Coal and Clean Coal Report

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Market Intelligence

For the first time China became a net importer of coal last year. Demand from Southern and South Eastern provinces was met by cheaper imports from Indonesia and Australia rather than more expensive coal from the provinces of Shanxi and Inner in the north, due to logistic costs. Furthermore the rail network in China can only transport half of the country's demand, and despite investments in the sector is unlikely to meet demand in the near-term. Domestic supply is also likely to diminish owing to the country's strategy of consolidating the nation's mines to eventually close unsafe and inefficient mines. Consequently China is ensuring security of supply through a mixture of bi-lateral trade agreement and acquisitions of overseas mining assets. One of the most ambitious is China's Coal Geology Engineering Corporation and Wanbei Coal Electricity Group's plan to develop a potential 10 billion tonne coal resource in Queensland, Australia. Bi-lateral trade agreements have been signed with Mongolia, North Korea and Vietnam. Only time will tell whether China will rely more on seaborne or overland imports to meet demand; although, for the latter, improvement's in rail infrastructure will be needed.

A similar situation exists in India, where companies are buying up coal assets overseas, particularly in Australia, and are importing more coal. As domestic coal production is unlikely to meet growing demand even if logistics and operations within the country are substantially improved. Elsewhere, coal demand is expected to grow, but not at the same pace as China and India, due to rising natural gas prices. Traditional coal-fired power plants will continue to be phased out and replaced with modern plants with low emissions and some form of carbon capture and storage. The biggest investors in CCS are and policies covering CCS are starting to emerge. However, to date, the sector is not eligible for carbon credits and very few demonstration projects are in operation. Thus, an alternative to CCS in the short-term could be co-firing power plants with both coal and biomass, as the biomass proportion of the plant may be eligible for subsidies and count towards renewable energy targets.

At the production level, more mines will use methane from both operating and abandoned mines. As the project would both provide revenues from electricity production, methane sales and from any greenhouse gas emission reduction incentives, and improve mine safety. By preventing methane build-up, which is thought to be the cause of Pike River mine accident in New Zealand and numerous mining accidents worldwide. NRG EXPERT expects the use of methane to increase more in the short-term than underground coal gasification, which still has several technical and policy barriers to its deployment. However, if deployed UCG would allow some countries to tap unexploited coal resources. The UK is one of the country's leading the development of the sector with a total of fourteen conditional near offshore UCG licenses awarded to date.

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Highlights

In the near and long-term India, China and perhaps Brazil are expected to drive growth for coking coal for the domestic steel sector following projections of strong growth in steel production and consumption in these countries. Demand for coal will be driven more by China than India, in the former coal will be increasingly used to produce a liquid fuel and chemicals such as olefins, a long-chain polymer synthetic fiber, to reduce the country's reliance on imports.

Australia, Indonesia and South Africa are expected to remain as major exporters, with growth in exports from Russia, Mongolia and other countries in the region to meet demand from China and, to a lesser extent, India.

For the US mining sector, operations in the Power River Basin region may increase. But will be balanced out by a reduction in output from the East Appalachian region that mainly uses invasive mountain-top mining operations. Any resurgence in the US coal mining sector will only occur with improved clarity regarding the permitting process, and incentives ensure domestic coal is cheaper than imports.

The switch from underground to surface mining is expected to continue along with the consolidation of mining assets. More mergers and acquisitions involving big players are likely.

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