



# FACT SHEET: GROUNDWATER REMEDIATION

**CHINA GROUNDWATER PROTECTION & REMEDIATION OPPORTUNITIES**

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### Fact Sheet --- China Groundwater Protection & Remediation Opportunities

Groundwater is an extremely important water resource in China as 20% of China's water supply comes from the use of groundwater. Among China's 661 cities, more than 400 of them use groundwater for their water supply. In rural areas, groundwater is used as the only drinking source.

Although groundwater is a critical water resource in China, the groundwater quality is severely threatened by over-extraction and swift urbanization and industrialization. Industrial facilities, oil/gas development, landfills, as well as farmlands and mining are examples of major causes for the groundwater pollution issues in China. A report issued states that nearly 60% of the monitored groundwater in China has "very poor" and "relatively poor" groundwater quality.

The Ministry of Environmental Protection (MEP) of China has made groundwater protection and groundwater pollution control a top priority. According to *National Groundwater Pollution Prevention and Control Plan (2011 – 2020)* proposed by MEP, Groundwater contamination control and prevention projects are divided into two categories as Priority Projects and Key Projects based on their urgency and readiness.

It's estimated that Priority Projects will cost 1.43 billion USD. The breakdown of the total cost is:

- Groundwater investigation projects – 430 million USD;
- Groundwater as drinking water sources pollution prevention and control demonstration projects – 54.7 million USD;
- Typical site groundwater pollution prevention demonstration projects – 164 million USD;
- Groundwater remediation demonstration projects – 61 million USD;
- Agriculture non-point source pollution prevention and control demonstration projects – 22.5 million USD; and
- Groundwater monitoring capability infrastructure projects – 691 million USD.

Key projects will command investment of 4.14 billion USD and they include:

- Groundwater as drinking water sources pollution prevention and control demonstration projects – 3.15 billion USD;
- Typical site groundwater pollution prevention demonstration projects – 800 million USD;
- Groundwater remediation demonstration projects – 169 million USD; and
- Agriculture non-point source pollution prevention and control demonstration projects – 21 million USD.

In contrast to China's urgent need for groundwater protection, China lags far behind in monitoring techniques and contamination remediation technologies in connection with groundwater protection. It is anticipated that the newly released 10-Chapter Soil Pollution Action Plan (2016) would also increase the demand for new technologies and proven expertise to tackle the groundwater problems. Even though the policy requires strong action, technologies and products provided by Chinese companies for groundwater monitoring and groundwater remediation are not up to the enormous tasks they are facing to achieve the goals set forth in the Plan. This reality of major groundwater contamination, creates large potential opportunities for American companies to tap into China's groundwater protection market, right now!