**ABOUT US:**

Larsen & Toubro was founded in 1938 in Bombay (now Mumbai) Larsen & Toubro is an Indian multinational engaged in EPC(Engineering Procurement and constructions which is a common contract in constrcutions) Projects, Hi-Tech Manufacturing and Services. It operates in over 50 countries worldwide.

**OUR VISION:**

**L & T** is an porfeessional multinational company commited to total customer satisfaction and share holders values. L & T shall foster a culture of caring , trust and continuous learning while meeting the exceptations of employee , stake holder and the society.

**OUR PART IN SOCIETY :**

* Constructions
* Hydro carbon
* Power
* Metals and minerals
* Defence
* Heavy engineering
* IT services
* Finance
* Metro rail
* L&T Valves
* LT sufin
* LTI Mindtree
* Edutech

**L&T CONSTRUCTIONS: (NATION DEVELOPMENT DOMAIN – includes all domains all plays an role in nation dev)**

1. **AIRPORT:**

**DELHI AIPORT:**

* Terminal 3 of the Indira Gandhi International Airport, Delhi was completed in just 36 months and it is the largest aviation hub in South Asia.
* Project worth : 2.5 billion INR
* Completed at 2010

**MUMBAI AIRPORT:**

* Terminal 2 of Mumbai's Chhatrapathi Shivaji International Airport
* Completed at 2015

**BANGALORE AIRPORT:**

* Bengaluru will be the 3rd Indian airport to have a runway of more than 4 km and will also be one of the few airports in the country to be equipped with CAT IIIB LED ILS (Instrument Landing System) to enable safe landings in low visibility.
* Completed at 2014

**Hyderabad aiport:**

* he airport is South Asia’s first A-380 aircraft compatible and at 4,260 metres, had one of the longest runways in India.
* Complted by 2017

**International aiprots**

**Omen aiport:**

**Abu dhabi aiport complex:**completd in 3 years and its sustainbale and remain as a trade mark till now

* LT has been constructing water treatment and effulent plants for treating the water thereby increasing sustainability
* LT roads and bridges provides transport systems for transportation across the antion
* LT been a part of railways tracks and geosystem construction

**LT IDPL:**

* Roads and bridinges leads to development of nation and LT has been serving a great part for nation development and integreity
* Since it's inception in 1995, L&T IDPL has completed landmark infrastructure projects across key sectors like Roads, Bridges, Ports, Airports, Water Supply, Hydel Energy and Urban Infrastructure.

LT has serving the nation by construction sof 7182 kms of roadways with covering 15 powerful operational projects in india

**LT METRO RAIL:**

* Eco-friendly – causes no air pollution
* much less sound pollution
* Low energy consumption – 20% per passenger km in comparison to road-based systems.
* Greater traffic capacity – carries as much traffic as 7 lanes of bus traffic or 24 lanes of car traffic (either way).
* Provides social equity

**L T EDUTECH: (EDUCATION DOMAIN)**

* L T have been playing an phenominal roles in education by providing insights about industry requirements through expert talks by our industry experts.
* LT is providing various vocational skills like IT course that includes Mean stack development , web dev with java.net, data engineering using python.
* LT provides plumbing , safety construction course and we are funding for students resrach works
* LT provides English language communications course and serving the college students
* LT provides E-learning courses on various domain such as AI , ML, cloud computing , IOT
* LT conducts nation talent fest unleashing the young talents and improve their skills
* ETAP.COM -TAP® is an analytical engineering solution company specializing in the simulation, design, monitoring, control, operator training, optimizing, and automating power systems.
* LT provides as many online courses that increases the remote way of learning

**LT FINANCE: (FINANCE DOMAIN)**

* L&T Finance Holdings Ltd. is one of the leading Non-Banking Financial Companies (NBFCs) in India with a strong presence across the lending business catering to the diverse financing needs of the served and underserved customers
* LT provides various financial support for the people and society
* We are providing house loan ,consumer loan , 2 wheeler loan and micro loans etc
* **SOCIAL IMPACT:**
* We are providing loans for farmers to buy equipments and funding many researches related to agriculture and thus improving the
* Food productions and increase the quality and quantity
* We are ensuring 24 x 7 customer support and chatbot to provide all details and ensure their clearance of doubt .
* Our loan applicable process are very much useful in such a way we have PLANET APP providing self option loans

**LT VALVES:(SPACE AND DEFENCE DOMAIN)**

* L&T Valves is a leader in flow-control solutions. The company is a subsidiary of Larsen & Toubro, a technology and engineering conglomerate. L&T Valves leverages its heritage of excellence that spans 6 decades to manufacture valves for key sectors of the economy such as oil & gas, power, petrochemicals, chemicals, water as well as defence and aerospace.
* LT valves are used in ships motors and in aerospace in rocket scince technology motors.
* LT are leading producers of different types of valaves in the world where each valvaes are used in particular domains
* Butterfly valves:
* butterfly valves can be used for throttling or regulating flow as well as in the full open and fully closed position. The pressure loss through a butterfly valve is small in comparison with the gate valve.

**LT SPACE FUND:**

* + Larsen & Toubro (L&T) have bagged a Rs 860-crore contract for end-to-end realisation of next five Polar Satellite Launch Vehicles (PSLVs), delineating the imperative growth and consolidation of the domestic space and satellite
  + *L&T-made India’s First Launch Hardware for Gaganyaan Mission at company's Powai Aerospace Manufacturing Facility*
* Larsen and Toubro played an essential role in launching 104 satelites of ISRO.The aerospace unit of Larsen and toubro provided historic support in installing the electronic packages that are mounted on upper stage of PSLV-C37 and Heat Shield using honeycomb deck panels. These honeycomb deck panels are manufactured at L&T’s Advanced Composite facility at Vadodara.
* PSLV-C37 was rocketed into orbit using S139 Motor Casings (Middle segments) manufactured by the Aerospace Business Group of L&T.
* The spacecraft was tracked using a Deep Space Network Antenna at ISTRAC's tracking facility near Bengaluru. This 32m diameter DSN antenna was installed and commissioned by L&T. The Antenna Mount Structure and 13mdiameter Bull Gear (made for the first time in India) were also manufactured by L&T.

### **L&T Valves has in-house state-of-the-art capabilities and trained manpower to carry out:**

* Shock test
* Vibration test
* Flow test
* Helium leak test

0 Endurance test

**(DEFENCE DOMAIN)**

### **Valves for Defence & Aerospace**

* L&T Valves is a strategic partner in the nation’s defence and aerospace programmes. In the last three decades, the company has developed many mission-critical flow-control solutions for classified projects.
* The continued successes in defence and aerospace domains bear witness to the company’s capabilities in technology management, new product design and precision manufacture.

**LT ship building and defence:**

* L&T has undertaken complex mission-critical projects towards Nation Building in all strategic sectors. In the Defence sector, L&T undertakes design and development of equipment and systems as well as platforms.
* L&T is proud to have been associated with the Design Engineering and Construction of India’s first nuclear powered submarine, demonstrating multi-disciplinary capabilities for Engineering and Construction of complex Naval platforms.
* L&T’s shipbuilding portfolio includes:
* Frontline Warships: Frigates, Destroyers, Corvettes
* Submarines
* Special Platforms: Landing Platform Dock
* Diving, Survey and Research Vessels
* Auxiliary Vessels: Offshore Patrol Vessels, Floating Dock
* Interceptor Boats, Fast Speed Boats etc.
* On the equipment front, the following marine systems have been developed and supplied for different classes of ships:
* Marine Engineering: Steering Gear, Stabilisers, Propulsion shafting for Ships and submarines, special heat exchangers, Thrust Blocks, Special Seals, Stern Gear sub-systems, Line shaft Bearings
* Weapon Launch Systems: Torpedo Launching systems, Rocket Launchers, Anti-Submarine Rocket Launchers, BrahMos inclined and Vertical Missile launchers. Dhanush weapon system, Fire Control Systems for these launch systems.
* Sensor Systems. Revathi Radar stabilised platforms, Winch handling systems for Towed Array Sonars, ATAS, ATDS, etc.
* Control Systems: Combat Management System, Integrated Platform Management System, Integrated Bridge System, Automated Power Management System etc.
* Electrical systems: Main (AC/DC) switchboards, distribution Boards, Starters, ACOS, Control Panels, Ship Degaussing Systems etc.
* Auxiliary systems. Helicopter Landing Gear, Replenishment at Sea (RSA) equipment, blast-proof hanger shutters, Boat Davits, special pressure-proof hatches and doors etc.
* Communication Systems: Special Modems, VHF / UHF Linking Equipment, secure quick communication Interface for interfacing with foreign Navies during joint exercises
* In addition to Design, Engineering and Construction of warships, L&T offers lifecycle management and mid-life upgrades for warships, submarines and auxiliary vessels. The Navy & Coast Guard therefore secures total solutions from concept design to delivery and in-service maintenance support.
* LT have been serving many wepon parts developments in military field for nation defence .We have introduced many programme like Indian army tracked self propelled aritellery program .

# **LT Hydrocarbons:(NATION GDP/IMPORT EXPORT )**

* L&T's Hydrocarbon business **caters to the entire hydrocarbon value chain covering oil & gas processing, petroleum refining, chemicals & petrochemicals, and fertilizer sectors** serving in import and exports thereby developing an national gdp

GLOBAL WARMING:

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**L T EDUTECH: (EDUCATION DOMAIN)**

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* LT provides English language communications course and serving the college students
* LT provides E-learning courses on various domain such as AI , ML, cloud computing , IOT
* ETAP.COM -TAP® is an analytical engineering solution company specializing in the simulation, design, monitoring, control, operator training, optimizing, and automating power systems.
* LT provides as many online courses that increases the remote way of learning and this reduce the global warming as students will come to college and go by petroleum vehicles.

**LT POWER:**

* L&T Energy-Power is a business brand of Larsen & Toubro, with a mandate to integrate L&T’s varied offerings in the thermal power sector.
* LT works on renewable source of energy like solar energy , wind energy by playing a major roles on construction of solar panels , wind mills thereby reducing the global warming
* LT has consistenly has an eye monitor over the thermal coal power plants by imposing strict rules like carbon filters , tracking emission rate etc

**LT Technology and services:**

* At L&T Technology Services, end-to-end e-mobility solutions such as electric powertrain, design and development of high-voltage battery management system, and applications for power electronics are taking center stage.
* Our wide range of e-powertrain systems, technologies, and solutions for varied applications and vehicle platforms: from EV to HEV to PHEV, helping customers get ahead in the e-mobility race. With hands-on experience in power electronics, software development, and state-of-the-art lab for powertrain component testing, we help customers reduce costs and accelerate the EV development journey.

**5G Engineering:**

* The need for higher throughput, lower latency, and accommodating increasing device density is increasingly reshaping global customer expectations around connectivity services. As the worldwide demand for a connected world continues to grow rapidly, LTTS engineers are leveraging their chip-to-cloud expertise to unleash the power of 5G and transform the ideas of business.
* 5G is a breakthrough technology standard that redefines our notions of connectivity. With 5G, we can help create a smart, reliable, and more sustainable future.
* As modularization and virtualization gather focus in the 5G world, our Lab-as-a-Service (LaaS) offering enables robust testing and validation for your next-gen networks as we prepare to #EngineertheFuture.

HEALTH CARE DOMAIN

* L&T Technology Services offers comprehensive set of services for development of Medical Imaging based AI solutions.

# Chest- rAi

* LTTS’ Chest-rAiTM is an AI-based chestX-ray analysis system to assist the radiologists in improving speed and accuracy of the diagnosis. It enables the Radiologists to identify the 10 prominent lung symptoms (will be scaled up to identify 34 symptoms) using chest X-ray including symptom localization and generates report for identified symptoms.
* Chest-rAiTM analyzes chest radiographs using machine learning techniques to identify and highlight various pulmonary and other thoracic diseases. It is a deep learning system blended with a traditional radiologist approach of systematically examining a chest radiograph.

# AFFORDABLE VENTILATOR

* The world needs more ventilators, especially now – but scaling up production is more complex than it seems. There are not enough ventilators available in hospitals right now for the potential patients who might get affected by the virus.
* Intensive care units are overcrowded and there is a need for Home-based ventilators.
* LTTS leverages its deep understanding of clinical data across EHR/EMR and imaging, and lab operations, alongside rich experience across different therapeutic areas (TA) such as Oncology, Cardiovascular, Diabetes, and Nephrology, to develop complex use cases across focus areas. These include Digital Therapeutics (DTx), Software as a Medical Device (SamD), Clinical Decision Support Systems (CDSS), Decentralized Clinical Trials (DCT), Regulatory Compliance, Analytics, Product Development, and lifecycle management