

Mainland could have 30pc renewable energy by 2050

Reuters in Beijing
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The mainland could obtain as much as a third of its energy from renewable sources by 2050 as a manufacturing expansion pulled down prices worldwide, if **Beijing** improved pricing and policy support for the sector, a report said.

The country was expected to invest about US\$10 billion (HK\$78 billion) in new renewable capacity this year alone, second only to Germany, the Worldwatch Institute said in *Powering China's Development: The Role of Renewable Energy*.

And as the government looks for alternatives to the dirty-burning coal that currently provides about 70 per cent of the mainland's energy, its firms are set to overtake market leaders in the industrialised world.

"China is poised to pass world solar and wind manufacturing leaders in Europe, Japan and North America in the next three years and it already dominates the market for solar hot water and small hydropower," Worldwatch said in a statement.

Driven also by concerns about a growing reliance on imported oil, Beijing has set a goal of generating 15 per cent of its energy from renewable sources by 2020, although the majority of that will be from large hydropower projects, which many environmentalists object to.

The shift in energy structure was particularly vital as rural workers flocked to the cities in search of work or a better life, as city dwellers used nearly three times as much electricity and commercial energy than rural ones, the report said.

Wind power is one of the mainland's best performing areas, with about 50 home-grown aspiring turbine manufacturers and the potential to install up to 600 gigawatts (GW) of capacity - or the equivalent of the country's entire current capacity - by mid-century.

However, the mainland needed to improve pricing support, quality controls and mapping of its wind resources, to ensure rapid growth continues, Worldwatch said.

"Wind power prices in China have been significantly lower than those found in other countries with robust wind markets, inhibiting the rate of development," the report said.

The country's solar photovoltaic panel manufacturing capacity was also growing fast but the panels that convert sunlight directly into power are too expensive still for widespread use in the mainland.

But it is already the world's largest market for less hi-tech solar water heaters, with more than one tenth of households relying on the sun for hot water.

This could rise to as much as one-third by 2020 under current policies. The equipment also costs about seven times less than in Europe, leaving a door to market domination open to mainland firms if they can adapt to overseas standards.

Beijing has curbed expansion of the biofuels industry because of fears over food security.

But if second generation technology to make fuel from products like straw and wood chips becomes commercially viable it could make the country a major ethanol producer after 2020.