

NexantThinking™

Strategic Business Analysis

Methanol Strategic Business Analysis

February 2014



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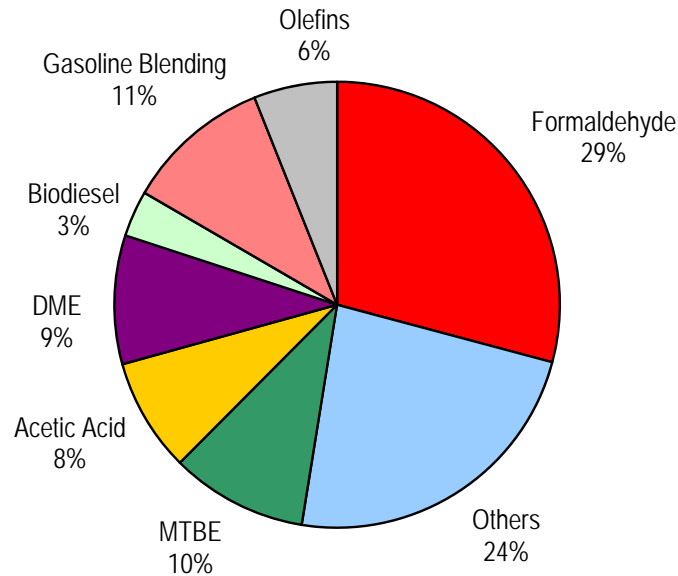
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Methanol Strategic Business Analysis

Global methanol demand grew by 8.2 percent in 2012 following a 12 percent growth in the previous year. In 2012, global methanol consumption reached 61 million tons while, global GDP growth rates recovered at a lower rate of 3.03 percent compared to the previous year.

In 2013, global methanol demand is expected to continue its robust growth, which is significantly above GDP growth. Global demand is estimated to reach 68 million tons in 2013, of which olefins will account for just under nine million tons. Traditional demand such as formaldehyde and acetic acid is expected to show some recovery while sustained growth is expected in emerging methanol end-uses.

Figure 1.1 Methanol Consumption by Application, 2012

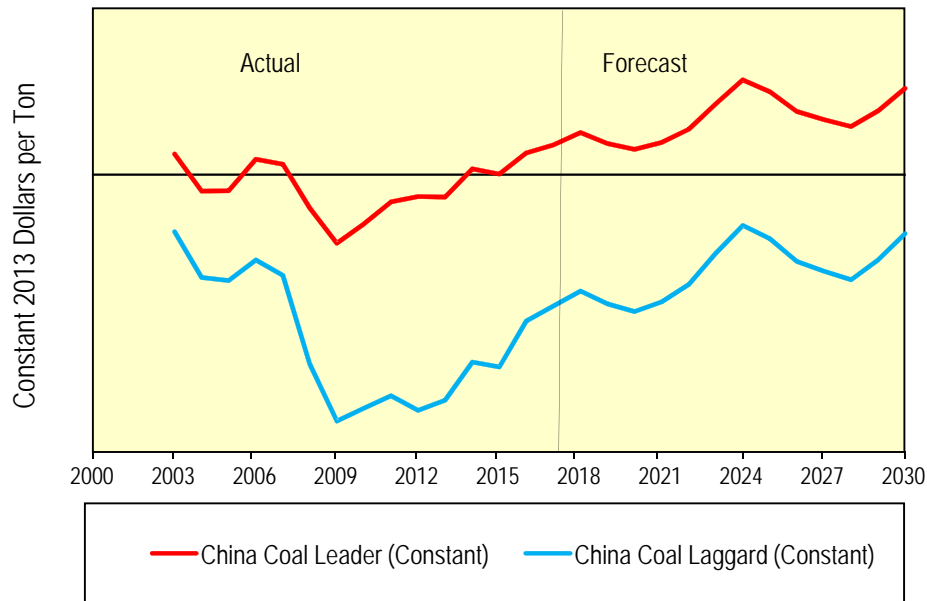


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An increase in gasoline blending of methanol is anticipated and Nexant expects the long term methanol price to be influenced by its gasoline blend value and hence energy values. Prices are expected to fall in 2014 and remain stable in 2015 close to the gasoline blend value. This decrease in prices will be driven by new capacity coming on-stream in the U.S. and China, relatively slower demand growth and a slight decrease in the oil price. Prices are subsequently expected to rise to a peak in 2018.

Profitability for coal based methanol producers in China is forecast to trend upwards for both leader producers. This is due to the cost of coal which forecast to decrease in real terms and to an expected upward trend of operating rates allowing new capacity additions in China as laggard producers with smaller capacities processing more expensive feedstocks - anthracite coal - tend to close.

Figure 1.2 Chinese Cash Margins



Since 2011 a resurgence of methanol capacity has been taking place in North America. Lower natural gas prices allowed start-ups of mothballed plants in the region. However, with Henry Hub prices in 2013 over \$3.60 per mmBtu, higher than the 2012 price average, and a couple of LNG projects already approved, several questions arise: how much more will the U.S. competitiveness improve and for how long? Will Africa emerge as a major low cost producer imposing a threat?

Nexant's wealth of experience in the methanol sector, combined with our wider global presence in global gas, coal gasification, refined products, biofuel and petrochemical industries, provides us with a unique overview of all factors influencing the development of the methanol business worldwide. The Methanol SBA program distills the core issues and insights from our accumulated expertise to providing subscribers with a good understanding of not only the fundamental drivers but also likely future strategic direction of the methanol industry. This year's issue includes the profitability of coal-based Chinese producers reflecting the major role that China plays in this dynamic business. We believe this program is an invaluable source of insight and strategic business analysis for executives and managers at all levels of the business.

Figure 1.3 Nexant's Unique Blend of Capabilities

STRATEGY	GAS
<ul style="list-style-type: none"> ▪ Distilling key trends to understand businesses ▪ Portfolio appraisal and positioning ▪ Merger & acquisition support ▪ Customer segmentation ▪ Manufacturing Strategy ▪ Value chain positioning ▪ Growth Strategy ▪ Industry structure analyses 	<ul style="list-style-type: none"> ▪ Global gas availability and pricing ▪ Strong experience of alternative gas monetization options including LNG, GTL, ammonia and power ▪ National and regional energy planning ▪ Oil & gas development projects ▪ Upstream oil & gas asset management ▪ Gas value chain analyses
CHEMICALS PRACTICE	DOWNSTREAM OIL AND BIOFUELS
<ul style="list-style-type: none"> ▪ Strong understanding of methanol and derivative markets, technology and economics ▪ Strong olefins experience and active MTO/MTP evaluation engagements ▪ Market dynamics research and analysis and forecasts ▪ Pricing and profitability scenarios ▪ Performance benchmarking ▪ Cost curve assessments ▪ Techno-economic feasibility studies 	<ul style="list-style-type: none"> ▪ Petroleum value chain analysis including ports & terminals, refining, storage & distribution, terminals & depots, fuel wholesaling and retailing ▪ Biofuel market and technology development ▪ Good understanding of fuel markets and the potential for methanol use as a gasoline blendstock, bio-diesel feedstock and DME feedstock

This analysis is presented in NexantThinking's Strategic Methanol Business Analysis (SBA) program subscription which provides:

- Strategic trends and challenges facing the industry such as trends of the methanol industry in connection with the prospects of coke oven gas in China, simultaneous methanol-ammonia-urea production, bunker fuel as a new end use and new trends in methanol pricing.
- Business fundamentals comprising market dynamics, profitability, and pricing, a technology review including coal gasification and new developments, and delivered cost competitiveness analysis.

See Nexant's Ammonia-Urea SBA Program for similar coverage for this sector.

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