



ICIS Interactive 2019

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APLA ANNUAL MEETING

TIME FOR LATIN AMERICA TO RISE TO THE CHALLENGE

OPENING CEREMONY, BUENOS AIRES, ARGENTINA





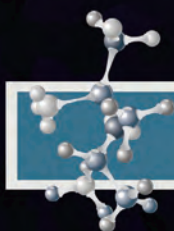
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INTRODUCTION



NEWS

Braskem sees recovery

Ecopetrol to double sales

Oxiteno to boost production

ICIS on recycling challenge

Elekeiroz on Brazil reform

YPF to boost gas production

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OUTLOOK BRIGHTENS

Braskem's Edison Terra sees plastics demand improvement in 2020

The outlook for Brazil's plastics market could brighten in 2020 with the overall economy, which should continue recovering.

This year, Brazilian demand for plastics will likely grow by 2.5-3%, said Edison Terra, vice president of Braskem's business unit for polyolefins, renewables and Europe.

That compares with a forecasted GDP growth rate of 0.92% from economists surveyed by the central bank. Next year, economists expect Brazil's GDP to grow by 2%. Since

demand for plastics rises and falls at multiples of GDP, the forecast points to a rise in plastics consumption in 2020.

In particular, the construction industry is showing signs of new investment after several years stuck in a downturn, Terra said. Interest rates have fallen and credit access has increased.

Construction is a major end market for PVC. During the downturn, Brazil had been exporting the resin, something that was uncommon in previous years.



OXITENO PLANT BOOST

CEO Joao Parolin aims to triple production at Texas alkoxyates plant by 2022

Brazil-based Oxiteno is targeting operating improvements and a tripling of production at its alkoxyates plant in Pasadena, Texas, US by 2022.

“The plan is to produce around 50 different products which is different from running a commodity plant, so we are gradually increasing the complexity of products there,” said Joao Parolin, CEO of Oxiteno.

“We faced some technical issues that are normal in the first phase of operations but we are on an upward trend in terms of reliability and service

to customers,” he added.

Oxiteno is targeting surfactants production from the plant of 120,000-125,000 tonnes by 2022, up from around 40,000 tonnes in 2019.

“It’s a multi-purpose plant. We want to fill it and keep improving the mix. We are running at full capacity with the current mix but with unoptimised production cycles which we are working to improve,” said Parolin.

Key end markets are ag chemicals, food additives, health and personal care, and oil and gas.



BRAZIL GAS REFORM

Elekeiroz CEO Marcos De Marchi sees natural gas reform boosting Brazil's chemical sector

Brazil's new laws governing its natural gas market should benefit the nation's petrochemical industry, which accounts for 25% of the country's demand for the fuel, said Marcos De Marchi, CEO of Elekeiroz.

The rule is known as Novo Mercado de Gas. It opens up the production, transportation and distribution segments of Brazil's natural-gas market, he said.

Transportation refers to shipments of natural gas across states, while distribution refers to shipments within

states.

All three segments were heavily concentrated under the earlier regime, making them effective monopolies, Marchi said.

The CEO expects Brazil's chemical industry to improve in 2020 with the overall economy after a depressed 2019, with demand from the construction and footwear end markets recovering.

Elekeiroz makes plasticizers used in polyvinyl chloride (PVC), as well as oxo-alcohols.



LATAM OUTLOOK FLAT

BASF SVP Antonio Lacerda sees flat or slight demand growth in 2020 but reforms offer hope

The outlook for Latin America's chemical market is relatively flat for 2020 but structural reforms in Brazil offer hope for future growth, a senior executive at BASF said.

"We see 2020 as a similar year to 2019 with no major changes demand-wise. Markets are long and may become a bit worse with capacity recent expansions in Asia and the US," said Antonio Lacerda, senior vice president of chemicals and performance products in South America.

Demand in Latin America may grow slightly, driven by Brazil, Colombia and Peru, as well as a potential short-term positive surprise from Argentina, he added.

"Argentina may be a positive surprise as every time there is a new government, there are signs of hope. It might last 12-18 months but is not likely to be sustainable," said Lacerda.

In Brazil, a series of reforms could cut the high price of natural gas, reduce freight rates and jump start infrastructure investment, he said.



ECOPETROL GROWTH

Pedro Manrique plans to double the chemicals business, excluding Esenttia, to \$1bn in sales by 2023

Colombia-based Ecopetrol plans to double sales of its chemicals business excluding the Esenttia polypropylene (PP) unit.

“We are changing the way we do business, focusing more on keeping our customers supplied. In 2018 we started importing products so we could supply customers when we were down for maintenance. Now we deliver our own products and imports,” said Pedro Manrique, vice president, commercial and marketing for Ecopetrol.

“There are still opportunities in our own market and in Ecuador, Peru, Chile and Central America,” he added.

Ecopetrol grew chemical sales by 30% from 2017 to 2018 and expects to hold sales steady in 2019 despite an overall drop in prices.

“Our plan is to double the business by 2023 for chemicals and plastics from about \$500m in sales to \$1bn,” said Manrique.

This excludes Ecopetrol’s wholly owned Esenttia Polypropylene business.



RECYCLING CHALLENGE

ICIS VP of consulting James Ray highlights challenges and opportunities in plastics recycling

Plastics recycling faces a number of challenges to be economically viable but will still have some impact on the market, an ICIS consultant said.

“The consumption of recycled polymers will grow over time, but will be limited by supply infrastructure. It is unlikely to seriously impact existing production but could impact future expansions,” said James Ray, vice president of consulting at ICIS.

Today, mechanically sourced recycled material is constrained by issues in collection/sorting

infrastructure and the lack of sufficient reclamation capacity.

Chemical recycling can overcome the limits of mechanical recycling.

“But there is a difference between something being physically recyclable and economically recyclable. Lightweight articles that are mixed and dirty often cost more to mechanically recycle than they are worth,” said Ray. “Chemical recycling is in its infancy because it is expected to be expensive and hard to compete in low oil price economies.”



YPF TO RAISE NATGAS

Executive manager Federico Veller expects rising gas production to feed into petrochemical projects

The advent of shale gas in Argentina could provide the feedstock for a variety of petrochemicals projects, ranging from on-purpose propylene to methanol, an executive with YPF said.

“The Vaca Muerta is a complete reality today,” said Federico Veller, commercial executive manager for YPF Quimica.

The Vaca Muerta is Argentina’s most prominent shale gas formation. Over the years, the country has successfully developed its unconventional energy reserves, causing an increase in the

production of natural gas, oil and natural gas liquids (NGLs).

This could provide the feedstocks for new petrochemical capacity.

One possible project is a doubling of urea capacity at Bahia Blanca to 2.5m tonnes/year by 2024.

Another possibility is a world-scale methanol plant, he added.

A producer could use the propane in the system to make on-purpose propylene, Veller explained. The propane dehydrogenation (PDH) plant could feed a downstream PP plant.



MERCOSUR-EU DEAL

Jorge Buhler-Vidal from Polyolefins Consulting sees trade deal boosting Argentina petrochemicals

The Mercosur-EU trade agreement reached in June 2019 should boost Argentina's petrochemical sector in the long run because of cost competitiveness from the Vaca Muerta shale gas region.

"The Mercosur-EU trade agreement doesn't mean you have to be the cheapest in the world, but it helps to be on the cheap side," said Jorge Buhler-Vidal, director of Polyolefins Consulting. "When you look at the Vaca Muerta and potential petrochemical projects, it may not be

as cheap as the Middle East or the US Gulf Coast, but it would still be on the lower left side of the cost curve. If South Korea can compete in Latin America, a plant in Argentina can compete."

In June, the Mercosur countries - Argentina, Brazil, Paraguay and Uruguay - and the EU reached a trade agreement to remove trade barriers.

The Mercosur countries will have more time to adjust to imports from the EU while benefiting from open EU markets earlier.



◀ Opening ceremony

Delegates from chemical businesses worldwide network at the APLA opening ceremony reception at the Kirchner Cultural Center in Buenos Aires, Argentina.

▶ Outlook 2020

James Ray, vice president of consulting at ICIS, delivers a presentation on the hot topic of plastics recycling at the APLA consultants panel discussion.



◀ TED talk at APLA

Delegates listened to a speech being delivered by Gerry Garbulsky, director of TED en Espanol. TED is a nonprofit devoted to spreading ideas in the form of short talks.



◀ **CEO panel discussion**

Ecopetrol's Pedro Manrique speaks on competitiveness at the APLA CEO panel discussion with Braskem's Fernando Musa and Dow's Diego Ordóñez participating.

▶ **Executive outlook**

Elekeiroz CEO Marcos De Marchi moderates the panel discussion with YPF Daniel Gonzales speaking on Argentina shale gas production and potential.



◀ **Plastics education**

An instructor teaches a group of students about plastics in a learning center set up at the APLA annual meeting at the Sheraton Convention Center.





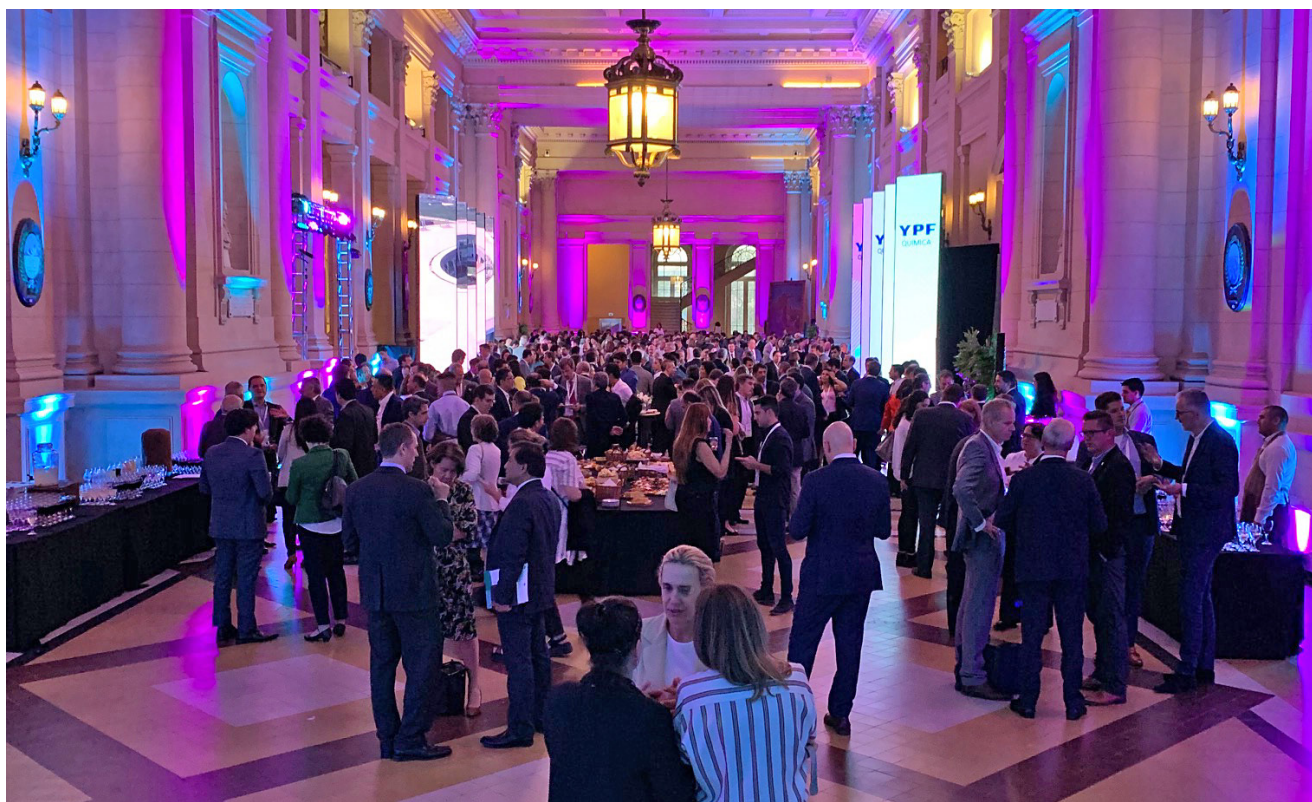
Delegates find time to network and enjoy the wine tasting event sponsored by Argentina's Petrocuyo.



The Camerata Argentina band put on a great performance at the opening ceremony of APLA's annual meeting.



A panel discussion and presentations on polyolefins, chlor-alkali and PVC, IMO 2020, gas markets and the global economic outlook at the ICIS Latin America Outlook 2020 seminar ahead of the APLA Annual Meeting drew a crowd of over 80 participants.



The APLA opening ceremony and cocktail event at the Kirchner Cultural Center in Buenos Aires was a hit with delegates.

ICIS Price Forecast Reports



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ICIS price forecast reports provide a clear view of prices and supply and demand trends for the next 12 months. Packed with vital information, the report includes everything you need to assess where the market is heading and the impact or opportunity that presents for your business.

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