WATER BUSINESS GROUP PERFORMANCE

The Triveni water business is playing an important role in boosting India's self-reliance efforts. On a consolidated basis, WBG recorded annual turnover of ₹ 270.21 crore during the year, with a PBIT of ₹ 31.01 crore. The business has shown a significant overall improvement. WBG has a total current manpower strength of 350+ employees. The average age of employees is 38, and the median is 37, which indicates a healthy workforce.

Our Water business was largely hit by two waves of COVID-19 pandemic during Q1 and Q4 of the year, which affected its revenue, profitability and cash flows. Water Business offices were closed for 1.5 months to safeguard our employees. There was a major disruption with our contractors, vendors and clients during this period. Efficiency of operations also slowed down due to COVID-19 protocols. Despite subdued turnover due to the COVID impact, profitability (PBIT) is still healthy, suggesting that operational efficiency had actually improved during the year.

Going forward, major of investments in this business are expected from the NMCG, BWSSB, DJB, Gujarat and Rajasthan. WBG is well positioned to undertake more jobs in

its chosen area of expertise. It has secured two ZLD projects i.e. Pali ZLD HAM job & Bhiwadi ZLD project. After our success in Maldives, we are targeting overseas markets such as South Asia, East Asia and Eastern Europe for new opportunities.

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WBG is also actively pursuing opportunities with NMCG, UP Jal Nigam, Delhi Jal Board, BWSSB, Pali, PCMC, and various other clients in Engineering Procurement Construction (EPC) and Hybrid Annuity Mode (HAM)/Public Private Partnership (PPP) projects. We are also exploring PPP opportunities for STP recycling in PPP format. Triveni Water is in discussion with several municipal corporations and water boards to catalyse PPP and HAM opportunities, and we are trying to create a business niche for ourselves. With its robust financials, Triveni Triveni is equipped to invest in PPP/HAM Concession projects and increase EPC opportunities.

The outlook for the Water business seems positive and new opportunities are expected to arise from Central and State funded schemes. Wastewater recycling and reuse is going to be a significant business going forward.

Triveni, as a responsible company, provides efficient and sustainable solutions to meet the water requirements of a







large section of the industry and Government. It has been our constant endeavour to bring in advanced technological solutions to contribute towards the growing needs of the society.

With the COVID-19 pandemic efforts largely behind us, we expect the coming years to see a surge in business opportunities, and new funding is expected to flow from Government of India and various State Governments. The private sector is ready to take investment position in PPP/HAM Concessions and there is a need to structure the projects properly. Equally important is the need to focus on mobilising new funding sources. ULBs also need to build financial and operational capacities.

The outlook for FY 23 is optimistic, and WBG sees a good bidding opportunity, including in EPC and HAM projects.

KEY HIGHLIGHTS

- On a consolidated basis, WBG achieved a turnover of ₹ 270.21 crore in FY 22 and PBIT was ₹ 31.01 crore
- WBG has completed construction of various facilities of company's Mathura HAM project for NMCG/UPJN. Part of these facilities have already passed through performance guarantee (PG) tests successfully and balance ones are undergoing the same



The outlook for FY 23 is optimistic, and WBG sees a good bidding opportunity, including in EPC and HAM projects.

- WBG completed 210 MLD WTP at Greater Noida for GNIDA (Govt. of Uttar Pradesh)
- WBG's regular participation in new bids has given it market recognition

Key Projects:

- 205 MLD Sewerage Treatment Plant (integration of 3 Phases) at Kondli, based upon new NGT norms for Delhi Jal Board funded by JICA, under YAP(III) package K3
- 210 MLD Water Treatment Plant (WTP) at Greater Noida for Greater Noida Industrial Development Authority
- 50 MLD CETP for Textile Dyeing Industries at Ludhiana for PDA
- 30 MLD STP based upon Sequencing Batch Reactor (SBR) and 20 MLD TTRO (UF + RO) at Mathura under NMCG on HAM basis
- 40 MLD STP based upon SBR at Bangalore for BWSSB
- Water & Sewerage system for 6 Islands in Maldives including RO for Govt of Maldives funded by Exim Bank of India
- 15 MLD Desalination plant (RO) at Barmer for BLMCL
- 18 MLD ZLD Plant (Including UF/RO) at Balotra (Rajasthan) for Textile Dyeing Industries
- 12 MLD Zero Liquid Discharge (ZLD) Plant (Including UF/RO) at PALI (Rajasthan) on Hybrid Annuity Model HAM/Public Private Partnership PPP basis
- Ultra-Filtration UF-Reverse Osmosis RO-MB Plant for JSPL (6X135 MW)







WBG has completed construction of various facilities of company's Mathura HAM project for NMCG/UPJN. Part of these facilities have already passed through performance guarantee (PG) tests successfully and balance ones are undergoing the same.

- Plant Water System for 3X800 MW NTPC Kudgi TPP 3 X 2800 M3/Hr.
- Water Treatment Plant (WTP) for Darlipali Super Thermal Power Project, 2X800 MW, 2.8 MLD
- Water Treatment Plant (WTP) for BPCL Kochi Refinery 2000 M3/Hr.
- 6 MLD Zero Liquid Discharge (ZLD) Plant at Bhiwadi (Rajasthan) for RIICO

Achievements:

- Across India, over 1,200 installations are successfully operating in various segments - infrastructure, industrial, and municipal
- Through our projects and equipment, over 10,000 MLD of water is treated
- We received several Water Awards for innovative project designs
- In 2022, we received a 12 MLD Zero Liquid Discharge project at PALI (Rajasthan) in HAM/PPP mode
- During the year, we also got the Bhiwadi 6 MLD Zero Liquid Discharge (ZLD) project





Hybrid Annuity Model (HAM)/ Public-Private-Partnership (PPP) Business

Triveni is executing the following two projects in Hybrid Annuity Model (HAM) format:

1. Mathura Wastewater Management Private Limited (MWMPL) – a 100% subsidiary of TEIL

MWMPL has undertaken an Integrated Sewerage Management project for the holy city of Mathura (Uttar Pradesh) under one-city-one-operator framework in the PPP/HAM mode, a noble concept under Namami Gange program of Ministry of Jal Shakti, Government of India.

With the objective of enabling a pollution-free Yamuna river flow through Mathura city, sewage from the designed areas has been intercepted from the drains and diverted through pumping to various Sewage Treatment Plants (STPs) before letting into the river.

One of the key components of the project is recycling of treated sewage through the membrane-based (Ultrafiltration followed by Reverse Osmosis – UF/RO) advanced treatment process to a crude oil refinery of IOCL (Indian Oil Corporation Limited) near Mathura city for their process water needs.

Various components of the Mathura project have been physically completed during the year, and after completing the ongoing trials for demonstrating mandated KPIs (Key

Process Indicators), MWMPL will undertake 15 years of comprehensive operation and maintenance (O&M) of the facilities.

Pali ZLD Private Limited (PZPL) – a 100% subsidiary of TEIL

PZPL is executing a 12,000 M3 per day (12 MLD) capacity Textile wastewater treatment plant for effluent being generated by over 500 industrial units in one of the industrial clusters of Pali district in Rajasthan. The project was awarded by the industry association through their CETP Foundation, a Special Purpose Vehicle (SPV) created for the purpose. The project is being executed in PPP/HAM mode with part capital funding as Capital grant being provided by the CETP Foundation and also by Rajasthan Government through their designed agencies/departments.

The project includes upgradation of existing Common Effluent Treatment Plant (CETP) in major ways, followed by state-of-the-art advanced tertiary level treatment plant (TTP), to make the treated water fit for use by the same industries, thus making the plant truly a Zero Liquid Discharge (ZLD) system.

Sludge generated from the plant will be minimised with extensive dewatering, drying, heating & incineration processes within the plant facilities and, post treatment, the sludge will be disposed of at a secured landfill site.





For Pali-based industries, this will be a unique scheme to get assured supply of recycled wastewater for their process water needs. The recycled water will be of much better quality compared to currently used groundwater sources in neighbouring areas, thus sparing them from further extraction.

For PZPL, project scope includes comprehensive operation & maintenance (O&M) for 15 years after its physical completion.

Water Business at a Glance

Water Business Group (WBG) of Triveni offers complete range of Water & Wastewater solutions, utilising innovative and the latest equipment and technology across a wide spectrum of applications. As tightener water and wastewater quality regulations are challenging the limits of conventional treatment systems, we provide cost effective systems and services to optimise operational efficiency and lower the life-cycle costs.

Processes and Technologies

Triveni Water has access to the latest technologies in water and wastewater treatment plants, and has gained sufficient experience in the following technologies:

- Moving Bed-Bio Reactor (MBBR): We have a commercial arrangement with Aqwise of Israel
- Sequential Batch Reactor (SBR): We have a commercial agreement with GAA of Germany
- Activated Sludge Process (ASP)
- Conventional technologies
- Filters: Sand or Membranes
- High Rate Clarifiers
- Membranes and Anaerobic-anoxic-aerobic method (A2O)
- Recycling and Reuse
- Zero Liquid Discharge (ZLD)

The Current Water Opportunities

- Rapid urbanisation, expanding economies, and shifting consumption patterns have increased demand for water resources
- Water pollution damages health, and negatively impacts the economy and the environment, while further endangering the sustainability of water supplies
- Water is undervalued, and proper incentives are not in place to use water resources efficiently
- In the last six years, the Indian Government, along with all State Governments, has taken a series of initiatives to make our country's water secure. Government programmes like Amrut schemes, Namami Gange, Jal Jeevan Mission, State water and sanitation missions, etc., are yielding the desired results



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