IMAGINEERING
THE FUTURE OF ENERGY
SOLAR POWER
Realising the tremendous potential of solar energy, L&T is harnessing this non-conventional resource to promote green energy. L&T’s capability spectrum covers development of economically viable and technically superior solutions in Engineering, Procurement and Construction (EPC) of Solar Energy Projects by partnering with core solar technology providers. L&T’s competencies encompass all the key elements in the solar value chain covering concentrated solar power and solar photovoltaic technologies.

L&T Construction has indigenous capabilities to design solar photovoltaic power plants, balance of system and the requisite power evacuation systems from “concept to commissioning” basis for utility scale solar PV and CSP power plants as well as off grid and rooftop solar PV systems. L&T, an established leader in power generation, transmission and distribution is now playing a crucial role in the power requirements of the nation by bringing solar energy to the forefront to help India address the twin challenges of energy security and combating global warming and climate change.

**BUSINESS AREAS**

### Grid Connected PV (Utility Scale)
- The Largest Player - L&T is the leader with demonstrated experience of having completed 114 MWp on ground in India
- Cumulative order book of 320+ MW in India including 200+ MW by Mar ‘12
- Technologically agnostic, Independent & Flexible with high Bankability factor
- Fastest execution time, Highest Yield per MWp & Lowest Cost has been the strategy with resounding success in the Indian solar space

### Concentrating Solar Power (CSP)
- Only pure play Indian EPC to be present in Solar PV and Solar CSP arena
- Currently doing EPC for 125MW Solar CSP (Solar Thermal) Power Project in Rajasthan, which on completion would be India/Asia’s largest Solar CSP Power Project in 2013

**Providing EPC Services for:**
- Standalone CSP Plants.
- Solar Steam Augmentation Projects
- Solar Direct Steam Application like industrial/process heat application.

### Rooftop & Micro-grid PV Systems
- Created a 1MWp Rooftop project (India’s unique technology test bed/ pilot project) at various L&T campuses across India to evaluate various technologies and configurations.
- L&T Solar’s Design & Project Operations team has derived a lot of valuable insights on various aspects of the solar power systems over the last 3 years since installation
- Active in the rooftop/ micro-grid segment with multiple projects under construction/planning.
Technologically agnostic, Cumulative order book of (utility scale) Indian solar space resounding success in the has been the strategy with Yield per MWp & Lowest Cost Independent & Flexible with 200+ MW by Mar ’12 320+ MW in India including ground in India experience of having leader with demonstrated challenges of energy security and combating global warming and climate change. of the nation by bringing solar energy to the forefront to help India address the twin transmission and distribution is now playing a crucial role in the power requirements grid and rooftop solar PV systems. L&T, an established leader in power generation, to commissioning” basis for utility scale solar PV and CSP power plants as well as off L&T Construction has indigenous capabilities to design solar photovoltaic power photovoltaic technologies. the key elements in the solar value chain covering concentrated solar power and solar covers development of economically viable and technically superior solutions conventional resource to promote green energy. L&T’s capability spectrum Business areas • Solar Direct Steam Application • Solar Steam Augmentation • Standalone CSP Plants. Providing ePc services for: Currently doing EPC for 125MW • Only pure play Indian EPC to be • Power (csP) Projects • Solar CSP (Solar Thermal) CSP arena present in Solar PV and Solar • Created a 1MWp Rooftop Active in the rooftop/ various aspects of the solar Operations team has derived and configurations. project) at various L&T technology test bed/ pilot projects in the Gujarat Solar Park. Intersolar India Projects Award ‘12

40 MWp SOLAR PV POWER PROJECT AT DHURSAR VILLAGE, POKHARAN TESHIL, JAISALMER DISTRICT, RAJASTHAN, INDIA

Location : 26.82 Latitude, 71.99 Longitude Project Size in acres : 341.78 acres Year Built/ Scheme : Mar’12, Open Access Modules : Thin-Film (5,03,660 Nos. First Solar ) Inverter : Power One Performance Data: Annual Generation : Approx 71,400+ MWh CO2 displaced : Approx 66,600 tonnes per year Special Feature : One among the largest PV plants in India. Commissioned in record 129 days From Concept to Commissioning

6MWp FIXED MOUNTING, GRID CONNECTED SOLAR PV POWER PLANT, SOLAR PARK, GUJARAT

Location : 23.54 Latitude, 71.11 Longitude Project Size in acres : 46.57 acres Year Built/ Scheme : Jan ’12, Gujarat Solar Policy Modules : Thin-Film Frameless (46914 Nos. -Sharp) Inverter : Power One Performance Data: Annual Generation : Approx 9500+ MWh CO2 displaced : Approx 8900 tonnes per year Special Feature : One of the consistent top performing projects in the Gujarat Solar Park. Intersolar India Projects Award’12

10 MWp SOLAR POWER PLANT AT DHAMA, GUJARAT (MILLENIUM PROJECT)

Location : 23.3 Latitude, 71.65 Longitude Project Size in acres : 73.17 acres Year Built/ Scheme : Jan ’12, Gujarat State Policy Modules : Tracker Technology (33288 Nos. - TRINA SOLAR & SOLARFUN Inverter : SMA Performance Data: Annual Generation : Approx 18,750+ MWh CO2 displaced : Approx 17,500 tonnes per year Special Feature : Superior CUF and Top Class performance. Proves tracker suitability to Indian conditions
The Largest Player – L&T is the grid connected PV Indian solar space resounding success in the has been the strategy with Yield per MWp & Lowest Cost high Bankability factor 200+ MW by Mar ’12 320+ MW in India including completed 114 MWp on experience of having leader with demonstrated transmission and distribution is now playing a crucial role in the power requirements grid and rooftop solar PV systems. L&T, an established leader in power generation, to commissioning” basis for utility scale solar PV and CSP power plants as well as off L&T Construction has indigenous capabilities to design solar photovoltaic power the key elements in the solar value chain covering concentrated solar power and solar partnering with core solar technology providers. L&T’s competencies encompass all in Engineering, Procurement and Construction (EPC) of Solar Energy Projects by covers development of economically viable and technically superior solutions conventional resource to promote green energy. L&T’s capability spectrum Business areas Solar Direct Steam Application • Solar Steam Augmentation • Standalone CSP Plants. • Providing ePc services for: • Currently doing EPC for 125MW • Only pure play Indian EPC to be application. like industrial/process heat Projects Power Project in 2013 India/Asia’s largest Solar CSP Power Project in Rajasthan, CSP arena present in Solar PV and Solar L&T Solar ‘s Design & Project • Created a 1MWp Rooftop • Rooftop & micro-grid construction/ planning. micro-grid segment with 3 years since installation various aspects of the solar Operations team has derived a lot of valuable insights on configurations. evaluate various technologies campus across India to project) at various L&T technology test bed/ pilot project (India’s unique CSP arena). ROOFTOP & MICRO GRID PV SYSTEMS Location : 13.02 Latitude, 80.17 Longitude Year Built/ Scheme : 710kW commissioned till date (in phases) 1st Phase 406.8kW (in 2009) Rest under commissioning Modules : Sharp/HHV/Solyndra/BHEL/Novergy Inverter : Sharp/ Vacon/ Kaco/ Delta/ SMA Performance Data: Annual Generation : Approx 990 + MWh CO2 displaced : Approx 720 tonnes per year Special Feature : This unique BOS project with east-west wave configuration resulted in yields ~ 6% more than conventional south facing layout 1 MWp ROOFTOP PROJECT AT CHENNAI & KANCHEEPURAM, INDIA – PILOT PROJECT (TECHNOLOGY TEST BED)
Forbes – the reputed US-based global business magazine – has ranked L&T the 9th most innovative company in a global study. This is ahead of companies like Google that are normally associated with innovation. L&T was rated highest amongst Indian companies that made the list, and is the only company to feature in the top ten.

27th ranking among top 225 global contractors by Engineering-News Record (ENR) Magazine, USA in 2012. L&T is the 1st and the only Indian EPC among the top 100 to appear ahead of globally renowned names such as Technip, Samsung, Hyundai, Foster Wheeler etc. on that list.

L&T Construction created a record for Solar PV installations by any pure play EPC player in India in 2011 – 114MW on ground catapults us into the list of global top 20 solar PV installers, and the only Indian EPC in the top 20! (Source: IMS Research (IHS), world’s leading research agency for the solar industry)
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L&T is 9th in Global Ranking of world’s Most Innovative Companies

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