

## China's massive energy challenge

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A major report released by the International Energy Agency (IEA) sheds stark light on one of the reasons why global oil prices are approaching an unprecedented US\$100 a barrel. It provides stunning new details of the looming global impact of China and India on future energy markets and the prospects for climate change.

It also brings a sobering clarity to the enormity of the energy challenge these two countries face and the huge stake the world has in their future energy choices.

The IEA's most striking conclusions concern China and the sheer scale of its energy demand. For example, from 2001 to last year, it added to global energy demand the equivalent of the entire 2006 energy consumption of Japan, the world's third-largest energy consumer. In the IEA's benchmark "reference scenario", which assumes a modest 6 per cent long-term economic growth rate, China accounts for one-third of growth in demand for global energy; one-third of the world's oil-demand growth; nearly two-thirds of global growth in demand for coal; 40 per cent of world nuclear energy development; and one-third of world hydroelectric power development.

Some of the most striking impacts will be in oil markets. Mainland China's demand for oil is likely to rise by 10 million barrels per day between 2005 and 2030, equal to Saudi Arabia's total oil production capacity today. The mainland vehicle market will surpass that of the US by 2015 and oil demand for transport will quadruple.

These trends have significant global implications. Tighter oil markets and higher prices would sharpen tensions among the oil-consuming countries over access to supplies and control of key energy transit sea lanes. Disagreements between the US and China over approaches to oil security, already a source of tension, would intensify. The oil producers' cartel, Opec, and producing countries like Iran, Venezuela and Russia will be further empowered. Even more worrisome, mainland China's impact on oil markets is likely to pale in comparison to those arising from its coal use and production of greenhouse gases. Despite **Beijing's** ambitious plans for huge increases in nuclear, hydroelectric, natural gas and renewables, coal is still expected to account for 80 per cent of electricity supplies in 25 years.

The implications for future greenhouse gas emissions are dire. The mainland is likely to account for a virtual tsunami of carbon - over 40 per cent of the future growth in world carbon dioxide emissions.

This has major consequences for global climate change talks. To its credit, Beijing is pursuing new policies to reduce energy use. However, these fall short of the scale of the challenge. Mainland China's energy trajectory is unsustainable. Over time, Beijing is likely to have to make a fundamental shift to an unprecedented new path based on energy efficiency, and demand-reducing and environmentally sustainable policies.

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