CHINA'S NATURAL GAS PROJECTION AND CONSTRAINT OF ENERGY MIX

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Overview

The paper focuses on studying the likely growth of natural gas usage in China. There has been much discussion of the future for natural gas in China, but virtually all of this came prior to the current relatively low price environment for energy commodities. Our study examines the range of forecasts and projects for energy use and energy mix for China and attempts to account for deviations from the underlying economic assumptions of these forecasts to account for this changed environment.

As recently as September, 2014, the EIA crude oil price forecasts (based on North Sea Brent) reported in the International Energy Outlook showed reference case prices in 2012 US dollars to be $97 per barrel in 2020 and $141 per barrel in 2040. Their low price case showed $69 and $75 for 2020 and 2040, respectively. Given the current circumstances (at this writing the price for Brent is just below $60), just a few months later, the low price case may appear to be more likely. This is expected to have significant implications for natural gas pricing in Asia and thus on natural gas demand and supply. This may be most relevant to Asia, since most natural gas in Asia is priced against crude oil prices.

The natural gas price estimate for the China-Russia is at $9.90 per MMBtu delivered to the China border, while spot prices for LNG-sourced natural gas delivered to Asia are currently below $10.00 per MMBtu, meaning that the Russian gas no longer appears to be such a good deal. Our paper addresses the potential competition between and among the various import and domestic sources of natural gas available to China. The lower priced energy world will also be assessed for how this may facilitate China's desire to substitute natural gas for coal in many areas of the economy. The lower prices for natural gas tied to crude oil will make it more competitive against alternatives and this should enhance its expanded role in the overall energy mix.

Methods

Where sufficient data exists we employ econometric analyses to estimate the potential changes to the outlook for natural gas consumption in China relative to the most recent forecasts/projections publically available.

Expected Results

We expect that the altered economic environment will have significant implications for the role of natural gas in China. Primarily we expect there to be an increased usage as the lower prices assist to help implement the stated goals of the Government to increase the role of natural gas and decrease the role of coal.

References

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