

Rapid population growth, combined with declining freshwater water resources in the country, is expected to drive the adoption of desalination technologies. Industries such as thermal power plants and oil refineries are setting up large-scale desalination plants to meet their water requirements efficiently. At least 350 mld of desalination capacity is being set up for industrial use. On the municipal front, Tamil Nadu and Gujarat have witnessed a tremendous increase in desalination demand. Another 800 mld of desalination capacity will be added in these two states alone in the next three to four years.

Private players in the desalination market have increased in the last one decade or so. Advanced technologies and equipment are also being deployed to reduce the high energy costs associated with desalination. Over the next three to four years, at least Rs 135 billion will be required to set up the planned desalination projects, thus presenting significant opportunities to key stakeholders.

## 1. Water Sector Overview

- ❖ Size and Growth
- ❖ Policy and Regulatory Developments
- ❖ Freshwater Resources Availability
- ❖ Sources of Water Supply
- ❖ New Water Sources (treated wastewater, desalinated water, etc.)
- ❖ Constraining Factors
- ❖ Demand-Supply Gap
- ❖ Supply Outlook and Projections
- ❖ Future Outlook and Projections

## 2. Desalination Market Snapshot

- ❖ Current Capacity (completed and ongoing)
- ❖ New Policy and Regulatory Initiatives to Scale up Capacity
- ❖ Experience So Far
- ❖ Major Milestones
- ❖ Issues and Challenges
- ❖ Key Recommendations

## 3. Cost Economics

- ❖ Trends in Capex
- ❖ Desalination Cost Structure
- ❖ Cost Components of Key Desalination Plants

## 4. Future Potential and Upcoming Capacity

- ❖ Growth Drivers
- ❖ Planned Capacity of States/Local Utilities
- ❖ Emerging Requirements of Key Industries
- ❖ Planned Capacity Additions
  - Municipal
  - Industrial
- ❖ Expansion Capacity Plans for Key Industries
- ❖ Key Upcoming Projects and Tenders

## 5. Treatment Technologies

- ❖ Types of Technologies (membrane and thermal)
- ❖ Key Features (capital cost, land requirement, production cost, plant performance, quality of treatment, etc.)
- ❖ Current State of Deployment
- ❖ New Advancements
- ❖ Issues and Challenges

## 6. Key Players and Noteworthy Projects

- ❖ Profiles of Key Players
  - IDE Technologies
  - VA Tech Wabag
  - ION Exchange
  - Suez Water Technologies & Solutions
  - Doshion Veolia Water Solutions
  - IVRCL
- ❖ Case Studies of Select Projects

## 7. Database of Key Desalination Projects

- ❖ Completed
- ❖ Ongoing
- ❖ Planned/Proposed

*Each project provides information on the scope of work, location, cost, capacity, mode of implementation, implementing agency, developer/contractor, current status, expected date of completion, etc.*