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AFTERMARKET BUSINESS OVERVIEW

Committed to providing full-service support throughout the life-span of a turbine

In FY 24, the Aftermarket business unit experienced strong growth, owing to a significant influx of new orders combined with repeat orders. This served to further strengthen the Company's already diversified portfolio of revenue streams dedicated to servicing and optimising turbine performance globally. The Company's mission is to ensure that turbines operate at maximum capacity. It is committed to providing full-service support throughout a turbine's life-span, from its initial commissioning to ensuring successful performance over its lifetime.

Aftermarket registered 34% and 31% y-o-y increase in order booking and sales respectively

The success of the Aftermarket business is evident in its order bookings and sales growth, at 34% and 31% respectively, in FY 24. With a growing international footprint and diversification into new industries, the Company is confident that this segment will continue to contribute significantly to its overall growth in the coming years. The Company is also exploring facilities in different regions to promote its reach and capabilities.

The Company's goal in its Aftermarket business is to be the preferred lifetime service solutions provider for customers, supported by a culture of innovation, operational excellence, safety and quality. As a multi-brand service provider, the Company leverages its accumulated

knowledge to service turbines, regardless of their make. Its primary objective is to provide timely service and spare parts support, to ensure that customers achieve the designed performance of their turbines, ultimately leading to increased customer satisfaction. This is achieved through deployment of innovative business models, and hybrid asset integration and optimisation.

MANUFACTURING AND SUPPLY CHAIN EXCELLENCE

Over the years, Triveni Turbines has consciously adopted a “**customer first**” approach in its manufacturing, supply chain, and logistics operation. The Company's aim is to ensure that it not only caters to the growing volume of output but also fulfils the ever-changing quality and delivery expectations from new segments and geographies. This journey starts with understanding the customer requirements, along with their feedback and satisfaction levels from various interactions and supplies. The Company's customer complaint resolution process ensures that feedback on any site issues reaches the relevant internal stakeholder and partners (e.g. suppliers) expeditiously, for speedy resolution. A similar approach is followed with respect to customer satisfactions (C-SAT) and Net Promoter Score (NPS) surveys conducted by the Company. This ensures that the Operations team is fully aligned with the effect of their output on customers, and is geared up for the evolving needs and expectations of the customers.

Equipped with this knowledge on customer expectations, Triveni Turbines' **Manufacturing teams** undertake manufacturing and assembly of industrial steam turbines up to 100 MW at its world-class facilities at Bengaluru. To cater to its overseas customers, the Company has already operationalised its South Africa manufacturing and servicing facility, and its North American facility is currently being built in Houston, USA. The Company's approach is to ensure the development of in-house capability of machining of critical components (blades, nozzles, rotors, casings, etc.), and to test them with best-in-class machining, inspection and testing infrastructure. With focus on supplying drive and power turbines for the Oil & Gas segment, the Company has developed capabilities to ensure manufacturing and testing of API-611 and API-612 compliant turbines.

The Company's in-house manufacturing is complemented by **efficient and robust supply chain partners**. These partners augment Triveni's manufacturing capabilities and capacities, and provide the customers with components and systems that are integral to offering them with complete heat & power solutions. In early phases of product development, the manufacturing and supply chain teams are involved to ensure commercial manufacturability of its products. Once the capabilities to ensure manufacturability are established, capacity assessments are continually undertaken to minimise component cycle times. For outsourced material that is heavily dependent on commodity price fluctuations, risk-based decisions on inventory policies and long-term rate contracting are continually made to ensure that supply side

shocks have minimal impact on the Company's customers and profitability.

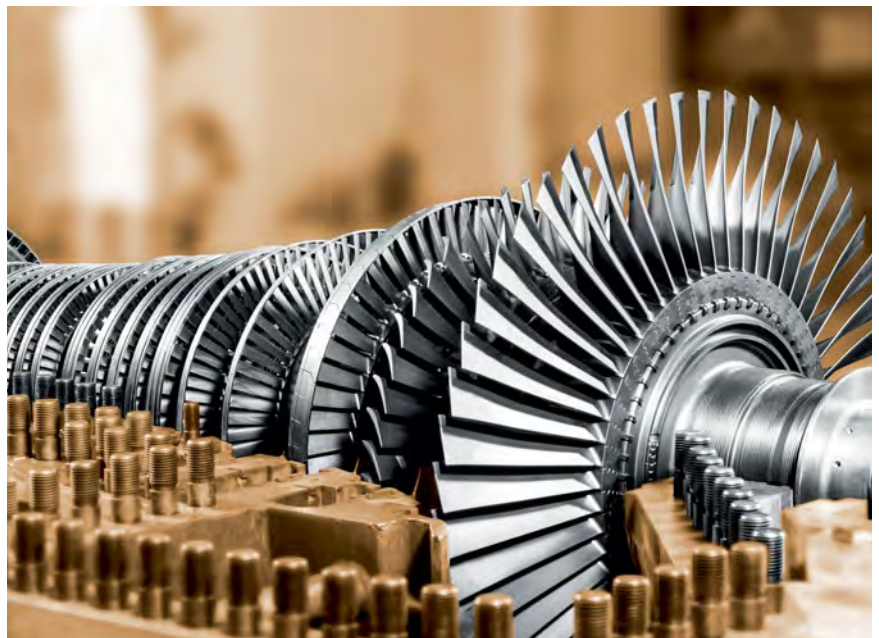
Triveni Turbines is fully aware that infrastructure, manufacturing, testing and supply chain capabilities alone cannot ensure operations excellence. Hence, continuous **investment is made towards nurturing people** (be it employees or suppliers) operating the hardware. Their competency assessment and development is achieved through continuous training and learning across various platforms. The Operations team has successfully maximised the opportunity presented to them by participating and winning inter-company Kaizen and Poka-Yoke competitions organised by CII-TPM Club (Gold Award in Renovation category and Silver Award in Breakthrough category) and QCFI Bangalore (Gold Category for Poka-Yoke project).

QUALITY ASSURANCE IN MANUFACTURING & SUPPLY CHAIN

With certified **Quality Management System (AS9100D / ISO 9001:2015)** in place, Triveni Turbines ensures quality through its entire value chain - from design, project execution, engineering and manufacturing, to supply chain and site execution.

Quality systems are implemented through a system of Quality Gates, Project Quality Plans, Inspection & Test Plans, Supplier Approvals & Evaluations, and Site Quality Plans. These practices help operationalise and realise the requirements

Triveni Turbines is fully aware that infrastructure, manufacturing, testing and supply chain capabilities alone cannot ensure operations excellence. Hence, continuous investment is made towards nurturing people.



of customers and the Quality Management System through stakeholder-driven processes that are documented and audited for effectiveness.

Quality Gate system checks fulfilment of defined criteria, and releases the product or process for the next stage once sufficient satisfaction levels have been achieved. Design/engineering verifications, validations, manufacturability checks, project handover, factory acceptance test (FAT), material dispatch approval and site protocols are some of the examples of Quality Gates implemented at Triveni.

Since a big part of the value chain is outsourced, implementation **of Quality Systems for supply chain** assumes special importance. Before inducting any new supply chain partner, the same is evaluated on its business viability, technical capability and quality systems. Risk-based evaluation of this new partner decides whether to use the partner's services on restricted or unrestricted basis. Once the partner's supply or service is validated for its quality, the said partner is made available for unrestricted use. Depending on the criticality of supply or service provided by the partner, their quality performance is re-evaluated at regular intervals through periodical meets, audits, technical and other supports. The supply chain partner's capability risk is addressed with regular supplier meets, supplier education, training of supplier personnel, investment in suppliers' operations and equipment, long-term contracts, building trust and support, as needed.

In its continuous quality improvement endeavour, the Company also teams up with research institutions (e.g. Central Power Research Institute – CPRI, Central Manufacturing Technology Institute – CMTI, Indian Institute of Science – IISc, etc.) on need basis with the aim to raise the calibre of its product quality offerings. Competency development in Quality Assurance is also improved with certifications on specialist programmes provided by American Society for Quality (ASQ), American Petroleum Institute (API), and National Association of Corrosion Engineers (NACE).

The **Customer Satisfaction & Quality Assurance** team also plays a critical role as a growth enabler by engaging with potential customers to get pre-approved for supply of Triveni Turbines' offerings. One such example is certification from Directorate General of Aeronautical Quality Assurance (DGAQA) and becoming a Ministry of Defence certified firm. During the year, the Company also got pre-approved by many Oil & Gas companies for supplies.

SAFETY AND SUSTAINABILITY

Customer First, Safety & Quality Always – this has been motto of the Company's Operations team over the years. Although these aspects are ingrained in its culture, the Company is now consciously working towards targeted actions to promote sustainable practices.

Its manufacturing office in Bengaluru and its site operations are certified with Environment Management Systems (ISO 14001:2015). Not being a polluting operation by nature, the Company focusses its environmental conservations efforts towards energy and water conservation and waste elimination. It continues to surge forward in its journey of transforming its plants into zero liquid discharge (ZLD) facilities and Platinum rated Indian Green Building Council (IGBC) green factory. In the past few years, the Company has also invested in generation of 1.3 MW of roof-top solar power in its Bengaluru plants.

Besides shareholders and customers, Triveni Turbines' prioritises its social obligations towards employees as a key business imperative. As the first step towards this during the year, the Company ensured that its manufacturing units, office in Bengaluru and site operations continued to be certified with Occupational Health & Safety Management Systems (ISO 45001:2018). Going beyond legal requirements, the Company strives to provide an opportunity-driven environment for its employees to pursue a healthy and safe lifestyle even while they are within the Company premises. Gym and sporting facilities, provision of healthy meals, annual health checks, and accessible workplaces are some examples of these efforts. The Company is also consciously looking to continuously expand the share of sustainable sourcing by mandating basic supplier qualifications and certifications (e.g. environmental impact, EHS system implementation, human rights compliance, etc.) to promote sustainability across its supply chain.

Statutory requirements essential for good governance of Triveni Turbines' operations are complied with, uncompromisingly. The record of the same is monitored with online compliance tools, and new requirements are constantly evaluated.

TECHNOLOGY, RESEARCH & DEVELOPMENT

Triveni Turbines has invested proactively in solving the world's energy trilemma – of addressing energy equity, security and sustainability.

The Company is continuously offering industry benchmarks, better efficiencies, and improving energy equity & security, to

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the world. The Company's products are working continuously to promote sustainability by operating in Waste Heat Recovery (Steel, Cement), Waste-to-Energy (Biomass, Refuse Derived Fuel (RDF), Municipal Solid Waste (MSW), Sugar, Textile, Paper & Pulp industries.

The focus of Triveni's R&D division at Triveni in FY 24 was on:

- Developing high-speed products in the lower MW (Mega Watt) range, with improved efficiency
- Customising products for niche markets
- Offering enhanced aero-solutions to the industrial turbine market
- Advancing sustainable technology programmes towards commercialisation

New product offerings – High-Speed Product Series

Triveni Turbine's high-speed product line, developed for the lower MW range, offers compactness and enhanced efficiencies. The Company has successfully installed several units of high-speed products, backed by programmes to upgrade to high-speed products in the higher MW application range.

Notable wins

The Company's product portfolio, along with its engineering capability to customise-to-order, has led to significant API segment order wins from one of the largest Middle East customers. These turbines are being built to API standards

and stringent end-user contract requirements for the global Oil & Gas segment.

The Company has also demonstrated expertise in modernising ageing power generation equipment. For a European customer, it designed, installed and commissioned a replacement turbine-generator package, to be mounted on columns with spring support system. This novel mounting arrangement substitutes the conventional foundation deck support for the turbine-generator package and reduces the civil cost for the customer substantially. It also allows for greater suitability of the Company's replacement product offerings for its customers.

Another notable case relates to a small turbine, where the Company has developed a double impulse steam path, considering customer requirement to provide a footprint replacement with high pressure extraction and bleed requirements, apart from an axial exhaust arrangement and spring (on columns, instead of foundation deck) mounted turbine-generator package.

Testing & Validation

Triveni Turbines offers the best-in-class efficiencies – the outcome of years of research & development towards optimal high pressure (HP), intermediate pressure (IP) & low pressure (LP) blading, coupled with rigorous testing for alignment between calculated and on-field efficiencies. High Speed – High Efficiency LP modules developed by the Company are field validated for performance and proven for their reliability.

New Aftermarket Solutions - Triveni REFURB (Any Make, Any Age)

Triveni REFURB team has further cemented its role as an engineering solution provider of choice for global customers looking to upgrade their equipment.

In a notable example, it has successfully replaced the last stage blades in a large-power rating direct drive machine of an OEM customer. The unit had a history of frequent failure of the last stage blades, leading to significant downtime and reliability issues for the customer. The Company's solution allows the customer to operate the turbine with expected reliability. The unit with replaced last blades has been commissioned and is running successfully, without any operational issues.

Another upgrade performed by the REFURB team included replacement of turbine internals for a medium power rating machine of other OEM. The unit was redesigned with reaction steam path – for improved reliability and efficiency. Originally, the unit was an impulse machine. The upgraded turbine was commissioned and continues to operate in a trouble-free manner, and with committed efficiency.

Other significant REFURB works include conversion of medium power rating (with Triveni Turbines' internals) and large power rating reaction condensing machines of other OEM into backpressure machines, followed by their successful commissioning. These units, post commissioning, operated trouble-free in the immediate sugar season.

Modernisation of the turbine control system for a large power rating direct drive (62-year-old machine) and the successful shop testing of the upgrade, replacement of internals (steam path for improved efficiency) of 15 MW Triveni Turbines backpressure unit, and implementation of design modifications for exhaust flow reduction in 2 x 15 MW Triveni Turbines are some other significant achievements for the Triveni REFURB group.

New R&D initiatives

CO₂ Turbine / Power Block

Triveni Turbines is championing the global energy transition efforts through development of supercritical (sCO₂) and sub critical CO₂-based power blocks. With higher efficiency, CO₂ technology can be a compact solution and replacement to steam-Rankine cycle based power generation. Prototype sCO₂ power block was manufactured and assembled at the Company's facility. The Company is on the threshold of commercialisation of this promising technology.

Renewable Energy Thermal Battery

Triveni Turbines is a technology provider with regard to energy transition solution to make solar and wind power dispatchable. The Company's association with a sustainable energy solution vendor in Europe is helping harness sun and wind, while also surmounting the intermittency challenge posed by these energy sources. While compressed air energy storage (CAES) solutions have been long available and proven to be capital intensive, thermal battery solution with CO₂ as a medium offers many advantages at relatively low capital expenditure and better operational expenditure compared to Li-ion solution. Triveni Turbine's CO₂ turbines are an ideal replacement for high Capex Li-ion battery systems.

INTELLECTUAL PROPERTY RIGHTS

The Company undertakes research activity that yields crucial Intellectual Property (IP), which must be safeguarded to uphold its competitive advantage. A dedicated team of IP experts collaborates closely with the R&D department, ensuring protection, from the initial stages of conception through to production.

To maintain its technological leadership, the Company has devised a comprehensive IP strategy. This strategy involves actively seeking patents and industrial designs worldwide, with a particular emphasis on bolstering its presence in India. The Company has pursued IP protection through patents and designs in various regions, including India, Europe, Southeast Asia, the United Kingdom, and the United States of America. Additionally, it plans to extend this protection to new international markets as it expands its operations.

As of March 31, 2024, the Company has secured a substantial number of IP Rights globally, including a significant number in India, with a total of 374 global IPR (Intellectual Property Rights) filings. These filings encompass areas such as turbo machinery and CO₂-based power systems.

IT AND DIGITALISATION

The Company focussed its digitalisation efforts during the year around the aspects of strengthening and integration of digital core, as well as value generation for customers and the Company's frontline personnel. These efforts were aimed at delivering value and improving value delivery by supporting stakeholders in the most process compliant and efficient manner.

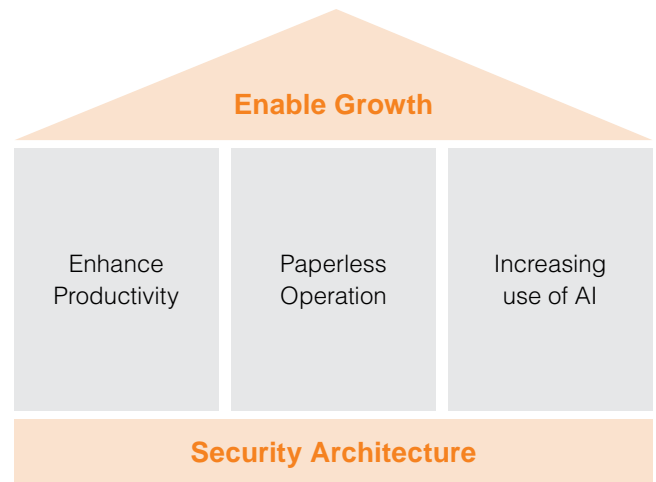
A key element of the Company's digital core is its Enterprise Resource Planning (ERP) system, using SAP (System Applications and Products in Data Processing). The Company successfully undertook technical conversion of its legacy, on-premises SAP ECC (ERP Central Component)

application server to RISE with SAP S/4HANA hosted on private cloud. The smooth conversion was completed in the first half of January 2024, leaving enough time to ensure seamless financial closure for the year. Being on the latest SAP platform not only ensures continued support from partners to the key operational platform but also enables the Company to leverage wide ranging features of the latest ERP updates - from improved graphic user interface (GUI) to Artificial Intelligence (AI) application. The year also saw implementation of Human Capital Management System (HCMS) to digitise its complete hire-to-retire process. The Company undertook a review of other legacy platforms, such as Salesforce, Teamcenter and Primavera. Upgrades and improvements in these platforms were identified and work has begun in this direction. The entire work on the digital core is being done by ensuring protection against cyber security threats and data integration among the platforms.

Various initiatives for customer value generation and efficient value delivery were undertaken during FY 24. Work had commenced in the previous year on integrating the Company's huge body of knowledge into an IT-enabled knowledge management system. The system has been integrated with the Customer Relationship Management (CRM) platform Salesforce. Along with customer-facing teams, the Company's Digital Transformation team is working on developing an integrated platform for knowledge management, field service and customer support.

The World Economic Forum (WEF), in its Global Risks Report 2024, identified cyber insecurity as one of the top five risks for the next two years. Combined with unethical use of AI and quantum computing, the risk of cyber-attacks gets accentuated. During the year, the Company's security architecture successfully prevented any such cyber-attacks. Not being content with this track record, the Company is continually assessing its security landscape and implementing measures to seal gaps, if any.

Going forward, the key focus of the Company's digital transformation effort is directed towards enabling growth, enhancing productivity, creating a favourable environment for paperless operation, and increasing the use of AI.



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HUMAN RESOURCES (HR)

People Strategy: Staying committed to excellence, innovation and sustainability

Triveni Turbines' people strategy is centred around excellence, innovation, diversity, and sustainability, intertwining seamlessly with the Company's overarching business strategy. Understanding the pivotal role of its people, the Company prioritises talent management practices aimed at attracting, developing and retaining talent. It is continually fostering a diverse and inclusive workplace that encourages collaboration and continuous learning. Continuous engagement, leading to enriched employee experience, is key to enhancing customer experience, and the Company makes regular investments to promote a positive work environment. The Company's commitment to core values like trust and mutual respect lays the foundation to help employees develop a sense of belonging, ownership and accountability.

Committed to nurturing talent from within

The Company's dedication to talent development initiatives remains unwavering. It prioritises providing its employees with opportunities for growth and advancement. From personalised learning interventions to mentorship initiatives, Triveni Turbines invests in its employees' development to ensure they reach their full potential. By nurturing talent from within, it cultivates a skilled and motivated workforce that drives the Company's success. It is dedicated to developing leaders from within the organisation through mentoring and leadership development initiatives. The Company's talent and succession initiatives are helping it to build senior leaders

for diverse roles, including those in different geographies such as the USA, thus ensuring a seamless transition and continuity in leadership, safeguarding its future.

Engagement with employees to enhance customer experience

Engagement with employees to enhance customer experience is at the core of the Company's business philosophy and essential for its long-term success.

The Company invests in employee development and well-being, offering training programmes, mentorship opportunities, and wellness initiatives to help its employees grow personally and professionally. Some of the initiatives conducted regularly are: Triveni Town Hall, Quality Day celebrations, and Innovation competitions, Celebrations of major festivals, Mentoring of new joiners etc.

The Company's objective of building confidence, and encouraging and motivating its employees goes a long way towards enhancing the customer experience. Fostering the core values of trust and mutual respect lays the foundation for creating a sense of belonging in employees, as it equips them to remain responsible and accountable.

Learning & development

The Company believes that investing in continuous learning and competency development is essential for staying ahead in the increasingly competitive business environment of today. It offers a range of learning initiatives to meet the diverse needs of its employees. These programmes cover

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a wide range of topics, including technical skills, leadership development, and people skills enhancement. The goal is to provide the required knowledge and tools that the team needs to succeed in their roles and contribute to the organisation's success. Triveni Turbines' dedicated Learning Centre is a world-class, in-house training facility to make learning effective.

The Company is committed to continuous improvement in its learning initiatives. It regularly reviews its programmes and incorporates feedback from employees and business to identify areas for improvement. It leverages technology to deliver innovative learning experiences to its employees. This includes e-learning platforms, virtual classrooms, and other digital tools that allow its employees to learn at their own pace and convenience.

The Company offers a range of career development opportunities to its employees, including mentorship programmes, job rotations, and opportunities for advancement. The Company believes that providing these opportunities not only benefits employees but also strengthens the organisation by ensuring that it has a skilled and engaged workforce. The Company believes that motivated employees are more productive and innovative, leading to better business outcomes. By investing in the growth and development of its employees, the Company believes that it is investing in the future of the organisation.

FY 24 Highlights – Focussed on Talent Acquisition and Competency Development

The Company's talent acquisition and competency development efforts are at the forefront of its organisational strategy, driving its long-term growth and success. The Company is committed to attracting top talent that aligns with its values and culture, ensuring a strong foundation for its team.

Talent acquisition is a critical, and yet the most challenging aspect of HR. Relentless effort and continued focus from the leadership team led to successful on-boarding of key positions in Technology, Sales, Projects, Digitalisation, amongst others, during the year. The HR team, along with the business teams, ensured regular connect with the candidates. Besides experienced and lateral candidates, the Company on-boarded a sizeable number of candidates from premium institutes like Indian Institute of Science (IISc), University of Petroleum and Energy Studies (UPES) and other leading universities.

The Company invests in its employees' growth and development through a range of training programmes and career development opportunities. These include technical training, leadership development, and people development programmes to nurture talent and drive performance. In FY 24, there was a renewed focus on the approach and execution in conventional Instructor Led Programmes in Technical and People Management areas, resulting in more than 120% increase in annual training man-days through conventional channels. In addition, the people experienced new methods of learning, encouraging self-paced learning using contemporary learning channels like E-learning portals, teach-back sessions, blended learning, book-club etc., and occupying 35% of their total learning portfolio. Diverse learning methods resulted in strengthening the learning culture and enhancing the learning appetite in the organisation. The Company's Competency Directed Learning channelises its development efforts in strengthening the critical competencies of diverse roles.

Leadership development initiatives, such as mentoring of new hires, interviewing in the new era, design thinking, critical thinking for decision-making, Management Development Programme (MDP) on strategy and business management etc., equipped the people with enhanced organisational skills. On-the-job training (OJT) on technical subjects, such as Oil Relay Cylinder Assembly, Steam Path Clearances, Turbine General Arrangement (GA) drawings, etc., helped the employees in developing cross-functional competencies. The Company's association with domain specialists like PMI (Project Management), RIMS (for Risk Management), and institutes like Indian School of Business (ISB), Indian Institute of Science (IISc), etc. helped significantly in engaging its people and developing relevant competencies. This helped create a vibrant workplace and retain people. Similarly, Executive Coaching for the senior leadership team formed a part of the succession plan for building the organisation for the future.

Triveni Turbines' Learning Centre continued with its training and competency-building programme for new college graduates entering the organisation. The comprehensive curriculum, spanning over 8 months, includes hands-on technical training (mechanical, electrical, etc.) with practical sessions on the shop floor, at machining vendors, and on project sites. These experiences enhance the core capabilities of the Company's new engineers. Moreover, the programme covers behavioural topics, such as presentation skills, communication skills, teamwork, and problem-solving. Additionally, the Computer-Based Training (CBT) centre has played a pivotal role in providing simulated training on turbines for the new hires.

✓ The Company is confident that leveraging the opportunities, both domestically and internationally, will enable it to maintain growth and profitability in the coming years.



BUSINESS OUTLOOK

Triveni Turbines is expected to maintain its robust business performance in FY 25 in the light of its strong results in FY 24. This expectation is supported by a substantial backlog of orders in renewable, API and IPG (Industrial Power Generation) turbines, along with successful market expansion into regions like East Europe. The Aftermarket business also shows promising growth prospects, bolstered by an expanding range of offerings, including spare parts, services and refurbishments, designed to cater to a broader customer base encompassing steam turbine, utility turbines, and geothermal turbines.

The resilient domestic supply chain provides a competitive edge and ensures business continuity, even amidst global supply chain disruptions and economic uncertainties. India's economic outlook appears promising, with the lowest probability of recession in FY 25 compared to other developing and developed nations. Led by its inherent robustness, Triveni Turbines stands to benefit from the relatively stronger domestic conditions and other favourable factors such as improved business environment and increased credit availability, which are expected to generate more domestic business opportunities and drive sustained growth.

Despite the slowdown experienced in certain advanced economies and the growing intricacies of international trade, the Company's expanding presence in global markets, along with the increasing demand for renewable energy, energy efficiency, waste-to-energy (WtE), and decentralised power solutions, continues to present substantial growth

opportunities for Triveni Turbines. The Company is confident that leveraging these opportunities, both domestically and internationally, will enable it to maintain growth and profitability in the coming years.

FY 24 marked another notable year for Triveni Turbines with regard to the supply of API steam turbines to the Oil & Gas and Petrochemical industries. These sectors witnessed remarkable growth compared to FY 23, with a substantial backlog of orders being carried forward. The Company's persistent efforts in these industries have significantly augmented its pipeline to robust levels. Although the domestic API order book experienced a slowdown due to a subdued business sentiment, the growth in FY 24 was predominantly driven by the international API order book. Looking ahead, strong growth is anticipated in both domestic and international markets within this segment.

CORPORATE SOCIAL RESPONSIBILITY (CSR)

CSR Objectives and Vision

Keen to be perceived as a 'Company with Conscience', Triveni Turbines strives actively and continually to contribute to the social and economic development of the communities for the benefit of the deprived, underprivileged and differently abled persons. The Company continues to endeavour to improve the lives of people, and provide opportunities for their holistic development through its initiatives in the areas of Healthcare, Education & Training, and Technological Development.

Triveni Turbines philosophy is steered by its belief in 'doing well by doing good'. It is the Company's firm belief