Middle East Chemicals Outlook 2017



A MIDDLE EAST CHEMICALS OUTLOOK



BASE OILS IRAN POLYOLEFINS POLYSTYRENE SAUDI ARABIA TOLUENE DI-ISOCYANATE

BASE OILS

OUTLOOK FOR MIDEAST GROUP I BASE OILS RESTS ON CRUDE, CURRENCY

By Veena Pathare

Spot Group I base oil prices in the key UAE market are likely to face a high degree of volatility following movements in crude oil prices in the first half of 2017, market sources said.

A high degree of unpredictability on the crude oil front, coupled with an exposure to currency fluctuations in key buyer markets are expected to impact Group I base oil prices in 2017, market sources added.

Market players are thus likely to remain cautious about base oils demand and offtake in the months ahead, sources said.

Import prices of Group I SN150 and SN500 witnessed significant movements in 2016 tracking sharp swings in upstream crude values.

Crude oil prices were mostly bearish for 2016 and have been largely so since the second half of 2014, weighed down by a pessimistic outlook brought on by the shale gas boom in the US.

However, the decision taken by the Organization of the Petroleum Exporting Countries (OPEC) on 30 November to cut crude oil output in 2017 has lent support to sharp gains late into the year.

Prices also rallied sharply with an 18-month high netted on 12 December when the non-OPEC countries led by Russia agreed to jointly reduce output to combat global oversupply.

The recent gains in crude are yet to be reflected on base oil prices given the seasonal lull at the end of the year.

It is possible that offers for January-lifting product may be firmer, taking into account the firmer crude levels.

However, industry sources are of the view that a big jump in crude prices may not



© 2016 ICIS

sustain because production cuts may not happen as planned.

"People are still talking of how crude outlook remains bearish in the longer-term because it all comes down to whether crude production cuts really happen, and analysts don't seem to be confident that the price surge will sustain. We think this strong recovery may be short-lived," a UAE-based importer said.

Market players now remain uncertain on where crude oil prices wil stabilise early in the year and are expected to procure base oils on a need-to basis until a clearer picture on crude oil values emerges in the weeks ahead.

Demand for blended lubricants in Africa was strained by currency issues in many countries.

With Africa serving as a key market for finished product exports, base oil purchases among several UAE-based blenders was affected as they grappled with order cancellations and payment delays owing to a lack of US dollar availability.

Market players expect currency issues to continue affecting demand for finished

lubes and weigh on base oils offtake in 2017 as well.

The difficult political landscape prevailing in many African nations is also likely to impact the trade, market sources said.

Furthermore, the absence of credit facilities available for the import of sanctioned Iranian base oils will continue to hinder large-volume cargo imports from Iran, market sources said.

"Owing to the sanctions imposed on Iran, we have to purchase base oils from Iran on a cash basis. So volumes purchased at time are limited because it is difficult to come up with large amounts of cash to fund big volumes," a UAE-based base oil importer said.

With a limited idea on the lifting of sanctions imposed by US on Iran given the change in US presidency, market players also remain uncertain on the availability of credit to fund Group I base oil imports from Iran in the months ahead.

"All eyes are now on Donald Trump, what he does with the Iran nuclear deal and his stand on the sanctions," the importer added.

Back to Quick Navigation 🔿 | 02



IRAN



IRAN BUILDING THIRD-BIGGEST PETCHEM COMPLEX IN MOKRAN By Tahir Ikram

Iran is building an \$11.9bn petrochemical complex in Mokran that will offer great potential for investors due to its strategic location, with ready access to cheaper gas feedstock, an industry executive told ICIS.

The Mokran petrochemical complex, located at the south eastern Chabahar coastal area, will be the third-largest petrochemical base in Iran, after Bandar Imam and Asaluyeh.

"We have developed several scenarios in investment, partnership and financing. Foreigners can own up to 100% of the plants or can join Iranian investors as their local partner," Reza Ebadzadeh, CEO of SPI International Proprietary Ltd (SPII), a subsidiary of SHASTAN, which owns nearly one quarter of petrochemical sector of Iran, said in an email interview.

SHASTAN is the master developer of the Mokran Petrochemical Hub, as well as the owner of three plants plus utility (nine different packages) within the Mokran Area, while SPII is in charge of funding arrangement for SHASTAN's mega projects.

The Mokran complex is projected to have a total production capacity of 25m tonnes/ year, a considerable part of which will be exported and the rest kept for captive domestic downstream use, according to an Iranian government publication.

Mokran Petrochemical Complex consists of four urea-ammonia plants, four methanolammonia plants, five methanol plants, two olefin plants, one aromatics plant, one methanol-to-olefin plant and one crystal melamine plant. It has three sections reserved for construction of additional plants and nine sections reserved for construction of 30 downstream units. The site also offers huge storage, utility and terminal infrastructure.

"Iran is a player that cannot be ignored in this game. Simply 20% of methanol of the world shall come out of Asaluyeh....strategic location, access to international water, easy access to landlocked markets give us a logistic superiority," Ebadzadeh said highlighting Mokran projects' advantages.

"In the new world trends, only countries with outstanding competitive advantages can stay," Ebadzadeh said.

In 2012, a company called Negin Mokran Development Petrochemical Company (NMPC) was set up under SHASTAN as the master developer of the project. The project's study, land preparation and acquisition of required licenses started in late 2015.

"Now, negotiations for the utility project have concluded and three contracts have been signed on build-operate-transfer & EPCF [engineering, procurement and construction] basis, Ebadzadeh said. Construction of the first methanol plant at the site known as Badr-e-Shargh started in 2016. The 1.65m tonne/year plant is expected to come on stream by 2019.

"For [the] methanol section, license agreement, as well as the EPCF [engineering, procurement, construction and finance] contract has been already signed," Ebadzadeh said.

"We have also signed an MOU [memorandum of understanding] with a reputable Russian company for EPCF of the pipeline project and I believe the contract will be signed before 21 March," Ebadzadeh said, referring to the proposed Mokran Gas Transmission Pipeline responsible for providing the feedstock to each plant.

"Three phases have been defined for the upstream projects. The construction started in 2016 and each phase will take three to four years to complete. Downstream projects will be constructed in parallel with or after upstream plants construction based on investors' policies," Ebadzadeh said.

The initial phase of the Mokran project will require \$5.7bn in investment.

| Mokran Project | Investment (in \$m) | Timeline |
|----------------|---------------------|-----------|
| Phase 1 | 5,700 | 2019-2020 |
| Phase 2 | 2,800 | 2021-2022 |
| Phase 3 | 3,400 | 2023-2024 |
| Total | 11,900 | 2019-2024 |

Most of the projects have been sold out to local investors, according to Ebadzadeh though most of the owners would like to have international partners.

"Petrochemical plants in Mokran may enjoy 10% to 30% discount in gas feedstock price awarded by the government in Chabahar Free Trade-Industrial Zone," Ebadzadeh said.

"More specific, as the value chain is extended from level one to level three, the discount increases from 10% to 30%," he added.

Iran is developing Chabahar industrial zone on the northeast coast of Oman Sea outside of the Persian Gulf and is working on developing a deep sea port, railways and airport.

The government offers 20 years of tax and duty exemptions on projects at the Mokran complex, Ebadzadeh said.

He acknowledges concerns about a global oversupply of petrochemicals, in the wake of the shale gas boom in America and new capacities in China. However, he stated that there are solutions to encounter this situation.

"The growth in demand is moving from traditional markets to new markets. We are

SUPPLY AND DEMAND DATA

lowering our dependency to a so-called, monopsony," he said.

"Although there are some signs that China is going to have lower economic growth rate, there are many other growing markets... It is not a difficult task to expand our presence in India, Africa, ASEAN and Pakistan.

"Although it is easier for us to deal with large quantities, today you can knock the door of our office in Germany, and ask only for one truck! It is our main competitive advantage that we have a sound control from A to Z, manufacturing to distribution," he added.

You can rely on ICIS for all your market intelligence needs

PRICING INFORMATION

ICIS is the benchmark for independent and reliable price assessments on more than 180 commodities traded in regions such as Asia, Europe and the Americas. Our reports also provide price histories and expert commentary to help you understand the key price drivers and market conditions and settle your contract prices confidently with access to time-sensitive offers, bids and price movements.

Request your free sample report

NEWS INFORMATION

Be the first to find out about breaking news and analysis across the global petrochemical markets. Our market-moving news articles cover production updates, plant capacities, output and shutdowns, plus so much more.

>> Request a free trial of ICIS news

FORECAST REPORTS

ICIS publishes monthly forecast reports for selected commodities showing a 12-month rolling price forecast as well as details of supply and demand, trade balances, capacity and margins. It is a valuable tool to identify commercial opportunities in the short to mid-term.

Enquire about the price forecast reports

DIGITAL CHEMICAL BUSINESS MAGAZINE

Receive an end-to-end perspective across the global petrochemical supply

Data includes import and export volumes, consumption, plant capacities,

production and product trade flows - from 1978 up to 2030.

Enquire about our supply and demand data

chain, enabling you to grasp the local or regional scenario in a global context.

ICIS Chemical Business (ICB) e-magazine is the No.1 source of market intelligence and analysis of the global chemical markets. It is the essential reading for global chemical industry players, providing decision support for executives making current transactions, as well as short term and long term planning.

Download a free sample now

POLYETHYLENE AND POLYPROPYLENE



MIDEAST PE/PP PRICE OUTLOOK WEIGHED DOWN BY AMPLY SUPPLY By Veena Pathare

New polyethylene (PE) supply expected to come on stream in 2017 is likely to weigh down on Gulf Cooperation Council (GCC) spot prices in the first half of the year.

Demand for plastics in key sectors such as packaging, consumer goods and construction remains hampered as a result of a lacklustre macroeconomic performance brought on by a weak crude environment, market sources said.

GCC's PE demand is likely to remain largely similar to that seen in 2016 and the additional surplus supply resulting from newer startups is expected to weigh down on PE prices in the months ahead, market sources said.

"I don't think there is any scope for prices to go any other way other than down considering so much PE capacity is coming up," a GCC-based importer said.

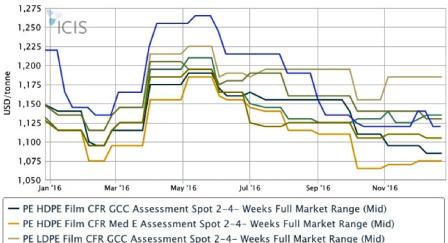
Sadara Chemical Company (Sadara) started up its 1.5m tonne/year mixed-feed cracker in late August 2016 and is likely to commence commercial operations at its 350,000 tonnes/year low density PE (LDPE) and 750,000 tonnes/year of linear low density PE (LLDPE)/ high density PE (HDPE) swing facility in the first quarter of 2017, according to industry sources.

Speaking to GPCA TV at the sidelines of the 11th Annual GPCA forum in Dubai on 27-29 November, Saudi Aramco vice president for chemicals Warren Wilder had previously announced the start-up of downstream derivative plants at the Sadara's mega complex in a phased manner, week after week, in early 2017.

ONGC Petro-additions Limited (OPaL) based in India started up its mixed-feed cracker in Dahej, Gujarat, India in late-November and looks to commence operations at its downstream PE units in the first quarter of 2017.

OPaL's cracker that has a 1.1m tonne ethylene capacity is expected to provide feedstock to two HDPE/LLDPE swing units with nameplate capacities of 360,000 tonnes/year each and a 340,000 tonne/year stand-alone HDPE facility, according to the company's website.

Major Indian producer Reliance Industries is also expected to start-up its LDPE and LLDPE/HDPE units in late first quarter or early second quarter of 2017, adding on to PE supply.



PE LDPE Film CFR GCC Assessment Spot 2-4- Weeks Full Market Range (Mid)
 PE LDPE Film CFR Med E Assessment Spot 2-4- Weeks Full Market Range (Mid)
 PE LLDPE Film CFR GCC Assessment Spot 2-4- Weeks Full Market Range (Mid)
 PE LLDPE Film CFR Med E Assessment Spot 2-4- Weeks Full Market Range (Mid)
 PE LLDPE Film CFR Med E Assessment Spot 2-4- Weeks Full Market Range (Mid)
 PE LLDPE Film CFR Med E Assessment Spot 2-4- Weeks Full Market Range (Mid)
 PE LLDPE Film CFR Med E Assessment Spot 2-4- Weeks Full Market Range (Mid)
 PE PE Pipe Natural Non-Pressure HDPE 100 CFR GCC Assessment Spot 2-4- Weeks ... (Mid)

© 2016 ICIS

These newer start-ups in India are expected to primarily cater to the Indian market, according to industry sources. Indian PE imports are, however, expected to come off sharply, leading to a surplus availability among Middle Eastern PE producers.

Market players deem PE demand in the GCC markets to remain largely capped by the pessimistic macroeconomic situation in the region.

Most economies in the GCC have been reeling under the impact of lower crude values since the oil price slump in the second half of 2014.

With crude oil exports forming the primary source of revenue for countries in this region, the economic situation in the region is not likely to see a major change from that in 2016, according to industry sources.

"Crude prices are likely to fluctuate between \$45-60/bbl, and the competition from shale will not allow it to go up further. We are not expecting any improvement in the economic situation in 2017 at least," a GCC-based trader said.

Similarly, polypropylene (PP) prices in the Middle East are also expected to come under downward pressure following rising supply in the key China market, according to market sources.

China is expected to move one step closer to achieving self-sufficiency for PP in 2017, with the start-up of coal-to-olefin (CTO) and methanol-to-olefin (MTO) plants in the country.

These plants are due to add to domestic PP production within the country and bring down import inflows, thereby resulting in surplus PP supply across markets, market sources said.

"PP prices are likely to come under pressure because of rising supply in China, while PE will be hit by additional supply from within the region," a GCC-based trader said.

Polymer demand in the East Mediterranean (East Med) region is poised to remain weak as the region reels under the impact of the ongoing political crisis in Iraq, Syria and Yemen. Jordan-based importers deem polymer demand in the country to remain weak, plagued by weak finished product exports into the key market of Iraq.

"Iraq serves as the primary market for most converters since the domestic market is small. Sales into Iraq have remained weak ever since the war broke out and we don't expect any change in the situation until the political situation resumes to normal," a Jordan-based trader said.

"Although there were talks of the Iraq-Jordan border reopening in June this year, it did not happen. As long as the border remains closed, business for all finished products into Iraq will remain poor. There also seems to be no announcement on when will the border actually open," the importer said.

"This weakness in end-user demand is expected to weigh down PE and PP prices in 2017, much like what we saw in 2016," the Jordan-based importer added.



PP Film CFR GCC Assessment Spot 2–4– Weeks Full Market Range (Mid)
 PP Film CFR Med E Assessment Spot 2–4– Weeks Full Market Range (Mid)

- PP Flat Yarn (Raffia) CFR GCC Assessment Spot 2-4- Weeks Full Market Range (Mid)
- PP Flat Yarn (Raffia) CFR Med E Assessment Spot 2-4- Weeks Full Market Range (Mid)

© 2017 ICIS

You can rely on ICIS for all your market intelligence needs

PRICING INFORMATION

ICIS is the benchmark for independent and reliable price assessments on more than 180 commodities traded in regions such as Asia, Europe and the Americas. Our reports also provide price histories and expert commentary to help you understand the key price drivers and market conditions and settle your contract prices confidently with access to time-sensitive offers, bids and price movements.

Request your free sample report

NEWS INFORMATION

Be the first to find out about breaking news and analysis across the global petrochemical markets. Our market-moving news articles cover production updates, plant capacities, output and shutdowns, plus so much more.

Request a free trial of ICIS news

FORECAST REPORTS

ICIS publishes monthly forecast reports for selected commodities showing a 12-month rolling price forecast as well as details of supply and demand, trade balances, capacity and margins. It is a valuable tool to identify commercial opportunities in the short to mid-term.

Enquire about the price forecast reports

SUPPLY AND DEMAND DATA

Receive an end-to-end perspective across the global petrochemical supply chain, enabling you to grasp the local or regional scenario in a global context. Data includes import and export volumes, consumption, plant capacities, production and product trade flows – from 1978 up to 2030.

Enquire about our supply and demand data

DIGITAL CHEMICAL BUSINESS MAGAZINE

ICIS Chemical Business (ICB) e-magazine is the No.1 source of market intelligence and analysis of the global chemical markets. It is the essential reading for global chemical industry players, providing decision support for executives making current transactions, as well as short term and long term planning.



Copyright 2017 Reed Business Information Ltd. ICIS is a member of RBI and is part of RELX Group plc. ICIS accepts no liability for commercial decisions based on the content of this report. Content published between December 2016 and January 2017.

POLYSTYRENE



MIDEAST PS TRADE CLOUDED BY SLOW DOWNSTREAM, VOLATILE SM By Jeslyn Lerh

Polystyrene (PS) trade in the Middle East is unlikely to gain momentum in the near term as slow downstream demand capped buying interests, against a backdrop of volatile upstream styrene monomer (SM) prices, industry sources said.

SM prices surged sharply, leading to a rise in selling sentiment for PS producers which sought to recover margins with higher offers.

However, there were weak buying responses from the Middle East, amid the lull season for polymer trade at the end of the year.

Buyers were also unwilling to accept the sharp hikes in PS offers. In the meantime, sellers sought to hold out on their offers in view of expectations of need-based buying.

Other market participants also highlighted that PS prices may be stable to firm in early 2017, due to expectations of firmer upstream crude prices. In November, the OPEC reached its first agreement to reduce oil output since 2008. This prompted a jump in oil prices in the same week, which led to a rise in SM prices.

"PS prices may move up due to the OPEC crude meeting... but this also depends on how sustainable the crude and styrene uptrend is," a GCC-based trader said.

Regardless of upstream developments, any price gain in the first quarter may be limited by weak PS demand in the Middle East markets.

"It has been quite difficult for us... my offer prices are never accepted by my buyers and it's already not easy to break even given rising SM costs," a southeast Asian producer said.

Buying interest in the GCC is expected to remain slow in the near term, with seasonal demand peaking only ahead of the Ramadan period in June.

Meanwhile, east Mediterranean trade continues to be hampered by ongoing political instability in the region. Weak demand in Iraq, which is the key market for finished product exports for many converters, has capped resin demand in Jordan largely.

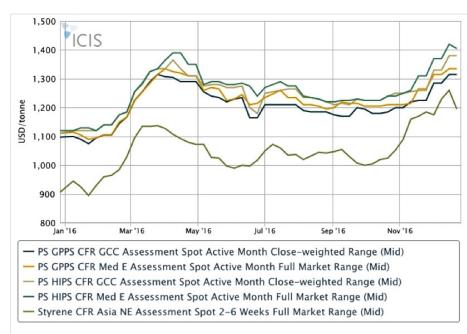
While there may be some incremental demand ahead of the Ramadan period in June 2017, it is not expected to boost prices by a large extent.

However, some market participants think that customers will have to accept the import prices eventually.

"I think customers will still consider importing even if Asian prices are higher, as SABIC [Saudi Arabia Basic Industries Corporation] supply is not enough to meet all the requirements," another GCC-based trader said.

SABIC is the sole supplier in the region and offers goods on a delivered-to-factory basis.

In the meantime, most market participants are on the lookout for further developments in the volatile upstream crude and SM markets.



© 2016 ICIS

SAUDI ARABIA



SAUDI ARABIA DIVES DEEPER INTO PETCHEMS AS LEADING OIL POSITION WEAKENS

By Jonathan Lopez

Saudi Arabia's SABIC is to splash out \$820m to fully control its 50:50 SADAF petrochemical joint venture with Shell in a move which further strengthens its drive to expand into downstream industries to diversify its economy away from crude oil.

Due to expire in 2020, SABIC and Shell announced on 22 January an agreement for which the cash-strapped Anglo-Dutch energy major would end its 37-year old stake in SADAF.

Shell said it had taken the decision as part of its strategy to divest \$30bn of noncore assets within the next three years. A spokesperson for the company told ICIS that chemicals continued to be a "growth engine" within Shell's operations.

Shell and SABIC had considered building further styrene monomer capacity in the Kingdom alongside propylene oxide and polyols but that project fell through. Shell is adding SMPO capacity utilising its OMEGA technology in its joint venture with CNOOC in China at Huizhou in Guangdong Province.

As it stands, SADAF, which has capacity to produce 4m tonnes of chemicals from six world scale plants at the Jubial industrial complex, is an amortised venture. The divestment will deprive Shell of nearly \$150m/year in earnings, or 13% of its \$2.3bn/year in cashflow from chemicals, according to analysts at investment bank Redburn.

"SABIC will be able to invest further in the facilities as a result of Shell's exit, while Shell will focus its downstream activities," said the analysts in a note to investors earlier this week.

"We lower our downstream [refining and chemicals] earnings estimates by c [circa] \$150m in 2017 to \$5.4bn."

During 2015, Shell greatly suffered from the fall in crude oil prices, with sales at \$272bn, down 37% year on year, posting annual losses of \$811m, down from a net income of \$2.7bn in 2014, according to its 2015 annual report.

The oil major is due to report its 2016 financial results on 2 February.

Other sources within the petrochemical industry in the Middle East said Shell's decision to exit the joint venture had been purely "political" as Saudi Arabia shifts focus from its current crude oil, upstream-based economic system towards one in which the country also becomes a player in more downstream sectors.

The Kingdom called the strategy Saudi Vision 2030, an attempt to boost manufacturing in the country to provide better prospects to 13m of its citizens who are below the age of 30. The strategy would place the national oil major Saudi Aramco at the centre to expand in sectors largely undeveloped – chemicals and petrochemicals being a prime example.

According to the International Labour Organisation, youth unemployment in Saudi Arabia stood at 29.5% in 2014. Moreover, the Saudi economy took a hit in 2016 as a consequence of the fall in crude oil prices registered since mid-2014, with GDP expected to have grown only by 1.2%, sharply down from the 3.4% in 2015.

As part of the drive towards downstream activities, Saudi Aramco in 2015 agreed to pay \$1.2bn for a 50% stake in a synthetic rubber joint venture with Germany's LANXESS.

The joint venture, ARLANXEO, has a fiveyear lock up period after which Aramco could exercise its right to acquire full ownership, a move that analysts at the time took for granted.

The joint venture posted falling sales and earnings in the third quarter of 2016 although it might have turned a corner in the

fourth quarter as global demand for tyres improved, according to German investment bank Baader Bank.

Shell's exit from SADAF, however, has raised some eyebrows. Exiting a market with plentiful, inexpensive feedstock like Saudi Arabia, and doing so before a key date, has prompted some market players in the Middle East to see in the move the hand of Aramco and the wider Saudi institutions.

According to one source, the move was prompted by Saudi "protectionism" at a time when the country would be looking to dispense with its international partners while allowing SABIC to expand.

The move, the source added, would help the new administration's attempt to diversify into petrochemicals and move away from crude oil.

"This also falls in nicely with [Saudi] Vision 2030 to wean off Saudi Arabia's dependence on crude oil," the source concluded.

The strategic vision for the new Saudi Arabia would include, according to the Saudi government, an initial public offering (IPO) of a 5% stake in Saudi Aramco, which is said to be the world's largest company in assets and potentially worth \$2,000bn.

In October, Aramco's CEO Amin Nasser said the IPO was likely to be launched in 2018, adding all stock exchanges were being considered and suggesting the company wanted to invest \$300bn in the next 10 years, with a special focus on gas.

Although Shell is stepping away from SADAF it retains stakes in three ventures in Saudi Arabia.

Aramco is Shell's partner in one of them, the Saudi Aramco Shell Refinery Company (SASREF), which has a crude distillation capacity of 292,000 bbl/day.

The other Saudi assets are the Aljomaih and Shell Lubricating Oil Company

(JOSLOC), together with Aljomaih Holding Company, and Peninsular Aviation Services (Pasco), a joint venture between Shell and UK's energy major BP, as well as Saudi firms.

Crude oil equity analysts consulted by ICIS pointed to Shell's urgent need of cash, rather than politics or Saudi protectionism, as the main reason for the divestment.

In their view, Shell will focus on its large-scale petrochemical complexes in the US and China. They do not see chemicals as a growth engines as described by the energy major.

"Shell needs cash and it would have exited the joint venture in 2020, anyway. All in all, Shell is concentrating in the US, where feedstock is cheap and has a lot of customers around, but chemicals will not become a growth engine in any case," said a Paris-based equity analyst at investment bank Oddo & Cie, Ahmed Ben Salem.

Shell said the construction of a gas-based cracker in Pennsylvania was on track, a

project which is expected to have an ethane production capacity of 1.5m tonnes/year.

"Chemicals can increase cash flow and profitability, as in some areas you have low-cost feedstock, but the answer for Shell going forward is clearly upstream," added Ben Salem.

Middle Eastern political ins and outs will always make good content for a Machiavellian essay. The time of Saudi Arabia deciding the fate of global crude markets has largely passed, with other non-OPEC producers gaining ground in output, notably the US.

Moreover, its neighbour and arch enemy Iran is propping up its presence in the market after it entered the world stage again in 2015 following the Nuclear Accord.

Iran's crude oil production reached a postsanctions era high at 3.9m bbl/day.

Invariably, crude oil majors are disembarking

in Tehran trying to seek new business. In November, Shell said it had signed an agreement with Iran to seek chemicals opportunities in the country.

Before it, France's Total also announced plans to develop a gas field in Iran.

"Saudi Arabia knows all oil majors will go back to Iran and they it can't stop them. If you look at the presence of international oil majors in Saudi Arabia, it is not in upstream but in chemicals or refining, so they don't have ways to make pressure," said the Oddo & Cie's analyst.

Jason Kenney, analyst at the investment arm of UK's Santander Bank covering Shell, added that growth of the company's petrochemicals operations will be focused on the Pennsylvania complex as well as the cracker and downstream investments in China.

"The complex in Saudi Arabia is left to Saudi Arabia to run – and that's the end of an era," he said.

You can rely on ICIS for all your market intelligence needs

PRICING INFORMATION

ICIS is the benchmark for independent and reliable price assessments on more than 180 commodities traded in regions such as Asia, Europe and the Americas. Our reports also provide price histories and expert commentary to help you understand the key price drivers and market conditions and settle your contract prices confidently with access to time-sensitive offers, bids and price movements.

Request your free sample report

NEWS INFORMATION

Be the first to find out about breaking news and analysis across the global petrochemical markets. Our market-moving news articles cover production updates, plant capacities, output and shutdowns, plus so much more.

Request a free trial of ICIS news

FORECAST REPORTS

ICIS publishes monthly forecast reports for selected commodities showing a 12-month rolling price forecast as well as details of supply and demand, trade balances, capacity and margins. It is a valuable tool to identify commercial opportunities in the short to mid-term.

Sending about the brice forecast reports

SUPPLY AND DEMAND DATA

Receive an end-to-end perspective across the global petrochemical supply chain, enabling you to grasp the local or regional scenario in a global context. Data includes import and export volumes, consumption, plant capacities, production and product trade flows – from 1978 up to 2030.

Enquire about our supply and demand data

DIGITAL CHEMICAL BUSINESS MAGAZINE

ICIS Chemical Business (ICB) e-magazine is the No.1 source of market intelligence and analysis of the global chemical markets. It is the essential reading for global chemical industry players, providing decision support for executives making current transactions, as well as short term and long term planning.

Download a free sample now



TOLUENE DI-ISOCYANATE

ASIA AND MIDDLE EAST TDI PRICES TO EXTEND LOSSES By Matthew Chong

Toluene di-isocyanate (TDI) prices in Asia and the Middle East are expected to edge lower in the first few months of 2017 but may start to drop faster thereafter as tight supply conditions in Europe are expected to be alleviated by the second quarter, according to market sources.

Feedstock toluene prices may also play a greater role in determining the TDI price trend in 2017 as raw material prices which have risen in line with crude oil prices since November will start to erode TDI producers' margins, sources said.

The supply shortage has stemmed from a series of plant troubles, which began when Covestro in early October announced force majeure (FM) across all of its European isocyanates operations including TDI, methyl di-p-phenylene isocyanate (MDI) and intermediate products due to issues in supply of feedstock nitric acid.

These operations were slated to return to full production on 11 December but there have been no official updates on their current status.

Covestro has been shipping cargoes from its Shanghai plant to help support the European market during this period, market sources said, thereby resulting in lesser supply availability in Asia.

An explosion and fire at BASF's Ludwigshafen facility in Germany then took place in the second half of October but at the time BASF said that it was still supplying TDI.

On 23 November, however, BASF suspended all TDI production at the facility for an indefinite period due to an unspecified production problem.

On-spec production at the new 300,000 tonne/year plant has been delayed yet again to April 2017 from its prior target of end-October, according to a market source, but this could not be confirmed with the company. There were concerns that some of the material from the new plant will find its way into Asia besides the Middle East, and the start-up delay will bring some relief to northeast Asian suppliers, albeit temporarily.

Middle East players have also been eager for news about additional supply coming from Sadara Chemical's integrated plant.

Sadara Chemical, which is a joint venture between US's Dow Chemical and state energy firm Saudi Aramco, is expected to cater to the Middle East and North Africa markets.

Sadara's two isocyanates plants, a 200,000 tonne/year TDI and a 400,000 tonne/year PMDI unit, will be the last of its downstream derivative plants to come on stream and most market players expect them to start up in Q3 2017 at the earliest, although a company source said all its downstream derivative plants will be up and running by mid-2017.

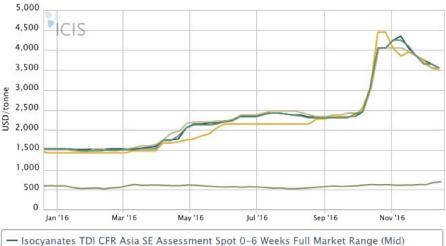
From Q2 2017 onwards, the TDI market is expected to return to the same oversupplied state ad in early-2016 once Covestro, BASF and Sadara start running their plants normally at high rates. TDI spot import prices in Asia surged to over eight-year highs in October amid the rise in China domestic prices due to myriad factors.

Overall supply was relatively tight due to turnarounds at several northeast Asian plants in October and November.

Average TDI import prices jumped by a cumulative 89%, or \$2,100/tonne in absolute terms, to hit \$4,450/tonne China/ Hong Kong on 19 October in the short span of three weeks.

Average China domestic prices nearly tripled to a historical high of Chinese yuan (CNY) 49,500/tonne DEL (delivered) south China on 19 October over a four-week period. Prices have since corrected from their peak and were hovering at slightly below CNY30,000/tonne DEL south China from mid-November to December.

The rise in China domestic prices could be partly attributed to panic buying as buyers were holding on to low TDI stock inventory due to suppressed TDI prices over the past couple of years and they started to snap up cargoes when prices began to increase amid tighter supply.



Isocyanates TDI CFR Asia SE Assessment Spot 0-6 weeks Full Market Range (Mid)
 Isocyanates TDI CFR China and Hong Kong Assessment Main Ports Spot 0-6 We... (Mid)
 Isocyanates TDI CFR GCC Assessment Spot 0-6 Weeks Full Market Range (Mid)
 Isocyanates TDI CIF India Assessment Spot 0-6 Weeks Full Market Range (Mid)

- Toluene FOB South Korea Assessment Spot 2-8 Weeks Full Market Range (Mid)

© 2016 ICIS

In October 2016, TDI import prices in Asia and the Middle East took cues from China domestic prices and skyrocketed by over \$1,000/tonne in the short span of three weeks as supply shortage sparked weeks of panic buying from customers.

Since November, prices have been on a downtrend but the pace of decline has been relatively moderate, and TDI prices have yet to retrace October moves. This correction process is expected to continue during the first few months of 2017.

Middle East TDI prices peaked at \$4,100/ tonne CFR GCC (Gulf Cooperation Council) in October but the prices began to ease in early November amid an ample availability of cargoes from northeast Asia. Buyers also pushed for lower prices as more material became available.

There were expectations that prices would fall back as quickly as they had risen but so far these have not materialised. By late-November, TDI prices were only down by about \$500/tonne CFR GCC from their October highs. On the demand side, buyers have been adopting a wait-and-see stance since November when prices started retreating from their peak.

Chinese foam makers, the downstream of TDI, have cut their production following the surge in TDI domestic prices in October, thereby suppressing the consumption of both TDI and polyols.

TDI, when combined with flexible polyols, finds outlets in polyurethane (PU) foam for mattresses, furniture and automotive seats.

You can rely on ICIS for all your market intelligence needs

PRICING INFORMATION

ICIS is the benchmark for independent and reliable price assessments on more than 180 commodities traded in regions such as Asia, Europe and the Americas. Our reports also provide price histories and expert commentary to help you understand the key price drivers and market conditions and settle your contract prices confidently with access to time-sensitive offers, bids and price movements.

Request your free sample report

NEWS INFORMATION

Be the first to find out about breaking news and analysis across the global petrochemical markets. Our market-moving news articles cover production updates, plant capacities, output and shutdowns, plus so much more.

Request a free trial of ICIS news

FORECAST REPORTS

ICIS publishes monthly forecast reports for selected commodities showing a 12-month rolling price forecast as well as details of supply and demand, trade balances, capacity and margins. It is a valuable tool to identify commercial opportunities in the short to mid-term.

Enquire about the price forecast reports

SUPPLY AND DEMAND DATA

Receive an end-to-end perspective across the global petrochemical supply chain, enabling you to grasp the local or regional scenario in a global context. Data includes import and export volumes, consumption, plant capacities, production and product trade flows – from 1978 up to 2030.

Enquire about our supply and demand data

DIGITAL CHEMICAL BUSINESS MAGAZINE

ICIS Chemical Business (ICB) e-magazine is the No.1 source of market intelligence and analysis of the global chemical markets. It is the essential reading for global chemical industry players, providing decision support for executives making current transactions, as well as short term and long term planning.



You may also be interested in:



Download these Chemicals Outlook magazines at www.icis.com/press-releases/global-chemicals-outlook-2017-series



You can rely on ICIS for all your market intelligence needs

PRICING INFORMATION

ICIS is the benchmark for independent and reliable price assessments on more than 180 commodities traded in regions such as Asia, Europe and the Americas. Our reports also provide price histories and expert commentary to help you understand the key price drivers and market conditions and settle your contract prices confidently with access to time-sensitive offers, bids and price movements.

Request your free sample report

NEWS INFORMATION

Be the first to find out about breaking news and analysis across the global petrochemical markets. Our market-moving news articles cover production updates, plant capacities, output and shutdowns, plus so much more.

Request a free trial of ICIS news

FORECAST REPORTS

ICIS publishes monthly forecast reports for polyethylene and polypropylene in Asia, Europe and the US showing a 12-month rolling price forecast as well as details of supply and demand, trade balances, capacity and margins. It is a valuable tool to identify commercial opportunities in the short to mid-term.

Enquire about the price forecast reports

SUPPLY AND DEMAND DATA

Receive an end-to-end perspective across the global petrochemical supply chain, enabling you to grasp the local or regional scenario in a global context. Data includes import and export volumes, consumption, plant capacities, production and product trade flows – from 1978 up to 2030.

Enquire about our supply and demand data

DIGITAL CHEMICAL BUSINESS MAGAZINE

ICIS Chemical Business (ICB) e-magazine is the No.1 source of market intelligence and analysis of the global chemical markets. It is the essential reading for global chemical industry players, providing decision support for executives making current transactions, as well as short term and long term planning.



Copyright 2017 Reed Business Information Ltd. ICIS is a member of RBI and is part of RELX Group plc. ICIS accepts no liability for commercial decisions based on the content of this report. Content published between December 2016 and January 2017.

Back to Quick Navigation 🔨 | 12



ICIS

ICIS price forecast reports Supply, demand and price trends at a glance

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 this presents for your business.

How price forecast reports can help you

Understand the market

Use ICIS price forecast reports to understand where the market is heading and identify the risks and the opportunities for your business. What are the major demand developments for your product?

Safeguard commercial decisions

Use market information to make better-informed business decisions relating to supply and demand. Learn about changes in market capacities. What factors will affect supply for you?

Budgeting and planning

Whether you are planning how much you will be spending in the short to medium, or even long-term, use the price forecast reports to help assess future prices for your product. What will the price of your product be in six months' time?

| | | Asia | Europe | USA | Global |
|--|---------------------|--|--|--|--|
| Price forecast reports currently available | Polypropylene | Image: A second s | Image: A second s | Image: A second s | |
| | Polyethylene | 1 | 1 | 1 | |
| available | Benzene | | | | Image: A second s |
| | Styrene/Polystyrene | | Image: A second s | | |
| | | | | | |
| Available as | Ethylene | \checkmark | \checkmark | \checkmark | |
| price forecast windows only | Propylene | Image: A second s | Image: A second s | Image: A second s | |
| | Styrene | Image: A second s | | Image: A second s | |



Price Forecast Window

ICIS price forecasts are now available on the Dashboard channel using the Price Forecast Window which will enable users to:

Chart the price forecast against the last (rolling) 12 months of related price history

Plot the last 12 months to view forecast progression and ICIS forecast accuracy

Convert data into different currencies and units and download this data into Excel in order to easily enter your own calculations

To talk to someone about price forecast reports call the numbers below, or email us at sales.uk@icis.com

 Asia-Pacific, Middle East
 Europe, Africa
 The Americas

 Tel: +65 6789 8828
 Tel: +44 20 8652 3335
 Tel: +1 713 525 2600 or Toll free: +1 888 525 3255 (US and Canada only)

To find out more or take a trial visit: www.icis.com/priceforecast



ICIS News

The leading news service for real-time ground breaking news and analysis on the global petrochemicals markets

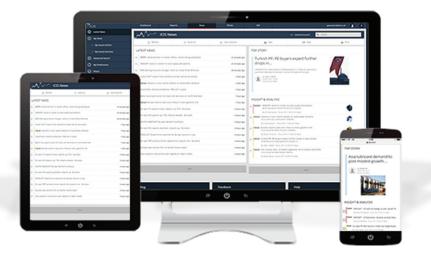


The ICIS News services give you unrivalled access to the most in-depth stories impacting the petrochemicals markets, influencing commodity prices and affecting your daily business decisions.

Our team of global editors are reporting around the clock to bring you the latest news and analysis so that you get the full picture of market and pricing developments first, providing you with invaluable foresight to take advantage of every opportunity and to stay ahead of your competitors.

With ICIS News, you will be the first to read:

- Breaking news on the chemical markets that will impact your business
- News on market moves, deals and announcements that will affect your organisation
- Force majeures, closures and developments that influence your commodity prices
- Expert analysis on industry trends and hot topics know what's happening and why
- Plants and Projects news the latest on capacities, outputs and shutdowns
- Searchable archive with over 1.4 million articles from the past 10 years



ICIS News offers access to additional sources including the ICIS Plants and Projects database and Chemical Business News Base (CBNB)



Chemical Business News Base (CBNB) is a premium resource available on ICIS News. It provides you with an extensive external source of upstream and downstream petrochemical news in summarised snapshots, so you can quickly and easily get the latest updates on what's important to you.

CBNB offers readers:

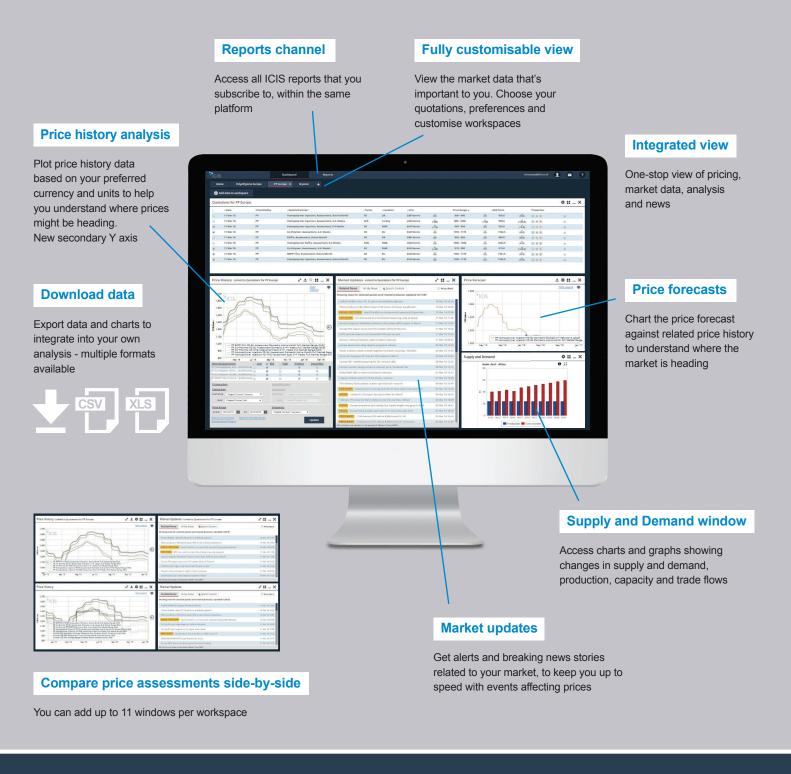
- Fast and consistent coverage on news, facts, figures from the upstream and downstream petrochemicals industry
- Access to over 700 news sources, including technical and trade journals, company literature, market research reports, stockbroker reports, books and directories
- User-friendly search functionality to find articles most relevant to you from around the globe
- Quick and easy-to-read summarised snapshots of articles with the option to access full articles from the original source

ICIS

Your view on the chemicals markets

In today's fast-moving world, you need quick and easy access to the information you rely on. The ICIS Dashboard gives you access to benchmark pricing data, news and analysis in one place.

This dynamic online platform is configurable and displays information updates according to your preferences. It enables you to build your own view of the market intelligence important to you.



Find out more: icis.com/about/dashboard Request a free trial: icis.com/trydashboard

Asia-Pacific, Middle East Tel: +65 6789 8828 Europe, Africa Tel: +44 20 8652 3335

Pricing intelligence to propel your business forward

You can make confident commercial decisions using pricing data from ICIS. Our highly respected pricing service covers all the major chemicals, energy and fertilizer markets, with a methodology that is trusted by buyers, sellers and analysts alike.

Powerful data in your hands -

ICIS gives you access to all of the following:

- Spot and contract prices for over 180
 commodities
- Market commentary on trends and business developments
- Reported and confirmed transactions
- Plant and production news shutdowns, maintenance and turnarounds

Look back and think ahead -

Access historical, current and forecast pricing data, so you can:

- Understand price drivers and fluctuations
- Adapt to emerging market volatility
- Mitigate risk using our objective analysis
- Conduct evidence-based negotiations
 with suppliers
- Settle contracts based on benchmark
 prices

| | Co | pyright © 2015 Re | ed Business In | formation Limited. ICI: | lis a member | of RELX Group. | | |
|--|---|-------------------|----------------|-----------------------------|--------------|----------------------|--------------|--|
| | _ | | | | | 2nd | October 2015 | |
| (CAN 71.19) COLEMP 2011 PARAMENT BY C.S. (Here its considering 19.7656) | ICIS p | ricir | ıg | I | Polye | ethylene Pacific) | | The Market 1 Content 2011 Addressed by CS Week (St. Contentioner) 1 page |
| Heren European Spot Gas Markets | Editors: Bee Lin Chow, be | elin.chow@icis | .com; Felit | ta Widjaja, <u>felita.w</u> | djaja@icis | com | | ICIS The Market |
| Chot Gas Marke | | | S | POT PRICES | | | | VIC NARVAL |
| VIC D spoor | | | | Price Range | | Four Weeks Ago | US CTS/Ib | |
| | LDPE Film | | | | | | | Data |
| Energy Prices News Analysis Secondary data | CFR China | USD/tonne | n/o | 1140-1185 | n/o | 1120-1175 | 51.71-53.75 | |
| 1 3 Month 5 7 2005 | CFR SE Asia All Origins | USD/tonne | n/o | 1130-1230 | +10 | 1130-1180 | 51.26-55.79 | |
| A Markets | CFR SE Asia Dutiable* CFR SE Asia Non- | USD/tonne | n/o | 1130-1150 | n/o | 1130-1150 | 51.28-52.16 | Agent S Morogen 3 News |
| 2 O taket lines upon the 13 U or maket price and opports | Dutiable | USD/tonne | n/o | 1200-1230 | +10 | 1170-1180 | 54.43-55.79 | O Ammonia 10 C POlashCorp Withstein |
| e provi | LLDPE Film | | | | | | | Subhur |
| General MOLDE 7 0 power of sensory | CFR China | USD/tonne | n/c | 1080-1120 | n/c | 1090-1120 | 48.99-50.80 | 20 10 Aver Grant part and project progresses 22 20 10 Aver Grant parts Prove estimates 22 |
| ilor paretter market in inte | CFR SE Asia All Origins | USD/tonne | n/c | 1130-1210 | +10 | 1100-1180 | 51.28-54.88 | tilizers at a glance |
| of the uterainian gas the draft | CFR SE Asia Dutiable* CFR SE Asia Non- | USD/tonne | n/c | 1130-1180 | +20 | 1100-1120 | 51.28-53.52 | anzers at a glama |
| With an and the second | CFR SE Asia Non- Dutiable | USD/tonne | -10 | 1180-1210 | +10 | 1150-1180 | 53.52-54.88 | len gialice |
| A rated as board include a stand of backets of backets | HDPE Film | | | 1 | | | | |
| MR.041 Minore and a second s | CFR China | USD/tonne | n/o | 1100-1180 | n/c | 1090-1175 | 49.90-53.52 | Et watting for latter for the states for the states for the states of th |
| OCCUSENTS AD 799 The UNIVARIaNT INN COLLINING IN THIS Would enable charge for use of the invested a draft tank containing in future would enable charge for use of the charge and pro- | CFR SE Asia All Origins | USD/tonne | n/o | 1130-1200 | n/o | 1120-1180 | 51.28-54.43 | en a skatas for the second sec |
| NEP pilo 40.518 membris to estaring set of postdoms of the new KD Is from customers a new KD Is from customers a new KD Is from customers a new KD Is from customers and the new KD Is from customers | CFR SE Asia Dutiable* | USD/tonne | n/o | 1130-1160 | n/c | 1120-1140 | 51.28-52.62 | Date a posting |
| MRI/M ALX3 memory and a LAX many strength register, we can aver a LAX. Constraints and a LAX many strength register and average strengister an | CFR SE Asia Non- Dutiable | USD/tonne | -10 | 1180-1200 | n/c | 1150-1180 | 53.52-54.43 | Ke hat been producery the banchmark price OP2 deal Market awarts a |
| | HDPE Injection | | | | | | | Participation of the Participa |
| | CFR China | USD/tonne | n/c | 1080-1170 | n/c | 1120-1200 | 48.99-53.07 | |
| | CFR SE Asia All Origins | USD/tonne | n/c | 1130-1200 | n/c | 1120-1180 | 51,28-54.43 | Stars have been been seen stars have been been been been been been been be |
| POL CAMAN 20 Separation and the polytophilos and the contract and the polytophilos and the po | CFR SE Asia Dutiable* | USD/tonne | n/c | 1130-1160 | n/c | 1120-1140 | 51,28-52.62 | is (4/30%) Potont |
| | CFR SE Asia Non- | USD/tonne | -10 | 1180-1200 | n/c | 1150-1180 | 53.52-54.43 | |
| and when an and a state of the | Dutiable | | | | | | | |
| Destroyer 18.195 Conversion of a gat training with the new rules are used as gat training of the second sec | HDPE Injection (Melt Flo CFR China | USD/tonne | n/o | 1080-1120 | n/o | 1120-1160 | 48,99-50.80 | 10,000 torner shorty and is another purchases as they away from bolines |
| THE CARE 18:500 A MARGINE CONTRACT OF THE CARE CARE CARE | HDPE Injection (Melt Flo | | ne | 1000-1120 | 100 | 1120-1100 | 40.00-00.00 | white down |
| NG ANIM 15,00 * A standard contrakt off. as the effective offective offecti | CFR China | USD/tonne | n/o | 1120-1170 | n/o | 1130-1200 | 50.80-53.07 | Right foreward Sulphur procession and with time contract |
| CASPOOL 19.164 A monotopy for cardinary of the man been yet been yet been and a | HDPE Blow Moulding | ooonana | | 1120-1110 | 100 | 1100-1200 | 00.00-00.07 | |
| | CFR China | USD/tonne | n/o | 1080-1120 | n/o | 1090-1130 | 48.99-50.80 | Lease, we want LLAN activity seen holiday but ittle t week |
| | CFR SE Asia All Origins | USD/tonne | n/c | 1130-1210 | n/c | 1120-1190 | 51,28-54.88 | NAX SG COM |
| Exception 2010 Ban made in code in code of the operation meets to be operational to the operation of the operation o | CFR SE Asia Dutiable* | USD/tonne | n/o | 1130-1160 | n/o | 1120-1140 | 51.28-52.62 | R renute under |
| Control and a production The second sec | CFR SE Asia Non- Dutiable | USD/tonne | -10 | 1180-1210 | n/c | 1150-1190 | 53.52-54.88 | Acres 1 |
| | "The applicable import duty r | stor see in the M | 10 Delumbul | inter methodologie de | cumored . | | | merch biology as America Not - Make weining - Dentrol - Alexan |
| TTE D.1, KIMIN 1E.001 | The applicable importably i | | | ene menosology of | COMPANY. | | | security and secur |
| | | | | | | | | |
| KC B 1, (AMM) 11,207 CAPPON D 1, (AMM) 11,07 10112 | | | | | | | | Below E wild |
| | | | | | | | | Instant an Annual Annua |
| PULO L CAMAN TANK WE | | | | | | | | No the second |
| SICELAND DARK MONTH AND | | | | | | | | Paradia a picture to |
| NORTHER AND ALLER | | | | | | | | R smart for any off |
| NBP, pMin 40.255 US Zaudaruppa, pMin 10.751 US Min Zaudaruppa IV VV Michael Min | | | | | | | | En la constante da que la constante da California da Calif |
| | | | | | | | | Action Manual Action Statements and Action S |
| 110, CAUDO 15,000 ISC (AMAN) ISC (ISC) The second secon | | | | | | | | A Const Cons |
| Statistica da Alega de manager a para para para para para para para | | | | | | | | |
| USEM TUTING INCOMENTATION | | | | | | | | |
| 122M 11376 (1000000000000000000000000000000000000 | | | | | | | | |

Request a free sample report

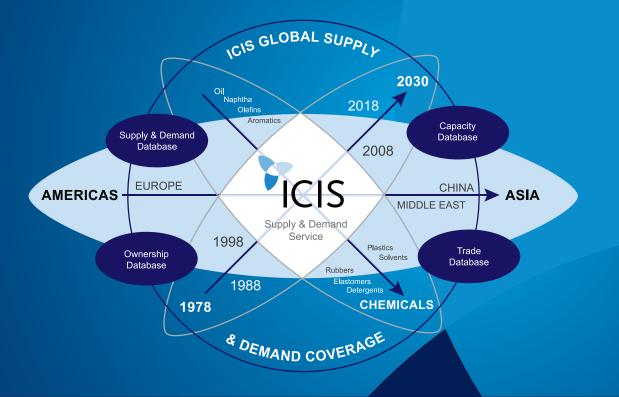


www.icis.com/trial



ICIS Supply and Demand Database

Single searchable source of historical data on global petrochemical and energy markets



- ✓ Historical and forecast data (1978-2030)
- ✓ Over 100 petrochemical products
- ✓ Over 12,000 refinery units
- ✓ Over 18,500 petrochemical plants
- Import, export and consumption volumes
- Plant capacity, production and operating status
- Upcoming plants, including speculative and announced projects
- Data breakdown by country, region, product or product family
- GDP, population, and consumer price index by country

More than just data, the **ICIS Supply and Demand Database** is a powerful analytics tool which gives end-to-end perspectives across the global petrochemical supply chain, including refineries. Data is derived by ICIS's team of Consultants using a 'bottom-up' approach – reconciling demand with supply, production, local capacity and net trade. Forecasts are validated against economic indicators such as GDP and per capita consumption.