

# China's cleantech boom: Opportunity knocks for Australia

Atop an XEMC wind turbine at dawn at the Shijing Wind Farm, near PuTian, Fujian Province, China.

Photo: John O'Brien

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CHINA IS ESTABLISHING ITSELF as the centre of the global clean technology industry and this presents a huge opportunity for Australia in this Asian 'Low Emissions' Century. These opportunities focus on the two-way transfer of technology and investment and have the potential to underpin Australia's future prosperity.

'Cleantech' encompasses companies involved in renewable energy (wind, solar, geothermal etc), water technologies, waste management and recycling, green buildings, energy efficiency, biomaterials, energy storage, vehicle technologies, environmental services, biofuels and carbon. The common element is that their products and services have both economic and environmental benefits.

There is plenty of activity in the Australian cleantech industry. There is however even more activity in our near neighbours. A 2012 HSBC report reviewed the low-carbon investment policies of ten countries and found that China was by far the most attractive location, followed by India and South Korea.

## Cleantech in China

The growth of the Chinese cleantech sector has outstripped its wider economy over the last five years. This has been driven overall by depleting natural resources, the need for energy security and the sheer cost of importing energy resources, all accelerated by the growth of population and wealth.

Three additional specific drivers of China's cleantech revolution have recently emerged.

First is environmental remediation. Over the last 20 years, China's massive economic growth has also caused massive environmental damage with rivers dying and frequent smog and toxic contamination causing health, economic and social problems. The cleaning up of this mess is increasingly a priority.

Second, huge economic opportunities in building these global industries of the future have become apparent.

Third, being a change-leader delivers increased influence over global climate policy discussions.

China has a number of very ambitious 2015 targets in its current Five Year Plan: carbon intensity per unit of GDP to be reduced by 17 percent; water intensity per unit of GDP to be reduced by 30 percent; and the non-fossil fuels proportion of primary energy mix to be 11.4 percent, up from 8.3 percent at the end of 2010. The plan also backed seven strategic emerging Industries including energy saving and environment protection, new energy, new materials; and clean-energy vehicles.

The performance of the listed Chinese cleantech companies is tracked by the China CleanTech Index. This tracks over 150 companies that are based in China although many are listed on international stock exchanges, with one even listed in Australia (Novarise, ASX:NOE). The performance of the market overall has not been good over the last two years and this has been driven primarily by the collapse of solar and wind stocks in the midst of the financial crisis. However, other sub-sectors have performed well, with

