

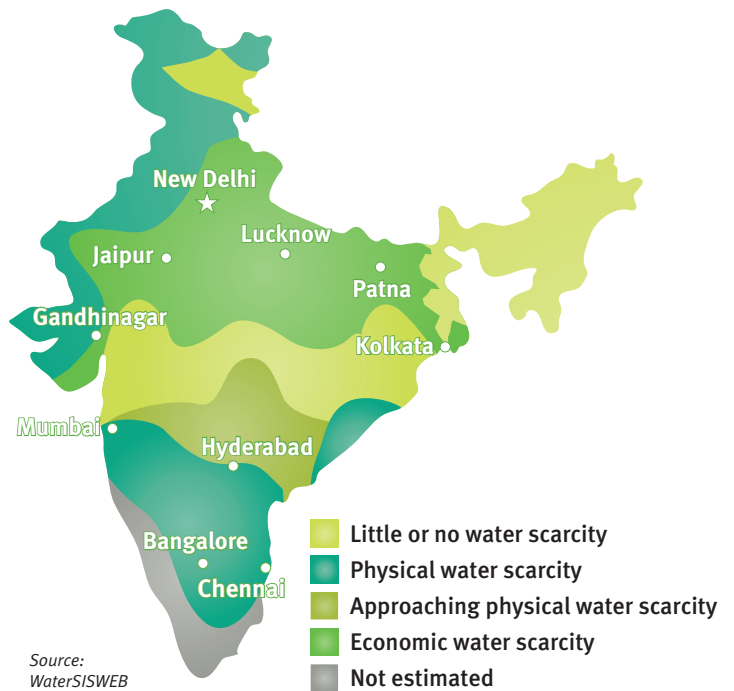
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Queensland clean technologies exports

Water and wastewater technologies, services and infrastructure export opportunities: **India**

Market trends

- There are significant ongoing investments in water and wastewater technologies, services and infrastructure worldwide, creating substantial opportunities for Queensland companies in this field.
- The global market for water products and services is worth more than US\$300B a year.¹
- It is expected the world will also invest some US\$23 trillion in water infrastructure by 2030, on a cumulative basis.²
- A key emerging market for Queensland's water and wastewater technologies, services and infrastructure exports is India. India's water market is estimated to be worth more than US\$4B per annum and growing by 10–12 per cent each year.³
- India's already limited water resources are depleting rapidly, while at the same time demand is increasing. India has intermittent drinking water supplies and poor transmission and distribution networks for water.
- According to assessments by the Indian Government, the country's water requirement for industrial use will quadruple to 120 billion m³, from the current 30 billion m³, by 2025.
- Many industries have been forced to adopt water recycling systems due to the scarcity of water. Growing public concern, media pressure and renewed legislation have left industries with little option but to install water treatment equipment.
- The Indian Government is seeking to privatise India's water transmission and distribution networks.
- During 2009, India experienced a below average monsoon season in many regions, which has negatively impacted the agricultural sector. This too has resulted in many major metropolitan cities, like Mumbai, having to cut water supply to residents by as much as 30 per cent to combat this acute shortage.⁴



- Water companies from all over the world have established a presence in India to pursue an estimated 70 projects, worth several billion dollars, in 20 Indian cities across the country.⁵
- Multilateral and bilateral agencies provide major funding for infrastructure projects in India. The World Bank currently operates four projects in water supply and two in sanitation and sewage improvement, worth US\$700M. The World Bank's total commitment to India's water sector amounts to more than US\$1.3B.
- Rooftop rainwater harvesting systems are now mandatory for new buildings in 18 of India's 28 states and 4 of its 7 federally administered union territories. In January 2010, India's Minister of Rural Development revealed about 50 per cent of the funds for India's Rural Employment Act are being used for water harvesting systems.⁶

Opportunities for Queensland exporters

- Trade Queensland has identified a considerable base of existing and potential Queensland water and wastewater technologies and services exporters. This includes Queensland companies of various sizes and areas of expertise providing services and products in the collection, conveyance, treatment and/or monitoring/analysis of water and wastewater for multiple purposes and end users.
- Queensland companies that specialise in the following water and wastewater technologies, services and infrastructure solutions will be best placed to service the Indian market. Opportunities include (but are not limited to):
 - › joint ventures with Indian firms to offer integrated solutions in water treatment, including performing feasibility studies, designing, technical consulting and providing operation and online maintenance services
 - › water supply, sewerage treatment, and efficient use and reuse of water particularly in industrial processes for high polluting sectors, such as cement, pulp, paper and equipment for wastewater treatment (including treatment technologies, biogas regeneration through anaerobic treatment of municipal and industrial wastewater, and water saving equipment and water recycling)
 - › provision of better design, manufacture and installation of various types of rainwater harvesting systems to cater to the inherent and growing needs of the population to conserve and reuse rain water
 - › design, manufacture and installation of various types of wastewater systems
 - › sewage system rehabilitation and septic system rehabilitation and alternatives
 - › packaged and transportable sewerage and wastewater treatments
 - › waterless composting toilets
 - › water treatment controllers
 - › design, manufacture and/or maintain equipment for disinfecting water by electrolysis

- › water use efficiency solutions (including efficient irrigation solutions, such as sprinkler or drip irrigation and low-flow faucets and other water use systems)
- › water governance (including innovative and novel government policy approaches)
- › water analysis and instruments (such as water-saving household devices and domestic usage monitoring equipment)
- › municipal and household water purification systems
- › water consulting (including services to develop water conservation policy plans).⁷

By 2030, water demand in India will grow to almost 1.5 trillion m³, driven by domestic demand for rice, wheat, and sugar for a growing population....

Against this demand, India's current water supply is approximately 740 billion m³. As a result, most of India's river basins could face severe deficit by 2030 unless concerted action is taken, with some of the most populous – including the Ganga, the Krishna, and the Indian portion of the Indus – facing the biggest absolute gap.

2030 Water Resources Group, 2009

Trade Queensland's representation in India advises that it is important for Queensland water and wastewater technologies, services and infrastructure firms that are considering exporting to India to:

- research the opportunities and their potential competition in the Indian marketplace
- consider connecting and/or partnering with Indian firms as part of their market strategy, and
- identify niche market opportunities for their water and/or wastewater technologies and services.

Market challenges

- The Indian wastewater treatment market is dominated by a few major players, most of which are international companies.
- Entry to the Indian water utilities industry is also dominated by a small number of large players with the financial strength to sustain the fixed costs of running a municipal water supply and to make the necessary investment in infrastructure and facilities.
- Privatisation of the Indian water industry is highly contentious. Projects following the Public–Private Partnership (PPP) model, and largely coordinated by the Government, have had little success to date, making the Government unsure of implementing this model.
- It is often hard to reach key decision makers in the municipal departments. According to the World Bank, many of the governments at both the union and state levels are “yet to initiate discussion of the changes which are necessary to confront the urgent and major new challenges of water management in India”.
- Forming partnerships or joint ventures are the most common entry strategy for international companies in India.
- The pricing of products and services needs to be decided on the basis of affordability for better acceptance in the Indian market.

Water is by far the most valuable resource on this planet... The water crisis that seems possible within the next 10 to 20 years will therefore quite probably trigger significant shortfalls in cereal production and, as a result, a massive global food crisis.

Peter Brabeck-Letmathe

Chairman of Nestlé, December 2009

India will invest over US\$108B annually on water and wastewater services by 2025.

Organisation for Economic Cooperation and Development (OECD)

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¹ UK Trade and Investment, 2009.

² US Global Investors, 2007.

³ Center for International Trade Development, 2008.

⁴ BBC News, 7 July 2009.

⁵ Center for International Trade Development, 2008.

⁶ Press Information Bureau (PIB) of India and Press Trust of India (PTI)

⁷ This is based on findings by Trade Queensland as well as international research.

For more information

For more information about global water and wastewater technologies, services and infrastructure market trends and opportunities for Queensland exporters, please contact Trade Strategy on +61 7 3224 4230 or tradestrategy@trade.qld.gov.au

Interested companies can also visit export.qld.gov.au

Other issues in the series

Issue 1 – Water and wastewater technologies, services and infrastructure export opportunities: USA

Issue 2 – Water and wastewater technologies, services and infrastructure export opportunities: China

Coming soon

Issue 4 – Water and wastewater technologies, services and infrastructure export opportunities: global demand

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