Agenda

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Acetyls Value Chain

Natural Gas

Methanol

Coal

CO

Acetic Acid

Ethylene

Vinyl Acetate (VAM)
Technology

• The methanol carbonylation route accounts for more than 90% of the world’s virgin acetic acid capacity

• Technologies are closely held with most technology owners favouring a JV structure

• Eastman, Celanese and BP are the key technology owners

• In 2013 BP announced the SaaBre™ technology to convert syngas directly to acetic acid

• China currently has 1.3 million tons capacity for the recovery of acetic acid from PVA hydrolysis
Acetic Acid Market Outlook
Global operating rates are expected to increase from 2016; significant capacity addition is expected in long term to meet growing demand.

Source: IHS

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At least a million tons of capacity addition is expected in India in the long term
World Acetic Acid Demand Forecast

Ethanol is a new high growth demand segment of Acetic Acid
North America is expected to establish itself as the largest net exporter on the back of low cost methanol production.
Northeast Asia, led by China, has increasingly become the most important region in the global acetic market – the epicentre of demand and capacity addition.

Source: IHS

Forecast

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Currently, the regional production is export oriented targeting the Indian and Northeast Asian markets; new capacity in China coupled with regional demand growth will shift the region to a net importer by 2020.
Indian Subcontinent Acetic Acid Supply / Demand

GNFC the only operational producer on the subcontinent; Assam PC to start up 65 kta of capacity in 2016
Expansions by ethyl acetate producers over the last three years have bolstered Indian demand for acetic acid.
Indian Imports

India a key target market for Southeast Asian producers as China adds capacity
Indian prices track the China / Southeast Asia market, but of late have shown a ceiling set by the exports of acetic acid derivatives.
Acetic Acid Business
Acetic Acid Competitive Production Cost

North American producers to become increasingly competitive
Conclusion
Conclusion

• In the medium term operating rates and margins will recover due to delayed capacity addition in China and strong demand growth in Asian and South American markets

• North America to strengthen it’s export position on the back of low cost methanol

• IHS expects additional acetic acid capacity to come to fruition in India by 2020 – this is likely to spur local VAM production
Methanol & Acetyls Market Service

- Weekly & monthly publication
- Worldwide market coverage
  - Methanol
  - Acetic acid
  - Vinyl acetate
  - Acetic anhydride
  - Ethyl/butyl acetate
- Price discovery
- Near-term market analysis and forecast
  - Supply / demand
  - Trade flows
  - Price
2015 World Analysis

• Annual report
• Long-term analysis up to 2025
• Global and regional description
  • Capacity
  • Supply / demand
  • Trade
  • Price
• Downstream analysis