Uncertainty over crude oil prices, market volatility and large-scale increases in global supply are just some of the key factors that market participants must watch next year.

**FABRIZIO GALIÉ, ROB PEACOCK, RHIAN O’CONNOR ICIS CONSULTING**

As Europe continues its hesitant economic recovery, petrochemical markets in 2017 will face an uphill battle on several fronts. We asked ICIS price forecast consultants to give their views on the main challenges to look out for in polyolefins, benzene, styrene and polystyrene (PS) markets in Europe next year.

Rob Peacock is the author of the ICIS Benzene and Styrene Europe price forecast report; Rhian O’Connor writes the PS Europe price forecast report; and Fabrizio Galié writes the PP and PE Europe price forecast reports. They will be attending the EPCA meeting in Budapest.

**ROB PEACOCK ICIS CONSULTING**

**EUROPE BENZENE AND STYRENE – THE COMPETITION CHALLENGE**

Some years ago there were concerns in the benzene market that new, worldscale paraxylene (PX) plants would unbalance the benzene market with the glut of co-produced benzene from these large units, and their integrated new condensate splitter and re-former capacity.

However, the following events curbed significant oversupply:

- Crude oil increased to over $100/bbl, so crackers increasingly switched to lighter, lower-cost feedstocks, which reduced pygas output and hence benzene availability
- Rationalisation of older capacity, much of it linked to cracker closures
- Continued growth in downstream derivative demand, especially China
- There have also been project cancellations, delays and production issues
- However, the restart of some units (for example, Jurong, Singapore) and the prospective and planned start-up of other units, either delayed or new paraxylene units and naphtha crackers, could well see the situation changing again, especially if global demand growth falters.
THE THREE key challenges facing the European polyolefin market in 2017 are competition, volatility and the overall business environment – that is, the global economy, finance and geopolitical events.

The biggest challenges to the European market will come from an international context, rather than the local market itself. The recovery in the eurozone has consolidated during 2016, after a couple of years of oscillating trends, although general economic conditions still remain uncertain. Analysis by the ICIS Consulting & Analytics team shows a forecast growth rate of 1.5-2.0% for polyethylene (PE) and 3.0-3.5% for polypropylene (PP) in Europe next year. The forecast is even higher in the central and eastern European area, with PE set to grow by over 3% and PP by over 5%.

The first major threat to the market comes from the supply side, as global capacity expansions are set to increase competition, especially in the PE market. Low-cost producers are bringing on line massive new capacities in North America, the Middle East and China, which could lead to situations of oversupply, depending on the actual timing of the projects’ start-ups.

In North America, almost 3.5m tonnes/year of new PE capacity is expected to be on line before the end of next year.

This will include the recently started Braskem-Ideas plant in Mexico, with a target capacity of 1.05m tonnes/year, plus state-of-the-art units run by Chevron Phillips Chemical, INEOS and Sasol, Dow Chemicals and ExxonMobil in the US and by Nova Chemicals in Canada – all scheduled to start-up during 2017.

In the Middle East, the massive Sadara complex – a joint venture between Saudi Aramco and Dow Chemical – will complete the progressive start-up of 350,000 tonnes/year of low density PE (LDPE) and 750,000 tonnes/year of linear low density PE (LLDPE)/high density PE (HDPE) in late 2016 or early 2017.

In China, a total of 1.4m tonnes/year of new PE capacity is set to come on stream during 2016, and 1m tonnes/year in 2017.

On top of all these, during 2016-2017, projects are planned in southeast Asia, the commonwealth of independent states (CIS) area, Iran, and Egypt, where the new 400,000 tonnes/year swing HDPE/LDPE capacity run by ETHYDCO (Egyptian Ethylene and Derivatives Company) intends to target Europe via various distributors in its major export destinations.

The ramp-up of these units will certainly be gradual, and depend on several factors including the development of effective logistics. We expect the full impact will not be seen in Europe before late 2017 or even after. The increase in PP capacity is far less impressive, at least in the short-term, but recent oversupply in the US and China will have implications from late 2016 and China’s endeavour to increase self-sufficiency should force exporters, especially from the Middle East, to re-allocate volumes to alternative destinations, including Europe.

The second pressure point for Europe will be price volatilities, which will probably be even more intense than what was seen in 2015 and so far in 2016.

Fluctuations in the crude oil price render polyolefins buyers cautious because of the risk of sudden PE and PP price swings.

We expect European producers’ margins to remain substantial next year, although probably seeing some reduction due to increased competition or in the case of a relative recovery of crude and naphtha.

Even if big hikes are excluded in our short-term base case, you certainly need to consider multiple scenarios, and unexpected increases in petrochemical values can undermine both producers’ margin stability and the commercial capability of processors.

The global oversupply in crude production looks likely to prevent a significant increase in the costs of raw materials. However, short-term shocks may occur. It will be interesting to see what will happen in November 2016 after the US presidential elections, and when OPEC meets in Vienna at the end of the same month.

Finally, some factors are harder to predict, including those coming from international finance, politics, Brexit, or even military and other events.

An important issue for Europe will certainly be the evolution of the Turkish market, if the business activity in the country is affected by political and economic instability.

The big challenge in Europe will be to react promptly to these events. Producers and buyers need to take a position to respond quickly to any strong modifications of the competitive environment. A key for success in the short-term will be a cautious and intelligent approach to inventory management at all levels.

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**EUROPEAN POLYSTYRENE (PS) producers have experienced record margins in 2016:** their challenge for 2017 will be maintaining this level of profitability with the triple threats of competition from other lower-priced polymers, Asian oversupply and the emergence of the Egyptian and Middle East industry.

There has been a wide-scale consolidation of the industry, as businesses merged or exited the market. Capacity across Europe fell by almost 1m tonnes/year from 2000 to 2015. This rationalisation was partly due to lower consumption, as well as producers' desire to improve profitability.

In addition, there has been a small pick-up in demand in 2016. A major factor was a slowing of the substitution to other low-cost polymers like polypropylene (PP). Many see this lower substitution as the result of technical rather than pricing reasons. To put it simply, anyone who could swap has already done so. For many applications PS is the only real alternative. One converter gives the example of snapable yoghurt pots, which cannot currently be produced with PP.

For 2017 we see little change to this trend and believe PS will continue to be the only viable option for many applications.

Oversupply in Asia has so far had limited impact on European pricing. The overwhelming driver of this is reliability, with buyers and traders all talking of quality and timing issues of product from South Korea and other origins. In many applications, PS is tested and certified by endusers in consumer, food, automotive and electronics industries.

Changing suppliers is often costly and time-consuming. For 2017, we believe Asian imports into Europe will be largely flat, as European producers maintain market share.

Similarly we see little short-term impact from new or reopening capacity in Egypt and the Middle East. E-styrenics reopened its 200,000 tonne/year plant in Egypt in 2016 when supplies of feedstock into the country improved. However, converters in Europe are said to be wary of buying, with the future seen as uncertain both politically and economically. Similarly, new capacity in Iran is due on stream in 2016 as Takht-e Jamshid Petrochemical opens its 50,000 tonne/year plant. We see delays to full production and exports and believe this plant will have limited impact in Europe into 2017.

So with little change to the positive fundamentals for European PS producers in 2017, we believe the industry will continue to be challenging for buyers who are price-takers in a highly consolidated market. Their challenge will be to pass this premium pricing on to end-consumers.

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**In 2017, polystyrene will continue to be the only viable option for many applications**

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**POLYSTYRENE GLOBAL MARGINS**

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*$/tonne, GPPS integrated based on naphtha*

**SOURCE:** ICIS margin reports
A CHALLENGING TIME FOR EUROPE’S CHEMS

The start of 2016 saw the US and Europe yet again into the highest price position, following months of term needs on the spot market – a situation that is not expected to change, if not quite reverse.

Although contract prices have remained stable, there has not been much in the way of arbitrage trade. This has been due to the almost continuous backwardation in the market – therefore allowing some imports, but whether this is a short-term blip or a return to the previous situation remains to be seen as we move towards 2017.

For the styrene industry, a considerable battle on several fronts. We asked market participants to give their with both styrene and benzene supply are just some of the key factors that market participants must watch next year.

Uncertainty over crude oil prices, market volatility and large-scale increases in global demands and the lack of liquidity in have also been launched on the ICIS Dashboard.

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