SHALE GAS REVOLUTION AND CHINA'S INDUSTRIAL POLICY

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Executive Summary

1. China is the world’s largest shale gas reserve country with 1,275 trillion cubic feet of technologically recoverable resources, which are more than the estimated 862 trillion cubic feet for the United States.

2. Given the uncertainty in oil prices, the potential problem in the Middle East and the pollution emissions, shale gas has great potential to change China’s energy structure and contribute to energy security and environmental protection.

3. The US-China shale gas agreement by President Obama and President Hu Jintao accelerated a series of US-China cooperation. Chinese companies invested billions of dollars in US shale gas projects, while US companies are participating in shale gas exploration in China using advanced exploration and water resources protection technologies.

4. Though the shale gas industry in China is in its early stage of development, it has already garnered significant interest from the national government. State-owned and provincial-owned enterprises are now conducting exploration and pilot projects on shale gas in China.

5. The United States is the pioneer in shale gas exploration and technology, and the second largest shale gas source in the world. It is now a potential big exporter instead of an importer. In 2010, shale gas represented 27% of US natural gas production. It is projected to grow to 43% in the next five years and to 60% by 2035.

6. Shale gas is likely to become a stimulant for the Chinese economy. In the United States, shale gas helps not only to reduce its reliance on natural gas import, but also its economic recovery. It has the potential of contributing more than 1.6 million jobs and over US$230 billion to GDP by 2035.

7. Shale gas development has become the new theme to world energy strategies and geo-politics, and the potential to change the world energy map. Based on current statistics, many oil and natural gas importer countries like those in Europe have already found vast shale gas reserves which can reduce their reliance on gas imports from Russia.

8. In early 2012, the Chinese government announced a series of policies to speed up shale gas development, which was also mentioned in Premier Wen's government work report in 2012.

9. During the 12th Five-Year Program period, the national target for shale gas is 6.5 billion cubic meters per year by 2015, and 60 to 100 billion cubic meters by 2020.

10. China's efforts to develop its shale gas industry may face various obstacles and more need to be done including opening up the shale gas market for private companies, establishing a market-driven price mechanism rather than government-control pricing, protecting the environment and local water resources, and encouraging innovation in local technologies.