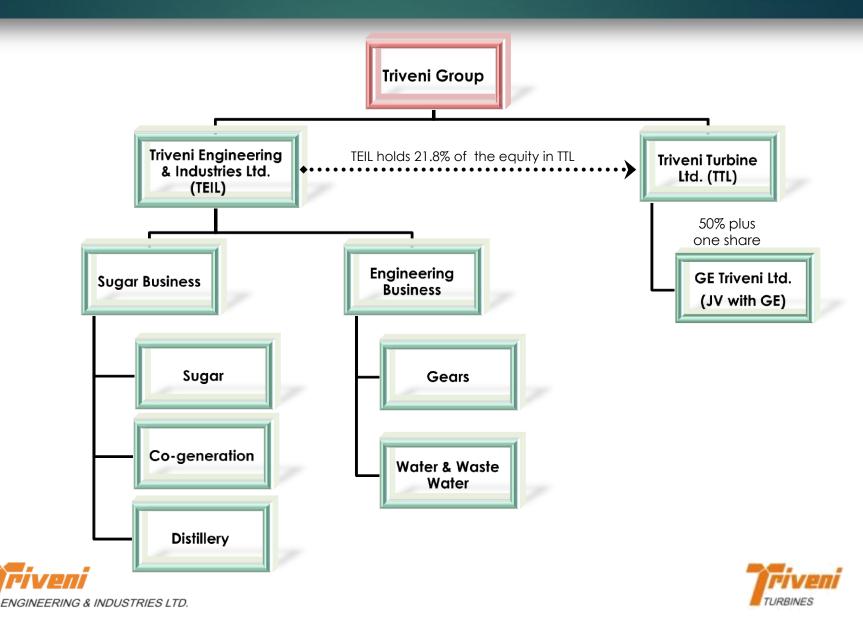


## Triveni Group Organisation Structure



### Triveni Group Fact Sheet

- Two Independent Listed Companies Triveni Engineering & Industries Ltd. and Triveni Turbine Ltd.
- Listed in both National Stock Exchange &
  Bombay Stock Exchange Market Cap of ~
  USD 600 million (August 7<sup>th</sup> 2014)
- Promoter driven, professionally managed companies with eminent and independent Board of Directors

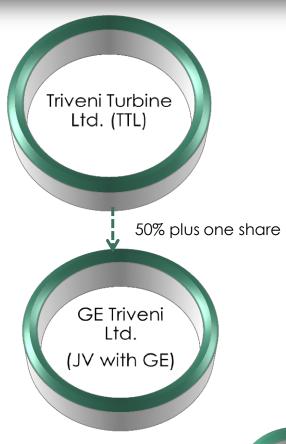
- Triveni Engineering is one amongst the largest integrated sugar manufacturers in India and the market leader in its engineering businesses comprising high speed gears, gearboxes, and water treatment solutions.
- Triveni Turbine Ltd. is the market leader in the steam turbines upto 30 MW size.
- Pan India Presence







## Triveni Turbine Ltd. (TTL)



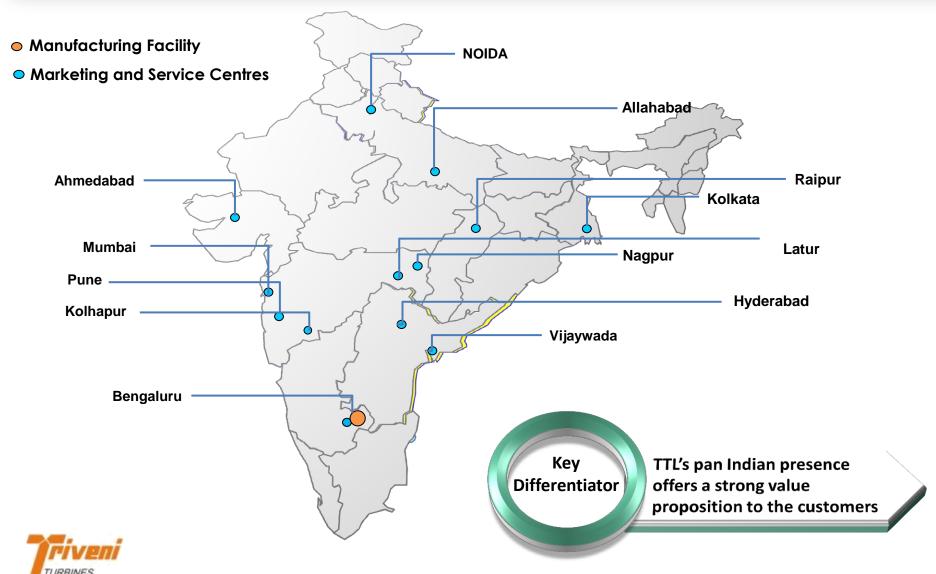






TEIL is holding 72 million equity shares of ₹ 1/- each in TTL - 21.8% of the total equity capital of ₹ 330 million

### TTL – Pan India Presence

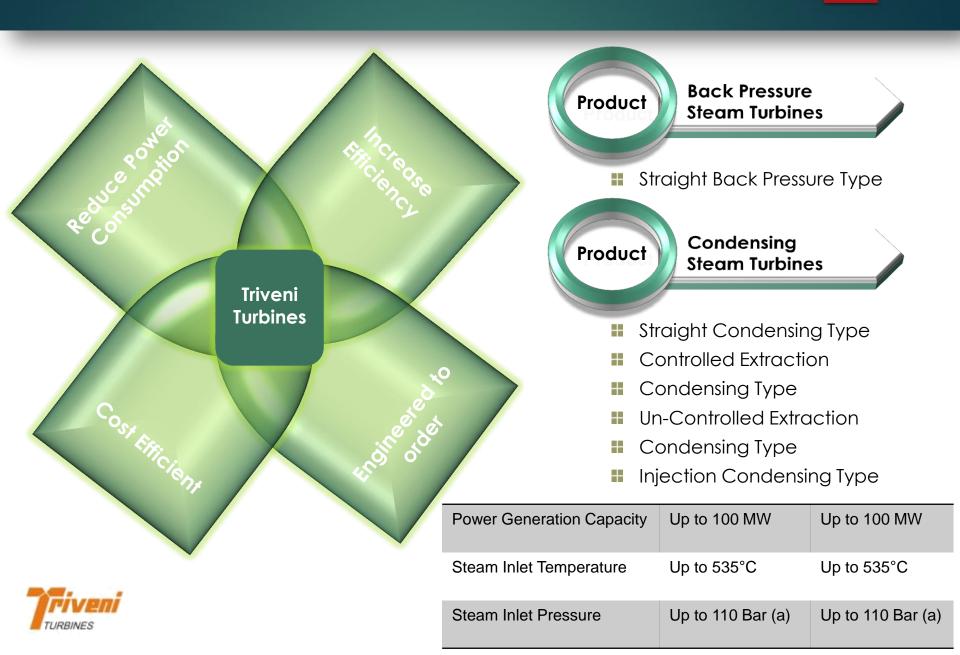


### TTL – Business Perspective

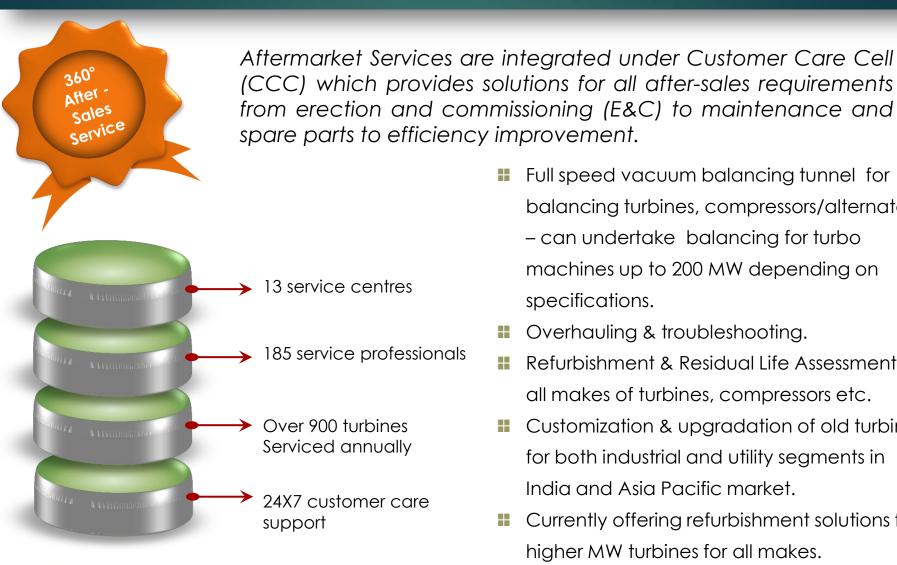
- Cater to wide range of customers across segments like sugar, paper, co-gen, textiles, pharma, steel, IPP.
- Consistently upgrading the product range and efficiency.
- The current range of product up to 100 MW.
- Manufacturing since 1968; over 2,500 turbines manufactured and sold since inception.
- Exporting to more than 40 countries
- Highly efficient turbines with indigenously developed tapered twisted blades.
- □ Fully integrated operations with strong Engineering & Design team.
- Facility equipped with state of the art equipments and machine tools best in the industry.
- Strong in-house R&D team and tie-ups with leading international design and R&D establishments.
- □ In-house learning centre to create pool of technical team for design, engineering and servicing.
- Consistently maintained dominant market share. Commands market leadership for range up to 30 MW.



### **Efficient Products**



### Unparallel Service



- Full speed vacuum balancing tunnel for balancing turbines, compressors/alternators - can undertake balancing for turbo machines up to 200 MW depending on
- Overhauling & troubleshooting.

specifications.

- Refurbishment & Residual Life Assessment of all makes of turbines, compressors etc.
- Customization & upgradation of old turbines for both industrial and utility segments in India and Asia Pacific market.
- Currently offering refurbishment solutions for higher MW turbines for all makes.



## Diverse Applications & Industry Segments



- Co-generation
- Captive Power Plant
- Combined Heat & Power
- CCP / Waste Heat Recovery
- Incineration
- Biomass



- **Sugar**
- # Palm Oil
- Distillery
- Pulp & Paper
- Food Processing
- Textiles
- Steel & Metal
- Carbon Black
- Cement
- **Chemicals & Fertilisers**
- Oil & Gas and Petrochemical
- District Heating & Cooling
- Municipal Solid waste

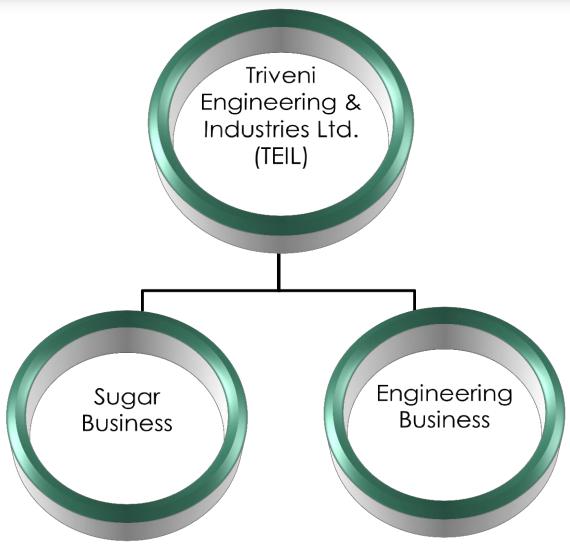


### Joint Venture with General Electric (GE)

- Triveni Turbine Ltd. formed a 50:50 Joint Venture with GE on 15<sup>th</sup> April 2010. GE Triveni Ltd. (GETL) headquartered in Bengaluru, a subsidiary of TTL, will design, manufacture, supply, sell and service advanced technology steam turbines in India in the range above 30-100MW for power generation applications in India and globally.
- GETL to get technology and on-going R&D support from GE and TTL and will use TTL's Bengaluru facility for turbine manufacturing.
- The operations of the joint venture with GE are in line with our expectation. All key managerial personnel are on board and the technology transfer is progressing as per schedule.
- The marketing teams of both GE and Triveni are working closely on the opportunities in their respective markets. The JV is currently responding to the enquiries both in the domestic market and to a diverse international market ranging from Canada to Indonesia.
- GETL has sold turbines in India, Indonesia and Philippines, with enquiries from more than 20 countries.



# Triveni Engineering & Industries Ltd. (TEIL)





### Engineering Business – Pan India Presence

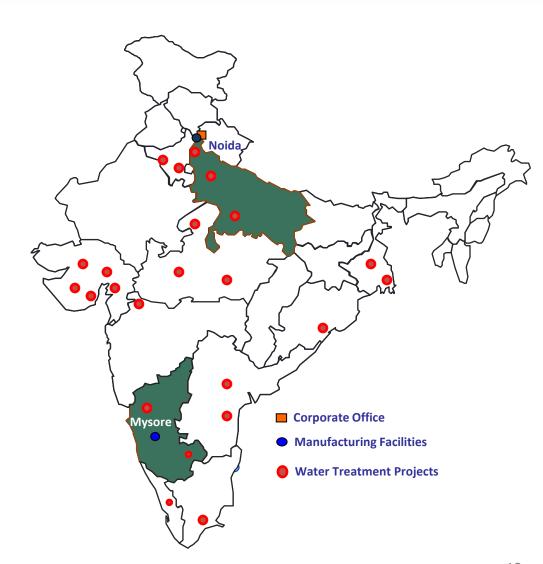
#### GEARS BUSINESS -MYSORE

Market leader in High speed gears & gear boxes upto 70 MW capacity and speed of 70,000 rpm

Engineering Business

#### WATER BUSINESS -NOIDA

A leading player in the high technology water & wastewater management business





### Water Business

- Technology association with world's leading technology providers for various products, process & solutions such as Ultra filtration (UF), Reverse Osmosis (RO), Moving Bed Bio Reactor (MBBR) etc.
- One of the widest ranges of products & technologies offered in the Indian Market. Indigenous Product lines include clarifiers, aerators, filters, membrane solutions, de-watering equipment and high purity water systems.
- Over 2000 numbers of process equipments for water & waste
  water treatment applications, supplied and commissioned till date.
- With the visibility of a fast growing market, Water Business expected to grow consistently in future.
- During FY12, the company has made a long term strategic investment by acquiring 25.04% equity stake in Aqwise-Wise Water Technologies Limited, a company registered in Israel, engaged in providing water treatment solutions using proprietary technology. The investment is synergistic to the water / waste water business of the company.







### Gears Business Group

- Triveni is in the business of design, manufacture and marketing of customised gears and gearboxes (both high speed and niche low speed gears) having a state-of-the-art design and manufacturing facility at Mysore conforming to international standards.
- About 70% market share in complete high speed gear market across applications up to 70 MW capacity and speeds of 70,000 rpm.
- Own developed technology for high speed gear boxes upto 7.5 MW and for hydel gearbox range upto 6 MW.
- Range above 7.5 MW-62 MW is manufactured using technology licensed from Lufkin, USA.
- High Speed Gears product range includes all Steam Turbine gear boxes, gear boxes for compressors and load gear boxes for gas turbines apart from gear boxes for mechanical drives like Pumps, Fans and Blowers driven by Electric Motor, Steam Turbine or Diesel Engine. Geographies extended to cover major markets in South East Asia such as Malaysia, Indonesia, Singapore, Thailand with the possibility of enhancing territories in the future.
- □ Niche engineered-to-order high technology low speed gear applications with Lufkin for four industrial segments viz., Rubber & Plastics, Metals and Steel, Marine and Coal pulverizer application in the thermal power plants.







## Sugar Business

#### **SUGAR BUSINESS**

One of the largest sugar producers in India with seven sugar manufacturing facilities

# CO-GENERATION BUSINESS

Two state of the art co-generation facilities at two of its major sugar units viz. Khatauli and Deoband

### Sugar Business

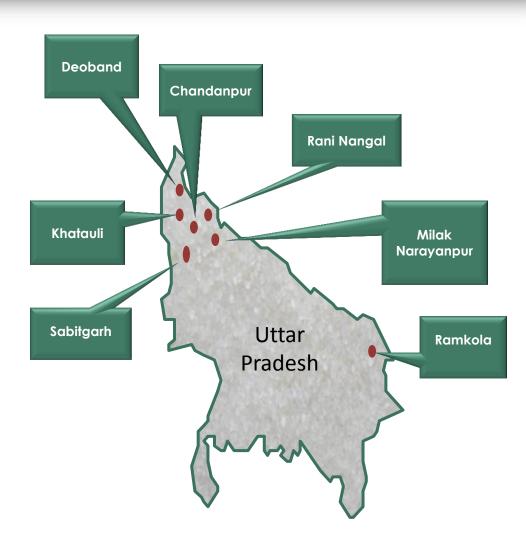
#### **DISTILLERY BUSINESS**

One of the largest single stream molasses based distillery in the country located at Muzaffarnagar



### Sugar Business

- Major facilities located in cane rich areas of Western Uttar Pradesh with more than 80% cane intensity – fertile and irrigated land
- Sugar cane catchment area for all sugar units under canal irrigation both in Western
  Central Uttar Pradesh Lower dependency on monsoon
- □ Closer to country's major sugar consuming markets - better realizations & lower transportation cost. Long term relationship with ~ 250,000 farmers
- Extensive sugar cane development programme – to develop new areas under cane cultivation in our new locations; improving yields of cane across the units.
- ☐ Two of its largest sugar plants have been converted into refinery 40% of current production is refined sugar.





## Sugar Business - Co-generation Business

- ☐ Triveni presently operates three co-generation power plants, one at Deoband and two at Khatauli.
- Deoband and 'Khatauli Phase-I' co-generation plants of the Company are registered as Clean Development Mechanism (CDM) projects with United Nations Framework Convention on Climate Change (UNFCCC).
- ☐ Triveni's Deoband and Khatauli units are eligible to get REC benefits and have been registered with National Load Dispatch Centre (NLDC) as REC projects.
- Recently established incidental co-generation plants at Chandanpur and Milak Narayanpur sugar units which will facilitate export of surplus power to Uttar Pradesh Power Corporation Limited (UPPCL).







## Sugar Business - Distillery Business

- One of the largest single stream molasses based distillery in the country located at Muzaffarnagar.
- Strategically located in close proximity to two of its largest sugar units viz. Khatauli and Deoband, the distillery procures consistent supply of captive raw material.
- ☐ The unit extracts bio-gas from the effluent and uses it as main fuel in the boiler.
- ☐ The distillery has a flexible manufacturing process allowing it to produce Extra Neutral Alcohol (ENA), Rectified Spirit (RS), Special Denatured Spirit (SDS) & Ethanol which are renowned for their high quality.





