

Management Discussion and Analysis

Introduction to Triveni Turbines

Triveni Turbines is a market-leading corporation, with core competencies in the areas of industrial heat & power solutions, along with decentralised steam-based renewable turbines up to 100 MW size.

Pioneering industrial steam turbine solutions

Triveni Turbines has 50+ years of experience and expertise in manufacturing and assembly of engineered steam turbine solutions, designed to meet the growing heat and power requirements of industrial customers across the globe. As one of the market leaders focussed on delivering industrial heat & power solutions, and decentralised steam-based renewable turbines up to 100 MW size, the Company plays a pivotal role in the industrial energy sector.

The Company provides its solutions and services to a marquee clientele, spanning major end-user industries like

Sugar, Distillery, Cement, Steel, Food Processing, Pulp & Paper, Pharmaceuticals, Petroleum Refineries, Chemicals, Petrochemicals and Fertilisers, etc.

Promoting sustainable energy through decentralised generation

Playing a critical role in meeting the global energy requirements, steam turbines find extensive use in the generation of heat and power from steam. They have emerged as one of the most efficient ways to convert heat energy into mechanical energy, which can be further converted into electrical energy. In the context of Triveni Turbines, whose customers also include decentralised renewable energy providers, particularly in areas where there is a lack of access to the main power grid or unreliable power supply, steam turbines are also used in conjunction with renewable energy sources. Along with solar or geothermal energy sources, they provide reliable and clean energy to users. Decentralised

power generation refers to the production of electricity closer to the point of consumption, enabling enhanced energy efficiency and reliability, reduced transmission losses & costs, and promotion of energy security. By using steam turbines in combination with solar, geothermal or waste-to-energy sources, communities can generate clean and reliable energy, while reducing their dependence on fossil fuels and augmenting their energy security and resilience.

Expanding global presence

Triveni Turbines has a large global footprint, which it continues to expand through its strategic investments. The Company manufactures steam turbines at its world-class manufacturing facilities in Peenya and Sompura at Bengaluru, India, and assists its customers with their aftermarket requirements through its global servicing presence. It is continually scaling its customer-centric approach through a robust service network spread across India, and having international offices in Europe, Middle East and Africa.

The Company has also established a dedicated office and repair facility in the USA to support its comprehensive product and service offerings in the region. By delivering responsive support across time zones, Triveni Turbines is reinforcing customer trust across global markets, and ensuring top-of-the-mind brand recall for its growing client base.

Expanding portfolio through new technology development

New technology development is the key engine of the Company's portfolio expansion strategy. Triveni Turbines collaborates actively with stakeholders to pioneer new manufacturing and service solutions for a wide range of industries. It is also advancing its energy transition efforts through the development of CO₂-based technologies for energy storage, heating and cooling applications using heat pumps and chillers.

Global Energy Demand

Steady growth in global energy demand, with rising share of renewables

The World Energy Outlook 2024 report by the International Energy Agency (IEA) has reported a 15% increase in the global demand for energy over the last decade. Rising population, increase in economic activity, and industrial output in emerging market and developing economies are the key factors driving the demand. Of the total demand increase, 40% has been met by clean energy (renewables), nuclear and low-emission fuels, including Carbon Capture, Utilisation and Storage (CCUS). This has led to a decline in the share of fossil fuels in the global energy mix - from 82% in 2013 to 80% in 2023. As the world moves towards a more renewables-rich energy system, the fossil fuels usage is further expected to decline to 75% by 2030, and below 60% by 2050.



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