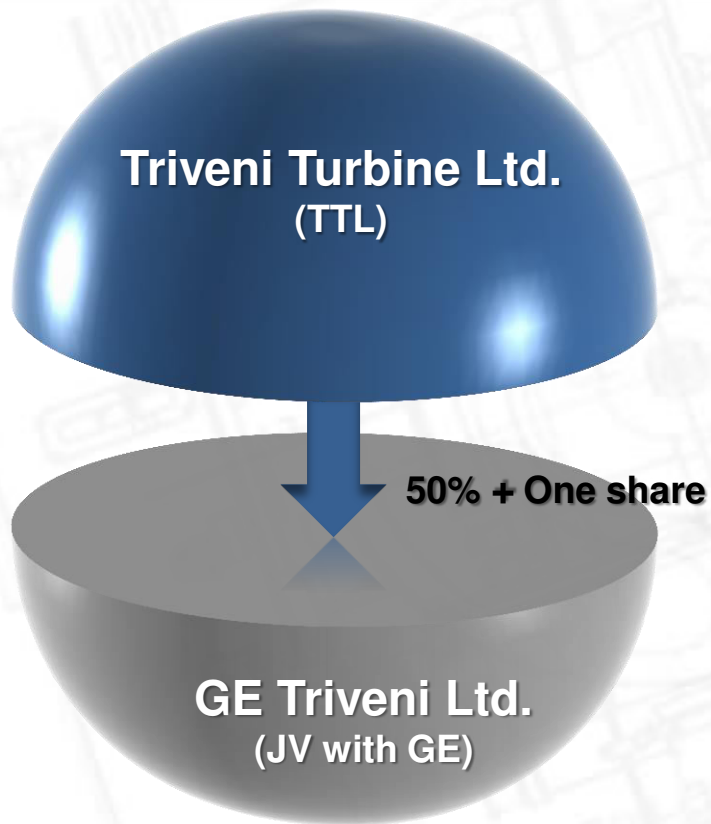




## CORPORATE PRESENTATION

# Fact sheet



Location: A 50,000 sq.mt factory area in the beautiful city of Bengaluru

TTL is listed in NSE & BSE, two major stock exchanges in India

# Fact sheet



## Delivering STG Packages

---

Delivering STG packages up to 30 MW. Installation base of over 2500 turbines globally.

## Market Share

---

Key global player in steam turbine market with market leadership position in India, having approx. 63% market share.

## Annual Revenues

---

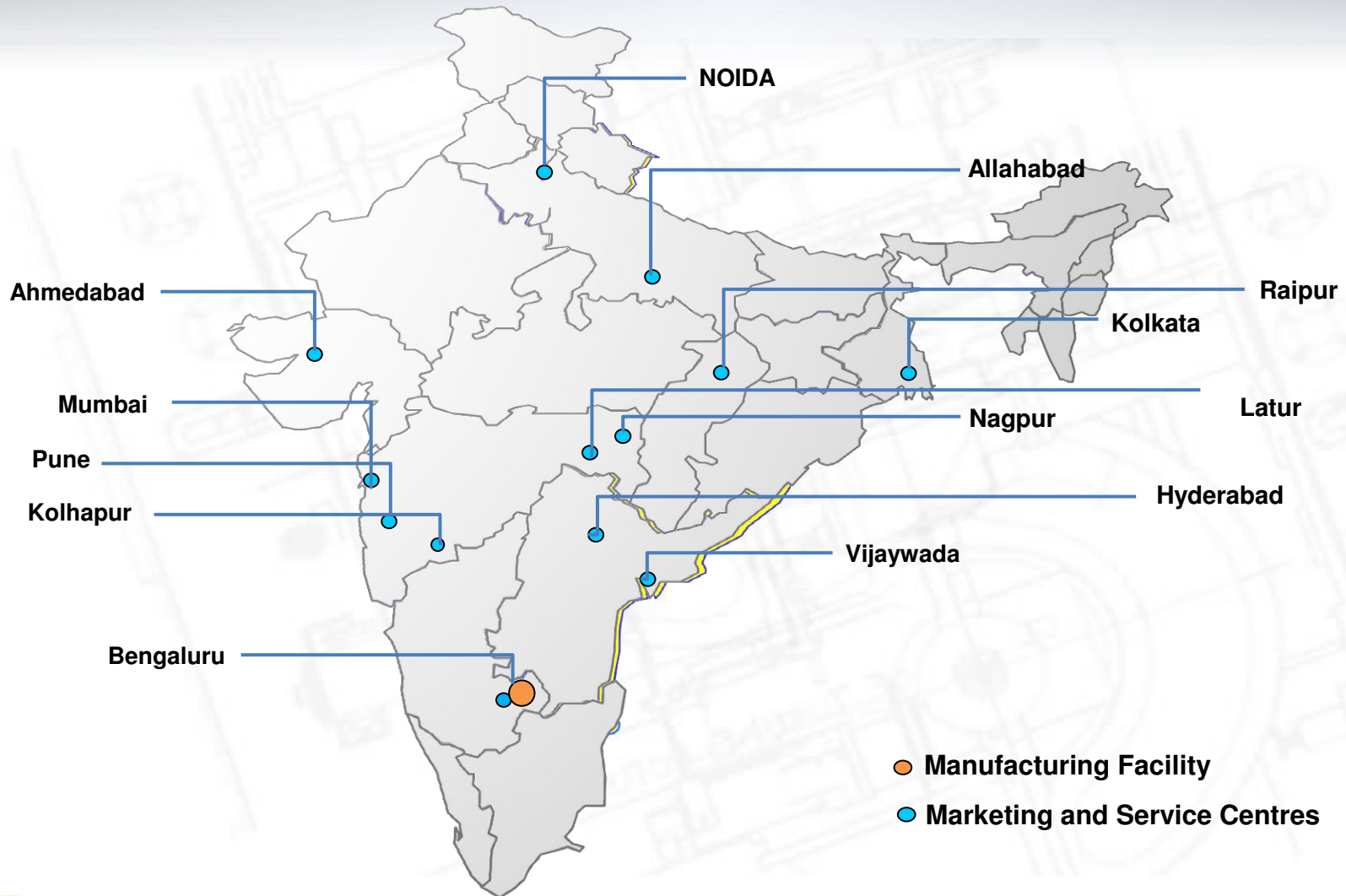
Annual Revenues for FY 14 at ` 5.06 billion (~ USD 85 million).

## Global Presence

---

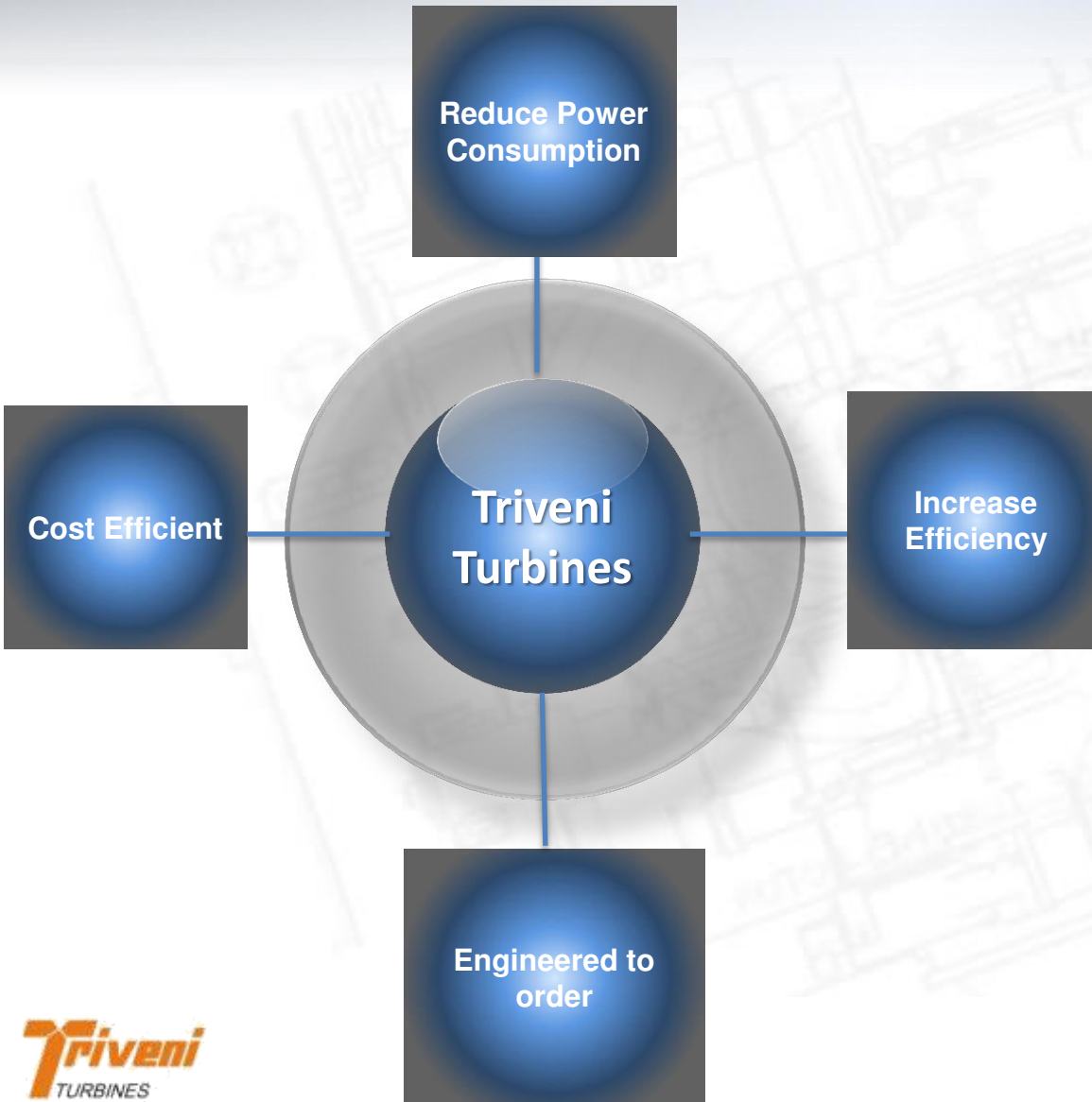
Significant presence in South East Asia, Europe, South America, Middle East & Africa, with installations in over 40 countries.

# Pan India Presence





# Efficient Products



## Back Pressure Steam Turbines

- Straight Back Pressure Type

## Condensing Steam Turbines

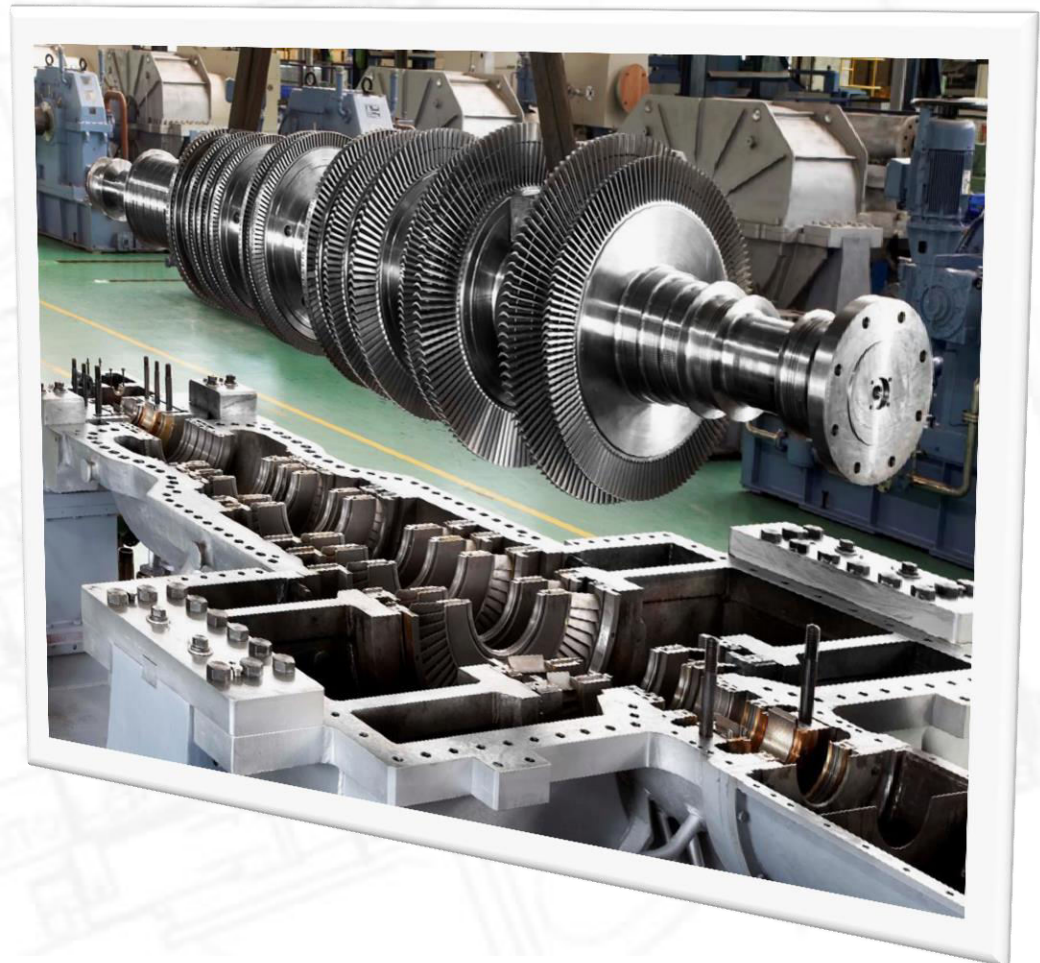
- Straight Condensing Type
- Condensing Type with Controlled Extraction
- Condensing Type with Un-Controlled Extraction
- Condensing Type with Injection

Power Generation Capacity	Up to 30 MW
Steam Inlet Temperature	Up to 545°C
Steam Inlet Pressure	Up to 120 Bar (a)
For GETL range	Above 30 MW to 100 MW

# Efficient Products

## Standard scope includes

- Steam turbine and its control system
- Control oil system
- Lubricating oil system
- Condensing system (as applicable)
- Gear box
- Alternator
- Electrical metering/control/protection system
- Instrument control system



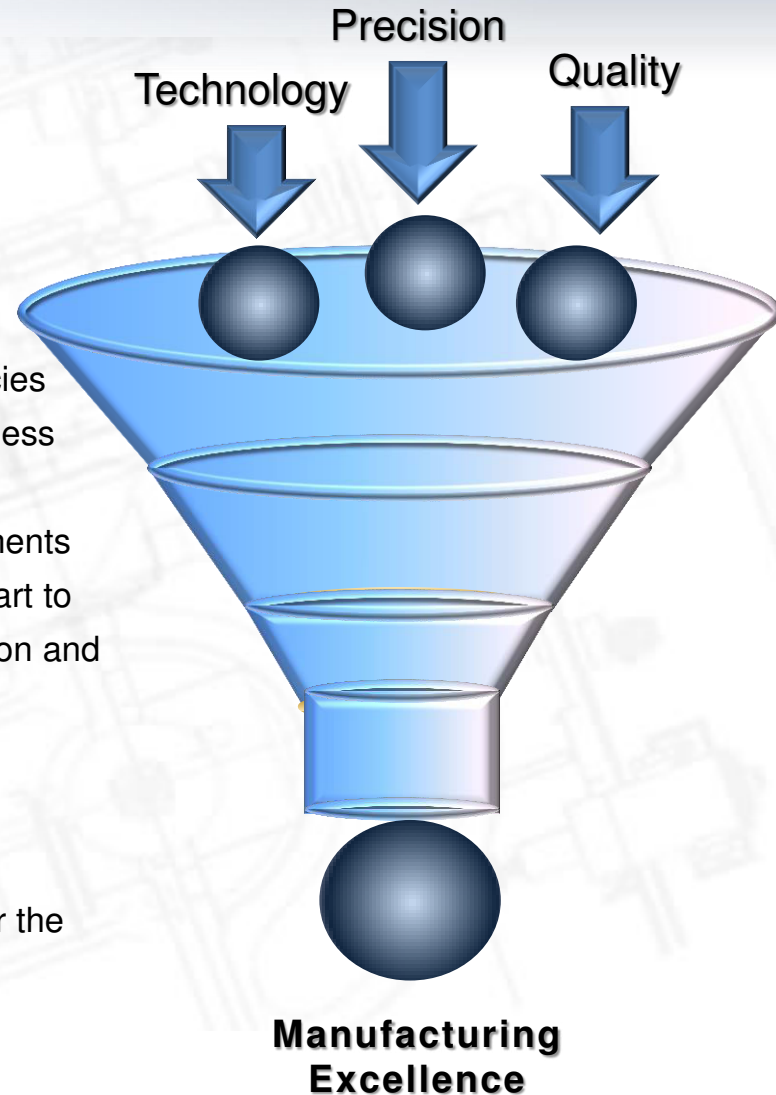
# Manufacturing Excellence

**State-of-the-art  
manufacturing facility**

**ISO 9001 QMS  
ISO 14001 EMS certified**

Manufacturing facility is equipped with:

- An array of 4 axis and 5 axis Vertical Machining Centres and Horizontal Machining Centres for machining of blades
- Mill-turn centre for machining of rotors
- CNC gantry and CNC VTL for casing machining to high accuracies
- Latest software applications like Integrated CAD/CAM for seamless manufacturing of turbine parts, Zeiss Co-ordinate Measuring Machines (CMM) for precision measurements of critical components
- Assembly-cum-test beds for assembling steam turbines from start to finish and recording the test results on a wireless Data Acquisition and Display System
- High Speed Vacuum Balancing Machine for balancing rotors
- CNC Coordinate Measurement Machine
- Turbine no load steam test facility
- GHTM Goratu Turn Milling Machine for Rotors above 30 MW for the GETL range of products



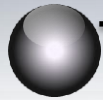
# Quality First

- An ISO 9001 14001 company
- Products meet International standards such as API, ASME, AGMA, IEC, NEMA etc.
- A network of approved suppliers and dedicated sub-contractors complying with stringent quality norms.
- Quality Checks performed before dispatch
  - ✓ Ultrasonic Test
  - ✓ Radiography
  - ✓ Hydro Test
  - ✓ Profile Measurement
  - ✓ ZygoTest
  - ✓ Dynamic Balancing
  - ✓ Alignment Check
  - ✓ Full speed factory test
  - ✓ Sound Level Measurement
  - ✓ Vibration Measurement
  - ✓ Governor Response

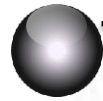




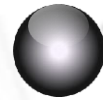
# Research & Development



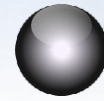
Strong design team supported by consultants and domain experts



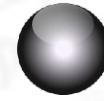
Association with globally acclaimed turbo-machinery design houses



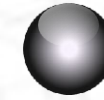
Developed and commercialised 40 basic new models of high pressure and cost effective steam turbines in a decade. Introduced 11 new product variants of turbines in 2013-14



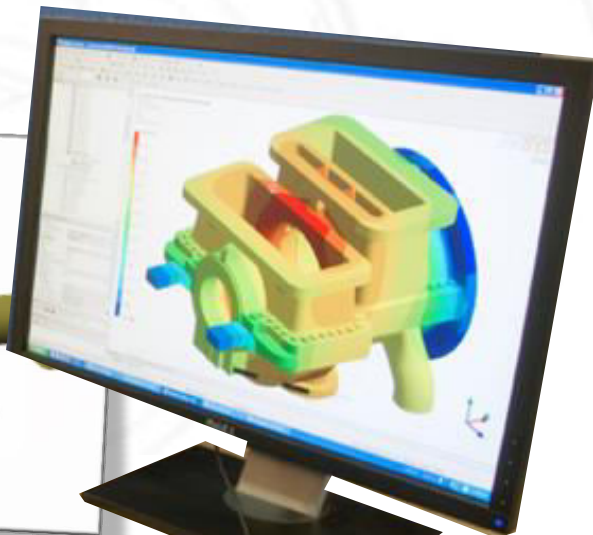
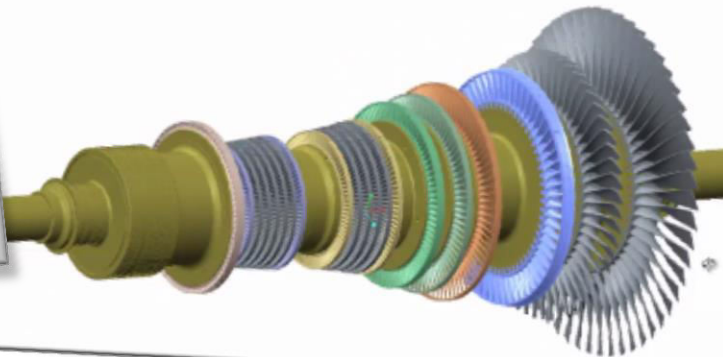
Innovative designs delivering maximum performance and higher efficiency



Innovative product development concepts such as design to cost, QFD, FMEA techniques, DOE



Deploy Latest computer aided design and engineering software for continuous product development



# Intellectual Property Rights



- TTL has filed 121 unique IP filings till March 2014.
- Involvement of IP team is right from product conceptualisation stage to the final design stage thus establishing a comprehensive security system to safeguard the valuable IPRs.
- The Company won the prestigious National Intellectual Property Award 2013 in the category of "Top Organisation in Design" for its outstanding contribution to intellectual property in the country.
- TTL has been awarded certificate of "Commendation for Significant Achievement" in the CII-EXIM Bank Award for Business Excellence - 2013. This recognition has been achieved by TTL for the third time in the consecutive years.

# Unparallel Service

Aftermarket Services are integrated under Customer Care Cell (CCC) which provides a comprehensive range of customized service solutions and complete life cycle support for industrial steam turbines

- Full speed vacuum balancing tunnel for balancing turbines, compressors/alternators – can undertake balancing for turbo machines up to 300 MW depending on specifications.
- Offers all after-sales requirements from erection and commissioning (E&C) to maintenance and spare parts to efficiency improvement.
- Overhauling & troubleshooting.
- 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 global markets.
- Currently offering refurbishment solutions for higher MW turbines for all makes.





# Diverse Applications & Industry Segments

## Industry Segments

- 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

## Applications

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





# Power Generation Market



**Industrial Growth**

**Manufacturing Growth**

**Power Shortage**

**Power Rate**

**Kyoto Protocol**

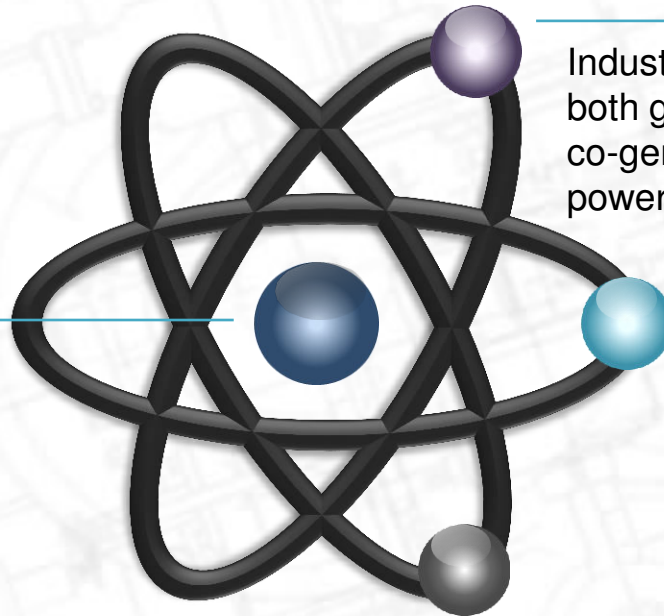
**Replacement Market**

## Market Characteristics

- Purchase decision based on robust designs, high level of technology, efficiency & low life cycle cost
- Price sensitive market
- Premium on shorter deliveries
- Strong servicing capabilities and lifetime relationship with the customer is expected

# Power Generation Market Potential

The industrial power generation market represents the decentralised and captive power generating industry.



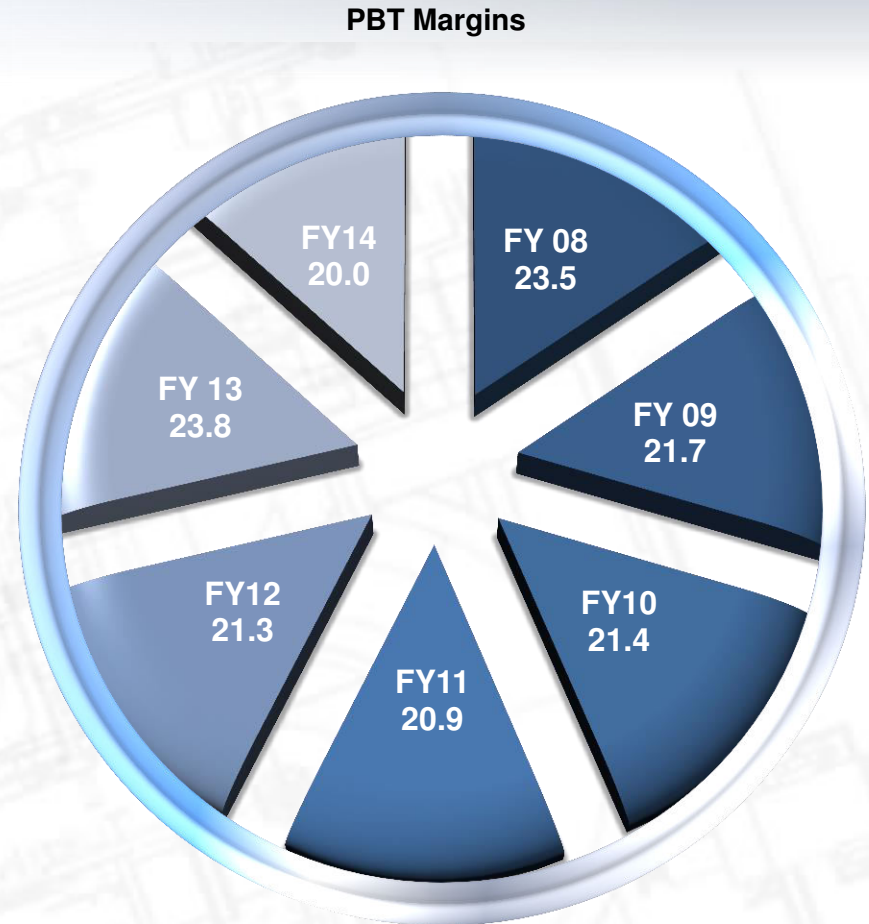
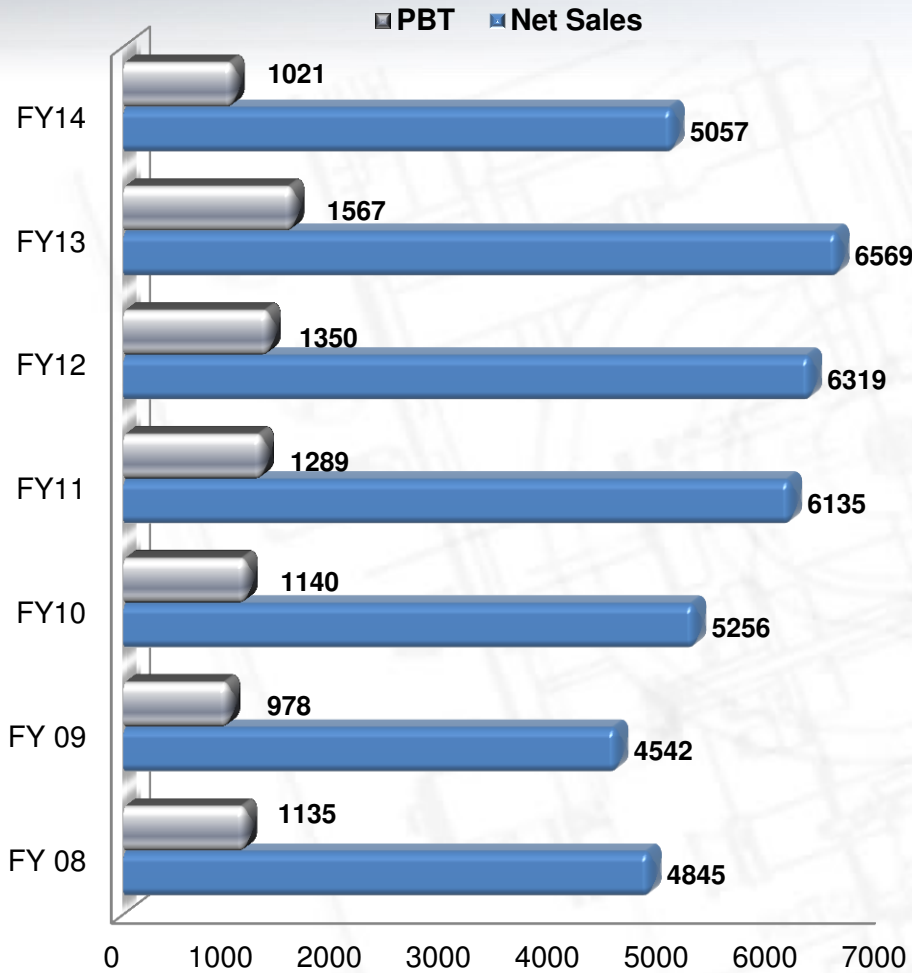
Industrial capital expenditure – both greenfield and brownfield co-generation based captive power plants

**Three principal segments that generate demand in both domestic as well as the export market.**

Renewable Energy – small-scale renewable-based Independent Power Producers, agro-based co-generation and renewable waste-heat

Opportunity based sale of power to the grid by captive units

# Financial Performance



# Financial Performance

(Figures in ` million)

	Q4 FY 14	Q4 FY 13	FY 14	FY 13
<b>Net sales</b>	<b>1313.2</b>	<b>1,905.8</b>	<b>5056.9</b>	<b>6,568.5</b>
<b>EBITDA</b>	<b>325.3</b>	<b>471.0</b>	<b>1148.2</b>	<b>1,716.3</b>
<b>EBITDA Margin</b>	<b>24.8%</b>	<b>24.7%</b>	<b>22.7%</b>	<b>26.1%</b>
<b>Depreciation &amp; Amortisation</b>	<b>32.5</b>	<b>30.7</b>	<b>128.6</b>	<b>122.6</b>
<b>PBIT</b>	<b>292.8</b>	<b>440.3</b>	<b>1019.6</b>	<b>1,593.7</b>
<b>PBIT Margin</b>	<b>22.3%</b>	<b>23.1%</b>	<b>20.2%</b>	<b>24.3%</b>
<b>Interest</b>	<b>1.4</b>	<b>0.7</b>	<b>6.0</b>	<b>27.2</b>
<b>PBT</b>	<b>291.4</b>	<b>439.6</b>	<b>1013.6</b>	<b>1,566.5</b>
<b>PBT Margin</b>	<b>22.2%</b>	<b>23.1%</b>	<b>20.0%</b>	<b>23.8%</b>
<b>PAT</b>	<b>192.7</b>	<b>305.9</b>	<b>684.5</b>	<b>1,066.3</b>
<b>PAT Margin</b>	<b>14.7%</b>	<b>16.1%</b>	<b>13.5%</b>	<b>16.2%</b>



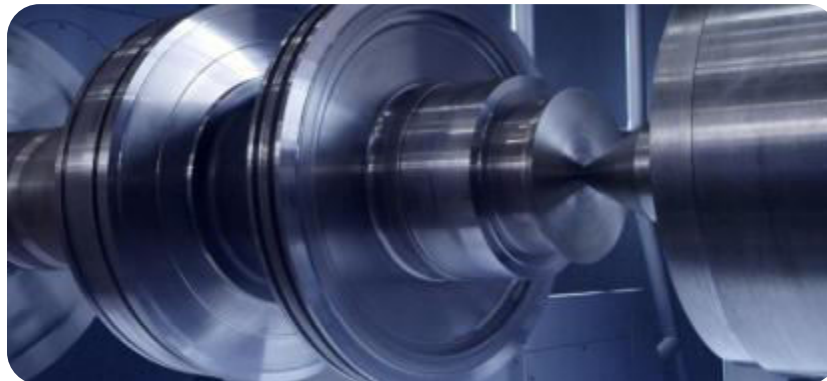
# Financial Performance

- The FY 14 turnover was lower by 23% on account of lower order booking in the first half of the year and also on account of deferment of deliveries.
- The after-market sales have shown decline of 13% which is expected to improve in the coming years both from services and spares of own turbines and also third party refurbishment.
- The proportion of exports sales to total sales has shown an improvement at 29% from 27%.
- The outstanding order book on a standalone basis, as on 31st March 2014 has been ` 5.8 billion including refurbishment orders, while on a consolidated basis, the order book is ` 7.1 billion.



# Joint Venture with General Electric (GE)

- Triveni Turbine Ltd. formed a 50:50 Joint Venture with GE on 15th April 2010. GE Triveni Ltd. (GETL) headquartered in Bengaluru, a subsidiary of TTL, will design, supply, sell and service advanced technology steam turbines in India in the range above 30-100 MW 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.
- During the year, the joint venture with GE, GE Triveni Limited, has received orders worth ` 1.8 billion.
- The company received three turbine orders from international market and two turbine orders domestically.
- With a strong order backlog and enquiry book, the business is expected to gain momentum in the coming year.
- The JV also concluded another major order in the first two months of FY15 from the international market.
- The company has a strong enquiry book both in the domestic market and international markets which are being pursued by the marketing teams of the respective JV partners in their territories.



# Contact for Investor Relations

**CN Narayanan**

**Triveni Turbine Ltd.**

**Tel. +91 120 430 8000 Fax : +91 120 431 1010**

**cnarayanan@trivenigroup.com**

**Gavin Desa/ Ashwin Chhugani**

**Citigate Dewe Rogerson**

**Tel: +91 22 66451237/1250**

**gavin@cdr-india.com / ashwin@cdr-india.com**

---

## **DISCLAIMER :**

Some of the statements in this presentation that are not historical facts are forward looking statements. These forward-looking statements include our financial and growth projections as well as statements concerning our plans, strategies, intentions and beliefs concerning our business and the markets in which we operate.

These statements are based on information currently available to us, and we assume no obligation to update these statements as circumstances change. There are risks and uncertainties that could cause actual events to differ materially from these forward-looking statements. These risks include, but are not limited to, the level of market demand for our services, the highly-competitive market for the types of services that we offer, market conditions that could cause our customers to reduce their spending for our services, our ability to create, acquire and build new businesses and to grow our existing businesses, our ability to attract and retain qualified personnel, currency fluctuations and market conditions in India and elsewhere around the world, and other risks not specifically mentioned herein but those that are common to industry.

Further, this presentation may make references to reports and publications available in the public domain. Triveni Turbine Ltd. makes no representation as to their accuracy or that the company subscribes to those views / findings.

