

CIREC

MONTHLY NEWS

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

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Czech Republic | Slovakia | Hungary | Poland | Bulgaria | Romania | Croatia | Slovenia | Yugoslavia | Baltic States | Russia | Belarus | Ukraine | Transcaucasus | Central Asia | Kazakhstan

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Key pointers from this month's issue

Central Europe

Central European petrochemical producer results were affected by higher crude prices in the first half of 2018, with rises in revenues largely offset by weak margins. Orlen achieved a 20% rise in net profit in the second quarter to zł 1.74 billion, although overall for the first half of 2018 the net profit declined to zł 2.78 billion down from zł 3.46 billion in the same period in 2017. MOL reported a 20% rise in revenues, whilst faced a 25% fall in net profits due to higher operating costs.

Both Orlen and MOL are focused on the strategic development of petrochemicals over the next decade in place of fuels and energy products. Orlen is close to completion of Unipetrol's PE3 project at Litvinov in the Czech Republic whilst MOL is working on polyol projects and the development of propylene derivatives in Hungary.

Russian chemical production

Production in the Russian chemical industry increased 4% overall in the first half of 2018. Russian ethylene production rose slightly in the first half of 2018 to 1.524 million tons, whilst propylene rose by 81,000 tons to 1.156 million tons. Increases were recorded across the board for bulk polymers. For the first six months, the production of bulk plastics increased by 5.1% to 4.1 million tons. Second quarter production data for main Russian chemical plants can be accessed at the Statistical Database at www.cirec.net.

Russian chemical trade

Russia's trade deficit in chemical products fell in the first half of 2018 to \$10.2 billion from \$10.9 billion in the same period in 2017. The reduced deficit can be attributed to a number of factors such as increased domestic production in certain product areas and slow-moving activity in some sectors of chemical applications. In polymers and rubber, Russia expects to increase export trade over the next few years as new capacity is introduced. Much less change is expected in areas such as fine chemicals, etc.

Russian chemical projects & competition

Progress in construction of the ZapSibNeftekhim project had amounted to 83.5% by the end of June. The design of the complex has been completed in full, whilst construction and installation works had achieved 75.7% of schedule. Gas producer NOVATEK is considering the possibility of building a gas chemical complex in the north of Yamal based at the Sabetta port. In the Russian Far East, the first large equipment delivery was received in July for the Amur Gas Processing Plant whilst Irkutsk Oil Company is progressing with plans to create a gas-chemical complex.

In December, a test plant for calcium carbide production is to be started at the idle Khimprom plant site at Volgograd and in the long term there are plans to produce methanol at the same site. In other project news Kuibyshevazot and the Linde Group launched ammonia production at Togliatti in July, whilst Shchekinoazot is close to starting its new methanol/ammonia complex. After the launch of the polypropylene plant at the new SOCAR Polymer division later in Azerbaijan SOCAR could present a challenge to other regional producers in the Russian polymer market.

CENTRAL & SOUTH-EAST EUROPE

PKN Orlen Group Chemical Production (unit-kilo tons)		
Product	Jan-Jun 18	Jan-Jun 17
Monomers	471	418
Polymers	285	246
Aromatics	205	182
Fertilisers	552	564
Plastics	204	203
PTA	274	256

to 274,000 tons this year.

PKN Orlen Group Chemical Sales (unit-kilo tons)		
	Jan-Jun 18	Jan-Jun 17
Monomers	459	421
Polymers	289	264
Aromatics	203	144
Fertilisers	515	464
Plastics	208	205
PTA	290	258

PKN Orlen Sales Revenues by Region (zl million)		
Region	Jan-Jun 2018	Jan-Jun 2017
Poland	23,605	20,243
Germany	7,968	6,409
Czech Republic	6,256	6,220
Lithuania, Latvia, Estonia	4,045	3,599
Others	8,068	7,429
Total	49,942	43,900

PKN Orlen Jan-Jun 2018

Orlen achieved a 20% rise in net profit in the second quarter to zł 1.74 billion, although overall for the first half of 2018 the net profit declined to zł 2.78 billion from zł 3.46 billion in the same period in 2017. The EBITDA for Orlen amounted to zł 3.04 billion in the first half of 2018, down by 30.4%.

Petrochemical production rose for the Orlen Group in the first half of 2018; monomers rising from 418,000 tons to 471,000 tons and polymers rising from 246,000 tons to 285,000 tons. PTA production rose from 256,000 tons in the first half of 2017

PKN Orlen posted record-high earnings from retail operations for the second quarter in 2018 at zł 677 million, an increase of 18%. The first half of the year saw growth in sales of diesel oil, polyolefins, fertilisers, PVC and PTA, whilst recording a slight decline in gasoline, LPG and olefin sales. The increase of sales revenues of the Orlen Group by zł 4,042 million to zł 49,942 million reflects an increase in sales volumes in all operating divisions and a 36% increase in crude oil prices. In the first half of 2018, ethylene prices rose by 6% and propylene rose by 13%.

Monomer sales from Orlen's divisions in Poland and the Czech Republic rose from 421,000 tons to 459,000 tons in January to June 2018. Deliveries involve ethylene shipments from Plock and from Litvinov either to Orlen group members or to other customers in Germany where there is a pipeline link to Bohlen. Propylene is shipped from Litvinov to Sokolov for derivative production.

Despite the rise in sales revenues in the first half of 2018, operating costs for the Orlen Group increased in by zł 4,289 million to zł 46,645 million. The increase in the costs of materials and energy consumption by 25% resulted mainly from higher crude oil prices combined with higher crude oil processing, rising by 3% for the three divisions in Poland, the Czech Republic and Lithuania to a total of 16.0 million tons. In terms of geographical markets, Poland remains the largest end-destination for Orlen's refined product and petrochemical sales to 47% from 46% in the first half of last year.

The highlight of Q2 2018 for Orlen was launch of the Petrochemicals Development Programme, with zł 8.3 billion signalled for investment on petrochemical projects by 2023, aimed at adding around zł 1.5 billion to annual EBITDA after completion. In the second quarter this year Orlen finished the construction of an

Unipetrol Financial Indicators (Kc million)		
	Jan-Jun 2018	Jan-Jun 2017
Revenues	58,309	61,031
EBITDA LIFO	3,831	10,160
EBITDA	4,734	10,026
EBIT	3,146	8,673
Net profit	3,208	6,399

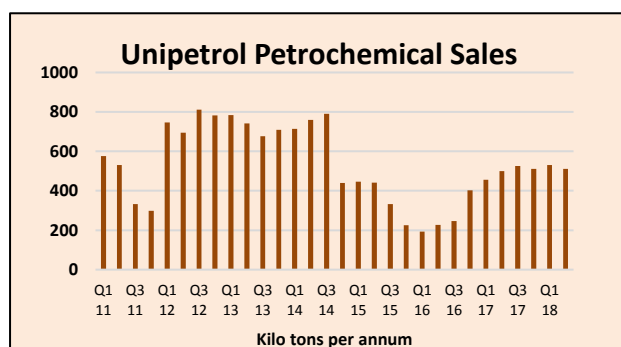
advanced CCGT energy unit at Plock and secured clearance from the Czech National Bank to buy out Unipetrol's minority shareholders.

Unipetrol, Jan-Jun 2018

Unipetrol's net profit dropped from Kc 6.399 billion recorded in the first half of 2017, to Kc 3.208 billion in the same period in 2018. The group's total revenues totalled Kc 58.3 billion in January to June, dropping from Kc 61.031 billion last

year. Unipetrol was affected by the sharp rise in oil prices in the second quarter (up 48% against the

same period in 2017) and resulting lower margins in the refinery and petrochemical division which were down 34% and 22% respectively. Unipetrol confirmed that it had reached a final insurance compensation settlement of Kc 1.6 billion for damages resulting from the incident at the steam cracker at Litvinov in August 2015. The total settlement is worth Kc 12.2 billion.



Unipetrol's capital investments in the second quarter amounted to Kc 2.3 billion and were primarily aimed at the construction of the new PE3 polyethylene unit at Litvinov. Unipetrol expects to complete the construction of its new 270,000 tpa HDPE plant at Litvinov by the end of 2018. At the start of August 2018 project progress had approached 88% completion. The project was originally scheduled for completion in mid-2018.

The key event in the second quarter was a planned turnaround at the Kralupy nad Vltavou refinery during which a general maintenance and modernisation was completed. Unipetrol's operating profit dropped 64% in the first half of 2018 to Kc 2.3 billion, whilst the net profit dropped 19% to Kc 687 million. In the first half of 2018 Unipetrol launched the production of aviation fuel at Litvinov, which up till now had only been produced at Kralupy.

Czech Petrochemical Exports (unit-kilo tons)		
Product	Jan-Jun 18	Jan-Jun 17
Ethylene	41.9	27.2
Propylene	7.4	4.3
Butadiene	0.2	2.0
Benzene	12.9	10.3
Toluene	8.8	5.6
Ethylbenzene	70.1	55.2

Ethylene exports from Unipetrol totalled 41,300 tons in the first six months months in 2018 from 27,100 tons in the same period in 2017. Almost all of the ethylene

this year was shipped to Bohlen in Germany. Propylene exports rose in the first six months to 7,400 tons, whilst imports of propylene rose from 21,995 tons in January to June 2017 to 23,638 tons in the same period this year. Germany provided 14,873 tons to the Czech Republic in the first six months, followed by Slovakia with 2,714 tons and Ukraine 3,937 tons.

Unipetrol's refining and petrochemical division posted an operating profit of Kc 1.9 billion in the second quarter, a drop of Kc 4.2 billion against the same period in 2017. The steam cracker at Litvinov achieved 89% utilisation 2018, whilst sales of petrochemical products grew in the second quarter by 2% to 511,000 tons. The refinery division achieved 77% utilisation rates; whilst the volume of processed crude oil fell by 22% to 1.6 million tons. The fall in refining volumes was primarily due to the planned turnover in the refinery at Kralupy.

Czech PVC Chain Trade (unit-kilo tons)		
	Jan-Jun 18	Jan-Jun 17
EDC Imports	47.9	0.5
PVC Imports	57.8	67.2
PVC Exports	61.2	57.1

Regarding Spolana, Unipetrol has needed to import ethylene dichloride since January this year in order to produce VCM since the close of the mercury chlorine plant at Neratovice in late 2017. In the first six months Spolana imported 46,000 tons of EDC, mostly from Germany. Due to the imports of EDC Czech PVC trade has remained unaffected by the chlorine plant closure.

MOL's Olefin & Polyolefin Production (unit-kilo tons)		
Product	Jan-Jun 18	Jan-Jun 17
Ethylene	414	376
Propylene	219	194
Butadiene	36	47
Raffinate	58	68
Product	Jan-Jun 18	Jan-Jun 17
LDPE	129	94
HDPE	203	192
PP	269	272

MOL, Jan-Jun 2018

MOL Group revenues totalled Ft 2335.7 billion in the first half of 2018 against Ft 1963.7 in the same period in 2017, whilst net profits dropped

from Ft 183.7 billion to Ft 133 billion. Regarding petrochemical production, ethylene volumes at the combined sites in Hungary and Slovakia totalled 414,000 tons for the first half of 2018 against 194,000

tons whilst propylene rose to 219,000 tons from 194,000 tons. Polyethylene production saw an increase in the first half of 2018, mainly due to the introduction of new LDPE capacity by Slovnaft in 2017.

MOL's Petrochemical Margins (€ per ton)		
Product	Jan-Jun 18	Jan-Jun 17
Ethylene	1,084	1,029
Butadiene-naphtha spread	439	1,023
MOL Group petrochemicals margin	403	562

very high base. The integrated petrochemicals margin dropped by more than €150 per ton and the group refinery margin was \$1.1 per barrel weaker.

MOL's Sales of Refinery & Petrochemical Products (unit-kilo tons)		
Country	Jan-Jun 18	Jan-Jun 17
Hungary	2,301	2,167
Slovakia	868	843
Croatia	881	889
Italy	1,009	897
Other markets	4,473	4,288
Total	9,531	9,086

Strong internal performance for MOL in petrochemicals, where production increased for both monomers and polyolefins, could only partly offset the weaker margins. This was evident in the butadiene-naphtha spread which dropped from €1023 per ton in the first half of 2017 to €403 in the same period this year. Geographically Hungary remains MOL's largest single market, followed by Italy, Slovakia and Croatia.

MOL-recycling contract

MOL has signed a strategic partnership agreement with the German company APK, dealing with technologies for recycling plastics. Under the agreement, MOL will support the construction of an APK plastics recycling plant in Merseburg, Germany. APK has developed its own solvent-based technology called Newcycling, which can be applied to a wide range of mixed plastics, processing them into high quality recycled products. The partners will also analyse the possibility of implementing joint projects on the key Central and East European markets for MOL.

Polish Chemical Production (unit-kilo tons)		
Product	Jan-Jun 18	Jan-Jun 17
Caustic Soda Liquid	169.3	175.4
Caustic Soda Solid	29.4	41.0
Ethylene	261.0	235.2
Propylene	157.6	172.5
Butadiene	28.7	29.0
Toluene	7.1	12.9
Phenol	23.2	21.1
Caprolactam	84.6	78.6
Acetic Acid	8.5	8.2
Polyethylene	195.7	166.2
Polystyrene	32.1	28.2
EPS	36.0	45.6
PVC	128.3	141.5
Polypropylene	140.6	131.3
Synthetic Rubber	138.5	119.3

Czech petrochemical trade Jan-Jun 2018

Benzene imports into the Czech Republic rose to 44,539 tons in the first six months in 2018 from 45,050 tons in the same period last year. Ethylbenzene exports from the Czech Republic totalled 70,100 tons against 55,200 tons.

Methanol imports, usually supplied mainly from Germany and Russia, totalled 40,100 tons in January to June 2018 against 50,600 tons in the same period in 2017.

Czech Organic Chemical Imports (unit-kilo tons)		
Commodity	Jan-Jun 18	Jan-Jun 17
Methanol	41.8	50.6
N-Butanol	6.1	5.9
Other Butanols	0.1	0.2
2-EH	12.4	11.7
Ethylene glycol	2.9	2.0
Propylene glycol	2.8	2.1
Pentaerythritol	0.3	0.4

TDI imports into the Czech Republic totalled 7,926 tons in the first half of 2018 against 8,466 tons in January to June 2017. Imports were sourced this year from Germany, the UK, and Hungary.

Exports of phthalic anhydride from the Czech Republic totalled 8,809 tons in the first six months in 2018 against 8,831 tons in the same period in 2017. Exports of DINP in the first half of 2018 amounted to 20,352 tons versus 18,362 tons.

RUSSIA

Russian Chemical Production (unit-kilo tons)		
Product	Jan-Jun 18	Jan-Jun 17
Caustic Soda	630.5	616.9
Soda Ash	1,754.0	1,674.0
Ethylene	1,524.0	1,523.0
Propylene	1,156.1	1,052.1
Benzene	725.8	703.0
Xylenes	313.4	267.4
Styrene	645.0	359.4
Phenol	100.9	106.5
Ammonia	9,200.0	8,300.0
Nitrogen Fertilisers	5,527.0	5,061.0
Phosphate Fertilisers	2,018.0	1,681.0
Potash Fertilisers	4,277.0	4,231.0
Plastics in Bulk	4,102.0	3,906.0
Polyethylene	1,126.0	1,038.0
Polystyrene	270.6	274.7
PVC	509.5	487.6
Polypropylene	753.0	739.0
Polyamide	87.7	79.4
Synthetic Rubber	846.0	832.0
Synthetic Fibres	83.3	83.4

Russian chemical trade & production Jan-Jun 2018

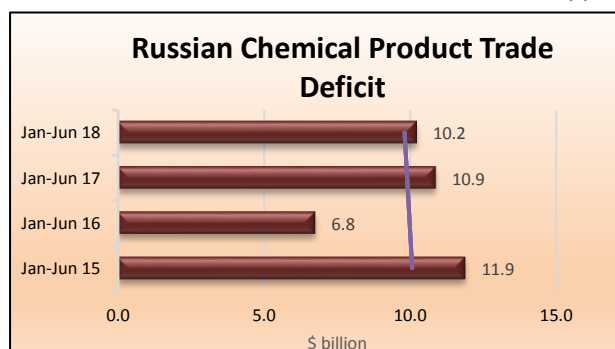
Russian chemical production increased overall by 4% for the first half of 2018. Russian ethylene production rose slightly in the first half of 2018 to 1.524 million tons against 1.523 million tons in the same period in 2017, whilst propylene made much larger gains rising by 81,000 tons to 1.156 million tons. Increases were recorded across the board for bulk polymers. For the first six months, the production of bulk plastics increased by 5.1% compared to last year's figure and amounted to 4.1 million tons.

In the fertiliser section the large rise in ammonia and urea production at several Russian plants in the past two years has facilitated rises in the nitrogen and phosphate sectors. Increases were noted in caustic soda and soda ash, the latter product helped by the incorporation of Crimean Soda into Russia's production balance.

Russia's trade deficit in chemical products narrowed slightly in the first half of 2018, dropping to o \$10.2 billion from \$10.9 billion in the same period in 2017. The reduced deficit can be attributed to a number of factors such as increased domestic production in certain product areas and slow-moving activity in some sectors of chemical applications. In polymers and rubber, Russia expects to

increase export trade over the next few years as new capacity is introduced, but much less change is expected in areas such as fine chemicals, speciality products, and higher value organic chemicals.

Benzene and phenol exports from Russia are likely to rise in the short term, as with propylene, but Russia is expected to remain predominantly dependent on imports of advanced reagents, pharmaceutical intermediates, etc. It is not clear if new sanctions on Russia will affect trade, but is

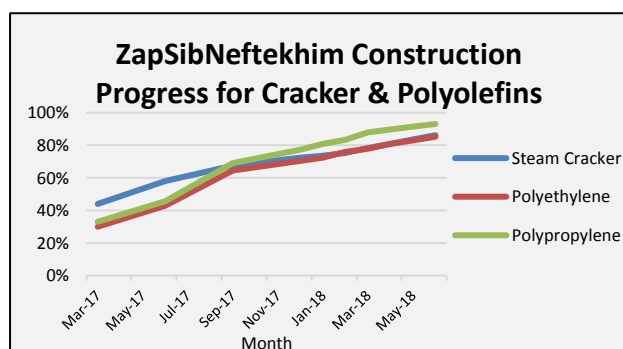


some evidence that higher crude oil prices facilitate greater volumes of imports of chemical products.

Russian petrochemical projects

ZapSibNeftekhim-August 2018

Overall progress of the project construction in ZapSibNeftekhim amounted to 83.5% by the end of June.



The design of the complex has been completed, whilst construction and installation works had been achieved to 75.7%. Progress in the pyrolysis unit was 86.2% at the end of June, and installation of polyethylene was completed at 85.8%. Problems over the workforce have occurred in recent weeks affected by problems with wages and residential conditions. The responsibility for any issues usually can attributed to the subcontractor companies supporting the main contractor, which in this case is Renaissance Construction.

Amur gas complex news

After installing an industrial gas plant at ZapSibNeftekhim at Tobolsk, Russian company Cryogenmash is aiming to participate in the tender for the supply of technical gas for the proposed Amur Gas-Chemical Complex at Svobodny (on which SIBUR is yet to reach a final decision).



In July the first batch of giant equipment arrived at the Amur Gas Processing Plant (GPP). The 830-ton demethanizer was delivered to the Amur capital on the Amur River, an 87-metre installation for separating methane from natural gas. The only possible way of delivering the equipment is by water.

The route starts from South Korea by sea, where the equipment was delivered firstly into Russia to the port of De-Kastri in the Khabarovsk Kray, and then along the Amur River. Transportation by water took about a month. The demethanizer will be loaded onto a huge automobile trawl of 167 axles, which will be delivered to the gas processing plant at Svobodny. Gazprom plans to deliver 79 cargoes in the summer navigation, of which the demethanizer is the largest consignment. Barges with new equipment will be delivered to the construction site of the Amur Gas Processing Plant every 5-6 days. Barges, tugboats and pontoons with small drafts, capable of overcoming the shallow Zeya River which provide the link with Svobodny, were created in Dutch shipyards.

NOVATEK-considering gas chemical complex at Sabetta

NOVATEK is considering the possibility of building a gas chemical complex in northern Yamal based at the Sabetta port. The added value is significant, as the cost of our gas is three times lower than, for example, Henry Hub in the plus good logistics from Sabetta, when we immediately loaded onto the ship and drove into any point of peace. In June 2013, NOVATEK began processing the stable condensate from the Purovsky ZPK into naphtha, kerosene, diesel fuel and fuel oil at the complex in the port of Ust-Luga. The company occupies about 9-10% of the volume of gas production in Russia, and about 18% of the domestic gas market.

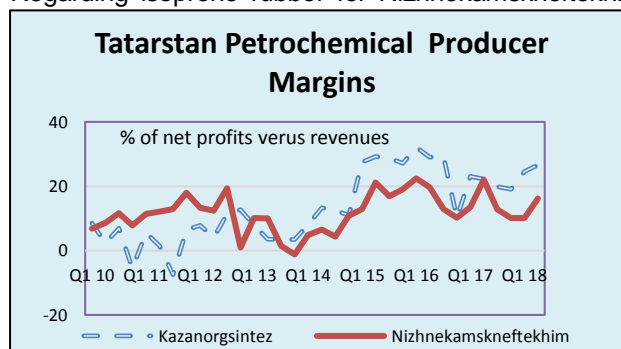
Regarding the Power of Siberia gas pipeline, Gazprom has built 90.5% of the first phase from the Chayanda field to the border with China which is 1954 km in total. The testing of the gas pipeline is planned for 2019. The gas of the Chayanda field will be the first to enter the Siberia Power gas pipeline, to be followed by Kovytko in 2022.

Russian petrochemical producers

Tatarstan chemical sector, Jan-Jun 2018

Nizhnekamskneftekhim reduced its net profit by 19.4% in the first half of the year to 11.63 billion roubles despite a rise in revenues by 8% to 87.5 billion roubles. The cost of sales of the company increased by 19%, amounting to 65.8 billion roubles. As a result, gross profit decreased by 15.4% to 21.8 billion roubles. The profit from sales for the half-year was 13.55 billion roubles against 18.24 billion roubles a year earlier.

Regarding isoprene rubber for Nizhnekamskneftekhim, demand for synthetic grades on the European



market is demonstrating signs of decreasing due to an excess of natural polymers and more desired engineering plastics. Moreover, competition in the polyethylene market for both Nizhnekamskneftekhim and Kazanorgsintez is expected to intensify after the start-up of the ZapSibNeftekhim complex in May 2019.

Kazanorgsintez increased its net profit by 20% for the first half of the year; revenue increased by 6% to 39.1 billion roubles. The profit from sales increased by 13.2% to 12.56 billion roubles, whilst

net profit amounted to 10 billion roubles. Kazanorgsintez was able to increase profit and earnings primarily due to higher production as the enterprise has consistently increased volumes over the past few years. The

conditions on the international polyethylene market have also been beneficial to Kazanorgsintez in relation to prices for products, and exchange rate changes.

Kazanorgsintez Production (unit-kilo tons)		
Product	Jan-Jun 18	Jan-Jun 17
HDPE	265.8	260.4
LDPE	111.0	110.9
Ethylene	303.2	314.1
Propylene	20.1	20.4
Polycarbonate	37.5	33.0
Phenol	37.5	31.9
Acetone	24.0	20.0
Cumene	50.6	43.1

At the same time, the cost of sales for Kazanorgsintez rose in the first half of 2018 to 23.45 billion roubles against 22.57 billion roubles last year, although the company managed to partially compensate for the rise in price of resources, reducing the cost of management and commercial expenses. Kazanorgsintez has been recording higher margins than Nizhnekamskneftekhim since early 2014.

In other chemical product areas in Tatarstan, Nefis Cosmetics increased the production of detergents and soaps in the first half of 2018, but also reduced the production of cleaning products and technical products. As a result, profit from sales decreased by 5% in the first six months. Ammoni increased production of fertilisers and methanol by 6% in the first half of 2018, and revenue rose by 12%. Urea production at the Mendeleevsk plant is running at 100%, whilst ammonium nitrate is growing. The Karpov plant in Tatarstan also increased production volumes due to sodium sulphite, magnesium sulphate and catalysts for hydrogenation.

SIBUR, Jan-Jun 2018

SIBUR increased revenue from sales of commodity products by 21.6% for the first half of 2018 to 257 billion roubles (\$4.044 billion). Revenue in the gas processing increased by 34.4% to 106.5 billion tons, whilst significant growth was achieved through the growth of LPG sales volumes and better pricing.

SIBUR's First Half Results (million roubles)		
	Jan-Jun 18	Jan-Jun 17
Revenue	257,694	211,944
Midstream	106,526	79,276
Olefins & Polyolefins	48,189	42,634
Plastics, Elastomers & Intermediates	78,151	76,192
Unallocated	24,828	13,842
EBITDA	89,188	75,157
EBITDA margin	34.60%	35.50%

SIBUR's sales of olefins and polyolefins rose 13% to 48.2 billion roubles, mainly associated with the dynamics of prices for polypropylene, BOPP films and ethylene. The gain was partly offset by a slight decrease in sales revenue from polyethylene. Plastics, elastomers and intermediate product sales increased by 2.6% to 78.15 billion roubles, mainly due to higher prices. Adjusted EBITDA of the company for the three months rose by 18.7%

to 89.2 billion roubles.

The net profit of SIBUR in the first half of the year decreased by 30.3% to 45.9 billion roubles. The main cause of the decline was from the sale of Uralorgsintez in 2017, as well as foreign exchange losses. Capital investments of the company increased by 44.3% compared to the same period in 2017 and amounted to 70.3 billion roubles. This was due to the growth in financing of the ZapSibNeftekhim project. As of 30 June

Russian Ethylene Production (unit-kilo tons)		
Producer	Jan-Jun 18	Jan-Jun 17
Angarsk Polymer Plant	115.4	105.5
Kazanorgsintez	303.2	297.3
Stavrolen	165.0	154.4
Nizhnekamskneftekhim	319.7	321.6
Novokuibyshevsk Petrochemical	28.8	29.8
Gazprom N Salavat	190.7	183.4
SIBUR-Kstovo	171.6	204.1
SIBUR-Khimprom	26.3	26.2
Tomskneftekhim	142.2	137.5
Ufaorgsintez	61.2	63.5
Total	1524.2	1523.2

2018, the total amount of debt obligations amounted to 325.5 billion roubles, an increase of 4.2% compared to 31 December 2017.

Russian petrochemical production & sales

Russian olefin production, Jan-Jun 2018

In the first half of 2018, Russian plants produced 1.52 million tons of ethylene, which corresponds to the volume issued in the same period of 2017.

Russia produced 254,800 tons of ethylene in June, 6% more than in May. SIBUR-Kstovo produced 35,100 tons of ethylene, which is 3.5

times more than in May. Novokuibyshevsk Petrochemical increased output of ethylene by 16%, up to 6,000 tons. All other ethylene producers reduced production in June. Stavrolen produced 25,300 tons, 8% less than in May. In addition, ethylene production at Tomskneftekhim and SIBUR-Khimprom declined by 6% and 15% respectively to 22,800 tons and 4,300 tons. In terms of feedstocks, naphtha remains dominant for the Russian crackers, followed by LPGs and ethane. Propane supplies to the petrochemical market totalled 79,000 tons for the first half of 2018. Kazanorgsintez is the largest merchant consumer of propane for petrochemical production.

For the first half of 2018, Russia produced 1.156 million tons of propylene, 2% more than in the same period in 2017. Russian propylene production rose 29% in June over May to 197,900 tons. The rise in volume is due to increased capacity utilisation at the two SIBUR plants. SIBUR-Kstovo operated in regular mode in June and produced 15,400 tons of propylene, which is three times more than in May. In addition, SIBUR-Tobolsk produced 37,200 tons of monomer after undertaking maintenance in May. Stavrolen produced 10,200 tons of propylene monomer, which is 7% less than in May. Gazprom's neftekhim Salavat reduced propylene production by 7% to 13,400 tons in June whilst Tomskneftekhim reduced by 11% to 11,800 tons.

Russian Propylene Domestic Sales (unit-kilo tons)		
Company	Jan-Jun 18	Jan-Jun 17
Angarsk Polymer Plant	43.2	38.5
Omsk Kaucuk	1.3	2.1
SIBUR-Kstovo	59.2	45.3
Akrilat	5.0	1.4
Lukoil-NNOS	112.5	101.7
Tomskneftekhim	0.2	1.6
Gazprom neftekhim Salavat	1.6	0.0
Nizhnekamskneftekhim	0.0	0.0
SIBUR-Khimprom	0.2	0.0
Stavrolen	0.0	2.0
Tobolsk-Polymer	0.3	0.1
Total	223.3	192.8

71,200 tons which was 1% less than in 2017.

Main Russian Propylene Consumers (unit-kilo tons)		
Consumer	Jan-Jun 18	Jan-Jun 17
Saratovorgsintez	98.5	89.9
Volzhskiy Orgsintez	6.2	5.0
Akrilat	10.7	10.2
SIBUR-Khimprom	33.5	27.1
Omsk-Kaucuk	16.9	6.3
Tomskneftekhim	1.6	0.1
Tobolsk-Polymer	34.7	11.1
Moscow Refinery	3.3	14.4
Ufaorgsintez	0.8	0.0
Gazprom n Salavat	0.0	2.1
Kazanorgsintez	1.9	3.4
Khimprom Kemerovo	3.4	1.8
Plant of Synthetic Alcohol	6.4	10.4
Angarsk Polymer Plant	0.8	0.0
Total	218.7	181.8

tons in the first half of 2018 which is 16% less than in the same period of 2017. In addition, exports of monomer from SIBUR-Kstovo decreased five times to 9,100 tons.

Russian propylene sales Jan-Jun 2018

Propylene sales on the Russian domestic market rose 4% in June over May to 39,200 tons. SIBUR-Kstovo increased shipments of monomer 3.5 times to 11,200 tons after maintenance in May. Conversely, other producers reduced olefin supplies to the domestic market. Lukoil-NNOS supplied Russian consumers with 19,800 tons of monomer, which is 16% less than in May, due partly to an increase in exports to 4,600 tons. In addition, Angarsk Polymer Plant and Gazprom neftekhim Salavat reduced shipments of the product to 6,800 tons and 1,300 tons respectively, 13% and 20% less. In the first six months in 2018 propylene sales on the Russian domestic market totalled 222,700 tons, 15% more than in 2017. Sales of propane-propylene fractions from Russian plants totalled

Russian propylene exports Jan-Jun 2018

Propylene exports from Russia amounted to 9,800 tons which is 3.3 times more than in May. Lukoil-NNOS increased shipments of monomer in June five-fold to 4.6 000 tons, after concentrating heavily on the domestic market in May. SIBUR resumed shipments of propylene to foreign markets in June after the completion of scheduled repairs, lasting from 20 April to 20 May. SIBUR-Kstovo exported 2,500 tons of monomer, whilst deliveries of propylene from Stavrolen increased by 36% to 2,600 tons in June.

In the first half of 2018 Russian plants exported 51,500 tons of propylene monomer, which is 45% less than in the same period in 2017. During the first half of 2018, Russian companies exported 33,900 tons of propane-propylene fractions, of which 33,000 tons were delivered from the Ryazan refinery. Lukoil-NNOS supplied 33,500

Russian Styrene Production (unit-kilo tons)		
Producer	Jan-Jun 18	Jan-Jun 17
Nizhnekamskneftekhim	152.0	153.5
Angarsk Polymer Plant	19.6	18.8
SIBUR-Khimprom	64.9	60.1
Gazprom n Salavat	104.3	95.8
Plastik, Uzlovaya	30.7	31.1
Total	371.6	359.4

Russian styrene production & exports Jan-Jun 2018

In the first half of 2018, Russia produced 371,500 tons of styrene, which is 3% more than in the same period of 2017. Gazprom neftekhim Salavat increased production by 9% to 104,300 tons in the first half this year.

Russian plants produced 63,300 tons of styrene in June, 4% less than in May. Angarsk Polymer Plant and Gazprom neftekhim Salavat reduced the capacity utilisation before the planned repairs. The Salavat plant produced 17,200 tons in June, 5% less than in May. At the same time, Angarsk reduced styrene monomer output by 8% to 3,000 tons. SIBUR-

Khimprom produced 12,800 tons of styrene in June, which is 3% less than in May whilst Nizhnekamskneftekhim reduced production by 3% to 26,200 tons.

For the first six months of 2018, Russian companies sold 54,500 tons of styrene on the domestic market which is 4% more than in the same period in 2017. Styrene domestic sales In June rose 2% to 9,200 tons. SIBUR-Khimprom increased shipments of styrene monomer by 15% to 5,300 tons whilst Gazprom neftekhim Salavat reduced the shipment of styrene by 10% to 3,500 tons. Repairs at Salavat and Angarsk were undertaken in the first half of July.

For the first half of 2018, Russian companies exported 76,700 tons of styrene on foreign markets, which is 9% more than in the same period in 2017. Exports of styrene from Russia totalled 14,000 tons in June, 6% more than in May. SIBUR increased shipments three-fold to 1,100 tons against 264 tons in May, whilst Gazprom neftekhim Salavat exported 10,600 tons which is 3% less than in May. At the same time, Angarsk Polymer Plant increased its supply of styrene abroad by 7% to 2,000 tons. In addition, 213 tons of styrene monomer were exported from Nizhnekamskneftekhim in June.

Bulk Polymers

Russian polyethylene, Jan-Jun 2018

Russian production of HDPE totalled 491,400 tons in January-June 2018, down 2% against 2017 when production totalled 500,400 tons. This year Kazanorgsintez and Nizhnekamskneftekhim have reduced production volumes in favour of linear polyethylene (LLDPE).

Russian HDPE Production (unit-kilo tons)		
Producer	Jan-Jun 18	Jan-Jun 17
Kazanorgsintez	262.2	269.5
Stavrolen	151.1	142.3
Nizhnekamskneftekhim	17.7	37.1
Gazprom n Salavat	64.4	51.5
Total	495.4	500.4

HDPE production at Kazanorgsintez decreased to 44,600 tons in June versus 48,400 tons in May. For the first half of 2018 Kazanorgsintez produced 262,200 tons which is 3% down on 2017. Stavrolen produced 151,100 tons in the first six months of 2018, up by 6%, whilst Gazprom neftekhim Salavat increased production by 17% to 60,400 tons. Nizhnekamskneftekhim produced HDPE only in April and May this year and thus produced 17,700 tons in

January-June 2018 against 37,100 tons in the same period last year.

Gazprom neftekhim Salavat reopened LDPE production after scheduled maintenance, which started on 1 March. In parallel, Gazprom Neftekhim Salavat carried out repairs in the production of low-pressure polyethylene which lasted a week. Also, the company recently carried out maintenance activities in the production of polystyrene.

Russian polypropylene production, Jan-Jun 2018

Russian polypropylene fell by 1.7% in the first half of 2018 and amounted to 704,000 tons. In June, the production of polypropylene increased to 114,600 tons from 93,300 tons a month earlier.

The low level of production in May was due to the maintenance outage by SIBUR-Tobolsk, and then production rose to 38,000 tons in June. For the first six months the Tobolsk plant produced 224,800 tons of polypropylene which is 15% less than last year. The decline is due to an early stop in prevention.

Russian Polypropylene Production (unit-kilo tons)		
Producer	Jan-Jun 18	Jan-Jun 17
Ufaorgsintez	55.0	52.2
Stavrolen	49.8	48.8
Neftekhimya	55.8	31.7
Nizhnekamskneftekhim	88.1	90.8
Polyom	92.1	88.6
Tomskneftekhim	61.5	58.8
SIBUR-Tobolsk	186.0	220.5
Total	588.3	591.4

Tomskneftekhim produced 12,200 tons of propylene polymer in June versus 12,600 tons in May. Over the first half of 2018, Tomskneftekhim produced 73,800 tons against 70,300 tons in January to June 2017. Ufaorgsintez produced 66,700 tons, against 63,200 tons, whilst Neftekhimya increased

Russian Polypropylene Imports (unit-kilo tons)		
	Jan-Jun 18	Jan-Jun 17
Homopolymers	35.5	26.2
Block	24.4	20.4
Random	16.8	13.6
Other	20.5	15.7
Total	97.2	75.9

polypropylene into Russia increased by 28% and amounted to 97,300 tons. In January-June 2018, homopolymer imports totalled 35,500 tons versus 26,200 tons in the same period in 2017. Block copolymer imports rose to 24,400 tons versus 20,400 tons, whilst propylene copolymer imports amounted to 16,800 tons against 13,600 tons. External supplies of other propylene polymers amounted to 20,500 tons against 15,600 tons a year earlier. Polypropylene exports were more than double of imported grades over the first half of 2018.

Russian PVC, Jan-Jun 2018

Production of PVC in Russia increased to 484,600 tons in the first six months in 2018, up 4% compared

Russian PVC Production (unit-kilo tons)		
Producer	Jan-Jun 18	Jan-Jun 17
Bashkir Soda	132.7	130
Kaustik	46.4	45.7
RusVinyl	155.8	155.8
Sayanskkhimplast	149.8	136.3
Total	484.7	467.8

to the same period of 2017. RusVinyl produced 28,800 tons of PVC in June, with emulsion PVC accounting for 2,400 tons, compared to 21,500 tons a month earlier. RusVinyl's overall production of PVC reached 155,800 tons in the first six months of 2018. Sayanskkhimplast produced 149,800 tons of resin in the first six months of the year, compared to 136,300 tons whilst Bashkir Soda increased production by 2% to 132,700 tons. Kaustik at Volgograd produced 46,400 tons in the first half of 2018 against 45,700 tons in the same period in 2018.

Bashkir Soda conducted scheduled annual repairs on the PVC plant from 6 to 11 July, where both PVC and VCM units were shut. Sayanskkhimplast stopped production of PVC for scheduled maintenance on 15 July, lasting for around 30 days. This is the second and last planned stop of the plant this year. Sayanskkhimplast achieved a net profit of 1.149 billion roubles in 2017 against a net loss of 87.675 million roubles in 2016. Revenues rose 1.7 times to 15.153 billion roubles, and the cost of production increased 1.6 times, to 10.355 billion roubles. Recovering from the five-month outage in 2016 Sayanskkhimplast increased its gross profit 2.1 times in 2017 to 4.798 billion roubles.

Russian PVC producers have made a significant increase in exports this year. The weakening of the rouble against the dollar made exports to certain countries attractive to producers. For January-June 2018, 61,600 tons of PVC were exported against 45,000 tons a year earlier. At the same time as exports have been rising imports have been falling, dropping 63% in the first half of 2018 to 11,900 tons. China supplied 10,800 tons to the Russian market in January to June 2018 against 30,200 tons in the same period in 2017.

PX-PTA chain

Russian Paraxylene Domestic Sales (unit-kilo tons)		
Producer	Jan-Jun 18	Jan-Jun 17
Gazprom Neft	28.0	45.0
Ufaneftkhim	59.8	51.9
Kinef, Kirishi	0.0	0.0
Total	87.8	96.9

Russian paraxylene & PTA imports

Paraxylene sales on the Russian domestic market dropped to 87,800 tons in the first half of 2018 versus 96,900 tons in the same period in 2017. No changes were from previous years were noticeable from the three plants, i.e., Ufaneftkhim sells most of its paraxylene to Polief, Kirishi exports almost all of its production and Gazprom Neft does

both. Domestic prices for xylenes have risen by about 10% in the first half of the year. Taneko at Nizhnekamsk started construction of the aromatics complex earlier this year, which will eventually result in the construction of a 147,000 tpa plant for paraxylene.

Russian PTA Imports (unit-kilo tons)		
Country	Jan-May 18	Jan-May 17
Belgium	2.1	19.1
India	4.8	15.4
China	43.2	37.6
South Korea	28.1	28.8
Poland	10.0	3.7
Thailand	9.5	9.0
Total	97.7	115.6

Russian exports of paraxylene amounted to 58,000 tons in the first five months in 2018 against 58,600 tons in the same period in 2017. Finland increased its share of Russian paraxylene exports in the first five months, rising from 83% to 98%. Belarus reduced purchases of paraxylene from Russia in 2018, falling from 12% to 1.5%.

Regarding Ufaneftkhim paraxylene capacity is being increased from 160,000 tpa to 260,000 tpa. In May-June 2018 SIBUR and the government of Bashkortostan signed an agreement on reconstruction of Polief's PTA plant, to rise up to about 350,000 tpa. Under a contract signed in 2016 Ufaneftkhim is required to deliver at least 120,000 tpa of paraxylene to Polief, although there is flexibility in volumes in the case of expanded PTA capacity.

Russian PTA imports totalled 97,700 tons in the first five months in 2018 against 115,600 tons in the same period in 2017. China supplied 43,200 tons in the first five months against 37,800 tons last year, whilst India reduced shipments from 15,400 to 4,800 tons. Thailand increased exports to 9,500 tons from 9,000 tons.

Aromatics

Russian benzene production, Jan-Jun 2018

In the first half of 2018 Russia produced 675,000 tons of benzene for synthesis and nitration, which is 4% more than in the same period of 2017. In June, Russian plants produced 106,100 tons of benzene for synthesis and nitration, which is 3% more than in May. Lukoil-PNOS at Perm doubled production to 1,900 tons after maintenance in May, whilst Kirishinefteorgsintez reduced volumes 2.2 times to 2,200 tons. SIBUR-Kstovo increased its production of benzene three-fold after maintenance in May to 8,000 tons. In June, Angarsk Polymer Plant produced 7,100 tons of benzene, which is 13% less than in May.

Russian Benzene Consumers (unit-kilo tons)		
Consumer	Jan-Jun 18	Jan-Jun 17
Kuibyshevazot	103.2	83.6
Azot Kemerovo	72.1	50.9
Shchekinoazot	35.1	28.1
Kazanorgsintez	35.7	31.5
Omsk Kaucuk	12.7	3.4
Nizhnekamskneftkhim	17.5	16.2
Novokuibyshevsk Petrochemical	15.2	15.6
Zapsib	26.1	17.5
SIBUR-Khimprom	30.5	47.5
Promsintez	3	8.3
Uralorgsintez	26.9	38.1
Others	23.5	11.7
Exports	37.8	104.2
Total	439.3	456.6

Russian benzene exports & domestic sales, Jan-Jun 2018

Benzene exports from Russia totalled 40,302 tons in the first half of 2018, against 36,370 tons in the same period in 2017. In the first half of 2018, Russian companies exported 15,800 tons of benzene for synthesis. Russian companies exported 2,900 tons of benzene for synthesis in June, which is almost six times more than in May and all delivered to Belarus. SIBUR-Kstovo exported 1,400 tons for the first time since December 2017, and 1,500 tons were supplied from Gazprom Neft at the Omsk refinery.

For the first half of 2018, Russian plants sold 360,800 tons of benzene for synthesis and nitration on the domestic market, which is 16% more than in the same period of 2017.

Nizhnekamskneftekhim-benzene expansion

Nizhnekamskneftekhim plans to increase the production of benzene in the fourth quarter of this year. In the near future, the first phase of the C6-C8 fraction extraction unit and the separation of benzene will begin on the site of the ethylene plant. Based on the results of the investment project, the production of benzene at the company's facilities will increase by 50,000 tpa.

The additional capacity will enable Nizhnekamskneftekhim to phase out merchant purchases, which amounted to 44,800 tons in 2017. The company produced 216,000 tons of benzene in 2017 against 212,800 tons in the same period in 2016. The licensed GT-BTX® technology will be added to the existing production of olefins EP-600 at Nizhnekamsk, and also applied to a new plant that will process a wide fraction of hydrocarbons.

Domestic sales of benzene dropped 5% in June versus May to 54,500 tons. Due to maintenance lasting from 18 May to 1 July Kirishinefteorgsintez reduced shipments by a half to 2,100 tons. In addition, last month supplies of benzene from Uralorgsintez and Severstal decreased to 7,800 tons and 2,600 tons respectively, 16% and 24% less than in May. Volumes of supplies of benzene for nitration from the Novolipetsk Metallurgical Combine amounted to 1,100 tons, 36% less than in May. SIBUR-Kstovo operated in regular mode in June, doubling domestic shipments over May to 5,900 tons.

Russian toluene & orthoxylene, Jan-Jun 2018

In the first half of 2018 sales of toluene on the

domestic market totalled 79,050 tons which is 14% less than in the same period last year.

Russian Toluene Domestic Sales (unit-kilo tons)		
Producer	Jan-Jun 18	Jan-Jun 17
Novopiletsk MK	0.0	0.1
Slavneft-Yanos	12.0	7.0
Severstal	2.2	2.5
Lukoil-Perm	12.7	5.1
Gazprom Neft	40.9	46.8
Zapsib	0.6	11.2
Kinef, Kirishi	10.0	15.0
Gazprom Neftekhim Salavat	0.0	1.7
Others	0.9	2.6
Total	79.3	91.8

In June, Russian companies supplied 7,000 of toluene to domestic consumers by rail which is twice less than in May. Gazprom Neft supplied 65% or 4,560 tons of total deliveries. Manufacturers of explosives reduced purchases of toluene by 38% to 750 tons (11% of total Russian consumption), whilst enterprises that produce paint and varnish in June reduced volumes of purchased toluene by 21% to 3,020 tons. Manufacturers of motor fuels and additives reduced purchase by 5.2 times to 900 tons, whilst 240 tons of toluene were purchased by companies using it as a solvent in the production of rubber.

For the first half of 2018 orthoxylene sales on the domestic market totalled 73,390 tons which was 8% down on the same period in 2017.

Russian Orthoxylene Domestic Sales (unit-kilo tons)		
Producer	Jan-Jun 18	Jan-Jun 17
Gazprom Neft	41.0	37.7
Ufaneftekhim	14.9	30.8
Kinef, Kirishi	18.0	14.3
Total	74.0	82.8

In June, Russian companies supplied 12,270 tons of orthoxylene to the domestic market, slightly up on May. Deliveries were made from the Omsk refinery at 7,490 tons, Kirishinefteorgsintez 2,910 tons and Bashneft 1,870 tons. Kamteks-Khimprom increased purchases by 22% to 6,790 tons and Gazprom neftekhim Salavat increased purchases by 26% to 790 tons. Dmitrievsky Chemical Plant bought 310 tons of orthoxylene in June. Russian paint and varnish manufacturers reduced purchases of orthoxylene in June relative to May by 7% to 3,170 tons (26% of the total Russian consumption). Manufacturers of fuel, agrochemistry, pharmaceutical and other products purchased 1,200 tons.

Russian Market Phenol Sales by Supplier (unit-kilo tons)		
Producer	Jan-Jun 18	Jan-Jun 17
Novokuibyshevsk Petrochemical	23.5	22.6
Kazanorgsintez	3.6	5.0
Ufaorgsintez	25.8	25.5
Borealis	3.4	3.2
Total	56.3	56.3

Novokuibyshevsk Petrochemical by 11% to 6,200 tons.

Russian phenol, Jan-Jun 2018

Phenol production in Russia totalled 100,900 tons in the first half of 2018 against 102,800 tons in the same period in 2017. Russian producers of phenol increased production by 6% in June over May, to 18,900 tons. Ufaorgsintez increased production by 12% to 6,300 tons, and Kazanorgsintez in June reduced the production of

phenol by 3% to 6,300 tons. On 22 May Ufaorgsintez launched its new cumene plant, replacing the old plant which started production nearly forty years ago. Modernisation of the plant has facilitated an increase in capacity to 170,000 tpa.

After the launch of the new phenol-acetone units at Omsk Kaucuk Russian phenol exports are expected to rise. Omsk Kaucuk plans to put into operation an updated plant for phenol with the capacity of 90,000 tpa by 2019. Due to a stagnant domestic market, Russian consumption of phenol decreased by 6.5% in 2017 to 203,000 tons against 237,000 tons in 2017. The decrease in demand is due to the conservation of bisphenol A production at the Ufa Refinery and the end of phenol processing at Kuibyshevazot.

Kuibyshevazot-Production (unit-kilo tons)		
Product	Jan-Jun 18	Jan-Jun 17
Polyamide-6	78.3	73.4
High Tenacity Tech Yarns	1.7	5.9
Tyre Cord Fabric	3.4	5.4
Caprolactam	108.2	94.9
Ammonia	558.5	324.3
Urea	179	172.9
Ammonium Nitrate	324.8	315.5
Ammonium Sulphate	274.5	241.4

Longer term, Omsk Kaucuk's phenol and acetone could be directed towards derivative projects. By 2022 Titan plans to create on the basis of its own raw materials the production of bisphenol A with the capacity of 118,000 tpa.

Kuibyshevazot, Jan-Jun 2018

Kuibyshevazot increased sales of commodity products by 34.7% in the first half of 2018 to 28.4 billion roubles. The company's net profit remained unchanged at 2.7 billion roubles.

Ammonia production for Kuibyshevazot rose 42% in the first half of 2018 to 558,500 tons, due partly to the launch of JV Linde Azot Togliatti. The production of urea rose by 3.5% to 179,000 tons. Caprolactam for the first half of 2018 totalled 108,200 tons, which is 14.7% higher than last year. Production of polyamide-6 for Kuibyshevazot was increased by 6.7% to 78,300 tons. The output of cord fabrics increased by 9% to 1,700 tons whilst the production of technical thread decreased by more than 40% to 3,400 tons.

In March 2018 Kuibyshevazot installed the fourth stage for polyamide-6 production, which increased capacity to a total of 212,000 tpa. Other investments have included the new production of ammonia from the JV Linde Azot Togliatti.

Synthetic Rubber

Russian C4 Purchases (unit-kilo tons)		
Consumer	Jan-Jun 18	Jan-Jun 17
Omsk Kaucuk	29.5	22.8
Nizhnekamskneftekhim	82.8	85.5
SIBUR Togliatti	96.9	97.8
Sterlitamak Petrochemical Plant	0.0	1.4
Total	209.2	207.5

Russian C4 sales, Jan-Jun 2018

In the first half of 2018 Russian companies sold 177,200 tons of C4 on the domestic market, which corresponds to the volume shipped for the same period of 2017. Domestic deliveries are supplemented by imports.

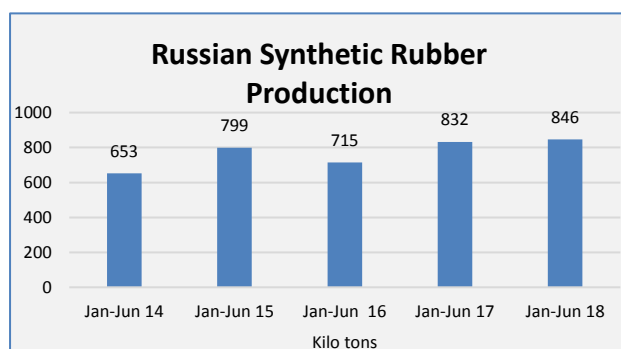
Russian producers sold 29,800 tons of C4s on the domestic market in June, which is 27% more than in May. The increase was due to the completion of

repairs at SIBUR-Kstovo on 20 May allowing the plant to increase deliveries by five times in June to 8,900 tons. In addition, supplies of C4 from Angarsk Polymer Plant increased by 30% to 2,300 tons. Tomskneftekhim reduced the supply of the fraction to domestic consumers by 16% to 6,200 tons, whilst shipments of C4 from Kazanorgsintez, Stavrolen and Ufaorgsintez practically did not change and amounted to 3,200 tons, 6,200 tons and 2,300 tons respectively.

In the first half of 2018, Russian companies imported 32,400 tons of the fraction, which is 5% more than in the same period in 2017. In June 2,500 tons of C4s were shipped from Azerkimiya in Azerbaijan to Russian consumers, 41% less than in May. In June, 1,500 tons of C4 were delivered to Nizhnekamskneftekhim from Azerbaijan, which is 37% less than in May. In addition, Omsk Kaucuk reduced imports 2.5 times to 950 tons. Naftan shipped 2,500 tons from Belarus to Nizhnekamskneftekhim, although the volumes were assigned to July.

Russian synthetic rubber news

Nizhnekamskneftekhim produced 358,000 tons of synthetic rubber in the first half of 2018, 2,000 tons more than in 2017. Nizhnekamskneftekhim accounted for 42% of Russian synthetic production in the first half of



2018 from the 846,000 tons produced in the country. Over the past five years Russian production has risen steadily with the exception of 2016.

Nizhnekamskneftekhim carried out major repairs in the production of butyl rubber in June and July. At SIBUR Togliatti nine new units have been installed in subdivisions this year for the production of synthetic rubber. In July this year the Togliatti plant celebrated a half year of isoprene rubber production which started on 24 July 1968 at the

then named Kuibyshev Synthetic Rubber Plant. The production at the original plant was based on isopentane which was carried out at the plant for the first time in globally. In the 1980s, the company entered the international market and began shipping to various countries around the world. SIBUR Togliatti has been awarded the highest category of supplier A from Bridgestone and Pirelli. In 2017, production of SKI-3 isoprene rubber totalled 69,400 tons at the SIBUR Togliatti plant.

A bankruptcy case against KZSK-Silicon is to be considered in November this year. KZSK-Silicon is a subsidiary of the Kazan Synthetic Rubber Plant, specially created for the construction of a production facility for the production of methyl-chlorosilane with a capacity of 40,000 tpa. The plant was supposed to be completed in 2015 but was badly affected by the fall in the rouble after Russian foreign policy activities in 2014 and effectively costs spiralled out of control. The plant has thus not been completed and assets are valued at 1.9 billion roubles.

Russian Synthetic Rubber Exports (unit-kilo tons)		
	Jan-May 18	Jan-May 17
Polybutadiene	104.7	102.5
BR	64.6	53.4
HBR	58.5	57.6
NBR	14.0	10.9
Isoprene	123.0	128.6
Others	67.2	90.0
Total	432.0	443.0

Russian synthetic rubber exports, Jan-May 2018

Export volumes for Russian synthetic rubber in the first five months totalled 432,000 tons against 443,000 tons in the same period in 2017. Average product prices dropped in the first five months from \$1846 per ton to \$1645 per ton. By product category, isoprene rubber exports totalled 123,000 tons in January to May 2018 against 128,600 tons. Isoprene rubber prices fell to \$1438 per ton from \$1492 in January to May 2017.

Export sales of both butyl rubber and halogenated butyl rubber from Russia rose in the first five months from

Russian Chemical Commodity Exports				
	Jan-May 18	Jan-May 18	Jan-May 17	Jan-May 17
Product	Kilo tons	\$ Mil	Kilo tons	\$ Mil
Ammonia	1,751	473	1,046	236
Methanol	794	253	686	189
Nitrogen Fertilisers	5,602	1,097	4,996	927
Potash	2,930	605	3,461	641
Mixed Fertilisers	5,054	1,437	4,354	1,124
Synthetic Rubber	432	711	443	814

53,400 tons in 2017 to 64,430 tons in the same period this year. Export prices of butyl rubber dropped from \$1764 per ton to \$1646 per ton.

By contrast, average prices for halogenated butyl rubber rose to \$2203 per ton from \$2046 per ton in 2017. Regarding export destinations, China was the largest recipient of Russian rubber shipments in the first five months

this year accounting for 10.2%, followed by Poland with 10.1% and India with 9.9%. Other leading markets included India, Hungary, Poland, and Mexico. Russian exports to Hungary could be affected later this year after the start-up of the new plant at Tiszaujvaros and the expected reduction in rubber imports.

Methanol & related products

Russian Methanol Production (unit-kilo tons)		
Producer	Jan-Jun 18	Jan-Jun 17
Shchekinoazot	229.7	241.2
Sibmetakhim	474.3	388.0
Metafrax	611.0	559.0
Akron	54.0	51.0
Azot, Novomoskovsk	143.3	115.2
Angarsk Petrochemical	0.8	1.9
Azot, Nevinnomyssk	50.9	57.8
Tomet	439.1	397.6
Ammoni	112.0	104.0
Totals	2115.2	1915.6

to 9,000 tons.

Russian Methanol Domestic Sales (unit-kilo tons)		
Producer	Jan-Jun 18	Jan-Jun 17
Azot Nevinnomyssk	5.4	14.5
Azot Novomoskovsk	73.4	39.9
Metafrax	131.8	192.2
Sibmetakhim	182.9	180.0
Togliattiazot	267.9	241.9
Shchekinoazot	24.9	23.1
Ammoni (Mendeleevsk)	82.5	56.6
Others	1.0	2.7
Total	769.6	750.9

99% up to 16,500 tons in June. The only producer that reduced domestic sales in June was Shchekinoazot. Tomet shipped 38,000 tons to Russian consumers, 6% up against May, Sibmetakhim by 28% to 34,600 tons, Metafrax by 36% to 27,000 tons, Azot by 49% to 13,200 tons and Azot Nevinnomyssk four-fold to 2,500 tons.

Russian Methanol Consumption (unit-kilo tons)		
Consumer	Jan-Jun 18	Jan-Jun 17
Nizhnekamskneftekhim	108.3	137.4
SIBUR Togliatti	69.7	62.7
Uralorgsintez	29.6	33.1
SIBUR-Khimprom	8.1	8.3
Tobolsk-Neftekhim	21.1	26.2
Ektos-Volga	26.4	24.8
Omsk Kaucuk	40.6	43.0
Novokuibyshevsk NPZ	22.6	44.2
Uralkhimplast	12.5	10.9
Slavneft-Yanos	9.0	6.4
Others	421.8	353.8
Total	769.6	750.8

methanol synthesis catalyst. The complex will produce 1,350 tons of methanol and 415 tons of ammonia per day.

Investment in the project amounted to 19 billion roubles. Shchekinoazot started commissioning works at the M-450/A-135 complex in June, and start-up is expected during the third quarter of 2018. The project has

Russian methanol production, Jan-Jun 2018

Methanol production in Russia increased by 10% in the first half of 2018 to 2.1 million tons. The largest rise was recorded by Azot at Novomoskovsk which increased by 24% to 143,300 tons, while the largest reduction was made by Azot at Nevinnomyssk by 12% to 50,900 tons.

In June, methanol production in Russia decreased by 11% to 328,000 tons versus May, partly caused by the introduction of restrictions during the World Cup period. Certain producers reduced capacity utilisation slightly: Azot by 1%, to 24,600 tons, Ammoni and Shchekinoazot by 2%, to 18,900 tons and 41,300 tons respectively, Metafrax reduced by 3% to 101,500 tons, and Akron 4%

Contrary to forecasts, Russian producers increased sales volumes of commodity methanol in the domestic market in June over May, rising by 29% to 136,000 tons. Producers which received a permit to ship methanol during the championship, sold the products in normal mode whilst producers that had not received methanol shipment permits to regions sold methanol in permitted regions under limited cargo traffic.

Tomet, Metafrax and Sibmetakhim, accounted for 73% of all methanol sold in Russia in June. At the same time, Ammoni increased its sales volumes by 99% up to 16,500 tons in June. The only producer that reduced domestic sales in June was Shchekinoazot. Tomet shipped 38,000 tons to Russian consumers, 6% up against May, Sibmetakhim by 28% to 34,600 tons, Metafrax by 36% to 27,000 tons, Azot by 49% to 13,200 tons and Azot Nevinnomyssk four-fold to 2,500 tons.

Nizhnekamskneftekhim is the largest individual buyer of merchant methanol on the Russian market, but reduced purchases from 137,400 tons to 108,300 tons in the first six months in 2018.

Shchekinoazot- M-450/A-135 complex

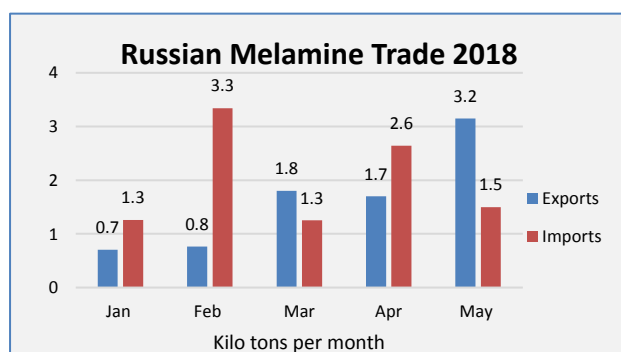
Shchekinoazot is preparing to launch its new combined complex of methanol and ammonia production, the first unit of its kind in Russia where the two products are produced using the same facilities and technology. Natural gas was delivered to the facility at Shchekino in July, and tests are currently being conducted on the equipment to start production. Preparations are under way for the recovery of the

been managed by the general designer Orgkhim at Severodonetsk in Ukraine started work in 2015. The general contractor for construction has been undertaken by Russian company Neftezavodmontazh.

Kuibyshevazot-Linde launches new ammonia plant

Kuibyshevazot and the Linde Group launched ammonia production at Togliatti in July. The new production capacity includes 1,340 tons of ammonia per day and 8,000 cubic metres of hydrogen per hour. Investments in the project totalled around 20 billion roubles. The project aims to meet the growing demand for ammonia used for the production of nitrogen fertilisers, as well as caprolactam and its derivatives (polyamide-6, technical and textile yarns, films and engineering plastics).

Linde Engineering Rus not only designed, supplied equipment and materials, commissioned works, acted as the general designer and contractor for the new ammonia plant at the Kuibyshevazot site. The new production unit was organised through the jv Linde Azot Togliatti. The share of each party is 50%.



Metafrax second melamine project

Metafrax and the Swiss company Casale signed a contract for the construction of a second melamine plant at the production site at Gubakha in the Perm region. The project will require €200 million and will be integrated into the complex Ammonia-Urea-Melamine (AKM) complex under construction at Gubakha. The introduction of the second plant will allow Metafrax to double the output of melamine up to 80,000 tpa. The company plans by the end of 2019 to prepare design estimates for the installation for the passage of Glavgosexpertiza.

Accordingly, the Russian melamine market is currently assessed at comprising consumption at around 50,000 tpa. After the introduction of the second installation for melamine Metafrax will be able to fully meet the needs of the domestic market, with a possible surplus.

Akron Production (unit-kilo tons)		
Product	Jan-Jun 18	Jan-Jun 17
Ammonia	1285.0	1248.0
Urea	475.0	434.0
Methanol	54.0	51.6
Formaldehyde	85.0	78.0
Urea-formaldehyde resins	95.0	88.0
Calcium carbonate	244.0	263.0

The shareholders of Metafrax received payments at the rate of 10 roubles per share. In 2017 the company received 6.4 billion roubles in net profit, which is twice as much as in 2016. Revenues increased by 10.2% to 19.5 billion roubles.

Russian fertiliser producers, Jan-Jun 2018

The Akron Group increased production of mineral fertilisers by 2.5% in the first half of the year, and for all products by 4.4% to 3.76 million tons. Ammonia production increased by 2%, including a 7% rise in output from the new Ammonia-4 unit at Veliky Novgorod to 417,000 tons. Urea production rose 15.9% to 475,000 tons.

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Fosagro Production (unit-kilo tons)		
Product	Jan-Jun 18	Jan-Jun 17
Ammonia	989	587
Urea	834	505
Phosphate fertilisers	3,432	3,228
Nitrogen fertilisers	1,114	768
Ammonium nitrate	279	262
Phosphoric acid	1,295	1,237
Sulphuric acid	2,943	2,649

In other production methanol increased to 54,000 tons in the first half of 2018 against 51,600 tons whilst formaldehyde increased from 78,000 tons to 85,000 tons. The production of urea-formaldehyde resins rose from 88,000 tons to 95,000 tons.

Fosagro increased production of mineral fertilisers by 14% in the first half of the year. During the first half of 2018, the

group's enterprises produced 4.5 million tons of fertilisers, including 2.2 million tons in the second quarter. The production of nitrogen fertilisers for the half-year increased by 45.1% to 1.11 million tons, phosphorus-containing products by 6.3% to 3.43 million tons. In the second quarter, the group of nitrogen fertilisers increased by 43.6%. Sales of fertilisers for the half-year increased by 14.8% to 4.66 million tons.

The Uralkhim Group increased ammonia production by 2% to 410,000 tons in the first half of 2018, whilst urea production dropped 1% to 605,000 tons. Uralkhim's production assets include Azot (Berezniki), Voskresensk Mineral Fertilisers (Moscow Region), ZMU KChKK (Kirov Region) and Mineral Fertilisers (Perm).

Organic chemicals

Russian butanol production, Jan-Jun 2018

In the first half of 2018 Russian butanol production amounted to 123,860 tons, slightly higher than last year. Russian plants produced 16,750 tons of butanols in June which is 18% less than in May. The share of n-butanol in the gross volume of butanols production in June 2018 was 60%, and isobutanol 40%. Gazprom neftekhim Salavat increased production by 1% to 5,550 tons whilst SIBUR-Khimprom reduced production by 39% to 5,400 tons. Angarsk Petrochemical Complex reduced production by 1%, to 4,180 tons (25%), and at Nevinnomyssk Azot by 5% to 1,610 tons (10%).

Russian N-Butanol Production (unit-kilo tons)		
	Jan-Jun 18	Jan-Jun 17
Angarsk Petrochemical	17.0	17.8
Azot, Nevinnomyssk	6.6	7.5
Gazprom n Salavat	27.3	29.8
SIBUR-Khimprom, Perm	20.9	20.7
Total	71.9	75.7
Russian Isobutanols Production (unit-kilo tons)		
	Jan-Jun 18	Jan-Jun 17
Angarsk Petrochemical	9.2	9.4
Gazprom n Salavat	18.7	14.6
SIBUR-Khimprom, Perm	24.1	23.7
Total	52.0	46.0

In the first half of 2018 Russian sales of butanols on the domestic market amounted to 36,080 tons which is 11% higher than the same period in 2017. The share of n-butanol in the total supply was 86%, and isobutanol 14%.

Domestic butanol deliveries to the Russian market amounted to 6,860 tons in June which is 13% more than in May. The share of n-butanol in gross sales in June 2018 was 91%, and isobutanol 9%. SIBUR-Khimprom decreased shipments by 21% compared to May and amounted to 2,850 tons (42% of the total Russian volume of supplies). Angarsk's plant increased shipments of butanols to the domestic market by only 2% to 2,020 tons. At the same time, 1,730 tons of butanols were shipped from Gazprom neftekhim Salavat, 5.8 times more than in May. In addition, in June 259 tons of n-butanol was delivered to the domestic market by Azot at Nevinnomyssk (no deliveries were made in May).

Russian Butanol Domestic Sales (unit-kilo tons)		
Producer	Jan-Jun 18	Jan-Jun 17
Gazprom n Salavat	4.4	2.8
SIBUR-Khimprom	14.2	17.6
Angarsk Petrochemical	11.9	5.5
Azot Nevinnomyssk	0.3	1.1
Totals	30.8	27.0

In June, Akrlat increased purchases of n-butanol by 28% compared to May to 2,540 tons (37% of total Russian consumption). Most of the supply came from SIBUR-Khimprom, supplemented by 929 tons from Salavat. Dmitrievsky Chemical Plant reduced purchases in June by 7% to 880 tons (13%), whilst Volzhsky Orgsintez increased purchases of spirits by 77% to 1,140 tons (17%).

Russian phthalic anhydride, Jan-Jun 2018

Russian production of phthalic anhydride amounted to 8,820 tons in June, 7% less than in May. Kamteks-Khimprom reduced production to 7,850 tons and Gazprom neftekhim Salavat increased production by 2.75 times to 970 tons. From January to June 2018 in Russia produced 52,470 tons of phthalic anhydride which is 5% lower than in 2017.

Russian Phthalic Anhydride Production (unit-kilo tons)		
Producer	Jan-Jun 18	Jan-Jun 17
Gazprom neftekhim Salavat	5.6	4.6
Kamteks	46.9	50.5
Total	52.5	55.1

Russian organic chemical trade, Jan-Jun 2018

Butanol exports from Russia increased in the first five months this year, although remain lower than the volumes recorded prior to the start-up of the Salavat acrylic acid complex in 2017. Normal butanol export shipments rose to 16,300 tons versus 7,200 tons, whilst isobutanol volumes increased from 9,400 tons to 18,500 tons. Exports from 2-ethylhexanol (2-EH) amounted to 11,300 tons in the first five months in 2018, down from 14,000 tons in 2017. Phthalic anhydride exports totalled 28,200 tons in January to May 2018, up from 25,000 tons, whilst butyl acetate shipments dropped to 7,400 tons from 18,900 tons.

Russian Organic Chemical Exports		
Product	Jan-May 18	Jan-May 17
N-Butanol	16.3	7.2
Isobutanol	18.5	9.4
2-EH	11.3	14.0
Pentaerythritol	5.2	4.7
Phenol	14.8	8.5
Ethylene Oxide	5.2	7.1
Formaldehyde	8.1	9.4
Acetone	14.0	18.9
VAM	8.4	14.4
Butyl Acetate	7.4	18.9
Phthalic Anhydride	28.2	25.0

Pentaerythritol exports rose to 5,200 tons in the first half of 2018 versus 4,700 tons. In the first half of 2018 Metafrax produced 11,360 tons of pentaerythritol which is 7% lower than in the same period in 2017.

Other products

Syngenta-Nizhnekamsk

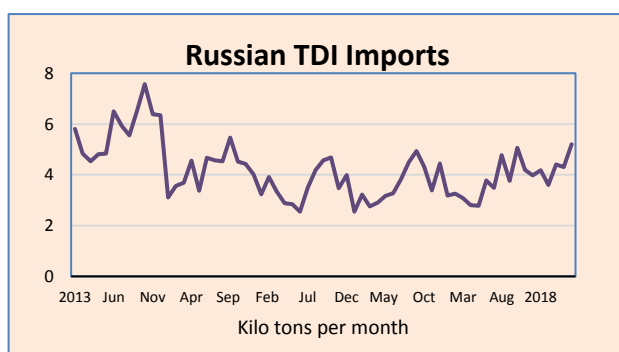
Syngenta has outlined plans to build a plant for the production of agrochemicals at Nizhnekamsk. Syngenta is interested in building a plant for the production, packaging and packaging of plant protection products in Russia in addition to the current production activities. Agrochemical production in Russia has risen sharply in the past two years, but the country still remains heavily dependent on imports thus providing opportunities for

domestic production. Syngenta was established in Switzerland in 2000 by merging the agribusiness of Novartis AG and AstraZeneca Plc.

Calcium carbide plant-Volgograd

A test production plant for calcium carbide at the idled Khimprom plant site at Volgograd could be started before the end of 2018, whilst plans exist long term to produce methanol. Until the plant closed Khimprom was the only producer of calcium carbide in Russia and since the closure in 2015 product has been largely

imported from Kazakhstan. Khimprom is again preparing to become the main supplier of calcium carbide to Russia, with former employees being taken back. The capacity of the new plant could be set up to produce 72,000 tpa, of which the first stage will consist of 36,000 tpa.



Russian TDI imports, Jan-May 2018

Russia imported 21,700 tons of TDI in the first five months in 2018, valued at \$86.8 million. Around 40% of supplies came from Germany, followed by Hungary and Saudi Arabia.

Compared with January to May 2017 TDI imports doubled by value in the same period in 2018 and by 43.7% by weight. The price rose \$2.86 per ton in the first five months this year to \$4,000 (i.e., +40%). Germany exported 8,370 tons of TDI in from January to May, at a cost of \$34.4 million, 54.7% higher in tonnage and double the value from last year. Hungary increased its supplies by 4% to 4,870 tons valued at \$19.5 million (+51.1% compared to January-May 2017). Despite the rise in price, demand remains strong in Russia for fireproof heat insulation and production. In January-May, the output of mineral wool totalled 13.78 million cubic metres, which is 10.7% higher than the same period last year.

Russian soda ash-raw material issues

Bashkir Soda Company (BSK) is yet to find a solution to raw material problems that could affect soda ash production in future. The reserves of limestone on Shakhtau's quarry that serves BSK's Sterlitamak plant will last about five years. The same amount of time will be needed to prepare a new field for operation, which if not undertaken could mean the cessation of operations for Bashkir Soda after 2022.

were provided by the Industrial Development Fund (FRP).

Khoma-Dzerzhinsk

Russian company Khoma at Dzerzhinsk has put into operation a new line for the production of styrene-acrylic dispersions, as the basis for glutinous and varnish-and-paint materials. The total investment is estimated at 459 million roubles, 150 million of which

The share of imports in Russian consumption of styrene-acrylic dispersions constitutes around 29%. New equipment was purchased by Khoma that will increase the production capacity of the enterprise 1.5 times from 24,000 tpa to 36,000 tpa and bring new competitive products to the Russian market. In addition to the started production of styrene-acrylic dispersions, a line of polyvinyl acetate dispersions will open later this year autumn, and in 2019 production of water-dispersion and polyurethane materials is scheduled for expansion.

Vtor-Kom-non-woven materials

Russian company Vtor-Kom will open production of non-woven materials from secondary PET in the industrial park Malaya Sosnovka (Chelyabinsk region). The plant will be launched by the end of 2020 and will produce synthetic fibre for the light and furniture industry, geosynthetic, filter materials, heaters and various fillers for clothing and upholstered furniture.

The project will increase the production capacity of Vtor-Kom by 50%, which corresponds to an increase in the volume of processing by 1,500 tons of PET per month. Vtor-Com has operated since 1990 specializing in the processing of waste with the subsequent production of finished products. The company collects and processes more than 4,500 tons of PET bottles, waste paper, plastic, boxes, aluminum cans, textiles and other secondary raw materials.

Ukraine

Ukrainian PVC imports, Jan-Jun 2018

Imports of PVC to Ukraine declined by 19% in the first half of 2018 compared to the same period of 2017 and amounted to 38,800 tons against 48,000 tons. Imports from the US in the first half this year amounted to 26,100 tons against 17,400 tons in January to June 2017, whilst imports of European PVC to Ukraine amounted to 11,400 tons against 21,300 tons.

Ukrainian Polypropylene Imports (unit-kilo tons)		
Category	Jan-Jun 18	Jan-Jun 17
Homo	44.1	44.6
Block	6.9	6.4
Random	8.6	6.2
Propylene copolymers	0.0	0.0
Other	1.2	1.2
Total	60.8	58.4

Homopolymer imports were unchanged at 44,000 tons, whilst block copolymers rose to 6,900 tons against 6,100 tons. Random copolymer imports rose to 8,600 tons against 6,100 tons.

Ukrainian polypropylene imports, Jan-Jun 2018

Polypropylene imports into Ukraine rose 7% in the first half of 2018 to 60,800 tons against 57,100 tons in the same period in 2017. Karpatneftekhim was the sole benzene exporter from Ukraine in June, shipping 3,000 tons to Europe which is 2.5 times less than in May. Karpatneftekhim sold 6,000 tons of benzene, but some of the volumes will be declared in July statistics. In the first half of 2018, Ukrainian companies sold 40,900 tons of benzene for synthesis abroad of which Karpatneftekhim supplied 29,800 tons.

Ukrainian chemical news, Jan-Jun 2018

Karpatneftekhim was the sole benzene exporter from Ukraine in June, shipping 3,000 tons to Europe which is 2.5 times less than in May. Karpatneftekhim sold 6,000 tons of benzene, but some of the

Ukrainian polyethylene imports, Jan-Jun 2018

Polyethylene imports into Ukraine in the first half of 2018 and amounted to 120,500 tons. The reduction in imports was recorded only in HDPE and ethylene-vinyl acetate (EVA). HDPE imports dropped from 52,800 tons against 37,200 tons, whilst LDPE imports rose 27% to 39,400 tons. LLDPE imports increased to 36,900 tons from 31,100 tons, whilst import of other types of polyethylene, including ethylene vinyl acetate, amounted to about 7,000 tons against 7,600 tons a year earlier.

Methanol imports into Ukraine rose 3.5 times in June over May to 1,060 tons all of which Shchekinoazot provided 80%, or 842 tons and Azot at Grodno provided the remaining 197 tons. Consumers in June included Ukgasdobycha which reduced its purchases of imported methanol by 93% to 158 tons, whilst Karpatsmoly increased purchases by 37% to

764 tons.

Azot at Severodonetsk in eastern Ukraine restarted urea and ammonia production in August after completing commissioning work, whilst also plans are being set out for the launch of workshops for the production of ammonium nitrate and other auxiliary structural units. This will make it possible to produce up to 36,000 tons of urea, and 10-15,000 tons of ammonia aqueous per month.

Ukrainian chlorine producer Dniprozot resumed work in late July, although the management does not exclude subsequent stops depending on market conditions. A rise in the price of chlorine has increased almost fivefold since 2017, up to 47,000 hryvnia per ton (about \$1,600). These price levels make chlorine production profitable, although should the price fall below a certain level Dniprozot is ready to stop the plant again.

Ukrainian PA/DOP Imports (unit-kilo tons)		
Product	Jan-Jun 18	Jan-Jun 17
Phthalic Anhydride	2.5	1.7
DOP	1.8	2.1

imported from China. Phthalic anhydride was purchased by the manufacturer of phthalate plasticizers Polikem (108 tons, or 34% of total imports), as well as TD LK-Ukraine (84 tons, or 27%). In the first six months in 2018 Ukraine imported 1,780 tons of phthalic anhydride which is 15% less than in the same period last year.

In June, imports of DOP into Ukraine amounted to 401 tons in June against 613 tons in May. In June 2018, Boryszew supplied 55% of all-Ukrainian imports) and Deza 45%. In total, 2,470 tons of dioctyl phthalate were imported into Ukraine in the first half of 2018 which is 46% more than the same period last year.

Belarussian Petrochemical Production (unit-kilo tons)		
Product	Jan-Jun 18	Jan-Jun 17
Ethylene	35.1	27.1
Propylene	22.1	17.6
Benzene	69.4	53.4

May whilst Grodno Azot increased caprolactam production by 53% to 12,100 tons. At the Polymir plant in June, monomer production doubled including propylene up to 4,300 tons and ethylene up to 6,500 tons. LDPE production in Belarus amounted to 31,000 tons in the first half of 2018, 9% more than in 2017 when it was 28,500 tons. From 5 May to 20 May Polymir stopped its LDPE capacities for scheduled overhaul of facilities.

Azot Grodno Production (unit-kilo tons)		
Product	Jan-Jun 18	Jan-Jun 17
Methanol	35.3	37.1
Caprolactam	61.4	58.3
Polyamide primary	57.1	50.9
Polyamide filled	6.1	6.1
Ammonia	541.7	579.2
Urea	518.4	573.5
Fertilisers	392.6	415.9
Fibres	21.1	19.6

Belarussian chemical production, Jan-Jun 2018

In the first half of 2018, Belarus produced 22,100 tons of propylene, 35,100 tons of ethylene, 69,400 tons of benzene and 63,000 tons of caprolactam. Naftan at Novopolotsk increased the production of benzene in June by 45% to 13,500 tons, which is 45% more than in

Azot at Grodno resumed production of methanol in June after a stoppage in May and produced 7,560 tons. Azot increased methanol production in the first half of 2018 by 34% as compared to the same period of 2017, up to 35,300 tons.

Azot increased production of primary polyamide in June over May 7.7% up to 9,870 tons. The production of fibres and chemical threads increased by 15% to 3,450 tons, whilst the production of cord fabric decreased by 19.1%. The production of mineral fertilisers at Grodno fell by 26.7% in June.

Omsk Carbon-Mogilev

Omsk Carbon Group expects to launch the first stage of production of carbon black at Mogilev in Belarus in September 2018. The ultimate target for the plant is 200,000 tpa, of which around half will be consumed in the manufacture of car tyres by the domestic company Belshina, and the rest will be delivered to Poland, Sweden, Germany, Romania, Finland. Omsk Carbon Group includes two plants for the production of carbon black, in Volgograd and Omsk. The capacity of the Omsk plant is 250 000 tpa and the Volgograd plant 200, 000 tpa.

Belarussian polymer trade, Jan-May 2018

In the first five months in 2018 PVC imports into Belarus increased by 24% to 14,100 tons against 11,400 tons a year earlier. The main increase in demand for PVC was seen by local window manufacturers. The key suppliers of resin in Belarus in the first five months in 2018 consisted of producers from Russia, accounting for 89% of supply, followed by Germany and Ukraine.

Polypropylene imports into Belarus totalled 41,100 tons in the first five months against 38,000 tons in the same period in 2017. Homopolymer imports rose 7.2% to 27,500 tons, whilst copolymer imports rose from 12,400 tons to 13,600 tons.

Belarussian Acrylonitrile Exports (unit-kilo tons)		
Product	Jan-May 18	Jan-May 17
Russia	1.5	0.6
Hungary	0.5	1.1
India	0.0	2.0
Iran	1.4	2.8
Netherlands	0.0	10.4
Turkey	14.5	6.1
UAE	0.0	0.1
Total	18.0	23.2

Polyethylene imports totalled 58,684 tons in the first five months in 2018 against 53,549 tons in the same period in 2017. LDPE imports dropped to 25,652 tons against 31,536 tons, whilst HDPE imports rose to 23,997 tons from 18,605 tons.

Regarding export activity, Belarus shipped 39,368 tons of polyethylene in January to May 2018 versus 32,763 tons in 2017. Most of the polyethylene exported consisted of LDPE. Polyamide exports totalled 30,214 tons in the first five months versus 26,572 tons last year. The largest market for Belarussian polyamide exports was China, consuming 9,400 tons against 9,340 tons in the same period in 2017. Other consumers include Germany and Russia.

Belarussian organic chemical trade, Jan-May 2018

Belarussian acrylonitrile exports amounted to 18,002 tons in the period January to May 2018 against 23,161 tons in the same period in 2017. The largest destination for Belarussian exports was Turkey which took 14,546 tons against only 6,120 tons in the same period last year. Exports to the Netherlands fell to only 20 tons in January to May 2018 against 10,400 tons last year. Iran reduced imports to 1,364 tons from 2,778 tons. Average prices for Belarussian acrylonitrile exports rose to \$1620 per ton in the first five months this year against \$1323 per ton in 2017.

Belarussian Organic Chemical Exports (unit-kilo tons)		
Product	Jan-May 18	Jan-May 17
Acrylonitrile	18.0	23.0
Caprolactam	3.2	4.7
Phthalic anhydride	20.7	9.1
Methanol	7.6	3.3

Phthalic anhydride exports rose from 9,056 tons to 20,729 tons, with average prices rising from \$887 per ton to \$897 per ton. Belarus exported 6,467 tons of phthalic anhydride to Russia in the first five months in 2018 against 4,024 tons in the same period in 2017. Russian consumers paid more than the average price, importing Belarussian phthalic at \$913 per ton. The second largest destination in the first quarter this year was India, taking 4,118 tons at \$883 per ton.

Belarussian Methanol Market (unit-kilo tons)		
	Jan-May 18	Jan-May 17
Production	27.7	31.5
Exports	7.6	3.7
Imports	39.1	18.7
Balance	59.1	46.4

In other areas of chemical trade, methanol export shipments amounted to 7,646 tons in January to May 2018 against 3,279 tons in the same period in 2017. Average methanol export prices rose to \$377 per ton in the first five months against \$318 last year.

Methanol imports into Belarus totalled 39,063 tons in the first five months, at \$304 per ton, against 18,653 tons in the same period in 2017 at \$301 per ton. Methanol consumption in the first five months

totalled 59,100 tons against 46,400 tons in the first five months in 2017.

Belarussian PTA Imports (kilo tons)		
Country	Jan-May 18	Jan-May 17
Russia	1.2	1.1
Belgium	0.5	2.0
South Korea	5.3	18.5
Poland	6.0	3.7
Others	0.1	1.0
Total	13.1	26.3

Due to the increase in phthalic anhydride production at Lida, Belarus reduced imports to 2,201 tons in the first five months against 15,180 tons last year. Regarding PTA imports into Belarus, volumes amounted to 13,062 tons in January to May 2018 against 26,299 tons in the same period in 2017.

PTA imports in the first five months this year came largely from Poland with 6,004 tons, rising from 3,687 tons, followed by South Korea with 5,637 tons which fell from 18,511 tons in the same period in 2017. PTA import prices rose to \$808 per ton the first five

months against \$761.

Central Asia/Caucasus

Azerbaijan chemical production, Jan-Jun 2018

Azerbaijan increased the volume of chemical production by 0.4% in the first half of 2018. Propylene production increased by 19.2% to 33,400 tons, polyethylene by 8.9% to 58,500 tons, and ethylene by 8.9%

up to 60,200 tons. The decline during the period took place in the production of iodine by 7.6% to 87.6 tons, isopropanol by 11% to 15,800 tons and methanol by 59.3% to 38,100 tons.

Azerbaijan Chemical Production (unit-kilo tons)		
Product	Jan-Jun 18	Jan-Jun 17
Ethylene	60.2	55.3
Polyethylene	58.5	53.7
Propylene	33.4	28.0
Isopropanol	4.7	1.1
C4s	20.1	17.7
Methanol	38.1	100.7

SOCAR Polymer-polypropylene sales

After the launch of the polypropylene plant at the new SOCAR Polymer division in Azerbaijan, SOCAR is expected to challenge other regional producers in the Russian market whilst focusing also on Turkey and Europe. Turkmenistan and Uzbekistan account for about 60% of polypropylene imported into the Russian market, thus providing opportunities for SOCAR-Polymer. After the launch of a polypropylene plant in late 2018, 19 brands of polypropylene (184,000 tpa) and 12 high-density polyethylene (120,000 tons per annum) will be produced at

the new SOCAR Polymer plant. According to SOCAR, around 75% from the new plant will be exported.



Cumulatively, the share of supplies from Turkmenistan and Uzbekistan accounted for about 60% of polypropylene imported to the Russian market in 2017, compared to 41% in 2016. SOCAR will be looking at competing against Central Asian sources, at least until the start-up of the new ZapSibNeftekhim complex at Tobolsk. Over 2016 and 2017, the import of Turkmen polypropylene to Russia amounted to \$77 million at a total weight of 83,800 tons.

BOPP unit-Uzbekistan

A plant for BOPP film production has started construction in Uzbekistan under the management of the Korean company LG International and the Uzbek company Jizzax Plastics. Investments in the project for the production of BOPP are estimated at \$40 million, consisting of a design capacity at 3,500 tons and scheduled for construction in the 2019-2020 period. The Jizzax Plastics Plant remains the main supplier of film and pipes for the agricultural and construction sectors of Uzbekistan.

Pavlodar chemical plant news

Kazakh company Neftekhim at Pavlodar stopped polypropylene production for planned maintenance on 25 July, lasting for around a month. Neftekhim was put into operation in 2009, including two units for MTBE and polypropylene.

Kazatomprom launched a two-stage tender for the sale of 40% stake in Kaustik at Pavlodar, the starting price for the stake is \$11 million. Kaustik was opened in October 2011. The company is capable of producing 30,000 tpa of caustic soda, 6,600 tpa of sodium hypochlorite, 26,400 tpa of chlorine and 45,000 tpa of hydrochloric acid.

At the Turkmenbashi complex of oil refineries, the BOPP film plant was commissioned in July. The capacity of the new production is 21,000 tpa. Polypropylene produced by the Turkmenbashi refinery is used as raw material, from which the plant will produce BOPP-film of two types transparent single-layer and co-extrusion. This represents an important project for Turkmenistan as part of the strategic programme and investments in petrochemicals. The

Kiyarly project on the Caspian coast is advanced stages of construction and the complex is expected to start by 2020 offering monomer and polyolefin capacity.

Relevant Currencies

Czech crown. Kc. \$1 = 22.4. €1 = 25.4; Hungarian Forint. Ft. \$1 = 279.2 €1 = 322.2; Polish zloty. zl. \$1 = 3.70. €1 = 4.28; Ukrainian hryvnia. \$1 = 31.4 €1 = 26.9; Rus rouble. \$1 = 66.3 €1 = 76.6

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