

This presents significant opportunities for growth and investment, driven by the country's growing water crisis and increasing demand for water treatment services. The new opportunities are expected to come from all over India, as various projects are in planning stage and several are undergoing tendering.

We are also exploring opportunities in international markets.

GLOBAL WATER INDUSTRY

Global Water Industry Overview

The global water treatment industry is expected to grow at a CAGR of 7.1% from 2022 to 2029, reaching a market size of USD 489.07 billion by 2029. The growth of the market is driven by a number of factors, including increasing population, rising urbanisation, and growing environmental concerns.

- Increasing population:** The global population is expected to reach 9.7 billion by 2050, putting a strain on the world's water resources. This will lead to an increased demand for water treatment services, as more and more people will need access to safe and clean water.
- Rising urbanisation:** The world is becoming increasingly urbanised, with more and more people living in cities. This is leading to increased pollution of water resources, as urban areas generate more wastewater than rural areas. Water treatment will be essential to ensure that the growing urban population has access to safe and clean water.
- Growing environmental concerns:** There is growing awareness of the environmental impact of water pollution. This is leading to increased regulations on water quality, which will require more water treatment facilities to be built.
- Increasing demand:** The demand for water treatment solutions continues to rise due to factors such as population growth, urbanisation, industrialisation, and climate change. This demand growth is observed across various sectors, including municipal, industrial, and commercial.
- Water scarcity:** Water scarcity remains a significant global concern, with many regions experiencing water stress or facing Water Management practices and shortages. This situation drives the need for effective water treatment technologies to optimise water use, recycle and reuse wastewater, and develop alternative water sources.
- Stringent regulations:** Governments and environmental agencies worldwide are implementing stricter regulations to address water pollution and ensure safe drinking water standards. These regulations require industries and municipalities to adopt advanced water treatment technologies and adhere to stringent water quality standards.
- Advancements in technology:** The water treatment industry is witnessing rapid technological advancements. Innovations include membrane filtration, advanced oxidation processes, desalination, biological treatment methods, smart monitoring systems, and





data analytics. These technologies enhance treatment efficiency, reduce energy consumption, and improve the overall effectiveness of water treatment processes.

- **Wastewater management and reuse:** There is an increasing focus on wastewater management and reuse to alleviate water scarcity and reduce environmental pollution. Advanced treatment processes, such as membrane bioreactors (MBRs) and reverse osmosis (RO), are employed to treat wastewater to high-quality standards, making it suitable for various non-potable uses like irrigation, industrial processes, and groundwater recharge.
- **Desalination:** With freshwater sources becoming limited, desalination has gained prominence as a viable solution in regions with access to seawater. Reverse osmosis (RO) and other desalination technologies are being widely adopted to convert seawater into potable water. However, desalination is energy-intensive and poses environmental challenges related to brine discharge.
- **Decentralised and modular systems:** There is a growing shift towards decentralised and modular water treatment systems, particularly in rural and remote areas. These systems offer flexibility, scalability, and cost-effectiveness, enabling localised water treatment solutions tailored to specific needs, and reducing the dependence on centralised infrastructure.



- **Public-Private Partnerships:** Collaborations between the public and private sectors are increasingly common in the water treatment industry. These partnerships facilitate investment in water infrastructure, technology development, and knowledge sharing, leading to improved access to clean water and enhanced water management practices.
- **Sustainability and Circular Economy:** The industry is shifting towards sustainable practices and adopting the principles of circular economy. These include resource recovery from wastewater, such as extracting energy, nutrients, and valuable by-products from the treatment process, promoting resource efficiency and minimising environmental impact.
- **Emerging markets:** Developing countries, particularly in Asia and Africa, are witnessing rapid urbanisation and industrial growth. This creates a significant demand for water treatment infrastructure and solutions to address water pollution and provide safe drinking water to expanding populations.

The global water treatment industry is segmented by technology, application, end-user, and region. By technology, the market is segmented into membrane filtration, chemical treatment, biological treatment, and others. Membrane filtration is the fastest-growing segment of the market, due to its high efficiency and optimal operating costs.

By application, the market is segmented into municipal water treatment, industrial water treatment, and others. Municipal water treatment is the largest segment of the market, accounting for majority and focus both of the market share. This is due to the increasing demand for safe and clean drinking water from municipal water treatment plants.

By end-user, the market is segmented into residential, commercial, and industrial. The industrial segment is the fastest-growing segment of the market, due to the increasing demand for water treatment services from industrial companies.

The global water treatment industry is expected to continue to grow in the coming years, due to the factors mentioned above. The market is expected to be driven by the increasing demand for safe and clean water, as well as the growing environmental concerns.