



China still attracts all the attention

Until recently Asian markets, especially China, have led the way in global chemicals growth – but the slowdown in the region raises many questions, which an ICIS Roundtable in Singapore set out to discuss

JOHN BAKER SINGAPORE

Strong Asian demand for petrochemicals has been the mainstay of recovery in global chemical fortunes since the sharp downturn of late 2008 and early 2009, given the subsequent sluggish economic growth in the US and Europe.

However, even Asian markets began to suffer in the second half of last year as domestic demand slowed and demand in the US and Europe for finished goods exported from Asia fell away. Plant operating rates have been curtailed and prices have suffered.

These market developments and the prominent role China plays in the petrochemicals sector in Asia, came under the spotlight at an ICIS High-Level Roundtable on Asian Petrochemicals, held in Singapore in association with the Singapore Chemical Industry Council (SCIC) at the end of November.

Eddy Setiawan, president of US major Dow Chemical's Southeast Asian business, said the recent strong performance enjoyed by petrochemical producers has been the result of a number of factors. The downturn, he explained led to a lot of capacity being rationalized so when demand returned, producers were

caught by surprise and the volumes were not there. Also, there was a miscalculation of when expected new Middle East capacity would come on stream fully. "Output was much lower than the expected capacities due to technical and feedstock issues and some plants did not start up on time," Setiawan said.

This situation has resolved itself so more material is available from the Middle East, and now, he warned, there is more capacity coming on stream in China to add to the supply. The slowdown has affected petrochemicals across the board and, he added, the situation is difficult to read right now. Setiawan does not expect the downturn to be as sharp as in 2008–2009, but does expect it to last several quarters, well into 2012.

Roger Wang, general manager in China for Switzerland-headquartered petrochemicals

"In the long term, China must be more domestic market focused and expand its inland areas"

ROGER WANG
General Manager, INEOS Management (Shanghai) Company

producer INEOS, agreed the downturn must be taken seriously. "The first half of 2011 was top of the cycle in terms of industry margins, but the second half was much more challenging," he said.

China's GDP growth has been slowing quarter by quarter since the beginning of the year, and although it is still averaging 9% for 2011, this has been having an impact on chemical demand, he explained. However, Wang added that there are signals the government is beginning to relax credit control again, to boost the economy a little, but not on the scale of the earlier stimulus package as fighting inflation remains a key factor.

"A higher inflation rate will really hurt the system in the country, so managing inflation in 2012 is one of the top priorities for the government," added Wang.

LRS Mani, director of regional chemicals manufacturing and general manager at Eastman Chemical in Singapore, said that based on the US specialty chemical producer's experience, the outlook is not very good. The company has production in Singapore, Indonesia and China, with most output destined for the China markets.

The first two quarters of 2011 were good,

even excellent, he said, but since then “we have been seeing a lot of stagnation in China, particularly in quarter four. Also, people are cutting inventory as well, so that next year [2012] will not be so good for the industry.”

The situation has changed markedly, added Wim Roels, CEO of Abu Dhabi polymer producer Borouge’s marketing and sales company, based in Singapore. “Consumer demand is down, although the fourth quarter should be the peak buying season in preparation for Christmas and New Year [for consumer goods].

“But we are also seeing that other areas like automotive and infrastructure are down – it’s all across the board.”



“[Higher prices] need to filter down the supply chain or producers will get squeezed in the middle”

PREMA VISWANATHAN

Managing editor, Asia/Middle East, ICIS

Prema Viswanathan, of ICIS, added a topical note when she said ethylene production margins have been steadily declining in Asia, leading to producers turning down operating rates. Indeed, in some areas, margins are now negative, given that feedstock rates remain artificially high. This, she said, is not a sustainable situation, as producers downstream have been struggling to absorb the high feedstock prices. “These need to filter down the supply chain or producers will get squeezed in the middle. Integration along the chain will be key to maintaining margins,” she added.

CHINA LOOMS LARGE

It is clear from these comments that the Roundtable participants see China playing a key role in the overall Asian petrochemicals market, given its high growth rates, huge import needs and ongoing investment in capacity. As SCIC’s executive director Terence Kohl pointed out: “You can’t talk about the general market in Asia without mentioning China.”

A number of key points arose during the discussion, which revolved around the developments and changes in the Chinese market. These include:

- the government’s 12th Fifth-Year Plan and its aims to rationalize and upgrade China’s petrochemicals asset base and increase production quality
- the move to stimulate domestic consumption, instead of relying on exports
- the shift of production away from the export-oriented eastern seaboard of the country to the inland areas

■ the move to develop coal-to-chemicals technology as an alternative to using oil and naphtha, much of it imported, as a feedstock

■ the challenge posed by logistics in the country, especially as customers and production move inland from the coast

■ China’s increasing focus on environmental issues.

As Setiawan pointed out, producers in the region are now watching as new capacity comes on stream in China. In the next few years, he added, the country will face a big challenge in terms of naphtha supply to feed the new capacities. The authorities have already recognized this and are progressing a large number of projects based on coal, which is abundant in northwestern China and can be economic as a feedstock in inland areas.

However, Wang was skeptical of the ambitious plans to use coal in petrochemicals, often via production of methanol and hence olefins (using the so-called methanol to olefins processes, MTO) and thus to polymers. “Is this really a mature technology?” he asked. Although Chinese institutes have been working on the development and design, Wang believes a lot of the investments are still experimental and China will have to proceed cautiously until it has proven MTO in a large-scale project.

Koh added that for Singapore, investments in coal and MTO projects are difficult to entertain as long as fossil fuels remain competitive.

Wang also commented on the changes he expects to see in China as the latest 12th Five-Year plan is executed. The government, he explained: “Wants to lift up the quality of products and restructure the sector and bring in new technologies, both external and indigenous, partly through merger and acquisition activity. The Chinese are aggressively looking to acquire [companies] outside China.”

INEOS, he added, is in talks with Sinopec for a joint venture project in Nanjing, Jiangsu province, to build and operate a phenol and acetone manufacturing site. A memorandum of understanding was signed at the beginning of 2011 for what will be China’s largest phenol plant, at 400,000 tonnes/year phenol and 250,000 tonnes/year acetone.

Roels added to the debate by pointing out the way business is conducted in China, and Asia in general, is changing and developing. “Today, business in Asia is still broadly done on price, but there is a clear drive towards quality and consistency. If you are serving a large OEM, you need quality all along the supply chain.”

Asia, he believes, is at a turning point in this respect, and especially so in China. “This will affect the ways companies do business.”

Roels also pointed out the key challenges in the region around logistics and moving raw materials and products around. Capacity for logis-

tics has to be developed, he noted, not only for moving raw materials into the region and finished products out of it, but also for moving product inside these large countries, such as China, India, and even Indonesia. “[Internal] logistics are not getting simpler and present a challenge on their own. In the end, you are moving quite significant quantities of goods.”

In Southeast Asia, with the exception of Indonesia, noted Setiawan, a significant portion of the industry output and economic growth are export-oriented, with China being one of its biggest trading partners.

During the last global downturn in 2008–2009, Indonesia’s economy was the least affected in ASEAN because of its heavier reliance on its domestic market. To be sustainable in the long term, China has to refocus its economic model so demand is much more domestically driven.

WAKE-UP CALL

As Wang pointed out, for the past two years the contribution of exports to China’s GDP has been declining, and the decrease in exports to the US and EU is serving as a further wake-up call to China’s authorities.

“In the long term, China must be more domestic market focused and expand its inland areas – this will be the driving force for China. Relying on the coastal areas as a great exporter is just not sustainable.”

These fundamental shifts in China’s industrial orientation will, added Roels, make logistics even more complicated as manufacturing is located further away from the coast. Materials and finished goods will have to be transported further and infrastructure will need to be developed, presenting a challenge to the country and industry.



“We are looking first at China, but you can’t depend on China alone”

EDDIE SETIAWAN

President, South East Asia, Dow Chemical

Although China inevitably dominates thinking when it comes to petrochemicals in the Asian region – it accounts for 60-70% of business – it is only part of the picture. The Roundtable participants were quick to point out that when considering investment in the region, local market size and potential were the top criteria, often with feedstock access secondary.

India represents a second huge potential market in Asia, given its rising middle class population, but it is not an easy place to do business. Eastman’s Mani pointed to logistics

» and infrastructure as two of the biggest problems hindering investment here. It is difficult, he said, to move raw materials and products around, and it only makes sense to build close to existing complexes in the country, although this does not solve the problem of reaching the customers.

Roels agreed, saying India is an interesting country “with good potential but lots of challenges.” There is, he noted, a strong local producer which is a challenge in itself, especially for companies wanting to export into the Indian market. If the country is to develop downstream customers it is essential, he believes, to establish several suppliers in the market to get more competition.

Several participants said the market is still relatively low in terms of appreciation of quality and a lot of business is still undertaken purely on a pricing basis.

Also, added Mani, labor rates are significantly higher in India than China, and inflation rates are high and growth is slowing. It is the only country to increase interest rates recently to tackle inflation, he pointed out.



“Business in Asia is still broadly done on price, but there is a clear drive towards quality and consistency”

WIM ROELS

CEO, Borouge Marketing and Sales Company

Turning to company strategies, Asia and particularly China are evidently high on the list of the participants’ companies. “For Dow,” said Setiawan, “Asia-Pacific is the ‘engine of growth’ across many of our market-focused businesses.” The key factor for Dow, he explained, is local demand. “We are looking first at China, but you can’t depend on China alone, which is why we are carefully looking also at other countries like Indonesia and India, and have a significant footprint in Thailand.”

In 2011, Dow completed its \$3bn (€2.3bn) Thai Growth Project with the smooth start-up of its specialty elastomers and hydrogen peroxide to propylene oxide technology plants.

It announced the planned opening of an office in Chengdu, China, and its electronic materials business added a research and development center, the Dow Seoul Technology Center, in Seoul, South Korea, with a focus on bringing to the market technological advancements in flat-panel display technologies, semiconductor devices and related applications.

The model, Setiawan said, is to find investments and collaborations that add value and elevate Dow into the solutions space. “Feed-

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LRS MANI

Director, regional chemicals manufacturing/general manager, Eastman Chemical Singapore

stock is important, but it is not everything.” This is consistent with Dow’s strategy to invest preferentially in a portfolio of technology-integrated, market-driven performance businesses.

INEOS, which has no assets in China, is keen to develop in emerging markets, including China and Southeast Asia. It serves the region from its European and North American production base.

The focus, said Wang, is to build capacity for intermediate chemicals in the region, for which it has a strong technology base. Target products include phenol, oxide and acrylonitrile (ACN), which serve a range of downstream products such as polycarbonate and carbon fibre.

Eastman, said Mani, has manufacturing assets in Singapore, Malaysia, South Korea and China and is looking at potential investments in India. It is also putting in technical service center capability into Shanghai, China.

During the past two years, Eastman has looked at growth on a global basis, with Asia playing a key role in strategy presentations. Significantly, some of the senior executives are now based in Asia for the first time.

The Eastman approach for the region, he explained, is to “look for the customer first and then the feedstock. Stability and security of the country are also to be looked at.”

Eastman is also searching for a local partner for its investments. “In some places you do

need a local company to be considered a local supplier, and most of our investments in Asia are joint ventures.” Mani added that protection of intellectual property is also an issue.

At Borouge, a joint venture between Abu Dhabi’s ADNOC and Borealis in Austria, the strategy is a clear one: building up capacity in Abu Dhabi to serve Asian markets. “Our focus is on Asia, which is very much a growth area,” said Roels.

The emphasis, he added, is on differentiated, added-value polymers in end-uses such as automotives, advanced packaging, wire and cable, and pipe systems. To back this up, Borouge is investing in an



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TERENCE KOH

Executive director, Singapore Chemical Industry Council

innovation centre in Abu Dhabi and an application research and development center in Shanghai, China, as well as a second compounding plant in Guangzhou, to complement its existing facility in Shanghai.

FREE-TRADE ISSUES

The wide-ranging discussion also touched on issues surrounding free trade agreements (FTAs) in the region. Participants stressed their support of multilateral and bilateral country-to-country agreements covering the extensions of free trade across the Asian region. These help in some places, said Mani, to ease access to markets. He cited, for instance, the FTA between Singapore and India.

In Singapore, explained Koh, SCIC is closely involved in putting the industry’s case when the government is negotiating bilateral agreements. “It uses SCIC as a platform to conduct surveys,” he adds. Trade is not such an issue for producers in Singapore itself, he said, given that it has zero tariffs for chemicals.

However, Roels added that duties are still an issue in some countries, and can be as high as 20%, mainly in Southeast Asia. There are also, he noted, import duties going into China and India, for example, but at a reasonable level at present.

Setiawan singled out Indonesia, China, Vietnam and India as having a significant impact with duties, but said free-trade agreements could only be agreed when these countries were ready for them in terms of global competitiveness. ■

TAKING PART IN THE ROUNDTABLE

- **Terence Koh**, executive director, Singapore Chemical Industry Council
- **LRS Mani**, director, regional chemicals manufacturing/general manager, Eastman Chemical Singapore
- **Wim Roels**, CEO, Borouge’s marketing and sales company
- **Eddy Setiawan**, president, South East Asia, Dow Chemical
- **Prema Viswanathan**, managing editor, Asia/Middle East, ICIS
- **Roger Wang**, general manager, INEOS Management (Shanghai) Company



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