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Roads



Airports



Oil and gas

Over the last 10 years, China's crude oil production has seen little expansion in production volumes, despite an ever growing demand for oil. Production has grown at just over two percent per annum since 2002, meaning China is now heavily reliant on imported oil. The 12th Five-Year Plan intends to see an acceleration and development of offshore and deep-water oil and gas fields, in an apparent recognition of a mounting issue.

Downstream refining capacity has seen strong growth since 2002, with capacity increasing from 5.9 million barrels per day to nearly 11 million per day in 2011,⁷⁵ and demand for oil reaching 9.8 million barrels per day.

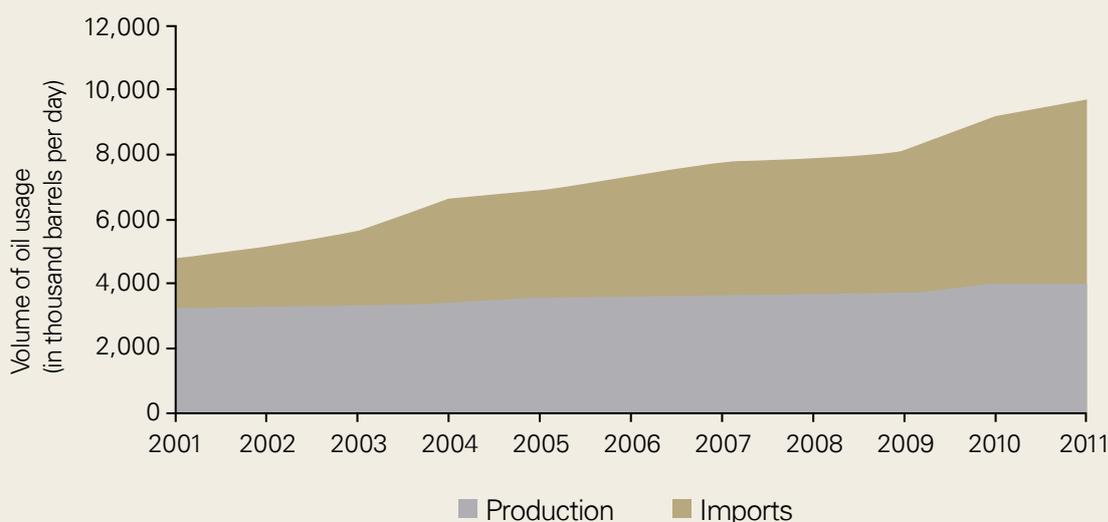
Natural gas is an increasingly important natural resource to China, due to its lower cost and carbon nature. With the central government committed to reducing the intensity of China's carbon dioxide emissions while providing a secure energy future, tapping the 3.1 trillion cubic meters of natural gas reserves will become increasingly important.⁷⁶ With production in 2011 hitting 107 billion cubic meters, an 8 percent increase on 2010, and consumption of nearly 130.7 billion cubic meters a 20.5 percent increase,⁷⁷ investment in natural gas from explorations to pipeline is booming. In the first half of 2012, there was an 89 percent year-on-year

growth in oil and gas extraction investments. Under the current Five-Year Plan, China will construct the second phase of its China-Kazakhstan oil pipeline, its portion of the China-Myanmar pipeline as well as significant longitudinal gas pipeline investments. The aim of which is to have around 150,000 km of pipelines for oil and gas by 2015.⁷⁸

China is the world's largest consumer of primary energy fuel, consuming 2.6 billion tons of oil equivalents in 2011 to fire its power stations, with a little over 900 GW of capacity available. By contrast the United States uses a lean 2.3 billion tons of oil equivalent to generate over 1000 GW.⁷⁹ Much of this inefficiency is located within the power plants themselves, and substantial scope for improvement remains. However equally contributory is the outdated transmission networks within China. To accelerate this, the government plans to build over 200,000 km of super-high voltage lines and build and develop smart grids to facilitate more efficient energy transmission.⁸⁰ Foreign players such as Siemens have already begun involvement with the building and operating of smart grids, and foreign investment is permitted for innovations and efficiency technologies.

Since 1992, there have been various channels of private capital flowing into the oil industry. The entry points include: oil refining, warehousing, logistics and product sales fields. Presently, China has more than 80,000 private oil enterprises and total storage capacity of up to 200 million tons.⁸¹

Domestic oil usage



Source: BP Statistical Review of World Energy 2012

⁷⁵ BP Statistical Review of World Energy 2012

⁷⁶ BP Statistical Review of World Energy 2012

⁷⁷ BP Statistical Review of World Energy

⁷⁸ 12th Five-Year Development Plan

⁷⁹ BP Statistical Review of World Energy 2012

⁸⁰ 12th Five-Year Plan

⁸¹ People.com.cn, 20 February 2012, 'Private enterprises have become an important power of China's oil reserve', <http://finance.people.com.cn/GB/1045/17164409.html>