As PE margins remain pressured, could prices move higher?
As PE margins remain pressured, could prices move higher?

ZACHARY MOORE JANUARY 2020

Margins for US polyethylene (PE) producers remain under pressure following a year of compression in 2019. Prices and margins have declined over the past year as significant capacity expansions have come online even as global GDP slowed to the lowest growth rate in a decade.

US PRODUCTION COST ADVANTAGE

PE producers in the US Gulf enjoy some of the most favourable production economics in the world thanks to the availability of low-cost ethane feedstocks. Costs of production in the US are similar to those in the Middle East and well below production costs for Asian and European naphtha-based producers.

The recent downturn in pricing has caused US PE margins to drop below the levels seen in previous years, although margins remain in positive territory for US production. Margins for Asian naphtha-based production, meanwhile, have been below break even thresholds since November, according to data from ICIS Margins Analytics.

CAPACITY INCREASES

US capacity has risen significantly in recent years. Over 6.5m tonnes/year of new capacity are set to be added between 2017 and the first half of 2020 after some projects set to start-up in late 2019 faced delays.

LyondellBasell remains in the commissioning phase at its new 500,000 tonnes/year Hyperzone PE plant in La Porte, Texas.

Formosa delayed the start-up of its new 1.2m tonnes/year cracker and 400,000 tonnes/year low density polyethylene (LDPE) plant in Point Comfort, Texas. The units had been expected to start up at the end of 2019.

Sasol had been in the commissioning phase at its new 420,000 tonnes/year LDPE plant in Lake Charles, Louisiana when the unit experienced a fire and an explosion.

An investigation is currently underway into the cause of the incident, the extent of the damage to the plant and the revised start-up schedule for the facility.

SLOWER DEMAND GROWTH

Global GDP sank to the lowest level seen in a decade in
2019, leading to slower than expected PE demand growth.

This, combined with capacity expansions in the US and elsewhere, prompted increasing competition for market share and consequently lower prices.

The favourable cost position of US PE producers allowed US companies to significantly increase their exports from 2018 to 2019, although the large new capacities built-up in the US lengthened domestic supply as well.

**DOMESTIC EXPORT SPREAD**

The rise in exports contributed to the margin compression experienced by US producers as export business is typically concluded at lower prices than domestic contract business. Therefore, increasing the percentage of sales in lower-margin market segments relative to higher-margin segments weighed on overall margin performance.

According to data from ICIS pricing, domestic contract prices for high density polyethylene (HDPE) blow moulding traded at an average of premium around 16 cents/lb ($353/tonne) over spot export prices during the course of 2019.

The spread widened throughout much of the first half of the year before the increasing gap between domestic and export numbers helped pressure domestic prices lower.

ICIS assessed domestic PE prices lower by a cumulative amount of 11 cents/lb during the course of 2019, with December contracts assessed at 42-48 cents/lb for linear low density polyethylene (LLDPE) butene film, at 45-49 cents/lb for HDPE blow moulding and at 49-53 cents/lb for LDPE hi-clarity film grade, all on a delivered US in bulk basis.

**JANUARY DISCUSSION**

The new year has opened with price increase initiatives prompted by negative margins.
for naphtha-based producers and hopes of improved economic conditions.

Most economic forecasts are calling for a higher rate of global rate GDP growth in 2020 compared with 2019, although 2020 growth is expected to remain below 2018 levels in most models.

Increases of 4-5 cents/lb are being sought on domestic PE business while the export markets have seen increase initiatives of between 1-3 cents/lb.

Recent news of a phase one trade deal being reached between the US and China is likely to generate increased confidence in international markets, which has spurred some early month price increases in the export market.

Domestic negotiations are ongoing. Delays in the start-up of some new capacities may give some support to prices while persistently low prices for ethane feedstock may help erode some of the momentum for higher prices.

New pipelines and fractionation capacities are coming online in the US Gulf and this is keeping ethane well-supplied even as new crackers increase incremental ethane demand.

PE is the most widely used plastic in the world, primarily found in packaging including plastic bags, plastic films and geomembranes.

Major US producers of PE include Chevron Phillips Chemical (CP Chem), DowDuPont, LyondellBasell, ExxonMobil, Formosa, INEOS, Total Petrochemicals and Westlake.

Gain insight with Margin Analytics

Will US PE producers’ margins continue to remain in positive territory? Let us help prepare you for what happens next in the PE market.

With comprehensive data for variable margins by feedstock and location, you can easily benchmark your performance against the rest.

DRIVE YOUR MARGIN PERFORMANCE HERE

Zachary Moore
Deputy Managing Editor, Americas

Zachary Moore joined ICIS in June of 2016 and has been working in the petrochemical industry for the past eleven years. Zachary has covered a wide range of petrochemical products including polyolefins, aromatics and aromatics derivatives and has worked in Asia and the Middle East in addition to his time in the US.