Ethylene glycol is an 18.9 million ton global market growing at on average 3.7 percent per year. China accounts for 43 percent of global demand, and over 60 percent of global growth. Today China imports over 5.0 million tons of ethylene glycol, much of which is supplied by the highly competitive ethane-based producers in the Middle East. Most regions have substantial MEG capacity of their own, and Canada, South Korea and Taiwan are the other major exporters.

In Inner Mongolia, China, Tongliao Jinmei Coal Chemical Co. has started MEG production in its 200 000 tons per year Coal to MEG plant. Also in Inner Mongolia, Kailuan Group’s plant in Erdos (400 000 tons per year) and Berun Group’s plant in Xilingol (200 000 tons per year) are currently in production. Henan Coal Chemical Group and Tongliao Jinmei, has started in Henan Province, Henan Yongjin Chemical Co., a JV between construction of five Coal to MEG plants in Anyang, Puyang, Xinxiang, Yongcheng and Luoyang, respectively, each with MEG plants in production, under construction and/or in design phase, China’s annual cost-based MEG production is expected to reach three million tons by 2015.

Subject to the competitiveness of coal-based MEG, there could be a paradigm shift in the structure of the global MEG industry especially regarding future trade flows beyond 2015. This technology could drive further restructuring of the global MEG supply base.

Threat Considerations
- Subject to the competitiveness of coal-based MEG, what will be the impact of a major loss of Chinese import volumes?
- Where will the Middle East ethane-based producers seek to place their MEG product in future if China is no longer the target market?
- What are the implications for other MEG exporting countries based on higher cost olefin platforms?

Opportunities for New Investment
- If the technology is widely developed or becomes available outside China, can it be married with alternative syngas sources such as natural gas reforming and even biomass gasification?
- If stranded gas can be converted at very large scale into MEG, as seen with methanol, is there a new investment opportunity for countries in the Middle East?

Nexant examined the relevant issues from both, and opportunity perspectives to advise how it may change the global MEG industry.

This technology may also result in changes to the olefins market if there is a global adoption of syngas (from several platforms) to MEG. For some this too may present a threat or an opportunity.


The Strategic Report is available for US$16 000. This analysis is also available combined with our Technology Report on this new route for US$24 000.

Please contact ChemSystems@nexant.com for a subscription form.