

Shale Gas Report Ed 1 2011

Market Intelligence

Shale gas has been a 'game changer' in the US changing the country from being reliant on imports for the foreseeable future to being able to meet demand from domestic production. A large reduction in the cost to produce natural gas from shale has made shale gas economically viable. So presently US natural gas prices are around USD 4 per mmBtu.

Whether shale gas can maintain its meteoric rise is uncertain. Low gas prices have made the economics of shale gas projects less attractive and are expected to remain bearish in the short-term. Furthermore, there is concern over the environmental impact of fracturing water and the amount of water used in the fracturing process. New environmental legislation on hydraulic fracturing, if passed, could drive the costs of hydraulic fracturing higher, possibly leaving only the big players in the shale game.

However, it is not all 'doom and gloom', other avenues for shale gas developers include the export of natural gas to Asia as liquefied natural gas (LNG) or the exploitation of natural gas liquids (NGLs) or oil in shale deposits. Both of which are currently considerably more expensive than US dry natural gas. Thus, there is an increased interest in shale deposits with a high liquid content or close to LNG terminals. Petrochemical manufacturers have even started to consider relocating close to shale plays in the US to use the NGLs produced.

Another option for the produced natural gas is to convert it into a transportation fuel. Sasol is the pioneer in the gas-to-liquids field with two plants in operation in South Africa and Qatar. Shell also recently commissioned a GTL plant in Qatar. There are tentative plans for a gas-to-liquid (GTL) plant in Canada using shale gas and Sasol's technology. But this is still not wide spread and plants are still very expensive.

Large oil and gas players that 'missed the boat' on acquiring shale gas acreage in the US have started exploring potential shale plays in these and other countries. These players have formed joint ventures with early pioneers of the US or Canadian shale assets or bought land in plays. In order to gain experience in North America that can be translated elsewhere. China, India, Argentina and other European countries have a lot of potential in terms of both shale gas resources and market demand for cheap gas. Australia is another potential shale gas producer for export to Asia.

Whether the 'success' of the US shale gas sector translates to success in overseas plays is debatable. In the US oil and gas assets are owned by the landowner therefore the landowner benefits from lease and royalty payments for the development of these assets on their land. This is not the case in Canada and Europe where the state owns these assets. A lack of infrastructure such as pipeline is a barrier to the development of shale plays in India and China. Not to mention competition of imports of liquefied natural gas and piped natural gas.

Highlights

Despite the uncertainty, interest in shale gas has not waned. High oil prices are starting to make compressed natural gas vehicles more of a viable option. Furthermore, natural gas produces less carbon dioxide (CO₂) emissions on burning than coal. Fuel switching from coal to natural gas at power stations is one option for country's to meet Kyoto targets for cutting CO₂ emissions.

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