

PetroChina discovers shale gas in Sichuan

Good initial results in southern province

China so far lacks productive wells

By Leslie Hook in Beijing

PetroChina has discovered shale gas in China's Sichuan province, confirming that the energy-hungry country is sitting on vast reserves of this unconventional fuel source.

Shale gas, or natural gas trapped inside deposits of shale rock, is expected to transform China's energy supply in future decades by providing a potentially cheap and plentiful source of fuel for the world's biggest energy consumer.

PetroChina, the listed subsidiary of Chinese oil and gas producer CNPC, told the Financial Times it had drilled about 20 wells in its shale gas acreage in southern Sichuan province and that initial results had been positive.

"The wells are producing more than 10,000 cu m of gas per well per day," said Mao Zefeng, PetroChina senior assistant secretary to the board. "We are still assessing the exact size of the potential reserves."

Shale gas is produced by a process known as "fracking" that cracks open rock to release natural gas. The technique has revolutionised energy markets in countries such as the US, the largest producer of shale gas, by driving down natural gas prices.

China does not yet have any shale gas wells producing commercially, but companies running exploratory projects include Sinopec, Royal Dutch Shell, BP and Chevron. China has more shale gas reserves than any other country, with 1,275tn cu ft of recoverable reserves, according to estimates from the US Energy Information

Administration. That is enough to supply China for more than 300 years, based on current consumption levels.

Beijing sees natural gas as a part of the solution for China's growing energy needs, and the state has encouraged the development of "unconventional" natural gas sources such as shale gas and coal bed methane.

Its shale gas production will eventually exceed that of the US, according to remarks by Fu Chengyu, chairman of Sinopec, at a conference on Wednesday.

Gavin Thompson, head of China gas research for consul-

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Wood Mackenzie

tancy Wood Mackenzie, said the initial results in southern Sichuan suggested the acreage could be "comparable with attractive shale plays globally" once horizontal wells were drilled. Most of the wells drilled so far are vertical, and horizontal wells are under way, according to PetroChina.

"These are quite crucial times for shale gas development in China," he said. "If PetroChina or Sinopec has really good success over the next one to two years with their [shale gas] wells, we may see a much harder push to develop shale."

However, some analysts are sceptical about how soon China can make shale gas production profitable given the relatively low price of natural gas in China and the lack of pipeline infrastructure. Two geologists told the FT that 10,000 cu m per day was not large relative to onshore US fields.