

International Focus: China

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With the world's biggest population and economic growth rates of around 9% for the past 25 years, China represents a huge market for environmental technologies and services.

Rapid economic development over the past two decades has placed a massive environmental burden on urban and rural areas in China with its associated ecological impact.

The serious pollution has also had an impact on public health and long-term sustainable development. Foreign economic experts estimate that environmental pollution costs the Chinese economy around US\$28 billion annually.

According to Chinese sources:

- Around 35% of the total territory is affected by acid rain.
- Over 40% of China's river basins have been polluted and 25% of the Chinese population drink contaminated water.
- Four hundred out of China's 667 cities face water supply shortages.
- Over 35% of people in urban areas breathe polluted air.
- Only 32% of all hazardous solid waste is currently treated.

The Chinese Government is trying to manage its rapid economic development in a sustainable way by curbing environmental deterioration. The 11th Chinese five-year programme (2006-2010) pledges to spend US\$175 billion on environmental protection, accounting for 1.6% of the gross domestic product (GDP) during this period. But despite this investment, it will be a major struggle to meet the goal of effective pollution control and improve the quality of the environment in China.

The State Environmental Protection Administration (SEPA) is updating and revising environmental regulations as well as improving enforcement. The pressure of worsening pollution means that current laws and regulations lag behind the demands of environmental protection.

As the threats to its population and economy become ever more palpable, China is actively promoting national policies aimed at improving energy efficiency (including supporting carbon dioxide reductions), energy saving and emissions reductions. China aims to reduce pollutant emissions by 10% and to reduce energy consumption per unit of GDP by 20% by 2010. It also plans to increase the use of renewable energy from the current 7.5% of total energy consumption to 10% by 2010, and 16% by 2020.

Demand for Clean Development Mechanism (CDM) projects that reduce greenhouse gas emissions,

contribute to sustainable development and result in the generation of tradable carbon credits has grown significantly in recent years in China. The UK Government sees China as a key country for the implementation of technologies that will slow the increase in greenhouse gas concentrations in the atmosphere but which will also contribute to the country's development.

The main business opportunities in China for companies are summarised in the table 1.

China's size means that any description of key opportunities is often best divided into regions (north, east, south, middle and southwest).

In southwest China, for example there are opportunities for environmental technologies and equipment supply in relation to air quality improvements, land reclamation and hazardous waste treatment. There are also opportunities involving the plants used to treat the wastewater entering the newly formed Three Gorges Reservoir.

In south China, the World Bank funds the Pearl River Remediation Project which provides opportunities for design and management consultancies. The rapid and ongoing industrial expansion and increase in heavy goods traffic has resulted in severe and prolonged air pollution problems in the southern region, including Hong Kong and Macau. Companies could provide value-added, advanced solutions to improve the air quality in this region, including air monitoring/analysis



QUICK FACTS – CHINA

Population: 1.3 billion
Capital: Beijing
Population: 15 million
Land area: 9.6 million km²
GDP per capita: US\$ 2000
Life expectancy: 71.8 years

and industrial/vehicle emissions control.

In east China, expertise could boost the design and technology performance of major manufacturers of solar photovoltaic (PV) cells, wind turbines and components.

UKTI Shanghai recently signed a Memorandum of Understanding (MoU) with the authorities in Jiangsu Province on the eastern coast of China to promote a low carboneyconomy and use of renewable energy.

Air Pollution

- Air pollution control: flue gasdesulphurisation, de-NOX system, and vehicle emissions control and inspection devices.
- Monitoring and analysis systems/instruments: online monitoring systems, continuous emission monitoring systems (CEMS) in industry, marine and agro-ecological situations, and indoor monitoring.



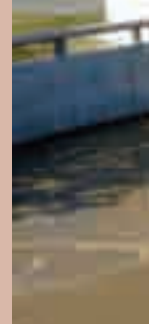
Waste Management

- Solid and hazardous waste treatment: landfill, incineration, hazardous waste treatment, waste electrical and electronic equipment (WEEE) treatment/recycling and medical waste treatment.
- Remediation, clean production, environmental management.
- Waste management and waste-to-energy technologies and systems.
- Importation of waste plastics and papers for recycling.



Water

- Water supply and wastewater plants: design, engineering services, project management and investment.
- Water resources: pollution control and management, drinking water safety technologies and management.
- Water and wastewater treatment: sludge treatment, catalysts, equipment and instruments.
- Water saving and recycling.
- Water monitoring, analysis and management.
- Design and management consultancy.
- Advanced technologies and products for projects funded by the World Bank and the Asian Development Bank.



Renewable Energy

- Energy efficiency and carbon abatement technologies and systems.
- Carbon trading: technologies support and financing in CDM projects in wind power, coal mines, landfill, steel refinery, cement, chemicals and hydropower.
- Renewable energy: solar, wind power, biogas, etc.
- Engineering consultancy and services.



Table 1