



Regional characteristics will once again become key factors as the high-water mark of globalisation recedes further into the past

# Polymers face challenging times

Pressures are emerging for the global polyolefins market, requiring a shift in approach. Regional and national characteristics will become key factors

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**D**ifficult times lie ahead for global polymer markets. In the short term it is clear that downstream users have once again been busy building stock in recent weeks as oil prices rose. But now finance directors are getting calls from their bankers asking about working capital levels. It would be no surprise if demand soon slackened off again ahead of the seasonal summer slowdown, as this excess inventory is unwound.

Unfortunately, however, this is not the main problem facing us as we head into the second half of the year.

There are more fundamental reasons for concern in the polymer markets themselves, as China starts to ramp up its own production of polymers, in line with the objectives of its new five-year plan. This calls for 93% self-sufficiency in the propylene chain and 62% in the ethylene chain, by 2020. As the chart shows:

- China's PP production is up 38% in January-April 2016 versus 2014 levels, and its imports are down 28%.

- Northeast Asia and the Middle East have

been badly hit, with their export volumes down 10% and 38%, respectively. In turn, this is starting to create the long-anticipated chain reaction, as these producers seek other markets for their volume.

Net US imports from each region tripled to a combined 62,000 tonnes over the same period, whilst net imports from Latin America also tripled to 32,000 tonnes – versus net exports in 2015 – as China's slowdown forced Latin American producers to seek new markets. There are likely to be further increases through the year as China's imports continue to decline.

This turnaround could not have worse timing, with these imports arriving just as the US domestic market is slowing. US inventories are now back at April 2013 highs, and a major battle for market share is now developing, with US prices for PP starting to tumble.

Contract prices are on track to fall 5 cents/lb (\$110/tonne) in June, after falls of 4 cents/lb in May and 3 cents/lb in April.

Europe has seen an even greater change in its trade patterns. It has now become a net importer, due to the arrival of displaced product from the Middle East and northeast Asia.

Their combined net imports jumped six-

fold in Q1 2016 to 116,000 tonnes, while Latin American net imports jumped nearly nine-fold to 17,000 tonnes. The problem goes far deeper than just PP, of course. European contract propylene prices have fallen sharply in H1 2016 versus ethylene, averaging just 69% of the ethylene price – a level last seen nearly 20 years ago. Already, converters are starting to think about switching from other polymers to PP in certain applications.

## PRESSURE ON PE

This is bound to put further pressure on polyethylene (PE), where China's import volume has also fallen so far this year. It was down 3% versus 2015 as China's own production rose – while its overall demand was up just 1%. The slowdown comes just as the first of the major new US PE plants will be on line in less than a year.

Recent announcements on US capacity expansions highlight the direction of travel. BASF has wisely postponed its proposed 475,000 tonne/year methane-to-propylene complex at Freeport, Texas. This highlights the rapid shift taking place in demand drivers for the entire petrochemical and polymer industry:

- Until recently, the industry has operated on the “build it, and buyers will come” principle of Kevin Costner's 1989 baseball movie “Field of Dreams”. It profited from a 25-year economic SuperCycle, which caused business models to become supply-driven, based on the strength of Baby Boomer demand.

■ Today, however, we are going “Back to the Future”. Feedstock cost advantage remains necessary, but it is no longer enough to guarantee profit in a world where demand growth is slowing sharply, as we describe in our joint study with ICIS, “Demand – the New Direction for Profit”.

Thus, while BASF was postponing its decision, Shell was confirming its plan to build a new greenfield site at Monaca, Pennsylvania, to produce 1.6m tonnes/year of PE. As Shell’s announcement confirms, the plant is expected to gain competitive advantage not only from being able to roll-through margins from locally produced ethane, but also from being close to potential customers.

“As a result of its close proximity to gas feedstock, the complex, and its customers, will benefit from shorter and more dependable supply chains, compared to supply from the Gulf Coast. The location is also ideal because more than 70% of North American polyethylene customers are within a 700-mile radius of Pittsburgh,” Shell stated.

**NEW POLYMERS STRATEGY**

The key question, of course, is: What do these developments mean for the polymers market? More important, what do they mean for your company’s strategy? How can you expect to

grow revenue and profit over the next decade, in a world where China no longer needs ever-increasing volumes of imports, and where feedstock advantage no longer provides sufficient competitive advantage? This is where our new study, “Demand – the New Direction for Profit”, can help provide answers.

As Shell’s project demonstrates, companies will need to establish new value propositions for their offerings, focused on target markets, rather than assuming they will have generic attraction to everyone.

Secondly, regional and national characteristics will once again become key factors as the high-water mark of globalisation recedes further into the past.

Instead of centralising resources in a few key hubs, managements will need to build up strong locally based technical and commercial teams focused on the specific needs of their market.

This will require employing experienced techno-commercial people on the ground in target markets (in terms of both application areas and geographies). They will also need support from capable R&D teams who can translate the needs they uncover into new products and services.

In turn, this will mean cost reduction programmes will need to be rethought. The tra-

ditional focus on headcount will be counter-productive, as centralised organisations based on regional hubs slowly disappear. Today’s often overly complex supply chains will also need to be reviewed, and the opportunities for reshoring back to the West reassessed to maximise the value proposition.

“This is impossible”, we can hear you saying in response. “Our shareholders would never allow us to invest for the future like this. They want profits today, not tomorrow.” And, of course, we understand your concern. We have been living in a world where the average “investor” holding period for a stock in the US S&P 500 Index is just four months. And more than half of all share trading is carried out in milliseconds by today’s modern highwaymen, the high-frequency traders.

But genuine investors still exist, who have a sense of fiduciary duty. They believe their job is to support companies to grow their earnings, on the basis that this growth will fund the future dividends required to meet pension promises.

They are quite different from many of the so-called activist investors, whose only concern is to buy themselves a bigger yacht, or a larger Manhattan apartment, and do not care about what happens in the future.

It is hard to overestimate the challenges that these developments will create for companies over the next few years.

It is hard enough to reinvent business models when markets are favourable. But it is even harder to change direction when volumes are under threat, and some key investors are seeking to take cash out of the business as quickly as possible.

**DUAL CHALLENGE**

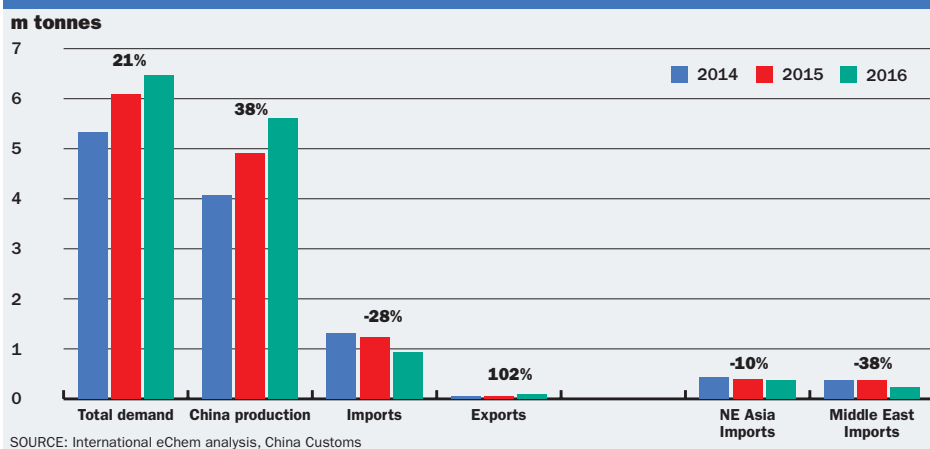
Essentially, companies face a dual challenge. They have to develop radically new value propositions that are based not only on the value of the product itself, but on the value provided by these products.

In addition, they also have to build robust stakeholder relationships with customers, suppliers and investors that are future-oriented rather than being focused on maximising break-up value next week.

Change on this scale is never easy, especially when core assumptions have to be rethought. But the good news is that the “new normal” world is opening for business. As the study’s route map demonstrates, there are excellent prospects ahead for the winners who understand and embrace the opportunities it is creating. ■

**For more information on the joint ICIS/ International eChem scenario study “Demand – the New Direction for Profit”, visit [www.icis.com/services/consulting/scenario-planning/demand-the-new-direction-for-profit-study](http://www.icis.com/services/consulting/scenario-planning/demand-the-new-direction-for-profit-study)**

**CHINA PP PRODUCTION AND TRADE DATA, JAN - APR**



**EUROPE CONTRACT PROPYLENE/ETHYLENE PRICE RATIO**

