

CHINA ACTS TO AVERT A WATER CRISIS

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Executive Summary

1. Water shortage in China continues to deteriorate due to supply and demand factors. In addition to low per capita water resources, northern China suffers from not only uneven water distribution in space and time, but also serious water pollution and leakage problem in potable water supply. More water is also needed as China urbanizes.
2. Water price in China today is still heavily regulated and remains at a much lower level than those of many other countries. This has discouraged not only water conservation by users, but also development and application of “water-efficient technology” in both agriculture and industries.
3. Measures to increase water supply (especially in northern China) mainly include groundwater exploitation and large scale water transfer projects. However, both measures face problems. Over-exploitation of groundwater has already led to the formation of more than 180 groundwater depression cones and caused the earth to sink in over 50 cities in China.
4. The *nanshui beidiao gongcheng* (南水北调工程 South-to-North water transfer project), a mega water transfer project, has to delay the completion of its Eastern Line and Central Line projects due to pollution and difficulties in resettling residents respectively. The Western Line project is still in the planning stage because of environmental concerns.
5. The Chinese government has to find more sustainable ways to increase its water supply. Desalination is one. Although China has invested in R&D on desalination technology since the 1960s, it is until recently that desalination became one of the new high-tech industries emphasized by the government.
6. In the Eleventh Five-Year Plan, desalination was listed as an important issue in a series of government policies. At present, the desalination industry in China

is still small in scale and has weak market competitiveness. With government's support, the industry will be extensively industrialized in 2020.

7. Recycled water (再生水) is increasingly recognized as one of the important sources of water supply. At present, China's recycled water industry is still in its infancy. It was only in the early 2000s that the Chinese government has turned its attention to the use of recycled water.
8. In 2006, the Chinese government issued "Urban Wastewater Renewable Technology Policy", proposing that the government provide support to the recycled water industry in various areas, including urban planning, water price, fiscal policy and taxation.
9. It is expected that the coming Twelfth Five-Year Plan will include recycled water facilities for the first time. Wastewater treatment, including water recycling, in towns will be one of the focuses in the Plan. A new scheme will be introduced to build wastewater treatment plants in county-level towns and major towns.