Chemical Information Resources for East Europe and CIS

CIREC MONTHLY NEWS

Chemical Industry News for Central Europe, South East Europe and Eurasia

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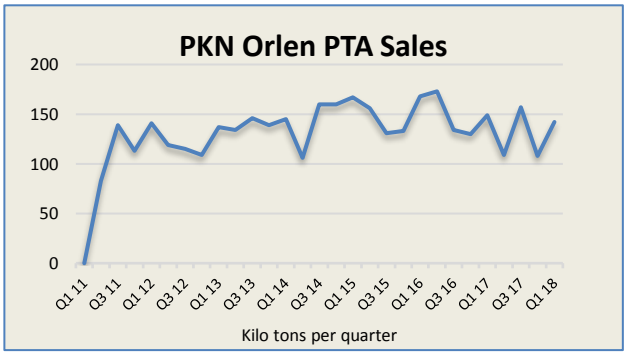
CENTRAL & SOUTH EAST EUROPE

PKN Orlen Petrochemical Production (unit-kilo tons)			
Product	***Q1 18***	***Q1 17***	***Q1 16***
Ethylene	138.4	124.2	140.5
Propylene	88.9	87.5	99.9
Butadiene	14.7	14.2	15.6
Toluene	4.4	5.6	4.2
Phenol	12.3	10.1	11.0

PKN Orlen Q1 2018

PKN Orlen's results in the first quarter in 2018 were affected by weaker margins, although the group reported an 8% increase in crude oil throughput and a 4% growth in sales volumes. Key developments in the first quarter included a letter of intent for the acquisition of Grupa Lotos and a declaration with the Lithuanian government concerning strategic improvements to Orlen Lietuva.

The model downstream margin for Orlen dropped by $0.7 per barrel in the first quarter, correlating to a $13 per barrel increase in the average Brent price and appreciation of zl exchange rates.



The downstream segment's Q1 2018 EBITDA dropped to zl 1.513 billion against zl 2.021 billion in the same period in 2017. In the refining division, Orlen increased diesel oil sales by 14% although the higher volumes were offset by increased energy costs used for the group's own needs, lower margins on polyolefins and both light and heavy refining fractions.

PKN Orlen produced 149,000 tons of PTA in the first quarter this year and sold a total of 142,000 tons. Regarding PTA exports, Germany remains the largest destination followed by Belarus.

PKN Orlen Group Chemical Production (unit-kilo tons)		
Product	***Q1 18***	***Q1 17***
Polymers	143	123
Aromatics	108	78
Fertilisers	308	268
Plastics	112	105
PTA	149	156

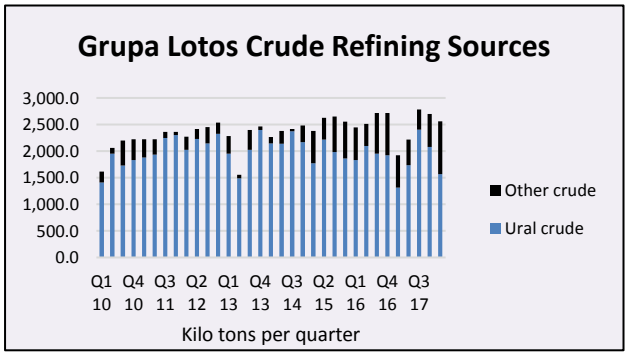
The Orlen Group reported rises in production across the chemical sector in Q1 2018. Regarding energy, the Płock CCGT plant was certified for operation this year and all other permits required for its use were obtained. After the unit is placed in commercial operation, PKN Orlen will produce about 7 TWh of electricity, accounting for 4.5% of Poland's total electricity output. PKN Orlen has also announced a tender for the development of a preliminary technical concept to determine the options for a project involving the construction of offshore wind farms in the Baltic Sea.

Anwil-PVC scheduled shutdown

Anwil started a planned outage at two PVC plants at Wloclawek in early May which last for two weeks. The two plants possess capacities for 200,000 tpa and 140,000 tpa respectively.

PKN Orlen-crude supply to increase from Aramco

PKN Orlen recently signed an annex to the current long-term agreement with Saudi Aramco, increasing the volume of oil supplies by half or by 100,000 tons monthly. Consequently, over one-fifth of the raw material processed by the Orlen group refineries will be sourced from Saudi Arabia. Under the new terms, the contract will be implemented from 1 May to 31 December 2018, with the option of extending for future years. The Płock concern intends to use the raw material for processing at refineries in Poland, the Czech Republic and Lithuania. Currently, Orlen imports around 30% of crude oil from outside Russia.



Grupa Lotos, Q1 2018

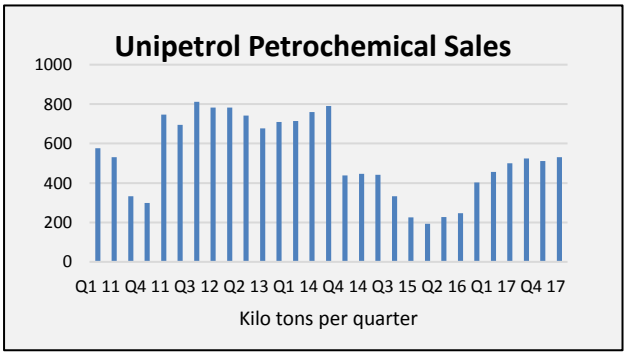
Grupa Lotos increased sales revenues in the first quarter in 2018 by 16% to zl 6.32 billion, whilst the net profit fell 22% to zl 320.8 million.

Unipetrol's Financial Indicators (billion)			
Classification	*Q1 18*	*Q117*	*Q1 16*
Revenues	27.172	29.850	17.686
EBITDA LIFO	1.495	3.617	350
EBITDA	1.366	3.971	559
EBIT	0.587	3 328	103
Net profits	0.322	2.826	-25

The drop in financial results was mainly caused by the lower model refining margin despite the maximum use of capacities at the Gdansk refinery. Margins were affected by higher prices for crude oil and natural gas. Crude oil processing at the Gdansk refinery amounted to 2.56 million tons in the first quarter in 2018, which was about one third higher than in 2017.

Unipetrol, Q1 2018

Unipetrol's revenues amounted to Kc 27.2 billion in the first quarter in 2018, Kc 2.7 billion lower than the same period in 2017. Costs for Unipetrol also fell in the first quarter, resulting in a fall in operating profit of 59% to Kc 1.5 billion. Financial results were affected by growing crude oil prices, lower margins in both the refinery and petrochemical segments, and the major accident and necessary turnaround at the Kralupy refinery.



Unipetrol's downstream division experienced a fall in the refinery production but at the same time an increase in petrochemical output. The volume of processed crude oil for the group fell by 4% to 1.9 million tons due to the turnaround that had started at the Kralupy refinery.

Sales volumes of refinery products dropped by 14% to 1.4 million tons. The petrochemical division, on the other hand, saw a growth after the steam cracker's utilisation rate at Litvinov rose by 44% to 94%. This helped sales of the petrochemical products to rise by 16% to a total of 531,000 tons. During the first quarter the ownership structure of the Unipetrol Group changed after Orlen increased its stake from 62.99% to 94.03%.

Unipetrol-PE3 plant

Unipetrol expects to complete the construction of the new polyethylene unit (PE3) in Chempark Záluží at Litvínov this year and will bring it into full operation at the beginning of spring 2019. The investment cost of Kc 8.5 billion is a record petrochemical investment in the Czech Republic.

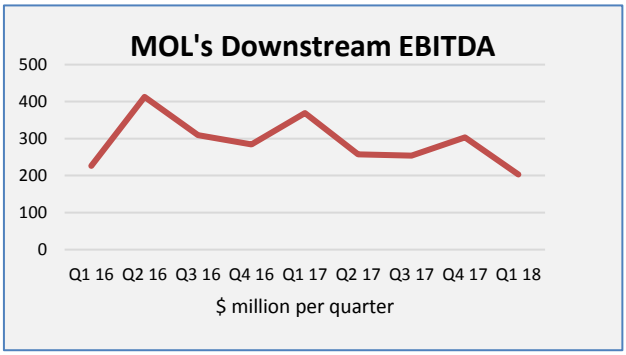
Total investments for Unipetrol in the first quarter amounted to Kc 2.2 billion, mainly directed to the construction of the new PE3 polyethylene unit, construction of the new boiler house for the steam cracker unit at Litvinov and for the modernisation of Benzina petrol stations.

MOL's Olefin & Polyolefin Production (unit-kilo tons)		
Product	***Q1 18***	***Q1 17***
Ethylene	202	202
Propylene	109	104
Butadiene	11	25
Raffinate	18	34
Product	***Q1 18***	***Q1 17***
LDPE	61	56
HDPE	103	102
PP	132	138

MOL Q1 2018

MOL's Q1 profit fell by 36% to Ft 60.3 billion as margins narrowed on refinery and petrochemical sales. The EBITDA fell 19% to Ft 154.3 billion, whilst total operating revenue rose 4% to Ft 1,008.5 billion. However, costs of raw materials and consumables climbed at twice that rate, increasing 8% to Ft 778.2 billion. Total operating costs for the group were up 11% at Ft 939.9 billion, dragging operating profit down 43% to Ft 68.6 billion.

The MOL Group increased its upstream EBITDA by 31% to $287 million in the first quarter due to rising oil prices, higher production and lower costs. Conversely, the MOL Group's downstream EBITDA fell by 33% to $218 million in the first quarter, although the EBITDA result in the first quarter in 2017 was a record result.



Ethylene production at MOL's two crackers at Tiszaujvaros and Bratislava totalled 202,000 tons in the first quarter, the same as in 2017 whilst small rises were noted in polyethylene. Butadiene production and sales from Tiszaujvaros dropped in the first quarter against 15,000 tons.

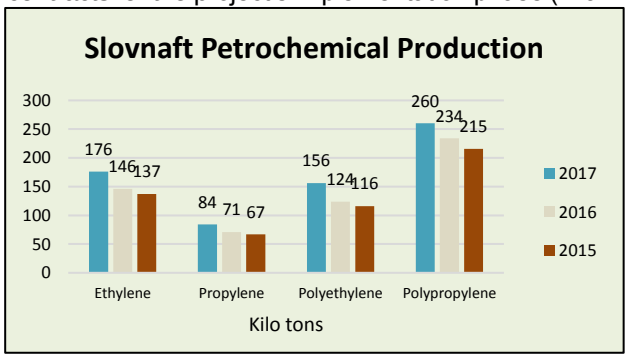
MOL-polypropylene production, new catalyst

The MOL Group has continued the replacement of the catalyst systems used for production of its polypropylene portfolio with non-phthalate catalyst alternatives. The aim for this project was to exclude the possibility that traces of phthalate decomposition by-products (phthalates are part of the traditional catalytic system) may end up in final plastic products. The completion of a series of successful tests led to the full replacement of the traditional catalyst system to a non-phthalate catalyst. As a result, all polypropylene grades produced by MOL Petrochemicals will be phthalate free as of 2018.

MOL petrochemical investments

With a $1 billion investment planned by 2021 the MOL Group is aiming to establish a new polyol product line, which will move the company further along the downstream value chain towards semi-commodity and specialty chemicals products. MOL intends to produce polyols from own produced propylene and to develop forward integration.

As part of these projects the front-end engineering design of the units for hydrogen-peroxide, propylene oxide, polyether polyol and propylene glycols, along with that of the related offsite and utility facilities is expected to be finalised by MOL in Q2 2018. At the same time, MOL is negotiating the EPC (detailed engineering, procurement and construction) contracts for the project's implementation phase (final investment decision) which may start after the closure of FEED.



Slovnaft 2017

Slovnaft's production of polypropylene totalled 260,000 tons in 2017, 11% higher than 2016. Polyethylene production at Bratislava amounted to 156,000 tons, a 24% rise. Overall 404 000 tons of polymers were sold by Slovnaft in 2017, 12% up on 2016. Polyethylene sales increased by 16% and the increase in polypropylene sales amounted to 10%. Slovnaft's domestic sales fell by 3% in 2017 while sales in the export market gained 15%.

Petrohemija restarts production

HIP-Petrohemija restarted ethylene production on 8-9 May after a one-month shutdown. This was followed by production restarting in the HDPE and LDPE plants. The outage period was used to implement overhaul activities in process equipment in petrochemical factories at Pancevo and Elemir.

Slovnaft's strategic objectives are aimed at strengthening of the petrochemical division and to boost the production. Rather than specific project investments Slovnaft is striving to raising efficiency, introducing new procedures whilst increasing its flexibility and expanding the product portfolio. Slovnaft's steam cracker unit processed 449,000 tons of naphtha and 117,000 tons of light hydrocarbons in 2017. Monomer production totalled 176,000 tons of ethylene and 84,000 tons of propylene. Naphtha and light hydrocarbons consumption, and ethylene and propylene production, resulted in a 19% increase over 2017.

Czech Petrochemical Exports (unit-kilo tons)

Product	*Jan-Mar 18*	*Jan-Mar 17*
Ethylene	27.4	12.1
Propylene	7.3	3.1
Benzene	3.8	7.6
Toluene	4.2	3.9
Ethylbenzene	35.2	32.1

Czech petrochemical trade Q1 2018

Czech ethylene exports totalled 27,400 tons in the first quarter in 2018 against 12,100 tons in the same period in 2017, whilst propylene exports rose from 3,100 tons to 7,300 tons. Ethylbenzene exports amounted to 35,200 tons in the first quarter this year versus 32,100 tons, nearly all of which was shipped to Poland. Whilst ethylene imports almost ceased completely in the first quarter, propylene inward shipments rose to 13,700 tons from 11,300 tons in January to March 2017. Propylene imports were sourced mostly from the EU, including Germany, the Netherlands and Poland, whilst non-EU imports came from Petrohemija in Serbia.

Polish Polyol Trade (unit-kilo tons)

	2017	*2016*
Exports	65.1	60.3
Imports	193.0	199.8

PCC Rokita-IRPC Polyol

PCC Rokita concluded the purchase of the extra 25% stake in IRPC Polyol share sale agreement of 28 February 2018, concluded with IRPC Public Co., have been met. Ltd. in Bangkok. After purchasing the 25% stake PCC Rokita will own 50% of IRPC Polyol. Poland remains a net importer of polyols, shipping 193,000 tons inwards in 2017 against 199,800 tons in 2016. Germany and the Netherlands were the two most important sources of imports, as similarly with exports which totalled 65,100 tons in 2017 against 60,300 tons in 2016.

Oltchim's Revenue Distribution (million lei)		
Division	*2017*	*2016*
Polyols-polyethers	586.0	479.4
Chlorine	202.1	163.3
Oxo-Alcohols	144.8	80.0
Merchandise	21.0	21.6
Pitesti Petrochemical Division	167.0	12.1
Building materials	7.7	4.2
Others	7.5	10.6
Total	961.5	754.8

Polish Chemical Production (unit-kilo tons)		
Product	*Q1 18*	*Q1 17*
Caustic Soda Liquid	97.1	86.6
Caustic Soda Solid	17.0	20.2
Ethylene	138.4	124.2
Propylene	88.9	87.5
Butadiene	14.7	14.2
Toluene	4.4	5.6
Phenol	12.3	10.1
Caprolactam	43.7	43.0
Acetic Acid	1.7	3.9
Polyethylene	100.7	87.3
Polystyrene	17.0	13.6
EPS	14.8	18.9
PVC	69.2	76.0
Polypropylene	75.8	65.4
Synthetic Rubber	72.4	62.1
Ammonia (Gaseous)	721.0	768.0
Ammonia (Liquid)	44.6	24.1
Pesticides	13.5	14.0
Nitric Acid	640.0	620.0
Nitrogen Fertilisers	530.0	543.0
Phosphate Fertilisers	105.6	126.4
Potassium Fertilisers	101.8	125.2

Oltchim sale of assets to be concluded by October 2018

The completion of the acquisition of Oltchim's most important assets will be completed by 17 October 2018 at the latest.

In 2017 Oltchim achieved revenues of €206 million against €162 million in 2016. Regarding raw materials supply contracts were concluded for the entire quantity of propylene required. The quantity of propylene increased from 86,000 tons in 2016 to 100,000 tons in 2017. The purchase of ethylene oxide was maintained at 6,000 tons in 2017.

For the volumes of raw materials purchased for the electrolysis plants (soda ash, sulphuric acid, brine) the sources remain the same, respectively sources in the country for soda ash and brine and EU sources for sulphuric acid. The power station Govora was the main supplier of electricity and industrial steam supplier in 2017.

Oltchim Q1 2018

Oltchim's turnover increased by 34% or 76 million lei in the first quarter in 2018 against the same quarter in 2017, and 21% more than the fourth quarter in 2017.

The net result increased by 39 million lei, representing a six-fold increase, compared both with the first quarter 2017, and with the fourth quarter 2017. The EBITDA increased by 48,8 million lei (a 3.5-fold increase) compared with the first quarter 2017, and by 31.7 million lei compared with the fourth quarter 2017.

The gross profit for the first quarter in 2018 (56.201 million lei), comprised operations at Ramnicu Valcea set against mothballing costs at the main site and also mothballing at the Bradu petrochemical division. The improved results in Q1 2018 were attributed to increased sales in oxo alcohols, and increases in the prices of liquid and solid caustic soda. Other factors included efficiency measures undertaken which meant that total costs increased by 11% set against the revenue increase of 34%.

Ciech-new salt plant Germany

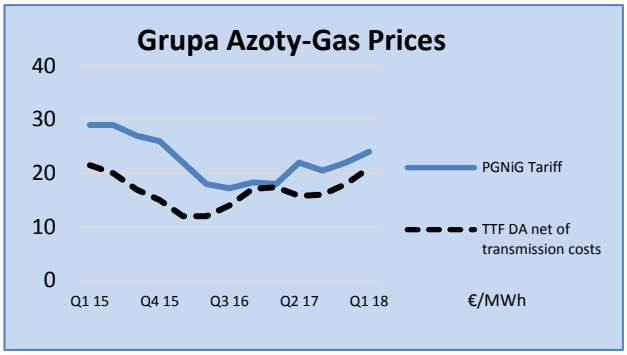
The Ciech Group's plans to build a new salt plant at Stassfurt in Germany is aimed towards producing high-purity evaporated salt products for the food or pharmaceutical industry. The new plant is expected to cost around €109 million and be ready by the end of 2020. Ciech has been operating a soda ash plant at Stassfurt since 1996. In 2015 Ciech completed the expansion of production capacity of the soda ash plant at Inowrocław, from 600,000 tpa to 800,000 tpa.

Ciech Divisional EBITDA (zl million)		
Division	2017	2016
Soda ash	690.7	793.9
Organic chemical	96.5	79.5
Silicates and glass	36.8	34.7
Transport	16.1	14.0
Others	14.9	19.0

For 2017 the Ciech Group achieved a net profit of zl 393.3 million, zl 588.8 million of operating profit, zl 83.2 million of EBITDA and revenues of zl 3.579 billion. The group recorded higher revenues in the silicates and glass segment, which was the result of the new furnace at Ciech Vitrosilicon at Żary (put into use in July 2016). Currently, Ciech is implementing a plan for increasing the production capacity of sodium silicate, used partly in the production of detergents or precipitated silicates.

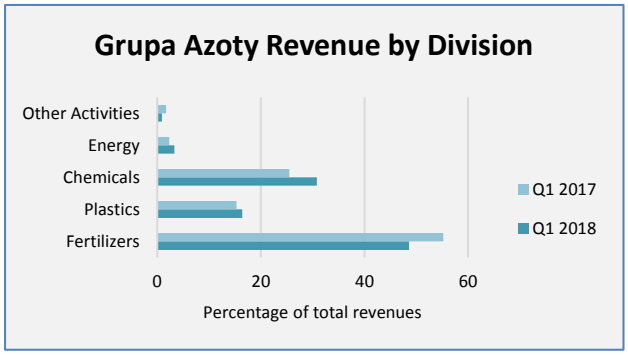
Grupa Azoty, Q1 2018

High gas prices combined with growing urea imports, affected Grupa Azoty's results in the first quarter in 2018. At the same time better results in plastics and pigments, in addition to the efficient management of nitrogen helped the company to minimize the impact of negative market trends. The group generated revenues amounting to nearly zl 2.5 billion in the first quarter, generating an EBITDA of zl 403 million.



Although both revenues (by zl 190 million) and EBITDA (by nearly zl 50 million) showed downward trends, Grupa Azoty only recorded a slight fall in operating profit margin to 16.1% versus 16.9% in 2017. The key factor influencing the performance of financial results in the first quarter of 2018 was gas prices which rose against the previous quarter.

Grupa Azoty's efforts to reduce dependency on the fertiliser sector will continue as part of the broader strategy until 2020. The important investment at PDH Polska and Polymery Police, involving propylene and polypropylene, will play an important part in product diversification. The new polyamide plant at Tarnow has already started providing more processing capacity for caprolactam and increasing the share of plastics in the revenues and profits for Grupa Azoty.



Azoty's chemical division saw a higher EBITDA of 19% to in the first quarter to zl 126 million against a 12% rise in revenues to zl 767 million. In the oxo market prices in Q1 2018 were higher than in 2017, and remain correlated with movements in propylene prices. Grupa Azoty ZAK decided to withdraw DEHP from its product portfolio to concentrate on non-phthalate plasticizers, mainly DEHT, chiefly due to legal restrictions on applications.

Russia

Russian chemical markets, Q1 2018

The chemical product trade deficit for Russia rose to $4.8 billion in the first quarter this year against $4.0 billion in the same period in 2017 and $1.5 billion in the 2016. Price rises coupled with increased buying power from industrial consumers help to explain the rise in the trade deficit for chemical products. Products such as epoxy resins and isocyanates, where Russia depends exclusively on imports, have seen large price rises this year.

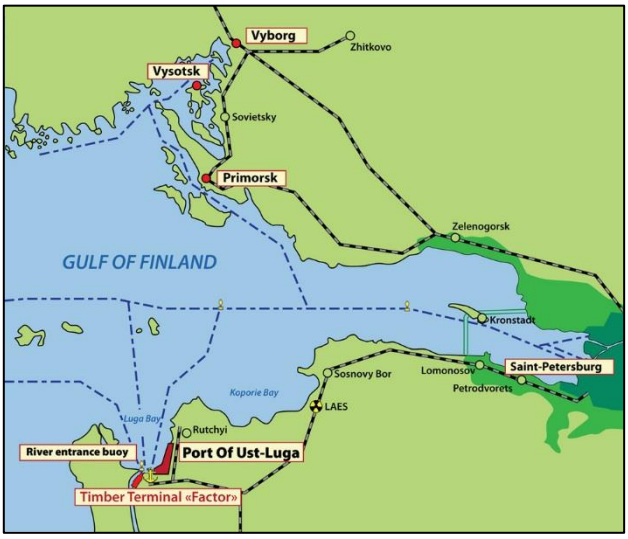
The Ministry of Industry and Trade of Russia has set itself the goal of achieving an increase in exports of chemical products by approximately $15 billion over the next decade. However, the trade deficit in chemical products is unlikely to be reduced until Russia focuses more on fine and speciality chemicals rather than petrochemicals at present.

Oil and gas accounted for around two thirds of the $90 billion export revenues for Russia in the first quarter this year, whilst the share of exports of chemical products in January-March 2018 amounted to 6.1% against 6.4% in January-March 2017. Higher oil prices this year have reduced the share of other products in the total revenue structure.

Russian Petrochemical Projects

Gazprom-Ust Luga gas-petrochemical complex

Gazprom is working on a project to create a gas chemical complex in the Baltic region at Ust Luga, depending on necessary pipeline expenditure. The amount of investments in the whole project is estimated at $20 billion, with the Russian company Peton responsible for development plans. Gazprom stresses that a key part of this project is the necessity to modernise the pipelines supplying the gas from the Yamal region.



The production complex is being considered for a site near the port of Ust-Luga. The gas processing plant could be designed to process up to 45 billion cubic metres of natural gas per annum, including 14-15 billion cubic metres to be sent for liquefaction in Baltic LNG. The remainder of the gas will probably be sent to Nord Stream 2, whilst the fatty fractions separated from the gas will be used to produce ethylene and polyethylene. The broader concept involves the export of up to 1.5 million tpa of polymers for export to Europe.

ZapSibNeftekhim, May 2018

SIBUR concluded 143 contracts in April with 74 Russian enterprises for the supply of equipment and construction materials for the ZapSibNeftekhim complex. The overall progress in the construction of ZapSibNeftekhim by the end of March 2018 was rated at 76.8%.

ZapSibNeftekhim and Uralkhimmash have signed a new contract for the manufacture of 20 units of technological equipment for the complex at Tobolsk. Uralkhimmash will produce and supply nitrogen purification absorbers, separators, polyethylene powder collectors, air receivers of instrumentation, drainage capacity and a number of other devices involved in the chemical processes of obtaining raw materials. The installation of equipment will be managed by Technip.

Uralkhimmash contracts with SIBUR for Tobolsk

- 2012-3 ball tanks (2,000 cm) & 8 gas holders for propylene storage
- 2014-2 ball tanks (2,400 cm) for NGLs
- 2016-supply of 12 ball tanks (1260 tons) for NGLs
- 2017-6 balls tanks for butadiene
- 2018-New contract signed for 20 units

SIBUR and the Federal Grid Company (FGC) have commissioned a key infrastructure element for the supply of electricity to ZapSibNeftekhim. The new infrastructure allows for the technological connection of ZapSibNeftekhim's power receivers with a maximum capacity of 300 MW to UNEG.

VNHK project to increase focus on petrochem

A fundamental change in the configuration of the VNHK complex the Russian Far East, which involves reducing the emphasis on refining and the same time increasing the focus on petrochemicals, has altered the project schedule for Rosneft.

The first stage of the VNHK complex, which was intended for refining, is now expected to be transferred to the second stage and introduced at the same time as the olefin cracker (including ethylene 1.6-1.9 million tpa and propylene 0.7-0.9 million tpa). The new configuration for VNHK

comprises the processing of 5 million tpa of naphtha into petrochemicals, an increase from 3.0 million tpa, and reduced production of refining products. The change in project product focus also means that the first stage of the complex will be delayed from 2020 to 2026.

Russian Chemical Production (unit-kilo tons)		
Product	***Jan-Mar 18***	***Jan-Mar 17***
Caustic Soda	329.0	307.9
Soda Ash	892.0	850.0
Ethylene	783.0	766.0
Propylene	605.6	598.4
Benzene	393.0	378.0
Xylenes	165.6	141.7
Styrene	645.0	179.6
Phenol	48.0	56.5
Ammonia	4,700.0	4,100.0
Nitrogen Fertilisers	2,863.0	2,471.0
Phosphate Fertilisers	1,029.0	818.0
Potash Fertilisers	2,101.0	2,085.0
Plastics in Bulk	2,047.0	1,936.0
Polyethylene	558.0	525.0
Polystyrene	135.4	127.0
PVC	255.9	233.2
Polypropylene	395.0	364.0
Polyamide	42.5	38.7
Synthetic Fibres	435.0	452.0

The parameters of the project, as well as the timing of its implementation, may depend on the ability of Rosneft to attract a foreign partner. Previously ChemChina refused to participate in the project in its previous configuration, and currently, a new partner is being searched.

The change in the configuration of the project may reduce the need for gas (previously estimated at 2.3 billion cubic metres per annum by 2021-2023, which is beneficial for Rosneft, which is working on the possibility of providing VNHK with gas from its own sources due to the lack of free resources from Gazprom.

VNHK reconfiguration could present challenge to Amur Gas Chemical Complex

Due to the unprofitability of gasoline sales and exports from Russia, and changed configuration towards petrochemicals, the VNHK complex could represent a competitive challenge to SIBUR's plans for the Amur-Gas Chemical Complex at Svobodny. SIBUR is yet to make a final decision on this project, which has hitherto depended largely on the ethane price that can be agreed with Gazprom.

Although the Nakhodka and Svobodny projects are located 1600 km from each other the Nakhodka complex was previously more focused on refining and thus presented only small competition for the Amur Complex.

Russian Far East Petrochemical Projects			
Project	***Location***	***Feedstock***	***Competitive advantage***
VNKH	Nakhodka	Naphtha	Coastal access
Amur Gas CC	Svobodny	Ethane	Production costs

Both complexes are being designed principally for the Chinese market, although the coastal location of VNKH will allow sales to the international marketplace. The Amur Gas-Chemical Complex should be better placed for production costs in that the petrochemical facilities will be using ethane rather than naphtha as at VNHK. Until recently, the VNHK project was being designed to produce mainly petroleum products.

Russian petrochemical producers & markets

Nizhnekamskneftekhim Q1 2018

Nizhnekamskneftekhim reduced its net profit by 23.0% for the first quarter in 2018, despite increased revenues of 4.2% over the same period in 2017 to 41.7 billion roubles. Revenues were boosted for Nizhnekamskneftekhim by the rise in rubber prices, helped by a shortage of natural rubber, and China's policy to stimulate demand for cars. Synthetic rubber production at Nizhnekamskneftekhim rose 8% in the first quarter, whilst polyolefin and polystyrene volumes remained largely unchanged.

Nizhnekamskneftekhim Production (unit-tons)		
Product	***Q1 18***	***Q1 17***
Ethylene	158.7	160.1
Propylene	82.5	78.4
Benzene	58	56.5
HDPE	0	10.7
Polypropylene	51.4	54.6
Styrene	77	75.2

The major factor in the first quarter was that production costs rose 12.6% in the first quarter to 31.9 billion roubles. The gross profit rose from 7.64 billion roubles to 9.8 billion roubles, whilst net profit fell from 5.4 billion roubles to 4.2 billion roubles.

Kazanorgsintez Q1 2018

Kazanorgsintez increased its net profit by 6.6% to 4.8 billion roubles for the first quarter in 2018. The company's revenue increased by 1.2% to 19.57 billion roubles. Most of the company's revenues are derived from polyethylene and polycarbonate which were down to 16.4 billion roubles in the first quarter this year against 17.7 billion roubles in 2017.

Kazanorgsintez Polymer Revenues (billion roubles)		
Polymer	***Q1 18***	***Q1 17***
HDPE	9.1	10.7
LDPE	4.7	4.5
Polycarbonate	2.6	2.6
Total	16.4	17.7

The cost of sales for Kazanorgsintez fell in the first quarter to 11.56 billion roubles, whilst the gross profit of the company increased by 4.7% to 8.01 billion roubles. Kazanorgsintez was the largest Russian ethylene producer in the first quarter, followed by Nizhnekamskneftekhim. Kazanorgsintez produced 132,000 tons of HDPE in the first quarter.

Russian ethylene & propylene production, Jan-Mar 2018

Ethylene production in Russia increased slightly in the first quarter to 786,100 tons against 773,900 tons. Regarding feedstocks naphtha was the most popular source for cracker operations for producers due mainly to excise factors which made it more attractive than other feedstocks. In the first three months of 2018, 593,710 tons of NGLs were shipped from Russian enterprises to the domestic market, which is 5% less than in the same period in 2017. The only ethylene producer using ethane, Kazanorgsintez, has benefited from increased supply from the Orenburg gas processing plant.

Russian Ethylene Production (unit-kilo tons)		
Producer	***Jan-Mar 18***	***Jan-Mar 17***
Angarsk Polymer Plant	57.8	56.4
Kazanorgsintez	160.1	160.5
Stavrolen	83.5	79.9
Nizhnekamskneftekhim	158.7	160.1
Novokuibyshevsk Petrochemical	12.2	12.7
Gazprom neftekhim Salavat	94.5	89.7
SIBUR-Kstovo	104.3	102.5
SIBUR-Khimprom	12.1	11.9
Tomskneftekhim	70.9	68.9
Ufaorgsintez	31.9	31.1
Total	786.1	773.9

In the first three months in 2018, Russia produced 616,000 tons of propylene which was 26% more than in the same period in 2017. Russian plants produced 213,400 tons of propylene in March, 12% more than in February. Lukoil-NNOS increased monomer production by 29% to 26,900 tons after reducing utilisation in February.

In addition, SIBUR-Tobolsk produced 43,100 tons of propylene monomer in March, 166% higher than February after technical issues needed resolving. Stavrolen and Ufaorgsintez increased production by 14% and 13% respectively in March, to 12,000 tons and 16,000 tons.

Russian Propylene Domestic Sales (unit-kilo tons)		
Producer	***Jan-Mar 18***	***Jan-Mar 17***
Angarsk Polymer Plant	21.3	20.4
Omsk Kaucuk	0.0	1.0
SIBUR-Kstovo	31.9	16.5
Lukoil-NNOS	51.9	54.7
Tomskneftekhim	0.0	0.3
SIBUR-Khimprom	0.0	0.5
Stavrolen	0.0	2.0
Tobolsk-Polymer	0.2	0.0
Total	105.4	95.0

Russian propylene sales, Jan-Mar 2018

Propylene exports from Russia doubled in March over February, after Lukoil-NNOS increased shipments by three-fold to 9,500 tons. SIBUR-Kstovo and Stavrolen both supplied 1,500 tons to foreign markets in March. Exports from Russia totalled 31,500 tons in the first quarter which was 36% down on the same period last year.

Russian domestic sales of propylene rose 11% in March over February to 37,300 tons. SIBUR-Kstovo increased shipments by 18% over February to 11,500 tons, while exports from the plant were halved to 1,500 tons. In addition, the Angarsk Polymer Plant increased shipments by 30% to 8,300 tons, enabled due to increased inventory. In the first three months in 2018 Russian companies supplied a total of 105,400 tons of propylene to the domestic market, amounting to 13% more than in the same period last year. Sales of propane-propylene fractions in this period rose 5% to 38,300 tons.

Russian Styrene Production (unit-kilo tons)		
Producer	***Jan-Mar 18***	***Jan-Mar 17***
Nizhnekamskneftekhim	77.0	75.2
Angarsk Polymer Plant	9.8	9.2
SIBUR-Khimprom	26.0	28.8
Gazprom n Salavat	51.8	49.8
Plastik, Uzlovaya	17.3	16.7
Total	182.0	179.6

Russian styrene, Jan-Mar 2018

Russian styrene production rose 8% in March over February to 61,800 tons. Gazprom neftekhim Salavat increased styrene monomer production by 13% to 18,200 tons, whilst Angarsk Polymer Plant increased production by 14% to 3,500 tons. The increase in capacity utilisation at Salavat and Angarsk was in response to the high demand for monomer in Russia. At the same time, SIBUR-Khimprom produced 7,400 tons of styrene which is 6% less than in February. In the first three months in 2018, Russia produced 182,000 ton of styrene, which is 1.5% more than in the same period in 2017.

Styrene sales in the Russian domestic market rose 12% in March to 10,600 tons. SIBUR-Khimprom supplied 2,000 tons which is 3.5 times more than in February, although due to repairs Nizhnekamskneftekhim reduced shipments by half to 1,200 tons. Gazprom neftekhim Salavat shipped 5,900 tons in March, 20% more than in February, whilst Angarsk Polymer Plant increased sales to the domestic market by 11% to 1,400 tons. For the first three months in 2018, domestic plants shipped 27,000 tons of styrene to the Russian market amounting to a 15% increase over the same period last year.

Bulk Polymers

Russian HDPE Production (unit-kilo tons)		
Producer	***Jan-Mar 18***	***Jan-Mar 17***
Kazanorgsintez	132.9	132.7
Stavrolen	76.3	73.1
Nizhnekamskneftekhim	0.0	10.7
Gazprom n Salavat	28.0	21.8
Total	237.2	238.3

Russian HDPE production Jan-Mar 2018

Russian HDPE production totalled 237,700 tons in the first quarter in 2018, 0.3% down on the same period in 2017 when it amounted to 238,400 tons. In March, the total volume of production of HDPE at Kazanorgsintez increased to 46,900 tons against 41,200 tons in February. Kazanorgsintez produced 132,900 tons in the first quarter in 2018 whilst Stavrolen increased by 4% to 76,300 tons. Gazprom neftekhim Salavat increased HDPE production by 28% in the first quarter to 28,000 tons, whilst Nizhnekamskneftekhim concentrated exclusively on LLDPE production of which it aims to produce around 160,000 tons in 2018. Consumption of HDPE in Russia is not growing particularly, partly because of the state of the economy and partly due to the wider spectrum of public concern over plastics packaging. Production of polyethylene films in Russia amounted to 980,000 tons in 2017, whilst consumption totalled 1 million tons or 3% down on 2016.

Russian Polypropylene Production (unit-kilo tons)		
Producer	***Jan-Mar 18***	***Jan-Mar 17***
Ufaorgsintez	33.7	30.2
Stavrolen	30.1	30.6
Moscow NPZ	33.1	21.8
Nizhnekamskneftekhim	51.4	54.6
Polyom	54.7	52.4
Tomskneftekhim	36.4	34.8
Tobolsk-Polymer	126.5	129.5
Total	365.9	353.9

Russian polypropylene production, Jan-Mar 2018

Russian polypropylene production increased in the first quarter by 3% to 365,900 tons. SIBUR Tobolsk reduced production by 2% to 126,500 tons, whilst Polyom at Omsk increased production by 5% to 54,700 tons. Nizhnekamskneftekhim reduced production by 6% to 51,400 tons whilst Tomskneftekhim increased volumes from 34,800 tons to 36,400 tons. Ufaorgsintez increased production to 33,700 tons against 30,600 tons whilst Neftekhimya at the Moscow refinery increased by 52% to 33,100 tons. Stavrolen reduced production by 1% to 30,200 tons. Russian polypropylene production is set to increase sharply in 2019-2020 after the start-up of the ZapSibNeftekhim complex at Tobolsk.

Russian polypropylene & PP film trade, Jan-Mar 2018

Russian polypropylene exports totalled 83,000 tons in the first quarter against 82,000 tons in the same period in 2017. Most of the polypropylene exported from Russia consists of homopolymers. Polypropylene film is the only Russian segment of thermoplastic films with a positive foreign trade balance and production surplus. Production of polypropylene films has been growing for four years, amounting to 230,000 tons with a consumption of 216,000 tons.

Imports of polypropylene to Russia increased by 28% in January-March 2018 over 2017 to 45,000 tons. Homopolymer imports rose from 10,700 tons to 15,500 tons, whilst imports of block copolymers increased by 3.7% to 11,200 tons. Imports of propylene copolymers for the first quarter amounted to 7,700 tons against 6,500 tons whilst imports of other propylene polymers amounted to 10,600 tons versus 7,100 tons.

Russian PVC Production (unit-kilo tons)		
Producer	***Jan-Mar 18***	***Jan-Mar 17***
Bashkir Soda	66.8	65
Kaustik	23.6	22.6
RusVinyl	84.6	77.6
Sayanskkhimplast	71.9	59.6
Total	246.9	224.8

Russian PVC market, Jan-Mar 2018

Russian PVC production increased by 10% in the first quarter in 2018, totalling 246,800 tons against 224,700 tons in the same period in 2017. RusVinyl produced 84,600 tons in the first quarter against 77,600 tons in January to March 2017.

Sayanskkhimplast produced 71,900 tons of PVC in the first quarter versus 59,600 tons whilst Bashkiria Soda increased by 3% to 66,800 tons. Kaustik at Volgograd produced 23,600 tons of PVC in the first quarter in 2018 against 22,600 tons in the same period in 2017.

Russian Export Polymer Prices (euros per ton)		
Product	***Q1 18***	***Q1 17***
Polyethylene	1113.6	1146.5
Polystyrene	905.2	1246.7
PVC	1094.2	921.3
Polypropylene	1118.6	1133.9

Imports of PVC into Russia increased 16% in the first quarter in 2018 from 3,900 tons to 5,600 tons whilst exports rose by 50%. China supplied 5,100 tons of PVC to the Russian market in the first quarter in 2018. For January-March of 2018, 43,500 tons of slurry were shipped for export against 28,900 tons in 2017.

Imports rose in April after the Kstovo plant started a two-week shutdown in the second half of the month. PVC demand in the second quarter is usually stimulated by the construction sector, and prices can be expected to rise. Some areas of PVC consumption are facing environmental pressures over polymer packaging, such as PVC film where volumes declined in 2017 by 2,000 tons to 34,000 tons. Main areas of growth for PVC include window profiles and pipes. The production of PVC pipes in Russia grew by 4.5% in 2017 to 45,000 tons.

Russian PX Production (unit-kilo tons)		
Producer	***Jan-Mar 18***	***Jan-Mar 17***
Gazprom Neft	44.1	34.9
Ufaneftekhim	8.5	29.7
Kinef, Kirishi	37.0	19.9
Total	89.6	83.9

Russian PX Domestic Sales (unit-kilo tons)		
Producer	***Jan-Mar 18***	***Jan-Mar 17***
Gazprom Neft	13.7	21.6
Ufaneftekhim	32.3	29.7
Kinef, Kirishi	0.0	0.0
Total	46.0	51.3

Russian PX Exports (unit-kilo tons)		
Producer	***Jan-Mar 18***	***Jan-Mar 17***
Gazprom Neft	18.2	12.8
Ufaneftekhim	0.00	0.00
Kinef, Kirishi	16.9	19.9
Total	35.1	32.7

PX-PTA-PET

Russian paraxylene Q1 2018

Russian paraxylene production totalled 89,600 tons in the first quarter in 2018 against 83,900 tons in the same period in 2017. Gazprom Neft at Omsk increased production from 34,900 tons in the first quarter last year to 44,100 tons and increased exports in the first quarter whilst reducing domestic sales. Overall sales of paraxylene on the domestic market totalled 46,000 tons against 51,300 tons in January to March 2017.

Paraxylene exports rose in the first quarter from 32,700 tons in 2017 to 35,100 tons in the same period in 2018. Paraxylene export prices in the first quarter this year averaged $763 per ton against $688 per ton in the whole of 2017.

Russian PET imports, Jan-Feb 2018

imports of PET into Russia for the first two months in 2018 amounted to 17,170 tons. The share of imports of PET in the total consumption of bottled granulate in the Russian market comprised 12%. PET production totalled 534,000 tons in 2017, 7% up on 2015. Imports totalled 131,000 tons and exports 45,000 tons.

Polief was the leading producer, providing 40% of production, followed by Alco-Naptha (29%), Senezh (17%) and SIBUR-PETF (14%).

Russian PTA Imports (unit-kilo tons)		
Country	***Jan-Feb 18***	***Jan-Feb 17***
Belgium	2.1	11.3
India	3.9	10.2
China	16.7	9.9
South Korea	4.8	8.4
Poland	0.0	2.1
Thailand	6.0	0.0
Total	33.2	42.0

Russian PTA imports, Jan-Feb 2018

PTA imports into Russia declined in the first two months in 2018 to 33,000 tons against 42,000 tons in the same period last year. China increased shipments to 16,700 tons against 9,900 tons in January to February 2017 whilst India reduced deliveries from 10,200 tons to 3,900 tons. India supplied the cheapest PTA in February, costing $695 per ton, with Thailand as the next lowest price source at $724 per ton. Thailand supplied 6,000 tons of PTA to Russia in the first two months in 2018.

Ivanovo polyester project-financing issues

Delays over financing are slowing down the project schedule for the Ivanovo Polyester Complex and raising doubts about the project's viability. Despite the fact that a loan agreement with Vnesheconombank was signed earlier, the bank is yet to make a final decision whether to finance the construction of the synthetic fibre plant. Ivanovo Polyester Complex (IPK) is yet to agree with Vnesheconombank (VEB) to change the terms of financing for the construction of the complex in the Ivanovo region.

Ivanovo polyester project

In December 2016, a contract was signed for the supply of technology, basic equipment, installation with the Uhde Inventa-Fischer. Agreements for the supply of 65,000 tpa of MEG with SIBUR and Nizhnekamskneftekhim and the supply of PTA in the amount of 155,000 tpa with Korean company Posco Daewoo Co.

The planned capacity of the future complex will be 175,000 tpa of polyester fibre and 30,000 tpa of polyethylene terephthalate for textile use. Part of the production is supposed to be processed in the industrial park in Vichuga, part of it is exported. One of the main market aims of the project is to compete with China in the manufacture of textiles which is only possible through the availability of the country's own raw material base. The original project schedule has altered substantially and due to the current financial delays, it is not possible to formulate a credible time line.

Russian Benzene Sales (unit-kilo tons)		
Producer	***Jan-Mar 18***	***Jan-Mar 17***
Angarsk Polymer Plant	14.9	6.8
SIBUR-Kstovo	21.1	16.4
Uralorgsintez	21.7	21.3
Kirishinefteorgsintez	10.6	16.3
West Siberian MC	18.8	18.0
Slavneft-Yanos	15.7	16.4
Gazprom Neft (Omsk)	31.7	28.9
Gazprom Neftekhim Salavat	17.0	2.9
Stavrolen	15.0	4.3
Koks	7.1	6.8
Magnitogorsk MK	11.1	11.6
Altay-Koks	7.3	10.0
Ryazan NPZ	9.8	7.6
Severstal	8.9	7.6
Others	6.0	14.9
Total	216.4	189.9

Aromatics

Russian benzene production-sales, Jan-Mar 2018

Russian benzene production amounted to 124,000 tons in March, 7% more than in February. After extended downtime Stavrolen increased styrene production by 26% to 7,900 tons. Gazprom neftekhim Salavat produced 19,900 tons of benzene in March, which is 12% more than in February. The output of benzene at Severstal dropped by 14% to 2,600 tons, which was due to the lack of inventory, whilst production at the Omsk Refinery decreased by 11%, to 10,000 tons due to an increase in the production of toluene.

In March, Russian plants shipped 63,400 tons of benzene to the domestic market, 3% less than in February. Shipments from SIBUR-Kstovo and Uralorgsintez decreased by 20% to 5,600 tons and 5,700 tons respectively. Stavrolen continued to increase its supply of benzene to the domestic market, shipping 25% more than in February to 7,800 tons. In addition, shipments of benzene from Severstal increased in March by 34% to 3,500 tons. For the first three months of 2018, 216,400 tons of benzene were shipped from Russian plants to the domestic market which is 15% more than in the same period of 2017. The main reason for the rise in consumption was increased purchases made by Kuibyshevazot.

Russian Toluene Domestic Sales (unit-kilo tons)		
Producer	***Jan-Mar 18***	***Jan-Mar 17***
Novopiletsk MK	0.0	0.1
Slavneft-Yanos	9.0	4.5
Severstal	0.8	1.2
Lukoil-Perm	6.9	1.1
Gazprom Neft	20.8	15.4
Zapsib	0.0	10.7
Kinef, Kirishi	4.4	6.2
Gazprom Neftekhim Salavat	0.0	1.7
Others	0.8	0.1
Total	42.7	41.0

Kuibyshevazot remained the only domestic consumer of imported benzene in March, buying 2,000 tons from the Atyrau refinery. an in February. For the first three months of 2018, Russia imported 3,600 tons of benzene which is 14% less than in the same period of 2017

Kirishinefteorgsintez continued to be the only Russian exporter of benzene for synthesis in March, increasing by 8% over February to 2,500 tons. For the first three months in 2018, Kirishinefteorgsintez exported 7,300 tons of benzene for synthesis against 990 tons in the same period in 2017.

Russian phenol, Jan-Mar 2018

Russia produced 16,900 tons of phenol in March, 9% more than in February. Novokuibyshevsk Petrochemical increased production by 15% to 5,700 tons, and Kazanorgsintez increased by 11% to 6,600 tons. Russian phenol production dropped to 48,000 tons in the first quarter against 56,000 tons in the same period in 2017.

Russian Phenol Market Sales by Supplier (unit-kilo tons)		
Producer	***Jan-Mar 18***	***Jan-Mar 17***
Novokuibyshevsk PC	11.4	12.1
Kazanorgsintez	2.1	3.1
Ufaorgsintez	10.9	13.3
Borealis	1.2	1.0
Total	25.6	29.6

Sales of phenol on the domestic market dropped in the first quarter to 25,600 tons against 29,600 tons in the same period in 2017. The fall was mainly due to lower purchases by Kuibyshevazot which used larger volumes of benzene in the production of caprolactam.

Kuibyshevazot-PA & Caprolactam Sales 2017		
Product	***Production (tons)***	***Internal processing***
Polyamide-6	147,200	15,700
Caprolactam	194,000	147,440
Product	***Merchant sales (tons)***	***Export share***
Polyamide-6	131,500	72%
Caprolactam	45,900	96%

Kuibyshevazot Q1 2018

Kuibyshevazot increased production of polyamide-6 by 4% in the first quarter in 2018, whilst cord fabric rose by 6%. At the same time, production of mineral fertilisers decreased by 1-3%. Production of caprolactam decreased from 48,500 tons in Q1 2017 to 52,900 tons in the first three months this year. The company is working on the construction of the fifth installation for polyamide-6 production and another installation for ammonium sulphate in a joint venture with Trammo (USA).

Kuibyshevazot increased sales volumes of commodity products by 31.3% for the first quarter of 2018 to 14.1 billion roubles although due to higher costs net profits dropped to 1.5 billion roubles from 1.89 billion roubles in the same period in 2017. Ammonia production by Kuibyshevazot increased by 72.5%, due partly to the start of production of the jv Linde Azot Togliatti. The output of ammonium nitrate increased by 8.4%, and urea by 1.9%.

Kuibyshevazot Capacities 2018 (unit-kilo tons)	
Product	***Capacity***
Ammonia	660
Ammonium nitrate	680
Ammonium sulphate	560
Caprolactam	220
PA-6	212
PA technical & textile yarn	18.8

In the first quarter in 2018, production of caprolactam at Kuibyshevazot increased by 9% and polyamide-6 by 6%. The output of the technical thread was reduced by 34.7%, cord fabric by 12.6%. The production of impregnated cord fabric increased by 19.4%. In March 2018, the fourth stage of production of polyamide-6 was completed by Kuibyshevazot, increasing capacity to 212,000 tpa.

Russian Caprolactam Production (unit-kilo tons)		
Producer	***Jan-Mar 18***	***Jan-Mar 17***
Kuibyshevazot	52.9	48.5
Shchekinoazot	13.7	13.9
SDS Azot	33.9	32.9
Total	100.5	95.3

Russian polyamide sales 2017

The production of caprolactam in Russia in 2017 increased by 2% compared with 2016. Exports accounted for 59% of Russian production and were shipped mainly to North and South-East Asia. Russian production of polyamide-6 increased by 3% in 2017, almost entirely produced by Kuibyshevazot and the remainder by Metafrax.

Kuibyshevazot-caprolactam sales & usage 2017

From its total caprolactam production in 2017 Kuibyshevazot sold 45,900 tons on the merchant market, of which 96% was exported to North and South-East Asia. Kuibyshevazot used 76% of its caprolactam production for internal processing into granulated polyamide-6.

Sales of polyamide-6 by Kuibyshevazot amounted to 131,600 tons in 2017, of which 72% was exported. The Kuibyshevazot (Shanghai) Trading Company, which was established in 2007, accounted for 30% of export sales of polyamide shipped by Kuibyshevazot in 2017. Supplies of caprolactam to the Russian market grew by 5% in 2017, although volumes remain small. The priority market for polyamide yarns produced in Russia remains the domestic market, which accounted for 94% of sales in 2017.

The share of exports from polyamide production in Russia comprised 65% in 2017. Deliveries of polyamide were shipped to North and South-East Asia, West and East Europe, the Middle East, Latin America and North Africa.

The total production of polyamide fibres and yarns increased by 3% in 2017, including textile threads by 9% and technical and cord yarns by 5%. The growth was facilitated due to commissioning of three new machines at Kursk for forming high-strength technical yarns at Kuibyshevazot's subsidiary Kurskkhimvolokno.

Synthetic Rubber

Russian C4 Purchases (unit-kilo tons)		
Consumer	***Jan-Mar 18***	***Jan-Mar 17***
Omsk Kaucuk	13.2	16.2
Nizhnekamskneftekhim	44.7	44.1
SIBUR Togliatti	55.9	48.4
Sterlitamak Petrochemical	0.0	1.4
Total	113.8	110.1
Source: Chem-Courier.ru		

Russian C4 sales, Jan-Mar 2018

C4 sales on the domestic market amounted to 34,800 tons in March which was 18% more than in February. SIBUR Togliatti purchased 21,200 tons which is 22% more than in February, whilst Omsk Kaucuk increased by 46% to 4,500 tons. At the same time, Nizhnekamskneftekhim purchased 9,100 tons or 6% less than in February. Over the first three months of 2018, Russian companies increased C4 sales on the domestic market by 3% to 95,800 tons from the total consumption of 113,800 tons.

Russian Tyre Production (unit-mil pieces)		
Product	***Jan-Mar 17***	***Jan-Mar 16***
Car Tyres	10.3	9.4
Lorry tyres	1.6	1.4
Agricultural tyres	0.5	0.4
Total	12.4	11.1

Russian rubber production, Jan-Mar 2018

Russian synthetic rubber production totalled 435,000 tons in the first quarter in 2018 against 452,000 tons in the same period in 2017. Exports totalled 266,000 tons in the first quarter versus 274,000 tons in Q1 2017. Domestic demand for synthetic rubber has benefited this year from increased tyre production, in all categories of cars, lorries and tractors. Of the tyre manufacturers Omskshina has agreed contracts with Kordiant Vostok for raw material supplies such as SBR, butadiene rubber, etc, which Kordiant sources through SIBUR.

Russian Synthetic Rubber Exports ($ million)		
Category	***Jan-Feb 18***	***Jan-Feb 17***
E-SBR	6.7	14.6
Block	10.1	10.5
SSBR	0.7	0.8
SBR	11.9	15.1
Polybutadiene	59.1	63.4
BR	48.9	33.2
HBR	46.8	43.8
NBR	11.0	10.6
Isoprene	75.1	72.1
Others	5.0	27.9
Total	275.3	292.0

Nokian Tyres increased sales in Russia in the first quarter of 2018. The company expects the total sales of tyres on the secondary market in Russia will increase by 3-5% this year, while the winter tyre segment will grow faster. The capacity of the Russian company Nokian Tires is 15.5 million tyres per annum.

Russian rubber exports, Jan-Feb 2018

Russian exports of synthetic rubber increased to 179,300 tons in the first two months in 2018 against 175,300 tons in the same period in 2017. Revenues rose from $293 million to $472 million reflecting a rise per ton from $1118 to $1726. The highest value product category exported from Russia is halogenated butyl rubber (HBR).

Volatility in raw materials prices for tyres and rubber goods has moderated since last year, but market is still prone to wild swings. Butadiene is up this year in all regions affecting margins, and recent crude hikes seem only likely to add further pressure to prices. The butadiene markets have been driven largely by trends in the ABS (acrylonitrile butadiene styrene) markets in Asia that have pushed prices to the point where rubber producers are not able to maintain positive margins.

In terms of revenues for Russian synthetic rubber exports in the first two months in 2018, isoprene rubber provided the largest source of sales totalling $75.1 million. This was followed by polybutadiene, butyl rubber and halogenated butyl rubber.

Methanol & Ammonia

Russian Methanol Production (unit-kilo tons)		
Producer	***Jan-Mar 18***	***Jan-Mar 17***
Shchekinoazot	104.3	113.7
Sibmetakhim	237.4	252.1
Metafrax	302.5	277.0
Akron	26.4	24.6
Azot, Novomoskovsk	70.7	64.9
Angarsk Petrochemical	0.4	1.3
Azot, Nevinnomyssk	25.8	30.2
Tomet	228.4	211.6
Ammoni	54.7	49.4
Totals	1050.6	1024.8

Russian methanol production Jan-Mar 2018

Russia produced 323,000 tons of methanol in March 2018, 4% less than in February. The reduction was due to the planned scheduled repairs at Nevinnomyssk Azot (production decreased by 15% to 7,800 tons) and Shchekinoazot (by 17% to 30,200 tons).

In March, Sibmetakhim reduced methanol production by 11% to 71,300 tons, due to low demand for Russian methanol in Europe (the share of exports in the gross production of the company is 55-60%). For the first quarter in 2018 Russian methanol production totalled 1.051 million tons against 1.025 million tons in the same period in 2017. Production is forecast to exceed 2017 volumes in 2018, particularly as Shchekinoazot expects to start its new 450,000 tpa plant at some stage during the year.

Russian methanol sales, Q1 2018

Domestic sales of methanol in the Russian market remained unchanged for the first quarter this year versus the same period in 2017 and totalled 394,200 tons. Tomet at Togliatti was the largest supplier in the first quarter providing 143,600 tons against 123,400 tons in the same period in 2017. Metafrax reduced shipments to 62,200 tons from 99,700 tons whilst Ammoni increased deliveries from 25,900 tons to 42,800 tons.

Russian Methanol Domestic Sales (unit-kilo tons)		
Producer	***Jan-Mar 18***	***Jan-Mar 17***
Azot Nevinnomyssk	1.8	4.0
Azot Novomoskovsk	40.1	26.3
Metafrax	62.2	99.7
Sibmetakhim	92.4	103.0
Tomet	143.6	123.4
Shchekinoazot	11.1	10.3
Ammoni (Mendeleevsk)	42.8	25.9
Others	0.3	1.7
Total	394.2	394.2

In terms of consumers Nizhnekamskneftekhim reduced purchases in the first quarter from 64,800 tons to 47,200 tons whilst SIBUR Togliatti increased purchased volumes from 30,700 tons to 38,700 tons.

Domestic prices for methanol are undergoing seasonal upward pressure. Prices started May for the Volga region in the range of 15,500-17,000 roubles per ton, including VAT. Prices in the Ural region varies in the range of 16,000-18,500 roubles per ton, and for the Siberian Federal District 12,500-14,800 roubles per ton. The highest range of prices were noted in the Central Federal region (including Moscow) at 17,500-18,500 roubles per ton.

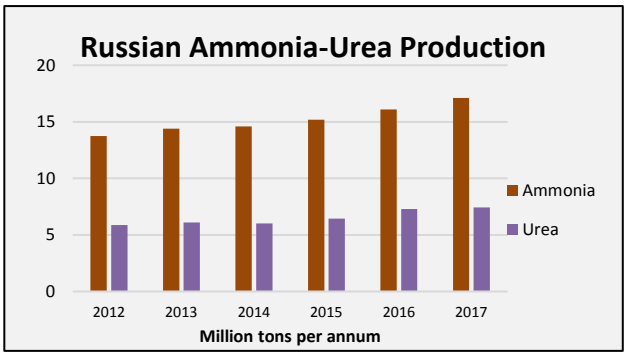
Metafrax-Asian markets

Metafrax has signed a contract with Samyung Chemical Corporation for the supply of pentaerythritol and urotropine to Korea, having shipped 200 tons in April and in future aims to increase supplies to other Asian markets. The challenge to Metafrax for entering Asian markets is that Korean consumers largely prefer to buy products from local companies. Until the recent agreement with Samyang Chemical Corporation Metafrax supplied to Asia up to around 2,000 tpa of utropin and 1,000 tpa of pentaerythritol. In future, the company's sales could potentially rise to 4,000 tpa of utropin, 2,000 tpa of pentaerythritol, and 15,000 tpa of methanol.

Methanol exports from Russia totalled 478,000 tons in the first quarter against 441,000 tons in the same period in 2017. Average prices rose from $254 per ton in the first three months in 2017 to $320 per ton in the same period in 2018.

Russian ammonia & urea, Jan-Mar 2018

Evrokhim is scheduled to open a new ammonia plant at Kingisepp in the Leningrad region in 2018. The ammonia plant capacity of 1 million tpa. Russian ammonia production continues to rise following expansions in the past couple of years, companies such as Fosagro and Akron. Perm



Mineral Fertilisers produced 632,200 tons of ammonia in 2017, resulting in a record level for the producer as a result of modernisation.

Due to the higher production ammonia exports from Russia totalled 1.040 million tons in the first quarter this year against 614,000 tons in the same period in 2017.

Following the start-up of a major investment by Fosagro in 2017 the company was able to increase ammonia production in the first quarter in 2018 to 496,100 tons against 279,300 tons last year, whilst urea production rose from 252,800 tons to 417,300 tons. As a result of the higher production levels, Fosagro was able to increase the production of mineral fertilisers by 18.5% for the first quarter in 2018 to 2.3 million tons. For nitrogen fertilisers Fosagro recorded an increase of 46.6% in production to 560,800 tons.

Fosagro Production (unit-kilo tons)		
Product	***Q1 18***	***Q1 17***
Ammonia	496.1	279.3
Urea	417.3	252.8
Phosphoric acid	656.1	596.4
Sulphuric acid	1,483.9	1,284.3
Sodium Tripolyphosphate	24.8	15.3

Akron also increased ammonia and urea production in the first quarter in 2018. The volume of ammonia production by the group's enterprises grew by 3% to 667,000 tons, the output of the new Ammonia-4 unit was 208,000 tons, which is 5% more than in the first quarter of the previous year. The company aims to increase capacity from 2,300 tons per day to 2,500 tons per day. Akron reduced its net profit by 11.6% for the first quarter of this year to 692 million roubles, although revenues increased by 6% to 14.83 billion roubles. Akron increased production of mineral fertilisers by 4.5% in the first quarter to 1.58 million tons.

Akron Production (unit-kilo tons)		
Product	***Q1 18***	***Q1 17***
Ammonia	667.0	648.0
Urea	249.0	204.0
Methanol	26.0	24.6
Formaldehyde	42.0	41.0
Urea-formaldehyde resins	47.0	46.0
Calcium Carbonate	119.0	126.0
Hydrochloric Acid	10.0	11.0

Brazilian Petrobras is holding negotiations with Akron on the sale of two production assets Araucaria Nitrogenados SA (Ansa) and Nitrogen Fertilizer Unit III. Ansa, a 100% subsidiary of Petrobras, has the capacity to produce 1300 tons of ammonia and 1975 tons of urea per day. Nitrogen Fertilizer Unit III is a plant under construction with a design capacity of 3,600 tons of urea and 2,200 tons of ammonia per day. In Russia, Akron is building a urea plant number six at Novgorod with a capacity of 600 tons per day. After the launch of the sixth unit in 2018, the total capacity for urea at Novgorod will increase to 3,650 tons per day.

Organic chemicals

Russian Butanol Production (unit-kilo tons)		
N-Butanol		
Producer	***Jan-Mar 18***	***Jan-Mar 17***
Angarsk Petrochemical	8.8	9.3
Azot	2.9	4.0
Gazprom n Salavat	17.4	18.9
SIBUR-Khimprom	11.9	9.6
Total	41.0	41.9
Isobutanol		
Producer	***Jan-Mar 18***	***Jan-Mar 17***
Angarsk Petrochemical	4.9	4.9
Gazprom n Salavat	9.1	9.1
SIBUR-Khimprom	13.8	12.7
Total	27.8	25.0

Russian butanol production Jan-Mar 2017

Russian butanol production amounted to 23,130 tons in March 2018 which is 8% more than in February. The share of n-butanol in gross production in March comprised 58%, and isobutanol 42%. Gazprom neftekhim Salavat increased butanol production by 9% to 8,940 tons in March, whilst SIBUR-Khimprom increased by 18% to 9,060 tons. Angarsk Petrochemical's output remained unchanged from February at 4,290 tons and Azot at Nevinnomyssk reduced production by 29% to 1,840 tons.

In the first quarter in 2018 Russian butanol production totalled 68,850 tons which is 0.5% more than in the same period in 2017. The Salavat plant maintained the same volumes of isobutanol production in the first quarter at 9,100 tons, although n-butanol production dropped from 18,900 tons to 17,400 tons.

Russian butanol sales, Jan-Mar 2018

Butanol sales on the Russian domestic merchant market dropped 29% in March over February to 5,200 tons. N-butanols accounted for 90% of total sales. SIBUR-Khimprom reduced shipments by 6% in March to 3,000 tons whilst the Angarsk plant reduced shipments by 1% to 2,040 tons. Gazprom neftekhim Salavat and Azot did not ship butanols to the market in March.

Russian Butanol Domestic Sales (unit-kilo tons)		
Producer	***Jan-Mar 18***	***Jan-Mar 17***
Gazprom n Salavat	2.3	0.9
SIBUR-Khimprom	8.0	10.4
Angarsk Polymer Plant	6.8	1.2
Azot Nevinnomyssk	0.0	0.7
Others	2.9	2.8
Totals	20.0	16.0

In the first three months of 2018, merchant sales of methanol amounted to 20,050 tons which is 20% more than for the same period last year. The share of n-butanol in the total supply was 86%, and isobutanol 14%. Gazprom neftekhim Salavat was able to make more product available for the merchant sector in 2018 although the major market change took place through Angarsk Petrochemical shipping 6,800 tons against 1,200 ton in Q1 2017.

Akrilat shutdown completed May 2018

SIBUR completed scheduled repairs at the Akrilat division at Dzerzhinsk in April, slowing down butanol purchases although the outage did not affect deliveries to customers. The stoppage was for repairs in the production of acrylic acid and acrylic esters (methyl acrylate, butyl acrylate and diethylhexyl acrylate). As part of the shutdown, the heat exchanger (condenser) was replaced by a column for the production of acrylic acid. Production of acrylic acid and of esters at Dzerzhinsk was put into operation in 2004, using technology and equipment from Nippon Shokubai, Nissho Iwai and Mitsubishi Heavy Industries.

Russian Butanol Consumption (unit-kilo tons)		
Consumer	***Jan-Mar 18***	***Jan-Mar 17***
Akrilat	5.4	5.2
Dmitrievsky Chemical	5.7	2.3
Plant of Synthetic Alcohol	0.0	0.0
Volzhskiy Orgsintez	1.8	2.4
Roshalsky Plant of Plasticizers	0.0	0.2
Others	7.1	5.9
Total	20.0	16.0

The Akrilat plant, which is part of SIBUR-Neftekhim, is one of the two largest merchant buyers of butanols on the Russian merchant market, taking 5,400 tons in the first quarter against 5,200 tons in the same period in 2017. In March this year Akrilat reduced purchases of butanols by 3% against February to 1,800 tons (35% of the total Russian consumption). The Dmitrievsky Chemical Plant bought 5,700 tons of butanols in the first quarter, up against 2,300 tons in the same period last year. Volzhsky Orgsintez was the third largest Russian buyer of butanols, taking 1,800 tons in the first quarter against 2,400 tons in the first quarter in 2017.

Russian Organic Chemical Exports (unit-kilo tons)		
Product	***Jan-Feb 18***	***Jan-Feb 17***
N-Butanol	4.5	1.7
Iso-butanol	4.5	3.3
2-EH	4.3	6.4
Pentaerythritol	2.0	1.8
Phenol	0.4	1.2
Ethylene Oxide	2.5	2.8
Formaldehyde	2.6	4.8
DEG	3.2	3.1
Acetone	4.4	10.3

Angarsk Petrochemical- conversion from cobalt to rhodium catalyst

Angarsk Petrochemical Company is changing its oxidation technology for butanols production to R-Oxo technology, which effectively involves a transfer from cobalt catalyst to rhodium. As a result, the company should be able to benefit from more rational use of raw materials and lower operating costs.

Other Russian organic chemicals, Jan-Mar 2018

Russian exports of 2-ethylhexanol (2-EH) dropped in the first two months to 4,300 tons against 6,400 tons in 2017, whilst both n-butanol and isobutanol exports increased. Acetone exports dropped from 10,300 tons in January to February 2017 to 4,400 tons in 2018, partly due to the lower production of phenol. Pentaerythritol exports amounted to 2,000 tons in the first two months, representing around 50% of production at the sole Russian producer Metafrax.

Phthalic anhydride production amounted to 9,200 tons in March which is 19% up on February. Kamteks-Khimprom increased the production of phthalic anhydride by 20% to 8,100 tons, whilst Gazprom neftekhim

Salavat increased production by 11% to 1,100 tons. In the first three months in 2018, Russia produced 26,540 tons of phthalic anhydride which is 3% less than in the same period last year.

Other products

Eurasian TDI Imports (unit-kilo tons)		
Country	***Jan-Feb 18***	***Jan-Feb 17***
Hungary	1.6	2.3
Germany	3.6	2.9
China	0.0	0.1
South Korea	0.3	0.8
Saudi Arabia	0.4	0.0
US	0.2	1.2
Japan	0.3	0.1
France	0.1	0.0
Iran	0.1	0.0
Total	6.5	7.3

Russian polyurethane project & isocyanate trade

A Russian company Fomline in the Penza region intends to construct a plant for the production of flexible polyurethane foam for the furniture industry. Investments in the project have been estimated at 1.5 billion roubles into the installation of a new plant capacity of 25,000 tpa. The plant is to be located at Kuznetsk in the Penza region which is around 760 km to the south east of Moscow. The intention is to manufacture mattresses from polyurethane foam.

The project has completed its documentation process to date, and the site is fully equipped with the necessary engineering infrastructure. The production of polyurethane foam is planned for the spring of 2019.

Eurasian Imports of MDI 2018		
Country	***Jan-Feb 18***	***Jan-Feb 17***
Belgium	1.8	3.5
Hungary	0.8	0.8
Germany	2.5	6.2
Spain	0.0	0.1
China	1.6	1.0
South Korea	0.0	0.2
Netherlands	3.6	4.1
Lithuania	0.1	0.0
Saudi Arabia	4.6	0.0
Turkey	0.1	0.0
Japan	0.3	0.1
Total	15.5	15.9

TDI imports into Russia and its Customs Union dropped in the first two months to 6,500 tons against 7,300 tons in the same period in 2017. Germany supplied 3,600 tons in the first two months against 2,900 tons, whilst Hungary reduced shipments from 2,300 tons to 1.600 tons. MDI imports dropped from 15,900 tons in the first two months to 15,500 tons, similarly to TDI volumes have been affected by rising prices. Saudi Arabia supplied 4,600 tons in January to February this year as a new supplied, replacing supplies from other countries such as Germany, the Netherlands and Hungary.

Project concepts for TDI/MDI projects in Russia continue to come under evaluation, technology seems to provide the major challenge to undertaking a large-scale investment. In the past couple of years TAIF has been linked with foreign companies for the construction of an isocyanate plant at Nizhnekamskneftekhim, whilst interest in implementing similar projects at various junctures have been expressed by Bashkir Soda Company, Khimprom at Novocheboksarsk and other companies. As yet none of the projects have been able to complete the full chain of conditions. In the meantime, the demand for polyurethane is expected to rise significantly in Russia over the next few years. Consumption rose notably in 2017.

Belarussian Petrochemical Production		
Product	***Jan-Mar 18***	***Jan-Mar 17***
Ethylene	19.2	11.8
Propylene	11.5	7.8
Benzene	36.0	25.6

Azot Grodno Production (unit-kilo tons)		
Product	***Jan-Mar 18***	***Jan-Mar 17***
Methanol	23.0	21.8
Caprolactam	33.3	29.8
Polyamide primary	28.9	25.8
Polyamide filled	2.9	3.0
Ammonia	289.7	289.7
Urea	280.7	284.7
Fertilisers	206.7	208.5
Fibres	10.7	9.9

Belarus

Belarussian petrochemical production, Jan-Mar 2018

In the first three months of 2018, Belarus produced 11,500 tons of propylene, 19,200 tons of ethylene, 36,000 tons of benzene and 33,300 tons of caprolactam. Production at Grodno rose in the first quarter for methanol and caprolactam, whilst a slight fall was recorded for ammonia. Methanol output increased by 7% to 8,000 tons, whilst caprolactam production dropped 13.9% to 9,900 tons. Azot increased its tonnage production of polyamide by 11.8% in March to 10,240 tons. The production of fibres and chemical threads increased by 4% to 3,620 tons, and the production of cord fabric increased by 2,3%.

Belarussian Polymer Imports (unit-kilo tons)		
Product	***Jan-Feb 18***	***Jan-Feb 17***
PVC	10.0	6.2
Polypropylene	15.6	13.0
LDPE	10.1	13.7
HDPE	10.1	6.4
Polystyrene	8.4	9.0

Belarussian polymer trade, Jan-Feb 2018

Belarus increased polypropylene imports in the first two months in 2018 by 17.4% to 14,900 tons from 12,600 tons. Homopolymer imports rose 21% to 10,300 tons, whilst propylene copolymers rose from 4,100 tons to 4,600 tons. Polyethylene imports rose 0.7% in the first two months in 2018 to 20,200 tons. LDPE imports dropped from 13,700 tons to 10,100 tons and HDPE imports rose from 6,400 tons to 10,100 tons. Russia continues to provide the largest source of polymer imports, supported by other supplies from Europe.

Belarussian PTA Imports (kilo tons)		
Country	***Jan-Feb 18***	***Jan-Feb 17***
Russia	1.1	1.0
Belgium	0.5	0.5
South Korea	4.4	8.6
Poland	4.9	2.1
Total	10.9	12.2

Belarussian PTA imports, Jan-Feb 2018

PTA imports into Belarus totalled 10,900 tons in the first two months in 2018, versus 12,200 tons in the same period in 2017. Imports from South Korea dropped to 4,400 tons against 8,600 tons in January to February 2017, whilst imports from Poland rose slightly to 4,900 tons from 2,100 tons. PTA prices averaged $796 per ton in the first two months against $731 per ton in the same period in 2017.

Belarussian Acrylonitrile Exports (unit-kilo tons)		
Product	***Jan-Feb 18***	***Jan-Feb 17***
Russia	1.0	0.2
Hungary	0.5	0.0
India	0.0	2.0
Iran	0.6	2.4
Netherlands	0.2	3.8
Turkey	5.0	2.0
Total	7.2	10.3

Belarussian acrylonitrile exports, Jan-Feb 2018

Acrylonitrile exports from Belarus dropped from 10,377 tons in the first two months in 2017 to 7,186 tons in the same period in 2018. Turkey was the main market for Belarussian acrylonitrile, accounting for 5,000 tons in the first two months. Average prices for acrylonitrile exports increased to $1596 per ton from $1127 per ton in 2017.

Belarussian chemical exports, Jan-Feb 2018

Phthalic anhydride exports totalled 8,200 tons in the first two months in 2018 against 3,500 tons in the same period in 2017. The rise in exports has been facilitated by the increase in capacity at Lida. The main destinations for Belarussian phthalic anhydride exports included Russia, India and Columbia. Average prices rose to $890 per ton from $819 per ton in January and February 2017.

Belarussian Organic Chemical Exports (unit-kilo tons)		
Product	***Jan-Feb 18***	***Jan-Feb 17***
Acrylonitrile	7.2	10.3
Caprolactam	3.0	1.3
Phthalic anhydride	8.2	3.5
Methanol	2.8	3.0

Caprolactam exports have revived this year, and totalled 3,000 tons for the first two months against 1,300 tons in January to February 2017. Methanol exports have dropped this year from Belarus, totalling 2,800 tons in the first two months versus 3,000 tons in the same period last year. This was due to increased domestic consumption of methanol.

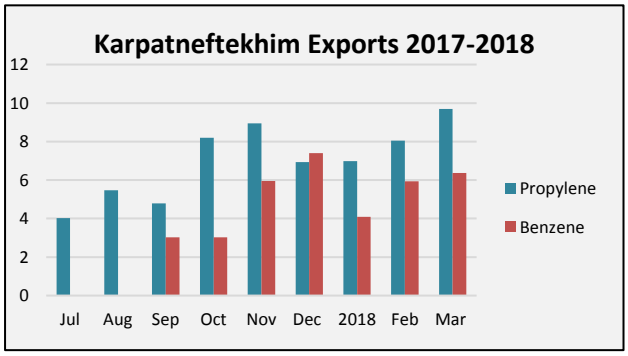
Ukraine

Ukrainian Polypropylene Imports (unit-kilo tons)		
Category	***Jan-Mar 18***	***Jan-Mar 17***
Homo	20.2	22.2
Block	3.3	2.9
Random	4.4	2.8
Other	0.5	0.5
Total	28.4	28.4

Ukrainian polyolefin imports, Jan-Mar 2018

In the first quarter in 2018 polyethylene imports into Ukraine amounted to 59,300 tons, 5% down on the same period in 2017.

Polypropylene imports into Ukraine remained the same as in 2018 in the first quarter to 28,400 tons. Imports of homopolymers dropped 9% to 20,200 tons from 22,200 tons in Q1 2017, whilst block copolymer imports rose to 3,300 tons from 2,900 tons and random copolymers rose from 2,800 tons to 4,400 tons.



Karpatneftekhim-April outage

Karpatneftekhim undertook a shutdown from 20 to 27 April, designed to help the complex increase capacity utilisation over the summer months. Karpatneftekhim conducted a hydrotreatment of the heat exchangers of the installation, checking the state of the pyrogas compressor. By the end of February 2018, the plant had reached 80% capacity utilisation and the aim is to achieve 100% in the next few months.

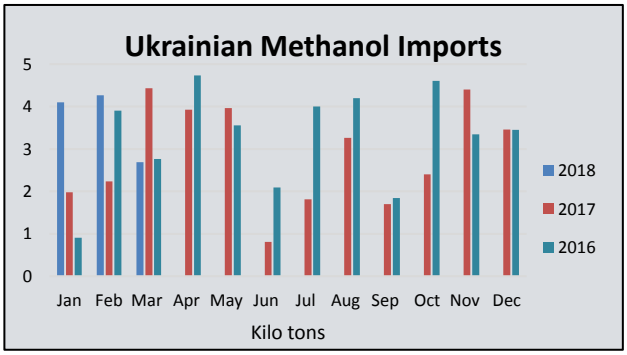
Karpatneftekhim was the only Ukrainian benzene exporter in March, all of which went to Latvia. In the first quarter in 2018 Ukrainian benzene exports totalled 21,600 tons which was almost three-fold more than in the same period of 2017. From the total exports, Karpatneftekhim accounted for 16,379 tons.

Ukrainian chemical imports, Jan-Mar 2018

Phthalic anhydride imports into Ukraine rose in March 2018 to 398 tons from 271 tons in February. Lakokraska at Lida supplied 222 tons (56% of total Ukrainian imports), whilst another 110 tons was supplied by Austrian company Atmosa and 22 tons from Deza. In addition, the Polish company Phoenix Chemicals Trading supplied 44 tons of phthalic anhydride to the Ukrainian market. Consumers included Polikem (237 tons, or 60% of total imports) and Lizinvest (44 tons or 11%), and LK-Ukraine (117 tons, or 29%). In the first quarter in 2018, Ukraine imported 889 tons of phthalic anhydride against 703 tons in the same period in 2017.

Ukrainian Plasticizer/PA imports (kilo tons)

Product	*Jan-Mar 18*	*Jan-Mar 17*
DOP	1.1	0.7
Phthalic Anhydride	0.9	0.7



DOP imports into Ukraine amounted to 414 tons in March against 419 tons in February. Deza supplied around 50% of imports in March. Imports of DOP into Ukraine rose by 52% in the first quarter this year to 1,100 tons.

Ukraine imported 2,700 tons of methanol in March, 37% less than in February. The reduction in purchases of imported methanol was due to partly to higher prices (rising by 14%, to $485 per ton DAF border of Ukraine). Russian suppliers provided 77% or 3,400 tons of methanol in March, 40% less than in February). At the same time, Shchekinoazot reduced supplies of methanol to Ukraine by 80% (to 204 tons), Metafrax increased by 32% (to 1,850 tons), and Tomet stopped deliveries. The Belarusian company Grodno Azot in March reduced methanol supplies to Ukraine by 32%, to 587 tons (22% of imports). Consumers in March included Karpattsmoly, Ukrhazdobycha and Ukrtatnafta.

Ukrainian Ammonia Market (unit-kilo tons)

	2017	*2016*	*2015*
Production	1191	2045	2556.8
Exports	139	156	624
Imports	436	261.5	65.7
Balance	1488	2150.5	1998.5

Ukrainian ammonia market 2017

Ukraine increased imports of ammonia in 2017 due to a fall in production, dropping to 1.191 million tons against 2.045 million tons in 2016. Despite political relations at rock-bottom, Ukrainian consumers of ammonia are building closer economic ties with Russian producers. In 2017, several large ammonia plants were launched in the Russian market: one more installation at Cherepovets Apatite (formerly Fosagro-Cherepovets) with a capacity of 2,200 tons per day and a joint production of Kuibyshevazot and Linde capacity of 1.340 tons per day. Due to cheap gas, and as a result, low cost, Russian manufacturers can offer Ukrainian customers competitive prices.

Ammonia production in Ukraine has been falling in recent years partly due to lower gas availability, and this

has led to a reduction in exports and a simultaneous rise in imports. Throughout 2017 and in the first quarter of 2018, Dniproazot was the only plant to operate at a high level of utilisation.

Severodonetsk Azot and Stirol have both been idle since 2014, whilst Rivneazot did not produce ammonia in 2017 due to unprofitability. Cherkassy Azot tried to produce nitrogen fertilisers partly from its own ammonia, having worked with a high load only four months in 2017 and one month in the first quarter of 2018. At the same time, the plant has been confronted by a series of failures.

Rivneazot, also part of the holding Ostchem, reopened the ammonia complex in February. The unit of synthesis gas is now running at maximum load, and produces more than 650 tons of ammonia per day. Rivneazot is the sole producer of calcium ammonium nitrate and one of the two producers of adipic acid in Ukraine. Plant capacities include 420,000 tpa of liquid ammonia, 540,000 tpa of granulated ammonium nitrate, 470,000 tpa of calcium ammonium nitrate and 25,000 tpa of adipic acid.

Ukrainian Ammonia Production (unit-kilo tons)

Producer	*2017*	*2016*	*2015*
Dnpriazot	533.4	499.3	399.4
Odessa Portside Plant	249.4	504.6	1146.8
Rivneazot	17.0	202.9	312.2
Azot Cherkassy	391.4	838.1	698.4
Total	1191.2	2044.9	2556.8

The Odessa Portside Plant is experiencing a deficit of working capital due to the financial problems accumulated in previous years. In 2018, the plant concluded a tolling contract with the company VEK and from the end of January it operated in a relatively uninterrupted mode at one ammonia plant and two urea plants. However, at the start of May 2018 Odessa Portside Plant was forced to stop production due to the cessation of gas supplies due to debts. In the first half of April the Odessa Portside Plant had resumed operation of the second urea production unit.

Central Asia/Caucasus

SOCAR-cracker expansion

SOCAR is currently upgrading the EP-300 cracker at Azerkhimya complex at Sumgait which will allow ethylene production to rise from 100-105,000 tpa to 192,000 tpa and the production of propylene from 50-55,000 tpa to 187,000 tpa. Technip won the tender for the modernisation of the outdated EP-300 cracker in 2016. The engineering work has completed by 88.3% of the project schedule, procurement by 45.9%, and construction itself by 13.7%. Equipment and materials will be supplied by 50 suppliers from 15 countries until September 2018. The expansion and commissioning of the modernised plant is planned for the first quarter of 2020.

Azerkhimya Production (unit-kilo tons)

Product	*Current*	*Post 2020*
Ethylene	105	192
Propylene	55	187

SOCAR-OGPC Capacities (unit-kilo tons)

Product	*Capacity*
Ethylene	610
Benzene	42
Propylene	130
Polyethylene	600
Butylene-1	32
Hexene-1	21

SOCAR-OGPC

SOCAR OGPC intends to begin construction of the new gas processing complex and production of polymers in 2018. The new complex will produce 9.1 billion cubic metres of gas, 130,000 tpa of propylene, 42,000 tpa of benzene, 25,000 tpa of gasoline and 600,000 tpa of polyethylene. In addition, 32,000 tpa of butylene-1 and 21,000 tons of hexene-1 obtained will be used for the internal needs of the complex. The construction of the complex is being undertaken at a site with an area of 305 hectares south of Baku.

SOCAR has arranged to use advanced technologies from Technip, Axens, Sinopec Tech and Univation, using Fluor as the project manager. The complex will provide feedstocks to the SOCAR Polymer plant, which is separate from the established Azerkhimya plant.

SOCAR completes urea project

SOCAR has completed the construction of its plant for the production of urea at Sumgait, and commissioning started in May. The construction has cost around €320 million of credit funds from a total project cost of €770-780 million. Production is expected to start in August-September, firstly

ammonia and later urea. At a world price average level of $250 per ton, the plant will pay off in nine years.

SOCAR Methanol 2018

SOCAR Methanol has set a target for the production of 350,000 tons of methanol in 2018, after production totalled 265,000 tons in 2017. A target of 500,000 tons has been set for 2019. The strategic goal of the enterprise is to increase production efficiency to 90 percent of capacity, maintain price competitiveness, low accident rates, increase the share in the domestic market and expand warehouse capacities.

Azerbaijan's internal needs for urea are estimated by SOCAR at 150,000 tpa which could rise to 200,000 tpa. Licensors of the new plant include Stamicarbon and Haldor Topsoe, whilst Samsung Engineering undertook design, procurement and construction at Sumgait. Plant capacity comprises 1,200 tons per day of ammonia and 2,000 tons per day of urea.

Navoiazot, PVC, caustic soda, methanol

Uzbekistan wants to attract loans from foreign banks totalling $137.36 million in order to support the financing of the three investment projects at Navoiazot, including PVC, caustic soda and methanol and all of which are already under construction. Under the state guarantees it is planned to attract a loan from a consortium of Japanese banks for the amount of 2.5 billion Japanese yen ($21.74 million) and a loan from the consortium Commerzbank (Germany) and Credit Suisse (Switzerland) by $115.62 million.

Turkmenistan-BOPP plant to start in June 2018

The Turkmenbashi complex of oil refineries (TKNPZ)will start producing bi-axially oriented polypropylene film (BOPP film) in June. The plant's capacities will allow the company to produce up to 21,000 tpa BOPP-film mostly of two types: transparent single-layer and co-extrusion. The latter features gas barrier properties and high thermoformability. A significant part of the BOPP production is intended to countries such as Russia, Japan, Italy, Turkey, China, and Iran, etc.

In addition to projects for PVC, caustic soda and methanol, worth $1.7 billion, Uzbekistan is also engaged in the construction of ammonia and urea and organisation of the production of nitric acid.

Chinese company CAMC Engineering is responsible for construction at Navoi for 100,000 tpa of PVC, 75,000 tpa of caustic soda and 300,000 tpa of methanol, intended mostly for the domestic market.

The ammonia and urea project worth an estimated $985 million, is being undertaken in cooperation with Mitsubishi Corporation and Mitsubishi Heavy Industries. Navoiazot is replacing obsolete equipment and aiming to start the revamped unit in 2020. This will facilitate capacities for the 660,000 tpa of ammonia and 580,000 tpa of urea.

The nitric acid production complex with a project cost of $216.6 million will be launched in partnership with Casale, comprising a capacity of 500,000 tpa. The cost of this project is worth $216.67 million which is being managed by contractor Casale SA.

Relevant Currencies

Czech crown. $1= 20.852. €1 = 27.444: Hungarian Forint. Ft. $1 = 229.253. €1 = 310.141: Polish zloty. zl. $1=3.016. €1 =4.14 Ukrainian hryvnia. $1 = 226.4 €1 = 29.6: Rus rouble. $1 = 57.2 €1= 63.7

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