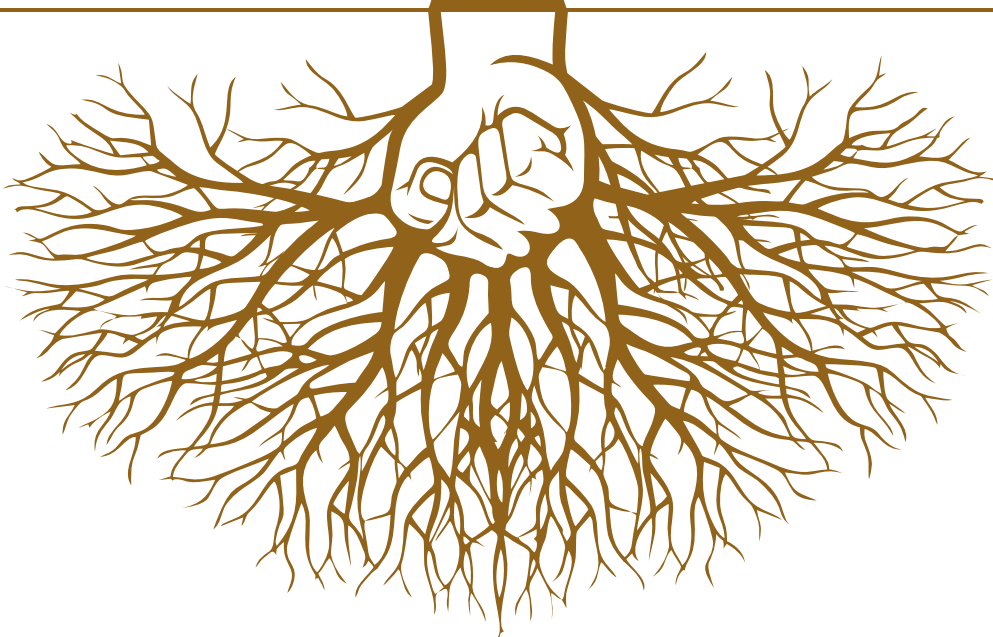




**Rooted to the future**

Sustainability Report 2016



## Rooted to the Future

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**“Machines must be there,  
products must be there,  
.... but most importantly,  
people must be there”.**

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*Henning Holck Larsen*

With these words, Henning Holck Larsen set L&T down the path of sustainability, long before the term was even coined. His vision is our polestar, guiding practices across the organization – with an eye on the future, but driven by the heart.

Over the years, L&T has developed an ethos that is deeply rooted in the welfare of its stakeholders, the country and the planet at large – while enhancing productivity and growth through technology leadership.

From delivering strength for peace to helping create global energy security; from exploring new frontiers, to powering smart cities, L&T is building the foundation for a better future...for all.

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## Message from Group Executive Chairman



### Dear Stakeholder,

I am happy to present L&T's 9<sup>th</sup> Sustainability Report. The 2016 report reaffirms our dedication to our triple bottomline. Moreover, it describes the several initiatives that the Company has implemented in line with India's ratification of the Paris Climate Change Agreement. These efforts will help to mitigate the adverse impact of the country's industrial operations on the environment and thus contribute to lowering of the rate of global warming.

As always, the report is independently assured and is based on the international Global Reporting Initiative (GRI) guidelines. It conforms to the 'In Accordance - Comprehensive' option of reporting as prescribed in the latest GRI - G4 guidelines. Reiterating our commitment to the United Nation's Global Compact and its ten principles, the Report serves as our annual communication on progress in the Sustainability space.

## A Climate of Change

The biggest challenge facing the world is how to keep developing, without destroying the balance between progress and the planet's wellbeing.

The COP 21 Paris Agreement – with signatories including India, China, USA and the European Union – hopes to play a crucial role in this endeavour.

Our efforts towards energy conservation and climate change mitigation were showcased as a case study at the India Pavilion in Paris at COP 21 – an example of how Indian corporates are leading the way in climate change through responsible actions.

2015-16 has been a year of promise. Positive indicators include growth in the country's GDP

from 7.2% to 7.6% and announcements by the Government regarding new initiatives focusing on core Infrastructure and 'Make in India' projects. This allows us to leverage our unmatched capabilities in high-tech design, manufacture and construction, and reiterate our pledge – 'We make the things that make India proud'.

The Company has grown steadily and in the financial year 2015-16, revenues have increased by 12% to ₹1026.32 billion. Profits after Tax at the Group level has grown by 7% to ₹ 50.91 billion and the unexecuted Order Book stood grew by 7% to an all-time high of ₹ 2499.49 billion.



## Digital India - Digital L&T

L&T in many ways is a reflection of the hopes and aspirations of the country, creating solutions to meet national needs. So, when the Government of India has embarked on an ambitious plan to transform India into a digitally empowered society, or set up a 100 'Smart Cities', it is only natural that L&T should gear up to answer the call.

Larsen & Toubro is undergoing a transformation by implementing digital technologies to make quantum improvements in all key areas of its operations. A major step in this direction has been the setting up of a Digital Group which will ideate, initiate and implement solutions to deliver results, both within the company and for our businesses.

As a Group too, we are changing the complexion of our businesses. Our focus is shifting towards knowledge-driven, asset-light businesses in our portfolio, including IT, Technology Services, Defence, Smart World and Water Management – enhancing our agility and long-term sustainability.

## Green Portfolio

L&T's traditional businesses are capital, energy and material intensive. The mega scale and speed of our operations demands resources to match. The solution lies in leveraging new technologies to reduce our consumption and create a wider portfolio of green products across our client spectrum. This year, we achieved a green products and services portfolio to the tune of ₹ 163.38 billion – an increase of 51% over the previous year.

We have harnessed the power of the sun and the wind and helped our clients to do the same – giving energy production a greener hue. Our solar business commissioned 200MWp – a rare feat to be accomplished in a year.

Our Green Building footprint includes 17 green buildings including one green factory within L&T campuses, and our Greenhouse Gas emission intensity has decreased by almost 28% since 2013-14.

At L&T, we intensified our 'green' focus by planting over 300,000 trees in the last year alone. Each of these stand testimony to our commitment to the environment and the planet.

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**Over 74.5 million units of energy saved, avoiding over 60,872 tones of CO<sub>2</sub> emissions at our establishments in the last eight years.**

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## Water Management

Over the years, a combination of overuse, abuse and sheer disregard for the depleting global water table has transformed water from an abundant resource into one of the scarcest commodities on the planet. At L&T, we have been doing our bit to help tilt the balance towards a more sustainable ecosystem – in our facilities and among society at large.

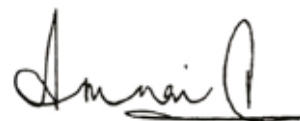
We continue to maintain a Zero Wastewater Discharge status for major campuses and eight campuses have become Water Positive. Our Water and Effluent Treatment (WET) business provides water management solutions that range from treatment to distribution, optimising water usage across various sectors.

## Building India's Social Infrastructure

India lives in its villages and small towns, and that's where we build another kind of infrastructure – social infrastructure. From check dams and watershed projects in water stressed areas to health centres that provide affordable primary healthcare; from mobile science labs that light the spark of curiosity to skill training institutes that make even the uneducated, employable – we help build India's social capital. Across L&T, employees and their spouses contribute personal resources – such as time and skills – for the benefit of the underprivileged. And over 1.27 million people have benefited from these initiatives in the last year alone.

Over the years, L&T's sustainability efforts have been regularly receiving global accolades, but it is the tale told by the statistics and case studies in this report that is most rewarding. A tale of commitment and collaboration by all our stakeholders.

I look forward to seeing many more co-authored sustainability stories emerge in the year ahead.



**A M Naik**  
Group Executive Chairman



## VISION

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

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

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



**LARSEN & TOUBRO**

Hon'ble Prime Minister Shri Narendra Modi visits L&T's Riyadh Metro Project site



Hon'ble Prime Minister of India, Shri Narendra Modi being presented with a ceremonial Saudi Arabian sword by L&T's Group Executive Chairman, Mr. A. M. Naik and Dy. Managing Director & President, Mr. S. N. Subrahmanyam, during his visit to L&T's Riyadh Metro Project site. In his address to the Indian workmen on site, he commended L&T's on-site safety record, attributing it to superior management, technology and discipline exhibited by the workforce.

Message from

## Senior Leadership Team



**S. N. Subrahmanyam**  
Dy. Managing Director &  
President

The world is fast going digital and is throwing up huge opportunities for companies like ours. Every aspect of our business has the potential to be more efficient, productive, competent, competitive and profitable through digitalization. I am glad that L&T is leading the way by using digital technologies like LiDAR and the Internet of Things. We are creating smart and sustainable infrastructure to enhance the overall quality of life – an approach that is congruent with our deep-rooted commitment to sustainability.

We are ever-mindful of the fact that natural resources are not just scarce, but also depleting at a rapid pace. We owe it to the planet and future generations to preserve and protect these resources. A few of the sustainability measures adopted by L&T to achieve this include:

- Designing and building smart and 'green' buildings
- Structures with smart lighting, energy-saving devices and water-efficient fixtures for lesser flow rates
- Water treatment systems to re-cycle and re-use water
- Substituting water with chemical compounds for curing purposes
- Re-cycling and re-use of construction waste
- Augmentation of refrigerants from the air-conditioning and refrigeration systems to ensure a CFC (Chlorofluorocarbon)-free environment, and thereby moving towards zero-ozone depletion
- Utilising superior materials and the latest technologies to reduce power transmission and distribution losses
- Tapping and use of alternative 'green' energy sources like solar energy

We contribute significantly to the national 'Skill India' initiative through the eight Construction Skill Training Institutes, our flagship skill-building programme while 'L&Teering' in the areas of healthcare, education and 'greening' initiatives is how our employees contribute towards improving the quality of life of people around our various project sites. What's more, as an organization, we remain committed to the highest standards of safety and quality.



**R. Shankar Raman**  
Whole-time Director &  
*Chief Financial Officer*

With growing emphasis on climate change and long-term sustainability, our long-standing commitment to social responsibility gives us a head start and puts us at the vanguard of the CSR movement.

The Projects business, by its very nature, employs vast resources in terms of men, material and money, while providing sustenance to communities in the vicinity of the project sites. We, as a company, consciously strive for community welfare and in effect, partner with society in our endeavours. This ensures that society thrives along with our business and enables a long-term competitive advantage.

Our structured community development initiatives are focused towards building India's social infrastructure, with improvements in the areas of healthcare, water, sanitation, education and skill development. We also go the extra mile to ensure that natural resources are preserved and replenished in the most responsible manner.

Internal governance standards have evolved within the organisation over time, enabling it to remain robust and sustainable. These include a Code of Conduct, ethics in business, safety and quality standards, risk management processes, internal control systems, compliance prescriptions and the like.

We believe that our social responsibility initiatives and outreach programmes for community development provide us with a strong platform for sustained growth and a meaningful contribution to the progress of our country.





**S. N. Roy**  
Whole-time Director &  
Sr. Executive Vice President  
**Power, Heavy Engineering &  
Defence**

Challenges emanating from our operations notwithstanding, we have made it a point to develop our business strategy around sustainable growth.

As a responsible corporate citizen, we try to create value for our stakeholders, while striving to preserve our environment. We are consciously trying to reduce our carbon footprint, minimise waste generation, and manage water resources better. We are working towards realising our vision to power our business with greener technologies, recycled materials and zero-liquid-discharge plants.

With the adoption of more environment-friendly solutions such as Flue Gas Desulphurisation and Selective Catalytic Reduction technologies, we will provide greener products and services to our customers, enabling them to minimise their adverse impact on the environment.

We plan to accelerate the pace at which our sustainability objectives are met, by ensuring the full integration of our sustainability initiatives with our business strategy.

We appreciate the support of our employees and partners who have helped us in addressing the challenges as well as in attaining substantial achievements this year, and look forward to a sustainable future.



**M. V. Satish**  
Whole-time Director & Sr. Executive  
Vice President  
**Buildings, Minerals & Metals**

The Indian infrastructure scenario offers great potential for growth owing to schemes such as 'Housing for All', the revival of the real estate sector, and the Government's focus on healthcare infrastructure. With infrastructure growth on the anvil, the per capita consumption of steel is likely to grow accordingly, benefitting the minerals sector. L&T is committed to playing a key role in India's growth story by providing high-quality, reliable infrastructure.

Our high safety standards are aimed at zero loss of life. With D&B jobs, we conserve natural resources by optimising structural designs. L&T has constructed over 49.1 million sq.ft. of certified green building space, across 34 buildings – most of which are either Platinum or Gold rated. Also we offer premium quality sand manufacturing plants to replace usage of natural river sand. We make Advanced material-handling machinery.

L&T conceived the idea of 'Building India's Social Infrastructure' in 2015. Prayas, our CSR arm, carries out various community welfare activities such as blood donation camps, health awareness programmes and tree plantation in rural India. As a part of our continuous efforts in skill-building, our Construction Skills Training Institutes provide training to rural youth, helping them to become employable and financially independent.



**D. K. Sen**  
Whole-time Director &  
Sr. Executive Vice President  
**Infrastructure**

Technological advances are being accompanied by a growing awareness of the importance of sustainability, especially in the last decade and the Construction industry is no exception.

Construction activities have a major impact on the social, environmental and economic aspects of sustainability. We at L&T, have always endeavoured to use and develop assets with a long, useful life and with minimum reliance on non-renewable resources. Infrastructure must be sustainable if it is to benefit the generations to come and make a positive contribution to the future. Providing such infrastructure now is an investment that will pay for itself many times over in the future. L&T plays a major role in the development of sustainable infrastructure in India and other countries. We recognize our privileged position of gathering and integrating knowledge and experience from around the world to help create better infrastructure, more responsibly.

Being in the Transportation and Heavy Civil Infrastructure business, we recognize the importance of sustainable construction practices at all stages of our projects. Driven by a vision and commitment to innovation, our business approach is to create long-term value by embracing opportunities and managing risks derived from economic, environmental and social developments. We have made our choice and are hopeful that our contributions will make a difference for the better.

## Message from Senior Leadership Team



**Subramanian Sarma**  
Non-Executive Director &  
CEO & Managing Director  
*L&T Hydrocarbon Engineering Limited*

The Hydrocarbon sector has been passing through a very volatile and challenging phase. But the market is beginning to stabilise and operating companies are looking for investments, albeit in a steady and cautious manner. In such an investment scenario, our chief challenge is to position ourselves in the global market by providing a differential value proposition.

We have had our share of both achievements and challenges over the last year, we are now on track to achieve steady growth, while being accountable, inclusive and sustainable.

Our focused efforts towards conservation across critical areas have enabled us to achieve our Sustainability Roadmap targets.

In pursuit of holistic social development, we have undertaken educational enrichment programmes and initiatives to raise the health levels of the communities around our campuses and project sites. This is in line with our CSR theme - 'Building India's Social Infrastructure'.

We have also maintained our focus on project execution, while continuing our efforts to create an environment that attracts, nurtures and rewards high-calibre talent.



**S. C. Bhargava**  
Sr. Vice President  
*Electrical and Automation*

The Indian economy is among the fastest growing in the world, but the sluggishness in global markets did have a dampening effect on India's business growth story. Plans for major new investments were slow to take off from the drawing board, leading to a lower-than-expected growth rate of the electrical industry in general.

Our strategy for addressing the concerns of profitable growth is viewed through the lens of sustainability. Being efficient in resource use is, therefore, built into the strategy. Our major manufacturing locations are now certified for ISO 50001, and we are planning to steadily increase the use of renewable energy at our locations. While three of E&A business locations are water-positive, we are looking to further improve our water conservation through better measurement and monitoring mechanisms.

Innovation is critical to the process of integrating sustainability into our business. We have in place a programme that encourages employees across functions to experiment with their ideas. Our new-generation products are designed with smart features such as use of less material and lower energy requirements.

Initiatives are being implemented to increase the use of IT and automation in some of our operations, such as logistics, to increase efficiency and enhance customer experiences. We plan to increase digitalisation in more areas of our operations. We consider our suppliers as our partners, and extend these LEAN practices to our supply chain.

We believe that we will retain our competitive edge through our efforts in addressing our top material issues of optimising cost through the smart use of resources and staying at the cutting edge of technology, in line with customer needs.



**Sanjay Jalona**  
CEO & Managing Director  
*L&T Infotech Limited*

At L&T Infotech, we follow a unique approach to Corporate Social Responsibility. At the organisational level, we strive to make a positive impact on the environment and the Company's sustainability. At an individual level, all our employees make a meaningful contribution to the communities through our CSR initiative called '1Step'.

Our corporate initiatives leverage technology to reduce our carbon footprint, while preserving precious resources like energy and water across our office campuses.

This year was a fruitful one. We achieved the BS OHSAS 18001:2007 certification for our Powai Head Office by ensuring the occupational health and safety of our employees. In addition to this, we have got our balance 7 development centres in India certified for BS OHSAS 18001:2007. Also, our Powai Head Office received the US Green Building Council's LEED Gold Green Building Certification.

We set up 18 centres dedicated to the improvement of youth employability through IT and soft skills education, as well as an additional 27 centres in schools. As part of our women's empowerment programme, we created infrastructure to generate recurring income for 150 women. Our volunteers record audio books from text books for visually impaired youth, enabling them to access study material. During the Chennai floods, we responded with rehabilitation efforts across the city.

Our aim is to be a positive force of change in our communities and to conscientiously drive sustainability in the ecosystem.



**Dr. Hasit Joshipura**  
Member of Executive Management Committee &  
*Head – Corporate Centre*

Sustainability and Climate Change is a key subject matter of discussion across the governance segments, be it Corporate, Social or Political. It is topical and has acquired a sense of urgency unparalleled in recent memory. It has been L&T's endeavour to be a benchmark in terms of its environmental footprint. Our commitment to sustainability is not limited to its ecosystem.

The Company's efforts towards energy conservation and climate change mitigation were showcased as a case study at Paris, COP 21 – India Pavilion, exemplifying India's initiatives on climate change through its responsible corporates. L&T is also the first Engineering & Construction Company in India to release a sustainability report.

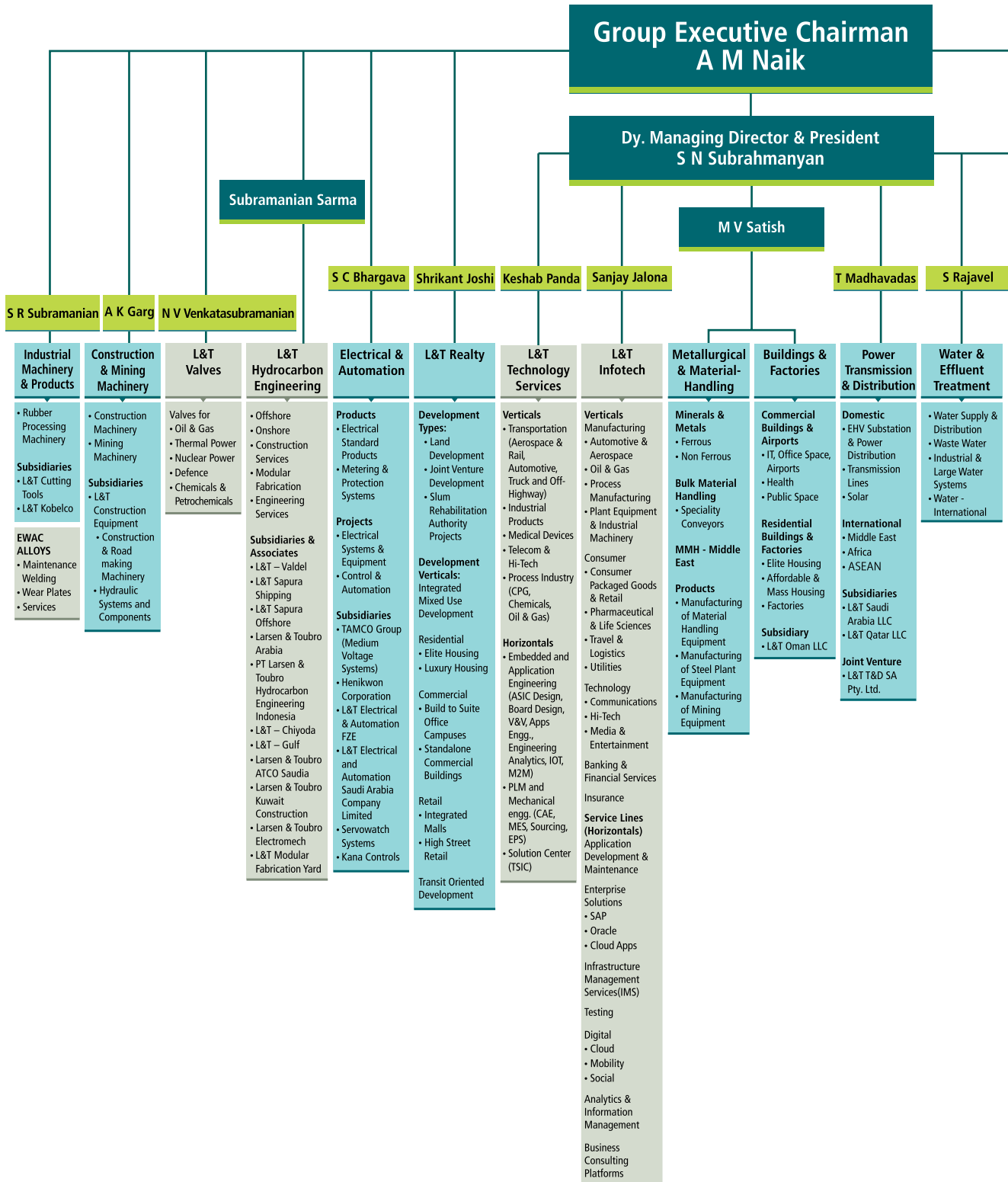
"Rooted to The Future" is our 9th report in as many years, underscoring L&T's pioneering transparency initiative. The report describes the process of identification of material issues and the past performance. A unique feature of this report is releasing the Sustainability Roadmap 2021, which reaffirms our commitment to resource conservation and climate change mitigation. The effort is to inculcate sustainability as part of the long term strategy and business plan of the Company titled "Lakshya 2021".

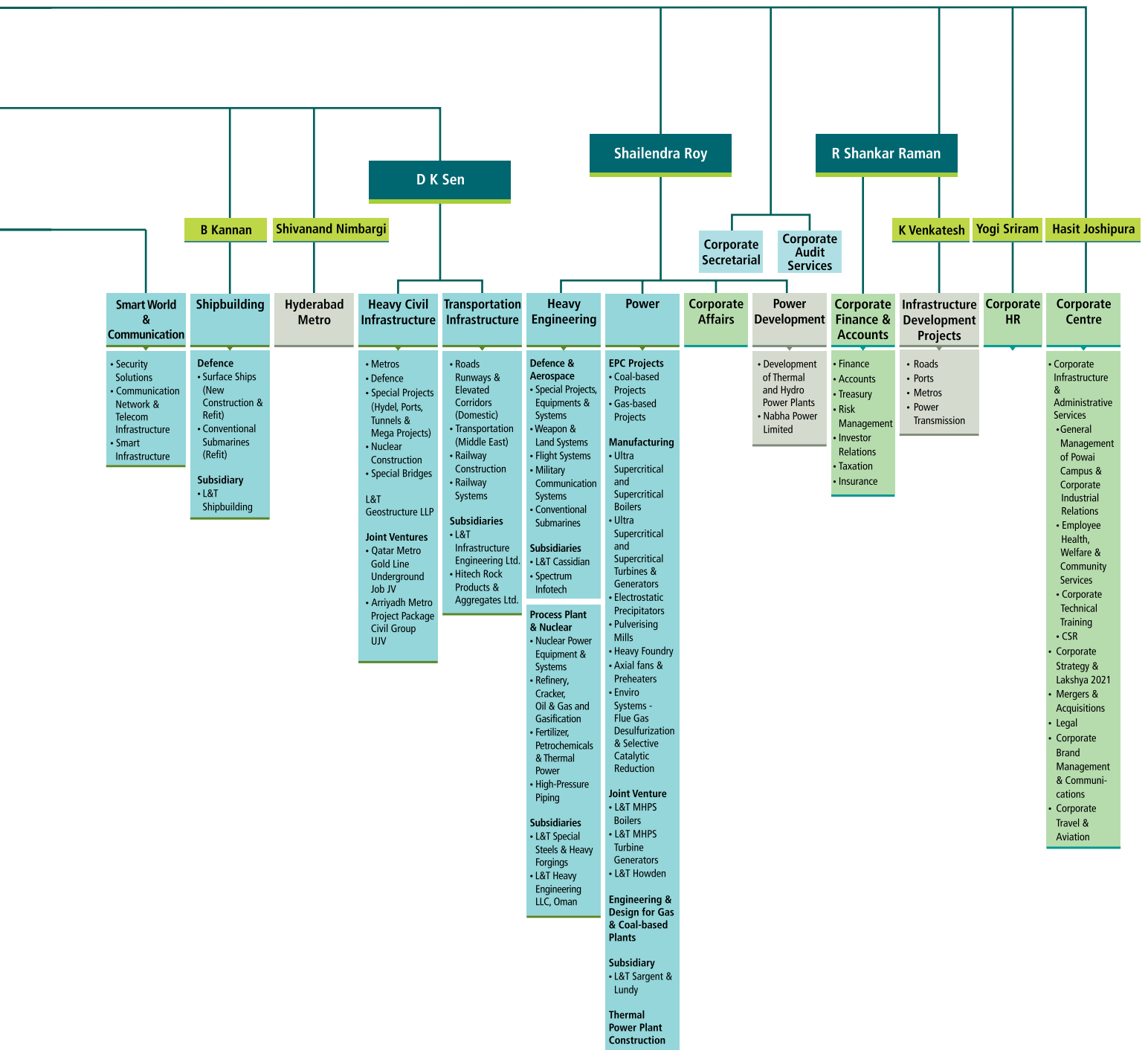
The Report has been developed completely in-house by our Sustainability and Corporate Brand Management & Communications teams – adding to our own sustainability quotient.

We believe that each of these programmes helps in protecting and promoting one of L&T's most valuable assets, and an integral factor in our triple bottomline – the Company's brand value.



# Organisation Structure





■ Subsidiary Companies  
 ■ Corporate Functions

# Business Profile

## Infrastructure



India's largest construction organisation and ranked among the world's top 30 contractors; L&T offers total engineering solutions – encompassing design, engineering, procurement and construction (EPC) to the following segments:

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

### Infrastructure Portfolio

- **Buildings & Factories:** Airports, IT parks, institutional spaces, hospitals, stadiums, hotels, mass housing complexes, cement and automotive plants
- **Heavy Civil Infrastructure:** Metro, nuclear & hydel power plants, ports, bridges, tunnels and defence segments
- **Transportation Infrastructure:** Roads, elevated corridors, railways construction
- **Power Transmission & Distribution:** Transmission lines, substations, underground cable networks, distribution networks, solar PV plants
- **Water & Effluent Treatment:** Water supply and distribution systems, desalination plants, treatment plants, lift irrigation and canal rehabilitation
- **Smart World & Communication:** City surveillance systems, intelligent traffic management systems, border security, communication networks, smart grids
- **Metallurgical & Material Handling:** Bulk material handling system, specialised conveying systems and ash-handling plants, surface miners, crushing systems

## Power



L&T's Power business provides integrated concept-to-commissioning of coal and gas-based power plants on a turnkey basis. It has project management centres in three cities, and integrated facilities for the manufacture of power equipment such as ultra-supercritical/ supercritical boilers, turbines and generators, axial fans, air-preheaters, electrostatic precipitators, pressure piping, etc.

## Heavy Engineering



L&T designs, fabricates and integrates custom-designed, engineered critical equipment and systems for core sector industries like fertilizer, refineries, petrochemicals, chemical, oil & gas, thermal and nuclear power, aerospace and for defence applications.

Larsen & Toubro is a major technology, engineering, manufacturing, construction and services conglomerate, with global operations. L&T is engaged in core, high-impact sectors of the economy – Hydrocarbon, Infrastructure, Power, Process Industries and Defence – and serves customers in over 30 countries. L&T has significant operations in India.

## Electrical & Automation



L&T offers a wide range of products and systems for electricity distribution and control including low and medium voltage switchgear, electrical systems, marine switchgear systems, industrial and building automation solutions, surveillance systems, energy meters and protection relays.

## L&T Hydrocarbon Engineering



This L&T subsidiary provides design-to-build turnkey engineering, procurement and construction solutions for the global oil & gas industry through the following verticals:

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

## L&T Infotech



This L&T subsidiary offers an extensive range of IT services to diverse industries worldwide, leveraging its domain expertise. The business delivers technological capabilities, wide geographical reach, an efficient global delivery model, thought partnership and new-age digital offerings.

## L&T Shipbuilding



L&T's shipbuilding arm offers total solutions – from design to construction of commercial vessels and builds specialised vessels for defence. L&T has two major shipyards, on the east and west coasts of India.

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



## Global Presence

- ★ Offices
- Engineering & Construction Projects
- ▲ Product & Equipment Supply
- Manufacturing / Fabrication Facilities
- Agents

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





# National Network

- ★ Registered Office
- Campus\*
- ⚙ Power Plant
- 🚢 Shipyards
- Offices
- ◆ Knowledge City
- 🏠 Leadership Development Academy
- ▲ Construction Skills Training Institutes\*

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

# Management Approach



## Economic

L&T has been a pioneer in offering 'concept-to-commissioning' engineering solutions across various verticals. Our key competitive advantages across businesses include dedicated engineering design centres, competency cells, advanced formwork systems, project execution capability, digitized project control and a pool of talented employees. These have enabled the Company to establish itself as one of the premier EPC solutions providers, in India and in targeted markets overseas. Characterised by professionalism, high standards of corporate governance and sustainability, L&T continues to evolve, seeking better ways of engineering to meet emerging challenges.



## Environmental

Across all our operations, it is our endeavour to minimise our impact on the environment. Our corporate Environment, Health & Safety Policy is implemented through a dedicated team of professionals to ensure environment preservation and optimal consumption of natural resources, energy and water. Our initiatives encompass entire project lifecycles and we extend these to all stakeholders including employees, partners, clients and suppliers, among others.



## Corporate Social Responsibility (CSR)

We believe in inclusive development and have been partnering with communities for many years. In 2014, we conducted a large-scale interaction with 3600 stakeholders to understand our influence, need assessment and the community's expectations from the Company. We then crafted our CSR theme 'Building India's Social Infrastructure', to develop focused CSR programmes on Water, Sanitation, Health, Education and Skill Development.

We have dedicated teams to implement these initiatives and also encourage our employees in all businesses to participate in these initiatives through 'L&Teering' – our employee volunteer programme.





## Labour Practices and Human Rights

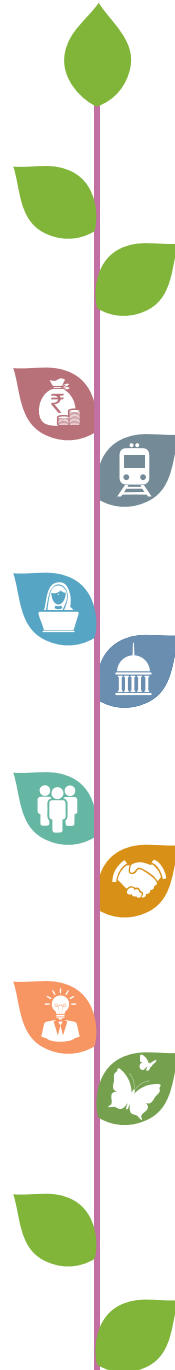
Our people are valued and we nurture individual learning and development. Being a project-oriented engineering company, amicable labour relations are critical to our success. In our constant quest to work towards the health and safety of employees, we follow conventions of the International Labour Organisation and applicable local laws covering the Factories Act 1948, Building & Other Construction Workers (Regulation of Employment & Conditions of Service) Act 1996, Central Rules 1998, Industrial Disputes Act 1947 and amendments thereof.

The implementation of policies is ensured by dedicated managers throughout the Company. We also offer extensive opportunities for training and skill enhancement with our Any Time Learning (ATL) web-based module, Leadership Development Programmes and functional and technical training programmes. Our HR policies and practices comply with ethical and human rights standards.

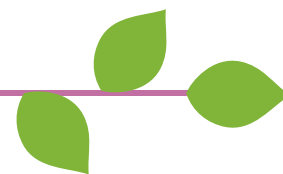


## Product Stewardship

We recognize our responsibility towards minimising our environmental impact in everything we build or make. Our products and services are designed, manufactured and constructed by taking into consideration their impact on the environment. Our products are engineered for eco-friendly operations, while accounting for their health and safety impact across their life-cycle. We are conscious of the sensitive and strategic nature of many of our projects and products and maintain complete customer confidentiality. Detailed user manuals are provided and training imparted to customers and their employees in plant operation and product usage.



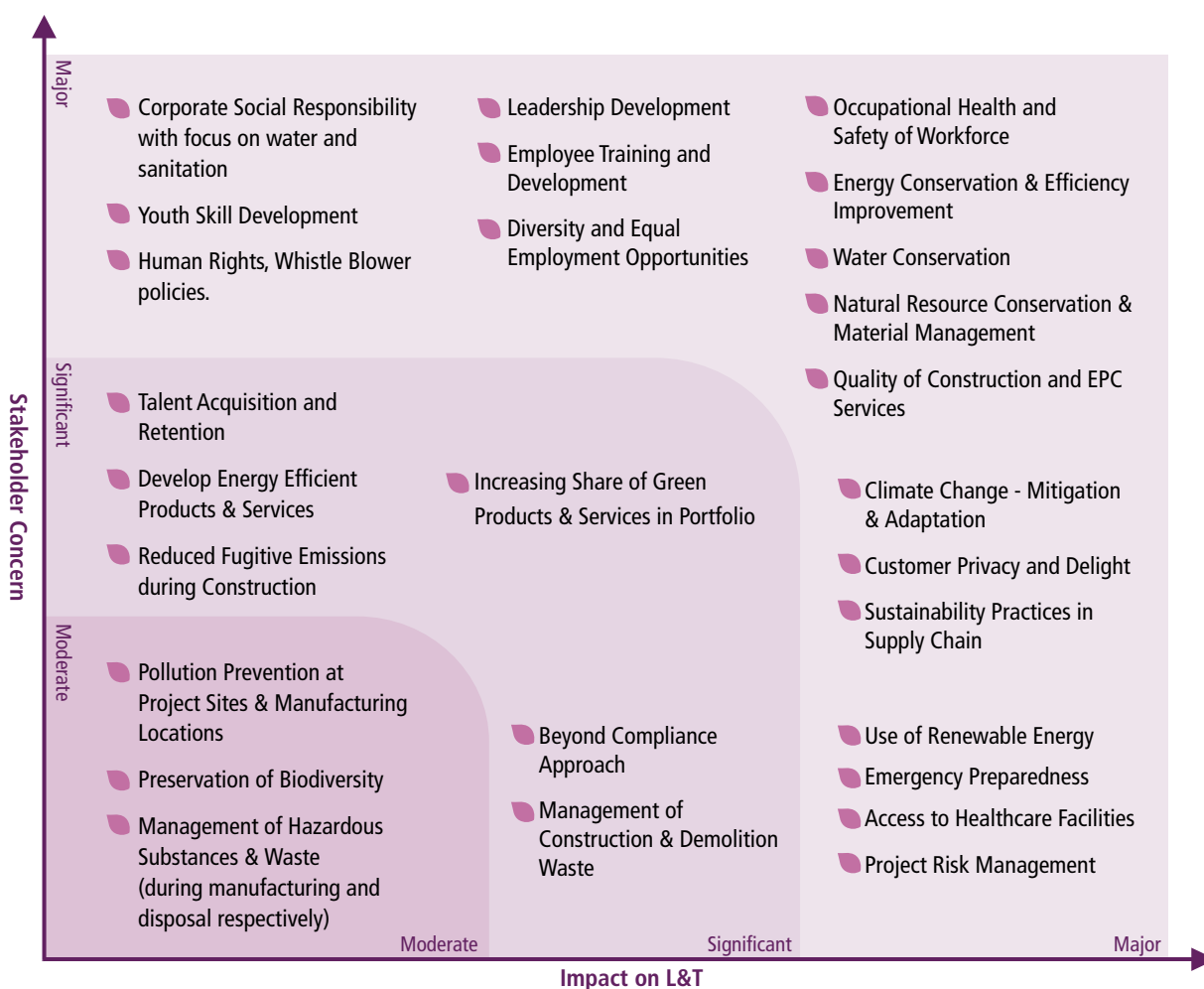
# Materiality Assessment



Materiality Assessment is conducted for identification of sustainability issues that have the potential to affect our business, and/or our stakeholders. It is an ongoing process, incorporating stakeholder inputs, compiled through regular interaction. The outcome is condensed into a list of topics which provides information on company strategy, targets, and reporting. Our methodology attempts to identify the economic, environmental and social issues material to us and society at large.

## Materiality Matrix

Consolidated for the Company



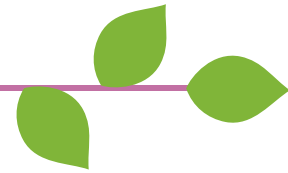
## Materiality Assessment Inputs

- Focus on significant sustainability challenges
- Strategic sustainability roadmap development
- Structured internal assessment of our risks and opportunities
- Feedback from customers, supply chain and employees
- Business strategy and market insights
- Parameters evaluated by third party

## Description of Material Issues

Focus Issues	Relevance
Occupational health & safety of employees and contractors, and emergency preparedness	Our work requires utmost safety standards to work towards zero accident goal, and hence it is important to comply with regulatory requirements.
Project risk management, quality of construction and EPC services	The Company is predominantly in the 'projects' business and faces challenges like land acquisition & right of way (ROW), pending approvals, clearances from Government agencies, working in difficult/harsh weather conditions/terrains, skilled manpower availability. etc., which make it critical to manage project risks and maintain the quality of construction and EPC services delivered.
Water conservation	Water is a critical requirement for our business and hence must be conserved. We have focused our efforts on water management and making our facilities water positive.
Natural resource conservation and material management	Our business is primarily dependent on the utilisation of natural resources including ferrous and non-ferrous materials. Judicious utilisation of such resources is aiding our efforts towards carbon abatements, while improving productivity and profitability.
Diversity and equal opportunity	The Company is a merit-based organization with operations worldwide. It important for us to have a diversified workforce while providing equal opportunity.
Employee training & development and leadership development	Training is a necessary ingredient for growth. The Company has prioritised employee training as a key focus area. All talent investments are focused on increasing productivity, efficiencies, building a robust leadership pipeline.
Climate change mitigation & adaptation and use of renewable energy	The future competitiveness and progress of companies are linked to low carbon economy. Regulatory and client requirements relating to carbon emissions are increasing. Progressively, we have been investing in products and processes that promote sustainable growth - enhancing energy efficiency, developing low-carbon technologies for building infrastructure, using renewable energy at our campuses and increasing our green cover.
Energy conservation & Efficiency improvement	The depletion of energy sources is detrimental to long-term business objectives. Increasing energy savings directly relate to reduced cost of power and fuel, and thus reduced operational cost and increased profitability.
Customer privacy and satisfaction	Our services are linked with sensitive customer information and hence customer confidentiality is paramount. Innovation in our products and services help us serve larger market segments and repeat orders are testimony to client satisfaction.
Sustainability of supply chain	Suppliers are our strategic partners for timely completion of our projects. It is important for us to encourage our suppliers to join us in our quest for sustainable growth. Taking sustainability practices in supply chain also helps them to improve their economic, environmental, and social performance.
Corporate social responsibility	Under the banner of 'Building India's Social Infrastructure', we are providing underprivileged sections of society with opportunities. The Companies Act has given us an opportunity to relook at our CSR programme. We have made it more robust and included specific thrust areas like Education, Health, Skill Development and Integrated Community Development.
Human rights	We ensure that employees are sensitised to human rights clauses. These are extended to our sub-contractors as part of their contract documents, and our Subsidiary and Associate companies are encouraged to follow our Corporate Human Rights Policy.
Increasing share of Green Portfolio	The Company is working towards sustainable development. We offer dedicated and niche green products and services – to customers to help them follow low carbon economy path.
Talent acquisition and retention	Our work requires expertise and high engineering skills. L&T is proactive in engaging and retaining the best talent.

# About the Report



## Report Scope

This Sustainability Report for Larsen and Toubro Limited (L&T – ‘The Company’) is published in accordance with Global Reporting Initiative (GRI) G4 Guidelines ‘Comprehensive’ option and covers L&T’s Environment, Economic and Social performance between April 1, 2015 and March 31, 2016. The last Sustainability Report 2015 ‘In Harmony’ was released in 2015. Annual reporting cycle is maintained for all our Sustainability Reports since 2008 and these are available on the Company’s website [Lntsustainability.com](http://Lntsustainability.com).

L&T has a robust mechanism for compilation and reporting of Sustainability indicator performance. The report is compiled in-house by the Corporate Sustainability Team with data inputs from all businesses compiled using a data management software. The data management techniques used in the report comprise actual measurement, computations and estimations (the assumptions are specified). The data for economic performance has been included from L&T’s Annual Report FY2015-16. The data presented in the report is verified through systematic internal and external assurance.

## Reporting Boundary

This report is for the Larsen & Toubro standalone and its subsidiaries. The reporting boundary covers all manufacturing locations, projects sites and offices across India, and overseas projects managed from India. There are no significant changes during the reporting period in reporting scope, boundaries, organisational size, structure, ownership and locations.

### L&T Subsidiaries included in the Report:

- L&T Hydrocarbon Engineering (LTHE)
- L&T Infotech
- TAMCO Malaysia
- L&T Infrastructure Development Projects Limited (IDPL)

## Assurance

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

## Locations Reported

### Corporate Locations

L&T House and Leadership Development Academy (LDA), Lonavala, near Mumbai, Powai, Mumbai.

### Infrastructure Business

Business operations and India-based support processes and project sites including Kansbahal, Pondicherry and Kanchipuram locations.

### L&T Power

Project Sites at Malwa Phase-II (MP), Chhabra (Rajasthan), NPCIL RAPP 7 & 8 (Kota), Khargone (MP), Darlipali (Orissa), Kudgi IDCT+CW (Karnataka), Koradi (Nagpur), Lara (Raigarh), Yeramurus (Karnataka), Cuddalore (Tamil Nadu), Vindhyaachal (UP) and Mouda STPP (Maharashtra).

### Heavy Engineering

Powai, Ranoli, Talegaon, Coimbatore, Visakhapatnam, Bengaluru, Hazira, Sohar (Oman).

### Shipbuilding

Shipbuilding facilities at Kattupalli near Chennai and Hazira, Gujarat.

### Electrical and Automation

Powai, Mahape, Ahmednagar, Mysore, Coimbatore, Rabale, Vadodara and TAMCO (Malaysia).

### L&T Hydrocarbon Engineering

Offshore and onshore projects worldwide, offices within India at Powai, Vadodara, Faridabad, Bengaluru and Chennai and modular fabrication facilities at Hazira, Kattupalli and Sohar (Oman).

### L&T Infotech

Offices across India: Mumbai, Chennai, 2 Campuses in Bengaluru, 2 Campuses in Pune and 2 Campuses in Navi Mumbai.

**Domestic Marketing Network** 17 Offices in India

**L&T declares that the Sustainability Report 2016 conforms to GRI–G4 ‘In accordance – Comprehensive’.**

Queries may be directed to:

**Mr. Gautam Kar,**

Head,

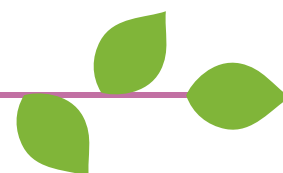
Corporate Infrastructure & Administrative Services,

Larsen & Toubro Limited, Saki Vihar Road, Powai,

Campus, Mumbai 400072, India

Email: [sustainability-ehs@Larsentoubro.com](mailto:sustainability-ehs@Larsentoubro.com)

## Risks and Opportunities



The Company has a risk identification framework which provides for risk reviews and also evaluates steps to strengthen its risk management processes. This framework involves evaluation of the risk at the enterprise level as well as the country's clearance process, pre-bid risks, execution risks and close-out risks. It also periodically assesses the new and upcoming challenges for the Company. Periodic 'Execution Risk Reviews' are conducted for the projects under execution. 'Top risks that Matter' are identified and the Company's response measures are integrated into respective business plans. Key risks and opportunities across significant businesses are listed below:

Infrastructure Business	
Risks	Strategic and Operational Initiatives
<b>Rising demand for trained and skilled labour force</b>	<ul style="list-style-type: none"> <li>Enhancing skill levels by organising site-based training for the Workmen Management Centre</li> <li>Construction Skill Development programmes run by the Company's dedicated Construction Skill Training Institutes</li> <li>Engaging skilled workmen on site after receiving training in construction practices</li> </ul>
<b>Project execution delay</b>	<ul style="list-style-type: none"> <li>Analysis of geological and climatic conditions</li> <li>Timely mobilization of resources</li> <li>Elimination of soil investigation delays</li> <li>Enhancing availability of bulk materials</li> <li>Reducing delay in materials supplied by clients</li> <li>Improvement in internal processes</li> </ul>
<b>Delay in project approvals and environmental clearances from clients</b>	<ul style="list-style-type: none"> <li>Removing ambiguity in interpretation of contract clauses</li> <li>Adoption of proper dispute resolution mechanism</li> <li>Faster claim settlement</li> </ul>
<b>Safe and congenial working environment</b>	<ul style="list-style-type: none"> <li>Continuously cultivating a culture of safety across sites including:                             <ul style="list-style-type: none"> <li>Adoption of 5 S principles on sites</li> <li>Implementing global best practices for elimination of unsafe conditions (e.g. Safety starters for rollers for safety of workmen on road development projects)</li> <li>Educating the workforce and staff on safe working practices</li> </ul> </li> </ul>
<b>Availability of credible subcontractors</b>	<ul style="list-style-type: none"> <li>Increased engagement with key subcontractors</li> <li>Reduction in attrition of skilled workmen, supervisors and trade specialists during project execution</li> <li>Timely mobilisation of associated plant and equipment by subcontractors</li> <li>Evaluation of subcontractor based on financial strength and past performance, before signing a contract</li> </ul>
<b>Environmental impact and CSR</b>	<ul style="list-style-type: none"> <li>Enhancing greenery through continuous tree plantation and maintenance at construction sites and establishments</li> <li>Promotion of Green buildings</li> <li>Installation of LED lights at project sites</li> <li>Extensive use of video-conferencing and digital practices, saving business travel time, cost and natural resources</li> <li>Optimal water usage for construction work at project sites</li> <li>Waste water treatment plants are at large sites to avoid / reduce pollution</li> <li>Proper selection of plant and machinery to reduce air and noise pollution</li> <li>Effective implementation of CSR activities for water &amp; sanitation, education, skill-development and health</li> <li>Need assessment survey before implementation of CSR programmes in thrust areas</li> </ul>
<b>Slowdown in Indian steel market</b>	More emphasis on material handling, mineral beneficiation and coal washery projects in India
<b>Slowdown in the Middle East business due to lower crude oil prices</b>	<ul style="list-style-type: none"> <li>Focus on major retained jobs for cost effective and timely execution with the help of experienced senior leaders</li> <li>Continuous efforts to get new major projects through the Consortium approach</li> </ul>

## Infrastructure Business

Opportunities	Strategic and Operational Initiatives
Government of India's thrust on Infrastructure	Development of core competency for increasing market share, owing to schemes such as 'Housing for All' and 'Make in India'
Growing potential in Africa/Asia/SAARC region	Plans are in place to increase our presence in these emerging markets
Enhancing productivity and controlling cost	<ul style="list-style-type: none"> <li>• Digitisation and reduction of waste</li> <li>• Ensuring timely availability of materials at project sites</li> <li>• Reducing skill-gap for productivity enhancement</li> </ul>
Conservation of energy	<ul style="list-style-type: none"> <li>• Usage of energy-efficient products at campuses and project sites</li> <li>• Increasing alternative energy usage, especially at training centres</li> </ul>
Capability building	Organisational capability building through competency mapping and imparting competency development training at various employee cadres
Strong infrastructure demand in the country	Plans are in place to effectively increase business presence
Digitalisation	Exclusive team assigned to look after technology enhancement and future prospects
Government thrust on water and waste water projects	<ul style="list-style-type: none"> <li>• Augmenting in-house capabilities</li> <li>• Spread business in new geographies</li> </ul>

## L&T Hydrocarbon Engineering

Risks	Strategic and Operational Initiatives
Declining Capex due to falling oil prices	<ul style="list-style-type: none"> <li>• Step up Business Development efforts including venturing into new geographies and markets</li> </ul>
Aggressive bidding by competitors	<ul style="list-style-type: none"> <li>• Enhance pre-bid engineering</li> <li>• Cost optimisation through value-added solutions</li> </ul>
Cost Overrun	<ul style="list-style-type: none"> <li>• Achieve Operational Excellence</li> <li>• Use of robust project and risk management tools</li> <li>• Mitigating risk by hedging or by taking suitable covers based on detailed analysis of foreign exchange inflow and outflow</li> <li>• Implementation of effective Knowledge Management process</li> </ul>
Increased brownfield offshore projects	<ul style="list-style-type: none"> <li>• Build capabilities in executing brownfield projects</li> <li>• Explore strategic partnerships</li> </ul>
Talent acquisition and retention	<ul style="list-style-type: none"> <li>• Enhance employee engagement and alignment</li> <li>• Capability building</li> </ul>
Protection of Health, Safety & Environment	<ul style="list-style-type: none"> <li>• Continue to ensure thrust on safety culture, human rights and wellness initiatives</li> <li>• Focus on good practices in Health, Safety and Environment</li> </ul>
Opportunities	Strategic and Operational Initiatives
International operators open to low-cost EPC Contractors	Stepping up pre-qualification efforts and entry into new geographies
Upcoming clean-fuel projects in India	Advocacy to convert mode of execution from Non-LSTK to LSTK
Large investments in Saudi Arabia	Leveraging long-term agreements and track record to pursue projects
Growth in domestic gas demand	Pursue LNG regasification projects through strategic alliances
Investments in petrochemical sector in Middle East and India	<ul style="list-style-type: none"> <li>• Leverage track record to pursue international projects</li> <li>• Build strategic partnerships</li> </ul>
Digitisation	Focus on Digitisation through analytics, mobile and cloud technology

Power Business	
Risk	Strategic and Operational Initiatives
Limited domestic opportunities	<ul style="list-style-type: none"> <li>• Aim to be more competitive</li> <li>• Selectively pursue opportunities in gas-based projects outside India – particularly in South-East Asia</li> </ul>
Increased competition	Enhanced focus on project management to ensure cost optimisation and timely execution of projects as per business plan – LAKSHYA 2021
Risk during bidding and execution of projects	<ul style="list-style-type: none"> <li>• Deployment of Structured Risk Management process.</li> <li>• Due diligence on prospective clients and projects</li> <li>• Back-to-back arrangements with sub-contractors and vendors</li> </ul>
Talent management	<ul style="list-style-type: none"> <li>• Fine-tuning HR policies to facilitate talent acquisition and retention</li> <li>• Establishment of Power Training Institute for developing skillsets required for execution of power projects</li> </ul>
Opportunities	Strategic and Operational Initiatives
Stringent pollution control norms requiring installation of additional systems in power plants	<ul style="list-style-type: none"> <li>• Identifying partner(s) to provide technology for additional systems</li> <li>• Tapping business opportunities that arise from the new norms</li> </ul>
Corporate Social Responsibility	Partnering with communities by implementing sustainable developmental programmes

Heavy Engineering Business	
Risks and Opportunities	Strategic and Operational Initiatives
Safety	<ul style="list-style-type: none"> <li>• Employees, vendors and contractors encouraged to report and resolve potential / actual safety concerns (Near miss, unsafe act and unsafe condition)</li> <li>• Competency building and safety training for all personnel</li> <li>• Sharing and implementation of safety practices across locations</li> <li>• Implementation of behaviour-based safety</li> </ul>
Reliability and delivery performance	<ul style="list-style-type: none"> <li>• Execution by addressing constraints across the value chain internally, including: <ul style="list-style-type: none"> <li>- Realization of full kits</li> <li>- Process improvements for operational excellence</li> <li>- Learnings through defect / failure analysis</li> <li>- Cost control measures.</li> </ul> </li> <li>• Y-o-Y reduction in cycle-time</li> <li>• Sustained on-time delivery records in serialized Defence production</li> </ul>
Community development projects	<ul style="list-style-type: none"> <li>• Systematic Gap Analysis to identify the needs of the underprivileged communities around our campuses</li> <li>• Identify projects aligned with the CSR thrust areas</li> <li>• Fulfilling needs with the desired impact</li> <li>• Monitoring the process for continual improvement</li> </ul>
Energy, water and waste management	<ul style="list-style-type: none"> <li>• Continuous monitoring of energy &amp; water consumption and implementing conservation measures</li> <li>• Monitoring greenhouse gas emissions at our campuses</li> <li>• Updating the team with new developments, legal requirements and global benchmarks</li> <li>• Proactively working on improving environmental and social performance</li> </ul>
Sustainability in supply chain	<ul style="list-style-type: none"> <li>• Signing of Environmental &amp; Social Code of Conduct by suppliers</li> <li>• Measuring impact of transportation on the environment and creating awareness on sustainability for transporters</li> <li>• Organizing business-specific Buyer-Seller meets</li> <li>• Involving MSME in understanding sustainability and its advantages</li> <li>• Import substitution to build local supply chain</li> </ul>



## Electrical & Automation Business

Risks	Strategic and Operational Initiatives
Low profitability	<ul style="list-style-type: none"> <li>Operational excellence initiatives to improve cost optimization in specific SBUs</li> <li>Continued organization-wide emphasis on value engineering, lean manufacturing and procurement optimisation</li> <li>Product design initiatives to optimise material consumption</li> </ul>
Technology obsolescence	Resources deployed to identify and develop potential new technologies for the future
Delay in speed-to-market	Restructuring and improving processes for faster introduction of new products
Inadequate sustainability practices in supply chain	Conduct risk assessment of suppliers based on their sustainability practices
Wide gap in employee age profile	<ul style="list-style-type: none"> <li>Structure leadership and skill development programmes</li> <li>Innovation programme to tap entrepreneurial spirit</li> <li>Engaging seniors as trainers in skill and knowledge building programmes</li> </ul>
Opportunities	Strategic and Operational Initiatives
Enhanced awareness among all users, specifically industry segment, on the need for improving energy efficiency	Provide products and solutions that help customers reduce their carbon footprint and improve energy efficiency
Increase in installed electricity generation capacity and rural electrification	<ul style="list-style-type: none"> <li>Continuing efforts to build capabilities in MV switchgear</li> <li>Enhancing marketing efforts and sales reach to increase market share</li> </ul>
Growing potential in emerging economies	Business plans made to increase sales in select international markets



## L&T Infotech

Risks & Opportunities	Strategic and Operational Initiatives
Water & energy consumption in our offices	<ul style="list-style-type: none"> <li>Launched initiatives to monitor and save electricity and water as per the guidelines of US Green Building Council (GBC).</li> <li>L&amp;T Infotech Technology centre (TC-1), Powai adopted various water and energy conservation initiatives including:               <ul style="list-style-type: none"> <li>- Installing of motion sensors in washrooms</li> <li>- Replacement of CFL bulbs with LEDs</li> <li>- Use of aerated/sprinkler water taps, etc.</li> <li>- Conversion to a Green Building – Gold Category by USGBC under LEED framework</li> </ul> </li> </ul>
Occupational Health & Safety (OH&S) of employees.	<ul style="list-style-type: none"> <li>Aligning our health and safety practices with OHSAS 18001 standard.</li> <li>L&amp;T Infotech has obtained OHSAS 18001:2007 certification for all seven development centres in India</li> </ul>
Assisting employability	<ul style="list-style-type: none"> <li>Imparting PC-based spreadsheet skills and value added courses to college dropouts, enhancing employability prospects as Computer Operators.</li> <li>We conducted two courses in association with the Chamber of Small Industry Association (COSIA) under its skill development programme for the most underprivileged educated youths:               <ul style="list-style-type: none"> <li>- Computer Hardware &amp; Networking</li> <li>- Accounts Assistance &amp; Tally Operator</li> </ul> </li> </ul>
Building internal motivation for CSR - 'My CSR' scheme	<ul style="list-style-type: none"> <li>Employees are encouraged to participate in CSR projects as volunteers through 'My CSR' Scheme.</li> <li>Employees are involved in CSR activities including:               <ul style="list-style-type: none"> <li>- Teaching to Government school students</li> <li>- Promoting NGO products</li> <li>- Supporting environmental initiatives in the community</li> </ul> </li> </ul>

Pokaran-Falsoond-Balotra Siwana Lift Water Supply Project charting a water lifeline in Rajasthan.





## In harmony with the National Action Plan for Climate Change

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



### Mission 1: Solar

- Solar business provides a single-point EPC turnkey solution for solar PV-related projects
- L&T has executed solar projects across all terrains (sandy, rocky, etc.) and all technologies (Thin Film Frameless and Framed, Crystalline, Tracker, etc.) and is a channel partner with Ministry of New and Renewable Energy

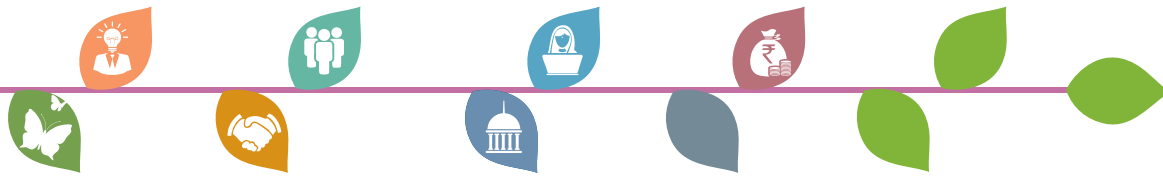
#### Key Projects

- Installed solar capacity of 567 MW till date for clients
- Executed two 60 MWp tracker-based solar PV plants and the largest solar tracker system at Panaiyur village, Tamil Nadu, within a span of 8 months
- 18 L&T establishments are generating onsite solar energy for campus usage



### Mission 2: Enhanced Energy Efficiency

- Through focused energy conservation projects, more than 74.5 million units of energy saved, avoiding over 60,872 tons of CO<sub>2</sub> emissions at our establishments in the last eight years.
- Ahmednagar, Hazira, Kancheepuram, Pithampur and Pondicherry Campuses have implemented ISO 50001: 2000 (Energy Management Systems)
- Over 20 certified energy auditors are working at various L&T campuses and project sites
- The Electrical & Automation business helps its customers to improve their energy efficiency and reduce their carbon footprint through its products and services
- L&T's Control & Automation business has an Automation Training Centre at Navi Mumbai which offers an 'Integrated Automation Training Course' for fresh graduates



### Mission 3: Sustainable Habitat

- L&T has 17 Green Buildings within its campuses including one green factory at Vadodara
- L&T Infotech Technology Centre - 1, at L&T's Powai campus is the latest addition to L&T's Green Building portfolio
- L&T's USGBC & IGBC rated Green Buildings: 6 Platinum, 6 Gold, 4 Silver and 1 Certified
- L&T has constructed more than 49.1 Million sq.ft. of certified green space for its clients. Additional 8.84 million sq.ft. of green space is under various stages of construction



### Mission 4: Water

- 28 L&T campuses continue to be zero wastewater discharge establishments
- Three more campuses achieved 'Water Positive' status, taking the tally to 8 campuses
- 12.20% reduction in water consumption intensity (measured in m<sup>3</sup>/employee) w.r.t 2011-12.
- 200 check dams built by L&T Public Charitable Trust continue to collect over 1200 million litres of water for the tribal communities in Maharashtra
- Integrated Community Development (ICD) Projects in Maharashtra, Rajasthan & Tamil Nadu have built more than 80 million litres of water storage facilities at water stressed locations
- Over 20 million people in India have benefited from L&T's water infrastructure projects
- With a track record of constructing over 51,000 km of water and wastewater pipeline networks and more than 4,000 MLD of water, wastewater and effluent treatment plants, L&T is India's largest water infrastructure organisation



### Mission 5: Strengthening the Himalayan Ecosystem

- L&T continues to undertake large-scale tree plantation in and around projects being executed in Himalayan regions
- In addition, skill building programmes are conducted for the local youth to enhance their employability during the project execution phases
- Health Camps / medical camps are periodically conducted as a part of community engagement programmes at project sites in this region



### Mission 6: Green India

- Campuses have more than 35% of the available open area is under green cover
- More than 1,50,000 trees are nurtured at L&T campuses.
- In 2015-16, L&T planted more than 0.3 million trees, taking the tally to 1.5 million trees in the last five years
- The Company monitors the number of trees planted across campuses and project sites through a tree inventory portal
- Guests are felicitated either by planting a tree or by presenting a Tree Certificate instead of a floral bouquet at key campuses
- Tree plantation and maintenance is a part of 'Integrated Community Development (ICD)' project's overall plan, across adopted villages in Rajasthan, Maharashtra and Tamil Nadu





### Mission 7: Sustainable Agriculture

- Through 200 check dams constructed by the L&T Public Charitable Trust, tribal farmers in Talasari block near Mumbai can grow two crops instead of one, along with vegetable cultivation
- The Water & Effluent Treatment (WET) business provides turnkey solutions in lift irrigation and canal rehabilitation
- The Electrical & Automation (E&A) business offers a wide range of products and solutions for electricity distribution and control in the agriculture sector
- The E&A business conducts training programmes for farmers in the use of motor starters and pump controllers which are widely used in agricultural fields across India
- Solar pumps are provided by E&A business to enable farmers to reduce their dependency on conventional pumps
- The ICD project focuses on increasing availability of water for agriculture at water-stressed locations
- L&T Hydrocarbon Engineering provides turnkey EPC solutions for the fertiliser sector
- The Heavy Engineering business is the preferred supplier for equipment to fertiliser plants in India

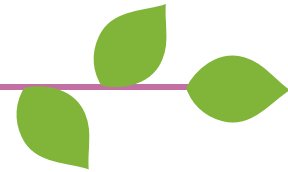


### Mission 8: Strategic knowledge on Climate Change

- The Company actively participates in institutional and industrial forums and employees attend various capacity-building programmes on climate change and green initiatives.
- Many in-house functional and technical capacity-building programmes on sustainability and climate change are conducted, including:
  - CII - GBC certified programme on energy efficiency and climate change
  - Certified Sustainability Assurance Practitioners (CSAP) programmes
  - Preparatory programmes for the Energy Auditor and Energy Manager examination conducted by Bureau of Energy Efficiency (BEE)
  - Training programme on the GreenCo rating system for Companies
  - Green Building rating programme
  - GRI – G4 reporting framework
- Prayag (the induction programme for new employees) covers sustainable development and climate change topics along with EHS and Human Rights.
- L&T's case study on energy and climate change was showcased at the India Pavilion as 'Energy Efficiency & Climate Leaders' at the 2015 Paris Climate Conference (COP 21).



# Sustainability Roadmap 2012-16 Journey



The Company takes pride in voluntarily setting and meeting Sustainability Targets since 2009. These measurable targets are set through a structured process, in consultation with all our businesses. Our sustainability targets are designed to provide a

comprehensive platform for accelerating best practices and performance across L&T. Our second Sustainability Roadmap (2012-15) was extended till 2016 and the majority of our goals were achieved.

## 2012-16 Performance



### Energy Conservation

**Target 1: 15%** increase in energy saving by conservation and efficiency improvements (YoY target)

Status: Shifting to LED-based lighting system. Increased awareness on energy conservation across establishments and project sites.

- 14.15 % was the cumulative average increase in energy conservation achieved since 2011-12.
- 12.5 % increase in cumulative energy conservation this year compared to 2014-15.
- Cumulatively, more than 74.5 million units of energy saved avoiding over 60,872 tons of CO<sub>2</sub> emissions at our establishments in the last eight years.

**Target 2: 5%** reduction in energy consumption intensity (measured per employee)

Status: Continued to focus on energy efficiency improvement programmes across businesses

- Energy intensity per employee reduced by 7.39 % w.r.t 2011-12.

*More information in Environment Performance section.*

### Climate Change



**Target 1: 5%** reduction in Scope 1 (Direct) GHG emissions intensity (measured per employee)

Status: Change in operations from diesel-based processes to electrical supply from state electricity boards. Use of cleaner fuels, shifting from diesel to natural gas based processes.

- 25.13% reduction in Scope 1 (Direct) GHG emissions intensity (measured per employee) w.r.t. 2011-12.

**Target 2: 3%** reduction in Scope 2 (Indirect) GHG emissions intensity (measured per employee)

Status: Focused energy audit planned at key campuses. Powai, Hazira & Chennai campuses continue to use contracted wind energy.

- Scope 2 GHG intensity has increased by 11.83% w.r.t 2011-12, due to reduction in the use of renewable energy. This is attributed to change in regulations related to banking of renewable energy units and reduction in generation of wind power from 8.7 MW wind farm.

*More information in Environment Performance section.*

### Safety



**Target 1: Zero** Working towards Zero Accident Goal

Status: 'Mission Zero Harm' theme released on L&T Safety Day to enhance employee participation and integrate safety consciousness into work culture.

12 L&T Campuses, 9 L&T Infotech offices, 17 Domestic Marketing Network offices, L&T House and Leadership Development Academy, Lonavala had zero reportable accidents in 2015-16.

**Target 2: 30%** reduction in Severity Rate (SR)

Status: Severity Rate reduced by 13.3% w.r.t 2011-12.

*More information in People Performance section.*



## Water Conservation



**Target: 5%** reduction in water consumption intensity (measured per employee)

Status: Eight Campuses become 'Water Positive'. All 28 major campuses continue to implement 'Zero Wastewater Discharge' strategy.

- 12.20 % reduction in water consumption intensity (measured in m<sup>3</sup>/employee) w.r.t 2011-12.

*More information in Environment Performance section.*

## Material Management



**Target: 5%** reduction in direct material consumption and/or increase in the share of recycled input materials

Status: Increase in share of recycled input materials (Zinc & Steel) from 206 tons in 2011-12 to 6,765 tons in 2015-16.

Cumulatively utilised 1.2 million tons of fly ash and 2.5 million tons of crushed sand by the construction businesses as alternative material.

*More information in Environment Performance section.*

## Health



**Target: 10%** improvement in employee health index through 'Working on Wellness' (WoW)

Status: We continue to conduct various programmes for empowering employees to manage their health. Our focus areas of healthcare interventions are cancer, diabetes, cardiac disease, obesity, ergonomic issues and stress.

We conduct awareness programmes, counselling, diagnostic camps and workshops across locations. Health Risk Index questionnaire is used to identify the individual health concerns and suggest suitable preventive healthcare.

## Corporate Social Initiatives



**Target 1:** Scaling up of community development interventions in education, health and skill-building

Status:

- Over 237,000 children are impacted through our educational programmes.
- Our health programmes have touched the lives of more than 678,000 people.
- Construction Skills Training Institutes set up by L&T have trained more than 44,700 people in the past 20 years.
- Over 1.27 million people have benefited from our programmes.

**Target 2:** Enhancing employability of urban and rural youth and women through capacity-building initiatives

Status:

Currently, we are running 8 Construction Skills Training institutes and one is under construction at Kattupalli, Tamil Nadu. Through these institutes, we extend construction skills training to rural youth.

**Target 3:** Widening the reach of employee volunteering for community welfare

Status:

More than 2,743 active L&Teers are involved in various community welfare programmes.

*More information in Social Performance section.*

# Sustainability Roadmap 2016-2021

## KEY TARGETS

### Green Portfolio

Maintain Green product and service portfolio

**25%**

### Energy Conservation

Increase energy conservation by

**10%** YoY

### Energy Consumption

Reduce total energy consumption intensity per turnover by

**5%** (GJ/₹)

### Carbon Emissions

Reduce direct GHG emission intensity per turnover by

**5%** (direct CO<sub>2</sub>/₹)

With learnings from previous sustainability roadmaps, peer analysis and stakeholder inputs, the next Sustainability Roadmap has been formulated. This roadmap is divided into two aspects, namely key initiatives and targets. This is the third Sustainability Roadmap 2016-21 and aligned with Company's strategic business Roadmap 'LAKSHYA 2021'

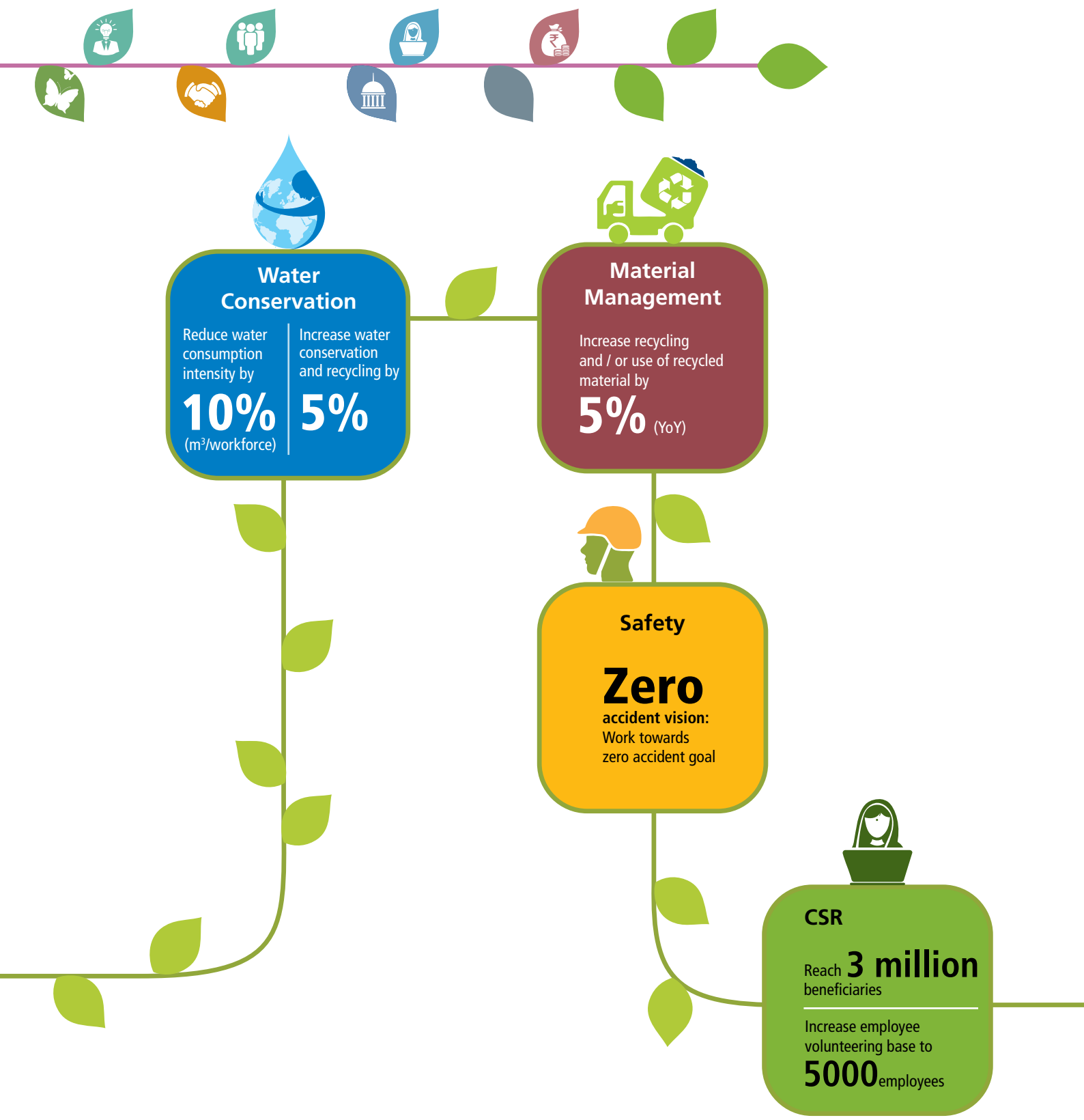
## KEY INITIATIVES

Achieve carbon neutrality for major campuses

OHSAS 18001 certification for all businesses/ establishments

Achieve water positive status for all major campuses

Implement sustainability data management software in key Subsidiary and Associate companies



Report on supply chain carbon footprint along with conservation measures implemented

Report sustainability performance with Sustainable Development Goals (SDGs)

Implement Contractor Safety Management

New buildings within L&T campuses to be Green Buildings



Strengthening  
our Roots



## Commitment to Values

L&T is a professionally-managed Indian multinational, committed to total customer satisfaction and enhancement of stakeholder value. The Company is guided by the highest principles of corporate governance and believes that promoting fairness, integrity, transparency and accountability is paramount. Our corporate governance philosophy is built on a rich legacy of transparent governance and disclosure practices. This includes respect for human values, individual dignity and adherence to norms of ethical and professional conduct.

The Company's Vision and Policies state its commitment to these values, and are extended to all subsidiaries and associate companies. We accord priority to accountability, equity and transparency in all our dealings and operations, both financial and non-financial, on the ground and off it – without exception. L&T believes that it is the only way to achieve targets, manage risk and optimise performance.

Our governance structure consists of systems, processes and principles that help us realize our long term business goals, while simultaneously providing value to our stakeholders and preserving the environment. Our governance structure is overseen by the Board of Directors, who supervise management activities and ensure effective delivery of value to all stakeholders. The composition of our Board conforms to Regulation 17 of the SEBI (Listing Obligations & Disclosure Requirements) Regulations, 2015, which stipulates that at least 50% of the Board should consist of Independent Directors, if the Chairman of the Board is an Executive Director.

## Governance Structure

The Corporate Governance Structure of Larsen & Toubro provides a comprehensive framework to enhance accountability to shareholders, while ensuring timely and accurate disclosures of all material aspects. The governance structure consists of:

### Strategic Supervision

By the Board of Directors comprising the Executive Directors, Non-Executive Directors and Independent Directors.



### Executive Management

By the Corporate Management comprising of Group Executive Chairman, the Deputy Managing Director, four Executive Directors, one Non-Executive Director, three Senior Managerial Personnel and one Advisor to the Chairman.



### Strategy & Operational Management

By the Independent Company Boards of each Independent Company (IC) comprising representatives from the Company Board, Senior Executives from the IC and independent members.



### Operational Management

By the Business Unit (BU) Heads.



This four-level governance structure facilitates increased autonomy to businesses, performance discipline and development of business leaders, leading to greater management accountability and credibility, and increased public confidence.

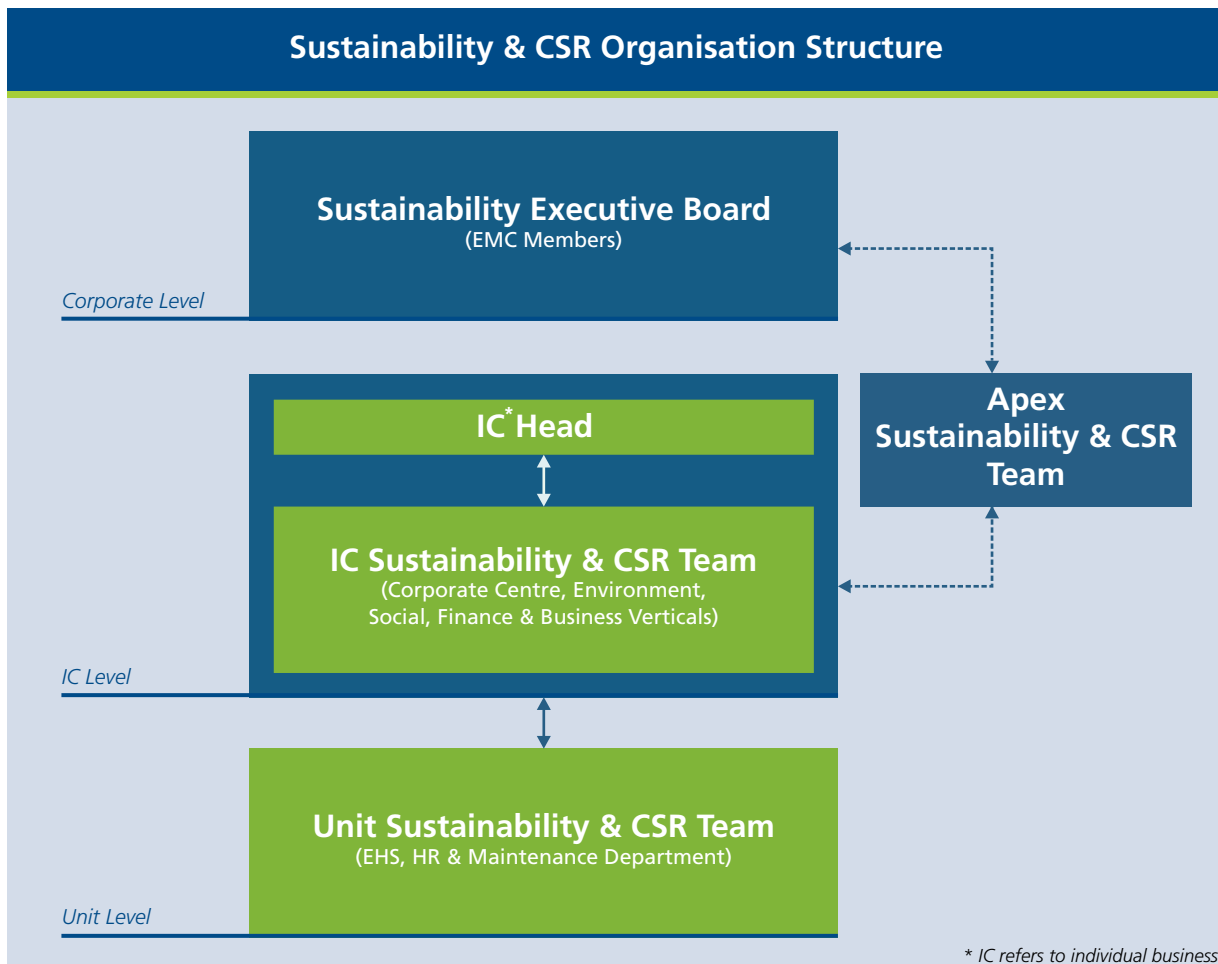
The Board of Directors has constituted five Board Committees i.e., Audit Committee, Nomination & Remuneration Committee, Stakeholders' Relationship Committee, Corporate Social Responsibility Committee and Risk Management Committee. The terms of reference of the Board Committees are governed by relevant legislation and / or determined by the Board from time to time. The Board is responsible for constituting, assigning and co-opting the members of the Committees.

Further details on L&T's governance structure, the Board of Directors, Board Committees, and their roles and responsibilities are provided in the Annual Report FY 2015-16 Pg 77 - 87, available on our website [www.Larsentoubro.com](http://www.Larsentoubro.com).

## Sustainability Structure

L&T's Sustainability Executive Board (SEB) consists of the Company's Executive Management Committee (EMC) members. The EMC members provide guidance and are responsible for formulating sustainability policy. The sustainability performance of the Company is reviewed annually.

The Apex Sustainability & CSR (SCSR) team comprises of sustainability coordinators from individual businesses and members from corporate functions like investor relations, secretarial etc. The Apex Sustainability & CSR (SCSR) team develops the sustainability strategy for the L&T Group. This is implemented by SCSR teams at the individual businesses level and unit level. The SCSR teams at the individual businesses level and unit level are also empowered to design their sustainability agenda, based on their material issues. This approach helps the L&T Group to manage challenges arising both at the individual businesses and company level.





*Release of Sustainability Report 2015*

## Code of Conduct

The Company has laid down a Code of Conduct (CoC) for all employees, featured on the Company's Intranet. The Group Executive Chairman makes an Annual Declaration to the shareholders on the compliance with the Company's CoC by the senior management. Every new employee is introduced to the CoC through a detailed online module on the Company's 'Any Time Learning' (ATL) portal. Critical aspects of the CoC are also included in the HR Orientation Programme. Another unique initiative ensures each individual employee of the Company is required to confirm his/her acceptance of the Code of Conduct, Corporate Governance policies and guidelines in writing or online. This is a 'once-a-year' requirement, which creates awareness about the CoC, policies and guidelines, and encourages employees to take responsibility for their actions.

The CoC Apex Committee, constituted by a minimum of five senior members of Executive Management Committee (EMC) functions as the Apex Body, and is required to meet at least twice a year.

The Compliance Officer acts as the Ex-Officio Secretary of the Apex Committee.

This Committee interacts, informs and advises the EMC on all issues relating to the CoC. Its key function is to ensure implementation of the CoC across the Company and deal with instances of non-compliance, apart from overseeing the functioning of the unit-level CoC Committees.

Unit-level CoC Committees consist of at least four members, headed by the Unit Head, along with Head of Accounts, Head of HR and a senior member from the Operations team. The Unit-level Committees are required to meet at least once in a quarter. The role of the Committee is to create awareness about CoC, motivate employees to follow it, monitor compliance and investigate instances of non-compliance.

The code of conduct is available on the Company's website [Larsentoubro.com](http://Larsentoubro.com)



## To the Shareholders of Larsen & Toubro Limited

### Sub: Compliance with Code of Conduct

I hereby declare that all the Board Members and Senior Management Personnel have affirmed compliance with the Code of Conduct as adopted by the Board of Directors.



**A M Naik**  
Group Executive Chairman

Date: May 25, 2016  
Place: Mumbai

## Whistle Blower Policy

The Company put in place a Whistle Blower Policy in 2004, which has been amended to meet the requirements of The Companies Act, 2013. The Whistle Blower Policy has been created to establish a vigil mechanism for encouraging all employees and directors to report, without fear, any wrongdoings which may adversely impact the Company, concerns about unethical behaviour, actual/suspected frauds and violation of Company's Code of Conduct. The employees can either submit a verbal report or send a written note to the Whistle Blowing Investigation committee's address. While the policy requires the whistleblower to identify himself / herself, the management assures maintaining anonymity of the whistleblower at all times.

The Company has a Whistle Blowing Investigation Committee with the key role of investigation of reported matters through appropriate delegation/ agencies and recommending a corrective course of action.

The Committee presently consists of 4 senior executives of the Company, viz., the Whole-time Director & Chief Financial Officer, Head – Corporate HR, Executive Vice President & Company Secretary and Head – Corporate Audit Services. Senior officers of the Company based at various locations are appointed as coordinators for respective individual businesses/ Corporate departments.

## Compliance

Operational and financial controls are in place across the L&T Group to prevent acts or behaviour that deviate from the Company's stated policies of fair and ethical practice.

## Internal Control System

Our corporate policy on internal control provides a framework for identification, rectification, monitoring and reporting of internal control weaknesses in the organization. Additionally, we periodically engage independent professional firms to review the effectiveness of control processes in businesses and support functions. All significant observations and corrective actions taken are reviewed by the management and Audit Committee of the Board.

## Corruption & Anti-competitive Behaviour

We remain committed to behaviour that is in consonance with the principles of ethical and fair business practices. We will not be party to any act or measure that compromises or is likely to compromise our values. No incidences of corruption were reported during the year. We also comply with relevant statutory requirements including anti-competitive behaviour.

## Precautionary Approach

We recognise that environmental risks may be associated with our operations, including our facilities and project sites. We have implemented a structured Risk Management System for early-stage identification, understanding and mitigation of impacts.

**"This year we released LAKSHYA 2021, our business plan for implementation of strategic initiatives encompassing product & technology development, risk management, mergers – acquisitions, human resource functions and operational excellence initiatives.**

## Remuneration Policy

The remuneration of the Board Members is based on the Company's size and the markets it serves; along with its economic and financial factors, industrial trends, and compensation paid by other peer companies. The Company has in place a Nomination & Remuneration Committee in accordance with the requirements of the Companies Act, 2013 read with the rules made thereunder and Regulation 19 of the SEBI (Listing Obligations & Disclosure Requirements) Regulations, 2015. The Committee has formulated a policy on Director's appointment and remuneration, recommendations on remuneration of the key managerial personnel and other employees, board diversity, composition and the criteria for determining qualifications, positive attributes and independence of a Director.

The compensation paid to the Executive Directors is based on recommendations of the Nomination & Remuneration (NRC) Committee, approval of the Board and the shareholders. Its components are salary, perquisites and retirement benefits (fixed components) and commission (variable component). The commission component is based on the performance of the business as well as qualitative factors, and is calculated with reference to the net profits of the Company in the Financial Year, subject to the overall ceiling stipulated under the Section 197 of The Companies Act, 2013.

The Non-Executive Directors (NEDs) are paid remuneration by way of commission and sitting fees. The commission is paid subject to a limit not exceeding 1% p.a. of the profits of the Company as approved by shareholders (computed in accordance with Section 197 of the Companies Act, 2013). In the case of nominees of Financial Institutions, the commission is paid to the Financial Institutions.

The performance criteria in the remuneration policy of the Board and senior executives evaluates performance on economic, environmental and social aspects of the Company.



## Commitment to External Initiatives

We support/follow/commit to the following:

- Global Reporting Initiative (GRI) framework
- United Nations Global Compact Network, India (GCNI)
- Applicable International Labour Organization (ILO) conventions
- The National Voluntary Guidelines (NVG), India
- Other United Nations (UN) directives that cover:
  - Statutory and regulatory compliance
  - Business ethics
  - Fair and equal opportunity to all employees
  - Employee development through training
  - Labour camps at construction sites
  - Medical facilities at units, offices and project sites
  - Steps to measure, monitor and conserve materials and energy

## Memberships

We engage with multiple business forums and trade organizations. Our senior executives are active members of industry bodies that participate in the formulation of public policy affecting our industry. We have active memberships with the following:

- Confederation of Indian Industry (CII)
- Federation of Indian Chambers of Commerce and Industry (FICCI)
- Associated Chambers of Commerce and Industry of India (ASSOCHAM)
- Bombay Chamber of Commerce & Industry (BCCI)
- Bureau of Indian Standards
- Construction Industry Development Council (CIDC)
- Indian Electrical and Electronics Manufacturers Association
- National Safety Council
- Indian Institute of Chemical Engineers (IChE)
- National Fire Protection Association
- British Safety Council
- Association of Business Communicators of India

*Note: The list is indicative, not exhaustive.*



## Reaching Out



Our key stakeholders are customers, shareholders and investors, suppliers, contractors, employees, Government bodies, the media and the community at large. Expectations, interests and the growth of our stakeholders are vital for the Company. We believe that we are accountable to our stakeholders and constantly engage with them to match their expectations.

Our stakeholder engagement framework is built on transparency, inclusiveness and trust, which are core to the Company. All our businesses use various formal and informal channels of communication for ongoing dialogue with their stakeholders. Apart from these, the Company has a dedicated Corporate Brand Management & Communications department which facilitates dialogue between the organisation and its stakeholders.

## Shareholders and Investors

The Company values the contribution of its shareholders and investors in its growth and attributes its success to them. We release L&T's Annual (Financial) Report and Quarterly Financial Reports to provide shareholders with comprehensive information about the Company's performance and capabilities. Regular updates are posted on the corporate website, [Larsentoubro.com](http://Larsentoubro.com). We also make presentations to institutional investors and equity analysts on the Company's quarterly performance. Information to Stock Exchanges is filed online for National Stock Exchange of India Limited and Bombay Stock Exchange Limited.

We have a robust grievance handling and redressal framework. Investor queries are handled by our Company Secretary & Compliance Officer through [igrc@Larsentoubro.com](mailto:igrc@Larsentoubro.com). Our Stakeholders' Relationship Committee comprises of 1 Non-Executive Director, 1 Independent Director and 1 Executive Director.

As part of our effort towards environment conservation and in accordance with the circular issued by the Ministry of Corporate Affairs, Govt. of India, shareholders have been given the option of receiving documents related to General Meetings (including AGM), Audited Financial Statements, etc., through electronic mail.



L&T's Annual General meeting held on 9<sup>th</sup> September, 2015





L&T showcases its products and capabilities through business-specific exhibitions

## Customers

We have continual dialogues with customers to understand their expectations and gauge satisfaction levels. Our engagement mechanisms include customer meets, workshops and conferences, exhibitions and trade fairs, product advertising campaigns, corporate print and TV campaigns, bulletins and news, one-on-one interactions and periodic reviews. We also release the Annual Review of the Company which is a capability statement, with highlights of the year.

The L&T Infodesk [infodesk@Larsentoubro.com](mailto:infodesk@Larsentoubro.com) introduced in 2012, is a single-point contact for information and feedback on the entire range of L&T products and services. We periodically track customer satisfaction through surveys and focus group discussions conducted by independent agencies. This year, the Buildings and Factories business has established a formal system for collection and review of customer feedback about its project sites. In this business, customer feedback is collected every quarter on a scale of 1 to 10 (10 = Excellent, 1 = Poor) and the feedback is reviewed during Management Review Meetings. Corresponding action plans are drawn up to improve the performance in the areas

rated below the average (8.0). Through this model, 259 feedbacks were received and analysed from 96 project sites during the year.





A unique Safety Innovation School has been set up at Hazira, for imparting quality training on safety

## Employees

We value our employees, and provide them with an engaging and encouraging environment. The Working on Wellness (WoW) initiative spearheaded by our medical health & welfare team conducts regular programmes for employees to drive preventive healthcare practices. Employees are informed about the Company's activities, new businesses and accolades, through Spot News and Newsman periodical e-mails. L&T Scape - a collaborative, enterprise-wide portal was launched in 2012. It provides employees with an opportunity to communicate, collaborate and access all employee welfare benefits provided by the Company. Employee Feedback Surveys are conducted by the respective business. ATL – 'Any Time Learning' facilitates online learning and knowledge sharing at the employee's convenience.

**Our initiatives include welfare activities for employees and their families. In-house magazines, internal spot news, employee satisfaction surveys, town hall sessions, career development discussions and an employee suggestion scheme are other modes of engagement.**





## Suppliers and Contractors

Suppliers, contractors and service providers form an intrinsic part of our operations and we engage with them on a continual basis. Various categories of suppliers include raw material vendors, machine suppliers, contract workmen providers and other service providers. L&T uses the e-tendering system which is an e-procurement model for paperless buying, systematic information flow and reverse auctioning.

We aim to protect human rights. Our practices are extended to our suppliers and service providers, and included in our contract agreements and purchase orders. These cover prohibition of child labour, forced & compulsory labour, discrimination on the basis of gender, caste and nationality. Apart from this, the suppliers are required to endorse the 'Environmental & Social Code of Conduct' for suppliers.

The Company organizes periodical partner meets for its suppliers, vendors and contractors, where their concerns, issues and expectations are addressed. Our suppliers are also updated about the Company's progress and plans on aspects relating to business, sustainability and CSR during the meet and through other modes of engagement.

In March this year, we conducted a 'Sub-Contractors Meet' in Hyderabad for our Heavy Civil Infrastructure business, which 40 sub-contractors from project sites across India and Bhutan attended. Safety and Quality were given prime importance at the meet. The Company conducts vendor performance evaluations and encourages good contractors, and provides recreation facilities for contract labour forces. The Defence & Aerospace vertical of the Heavy Engineering business participated in

Buyer-Seller Meets organised by the CII at Mumbai and Aurangabad. About 100 MSMEs participated in the events wherein L&T shared the business opportunities along with its expectations about safety, quality and our process of supplier development.

## Community

We work with the community to enhance the quality of life and livelihoods through regular interaction with village panchayats, school authorities and District Health Officials at our CSR project sites. A quarterly review of our Integrated Community Development projects is done with the Village Panchayats and local authorities.



*Participatory rural appraisals (PRA's) during Integrated Community Development Programmes.*



*Employee training and interaction sessions*

## Government

The Indian Government is a key stakeholder in L&T. We regularly interact with regulatory bodies for policy development. We are members of several industry associations and regularly participate in national and international industry and economic forums.

## Media

Regular media engagement activities are undertaken with the objective of keeping stakeholders updated about critical business developments. Four media briefings and two media visits were organised during the year.

## Responses to stakeholder concerns

Key topics and concerns that have been raised through stakeholder engagement and our response to these are as follows:

Stakeholders	Concern areas	L&T's initiatives
Shareholders and Investors	<ul style="list-style-type: none"> <li>- Business Performance</li> <li>- Improved Return on Investments</li> <li>- Effective financial and non-financial risk controls</li> <li>- Fair business practices</li> <li>- No defamation</li> </ul>	<ul style="list-style-type: none"> <li>• Transparency of business plans to investors</li> <li>• Uninterrupted dividend</li> <li>• Showcasing performance on non-financial disclosures in sustainability reports</li> <li>• Reporting for Carbon Disclosure Projects (CDP)</li> <li>• Reporting for Dow Jones Sustainability Indices (DJSI)</li> </ul>
Suppliers/ Contractors	<ul style="list-style-type: none"> <li>- Timely payments</li> <li>- Repeat orders</li> <li>- Price reduction</li> <li>- Different purchase processes by businesses as per the projects/ establishment requirements</li> </ul>	<ul style="list-style-type: none"> <li>• Regular visit to suppliers' and contractors' facilities</li> <li>• Environmental and Social Code of Conduct for suppliers</li> <li>• Screening and providing support to implement resource conservation initiatives at select suppliers' premises</li> <li>• Cost-effective price negotiations</li> </ul>
Employees	<ul style="list-style-type: none"> <li>- Career growth</li> <li>- Employee benefits</li> <li>- Skill development</li> <li>- Effective/ high-quality training programmes</li> </ul>	<ul style="list-style-type: none"> <li>• Attracting and retaining talent</li> <li>• Promoting people wellness</li> <li>• Functional and soft skill development programmes</li> <li>• Improving leadership skills</li> <li>• Development and continual improvements in programmes for structured learning and development of employees</li> </ul>
Community	<ul style="list-style-type: none"> <li>- Expectation of livelihood creation</li> <li>- Improvement in overall living standard</li> <li>- Water and sanitation</li> <li>- Development of the community infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• Education, health and skill development for the benefit of communities around L&amp;T establishments and project sites</li> <li>• Access to drinking water and sanitation in water stressed regions</li> <li>• Implementing Integrated Community Development Programmes</li> </ul>
Customers	<ul style="list-style-type: none"> <li>- Timely completion of projects</li> <li>- Confidentiality</li> <li>- Competitive contract price bid</li> <li>- Innovation and state-of-the-art engineering techniques</li> <li>- High safety standards</li> <li>- Transparency in energy, water, GHG emissions performance</li> </ul>	<ul style="list-style-type: none"> <li>• On-time project completion</li> <li>• Deeper customer connect at multiple levels</li> <li>• Project monitoring and control</li> <li>• Increased after-sales support</li> <li>• Regular monitoring of Project KPIs – Safety, water, energy, GHG emissions etc.</li> </ul>
Government	<ul style="list-style-type: none"> <li>- Practicing fair and ethical business trade in all spheres - Economic, Environment and Social</li> </ul>	<ul style="list-style-type: none"> <li>• Continual improvement in efforts for ensuring transparency in the triple bottom-line (people, planet &amp; profit) disclosures</li> </ul>



Nurturing  
Tomorrows



We empower people to build a newer and brighter future, by providing exciting opportunities and a sense of ownership. We combine potential with professional skills to create a culture of trust, care and growth. Our employee engagement & employee satisfaction framework is aimed at giving our employees a platform to increase their involvement and efforts, thereby taking the company to greater heights. The engagement framework is built on the organisation's core values, which contribute towards making the company a great place to work at.

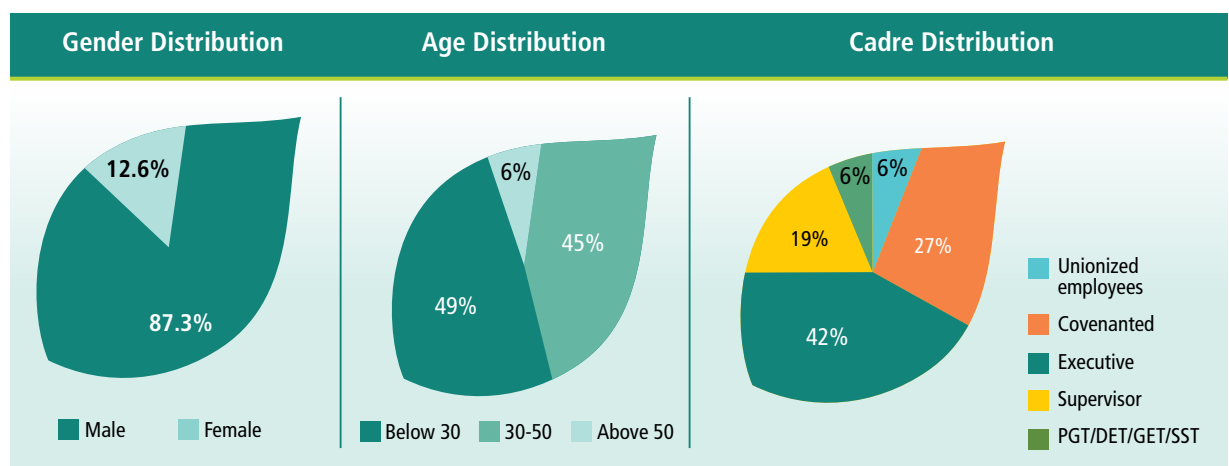
The Company employs various platforms for interaction, in which employee engagement surveys play an important role. An action plan is prepared to address the expectations and concerns expressed by employees. The Company is a merit-based organisation and embraces diversity in race, nationality, religion, caste, age, physical-ability, and religion. The annual compensation review is an important part of any employee's calendar, and we strive to make it a transparent and engaging process. There had been no cases of discrimination in the reporting year. L&T's believes in diversity and equal career opportunities for all. The remuneration ratio of male to female is 1:1.

All Board members are Indian nationals above the age of 50, and there are two female representatives on the Board. The Company directly employs 93 persons with disabilities and the value chain also employs 31 persons with disabilities. 100% of our senior management is local and belong to India.

We have launched a range of strategic Human Resources initiatives, initiated by the Corporate Human Resources Department and implemented across businesses. Shadow Task Forces are constituted for individual businesses and are responsible for 'Concept to Delivery' of the various initiatives planned. The advice of the Shadow Task Force is important for conceiving and delivery of the initiatives.

'Working on Wellness' is our umbrella of employee health initiatives conducted to build a robust, stress-free environment and enhance employee well-being, with a focus on stress management and essential healthcare.

Periodic employee engagement with Top Management is done through Town Hall sessions, webcasts, video conferencing and emails. Various other initiatives like long service awards, team building workshops, recognition events, etc., are undertaken to enhance employee motivation. The business also has tie-ups with premier institutes like IIMs, XLRI and IITs for conducting 'Core Development Programmes', E-MBA, M. Tech and e-learning Programmes at regular intervals.



## Our Workforce

Workforce	2015-16
L&T (excluding L&T Infotech)	47,069
L&T Infotech	18,279
Total Full Time Employees (a)	65,348
Full Term Contract Workers (b)	310,424
<b>Total Workforce (a+b)</b>	<b>375,772</b>

## Human Rights and Labour Practices

L&T is committed to the philosophy of conducting business in an ethical manner with respect for human values, individual dignity and professional conduct. We are committed to the United Nations Global Compact Principles, the Universal Declaration of Human Rights and the applicable International Labour Organisation (ILO) Core Conventions on Labour Standards.

Our policies and systems ensure protection of Human Rights and are defined in our Code of Conduct. These policies cover the issues of prohibition of child labour, prohibition of forced & compulsory labour, non-discrimination, freedom of association and collective bargaining. The Code of Conduct is available to all employees through the Company's Intranet and online training modules on the Code of Conduct are available through our Any Time Learning (ATL) portal.

Our HR policies and practices are on par with the best in the industry. We follow all applicable local laws and regulatory requirements, which include among others, the Factories Act 1948, Building & Other Construction Workers (Regulation of Employment & Conditions of Service) Act 1996, Central Rules 1998 and Industrial Disputes Act 1947. All our security personnel are regularly apprised of human rights and there were no grievances related to security personnel's breach of human rights at our operations. There have been no significant fines or non-monetary sanctions for non-compliance pertaining to human rights, or labour practices during this reporting period.

There were no cases of child labour, forced or compulsory labour or discrimination reported within the organisation.

Also, there have been no violations involving rights of indigenous people during this reporting period.

L&T strictly adheres to statutory and regulatory norms for payment of wages and benefits. The Company ensures that there is no violation of the rights of workmen and provides statutory benefits like PF and medical facilities, etc. The Minimum Wages compliance is 100%. All union employees retain the right to exercise the option of collective bargaining.

We make certain that Human Rights clauses including the right to exercise the option of Collective Bargaining, Prohibition of Child labour, Forced or Compulsory Labour or Discrimination are included in our investments and contract documents with sub-contractors and are strictly adhered to within our premises and at project sites. Each facility has its grievance handling mechanism in place to address concerns related to labour practices.

Significant suppliers and contractors are screened for compliance to the Environmental and Social Code of Conduct, which includes clauses related to human rights, environment, health and safety. All our employees are trained regularly on Human Rights aspects, which is a part of the Code of Conduct training. To enhance workmen's training and upgrade the skillsets of the workmen at our project sites in various functional areas of construction, our Heavy Civil Infrastructure business has set up dedicated Workmen Training Centres at its project sites. More than 8,000 workmen at more than 15 project sites have been trained in Formwork, Bar Bending and Masonry Trades, during FY 2015-16. This programme used the 'learning while working' methodology to train, with a special emphasis on safe working practices.

### Right Equipment for the Right Job

Safe, quick and cost-effective - The benefits of using the right equipment for the job on hand are clear. Our Buildings and Factories business trains our people in this crucial area – helping meet project schedules in a safer, cost-effective way.

*G4-DMA Child Labour, G4-DMA Prohibition of Forced & Compulsory Labour, G4-DMA Nondiscrimination, G4-DMA Freedom of Association, G4-DMA Collective Bargaining, G4-DMA Assessment, G4-HR 9, G4-DMA (Security Practices), G4-HR 7, G4-9, G4-10, G4-HR 9, G4-HR 12, G4-HR 3, G4-HR 6, G4-DMA (Indigenous People), G4-HR 8, G4-11, G4-DMA Labor practices grievance mechanism, G4-DMA Investment G4-HR 1, G4-HR 4, G4-LA 16, G4-HR 4, G4-HR 10, G4-HR 11, G4-LA 8, G4-HR 2*



## Employee Benefits

We offer full-time employees a range of benefits like insurance, healthcare, maternity leave, post-retirement medical benefits, gratuity, pension and provident funds. Apart from all statutory benefits we provide additional benefits such as leave encashment, scholarships and rewards to employee's children, education for children of deceased or permanently incapacitated employees, annual health check-ups, holiday homes and medical insurance in accordance with the Company's norms.

Minimum notice period for operational changes is mandated as 21 days as per the Industrial Disputes Act.

The Company supports employees through the 'Child Disability Project' by providing reimbursement of the expenses related to: Remedial therapy, physiotherapy, speech therapy, occupational therapy, special educator, medical consultations, surgical interventions and physical & mental Assessment, etc. The cost of hearing aids for children with hearing impairments and certain special equipment like wheelchairs and crutches for physically challenged children are also reimbursed. This is a part of an endeavour by the Company to help rehabilitate differently-abled children of L&Tites.

All female employees are entitled to maternity leave. During the year, 375 female employees took maternity leave. 97.07% returned to work after leave ended and 53.07% are still employed. The return-to-work retention rate for the Company is 54.7%.



## Female Workforce

We have a policy for Protection of Women's Rights at Workplace which sets out objectives, and processes to redress complaints. We have constituted Apex and Regional Complaints Committees to address cases of sexual harassment at the workplace, if any.

'Renew' is a career renewal initiative for women which stems from L&T's strong belief in diversity and equal career opportunities for all. It is aimed at providing a platform through which women professionals can re-enter the corporate world after a career break. Any woman on a career break may apply and would be employed subject to fulfilment of selection criteria. Various departments that one can apply for are Audit, Finance / Accounting, Engineering Design, Project Management, Information Technology, Human Resource Management, Legal and Corporate Social Responsibility.

**Female employees are provided with additional benefits such as maternity leave and crèche allowance.**



## Employee Development: Training and Capacity Building

Training is essential to our business and we offer several training modules for employee development and skill building to meet various facets of the organisation's growth and performance. Our training programmes can be categorized as follows:

**Orientation Programmes:** These entry-level programmes ensure a smooth transition from the academic to the corporate world. They include an introduction to L&T's culture and values, information about the organisation, its businesses and interaction with senior and top management.

**Core Development Programmes:** These programmes develop and groom talent in general management and equip trainees to address higher-level responsibilities.

**Centre of Excellence Programmes:** These are structured programmes to provide end-to-end consulting on various operational excellence initiatives of businesses. These programmes assist L&T businesses in improving business performance and effectiveness through training in operational excellence programmes and certification courses.

**External Training Programmes:** These programmes, conducted by external agencies, meet specific training needs on technical subjects.

**Performance Oriented Development Plan:** After identifying developmental and training needs of an individual, support for performance improvement is provided through on-the-job-training, self-study

material, participation in external and internal competitions, special projects, voluntary assignments, external programmes, seminars, etc.

**Theme Based Programmes:** These are need-based programmes conducted to spread awareness and knowledge about a particular system, model or process.

**Any Time Learning (ATL):** L&T's robust e-Learning platform, ATL is available online to all employees. It has a collection of training modules on diverse topics as well as availability of national and international journals and magazines. The modules are user-friendly, interactive and engaging, formulated by subject matter experts and using various knowledge resources. ATL is also being used as a blended learning tool, along with classroom learning sessions.

**NEBOSH Certified Courses:** L&T is the first Indian corporate to be accredited as a 'course provider' by National Examination Board in Occupational Safety & Health (NEBOSH), United Kingdom (UK) for delivering the International General Certificate and Institution of Occupational Safety & Health (IOSH), UK. The objective is to sustain a strong culture of Managing Safety across L&T businesses.

**Leadership Development:** Our Leadership Development Programmes are conducted in collaboration with reputed Indian and International Business Schools. The 7-Step Leadership Development process shown in this section has been meticulously structured.

### Average Training Hours

*Training Hours per Employee*

Gender-wise Training Hours	Grade-wise Training Hours	2013-14	2014-15	2015-16
<p>A bar chart with a light blue background and a white grid. The x-axis is labeled 'Male' and 'Female'. The y-axis represents training hours. The bar for 'Male' reaches the value 53.41, and the bar for 'Female' reaches the value 39.73.</p>	Covenanted	16	13	17
	Executive	21	20	18
	Supervisors	26	12	16.5
	Unionized	43	11	10
	PGT/GET/DET/SST	480	480	480

**Total Training Hours: 3.6 Million**

## Seven-Step Leadership Development Process



**1 Management Education Programme (MEP):** An exclusive collaborative programme between L&T and the Indian Institute of Management (IIM) Ahmedabad, aimed to groom young leaders in holistic management.

**2 Leadership Development Programme (LDP):** Designed for middle management, it focuses on the overall development of high performing executives to enable them to assume leadership responsibilities.

**3 Global Leadership Development Programme (GLDP):** Customised and presented by the University of Michigan's Stephen M. Ross School of Business, the programme focuses on competition in the global context and facilitates leadership skills.

**4 Transforming L&T into a Global Corporation:** In association with INSEAD, the business school for the world, this programme is designed for top management executives. The programme covers strategic choices including mergers and acquisitions, risk management and leadership attitudes from a global perspective.

**5 Global CEOs Programme:** Conducted by Professors from Harvard Business School, it is aimed at leaders handpicked for future roles such as CEOs, Business Heads, Board Members and Business Leaders.

**6 International Executive Education:** Enterprise Leaders are nominated for Advanced Management Programmes offered by select, globally renowned business schools like London Business School, INSEAD, etc.

**7 Mentoring:** A systematic, internal mentoring process is put in place, where the Group Executive Chairman personally mentors a few Senior Executives through regular interaction.

**The Leadership Development Academy (LDA) has been recognised by Symbiosis International University as a 'Research Centre' which enables L&T-ites to pursue their Ph.D. Programmes.**



## New Hires

New Employees Who Joined in 2015-16	
Male	9,930
Female	1,986
Below 30 years	8,518
Between 30-50 years	3,227
Above 50 years	171
Unionised	2
Total	11,918

## Employee Turnover

Turnover in 2015-16	
Male	10,116
Female	1,515
Below 30 years	6,550
Between 30-50 years	4,597
Above 50 year	484
Unionised	131
Total	11,762



First Level Leadership Programme Launched in Infrastructure business

## Feedback Fuels Leadership



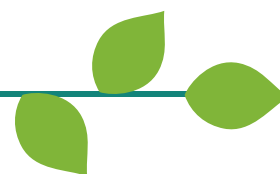
To sustain a company far into the future, it is essential to groom leaders from within the organisation. L&T Hydrocarbon Engineering designed a First Level Leadership Programme (FLP) to bridge the gaps in the leadership capability of its young managers and equip high performers with the managerial and leadership skills to build a strong leadership pipeline.

Constructive feedback plays a positive role in shaping an individual's future. That is why FLP 360 is provisioned to get feedback from everyone in a young manager's corporate environment: seniors, peers, mentors, friends, subordinates, et al. Respondents complete a survey, designed around the competencies of a participant. Holding up a mirror to the young manager; this helps him or her to build professional strengths for the Company's growth.





# Occupational Health & Safety



Safety continues to be our top priority and a critical component of any business decision made. Our goal is to ensure 'Zero Harm' for all our employees, contractors and customers. We manage safety across our businesses through a combination of rigorous systems, procedures and by building a culture for safe operations. Our standards and operating procedures define the controls and physical barriers we require to prevent incidents. All L&T businesses and our contractors must manage safety risks in line with the L&T Corporate Environment, Health and Safety (EHS) Policy, local laws and the terms of their contract with relevant permits and approvals. Each business has its own dedicated EHS team for focused business-specific environment, health and safety interventions.

Across our project sites, we foster a culture where health and safety are core values. Each person is encouraged to understand the importance of good health, and his or her role in creating a safe workplace. Essential periodic training and skills are provided before commencement of work and our safety performance is reviewed during business meetings and management review meetings. In addition, key safety performance numbers are reviewed by the Company Board on a quarterly basis.

## Safety Culture

Our Corporate EHS Policy articulates our commitment towards building a workplace that is conducive to the mental and physical well-being of the workforce and encourages implementation of best practices.

The policy is explained to our contract workforce during induction training. It is periodically reviewed by senior management. Safety capability of our sub-contractors is evaluated before assigning contracts and compliance to the policy is ensured through regular training, site visits and audits. The EHS framework helps translate our EHS policy into practice at campuses & project sites and is deployed across the organisation through procedures, guidelines and manuals.

Safety committees have been constituted at our manufacturing locations to encourage employee participation in building a culture of safety consciousness. The committees comprise management representatives and union members. More than 50% of the members of the committees are union members. The Safety Committees assist the management in achieving the objectives of safety performance for a particular campus. Regular job-specific safety training and implementation of proactive safety measures is ensured.

**The projects executed by L&T continued to receive various Safety awards and recognition. 17 Projects were awarded by the Royal Society for Prevention of Accidents (RoSPA), 14 by the British Safety Council, and 12 by the National Safety Council, India.**



*Safety is our top priority and is driven from the top. Mr. S. N. Subrahmanyam, Dy. Managing Director & President addresses workers at a project site.*

## Solar Light Enhances Safety by Night

Solar blinkers on the moveable tower crane hooks keep operators and signal workmen safe from injury during the night shift at Buildings and Factories business project sites.



## Building a Safety Culture



The Buildings and Factories business executed Olympia Grande, Chennai, India – a residential apartment project, with these safety processes. Solving lofty issues: wall protection, peripheral working platform and safety net, overhead protection, handrails and anchoring points for lifelines.

## Safety Dashboard

Accident Statistics (YoY)	2013-14	2014-15	2015-16
Frequency Rate	0.15	0.15	0.16
Severity Rate	218	225.94	189.63
Fatality Rate	8.83	8.98	9.55
Fatalities (YoY)	40	43	41

Frequency Rate (FR): Number of reportable accidents per million man-hours worked.

Severity Rate (SR): Number of man-days lost per million man-hours worked.

Fatality Rate: Number of fatalities per lakh workforce.

At workshops and fabrication yards, our workers are exposed to the risk of developing hearing disorders, but we take utmost care and ensure that our noise levels are within the permissible limits. Similarly, Information Technology business' workforce is exposed to the risk of having ergonomic disorders, for which we conduct ergonomic awareness camps and impart training on a regular basis. The workforce of our Construction business is exposed to the risk of heat strokes and dehydration at places with high temperature. This is managed through time schedules with most of the work to be done during comfortable timings.



Road Safety Week 2016

## Significant Safety Interventions

1. Striving to achieve the goal of 'zero harm', the Heavy Civil Infrastructure business has launched the Corporate EHS Strategic Plan 2015-16 with key EHS deliverables that have been implemented across all its operations. As part of the EHS Strategy, the following significant initiatives were taken up during the year:
  - Successful re-certification of EHS Integrated Management Systems (IMS) conforming to international standards: ISO 14001 & OHSAS 18001.
  - Key training initiatives include IOSH Managing Safely certification courses for Project Heads, NEBOSH certification courses for Project EHS In-charges and online EHS certification courses for all technical employees.
  - The business has revamped the IMS procedure and introduced monthly EHS Risk Management audits to facilitate and monitor implementation across all its projects.
  - A Pre-cast elements lifting strategy was launched with inputs from all stakeholders and training workshops were held at relevant project sites to facilitate implementation.
  - The Workmen Management Centre trained 8,045 subcontractors' workmen at various sites through 'On Job Training' (OJT) programmes on formwork, bar bending and masonry to enhance their skill level for speedy and effective execution of jobs, while emphasising on safety, quality and productivity.

## Safety is the most crucial investment that we make to focus on improvement.

2. To enhance safety at its operations, Power Transmission and Distribution business, has taken various initiatives, which include:
  - Upgrading Safe Operating Procedures (SOPs) for Transmission Lines
  - EHV substations and distribution projects to reflect changing work methods and a mechanisation
  - Adoption of the sagging bridge (stringing working platform) technique
  - Use of motorised winch machines in place of tractors in final sag activities
  - Enhanced training on Behaviour-Based safety, safety audit and train the trainers
3. At L&T Hydrocarbon Engineering, cross-functional Safety Audits were initiated across all business units, as a part of the Corporate HSE Plan. All safety systems and procedures were IT enabled to make them more user-friendly. Senior Management involvement and visibility was reinforced through systematic senior management site safety observation. To spread safety awareness, various theme-based campaigns were held on various important dates during the year. Lessons learnt during project execution were shared throughout the organisation by way of 'Safety learnings and alerts'. Various safety training programmes were held, and motivational schemes were instituted during the year.





4. L&T set up a Safety Innovation School in 2012 at its facility at Hazira, near Surat, India to provide safety training. This school is one-of-its-kind to be established by any engineering & construction company in India. Similarly, there are two more safety training schools established at the Madh Training Centre near Mumbai and at Kanchipuram near Chennai.

5. L&T Infotech ensures safety of female employees working during late hours and specific initiatives have been instituted such as:

- A minimum of two female employees are required to be present on the same floor, in case of an operational requirement.
- Pick-up and drop facility is provided to all female employees through L&T authorized transport vendors, with an appropriate schedule.
- Security checks at all floors have been enhanced
- Mandatory communication to security is enforced regarding presence of female employees in office for extended hours.

**Safety System – Now more effective through digitisation**

Behavior-Based Safety (BBS) focuses people’s attention and actions on safe behaviour. At our Heavy Engineering facility at Hazira, near Surat, an online system was designed to collect and analyze BBS observations. Simpler, faster and more efficient than manual collection and analysis, the digitized system enables user departments to resolve safety issues speedily, thus enhancing safety levels on the shop floor.

*We focus on safety of our workers at our construction sites.*









## Growing Taller



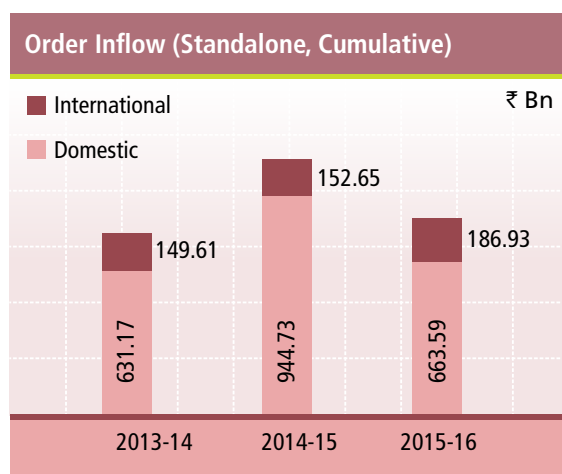




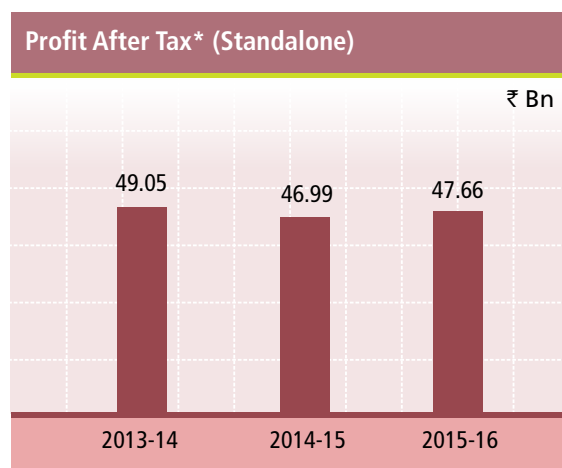
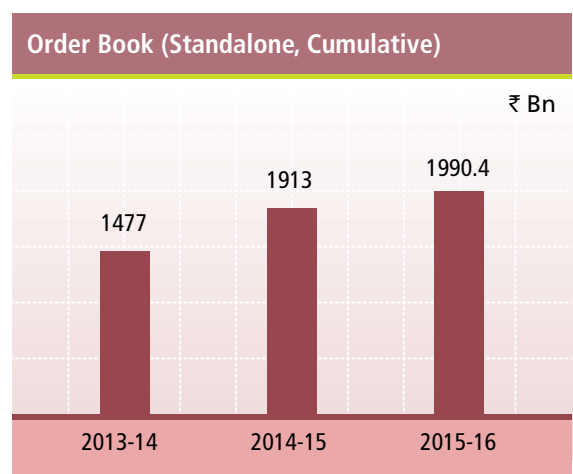
Success in business has always been a moving target. In recent times, the target seems to be moving faster and with greater unpredictability thanks to the global economic turbulence and its ripple effect around the world. L&T is a public listed company and shareholding pattern as of 31<sup>st</sup> March, 2016 presented in the Annual Report 2015-16, Page 115. Overcoming macro-economic challenges, L&T has retained its leadership edge by leveraging its entrenched competitive capabilities while simultaneously remaining alert to emerging possibilities. We continued our engagement with India's strategic sectors as well as in critical areas such as infrastructure development. Our existing capabilities are also in sync with national programmes like 'Make in India' and 'Digital India'.

In 2015-16, the signals on India's economic front were positive. The country registered GDP growth of 7.6% as compared to 7.2% in the previous year and a reduced fiscal deficit of 3.9%. The Company recorded encouraging financial performance in 2015-16. Consolidated revenues surged to ₹ 1026.32 billion - a 12% growth over the previous year. The unexecuted Order Book presents an even more optimistic picture – it stood at an all-time high of ₹ 2499.49 billion (consolidated) ensuring prolonged visibility on revenues and margins. A dividend of ₹ 18.25 per equity share on a face value of ₹ 2 per share has been declared.

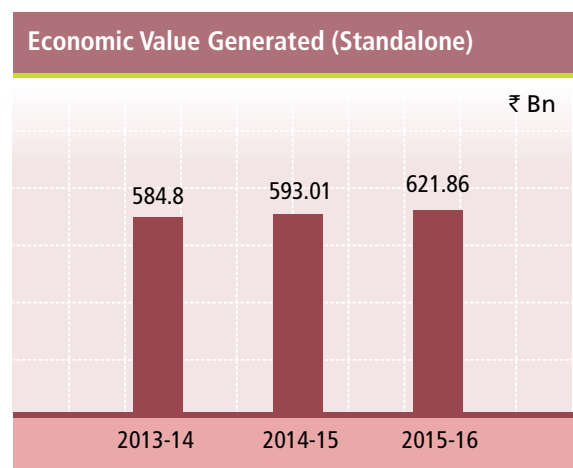
There has been a slight increase in the share capital of the Company during the year on account of allotment of shares on exercise of ESOPs. In line with the corporate strategy of listing key subsidiaries, the Group rolled out its IPO programme. L&T Infotech made its stock market debut on July 21, 2016 at the National Stock Exchange in Mumbai. The IPO had attracted more than one million applications, the highest for any share sale offer in India in last five years. The Company shares have been listed on NSE and BSE.



Figures for 2013-14 exclude IES business to enable appropriate comparison.



\*excluding extraordinary/exceptional items



Particulars	2013-14	2014-15	2015-16	L&T's Market Capitalization as on 31 March, 2016 was ₹ 1132.89 Bn
EPS (₹ Per Share)	59.36	54.46	57.07	
RoCE	14.9%	12.5%	11.90%	

EPS: Earnings per Share | RoCE: Return on Capital Employed

Liquidity and Capital Resources	₹ Bn	2013-14	2014-15	2015-16
Cash and cash equivalents at the beginning of the period		14.57	17.94	15.9146
Add: Net cash provided/(used) by:				
• Operating activities		10.47	31.18*	32.56
• Investing activities		-19.42	-23.19*	-28.11
• Divestment proceeds		7.27	4.35	22.89
• Financing activities		5.04	-14.37	-25.67
• Discontinued operations		-	0	0
Cash and cash equivalents at the end of the period		17.94	15.91	17.58

No significant financial assistance was obtained from the Government in the reporting year.

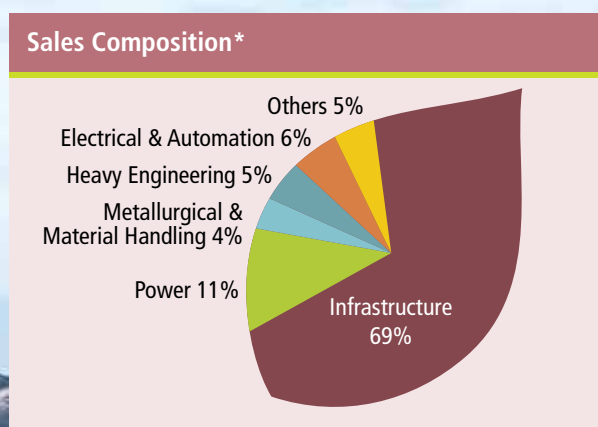
\* Figures for 2014-15 have been re-grouped / re-classified to conform to the figures of the current period.





Economic Value	Particulars	2013-14	2014-15	2015-16
Generated (A)	Total Income	584.8	593.01	621.86
Distributed (B)	Manufacturing, construction and operating expenses	433.52	443.80*	466.29
	Employee wages and benefits	46.57	41.62*	44.80
	Payments to providers of capital			
	Interest	10.76	14.20	14.49
	Dividend	13.21	15.11	17.00
	Payments to Government		57.93	59.99
	Community investments (CSR spend)	0.77	0.77	1.19
Retained	=A-B	79.98	Dividend	Dividend

\* Figures for 2014-15 have been re-grouped / re-classified to conform to the figures of the current period.



**Employee Cost and Benefits**

	2013-14	2014-15	2015-16
Cost towards wages/salaries (a)	38.07	34.23*	38.64
Other benefit costs (b)	8.50	7.39*	6.17
Total personnel cost = a+b	46.57	41.62*	44.80
Average payout / employee (millions)	0.85	0.94	1.03

\* Figures for 2014-15 have been re-grouped / re-classified to conform to the figures of the current period.

**Hosur – Krishnagiri road**

L&T's Transportation Infrastructure Business has added might to NH 7 - a vital interstate connect by transforming the old highway into a smart six-lane one with excellent drivability.



## Supply Chain

L&T is committed to fostering green consciousness through an inclusive approach encompassing its supply chain. L&T's supply chain partners include vendors, contractors, distributors and service providers. Raw material procurement accounts for major portion of the Company's operating cost. Each business has a procurement and supply chain team catering to business specific requirement.

We encourage local sourcing of raw materials. We also invest in local manufacturing wherever feasible. More than 80% of the Company's requirements in FY 2015-16 were met by local suppliers. Local sourcing has helped us improve logistics through better response time, faster turnaround, efficient and cost-effective transportation as well as being beneficial to the local economy.

## Environmental & Social Code of Conduct for Suppliers and Capacity Building

In line with the Company's Green Supply Chain Policy, we have formulated an 'Environmental & Social Code of Conduct for Suppliers' covering specific clauses on environmental management and compliance, human rights, labour practices, prohibition of child labour, freedom of association & collective bargain, prohibition of forced & compulsory labour, ethics and transparency, and impact on society. More than 400 L&T Suppliers have signed this code, which is required to be signed by all new suppliers. Taking this forward, this year, the environment assessment of 8 suppliers of the Heavy Engineering business was conducted, along with an awareness session on sustainability for suppliers and transporters. After gap analysis a time bound action plan for improving overall environmental aspects of their business was put in place. The feedback was also shared with supplier's their senior management.

The Company conducts capacity-building programmes for vendors and sub-contractors and provides training on safety, business efficiency and sustainability. This year, we conducted a half day programme on sustainability for our prime transporters at Powai Campus. Various tips for fuel saving, time saving, use of technology, route planning, maintenance planning, vehicle checks were shared; also we encouraged the transporters to measure their fuel, running & maintenance cost and carbon emissions per kilometre of transportation. This monitoring will aid in fuel conservation, safe transportation and development of better management techniques.

## Climate Change Challenges and Efforts

Climate Change has the potential to bring extreme weather events, and as we operate internationally, this may pose physical challenges to our construction and manufacturing businesses. Increase in mean temperature may lead to cases of heat stroke at our project sites, resulting in delay of projects and operational losses. The Indian economy is largely dependent upon the monsoon and changes in monsoon patterns may have a significant impact on the Company. In the case of droughts, the demand for water intensive products and services would reduce. On the other hand, excess rains and reduction of solar influx would negatively impact the solar business. Apart from this, the cost of fuel, energy and related taxes are increasing at alarming rate and diluting profit margins.

The Company remains committed to reducing its GHG impact. Carbon footprint mapping is conducted organization wide and emission reduction targets are set. The Company has formulated its third Sustainability Roadmap 2021, which is aligned with its Business Plan – LAKSHYA 2021. We are working on achieving the targets including climate change adaptation and mitigation initiatives and are also proactively disclosing our carbon emissions annually through the Carbon Disclosure Project.

Our initiatives include increased use of renewable energy, promotion of green building construction and energy efficiency, enhancement of green cover, installation of solar and renewable energy solutions at our campuses and also providing Green Portfolio Solutions to our customers.

## Innovation Reduces Project Time

The new technique developed to install each heavy pancake on a platform's valve access deck for the NASR Phase-1 Development Project of Abu Dhabi Marine Operating Company, reduced installation time by 80% and saved ₹ 39 million.

Kudos to our L&T Hydrocarbon Engineering team!





## CASE STUDY

### More Power From the Sun

Solar Tracking Mechanism— an innovative technology maximises electricity output



India's single largest solar tracker plant with a capacity of 60MWp in Tamil Nadu, 2016, constructed by L&T.

#### How can you get more solar power?

**Simple! Just follow the sun!**

Bringing this innovative idea to life, L&T's Power Transmission and Distribution – Solar business added a new dimension to solar power generation. It designed and developed a solar tracker which generates more power from solar modules by tracking the sun's path. The enhanced collection of solar radiation on the panels, helped maximise power production.

L&T's horizontal single-axis solar tracker, designed in-house, moves 1200 solar panels mounted on 30 rows using a single gear drive housed in the middle. The movement is synchronized with precision of  $\pm 1^\circ$  even in desert winds. This technology evolved during the last 5 years. L&T constructed India's largest Vertical Single Axis Tracker plant in 2011. In 2015, L&T designed the Horizontal Single Axis Tracker.

The benefits of this technology are multifold: enhanced solar energy production, sustainable use of land and other resources, reduced CO<sub>2</sub> emissions and more affordable solar energy.

#### Highlights:

- Maximises capture of solar radiation on the solar PV panel, producing power more efficiently than the conventional fixed tilt systems
- Energy produced by the solar power plant increases by 15-35% by employing different tracking mechanisms, depending on the geography
- Filed two patents on solar tracking technology
- Constructed India's single largest solar tracker plant (60MWp) in Tamil Nadu in 2016
- Only EPC player in India to execute solar tracker using both Solar PV and CSP technology

**L&T is India's only EPC player to execute solar trackers using Solar PV & CSP technology. L&T is India's first company with a portfolio of approx. 140MWp solar tracker projects.**



# Green Portfolio: Products & Services

L&T's integrated capabilities span the spectrum of 'design to deliver' for infrastructure and engineering solutions. Infrastructure is critical to the economic development of a country, industries, businesses and public well-being. Characterised by professionalism, high standards of corporate governance and sustainability, L&T continues to evolve, seeking better ways of engineering to meet emerging challenges and with this in mind, the Company has developed

a Green Products and Services Portfolio. With our Green Portfolio, we deliver engineering and design solutions focused on sustainability and infrastructure with low environmental impact. These include technology solutions with lower carbon emissions, less water consumption, lesser air pollution, energy efficiency improvement, clean energy and resource conservation.



## Renewable Energy

### Solar Power Plants

Solar Photo Voltaic (PV) based power plants utilise renewable solar energy and contribute to reduction of GHG emissions.

**L&T commissioned 200 MWp of Solar Power Plants and commissioned India's largest Solar Tracker based Solar Power Plant in Tamil Nadu.**

### Hydro-Power Plants – Our 'Water to Wire' solutions

Renewable energy based power plants which harness the energy of moving water.

**Hydel projects with an aggregate capacity of 870 MW are in various stages of development by L&T.**



## Energy Efficiency

### Efficient Power Transmission and Distribution System

L&T offers highly-efficient Power Transmission and Distribution Systems (PTDS) designed to reduce pilferage and transmission and distribution losses. This saves 20 - 40% of electricity, which reduces CO<sub>2</sub> emissions significantly. PTDS includes transmission lines, underground cable networks, substations, distribution networks, electrical, instrumentation & communication works.

### Energy-efficient Equipment

Electrical & Automation business offers a range of eco-friendly products, systems and services for industrial, commercial and residential applications.

**Products:** Low-watt loss fuses, AC drives, soft starters, power factor improvement capacitors.

**Systems:** Industrial & building automation solutions, smart metering systems.

**Software Functions:** Energy performance analysis, integrated energy management.

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**Our green products and services portfolio steadily increased to ₹161.33 billion in the FY 2015-16, an increase of 49.83% over the previous year. The percentage contribution of our green products and services portfolio to overall sales grew to 26.27% in the reporting year.**

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## CO<sub>2</sub> Emission Reduction

### Metro and Mono Rail

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

**243 km of Metro rail systems including ongoing projects is credited to L&T. L&T has successfully executed metro rail projects in multiple cities across the country and internationally.**

### Green Buildings

The Company constructs certified Green Buildings which consume less energy and water, utilise recycled material and locally source most of the construction material.

**More than 49.1 million sq. ft. of Green Building space has been constructed by the Company for its clients. Additional 8.84 million sq.ft. of green space is under various stages of construction**

## Water & Resource Conservation

### Water Treatment & Distribution Infrastructure

L&T constructs bulk distribution and water treatment systems, waste water treatment plants, effluent treatment plants and lift irrigation systems.

**L&T has constructed water and waste water distribution networks extending across 50,000 km. It has also constructed 4,000 MLD of water and waste water treatment plants.**

### Supercritical Thermal Power Plant Equipment

Supercritical technology results in better energy efficiency, less fuel consumption, less greenhouse gas (GHG) emissions and less water consumption. It requires less land and less expenses over the project life cycle.

**L&T is executing 4 orders of ultra-supercritical and supercritical thermal power plants in India.**

### Coal Gasifiers

Coal gasification technology offered is used to produce synthesis gas – an economical alternative to natural gas. Synthesis-gas based plants use coal economically resulting in less CO<sub>2</sub> emissions.



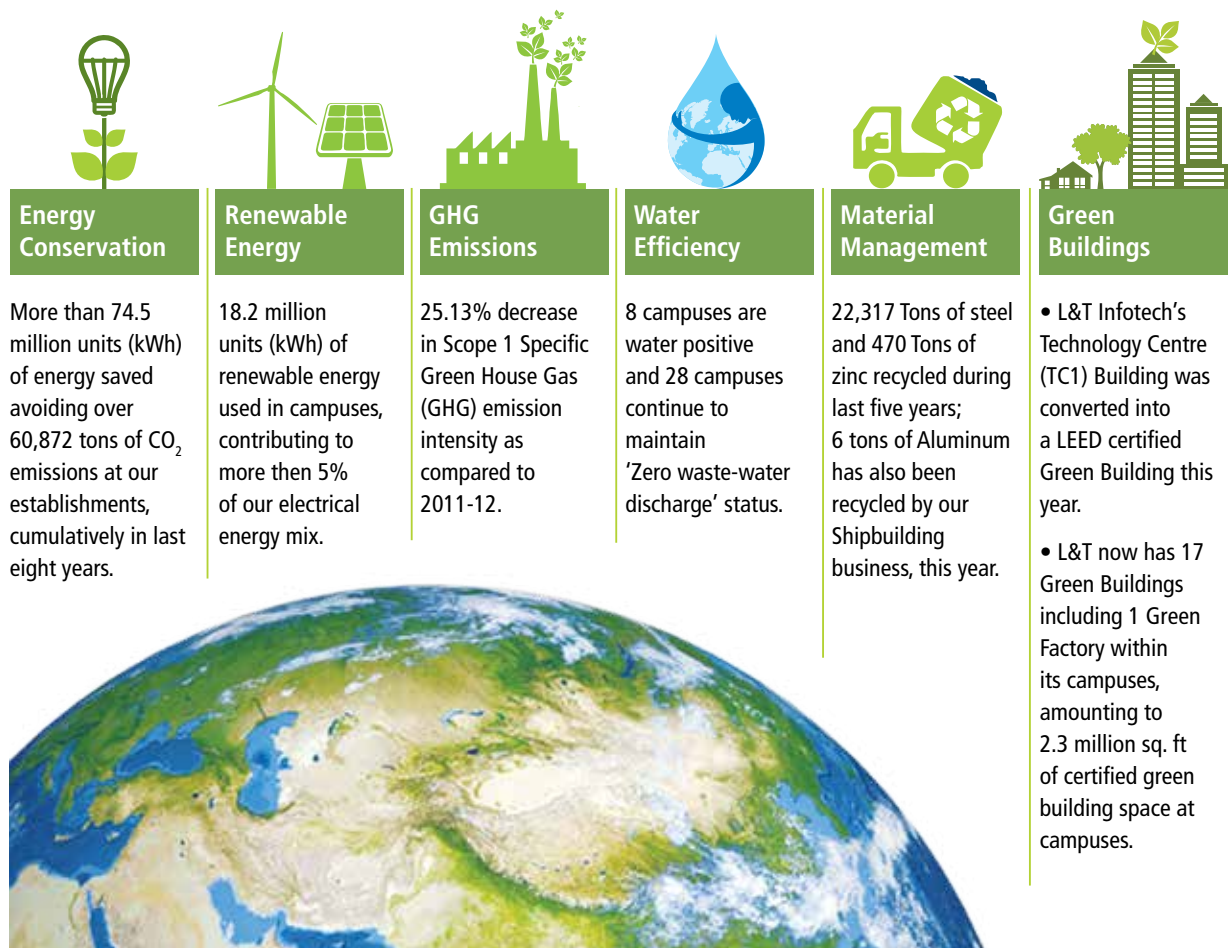
Greening  
the Future

A holistic approach towards environment management and making responsible, informed choices are vital to the growth of the organisation. We recognise that achieving growth in industry at the cost of the environment is neither desirable, nor sustainable. Our Corporate Environment, Health and Safety (EHS) Policy plays a vital role in defining the choices we make. Since 2009, we have been setting measurable targets and developing action plans for successive three-year Sustainability Roadmaps. Last year, we completed our 2<sup>nd</sup> Sustainability Roadmap cycle. The next Sustainability Roadmap 2016-2021 has been formulated in alignment with business plan LAKSHYA-2021.

## Performance Review

We regularly review our environmental performance against the objectives and targets set, and conduct periodic EHS training for our workforce. At project sites and offices, the respective project managers are responsible for ensuring optimal utilisation of natural resources.

We also work closely with our clients, suppliers, and external stakeholders to improve their environmental performance. In 2015-16, a total expenditure of about ₹ 0.13 billion was incurred on environmental pollution control and management measures.

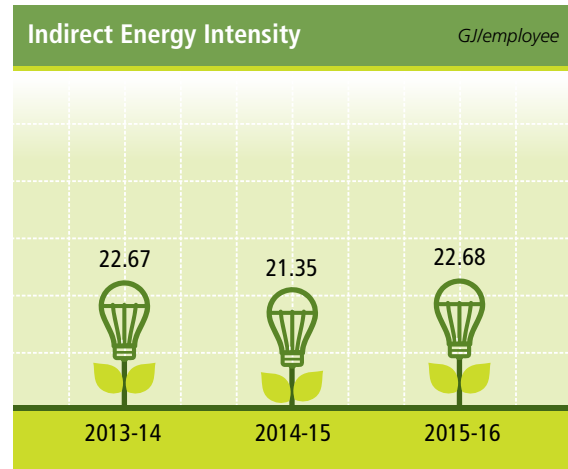
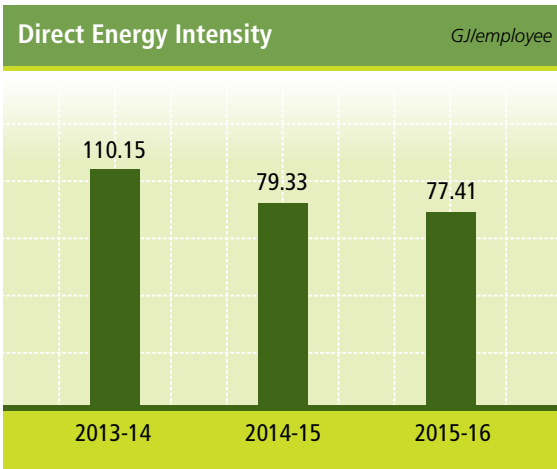


## Energy

The production of fossil fuel based energy contributes to a large extent to the depletion of many of our planet's valuable resources. At L&T, we focus on conservation of resources by constantly improving our energy management processes.

We have dedicated energy auditors and managers, trained at units certified by Bureau of Energy Efficiency (BEE). Our Direct Energy consumption was 5,058,777 GJ and Indirect Energy consumption was 1,482,222 GJ for the year 2015-16.

This year, our direct energy consumption has reduced by 5.95% as compared to last year with the implementation of fuel efficiency measures. Our energy consumption outside the organisation covering transport facilities provided to the employees is 107,201 GJ. The variation in direct and indirect energy consumption w.r.t. previous year is due to the nature of business. Our major business is Engineering, Procurement and Construction of projects, in which energy consumption depends on the stage of project execution cycle. Our focus is on energy conservation and maximising the energy efficiency across our campuses and project sites.



## Renewable Energy

We strive to increase the share of renewable energy in our overall energy mix. 3 campuses are sourcing wind energy from external suppliers, while 18 campuses and 1 project site are generating renewable energy on-site. Due to changed regulations regarding the banking of renewable energy units, renewable energy usage significantly reduced at Mumbai-based locations, this year.



**WIND**

Our campuses utilise 16.8 million units of electricity supplied by wind powered turbines.

**SOLAR**

Solar energy equivalent to 1.4 million units is harvested within the campuses.

**BIO-GAS**

The food waste processing plants at four campuses contribute to more than 5,471 Cu.m. of bio-gas, which is used in canteen.





## CASE STUDY

### A Green Campus – Now Greener! Microgrid makes maximum impact



*L&T has installed a Renewable Energy Microgrid at its Chennai Campus integrating solar PV cells, micro-wind turbines, and a bio gas plant along with Li-ion battery for energy storage.*

Spread over 27 verdant acres at Chennai, L&T's Construction Headquarters was virtually a sustainability model – with three U.S. Green Building Council (USGBC) certified green buildings, a grid-connected solar rooftop PV system producing over 600,000 units per annum, solar street lighting, and a vast tree cover. Apart from this, the facility consumes about 13 MWH (of the 20 MWH) annually generated by the wind farm L&T set up in Tamil Nadu.

And then we went the extra, greener, mile. We installed a renewable energy microgrid system. It integrates solar photo-voltaic cells, micro-wind turbines, and a biogas plant and a Li-ion battery for energy storage. The micro-grid system was created by our Solar business team, an industry leader in renewable energy in India. The system maintains power security and overall protection through complete control and monitoring of energy resources, storage and loads. Optimising energy use, it improves energy efficiency through smart decision-making.

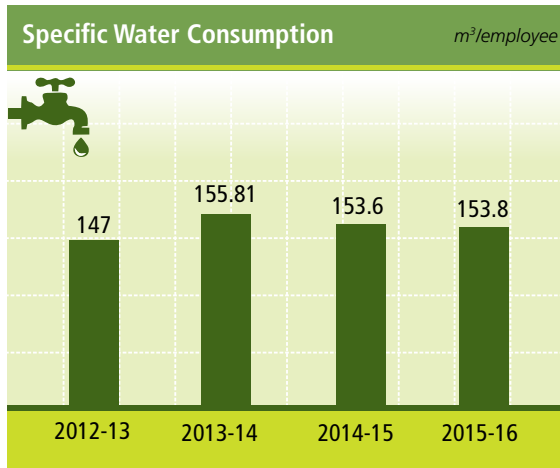
#### Highlights

- Full-fledged pilot renewable energy micro-grid commissioned
- Significant reduction in diesel consumption in DG sets
- Advanced load management by prioritisation of loads
- Advanced storage technology enables energy time shift and regulates frequency. Seamless integration of various renewable energy sources
- Won Earth Care Award 2015 for 'Excellence in Climate Change Mitigation and Adaptation'



## Water

L&T is continuously optimising its water consumption through adoption of new technologies and behaviour change initiatives. The Company reuses / recycles treated wastewater at its establishments with the aim of reducing its fresh water intake.



**12.87% of the total fresh water consumed at our campuses and project sites is reused / recycled.**

All our 28 major manufacturing campuses have adopted a 'zero wastewater discharge' strategy. The Company is also focussing on utilisation of rain-water around its campuses by installing rain-water harvesting systems at its facilities at Powai (Mumbai), Pondicherry, Ahmednagar and Mysore.

**Water Consumption** *m<sup>3</sup>/year*

Source of Water	2013-14	2014-15	2015-16
River/ Lake	2,991,156	2,869,540	2,651,888
Municipal Water	2,173,743	535,840	1,532,946
Rain water	8,803	71,694	80,602
Ground water	1,301,963	2,321,394	4,102,763
Other	4,096,076	4,615,700	1,683,795
<b>Total</b>	<b>10,571,741</b>	<b>10,414,440</b>	<b>10,051,994</b>

*Total water consumption as per current scope: 10,051,994 m<sup>3</sup> and total wastewater discharge: 1,412,632 m<sup>3</sup>. Our waste water discharge does not significantly impact any water body, protected area, area of biodiversity value.*

## Making Every Drop Count

In 2015-16 Maharashtra state faced one of its biggest water crises in recent decades. And L&T's Powai campus rose to the occasion. Comprising Heavy Engineering workshops, world-class design and R&D labs, a Technology Centre, a world-class Business Park and offices of various businesses of the Group, there was plenty of scope for water conservation. L&T's efforts and initiatives resulted in a significant level of water conservation.

### Key impact initiatives include:

- Throttling of valves in the main pipeline for reduction of water at source
- Formation of task force on water consumption reduction
- Fixing of orifice in taps to regulate water outflow
- Water leak detection in main delivery line to avoid water wastage

- Water meter installation at strategic locations for hourly water monitoring to identify and control high water consumption areas
- Employee participation through water conservation suggestions and awareness through posters/emailers
- Fixing of water-saving devices in canteen utensil washing area
- Use of sprinkler showers instead of pipes for watering gardens and lawns
- Reduction in garden watering frequency from thrice-a-week to twice-a-week
- Use of water gel chemical and moss to reduce water requirements of potted plants

**Water consumption at Powai Campus has been reduced from 400,000 Litres/Day to 165,000 Litres/Day. Average water consumption was reduced by 54.33% .**



## Eco-friendly Recycling of Waste-water

L&T's Shipbuilding business offers total solutions, from concept to design for new ships, as well as repair and retrofit for both defence and commercial vessels. The business owns and operates two modern shipyards at Hazira, Gujarat and Kattupalli, Chennai – both of which are ISO 14001 and OHSAS 18001 certified. The corporate headquarters of L&T Shipbuilding and a state-of-the-art Marine Design Centre are located in Chennai, India.

Taking an eco-friendly step to conserve a precious resource, L&T's Kattupalli Shipyard has installed an oil-water separator to recycle and dispose of influent from the bilge water tank or from oil storage tanks of new or repaired ships. This helps remove the oil present in high concentration in the waste water. The separator generates a centripetal force to separate the lower density oily phase from the higher density water phase. The separated water is then treated in the effluent treatment plant and is used for gardening and horticulture, once it meets the discharge standards prescribed. The separated oil is disposed through government- authorised recyclers. This has simplified the effluent treatment process and helped convert process water into a clean reusable effluent.

### L&T's Kattupalli Shipyard has installed an oil-water separator.



## Air Emission

We have put in place all the necessary control measures for monitoring and managing air emissions from our campuses and project sites. This includes monitoring systems to check our performance against applicable regulations, at campuses and project sites. The usage of Ozone Depleting Substances (ODS) has been phased out as per the applicable regulations. The ODS consumption is due to the use of refrigerants in air-conditioners and chilling plants.

	<i>Tons/year</i>		
	2013-14	2014-15	2015-16
SOx	84.6	23	11.5
NOx	456	91.7	20.3
PM	82.06	36.6	23
ODS	1.27	2.5	2.4



## GHG Emissions

### Scope 1

Direct GHG emissions  
**368660 tons of CO<sub>2</sub>e**

### Scope 2

Indirect GHG emissions  
**321972 tons of CO<sub>2</sub>e**

### Scope 3

Other Indirect GHG emissions  
**2872617 tons of CO<sub>2</sub>e**

Climate Change due to mankind's energy intensive and planet-unfriendly production processes is a real challenge and needs to be addressed on a global scale. At L&T, we are making every effort to minimise our impact by reducing GHG Emissions.

The source of emissions in our operations, are:

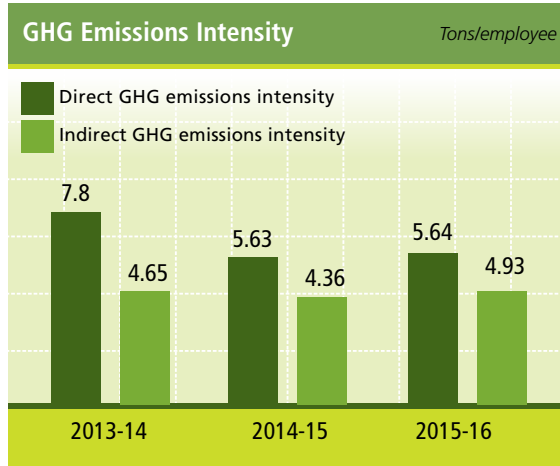
**Scope 1 emissions\*** - Consumption of fuels like petrol, high speed diesel, furnace oil, natural gas, LPG, CNG and acetylene.

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

**Scope 3 emissions** - Business travel, employee commuting provided by the organization and waste generation in operations. We are also capturing a part of the Scope 3 emissions from upstream and downstream transportation, emissions from purchased goods and services. We are in the process of establishing a system to capture the entire Scope 3. Emissions from leased assets (upstream) and investments are included in the Company's Scope 1 and Scope 2 emissions.

Initiatives such as technology change, switching to renewable energy and improving energy efficiency are also enabling us to reduce our scope 1 and scope 2 GHG emissions.

**We have achieved a 27.7% decrease in Scope 1 Specific Green House Gas emissions intensity compared to 2013-14.**



\*The energy, GHG emissions and water consumption intensity per employee has been derived as per the Scope of reporting [Refer Section - About the Report]. Calculation methodologies are as per ISO 14064-1 standard and the global warming potential used in these calculations is taken from IPCC and WBCSD GHG protocol.

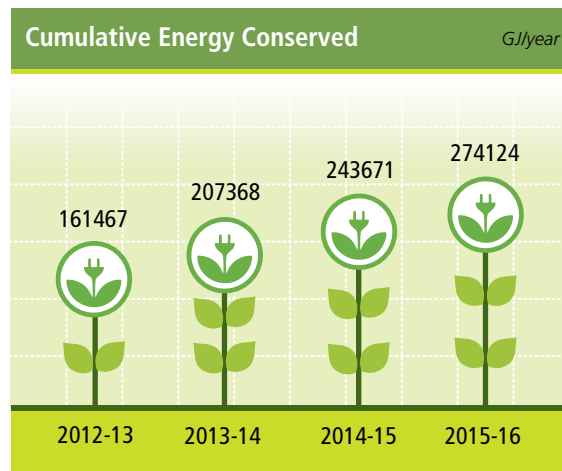
## Innovative Eco-friendly Waste-water Treatment

It's chemical-free, underground, lightweight, rust-proof, leak-proof, durable and easy to maintain. That's the innovative sewage treatment plant installed by our Heavy Engineering business at its Ranoli Campus. The plant undertakes anaerobic-aerobic treatment of domestic waste water, without any chemical dosing. The underground treatment plant has 3 separate zones which undertake solids separation, aeration and final sedimentation. Waste water flows by gravity, requiring little energy and low maintenance costs. The surface land is being utilised for parking or gardens.



## Energy Conservation

The Company places an emphasis on energy conservation. More than 74.5 million units (kWh) of energy have been saved cumulatively, thus avoiding over 60,872 tons of CO<sub>2</sub> emissions at our establishments.



Interventions	Energy Savings
Process Redesign	16,522
Optimisation and Operational Control Efficiency	157
Conversion and Retrofitting of equipment	10,428
Change to CFL and LED lamps	2,298
Change in personal behaviour and auto shutting of lights when not in use	1,047
<b>Total Energy Conserved</b>	<b>30,452</b>

### Major Energy Conservation Measures

HVAC operation optimisation for energy efficiency, through operators' training and strict monitoring by the Power Business - Knowledge city, Vadodara, saving 282,383 kWh.

Installation of motion sensors to enable auto on/off of floor lighting based on employee presence by Power Business - Knowledge city, Vadodara saving 47,370 kWh

Installed LED for shop overhead light replacing 400W MH with 140W LEDs improving LUX level in the shop area at our Heavy Engineering facility, Hazira leading to savings of 39858 kWh.

Modification in coolant system in deep hole drilling machine at our Heavy Engineering facility, Hazira saving 0.26 million kWh.

Replaced 69 thyristor-based welding machines with inverter-based welding machines at our Heavy Engineering facility, Hazira saving 0.1 million kWh.

At our Heavy Engineering facility, Hazira we replaced 150TR VAM chiller with 130 TR twin circuit water screw chiller which reduced energy consumption from 0.013 to 0.002 GJ/TR-hr, eliminating natural gas consumption usage of 0.38 SCM /TR-hr.

Conservation of Voltage Reduction (CVR) by Heavy Engineering, Vadodara. A 2% saving of Energy Consumption= 22,965 kWh, reducing 12.1 MT of CO<sub>2</sub> equivalent.

Using 90kW Vertical Autoclave for curing process in place of energy intensive Horizontal Autoclave by Heavy Engineering, Vadodara, saving 73.2% energy and Reduction in Carbon Footprint 13.84 MtCO<sub>2</sub>e / annum.

Optimisation of electrical energy in Bay-3 Shop with installation of Noorikool to utilize natural light by Heavy Engineering, Vizag leading to power saving of 2695 kWh and reduction in carbon footprint.

Installation of 32 KW solar power plant for power generation at Heavy Engineering, Vizag with average power generation of 3,054 kWh per month.

Optimisation of electrical energy usage by using occupancy sensors at Heavy Engineering, Vizag leading to power conservation of 6,000 kWh

Conversion of entire office lighting to LED lighting at Heavy Engineering, Vizag leading to power savings of 17,421 kWh

80 watt induction lamps in place of 150 watt MHL for shop floor lighting at Heavy Engineering, Coimbatore. This led to reduction in energy consumption by 25%.

Compressed air management by Metallurgical & Material Handling business at Kansbhal, through a change in compressor layout, leakage identification and arresting and use of an in-house designed trolley mounted portable compressor for painting and cleaning operation, leading to 21% reduction of energy 0.53 million kWh and 423 Tons CO<sub>2</sub> emissions.

At Metallurgical & Material Handling business, Kansbhal, a 20 HP pump at the undercarriage shop was replaced by a 10 HP pump, avoiding throttling operation, leading to savings of 34,171 kWh, and reduction in CO<sub>2</sub> emissions of 27 Tons.

Optimisation of the condensate booster pumps (elimination of high voltage motor) in Sagar Pragati Project by L&T Hydrocarbon Engineering.

At our Heavy Engineering facility, Hazira the Hood was installed for the Burner Candle Array, saving 2.6 million kWh.



## Waste and Spills

We believe that effective waste management is a vital contributor to the protection of the environment and we are committed to reducing and efficiently managing our waste footprint. Our waste management practices ensure responsible waste disposal at our manufacturing facilities, project sites and offices. We have also set up measures to eliminate or contain any spills.

*Tons*

Waste Generated	2015-16
Hazardous waste and waste oil	5,952
Non-hazardous waste	39,599

### Highlights of our waste management strategies:

#### Reviews

- Periodic assessment by internal and independent auditors to ensure compliance with applicable regulations.
- Regular reporting of waste and spills as part of ISO 14001 and OHSAS 18001 compliance.

### Disposal and transport

- Disposal of hazardous waste like used oil, oil soaked cotton waste, used chemical/ paint/ oil containers, batteries, paint residues and ETP sludge is done through government-approved recyclers/re-refiners /re-processors.
- Transportation of hazardous waste is done as per the statutory requirements.
- Authorized vendors for electronic waste (e-waste) disposal are identified.
- Responsible disposal of bio-medical waste generated by dispensaries and health centres is ensured.
- The Company does not import, export, transport or treating of any hazardous waste covered under the Basel Convention.

### Waste to worth

Canteen waste is reused in bio gas plant or organic waste converters at the following L&T Campuses: Ahmednagar, Bengaluru, Chennai, Hazira, Knowledge City (Vadodara) Leadership Development Academy (Lonavala), Mahape, Mysore, and Powai. The Bio-gas is used in the canteen for cooking purpose and the manure is utilised for horticulture.



Food Waste Processing Bio-Gas Plant at L&T Powai.

## We Put Waste to Work

Eco-friendly concrete? That's what you get when you recycle concrete instead of discarding it. At its thermal power project site in Rajasthan, L&T Power recycles waste concrete cubes for casting 'precast slabs' – which have many applications: walkways, material stacking, internal approach roads, and more. This initiative eliminates wastage and meets the need for structure without added environmental impact.



## Biodiversity

As a responsible corporate citizen, we understand the need to conserve precious natural resources. Our facilities are located in notified industrial areas. No species listed in the International Union for Conservation of Nature (IUCN) Red List and National Conservation List was found to exist at our campuses.

More than 150,000 trees are nurtured within L&T campuses. This year, we have planted more than 0.3 million trees, across locations, taking the count to 1.5 million trees planted over the last five years. The Company quarterly monitors the number of trees

planted across campuses and project sites through a tree inventory portal. A guidance document on the scientific method of tree plantation along with operation and maintenance, has been made available across campuses and project sites.

Tree certificates are presented to guests instead of floral bouquets. These certificates affirm that a tree sapling has been planted and maintained on behalf of the guest. This is in line with the Company's objective to increase the tree cover and create natural carbon sinks in a sustainable way.



## Compliance

All our campuses and project sites have taken the requisite approvals from the local authorities before commencement of operations. Compliance with respect to various statutes, rules and regulations applicable to L&T is ensured by the Company. There is a 'system compliance report' which is reviewed at

all units and regional offices, and submitted to the Corporate Secretarial department on a quarterly basis. During the year, there was no incidence of non-compliance and no fines were imposed within the reporting period on L&T Campuses.



## Clean Development Mechanism (CDM)

L&T's Infrastructure Development Projects Limited (L&T IDPL) has setup a Wind Farm, which is registered on Clean Development Mechanism (CDM) under United Nations Framework Convention on Climate Change (UNFCCC). This project has capability to reduce an equivalent of 16,128 tons of CO<sub>2</sub> emissions per annum.



## CASE STUDY

### Building a New Future, a Sustainable Future



Heavy Civil Infrastructure business not only puts underprivileged youth on their feet – it does so in a sustainable way. Construction Skills Training Institute (CSTI) at Jadcherla in Andhra Pradesh, where it imparts training in formwork and carpentry, bar-bending, steel-fixing, masonry, construction, electrician skills and welding.

Going a step further, the business turned the facility into a green campus. This year, it reduced CO<sub>2</sub> emissions by 124 tons. It obtained 129,285 kWh solar power from a 114 KWp installation comprising a fixed panel, a single-axis tracker and double axis trackers, reducing CO<sub>2</sub> emissions by 106 tons. Another 18 tons was reduced by using five, 300-litre solar water heaters to provide warm water round-the-clock to the hostel, saving 22,500 units of electricity.

Water conservation measures coupled with utilisation of RO plant reject water helps to reuse more than 3.2 million litres of water in the canteen and for gardening.

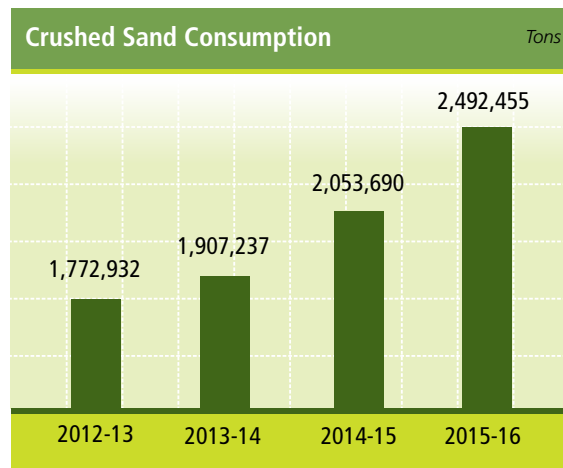
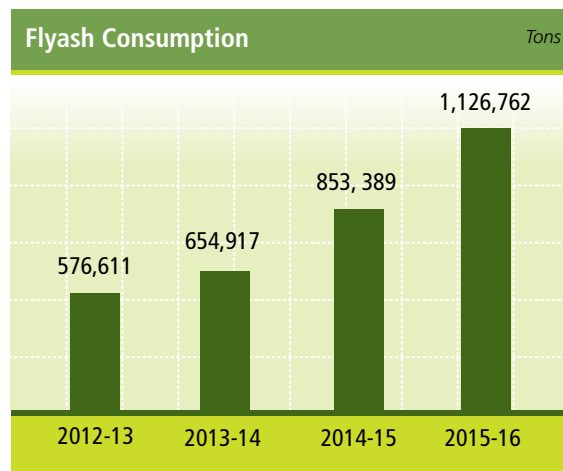


**Last year, armed with marketable skills that will shape their future, 745 youth emerged from the Institute, leaving a minimal carbon footprint.**

## Material Management

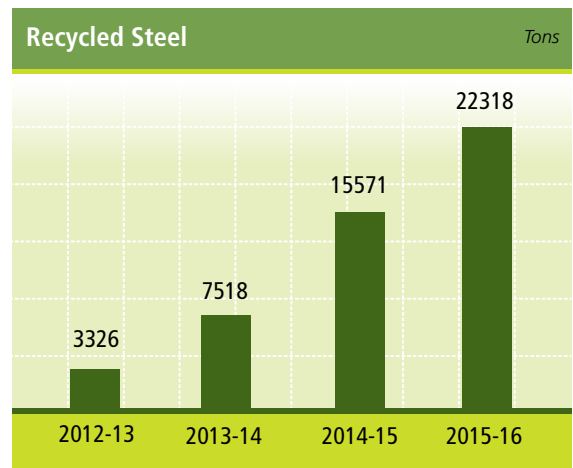
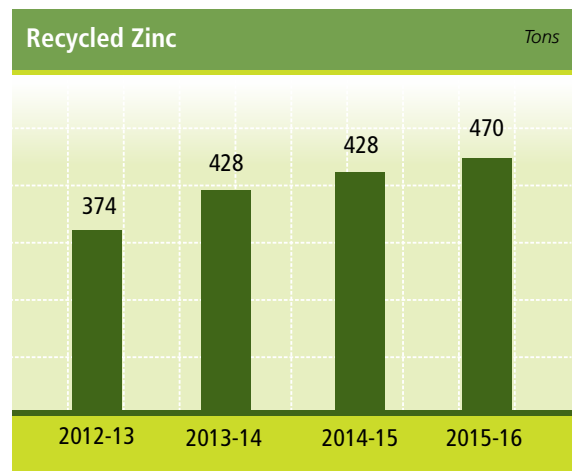
L&T has instituted several resource-saving initiatives at its campuses. We promote the use of alternative materials such as flyash and crushed sand in our construction business. As most of our products are Engineered To Order (ETO), the scope of using recycled material is limited. We continue to recycle steel and zinc in our operations.

### Cumulative Alternative Material



Materials (Partially Reported)	2015-16
Ferrous	746,005
Non Ferrous	19,573
Hazardous Chemicals	103,792
Oils and Lubricant	1,649
Hazardous Gases	4,677
Packaging Material	11,324
Cement and Sand	6,224,962

### Recycled Input Materials Used



## Packaging Materials

Many of our products are 'engineered to order', heavy equipment which do not require packaging. Whenever packaging is required for distribution or retail sale, we continue to use green packaging materials and ensure that minimum packaging material is used. Given the nature of our business, it is not feasible to reclaim or recycle packaging material used for our products.



## Green Buildings

With the conversion of one more building into a Green Building, we now have 17 Green Buildings and one green factory, covering 2.3 million square feet of green building area within our campuses.

### Larsen & Toubro LEED Rated Green Buildings



Technology Block, Hazira



Administrative Building, Kattupalli



Office Complex, Talegaon



SBU Block (2nd floor), Hazira



Administrative Building, LTSSH, Hazira



Office building, Coimbatore



Office Complex, Ahmednagar



Unnati building at C&A Mahape (Navi Mumbai)



Knowledge City, Vadodara



North Block II, Mumbai



Learning Centre - LDA, Lonavala



Infotech TC 1, Mumbai



Green Factory, Vadodara



EDRC, Chennai



L&T TC II, Chennai



L&T TC III, Chennai



Administrative Building, Vadodara







## CASE STUDY

### Hi-Tech Facility Gets Emerald Hue – LEED Green Building Certification

L&T Infotech adds value to prestigious companies worldwide by providing cutting-edge technology solutions. And now, it adds a greener edge to its offerings.

L&T Infotech Technology Centre -1, at Powai in Mumbai, was converted into a Green Building and the US Green Building Council has conferred upon it the Gold Rating LEED certified Green Building status. This coveted certification marks a significant milestone in L&T Infotech's approach towards sustainable development.

In order to convert the building into a Green Building, the Centre enhanced its energy performance by adopting environment-friendly initiatives as well as major and minor changes. Major initiatives included installing of motion sensors in washrooms, using eco-friendly chemicals for cleaning, recycling of PET bottles used in the office, use of environment-friendly refrigerants, replacement of CFL bulbs with LEDs, use of aerated drinking water taps, and sprinkler water taps for gardening etc.

The building was given an Energy Star Rating of 88 (released by Bureau of Energy Efficiency) i.e. the energy performance of the building is better than 87% of similar buildings. We are in the process of converting other office buildings into certified LEED green buildings.

#### Highlights:

- Reduction in water consumption
- Use of electronic sensors to optimize energy consumption
- Environmentally friendly chemicals used for office cleaning
- Water and e-Waste disposal system
- Reduction of paper usage and recycling of used paper
- Recycling of PET water bottles, paper cups
- Replacement of CFL bulbs with LED lamps
- Hibernation of personal computers for energy saving
- Enhanced green cover around campus, contributing to biodiversity
- Substituting travel wherever possible through audio / video conferencing
- Use of Company Buses for employees





Under our  
Canopy





At L&T, we believe in Building India's Social Infrastructure through the development of healthy, resilient and sustainable communities. The Company has been running Community Development Projects around our facilities and our project sites and also extending them to water-stressed rural areas of the country. In order to create sustainable communities, we ensure meticulous planning, focussed on long-term social, economic and environmental challenges. All our programmes are developed in partnership with the community to ensure they cater to specific needs and the ownership remains with community members. L&T empowers the communities, provides them with appropriate skills and invests to give them confidence to grow. Our aim is to make a meaningful change in the lives we touch!

**L&T has positively impacted lives of over 1.2 Million individuals through community development programmes covering Health, Education, Skill Development, and Water & Sanitation in 2015-16.**





## Corporate Social Responsibility Policy and Board Committee

The company has re-aligned its interventions in the social space in line with the revised Companies Act 2013. The Company constituted its Board 'Corporate Social Responsibility Committee' in 2014 and revised the existing Corporate Social Responsibility Policy. We also evaluated our existing initiatives and developed a new CSR theme, 'Building India's Social Infrastructure' through a large scale interactive process with inputs from employees, NGO partners and community interactions. The CSR theme drives our programmes with an objective of pursuing holistic and integrated social development programmes at identified locations. The CSR Committee accorded its approval for the programmes in line with the provisions of the Act.

The CSR Committee is responsible for the activities to be undertaken by the Company; recommend the amount of expenditure and regularly monitor implementation of the Corporate Social Responsibility Policy. As on March 31, 2016, the CSR Committee comprised of 1 Independent Director and 2 Executive Directors.

## Building India's Social Infrastructure

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

Programme Beneficiaries		
Focus Areas		2015-16
 Water & Sanitation		305,930
 Health		678,760
 Education		237,633
 Skill Development		44,771
<b>Total Beneficiaries</b>		<b>1,267,094</b>

## Integrated Community Development Programme

This programme was conceptualised and launched in 2014-15 to enable the water-stressed rural communities to become self-reliant and meet their drinking water requirements, maintain sanitation, have access to improved healthcare, education and promote agriculture. The programme is being implemented in phases with varying focus areas,

A study of the Water Stress Index (WSI) of districts across India was conducted to identify water-stressed communities. Five watershed areas in Bhim and Kumbalgarh blocks, Rajasthan, Pathardi block, Maharashtra and Chettipalayam and Papampatti blocks, Tamil Nadu were shortlisted for L&T's programme intervention on the basis of Water Stress Index (WSI), access to drinking water, current status of sanitation facilities and human development indicators. In consultation with domain experts, 32 villages who were not beneficiaries of any previous interventions were selected.

The most important feature of this programme is the in-depth involvement of community members at every stage, building community ownership and knowledge. The entire programme began with gaining community consent and trust through regular village meetings, involvement in deciding location of various water structures and mobilization of *shram daan* or labour against remuneration to build these structures.

Community level organisations like Village Development Committee (VDC), Self Help Groups (SHGs) and Users groups were created for long term maintenance of the project. It was an endeavour to ensure a high level of participation of women in the programme, and hence this was incorporated as a key programme indicator. We ensured that at least 30-50% of participants in all Village Development Committees (VDC) and watershed project interventions were women.



### Social Intervention Propellers

#### Corporate Social Responsibility (CSR Team)

This dedicated team, driving social interventions across the L&T Group, deploys the most effective levers of change to bring about long-term solutions for critical social problems.

#### Ladies Clubs

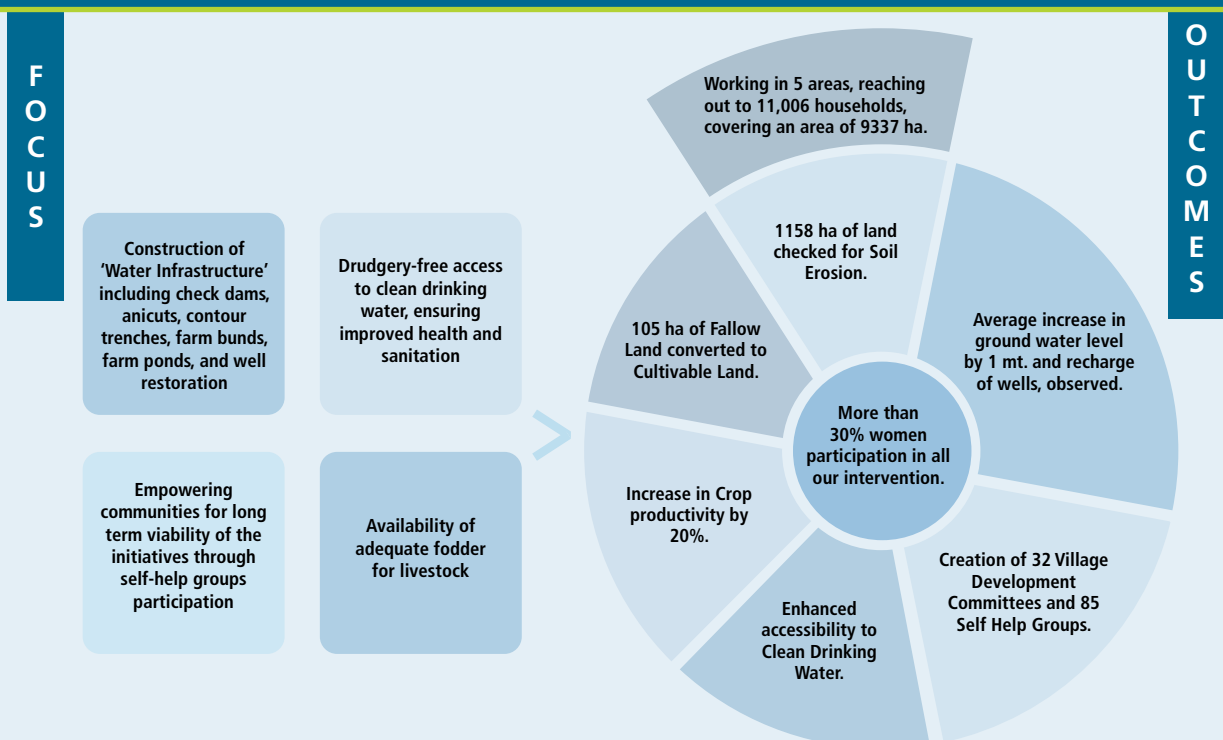
A unique intervention, the Ladies Clubs comprise employee's wives who initiate and implement developmental programmes in the communities near our campuses.

#### Larsen & Toubro Public Charitable Trust

Complementing the CSR team's activities, the Larsen & Toubro Public Charitable Trust undertakes a wide spectrum of community development work.

## Highlights

Integrated Community Development Program in States of Maharashtra, Rajasthan and Tamil Nadu, has had a significant impact





This year, a detailed programme for watershed development was designed with the overall objective of making water available for drinking, sanitation and agriculture, the emphasis is on creating sustainable water harvesting structures and mobilizing the community for the same. The effects of these interventions are already becoming evident across many of the intervention villages.

Significant processes have been put in place to measure progress over the entire duration of the 4-year programme. L&T is working on mechanisms for community feedback and participation that will ensure that the focus of L&T's CSR programme continues to remain on community ownership of its programme outcomes, thus ensuring sustainable impact.



## CASE STUDY

### Water – Now Closer, Cleaner



*Before: Haraj village before L&T's intervention*



*After: Water at the village doorstep after L&T's intervention*

Only a few months ago, the women in Vanader village, Kumbhalgarh district, Rajasthan walked several kilometres, several times a day, to fetch water in vessels carried on their heads, to meet the minimal water requirements of their families. In another village not so far away, Haraj women risked their lives daily, climbing up and down a very steep stairway leading to the depths of an old village well. Water potability too was a concern, posing several health hazards.

Today, both villages have water storage and potable water supply systems built by L&T. At Vanadar, a water-storage tank was constructed by the Company. The water supply lines were laid from the tank to five stand posts, each supplying clean drinking water to 20 families utilising the contribution of ₹ 18000 raised by the community.

The tank draws water from the water source and each stand post has a tap catering to a cluster of families. The water is treated before supply. At Haraj, a similar system was commissioned with a storage tank drawing water from the old well. Women no longer have to risk their lives daily.

**In both the villages, women have been instrumental in the execution of the system. Women's self-help groups are trained to maintain these water treatment and management systems, including regular cleaning of the tanks.**



## Education

L&T's aims at improving children's access to quality education and motivating children to attend schools. Our initiatives cover: Support to pre-schools (*Balwadis*), infrastructure development for schools, providing educational material, introduction of innovative teaching and learning methods for mathematics and languages and capacity development of relevant stakeholders.

Our Science on Wheels van provides hands on opportunities to children to perform science experiments and gain associated learning. The *Balwadi/Anganwadi* programme facilitates school readiness and enrolment for children in several underprivileged communities. Urban and rural community learning centres have been set up to provide after-school academic support to children to help them cope with their curriculum and prevent drop-outs.

The overall personality development of children is emphasized through programmes to generate awareness on social issues, extracurricular activities and workshops on life skills.

In schools, through interventions, we provide safe and hygienic learning spaces for children by constructing classrooms, playgrounds and toilets. Apart from this, we provide educational kits, school uniforms, set up computer labs, organise summer camps and upgrade the school library to motivate children to attend the classes and reduce the drop out rate.

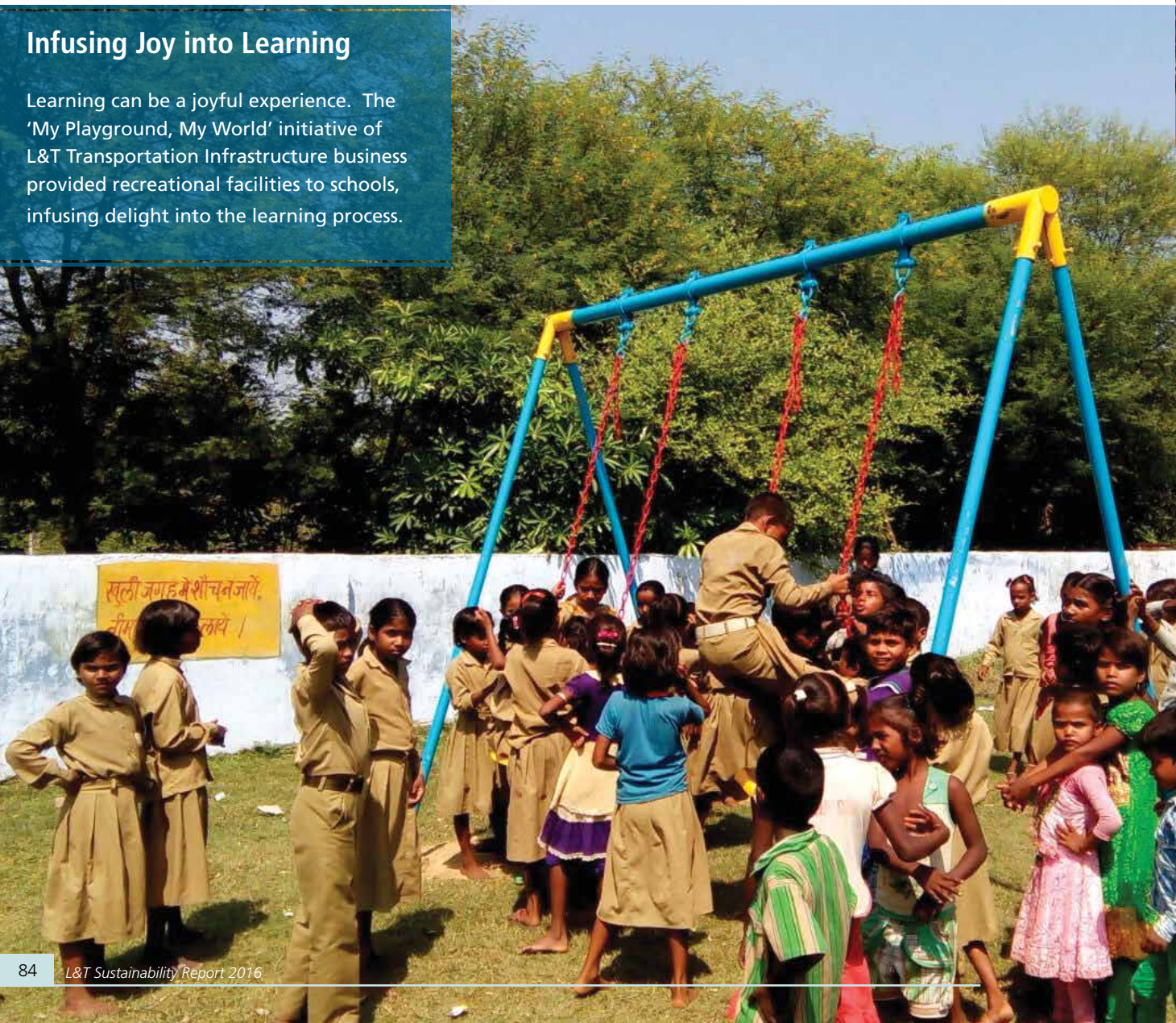
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**L&T supported 201 schools and reached out over 200,000 children through various interventions.**

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### Infusing Joy into Learning

Learning can be a joyful experience. The 'My Playground, My World' initiative of L&T Transportation Infrastructure business provided recreational facilities to schools, infusing delight into the learning process.







## Getting Organized to Serve Better!



*L&Teers pour passion into teaching.*

A community volunteering initiative can be more meaningful and effective for both volunteers and beneficiaries, if simple and user friendly processes are in place, in addition to volunteer's passion and commitment. L&T employee volunteers - or 'L&T-eers' across our locations have always been giving back enthusiastically to society over the years. Here is one example of how the L&Teering movement, which began in 2014, is being strengthened by introducing key steps in a volunteer teaching programme for children in low-income communities.

At the onset of the new academic year in 2015, an assessment revealed that even a seventh standard child couldn't read simple English words. The L&T-eers realised that the children needed to sit in small groups based on their English learning levels – and not on their school standards. With guidance from a senior educationist, 25 L&T-eers learned various teaching methods and activities to engage with 90 children.

The end-of-year assessment revealed that a third of these children had made some progress, despite an English-deprived environment.

In 2016, in addition to the assessment, 35 L&T-eers designed simple lesson plans with learning targets and creative teaching aids to help them become more effective teachers. Two L&T-eers manage one small group of children. This ensures continuity in the child's learning. Each study centre has two group leaders who ensure that volunteers are available consistently and teaching materials reach the centre before every class.

Displaying personal commitment and leadership, the L&T-eers are driven by a purpose. As one L&Teer put it, "I believe the home a child steps out from in the morning to go to school should not determine the quality of education he/she receives." Being organized helps them to contribute better and stay motivated.

**This year, 2743 employees opted to be L&T Volunteers.**

## Health

Our initiatives involve conducting diagnostic and health camps for women and children, as well as camps for reproductive health & immunization, malnutrition and anaemia mitigation, school and community health, eyes, blood donation and health awareness. We have developed interventions for HIV/AIDS affected including awareness camps in the community and health care facilities. Anti-Retroviral Therapy (ART), counseling and tests, are conducted in Mumbai at the L&T health centre.

Currently, L&T has seven health centres at key campuses located at Mumbai, Ahmednagar, Surat, Kansbahal, Coimbatore, Chennai and Vadodara. These health centres operate mobile medical vans to reach out to the nearby communities. Our health centres in Thane ( Mumbai), Vadodara and Chennai have artificial kidney dialysis facilities for underprivileged communities.

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**Healthcare initiatives for women and children have brought about health seeking behaviour among 0.25 million individuals in the year.**

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L&T volunteers bring smiles to faces of cancer-affected children and their families from St. Jude India ChildCare Centres through fun activities regularly. Time spent with the families is invaluable for L&Ters.



## Skill Development

L&T has set up dedicated Construction Skill Training Institutes (CSTIs) aimed at developing a skilled workforce in the country. Rural and urban youth are trained at 8 CSTIs operational at Kanchipuram and Pulicat in Tamil Nadu, Panvel in Maharashtra, Pilkhuwa in Delhi, Jadcherla in Telangana, Cuttack in Orissa, Attibelle in Karnataka, Chacharwadi in Gujarat and Kona in West Bengal. Each of the CSTIs conduct training in basic trades like Formwork Carpentry, Masonry, Bar Bending & Steel fixing, Construction Electrical, Rural Electrification, Solar electrical, Quality Control, Pipe welding, Electrical Wiremen, Tilling and Plumbing. We also have dedicated skill-based training for women including Tailoring, Beautician, Nursing and Food Processing, providing means for self-reliance. Our efforts towards enhancing skills and knowledge contribute to our Indirect Economic Impact and help women and youth secure jobs.

Formwork Carpentry

Masonry

Bar Bending & Steel Fixing

Construction Electrical

Rural Electrification

Solar Electrical

Quality Control

Pipe Welding

Electrical Wiremen

Tilling And Plumbing

Tailoring

Beautician

Nursing

Food Processing

**L&T has reached 44,771 rural and urban youth and women from underprivileged communities teaching them employable skills to earn their livelihood.**



## Transforming Lives – 1Step at a Time

L&T Infotech's aptly-named 1Step CSR programme invests efforts in community support and skill development. A major initiative of 1Step this year was organising two free skill development courses in association with the Chamber of Small Industry Association (COSIA) for underprivileged educated youth viz. Computer Hardware & Networking and Accounts Assistance & Tally Operating.

Successful trainees obtained jobs in the COSIA-developed network of small scale industries. L&T Infotech contributed towards setting up a Training Lab with the relevant software for both courses, and our employee volunteers conducted a session on interview preparation.

**84 students underwent the course and many found work afterwards.**

In rural Satara, most of the women from the lower socio-economic strata did not work due to illiteracy, lack of opportunity, family restrictions and social conditions. Realising that the women were skillful in papad-making at home, 1Step invested in setting up machinery and a dryer for commercial papad production. Now, the output is up by 50%, and consistent quality is ensured.

The women were trained to sell papads, and health camps and awareness programmes were conducted to impart knowledge on healthy food and living habits. All our efforts have led to a sustained source of income for the women.

**The project has transformed the lives of 41 women and 212 direct beneficiaries of the production unit and allied services.**

# Aligning to Sustainable Development Goals

At L&T, we believe in the values behind Sustainable Development Goals and they represent an unprecedented opportunity for business to contribute towards putting the world on a sustainable path. Our practices are aligned to Sustainable Development Goals in the following ways:



## Goal 1: End poverty in all its forms, everywhere

- Vocational and life-skills training
- Income generation for underprivileged youth, and differently-abled



## Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture

- Nutritional support in pre-primary & primary schools



## Goal 3. Ensure healthy lives and promote wellbeing for all at all ages

- Welfare teams at the workplace
- Providing access to maternal, paediatric and general healthcare
- Regular health check-ups in schools and pre-schools
- Pre- and post-natal care
- Health education
- Access to family planning methods
- Integration with national health programmes



## Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

- Improving quality of education
- Promoting girl child education
- Nurturing talent
- School infrastructure development and providing learning aids, enhancing curriculum and impacting classroom learning



## Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

- Creating resilient infrastructure and sustainable industrialization for our clients, through our product offerings – Green Products and Services Portfolio
- Encourage automation and focus on applying for patents / Intellectual Property Rights (IPR) to encourage innovation
- 'Make in India' initiatives, instead of importing, to create employment opportunities



## Goal 10. Reduce inequality within and among countries

Equal Opportunity Employer Policies and practices for empowering employees irrespective of age, gender, disability, race and religion



## Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable

- L&T creates comprehensive smart technology solutions for critical infrastructure, covering airports, power plants, metro rails and IT parks
- L&T offers specialized turnkey GIS-based network management solutions for city surveillance, traffic monitoring and analysis
- Integrated Community Development Programme for water stressed rural settlements



## Goal 12. Ensure sustainable consumption and production patterns

- L&T proactively sets measurable targets through Sustainability Roadmap, since 2009
- Material conservation, energy efficiency and sustainable production practices are key material aspects



**Goal 5. Achieve gender equality and empower all women and girls**

- Skill development and vocational training programme
- Formation of women self help groups
- Creating livelihood opportunities for women



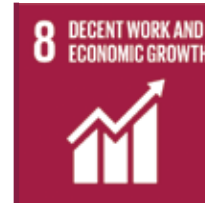
**Goal 6. Ensure availability and sustainable management of water and sanitation for all**

- Integrated Community Development Programmes – Water & Sanitation projects through watershed development in rural areas
- Supporting Swachh Bharat Abhiyan
- Creating water bodies for communities



**Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all**

- Increasing renewable energy use within campuses and project sites
- Executing off-grid solar power projects for communities
- Green Products and Services Portfolio for customers



**Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.**

- Empowering the workforce through learning, development and welfare initiatives
- Construction Skills Training Institutes – skilling youth



**Goal 13. Take urgent action to combat climate change and its impacts**

- Climate Change Mitigation Initiatives: promoting use of renewable energy, green buildings and energy efficiency
- Aligning efforts with National Action Plan on Climate Change (NAPCC), Government of India



**Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development**

- Risk Review of business process to ensure that no negative impacts are created



**Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss**

- This year, we have planted more than 295,000 saplings across locations and over 150,000 fully-grown trees are being nurtured across major campuses.
- In house guidelines on scientific tree plantation and maintenance
- Felicitation of guests with a Tree Plantation Certificate, instead of a welcome floral bouquet



**Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.**

Not applicable



**Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development**

- Collaboration and partnership with State Governments, NGOs and ITIs
- Skill building programmes in the Middle East.
- Sharing best practices with stakeholders



Fruits of  
Excellence





We believe it is essential for corporates to minimize the environment, health, safety and social impacts of their products throughout lifecycle stages, while maximizing economic benefits. L&T is focused on implementing its projects with minimal EHS impact through an integrated business process that identifies, manages and minimises risks in these areas. The Company provides a Green products & services portfolio, which helps its clients to improve their environment footprint and move towards a low carbon economy mode. At all our units and project sites, environment preservation and providing a healthy and safe work environment is given prime importance.

### Green Portfolio

Innovation is what gives us an edge in business and we have developed a Green Products & Services Portfolio. Contribution of our green portfolio to overall sales was 26.27% in 2015-16. There is an increase of 49.83% over the previous year.

**Our Green Products & Services portfolio contributed 26.27% to our overall sales during 2015-16**

**E&A filed application for 114 patents, 12 trademarks, 37 designs and 1 copyright in India, 2 foreign patent applications in Europe and China in 2015-16. This was the 9<sup>th</sup> consecutive year of filing more than 100 patent applications.**



*Gujarat CCTV project- L&T's prowess as a Master Systems Integrator (MSI), three key cities in Gujarat are now under 24/7 surveillance which eases traffic management and enhances vigilance. Putting together this state-of-the-art CCTV project consists of fixing a third eye at 288 locations.*

Highlights of L&T's activities in the arena of product stewardship are as follows:

## Infrastructure Business



Two projects secured awards from the Indian Concrete Institute, two more secured the Construction Week Smart 'Project of the Year' award.

On the Engineering front, the business undertook key initiatives towards digitisation, automation and adoption of modular techniques for construction. Building Information Modelling (BIM) and Design Automation are being implemented across business segments to provide optimal solutions.

Modular construction techniques have been successfully implemented in the construction of Nuclear Power Plants, resulting in significant time optimisation.

The Company commissioned the Delhi Metro Rail Corporation's (DMRC) CE07 line stretch of 37 km.

The 38 km Stage 1 Track works for the Chennai Metro was successfully completed.

The Company is building an underground Metro system for the city of Doha and setting exceptional standards in tunnelling.

The Doha Metro is one of the world's most advanced Mass Rail Transit systems and expects to have its Phase 1 Metro operational by the end of 2019 and Phase 2 by 2026.

L&T's Water & Effluent Treatment (WET) business has set another record by constructing Asia's first and largest Micro Filtration (MF) plant of 158 MLD for river water treatment at the 2X800 MW Yermarus Thermal Power Station, near Raichur.

The Combined Water Supply Scheme of 181 MLD Water Treatment Plant for Vellore Corporation will provide drinking water to 2.4 million people.

Our Power Transmission & Distribution (PT&D) business executed projects to improve power quality and significantly reduced AT&C losses through distribution reform projects – taking electricity to

thousands of households in economically backward areas and electrifying hundreds of villages. The Solar business commissioned 200 MWp in the last year, including India's largest tracker-based solar PV plant in Tamil Nadu.

L&T's rural electrification expertise has brought electricity to over 24,000 Indian villages.

A state-of-the-art Sewage Treatment Plant has been installed at the President of India's estate for re-use of 2 million litres of waste water for horticultural activities.

L&T's Smart World business is currently executing India's largest city surveillance project comprising 6,000 cameras at over 1,500 locations in Mumbai City.

The Smart World business commissioned India's First Smart City Project – Jaipur Smart City

L&T Kansbahal introduced the very first surface miners in Northern Coalfields Limited (NCL) coal mines in 2015-16.

Green buildings constructed by the Buildings & Factories business help customers to reduce energy and water consumption, utilize recycled material and locally source most of construction material.

## Electrical & Automation Business



This business won the prestigious National IP Award 2015 in the category 'Top Organizations for Designs', from the Department of Industrial Policy & Promotion and Intellectual Property Office, Govt. of India.

L&T's Control & Automation business made an entry into the Solar business with a tie-up with an Italian Company for an L&T-branded solar inverter, completing the solar solutions portfolio.

The Electrical Standard Equipment (ESE) business developed an outdoor compact substation 'N-Qube' to cater to the needs of the rapidly growing infrastructure sector.

## L&T Hydrocarbon Engineering



L&T Hydrocarbon Engineering, a wholly-owned subsidiary, has won national and international accolades from eminent institutions, clients and the media. These include the National Safety Council (Maharashtra Chapter), British Gas, Petronas Carigali Myanmar, Frost and Sullivan (F&S) and The Economic Times India Manufacturing Excellence Award (IMEA).

The Company commissioned the Habshan-Ruwais-Shuweihat gas pipeline project built on an EPC basis for GASCO, Abu Dhabi.

It commissioned the Mukta B Platform (MB Platform) and pipeline project for British Gas Exploration and Production India Limited, involving a wellhead platform, sub-sea pipeline and platform modifications.

## Power Business



L&T is executing complete EPC orders for three different 2x660 MW ultra-supercritical power projects at Khargone - Madhya Pradesh, Khandwa - Madhya Pradesh and at Chhabra - Rajasthan

L&T is executing two gas-based projects in Bangladesh – 360 MW Bheramara and 225 MW Sikalbaha.

A cumulative capacity of 2,228 MW built by L&T attained commercial operation. This includes two steam turbine generators, one steam generator and two blocks of a gas-based combined cycle power plant.

## Heavy Engineering Business



The Company is proud to be associated with the International Thermonuclear Experimental Reactor (ITER), the world's 'first-of-its-kind' fusion reactor. An international collaborative project, ITER involves contributions from seven member entities viz., China, European Union, India, Japan, Russia, S. Korea, and USA. The Cryostat is the world's largest high-vacuum pressure vessel and its components are currently being fabricated at L&T's Hazira facility.

## L&T Infotech



L&T Infotech, a wholly-owned subsidiary, offers a wide spectrum of end-to-end solutions covering IT infrastructure consulting, design, managed services, migration services, operational support, desktop support, cloud enablement, hosting and migration. Our aim is to provide our clients extensive services which help in automation of their business processes, using application development, maintenance, support & testing and customized service delivery plans.

The Company has agreements with a number of industry majors in delivering its Infrastructure management service offerings in a technologically-agnostic way. This approach is beneficial to clients and helps establish its credibility with them, with a view to eventually becoming their thought partners and long-term service providers.



## Ultrasonic Testing Augments Productivity

Phased Array Ultra Sound Testing (PAUT) has replaced conventional Radiography Testing to enhance the quality and precision of L&T Hydrocarbon Engineering's deliverables. PAUT is widely used for nondestructive testing (NDT) to detect discontinuities i.e. cracks or flaws in objects manufactured from metals.

### Highlights:

- Elimination of radiation hazards
- Eliminates downtime
- Improved Probability of Detection (POD)
- Improved Precision
- Flaw characterization / depth determination
- Real-time results
- Highly productive – speeds up inspection

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**PAUT technology is 160% more productive in comparison to radiography.**

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## Customer Delight

L&T's strength lies in the flexibility to develop and adapt products to meet customers' needs and therefore, it has received commendable references across the globe. L&T provides customers with high-quality solutions in reduced timeframes, delivering operating efficiencies and better value for its shareholders. We stress on not only meeting, but exceeding customers' expectations, through a continuous thrust on operational excellence, supply chain management, resource utilisation and cost optimisation.

## Customer Feedback

Customer Satisfaction Surveys are conducted across all businesses and prompt corrective measures are implemented for all feedback and complaints received. Every month, the Heavy Civil Infrastructure business reviews and acts on customer feedback on product quality from projects.

The Power business obtains feedback through Voice of Customer (VoC) surveys. The results of this year's survey are encouraging, and show an increase in satisfaction levels.

The Buildings and Factories business collects on-site feedback from customers every quarter, on a scale of 1 to 10 (10-Excellent, 1-Poor). This year, we scored an average rating of 8.0. The feedback is reviewed during the management review meeting and action plans are drawn to improve the performance on the areas rated below average.

## Product Labelling

We have taken specific steps to ensure a robust system of labelling across our products, with adherence to all the relevant codes and specifications. All our electrical and automation products and industrial machinery developed in-house, have the Bureau of Indian Standards (BIS) label. Most of these products are internationally certified, verified and tested at third party laboratories. At the time of delivery, product specific documentation is also shared with the client.

## Marketing Communication

The Marketing Communication team helps us to identify, engage and communicate with multiple stakeholders – customers, channel partners,



consultants, collaborators, etc., and all our communication conforms to the recommended guidelines.

We do not engage in sale of banned or disputed products. During the reporting period, no complaints were received from any of our stakeholders on the subject of incorrect or misleading marketing communication.

## Customer Health, Safety and Privacy

The health and safety of our customers is of prime importance and we ensure that safety aspects are considered at every step of the project, from design to commissioning. We provide operational and maintenance manuals and conduct training for our customers' employees to minimize the risks of our product or process-related health and safety issues. International practices and standards are followed

at all times and all our products are provided with adequate labelling, including product information and possible hazards. No incidents of non-compliance were reported with respect to regulatory and voluntary codes concerning the health, safety and labelling aspects related to any of our products or projects during the year. There were no complaints regarding breach of customer data or privacy in the FY 2015-16.

## Compliance

As a responsible corporate, we adhere to all statutory regulations and voluntary codes related to our products and services. We have implemented a structured system to monitor and report compliance to regulatory requirements on a quarterly basis. During the reporting period, there were no incidents of non-compliance with statutory requirements, and no monetary fines were imposed.

## Concrete Solution to Water Efficiency



Construction projects require copious amounts of water, so efficient water use, is a priority area. At NTPC Lara site, L&T Power initiated waste water recycling. Water used for cleaning of the boom placer and batching plant is collected after being cleared in a Transit Mixer, passed through a net or mesh for removal of big particles like stone chips etc, then transferred to a settling tank and used for curing and sprinkling on the road to suppress dust.

When waste (sludge) fills  $\frac{1}{4}$  of the settling tank, it used for road repair. Helmets, gumboots and hand gloves (rubber or polythene) keep users safe from splashes during waste-handling.

**Recycling waste water for curing and sprinkling of water on road for dust suppression saves 960,000 litres of water annually.**



Waste Water Collection Tank

# Awards & Recognition

## Awards for Top Management

### Mr. A. M. Naik honoured by GIANTS International

Mr. A. M. Naik, L&T's Group Executive Chairman, was honoured with the GIANTS International Award 2015 for his pioneering contribution to the cause of Business and Industry, at a ceremony on September 16, 2015.

### Mr. A. M. Naik awarded Honorary Doctorate of Letters Degree

In February 2016, Mr. A. M. Naik was awarded an Honorary Doctorate of Letters degree from the Veer Narmad South Gujarat University in recognition of his long and distinctive contribution to the nation and society.



## Awards for the Company

### L&T Ranks High on BS 1000 list - Business Standard

In the prestigious BS 1000 list released in February 2016, L&T ranked #11 in terms of Total Revenues and #1 in the Construction & Infrastructure Sector.

**L&T one of India's 'Most Respected Companies'**  
Business World ranked L&T #1 in the Infrastructure sector and #10 overall on its celebrated list of India's 'Most Respected Companies' in January 2016.

### L&T Wins Real Estate Award 2015 from CNBC Awaaz

CNBC Awaaz, a major news channel, declared L&T the 'Contractor and Construction Company of the Decade' at its 10th annual Real Estate Award ceremony. The awards were instituted to honour India's exemplary developers and builders who have played a major role in shaping India's success story.

### L&T among India's Top 10 most valued brands

Brand Finance, in its annual study of Indian brands, ranked L&T #8. L&T was the only company in the engineering & construction space to have made it to the Top 10 list in 2015.

### L&T wins 11 awards, voted Champion of Champions by Association of Business Communicators of India

L&T won stellar honours for the clarity of its communication philosophy, the vibrancy of its expression and demonstrated success in leveraging traditional and new media to serve its objectives.

## Awards for Sustainability

### Asia-Pacific Excellence Award for L&T's Sustainability Report 2014

Adjudged the most outstanding in its category, L&T's Sustainability Report was conferred the prestigious Asia-Pacific Excellence Award. These awards were instituted by Communication Director, an organisation for Corporate Communications and Public Relations in Europe and Asia-Pacific.

### Among Asia's Top 5 'Most Sustainable Companies' - Channel NewsAsia

L&T featured among Asia's Top 5 'Most Sustainable Companies' in the industrial sector in Channel NewsAsia's Sustainability Rankings 2015. L&T is one of only 18 Indian Companies to be featured among the Top 100 Most Sustainable Companies' list. The analysis covered companies in India, China, Hong Kong, Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan, Thailand, and Japan. It takes into account companies' performance in terms of contribution to social development, good governance and environmental protection

The survey featured 216 companies whose CSR efforts were weighed against four key criteria - sustainability, stakeholder value, governance and disclosures. The survey makes a special mention of L&T's focus on water, sanitation, education, healthcare and skill building.

### L&T Honoured With BCCI's Good Corporate Citizen Award

Bombay Chamber of Commerce & Industry (BCCI) conferred 'The Good Corporate Citizen Award' on L&T for its Sustainability & Corporate Social Responsibility initiatives in the 'Large Corporate Category'. The award recognises conspicuous achievement by corporates in terms of service to the civic community in addition to outstanding sustainability responsibility performance. This is the third time since 1995 that L&T has won this award – testimony to the Company's consistent sustainability performance over the decades.

### L&T ranked 4th Best Companies for CSR in India - *The Economic Times* CSR Survey

India's leading financial publication The Economic Times has ranked L&T at # 4 in its survey of "Best Companies for CSR in India". L&T was ranked at # 7 in the last year's survey by the publication.





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## INDEPENDENT ASSURANCE STATEMENT

### Introduction and objectives of work

BUREAU VERITAS has been engaged by Larsen & Toubro Ltd (L&T) to conduct an independent assurance of its Sustainability Report for the year 2015-16. This Assurance Statement applies to the related information included within the scope of work described below.

This information and its presentation in the Sustainability Report 2015-16 are the sole responsibility of the management of L&T. Bureau Veritas was not involved in the drafting of the Report. Our sole responsibility was to provide independent assurance on its content.

### Scope of work

The assurance process was conducted in line with the requirements of the Assurance Standard AA1000AS (2008) Type 2 and Moderate assurance. The scope of work included:

- Data and information included in Sustainability Report 2016 for the reporting period 1st April 2015 to 31st March 2016;
- Appropriateness and robustness of underlying reporting systems and processes, used to collect, analyse and review the information reported;
- Evaluation of the Report against the main principles of the AA1000 Assurance Standard (2008)
  - Inclusivity
  - Materiality
  - Responsiveness
- Evaluation of the Report against the principles of Accuracy, Accessibility, Balance, Clarity, Comparability, Reliability, Timeliness and Stakeholder Inclusiveness, as defined in the GRI Sustainability Reporting Guidelines G4 "In accordance - Comprehensive";

### Methodology

As part of its independent assurance, Bureau Veritas undertook the following activities:

1. Visited selected locations of L&T and interviewed relevant personnel of L&T: Buildings & Factories IC at Chennai, L&T Shipbuilding at Kattupalli, L&T Infotech at Powai, Heavy Civil Infrastructure IC at Chennai, L&T Hydrocarbon at Kattupalli & Powai-domestic & offshore projects, Mineral and Material Handling at Kolkata, Water Smart World & Communication IC at Chennai, Electrical & Automation IC at Mysore & Ahmednagar, L&T Transportation at Mumbai, Power Transmission & Distribution IC at Chennai, Heavy Engineering IC at Coimbatore, Ranoli, Sohar, Hazira & Vizag, L&T Power at Vadodara.  
The assurance process involved carrying out an audit by experienced auditors from Bureau Veritas. These auditors visited some of the locations described above. Where no physical visit was performed, the interviews were carried out through video conference. We interviewed Project and Plant Operations & Maintenance personnel as well as the Sustainability & CSR team of L&T.
2. L&T had submitted performance data on reported GRI indicators. The data pertaining to each location visited was audited by Bureau Veritas through the process above described.
3. The data was audited on a sampling basis. Data on various GRI sustainability indicators was verified for the locations that were visited. Later, it was confirmed that the same verified data went into preparation of the final data within the Sustainability Report 2015-16.
4. Bureau Veritas reviewed stakeholder engagement activities that had been undertaken by L & T prior to the preparation of the Sustainability Report. The Stakeholder Engagement process was reviewed. Various records of the stakeholder engagement activities were reviewed to confirm how aspects material to L&T stakeholders had been determined.  
Our work was conducted against Bureau Veritas' standard procedures and guidelines for external Assurance of Sustainability Reports, based on current best practice in independent assurance.

### Our findings

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

- Nothing has come to our attention to indicate that the reviewed statements within the scope of our verification are inaccurate and the information included therein is not fairly stated;
- It is our opinion that L&T has established appropriate systems for the collection, aggregation and analysis of quantitative data such as Environmental, Health & Safety, Human Resources, Labour & Community interventions as well as Product and Investor related data.



## Alignment with the principles of AA1000AS (2008)

### Inclusivity

L&T has processes in place for engaging with a range of key stakeholders including socially responsible investors, shareholders, suppliers & contractors, Government officials, local community representatives and employees and has undertaken a number of stakeholder engagement activities in 2015-16 covering a range of topics such as customer satisfaction, employee welfare, supplier development, community welfare and environment.

### Materiality

The Report addresses the range of environmental, social and economic issues of concern that L&T and its stakeholders have identified as being of highest material importance. The identification of material issues has considered both internal assessments of risks and opportunities to the business, as well as stakeholders' views and concerns. The material issues were identified by a process of stakeholder engagement through one on one meetings and other engagements.

### Responsiveness

L&T is responding to those issues it has identified as material and demonstrates this in its policies, objectives, indicators and performance targets. The reported information can be used by the organisation and its stakeholders as a reasonable basis for their opinions and decision-making. The company has taken various initiatives towards delivering environmentally friendly services along with occupational health and safety, appropriate measures for emergency handling, control and risk management in its operations.

### Evaluation against Global Reporting Initiative (GRI) G4 Sustainability Reporting Guidelines

Bureau Veritas undertook an evaluation of L&T Sustainability Report 2015-16 against the G4 Sustainability Reporting Guidelines. This included cross-checking the GRI index table against all the reference documents to provide an opinion on the self-declared GRI reporting option.

Based on our work, it is our opinion that the Sustainability Report 2015-16 has been prepared in accordance with the GRI G4 Reporting Framework including appropriate consideration of the reporting principles and necessary indicators to meet the requirements of GRI G4 Reporting Option "In accordance- Comprehensive".

### Limitations and Exclusions

Excluded from the scope of our work is any assurance of information relating to:

- Activities outside the defined assurance period stated hereinabove;
- Positional statements (expressions of opinion, belief, aim or future intention) by L&T and statements of future commitment;
- Our assurance does not extend to the activities and operations of L&T outside of the scope and geographical boundaries; mentioned in the report as well as the operations undertaken by other remaining subsidiaries or joint ventures of the Company. This independent statement should not be relied upon to detect all errors, omissions or misstatements that may exist within the Report.

### Statement of independence, impartiality and competence

Bureau Veritas is an independent professional services company that specialises in Quality, Health, Safety, Social and Environmental management with almost 180 years history in providing independent assurance services.

Bureau Veritas has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day to day business activities. We are particularly vigilant in the prevention of conflicts of interest.

The assurance team has extensive experience in conducting assurance over environmental, social, ethical and health & safety information, systems and processes an excellent understanding of Bureau Veritas standard methodology for the Assurance of Sustainability Reports.

For Bureau Veritas



**Sanjay Patankar**  
Lead Assurer  
Manager - Sustainability & Climate Change Services



**Rupam Baruah**  
Technical Reviewer  
General Manager (East Region)

Date: 16<sup>th</sup> November 2016



**AA1000**  
Licensed Assurance Provider  
000-137

# GRI G4 Content Index

'In Accordance - Comprehensive'



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G4-EN24	74	Not applicable	Yes, refer page 98, 99
G4-EN25	74	Not applicable	Yes, refer page 98, 99
G4-EN26	70	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: PRODUCTS AND SERVICES</b>			
G4-DMA	91	Not applicable	Yes, refer page 98, 99
G4-EN27	91	Not applicable	Yes, refer page 98, 99
G4-EN28	77	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: COMPLIANCE</b>			
G4-DMA	75	Not applicable	Yes, refer page 98, 99
G4-EN29	75	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: TRANSPORT</b>			
G4-DMA	62	Not applicable	Yes, refer page 98, 99
G4-EN30	62	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: OVERALL</b>			
G4-DMA	16, 67	Not applicable	Yes, refer page 98, 99
G4-EN31	67	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: SUPPLIER ENVIRONMENTAL ASSESSMENT</b>			
G4-DMA	62	Not applicable	Yes, refer page 98, 99
G4-EN32	62	Not applicable	Yes, refer page 98, 99
G4-EN33	62	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: ENVIRONMENTAL GRIEVANCE MECHANISMS</b>			
G4-DMA	41	Not applicable	Yes, refer page 98, 99
G4-EN34	41	Not applicable	Yes, refer page 98, 99
<b>CATEGORY: SOCIAL</b>			
<b>SUB-CATEGORY: LABOR PRACTICES AND DECENT WORK</b>			
<b>MATERIAL ASPECT: EMPLOYMENT</b>			
G4-DMA	70	Not applicable	Yes, refer page 98, 99
G4-LA1	47, 52	Not applicable	Yes, refer page 98, 99
G4-LA2	49	Not applicable	Yes, refer page 98, 99
G4-LA3	49	Not applicable	Yes, refer page 98, 99

SPECIFIC STANDARD DISCLOSURES			
DMA and Indicators	Page	Omission(s)	External Assurance
<b>MATERIAL ASPECT: LABOR/MANAGEMENT RELATIONS</b>			
G4-DMA	17	Not applicable	Yes, refer page 98, 99
G4-LA4	49	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: OCCUPATIONAL HEALTH AND SAFETY</b>			
G4-DMA	53	Not applicable	Yes, refer page 98, 99
G4-LA5	53	Not applicable	Yes, refer page 98, 99
G4-LA6	54	Not applicable	Yes, refer page 98, 99
G4-LA7	54	Not applicable	Yes, refer page 98, 99
G4-LA8	48	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: TRAINING AND EDUCATION</b>			
G4-DMA	50	Not applicable	Yes, refer page 98, 99
G4-LA9	50	Not applicable	Yes, refer page 98, 99
G4-LA10	50	Not applicable	Yes, refer page 98, 99
G4-LA11	47	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: DIVERSITY AND EQUAL OPPORTUNITY</b>			
G4-DMA	19	Not applicable	Yes, refer page 98, 99
G4-LA12	47	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: EQUAL REMUNERATION FOR WOMEN AND MEN</b>			
G4-DMA	47	Not applicable	Yes, refer page 98, 99
G4-LA13	47	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: SUPPLIER ASSESSMENT FOR LABOR PRACTICES</b>			
G4-DMA	62	Not applicable	Yes, refer page 98, 99
G4-LA14	62	Not applicable	Yes, refer page 98, 99
G4-LA15	62	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: LABOR PRACTICES GRIEVANCE MECHANISMS</b>			
G4-DMA	48	Not applicable	Yes, refer page 98, 99
G4-LA16	48	Not applicable	Yes, refer page 98, 99
<b>SUB-CATEGORY: HUMAN RIGHTS</b>			
<b>MATERIAL ASPECT: INVESTMENT</b>			
G4-DMA	48	Not applicable	Yes, refer page 98, 99
G4-HR1	48	Not applicable	Yes, refer page 98, 99
G4-HR2	48	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: NON-DISCRIMINATION</b>			
G4-DMA	48	Not applicable	Yes, refer page 98, 99
G4-HR3	48	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING</b>			
G4-DMA	48	Not applicable	Yes, refer page 98, 99

SPECIFIC STANDARD DISCLOSURES			
DMA and Indicators	Page	Omission(s)	External Assurance
G4-HR4	48, 62	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: CHILD LABOR</b>			
G4-DMA	48	Not applicable	Yes, refer page 98, 99
G4-HR5	62	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: FORCED OR COMPULSORY LABOR</b>			
G4-DMA	48	Not applicable	Yes, refer page 98, 99
G4-HR6	48	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: SECURITY PRACTICES</b>			
G4-DMA	48	Not applicable	Yes, refer page 98, 99
G4-HR7	48	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: INDIGENOUS RIGHTS</b>			
G4-DMA	48	Not applicable	Yes, refer page 98, 99
G4-HR8	48	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: ASSESSMENT</b>			
G4-DMA	48	Not applicable	Yes, refer page 98, 99
G4-HR9	48	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: SUPPLIER HUMAN RIGHTS ASSESSMENT</b>			
G4-DMA	62	Not applicable	Yes, refer page 98, 99
G4-HR10	48	Not applicable	Yes, refer page 98, 99
G4-HR11	48, 62	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: HUMAN RIGHTS GRIEVANCE MECHANISMS</b>			
G4-DMA	38	Not applicable	Yes, refer page 98, 99
G4-HR12	38, 48	Not applicable	Yes, refer page 98, 99
<b>SUB-CATEGORY: SOCIETY</b>			
<b>MATERIAL ASPECT: LOCAL COMMUNITIES</b>			
G4-DMA	16	Not applicable	Yes, refer page 98, 99
G4-SO1	81	Not applicable	Yes, refer page 98, 99
G4-SO2	81	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: ANTI-CORRUPTION</b>			
G4-DMA	38	Not applicable	Yes, refer page 98, 99
G4-SO3	38	Not applicable	Yes, refer page 98, 99
G4-SO4	38	Not applicable	Yes, refer page 98, 99
G4-SO5	38	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: PUBLIC POLICY</b>			
G4-DMA	38	Not applicable	Yes, refer page 98, 99
G4-SO6	38	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: ANTI-COMPETITIVE BEHAVIOR</b>			
G4-DMA	38	Not applicable	Yes, refer page 98, 99
G4-SO7	38	Not applicable	Yes, refer page 98, 99

SPECIFIC STANDARD DISCLOSURES			
DMA and Indicators	Page	Omission(s)	External Assurance
<b>MATERIAL ASPECT: COMPLIANCE</b>			
G4-DMA	38	Not applicable	Yes, refer page 98, 99
G4-SO8	38	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: SUPPLIER ASSESSMENT FOR IMPACTS ON SOCIETY</b>			
G4-DMA	62	Not applicable	Yes, refer page 98, 99
G4-SO9	62	Not applicable	Yes, refer page 98, 99
G4-SO10	62	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: GRIEVANCE MECHANISMS FOR IMPACTS ON SOCIETY</b>			
G4-DMA	81	Not applicable	Yes, refer page 98, 99
G4-SO11	81	Not applicable	Yes, refer page 98, 99
<b>SUB-CATEGORY: PRODUCT RESPONSIBILITY</b>			
<b>MATERIAL ASPECT: CUSTOMER HEALTH AND SAFETY</b>			
G4-DMA	94	Not applicable	Yes, refer page 98, 99
G4-PR1	94	Not applicable	Yes, refer page 98, 99
G4-PR2	94	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: PRODUCT AND SERVICE LABELING</b>			
G4-DMA	95	Not applicable	Yes, refer page 98, 99
G4-PR3	95	Not applicable	Yes, refer page 98, 99
G4-PR4	94	Not applicable	Yes, refer page 98, 99
G4-PR5	94	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: MARKETING COMMUNICATIONS</b>			
G4-DMA	95	Not applicable	Yes, refer page 98, 99
G4-PR6	95	Not applicable	Yes, refer page 98, 99
G4-PR7	95	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: CUSTOMER PRIVACY</b>			
G4-DMA	17	Not applicable	Yes, refer page 98, 99
G4-PR8	17	Not applicable	Yes, refer page 98, 99
<b>MATERIAL ASPECT: COMPLIANCE</b>			
G4-DMA	95	Not applicable	Yes, refer page 98, 99
G4-PR9	95	Not applicable	Yes, refer page 98, 99



# United Nations Global Compact

## Communication on Progress

UNGC Principle	Category	Description	Page
Principle 1	Human Rights	Businesses should support and respect the protection of internationally proclaimed human rights	48
Principle 2	Human Rights	Businesses should make sure that they are not complicit in human rights abuses.	48
Principle 3	Labour	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	48
Principle 4	Labour	Businesses should uphold the elimination of all forms of forced and compulsory labour.	48
Principle 5	Labour	Businesses should uphold the effective abolition of child labour.	48
Principle 6	Labour	Businesses should uphold the elimination of discrimination in respect of employment and occupation.	47, 48
Principle 7	Environment	Businesses should support a precautionary approach to environmental challenges.	38
Principle 8	Environment	Businesses should undertake initiatives to promote greater environmental responsibility.	67
Principle 9	Environment	Businesses should encourage the development and diffusion of environmentally friendly technologies.	67
Principle 10	Anti-Corruption	Businesses should work against corruption in all its forms, including extortion and bribery.	38

## Sustainability Policy

At Larsen & Toubro, we are committed to fulfilling our economic, environmental and social responsibilities while conducting business. We will conserve natural resources and enhance social equity to achieve sustainable growth while serving all our stakeholders

Towards this we shall,

- Incorporate environmental and social considerations in our business operations
- Reduce adverse impact of climate change, augment energy efficiency and promote renewable energy usage
- Foster a culture of trust and caring to enhance safety and well-being of employees
- Continue to ensure good governance, ethics and transparency in our engagements with stakeholders, and advocate responsible business practices
- Partner with communities towards social interventions in the identified thrust areas
- Adopt sustainable and resource efficient processes and provide value added products and services

20<sup>th</sup> November, 2014

  
A M NAIK  
Group Executive Chairman



## Corporate Social Responsibility Policy

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

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

Towards this, we shall:

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

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

20<sup>th</sup> November, 2014

  
A M NAIK  
Group Executive Chairman



## Corporate Environment, Health & Safety (EHS) Policy

As an integral part of our business philosophy, we are committed to conserving the environment and providing a safe and healthy workplace to our employees and stakeholders. To achieve this, we shall:

- Incorporate EHS considerations in all business processes
- Ensure compliance to statutory and other applicable requirements
- Prevent adverse environmental impacts and occupational health and safety risks
- Conserve natural resources, minimise waste generation and environmental emissions
- Impart structured training and augment resources for effective EHS performance
- Encourage communication, consultation and collaboration with all the stakeholders

11<sup>th</sup> June, 2013

  
A M NAIK  
Group Executive Chairman



## Corporate Human Resource Policy

We believe that people are our most valuable resource, and play a pivotal role in helping us realize our Vision. We are committed to:

- Acquiring, developing and retaining a pool of high-calibre talent
- Enabling and empowering our employees to be creative and innovative
- Establishing systems and practices for maintaining transparency, fairness and equity
- Creating a culture of continuous learning, competitiveness and excellence through change management
- Respecting ethics, values and good governance

We will protect our environment and uphold in letter and spirit the United Nations Universal Declaration of Human Rights and the fundamental Human Rights Conventions of International Labour Organisation.

11<sup>th</sup> June, 2013

  
A M NAIK  
Chairman & Managing Director



## Acronyms

<b>ASLI</b>	Automatic Safe Load Indicator
<b>ATL</b>	Any Time Learning
<b>CIDC</b>	Construction Industry Development Council
<b>CSAP</b>	Certified Sustainability Assurance Practitioners
<b>IOD</b>	Institute Of Directors
<b>IP</b>	Intellectual Property
<b>ITER</b>	Thermonuclear Experimental Reactor
<b>NAPCC</b>	National Action Plan on Climate Change
<b>NSC</b>	National Safety Council
<b>PTB</b>	Passenger Terminal Building
<b>ROSPA</b>	Royal Society For Prevention of Accidents
<b>SLI</b>	Safe Load Indicator
<b>STS</b>	Single Teacher School
<b>UNGC</b>	United Nations Global Compact
<b>WRI</b>	World Resource Institute
<b>ABRR</b>	Annual Business Responsibility Report
<b>AC</b>	Audit Committee
<b>AGM</b>	Annual General Meeting
<b>AMPS</b>	Advanced Management Programmes
<b>ART</b>	Anti-Retroviral Therapy
<b>ASSOCHAM</b>	Associated Chambers Of Commerce And Industry Of India
<b>BCCI</b>	Bombay Chamber Of Commerce & Industry
<b>BEEC</b>	Energy Auditors And Energy Managers Certified By Bureau Of Energy Efficiency
<b>BIS</b>	Bureau Of Indian Standards
<b>Bn</b>	Billion
<b>BU</b>	Business Unit
<b>C&amp;A</b>	Control & Automation
<b>CBIP</b>	Central Board Of Irrigation And Power
<b>CDM</b>	Clean Development Mechanism
<b>CDP</b>	Carbon Disclosure Project
<b>CDP</b>	Core Development Programmes
<b>CEO</b>	Chief Executive Officer
<b>CII</b>	Confederation Of Indian Industry
<b>CIS</b>	Commonwealth Of Independent States
<b>CO2</b>	Carbon dioxide
<b>CSP</b>	Concentrating Solar Power
<b>CSR</b>	Corporate Social Responsibility
<b>CSTI</b>	Construction Skills & Training Institute
<b>E&amp;A</b>	Electrical & Automation
<b>ECRI</b>	Engineering & Construction Risk Institute
<b>EHS</b>	Environment, Health And Safety
<b>EMC</b>	Executive Management Committee
<b>EPC</b>	Engineering, Procurement And Construction
<b>ERP</b>	Enterprise Resource Planning
<b>ESD</b>	Emergency Shut Down
<b>ETO</b>	Engineered To Order
<b>FICCI</b>	Federation Of Indian Chambers Of Commerce and Industry

<b>FR</b>	Frequency Rate
<b>FY</b>	Financial Year
<b>GBC</b>	Green Building Council
<b>GGBS</b>	Ground Granulated Blast Furnace Slag
<b>GHG</b>	Greenhouse Gas
<b>GJ</b>	Giga Joule
<b>GRI</b>	Global Reporting Initiative
<b>GSPC</b>	Gujarat State Petroleum Corporation
<b>HACS</b>	Hot-Aisle Containment System
<b>HDI</b>	Human Development Index
<b>HR</b>	Human Resource
<b>IC</b>	Independent Company
<b>ICD</b>	Integrated Community Development
<b>IES</b>	Integrated Engineering Services
<b>IIChE</b>	Indian Institute Of Chemical Engineers
<b>IIM</b>	Indian Institute Of Management
<b>ILO</b>	International Labor Organization
<b>IMEA</b>	India Manufacturing Excellence Award
<b>IOSH</b>	Institution Of Occupational Safety & Health
<b>ISAE</b>	International Standard On Assurance Engagements
<b>LSTK</b>	Lump Sum Turnkey Projects
<b>MCGM</b>	Municipal Corporation Of Greater Mumbai
<b>MDACS</b>	Mumbai District Aids Control Society
<b>MDGs</b>	Millennium Development Goals
<b>MNRE</b>	Ministry Of New & Renewable Energy
<b>N&amp;R</b>	Nomination & Remuneration
<b>NEBOSH</b>	National Examination Board In Occupational Safety & Health
<b>NVG</b>	National Voluntary Guidelines
<b>ODS</b>	Ozone Depleting Substance
<b>PCT</b>	Patent Cooperation Treaty
<b>PLQP</b>	Process-Cum-Living Quarter Platform
<b>PM</b>	Particulate Matter
<b>PODP</b>	Performance Oriented Development Plan
<b>R&amp;D</b>	Research & Development
<b>RESCO</b>	Renewable Energy Service Company
<b>RO</b>	Reverse Osmosis
<b>RoHS</b>	Restriction Of Hazardous Substance
<b>ROW</b>	Right Of Way
<b>SEB</b>	Sustainability Executive Board
<b>SEBI</b>	Securities & Exchange Board Of India
<b>SR</b>	Severity Rate
<b>UNFCCC</b>	United Nations Framework Convention On Climate Change
<b>LEED</b>	Leadership in Energy and Environmental Design Widely used green building rating system
<b>PET BOTTLES</b>	Polyethylene Terephthalate Bottles
<b>CFL</b>	Compact Fluorescent Lamp
<b>LED</b>	Light-Emitting Diode assembled into a lamp





### Feedback on Sustainability Report 2016

Thank you for your interest in L&T's Sustainability Report 2016. Your feedback is important to us as it helps to improve our reporting on sustainability performance. Please do spend a few minute to give us your feedback on this report. It will help us make it even more engaging and relevant to your needs..

#### 1. Which of the following describes your affiliation with L&T ?

- Employee     
  Customer     
  Vendor/Supplier     
  Regulatory Agency  
 Other, Please specify .....

#### 2. Your rating of the entire report

- Excellent     
  Good     
  Fair     
  Poor

#### 2.1 If you ticked 'Excellent' or 'Good', what did we do well? (Choose relevant options)

- Navigation     
  Design & Layout     
  Readability     
  Comparability  
 Clarity in representation     
 Completeness

#### 2.2 If you ticked 'Fair' or 'Poor', what do we need to improve most? (Choose relevant options)

- Navigation     
  Design & Layout     
  Readability     
  Comparability  
 Clarity in representation     
 Completeness     
 Flow of information

#### 3. How would you rate individual sections in depth and coverage?

##### 3.1. Stakeholder inclusiveness (Prioritisation and engagement of stakeholders)

- Depth       Appropriate       Too detailed       Too brief
- Coverage       Appropriate       Too broad       Too narrow

##### 3.2. People Performance

- Depth       Appropriate       Too detailed       Too brief
- Coverage       Appropriate       Too broad       Too narrow

##### 3.3. Economic Performance

- Depth       Appropriate       Too detailed       Too brief
- Coverage       Appropriate       Too broad       Too narrow

##### 3.4. Environmental Performance

- Depth       Appropriate       Too detailed       Too brief
- Coverage       Appropriate       Too broad       Too narrow

##### 3.5. Social Performance

- Depth       Appropriate       Too detailed       Too brief
- Coverage       Appropriate       Too broad       Too narrow



**3.6. Product Performance**

- Depth  Appropriate  Too detailed  Too brief
- Coverage  Appropriate  Too broad  Too narrow

**3.7. Case Studies**

- Depth  Appropriate  Too detailed  Too brief
- Coverage  Appropriate  Too broad  Too narrow

**4. How would you rate L&T's Sustainability Report as compared to our peers ?**

- Excellent  Good  Fair  Poor

**5. Any other comments / suggestions (inclusions / exclusions)...**

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**Please provide your contact details for updates.**

Name \_\_\_\_\_ Company: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

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