CIS Chemical Industry News

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Russia

Russian Chemical Production (unit-kilo tons)

Product	*Jan-May 17*	*Jan-May 16*
Caustic Soda	513.9	451.6
Soda Ash	1,442.0	1,142.7
Ethylene	1,271.0	1.131.0
Benzene	575.0	509.2
Xylenes	233.6	241.4
Styrene	287.5	305.4
Phenol	89.5	102.2
Ammonia	7,000.0	6,700.0
Nitrogen Fertilisers	4,180.0	4,092.0
Phosphate Fertilisers	1,384.0	1,491.0
Potash Fertilisers	3,478.0	3,065.0
Plastics in Bulk	3,227.0	3,279.0
Polyethylene	858.0	967.0
Polystyrene	222.1	229.8
PVC	402.7	325.0
Polypropylene	614.0	561.7
Polyamide	66.3	64.0
Synthetic Rubber	717.0	600.7
Synthetic Fibres	68.8	62.5

Russian Petrochemical Projects

Rosneft-petrochemical strategy

Rosneft has committed its strategic goal to increase the percentage share of chemicals and petrochemicals in its revenue breakdown. This is based on the group's project investments and long-term development plans for the industry. Petrochemicals for Rosneft have become more prominent in the past two to three years, whereas prior to the decline in oil prices olefins and polyolefins had tended to represent an after-thought. The fundamental changes in global oil dynamics combined with further acquisitions have raised the importance to Rosneft of adding value to oil extraction and refining. Rosneft is following a global trend where low crude prices are forcing oil and gas companies to examine downstream potential,

Rosneft's first venture into petrochemicals took place with the acquisition of assets from YUKOS in 2012, which included Angarsk Polymer Plant and Angarsk Petrochemical Company. This was followed in 2015 by the acquisition of SANORS in the Samara region, which included the complex Novokuibyshevsk Petrochemical Company. In 2016 Rosneft added Bashneft to its list of acquisitions, somewhat controversially, giving control over Ufaorgsintez and the Ufa refineries.

Rosneft considering expansion of Ufaorgsintez

Rosneft is considering project plans for Bashneft subsidiary Ufaorgsintez that would see an increase) for processing raw materials from the current 650,000 tpa to 1.5 million tpa. Ufaorgsintez produces more than 25 products, including various brands of polypropylene, polyethylene, phenol, acetone, etc.

Development plans focus not only modernising and expanding existing plants, but also new grassroot projects in East Siberia and the Russian Far East. In the Volga region Novokuibyshevsk has been identified as a potential site for expansion, whilst modernisation is planned for Ufaorgsintez.

The most well-known of the grassroot projects involves the Eastern Petrochemical Company (VNHK) oil refinery and petrochemical complex at Nakhodka in the Primorsky Kray, well located for access to the markets in China and East Asia.

A newer and less well-known project comprises a joint investigation with Sinopec into establishing a gas based petrochemical complex at Boguchany in the Krasnoyarsk region in East Siberia. If the Russian-Chinese jv can be approved this project would be located on the Angara river which flows into the Yenisei river in China. The resource base of the project is to be focused on Rosneft's Yurubchensky oil and gas fields. This project will enable China to diversify the supply of petrochemical raw materials and of Sinopec to increase the share of the domestic market of petrochemical products.

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In view of lower oil prices Rosneft has assessed that petrochemicals could be more profitable than refining and upstream activities. Thus the group aims to increase the share of oil and gas chemistry in the company's total refining capacity to around 20%. To implement this goal, Rosneft has created a new separate department for petrochemicals. In the first quarter this year petrochemical sales for Rosneft amounted to around 20 billion roubles, of which around 7 billion came from exports.

Amur Gas Processing Plant-start of construction & equipment deliveries

Gazprom is to begin laying the foundations of the Amur Gas Processing Plant (GPP) in August, after completing a large part of the preparation stage. Its main infrastructure facilities have either been established already or are in the process of being built. The department of the Blagoveshchensk customs opened a special customs post in June, moreover, with the purpose of passing cargo to the Amur Gas Processing Plant. The need to organise a separate customs zone is due to the remoteness of the construction site from the nearest customs station, located 200 kilometres away. This makes it possible to shorten the time for conducting customs operations and to comply with plans for construction and installation.

Shipments of equipment are scheduled to increase from August, reaching their peak in 2018-2019, when the transportation of gas drying and gas fractionation facilities will be carried out. Six zones of temporary customs control will be created at Amur Gas Processing Plant, five of which will belong to the main site and one at the temporary berth on the Zeya River.

Some of the raw materials from the GPP will be exported, in part to SIBUR's proposed Amur gas chemical complex where monomers and polymers may be produced depending on SIBUR's final project plans. Assuming the petrochemical project is given the green light in 2018, most of the logistics and energy infrastructure being established for the Amur GPP will be used by SIBUR in the construction process.

To transport cargo to the Amur GPP the Dutch shipbuilding company Damen Shipyards Group has been contracted to build 19 specially equipped small draft vessels. The ship building agreement was signed between Damen Shipyards Group and Combi Lift (Germany), which was chosen by Linde as a logistics and transportation partner for bulky cargo for the Amur GPP. The company has been commissioned to transport over 176,000 tons of cargo from various shipyards to the construction site at Svobodny, either by sea and river transport. Part of the route will run along the Amur and Zeya rivers. The construction of ships will be carried out at the shipyard in China and two shipyards in the Netherlands.

Transportation of cargo is planned to be carried out in five stages (2018-2022), in periods when the Amur and Zeya will be free from ice. Combi Lift intends to work according to the following scheme: cargo from the ports of Europe and Korea will be exported on Combi Lift ships, and the port of De-Kastri will be reloaded to barges. After the special tugs-pushers of small precipitation will conduct barges along the rivers of Russia.

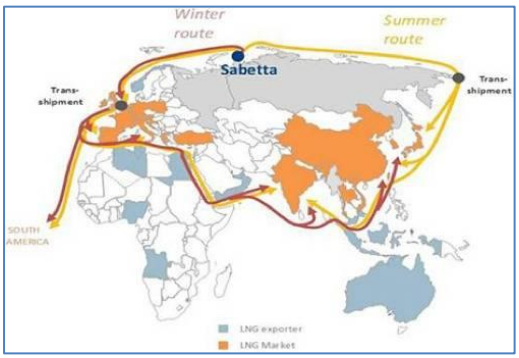
SIBUR-ZapSibNeftekhim

By the end of June ZapSibNeftekhim had completed 53.2% of the design, assembly and construction of the pyrolysis plant whilst overall progress on the project is 49.7%. At the pyrolysis installation, metal structures of overpasses, awnings and substations are currently being installed. Work is underway on the skinning of buildings and structures, welding of the above-ground pipeline continues. In parallel, the manufacture and installation of supports for pipelines of various diameters are being carried out, and on the technological overpasses, the fireproofing slabs are concreted. Russian company Electronmash manufactured and shipped equipment for power supply of process units and general plant for ZapSibNeftekhim.

ZapSibNeftekhim Project Status June 2017	
Overall Progress	50%
Design	92%
Construction & installation	28%

The overall progress of the project is almost 50% whilst the design is completed by 92% and construction and installation works by 28%. The supply of materials and equipment is completed by 69%. The number of building personnel on the site in May had risen to 12,110.

After the start of the ZapSibNeftekhim complex SIBUR estimates that its hydrocarbon feedstocks used for petrochemical production will rise to around 59% from 40% in 2016. The raw material for SIBUR is associated gas, which the company processes at its gas processing plant in West Siberia and produces a broad fraction of light hydrocarbons for further processing in petrochemical plants. In 2016 SIBUR processed a record volume of associated gas totalling 22.4 billion cubic metres. Construction of Zapsibneftekhim, which is being designed to produce 1.5 million tpa of polyethylene and 500,000 tpa of polypropylene, is scheduled to be completed in 2020.



ZapSibNeftekhim-logistical challenges

As a project coordinator, Linde Engineering and SIBUR have appointed a freight forwarding company Deugro. To store components, Deugro has chosen the port of Antwerp based .on the short transit time from this port to Sabetta in the Yamalo-Nenets Autonomous District. Currently, the equipment is located in the terminal of the company Zuidnatie and is ready to be shipped to Tobolsk, Tyumen region.

In total, 167 different parts are to be delivered to the ZapSibNeftekhim by Hansa Heavy Lift GMBH from China and South Korea. Among them are columns, heat exchangers, furnaces, reactor components, steam boiler drums and other components.

Loading operations are carried out by two Terex Gottwald cranes, designed for 200 tons each (up to 400 tons when working in a two-lift mode). As part of the programme, it is necessary to transport heavy objects weighing up to 481 tons and a length of 87 metres.

Complicating the logistics operation is that, due to low temperatures, access to the West Siberian region along the Northern Sea Route (SMP) opens in the period from July to September. Delivery of oversized cargo can begin in July, as soon as ice falls in the Ob Bay area. Large parts of equipment are transported In the Sabetta port when they are sent is transported to pontoons, which, going up the Irtysh River, arrive in Tobolsk after a period of around two weeks.

Russian petrochemical producers & markets

Russian ethylene-propylene production, Jan-Mar 2017

Russian ethylene production totalled 1.271 million tons in the first five months in 2017, against 1.131 million tons in the same period in 2016. In May ethylene production amounted to 260,300 tons, 11% more than in April. Stavrolen increased output by 42%, to 27,600 tons, whilst Kazanorgsintez increased production by 38%, to 46,800 tons. Novokuibyshevsk Petrochemical Company reduced production by 6%, to 5,600 tons.

Russian Ethylene Production (unit-kilo tons)

Producer	*Jan-May 17*	*Jan-May 16*
Angarsk Polymer Plant	94.9	21.5
Kazanorgsintez	243.3	202.6
Stavrolen	126.9	120.9
Nizhnekamskneftekhim	268.3	264.5
Novokuibyshevsk Petrochemical	24.2	27.5
Gazprom neftekhim Salavat	152.6	132.8
SIBUR-Kstovo	171.7	167.3
SIBUR-Khimprom	20.9	24.3
Tomskneftekhim	115.1	113.2
Ufaorgsintez	53.4	56.9
Total	1271.4	1131.4

Propylene production in Russia increased 6% in the first five months in 2017 to 765,800 tons. In May, the production of Russian propylene grew by 6%, to 159,200 tons. After the completion of the repair work at Kazanorgsintez, production increased 2.2 times to 3,100 tons. In addition, Stavrolen increased production by 37% to 11,200 tons, and Titan by 9% to 20,300 tons. SIBUR-Khimprom reduced propylene production in April by 9%, to 6,500 tons. Tomskneftekhim underwent a brief outage in late June due to an accident in the power supply system.

Russian propylene exports, Jan-May 2017

Propylene exports dropped 7% in May to 15,200 tons, of which 7,600 tons was supplied by Lukoil-NNOS. For the first five months, this year exports totalled 78,700 tons which was 44% up on the same period in 2016. Propane-propylene fraction exports totalled 35,600 tons in the period January to May 2016, 21% up on last year.

Russian Propylene Exports (unit-kilo tons)

Company	*Jan-May 17*	*Jan-May 16*
Lukoil-NNOS	31.3	31.4
SIBUR-Kstovo	40.8	22.7
Omsk Kaucuk	2.0	0.0
Angarsk Polymer Plant	0.0	0.4
Stavrolen	3.7	5.2
Total	77.8	59.6

Propylene exports from Russia amounted to 16,400 tons in April 23% less than in March when they totalled 21,300 tons. Lukoil-NNOS increased shipments of monomer to foreign markets by 26% in April to 10,200 tons from 8,100 tons in March. SIBUR-Kstovo reduced shipments in April 2.4 times to 5,200 tons from 12,400 tons in March. Omsk Kaucuk renewed exports in April, shipping 986 tons to Belarus. In the period January to April 2017 exports of propylene totalled 65,600 tons which was 26% up on the same period in 2016. Exports of propane-propylene fractions amounted to 27,800 tons, which is almost the same as in 2016.

Russian styrene, Jan-May 2017

Styrene exports from Russia amounted to 10,800 tons in May, 11% down on April. Gazprom neftekhim Salavat exported 9,370 tons, 1.3% more than in April whilst SIBUR-Khimprom and Angarsk Polymer Plant reduced styrene shipments by 43.7% (to 737 tons) and 55.6% (to 695 tons) respectively.

Finland took 8,330 tons of styrene from Russia in May, 7.9% less than in April, whilst shipments to Turkey rose 16.5 times to 1,040 tons. In the first five months in 2017, exports of styrene totalled 63,800 tons which was 12.4% up on 2016.

Russian Styrene Production (unit-kilo tons)		
Producer	***Jan-May 17***	***Jan-May 16***
Nizhnekamskneftekhim	126.3	125.5
Angarsk Polymer Plant	16.6	4.2
SIBUR-Khimprom	49.5	60.3
Gazprom n Salavat	83.8	78.1
Plastik, Uzlovaya	26.4	23.7
Total	302.6	291.8

Russian producers of styrene increased the supply to the country's market by 8% in May to 10,860 tons. Gazprom neftekhim Salavat shipped 5,740 tons of styrene, 11% more than in April, whilst SIBUR-Khimprom sold 2,970 tons of monomer which was 1.3% less than in April).

Angarsk Polymer Plant shipped 76.9% more to Russian consumers than in April, to 1,790 tons and Plastik at Uzlovaya reduced shipments by 57% to 36 tons. In the first five months sales on the domestic market totalled 43,650 tons which was 11% up on 2016.

Styrene production in Russia totalled 302,600 tons in the first five months in 2017, 3.7% more than in 2016. SIBUR-Khimprom reduced production from 37,000 tons to 28,800 tons whilst Angarsk Polymer Plant increased production from 4,200 tons to 9,200 tons and other smaller increases were reported by Gazprom neftekhim Salavat and Plastik. Production amounted to 63,800 tons in May, of which Nizhnekamskneftekhim produced 27,900 tons, Gazprom neftekhim Salavat 17,400 tons, SIBUR-Khimprom 10,600 tons, Plastik 3,900 tons and Angarsk Polymer 3,800 tons.

Bulk Polymers

Russian HDPE Production (unit-kilo tons)		
Producer	***Jan-May 17***	***Jan-May 16***
Kazanorgsintez	222.9	188.7
Stavrolen	116.3	118.7
Nizhnekamskneftekhim	24.6	64.8
Gazprom n Salavat	41.6	45.4
Total	405.4	417.6

Russian polyethylene imports Jan-May 2017

Polyethylene imports totalled 49,000 tons in May, against 45,200 tons. HDPE imports totalled 81,900 tons in the first five months in 2017 against 52,400 tons in the same period in 2016. LLDPE imports dropped from 82,900 tons to 69,100 tons, whilst EVA imports increased by 46% to 15,300 tons. Imports of polyethylene in the first five months in 2017 totalled 207,900 tons against 187,800 tons in the same period in 2016.

Russian HDPE production Jan-May 2017

HDPE production totalled 405,300 tons in the first five months in 2017 against 417,600 tons in the same period in 2016. Kazanorgsintez increased production to 222,900 tons, whilst Stavrolen increased production by 9% to 116,300 tons. Nizhnekamskneftekhim produced 24,600 tons of HDPE against 67,100 tons in January to May 2016, due to the concentration on LLDPE. Gazprom neftekhim Salavat reduced its production by 9% to 41,500 tons.

Gazprom neftekhim Salavat started scheduled repairs at the polyethylene production facilities from 1 July, including both LDPE and HDPE where the respective capacities are 45,000 tpa and 120,000 tpa. The shutdown was expected to last 30 days.

Russian Polypropylene Imports (unit-kilo tons)

	Jan-May 17	***Jan-May 16***
Homopolymers	21.0	31.0
Block	16.8	12.6
Random	12.3	10.5
Other	10.9	9.9
Total	61.0	64.0

Russian polypropylene imports, Jan-May 2017

In the first five months in 2017 Russian imports of polypropylene dropped 5% to 61,100 tons. Homopolymer imports dropped from 31,000 tons to 21,000 tons in January to May 2017, whilst block copolymers rose from 12,600 tons to 16,800 tons and random copolymers from 10,300 tons to 12,300 tons.

Polypropylene production in Russia totalled 591,700 tons in the first five months in 2017, 2% down on the same period in 2016. Production in May increased to 126,800 tons from 110,600 tons in April. SIBUR Tobolsk produced 46,700 tons in May against 44,300 tons in April

The largest producer of polypropylene in Russia - SIBUR Tobolsk last month earned about 46.7 thousand tons against 44.3 thousand tons in April. Overall for the first five months for SBUR Tobolsk production dropped 1% to 220,500 tons. Polyom at Omsk increased production by 5% in the period January to May 2017 to 88,600 tons, whilst Ufaorgsintez produced 52,200 tons versus 51,800 tons.

Stavrolen increased production by 3% to 48,800 tons, Tomskneftekhim produced 58,900 tons against 57,500 tons and Nizhnekamskneftekhim produced 90,800 tons against 91,300 tons. The largest fall was recorded by Neftekhimya at the Moscow refinery which produced 31,400 tons in January to May 2017 against 52,000 tons in the same period in 2016.

Russian polystyrene market

Penoplex, the largest Russian producer of extruded polystyrene foam, has decided to expand its production facilities at the plant at Cheremkhovo in the Irkutsk region. Production in the Irkutsk region was launched by Penoplex in July 2012. The enterprise was equipped with one line for the production of heat-insulating slabs with the capacity of 100,000 cubic metres. Converters previously received products from the Penoplex plant at Novosibirsk.

Technonikol and Nizhnekamskneftekhim are planning to conduct joint research in the field of general-purpose polystyrene. The parties plan to organise a working group that will study polystyrene in order to determine the most optimal solutions for the production of expanded polystyrene plates. Technonikol is experiencing a constant need for raw materials. And the quality of this raw material is critically important which strictly controls the level of ecological purity of production, and optimal product characteristics.

Technonikol buys about 5,000 tons of polystyrene per month, of which 20-205% is supplied by Nizhnekamskneftekhim. Technonikol operates production lines in Russia, Ukraine, Belarus, Lithuania, Czech Republic, Italy. The corporation owns its own trading network of 140 branches and has representative offices in 36 countries. The annual turnover exceeds 35 billion roubles.

Paraxylene-PET chain

Ivanovo Polyester Complex-final stage of financing agreed

The final stage for financing the Ivanovo Polyester Complex was taken at the end of June when agreement was reached with Vnesheconombank. The total amount of 25 billion roubles is required for constructing the polyester complex, of which 5 billion roubles is being provided from the regional budget.

In addition to the plant for the production of polyester fibre, a new modern industrial park is being developed near Vichuga. With the help of the mono-city development fund, there will be a convenient infrastructure made available for resident enterprises.

The construction process, in full, is expected to start very soon and the plant is scheduled to operate at full capacity by 2020. Most of the funds for the construction of synthetic fibre plant VEB attracted by European banks under the guarantee of European insurance companies. The project involves the construction of the plant for the production of polyester fibre capacity of 175,000 tpa and the textile PET granulate capacity of 30,000 tpa.

Etana-PET project

The construction of the PET complex in the May district, near Nalchik, in the Kabardino-Balkaria region has been started this year and represents the largest industrial investment project in the North Caucasus Federal District. The project in the first phase is valued at 15.7 billion roubles. If the project phases are implemented as planned, the production of polymers will lead to the development of around 20 other companies in the agro-processing cluster. The project concept originated around a decade ago when departments in the regional administration identified the lack of packaging facilities as a major stumbling block to selling agricultural produce from the North Caucasus. Thus the conclusion was formed that the agricultural sector required packaging to sell produce to the end user. Examination of different types of packaging led to PET and the subsequent assessment of plant construction.

By facilitating the availability of PET, local manufacturers can expect an estimated reduction in packaging costs of at least around 30% which can make the difference between profit and loss. The aim for Etana is to produce all kinds of polymers: for carbonated and non-carbonated water, aseptic products, canning, ketchup, dairy products, foil and so on.

Russian PTA Imports (unit-kilo tons)

Country	*Jan-Apr 17*	*Jan-Apr 16*
Belgium	14.6	8.7
India	14.1	0.0
China	31.4	5.3
South Korea	6.4	13.3
Poland	0.0	8.3
Thailand	5.5	0.3
Turkey	1.0	0.0
Total	73.0	35.9

The technological chain is divided into two parts, liquid phase and solid. The developer of the liquid phase is Uhde Inventa-Fischer, whilst Bühler is responsible for developing the solid phase.

The location of the plant site was chosen partly for logistical convenience, the centre of the North Caucasus is at an equal distance from the Black Sea coast, Dagestan, Rostov and Volgograd regions. At the same time, the territory is provided with the necessary transport infrastructure.

The construction site occupies an area of 50 hectares in the May Municipal District. Jansens and Dieperink have been commissioned to construct part of the storage facilities. Regarding raw materials, Etana has already signed a full-scale agreement with KP Chemical from South Korea and is preparing an agreement with BP. For MEG supplies, Etana has signed an agreement with Nizhnekamskneftekhim. In the future, Etana plans to produce PTA in a separate plant located 11 kilometres from the main site. Paraxylene supplies could be difficult in terms of logistics, but Etana believes that these challenges are not insurmountable.

Aromatics

Russian Benzene Production (unit-kilo tons)

Producer	*Jan-May 17*	*Jan-May 16*
Angarsk Polymer Plant	40.1	9.3
Gazprom Neft	31.0	49.1
Stavrolen	37.3	4.5
LUKoil-Permnefteorgsintez	21.2	17.7
Magnitogorsk MK	25.1	26.2
Nizhnekamskneftekhim	95.4	94.0
Novolipetsk MK	7.2	5.7
Gazprom n Salavat	90.6	67.4

Severstal	13.7	13.2
SIBUR-Kstovo	36.2	32.7
Slavneft-Yaroslavlorgsintez	29.1	24.8
Kirishinefteorgsintez	32.5	32.2
Ryazan Refinery	10.3	13.4
Ufaneftekhim	36.3	37.2
Ural Steel	0.8	4.7
Uralorgsintez	36.0	31.7
Zapsib	22.9	31.7
SANORS	10.0	13.5
Total	575.7	509.2

Russian benzene production & sales, Jan-May 2017

Benzene production in Russia totalled 575,700 tons in the first five months in 2017, 15% up on the same period in 2016. In May production from refineries and petrochemical plants increased by 9%, to 105,700 tons. After maintenance in April, in May Uralorgsintez increased production 3.7 times to 9,300 tons, whilst Gazprom Neft-at the Omsk refinery increased production by 43%, to 3,200 tons, and Stavrolen by 38% to 7,600 tons. Producers recording a reduction in May included Severstal, by 20% to 2,300 tons and Gazprom neftekhim Salavat falling by 11%, to 17,000 tons.

Russian benzene exports from refineries and petrochemical plants amounted to 13,400 tons in May 16% down against April. SIBUR-Kstovo reduced exports to 500 tons in May, whilst Stavrolen reduced sales by 41% to 2,900 tons. Gazprom neftekhim Salavat increased exports 1.5 times in May to 4,500 tons and Kirishinefteorgsintez by 41% to 4,000 tons. In the first five months in 2017 exports totalled 59,400 tons.

The rise in Russian benzene exports this year have been driven by sales from Kirishinefteorgsintez, SIBUR-Kstovo, Slavneft and Stavrolen. Coal based benzene exporters also shipped slightly more in the first five months. Benzene imports have continued to be shipped into Russia, amounting to 1,100 tons in May which was 18% down on April. Kuibyshevazot was the sole importer in May. For the first five months in 2017 imports totalled 6,200 tons which is 7% down on the same period last year.

Russian caprolactam, Jan-May 2017

Russian caprolactam production totalled 147,200 tons in the first five months in 2017 against 149,900 tons in the same period in 2016. Kuibyshevazot produced 80,600 tons against 81,200 tons in the same five months last year whilst Shchekinoazot produced 21,800 tons against 24,400 tons in the same period in 2016. Exports of caprolactam rose from 63,200 tons in the first five months in 2016 against 83,000 tons in the same period this year. The rise in export activity has been mainly due to the increased shipments from Azot at Kemerovo from 21,900 tons to 40,100 tons.

Russian Caprolactam Exports (unit-kilo tons)		
Producer	***Jan-May 17***	***Jan-May 16***
Kuibyshevazot	21.5	14.3
Shchekinoazot	21.5	27.0
SDS Azot	40.1	21.9
Total	83.0	63.2

Kurskkhimvolokno (part of Kuibyshevazot) launched a modernized production of polyamide technical yarns. The investment in the project amounted to 1.5 billion roubles, and increased capacities for the production of polyamide appliances from 15,000 tpa to 23,000 tpa. Kuibyshevazot has been implementing a long-term strategic programme to increase the processing of caprolactam for several years, within the framework of which modernisation of Kurskkhimvolokno and Balteks (Balashov, Saratov region) is being carried out.

Russian xylenes, Jan-May 2017

Xylene production totalled 233,600 tons in the first five months in 2017 against 241,400 tons in the same period in 2016. Whilst Gazprom at Omsk reduced production from 116,500 tons in the first five months in 2016 to 97,000 tons in the same period this year, Kirishinefteorgsintez increased production to 68,000 tons from 49,700 tons.

Russian Xylene Production (unit-kilo tons)		
Producer	***Jan-May 17***	***Jan-May 16***
Gazprom Neft	97.0	116.5
Kirishinefteorgsintez	68.0	49.7
Ufaneftekhim	68.6	75.2
Total	233.6	241.4

Orthoxylene exports rose 21% in May over April to 10,710 tons. Ufaneftekhim shipped 4,300 tons, Gazprom Neft 3,880 tons and Kirishinefteorgsintez 2,540 tons. Around 97% of exports went to Finland, and the remainder to Ukraine. For January to May 2017 Russian exports of

orthoxylene totalled 49,990 tons which was 30% up on the same period in 2016.

Paraxylene exports rose in May to 13,700 tons from 5,500 tons in April. Overall though, exports fell from 70,000 tons in January to May 2016 to 51,900 tons in the same period this year. The fall was mostly due to reduced exports from Gazprom Neft at Omsk, falling from 36,200 tons against 21,100 tons this year.

Russian Phenol Market Sales by Supplier (unit-kilo tons)

Producer	*Jan-May 17*	*Jan-May 16*
Novokuibyshevsk PC	22.6	23.4
Kazanorgsintez	5.0	4.3
Ufaorgsintez	25.5	27.1
Borealis	2.1	0.3
Total	55.2	55.2

Russian phenol, Jan-May 2017

Phenol production amounted to 17,800 tons in May, 15% less than in April, and bringing the total to 89,400 tons for the first five months against 100,400 tons in the same period in 2016. In May Novokuibyshevsk Petrochemical Company underwent a shutdown meaning that production dropped at this plant by 45% to 4,700 tons. Kazanorgsintez and Ufaorgsintez produced 6,600 tons and 6,500 tons of phenol in May respectively. Purchases on the Russian market were unchanged in January to May 2017 at 55,200 tons.

Synthetic Rubber

Russian C4 Purchases (unit-kilo tons)

Consumer	*Jan-Jun 17*	*Jan-Jun 16*
Omsk Kaucuk	22.8	25.7
Nizhnekamskneftekhim	85.5	84.3
Togliattikaucuk	97.8	82.5
Sterlitamak Petrochemical	0.0	1.4
Total	206.1	193.8

Source: Chem-Courier.ru

Russian C4 sales, Jan-Jun 2017

Shell suppled 2,842 tons of C4s to the Russian market in June, appearing for the first time. Other foreign suppliers in June included Naftan in Belarus, which shipped 701 tons, 530 tons from Iran and 1,799 tons from Azerkhimya in Azerbaijan. Total purchases made by Russian rubber producers in the first half of 2017 amounted to 206,100 tons against 193,600 tons in the same period in 2016. Naftan reduced shipments in the first half of 2017 to 12,500 tons from 31,700 tons in January to June 2016, and the shortfall was largely made up by other import sources.

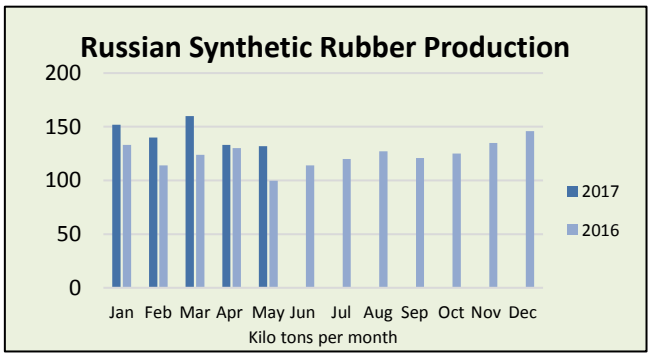
Nizhnekamskneftekhim-Michelin & Pirelli

Nizhnekamskneftekhim has reached agreement with Michelin for the supply of synthetic rubber. Nizhnekamskneftekhim supplies butyl rubber and halogenated butyl rubber to Michelin, which it has done for more than a decade. Last year Nizhnekamskneftekhim launched new equipment for its butyl rubber plant designed to eliminate bottlenecks in production, covering halobutyl rubber, chloro or bromobutyl rubbers. The company has since raised capacity up to 220,000 tpa.

Following talks in July Pirelli stated that it is ready to consider the possibilities of expanding cooperation with Nizhnekamskneftekhim, including the development of new brands of synthetic rubber and the creation of cord production facilities. For 2017 Pirelli has a contract in place for the delivery of 127,000 tons of synthetic rubber from Nizhnekamskneftekhim. Possible joint projects with TAIF, which owns Nizhnekamskneftekhim, of interest to Pirelli include polybutadiene, solution rubber, polyisoprene rubber and carbon black.

Divnyl-Styrene Rubber-Nizhnekamskneftekhim

Nizhnekamskneftekhim plans to master the industrial production of divinyl-styrene rubber in the next two or three years, creating a plant with a capacity of 50,000 tpa in the first phase. Nizhnekamskneftekhim produced 52% of total Russian production of synthetic rubber in 2016 and in terms of production, the company is on the seventh position in the global producer rating. In 2016 the company produced 671,000 tons of synthetic rubber, 3.7% more than in 2016.



Russian rubber production, Jan-May 2017

Russian synthetic rubber production totalled 717,000 tons in the first five months in 2017 against 600,000 tons in the same period in 2016. Prices were higher at the start of the year encouraging higher production, but have since declined. However, natural rubber prices have been falling in the second quarter, also pushing down synthetic rubber prices, and efforts to curb production have yet to have any impact.

SIBUR Togliatti

SIBUR Togliatti completed a number of modernisation targets in June aimed at improving product quality and reducing production costs. Some of the equipment that has been replaced includes pumps and heat exchange, most of which has been sourced from domestic companies. Togliatti is the only SIBUR site where isoprene is produced.

Voronezhsintezkaucuk-shutdown

SIBUR completed major repairs at Voronezhsintezkaucuk between 12 June and 25 June during which 180 pieces of equipment were cleaned, whilst another 770 units of valves underwent inspection. Also in the course of the shutdown various pumping and heat exchange equipment was replaced. Among the most important works carried out during this period include: cleaning column monomer production equipment and solvents, replacement of the component parts of divinyl node in the production of rubber. This year Voronezhsintezkaucuk did not shut the whole plant, having moved to a two year cycle for full maintenance.

In the period from 2014 to 2016 81 units of equipment were renewed at Togliatti, including heat exchange, column, pumping, electrical equipment, as well as ventilation and air conditioning systems, instrumentation and automation. In 2017 the renovation of the lighting system for the production of isoprene will be completed. The use of new lamps will increase the illumination of production facilities, and at the same time reduce energy consumption.

About 70% of the synthetic rubber produced at Togliatti is exported, to such companies as Bridgestone, Pirelli, and Nokian. Bridgestone at its Spanish plant has given a high rating to rubber produced at Togliatti.

SIBUR-Reliance butyl rubber project

SIBUR and Reliance have reaffirmed project plans to open a new synthetic rubber plant in India in 2018 with production expected to hit the market by the middle of the year. The project construction and management has taken longer than originally planned, having originally been planned for 2015. The construction of the rubber plant is part of Reliance's strategy to expand its processing at Jamnagar. The start-up of the plant depends on the receipt of raw materials from the local refinery.

The capacity of the new butyl rubber plant under construction is 120,000 tpa. Depending on market conditions, up to 60,000 tpa could be directed towards the production of halogenated butyl rubber. The project is costing around $450 million to construct under the jv in which 74.9% is owned by Reliance Industries and 25.1% is owned by SIBUR.

Russian tyre market expansion

Russian Tyre Production (unit-mil pieces)

Product	*Jan-May 17*	*Jan-May 16*

Car Tyres	17.8	16.7
Lorry tyres	2.8	2.5
Agricultural tyres	0.8	0.7
Total	21.5	19.8

Tyre manufacturing capacity in Russia is expanding as domestic and foreign companies take advantage of the rouble exchange rate. In the first five months in 2017 Russian tyre production totalled 21.5 million pieces against 19.8 million pieces in the same period in 2016.

A new plant in the industrial zone of the Zavolzhye at Ulyanovsk was opened in May by Bridgestone Tyre Manufacturing CIS. The plant capacity is 13.6 million pieces or units per annum.

In early July a Russian company Innovatech SPb received a land plot from the St Petersburg local government for the construction of a new tyre plant. The enterprise is located in the Frunzensky district of St. Petersburg, based on an area of 22,800 square metres.

The project is to be completed over a period of 84 months; in the first phase producing 15,000 tons of tyres with the intention to raise to 30,000 tons in the second phase. The third stage envisages the launch of additional capacities up to 60,000 tons of processing to be completed in 2022. Investments in the first two stages are estimated at 920 million roubles, in the construction of the third stage 700 million roubles can be invested.

Pirelli intends to double the capacity of production in the Voronezh region up to 4 million tyres per annum over the next two years. Voronezh Tyre Plant is a joint venture of Pirelli and Rostec along with the Kirov Tyre Plant. In 2016, the Pirelli-Rostec jv produced 8.4 million tyres, of which 6.2 were produced by the Kirov Tyre Plant and 2.2 by the Voronezh Tyre Plant.

Russian Synthetic Rubber Exports (unit-kilo tons)

Category	*Jan-Apr 17*	*Jan-Apr 16*
E-SBR	14.5	13.5
Block	15.1	9.2
SSBR	3.3	2.0
SBR	31.5	28.1
Polybutadiene	84.3	70.5
Butyl Rubber	41.3	52.0
HBR	46.1	36.1
NBR	9.4	10.0
Isoprene Rubber	99.3	85.9
Others	12.0	43.6
Total	356.8	351.0

Russian Synthetic Rubber Prices (euros per ton)

	May 17	*Apr 17*	*Av 2017*
SKMS Rubber	1589.3	1509.5	1551.5
SKD Rubber	1364.4	1421.7	1498.8
Isoprene rubber	1623.9	1792.2	1824.1
Other synthetic rubber	1794.2	1956.6	1843.8

Russian rubber exports, Jan-Apr 2017

Russian exports of synthetic rubber increased to 356,800 tons in the first four months in 2017 against 351,000 tons in the same period in 2016. Exports of isoprene rubber increased from 85,300 tons in January to April 2016 to 99,300 tons in the same period in 2017, whilst polybutadiene rose from 70,300 tons to 84,700 tons. Butyl rubber exports fell from 52,000 tons to 41,300 tons whilst at the same time halogenated butyl rubber exports rose from 36,100 tons to 46,100 tons.

Russian Methanol Production (unit-kilo tons)

Producer	*Jan-May 17*	*Jan-May 16*
Shchekinoazot	196.2	209.6
Sibmetakhim	367.4	345.4
Metafrax	465.0	468.0
Akron	41.7	26.7
Azot, Novomoskovsk	97.3	145.7
Angarsk Petrochemical	1.9	0.3
Azot, Nevinnomyssk	46.6	42.7
Tomet	326.4	282.3
Ammoni	85.9	47.3
Totals	1628.4	1568.1

Methanol & related products

Russian methanol production Jan-May 2017

Russian methanol production dropped 6% in May against April due to scheduled repairs at several domestic enterprises, particularly Sibmetakhim. Metafrax accounted for 33% of methanol produced in Russia in May, followed by Tomet 26%, Shchekinoazot and Sibmetakhim 13% and 11% respectively, and Azot Novomoskovsk 3%. Other producer shares included Azot at Nevinomyssk 4%, Akron 3% and Ammoni 6%.

Angarsk Petrochemical produced 480 tons in May, ten-fold higher than in April, whilst Azot at Nevinomyssk increased production 2.5 times to

11,700 tons. Following maintenance in April, Tomet increased production by 85% to 74,500 tons. Sibmetakhim's production in May dropped 62% due to maintenance to 32,000 tons. For the first five months in 2017 Russian methanol production totalled 1.628 million tons against 1.568 million tons in the same period in 2016.

Russian Methanol Domestic Sales (unit-kilo tons)

Producer	*Jan-May 17*	*Jan-May 16*
Azot Nevinnomyssk	11.5	7.5
Azot Novomoskovsk	32.7	36.4
Metafrax	157.3	168.3
Sibmetakhim	159.7	144.1
Togliattiazot	200.8	165.1
Shchekinoazot	17.5	41.0
Ammoni (Mendeleevsk)	45.7	36.6
Others	2.4	14.7
Total	627.6	613.8

Russian methanol sales & market, Jan-May 2017

Methanol sales on the domestic market amounted to 119,000 tons in May, 5% more than in April. Tomet, Metafrax and Sibmetakhim accounted for 83% of all methanol sold in Russia.

Methanol exports amounted to 89,000 tons in May, 35% down on April. Some Russian manufacturing plants in May were idle due to scheduled shutdown repairs. Metafrax supplied 23,300 tons in May, Shchekinoazot 28,000 tons, Tomet 15,800 tons and Sibmetakhim 9,000 tons. Azot at Novomoskovsk also exported 8,800 tons in May, Akron 1,800 tons and Ammoni 2,100 tons. Finland account for 31,000 tons of shipments in May, Poland 15,700 tons, Romania 6,400 tons, and Slovakia 14,800 tons. Romania and Slovakia reduced imports from Russia by 38% and 16% respectively. Another 7,400 tons was exported to Lithuania, 52% up on April.

Russian Methanol Exports (unit-kilo tons)

Producer	*Jan-May 17*	*Jan-May 16*
Azot Novomoskovsk	61.4	98.3
Akron	8.3	0.0
Metafrax	166.9	155.2
Sibmetakhim	178.4	186.0
Tomet	89.8	85.9
Shchekinoazot	145.9	149.8
Total	650.6	675.2

The cost of exported methanol in May 2017, as well as a month earlier, continued to show an upward trend, but its growth rate declined (only 2%, while in April it was about 20%). The average selling price of methanol shipped abroad in May by domestic producers amounted to $320 per ton DAF Russia's border, compared to $315 per ton DAF Russia's border fixed in April.

An emerging trend for the Russian methanol market in 2017 has been the separation of methanol market players into two camps with different price strategies. This has led to a conflicting situation on the domestic market.

The increase in supplies to foreign sales markets, with a consistently high level of methanol consumption in the country, has caused domestic producers to increase the capacity utilisation of methanol in Russia. The volume of production in the first quarter of 2017 was 12% higher than in the comparable period of 2016, and 5% up on the fourth quarter in 2016.

Shchekinoazot methanol and ammonia project update

Shchekinoazot has completed around 60% of the installation of equipment at the site of a new methanol and ammonia production facility, and plans to put the facility into operation in 2018. Nearly all the equipment has been delivered to the site where 1,350 personnel are engaged in construction. Design documentation has been provided by Orgkhim at Severodonetsk Orgkhim and from the licensor Haldor Topsoe.

Russian company Neftezavodmontazh has been approved as the general contractor for construction, responsible for metal and concrete structures. The liquid ammonia warehouse at Shchekino has the highest degree of construction readiness, whilst the production building has also been prepared for the testing of the heating and ventilation system.

Skorovodino methanol project allocated priority status

The Skovorodino methanol project in the Amur Oblast has been given priority status so that when the plant is operational set limits will be placed on how much tax needs to be paid. The Amur regional administration

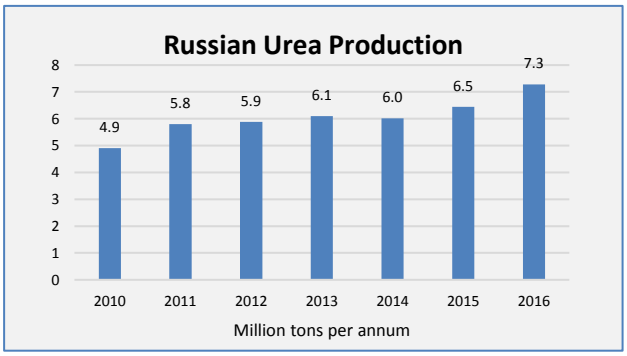
has decided to place a ban on the allocation of free land, as part of the federal policy in trying to develop the Far East, in areas where large-scale petrochemical projects are under planning as at Svobodny and Skovorodino. The reason is the upcoming construction of a gas processing plant, gas chemical complex and the processing plant of methanol.

Chinese methanol project proposal-Irkutsk Oblast
Chinese investors are considering options to set up a methanol plant in the Irkutsk region. Following the recent oil-gas forum in Vladivostok negotiations are underway with potential partners to construct a plant possibly near the Angara river which would allow access to the Chinese market. Other products being considered based on methanol include acetic acid, VAM and formaldehyde.

The company Tehnolizing owns the oil terminal at Skovorodino, but due to falling oil transhipment volumes after the launch of the ESPO oil pipeline the group decided to restructure the business and to start producing methanol. The facility also plans the production of MTBE. The project capacity of the new methanol is expected to be around 1.2 million tpa which would require around 1 billion cubic metres of gas per annum from the Power of Siberia pipeline.

Akron urea expansion

Akron will build the sixth unit to produce urea at Veliky Novgorod. As a result, urea capacity could rise to 3,500 tpa per day. The project is scheduled for completion in 2018. Investments in the construction of the sixth unit with a capacity of 600,000 tpa are estimated at 2 billion roubles. Urea capacity is being increased due to the extra availability of ammonia from the Ammonia-4 unit which was launched in 2016. At the same as the construction of the sixth urea unit will be accompanied by work in modernizing existing urea units. After their reconstruction and launch of the sixth unit, the total production capacity will increase to 3,650 tons per day.



The Ammonia-4 unit at Novgorod was launched at Akron on 29 July 2016. The daily capacity of the unit is 2,060 tons with an annual capacity of 700,000 tons. The volume of natural gas consumption is estimated at 938 m3 per ton, the energy consumption is just over 7 Gcal per ton of ammonia. With the commissioning of the fourth unit, the total capacities of the ammonia production group increased to 2.6 million tpa, and Akron to 1.9 million tpa.

Akron is currently implementing a project to modernize ammonia production in the Smolensk region, and it is planned to complete all work on the Dorogobuzh site in the second half of 2019. The unit's capacity should increase from 1,740 to 2,100 tons per day. The annual output of products will grow by 130,000 tons, whilst at the same time the energy efficiency of production should increase and the consumption rate for natural gas should be reduced.

Investments in the project are estimated at $75 million under which KBR is conducting the basic engineering. At present, ammonia production at the Dorogobuzh site is carried out on a single unit with a total capacity of 600,000 tpa. Its launch took place in 1979 whilst modernisation was undertaken in the early 2000s.

Organic chemicals

Russian butanol production Jan-May 2017

Russian plants produced 14.720 tons of butanols in May which was 36% less than in April and 23% lower than in May 2016. The share of n-butanol in the gross volume of butanols production in May 2017 was 61%, and isobutanol 39%.

Gazprom neftekhim Salavat stopped production in May for scheduled repairs, and then restarting in early June. As a result production dropped 3.6 times in May to 2,550 tons. SIBUR-Khimprom also reduced production in May by 32% to 5,740 tons whilst the Angarsk petrochemical complex reduced production by 15%. For the first five months in 2017 Russian production of n-butanols totalled 64,600 tons against 60,300 tons, whilst isobutanol production rose to 41,600 tons from 37,200 tons.

Russian Butanol Production (unit-kilo tons)		
N-Butanol		
Producer	***Jan-May 17***	***Jan-May 16***
Angarsk Petrochemical Company	15.8	0.8
Azot	5.9	6.3
Gazprom n Salavat	27.0	36.8
SIBUR-Khimprom	16.1	16.4
Total	64.8	60.3
Isobutanol		
Producer	***Jan-May 17***	***Jan-May 16***
Angarsk Petrochemical Company	8.3	0.6
Gazprom n Salavat	12.9	16.3
SIBUR-Holding	20.5	20.6
Total	41.6	37.2

Russian butanol exports, Jan-May 2017

Butanol exports amounted to 3,160 tons in May against 5,420 tons in April, versus 11,750 tons in May 2016. This May n-butanol accounted for 55% of exports and isobutanol 45%. SIBUR-Khimprom shipped 2,090 tons, Gazprom neftekhim Salavat exported 180 tons of isobutanols, Dmitrievsky Chemical Plant 860 tons, and Azot 17 tons.

Regarding destinations, the Netherlands accounted for 38% of Russian exports in May, Ukraine 35%, Poland 15% and Finland 6%. Exports totalled 16,610 tons in the first five months in 2017, 2.7 times less than in 2016.

Russian butanol domestic sales Jan-May 2017

Butanol sales on the Russian domestic market amounted to 4,610 tons in May, 23% less than in April. N-butanol accounted for 93% of sales. SIBUR-Khimprom supplied 1,980 tons, Angarsk Petrochemical 1,920 tons, Gazprom neftekhim Salavat 540 tons and Azot Nevinomyssk 160 tons.

Akrilat reduced purchases in May by 27% to 1,350 tons, whilst Dmitrievsky Chemical Plant increased purchases by 23% to 1,840 tons. Other consumers included Volzhskiy Orgsintez which purchased 220 tons. Sales for the first five months totalled 27,250 tons which was 11% down against the same period in 2016.

SIBUR successfully completed the planned outage at the Akrilat division at Dzerzhinsk in May, during which plants for the production of acrylic acid and ethers, including methyl acrylate, butyl acrylate and 2-ethylhexylate, underwent maintenance.

Russian N-butanol Exports (unit-kilo tons)		
Producer	***Jan-May 17***	***Jan-May 16***
Gazprom n Salavat	3.2	31.3
SIBUR-Khimprom	1.5	2.9
Angarsk Petrochemical	1.0	0.5
Azot Nevinnomyssk	0.8	0.2
Dmitrievsky Chemical Plant	1.0	0.8
Total	7.5	35.7
Russian Isobutanol Exports (unit-kilo tons)		
Producer	***Jan-May 17***	***Jan-May 16***
Gazprom n Salavat	3.5	4.3
SIBUR-Khimprom	5.8	8.9
Angarsk Petrochemical	0.1	0.0
Dmitrievsky Chemical Plant	0.1	0.1
Total	9.4	13.2

Russian Butanol Consumption (unit-kilo tons)		
Consumer	***Jan-May 17***	***Jan-May 16***
Akrilat	8.4	11.2
Dmitrievsky Chemical	5.6	8.1
Plant of Synthetic Alcohol	0.5	0.8
Volzhskiy Orgsintez	3.2	3.6
Roshalsky Plant of Plasticizers	0.2	0.0
Others	9.3	6.9
Total	27.2	30.6

Russian paints market

PPG has opened a new plant for paints production at Lipetsk. Investment in the plant cost around 2 billion roubles and includes capacities for 30,000 tpa of paints and lacquers.

Russian manufacturers of paints will be obliged to reduce consumption of foreign raw materials over the next few years. By 2021 the government has issued a stipulation that foreign raw materials in the formulation of coatings should be not exceed 50%. This includes a range of products such as coatings: binders, desiccants, pigments, fillers, thickeners, plasticizers, solvents and diluents.

Raw Material Import Guidelines for Russian paint manufacturers	
Year	***Max Procurement***
2018	70%
2019	60%
2021	50%

From the start of 2018 the share of foreign raw materials is advised to fall to 70% of product procurement, then to 60% from 2019 and then to 50% by 2021. The document was prepared by the Ministry of Industry with the aim of stimulating the localisation of production of paints and varnishes in Russia. It remains to be seen whether paint manufacturers will follow these directions, and whether trade barriers may be installed to make imported materials more expensive..

Russian Phthalic Anhydride Production (unit-kilo tons)		
Producer	***Jan-May 17***	***Jan-May 16***
Gazprom n Salavat	3.9	2.8
Kamteks-Khimprom,	41.7	34.5
Total	45.5	37.3

Russian phthalic anhydride, Jan-May 2017

Russia produced 9,510 tons of phthalic anhydride in May 8% more than in April this year. Kamteks-Khimprom increased production by 20% compared to April to 9,250 tons, whilst Gazprom neftekhim Salavat reduced production by 4% to 260 tons. Production at the Salavat plant was stopped in May for scheduled repairs. From January to May 2017, phthalic anhydride production in Russia amounted to 45,550 tons which is 22% more than in the same period last year.

Exports of phthalic anhydride from Russia in May dropped 8% to 3,550 tons. Market destinations included Poland (19%), Finland (17%), Turkey (15%), India (12%) and Ukraine (9%). In the first five months in 2017 Russian exports of phthalic anhydride totalled 21,060 tons, 4% down on 2016.

Russian Organic Chemical Exports (unit-kilo tons)		
Product	***Jan-Apr 17***	***Jan-Apr 16***
N-Butanol	5.4	25.8
Iso-butanol	8.0	8.8
2-EH	11.3	15.5
Pentaerthyitol	3.7	2.8
Phenol	2.2	2.7
Ethylene Oxide	5.6	6.9
Formaldehyde	8.3	9.2
DEG	7.9	6.1
MEG	26.4	18.7
Acetone	17.2	17.6
Acetic Acid	14.4	9.4
VAM	15.1	12.2
Butyl Acetate	9.8	11.1
Butyl Acrylate	9.9	5.2
Phthalic Anhydride	21.4	25.4

Russian DOP exports, Jan-May 2017

DOP exports from Russia amounted to 232 tons in May, versus 167 tons in April and only 3 tons in May 2016. All exports in May 2017 went to Uzbekistan, 188 tons of which were supplied by the Ural Plant of Plasticizers and the remaining 43 tons supplied by Kamteks-Khimprom. In the first five months exports totalled 860 tons against 172 tons in the same period last year. Imports of DOP dropped by around a half in the first five months to 578 tons.

Russian DOP market trends 2017

Russian DOP producers have strengthened their own domestic position in 2017, reducing the amount of imports on the market. Polish and Czech importers tended to dominate the market in 2015 and 2016, particularly Boryszew.

The share of foreign supply in Russia DOP consumption rose in 2015 to 7% from 0.2% in 2014. Boryszew supplied 61% of imports I 2015, followed by Grupa Azoty with 18%. The rapid expansion of imports in this period was partly due to a deficit in 2-EH, as Russian producers concentrated efforts on export activity to take advantage of the weak rouble.

In 2016 Russian producers were able to start rebalancing the domestic market, partly as the rouble had regained some of its value thus reducing the profitability in exports in 2-EH. Russian DOP production increased 26% in 2016 over 2015 whilst imports dropped as a share of domestic consumption from 7% to 4%, whilst imports dropped overall by 34%.

Grupa Azoty did not ship in 2016, whilst Boryszew increased its share of import shipments into Russia from 61% to 89%, whilst the remainder came from Deza in the Czech Republic. Domestic competition from Gazprom neftekhim Salavat and Kamteks-Khimprom.

In the first few months in 2017 the deficit in DOP in Europe, caused by an insufficient supply of phthalic anhydride and 2-ethylhexanol in led to a reduction in the production of DOP at Boryszew and a reduction in the supplies of Polish DOP to the Russian and Ukrainian markets. At the same time, the production of DOP in Russia continued to grow rapidly, and the products of foreign suppliers were displaced from the domestic market. DOP production increased by 56% in the first quarter to 19,000 tons whilst imports

dropped 2.3 times to 300 tons. The share of imported DOP in the Russian market decreased to 2%. Exports increased 4.3 times for the first quarter to 460 tons.

Belarus

Mogilevkhimvolokno PTA Imports (unit-kilo tons)		
Country	***Jan-Apr 17***	***Jan-Apr 16***
Poland	3.6	6.8
Russia	1.1	0.0
South Korea	14.6	4.0
Portugal	0.0	1.0
Thailand	0.0	1.1
Turkey	1.0	0.0
Total	20.4	12.9

Mogilevkhimvolokno modernisation

Mogilevkhimvolokno imported 20,400 tons of PTA in the first four months in 2017 against 12,900 tons in the same period in 2016. South Korea supplied 14,600 tons in January to April this year versus 4,000 tons in 2016. The company's strategy is aimed at reducing DMT in the production process for polyester fibres and increasing PTA which needs to be imported.

Mogilevkhimvolokno is currently working on a project for large-scale reconstruction of existing facilities. Mogilevkhimvolokno can currently produce 138,250 tpa of DMT, 105,000 tpa of PET for the textile industry and 80,000 tpa food PET. The capacity for production of polyester fibres is rated at 67,000 tpa.

The company aims to completely shift to the production of PET, textile industry and to start production of polyester fibres by compression moulding. This involves the modernisation of the continuous polycondensation capacity of 240 tons of granules per day or 80,000 tpa. The next step includes the transition from the production of food-grade PET for textile, launching the production of polyester fibre compression moulding with a capacity of 50,000 tpa.

Belarussian Acrylonitrile Exports (unit-kilo tons)		
Product	***Jan-Apr 17***	***Jan-Apr 16***
Kazakhstan	0.0	0.0
Russia	0.3	1.5
Belgium	0.0	0.0
Hungary	1.1	4.0
India	2.0	0.0
Iran	2.4	0.4
Netherlands	8.8	2.0
Romania	0.0	0.3
Turkey	4.1	8.0
UAE	0.1	0.0
Emirates	0.0	0.0
Total	18.7	16.2

Belarussian chemical exports, Jan-Apr 2017

Acrylonitrile exports from Belarus totalled 18,732 tons in the first four months in 2017 against 16,178 tons in the same period in 2016. The Netherlands has been the largest destination this year, accounting for 8,800 tons against 1,950 tons last year. Turkey reduced purchases in January to April 2017 to 4,082 tons from 8,042 tons. Average prices have risen this year for Belarussian acrylonitrile exports, rising from $722 per ton to $1,284 per ton.

Caprolactam prices have risen by a greater margin this year, amounting to $2,070 per ton in January to April 2017 versus $1,090 in the same period last year. Export volumes from Belarus remain low though, totalling 4,713 tons in the first four months this year to 6,451 tons in 2016. Methanol exports have declined sharply this year, dropping from 16,278 tons in January to April from 3,278 tons in the same period this year. Methanol export prices have risen from $255 per ton to $318 per ton. Azot at Grodno undertook a shutdown in May for methanol production, and thus imports have continued to remain low.

Belarussian Polymer Imports (unit-kilo tons)		
Product	***Jan-Apr 17***	***Jan-Apr 16***
PVC	8.6	6.2
Polypropylene	29.7	27.4
LDPE	25.6	23.3
HDPE	15.7	12.5
Polystyrene	19.0	19.6

Belarussian polymer imports, Jan-Apr 2017

Belarus increased PVC imports in the first four months by 39% to 8,600 tons. The main driver for the increase in imports came from local window manufacturers. Polypropylene imports to Belarus increased by 6% in the first four months in 2017 to 29,700 tons. The largest rise was seen in the consumption of propylene copolymers. Polyethylene imports rose for Belarus in the first four months, totalling 44,011 tons against 37,645 tons in the

same period in January to April 2016. LDPE imports rose to 25,630 tons against 23,342 tons, whilst HDPE imports rose to 15,672 tons against 12,438 tons. Imports of polyethylene have been affected this year by lower production by Polymir at Novopolotsk.

Belarussian polyethylene exports, Jan-Apr 2017

Belarussian polyethylene exports dropped to 27,052 tons in the first four months in 2017 from 47,926 tons in the same period last year. The fall in production by Polymir has resulted in much lower trading capacity. Polymir stopped production of LDPE on 3 June for scheduled preventive maintenance for two weeks keeping the pressure on imports.

LDPE production at Polymir resumed in full

Following the two week maintenance outage in June, Polymir was able to take steps in completing the restoration of the damaged line which had been inactive since last year's fire at the plant. By 5 July the company was able to restart the damaged line and restore the full capacity operation of 130,000 tpa. In June LDPE production dropped to 2,700 tons from 5,000 tons in May, due to the outage, but will now be able to more than 10,000 tons per month. In the first half of 2017, LDPE production totalled 28,500 tons against 62,800 tons in the same period in 2016. Polymir produces a wide range of chemical products, such as LDPE, acrylic fibres, organic synthetic products, hydrocarbon fractions, etc.

Ukraine

Ukrainian Polymer Imports (unit-kilo tons)

Product	*Jan-Mar 17*	*Jan-Mar 18*
PVC	20.9	28.7
LDPE	16.3	17.7
LLDPE	14.9	12.8
HDPE	24.0	29.7
Ethylene Vinyl Acetate	4.1	2.5
PP	28.4	27.0

Karpatneftekhim-feedstock deliveries

Karpatneftekhim received 25,400 tons of naphtha in June, of which 19,100 tons was supplied from the Perm refinery and 6,300 tons supplied from the Volgograd refinery. Both refineries belong to Lukoil. Karpatneftekhim is linked by ethylene pipeline to MOL's petrochemical complex at Tiszaujvaros in Hungary.

On 6 July Karpatneftekhim started production of HDPE after five years of inactivity. The next stage in the revival of production is to restart the PVC plant. Ukrainian companies have straight away started negotiations on the July deliveries of polyethylene in the domestic market

Production at Karpatneftekhim was discontinued in September 2012. Previously, the plant was repeatedly pointed out the existence of problems in the work because of the state debt to reimburse VAT export and dumping of foreign, particularly US producers of PVC.

Ukrainian polyolefin imports, Jan-May 2017

Polyethylene imports into Ukraine dropped by 6% in the first five months in 2017 to 100,600 tons. HDPE imports dropped from 42,900 tons against 51,900 tons, whilst LDPE imports dropped slightly from 26,800 tons to 25,400 tons.

Ukrainian PVC market, Jan-May 2017

In the first five months of the year, imports of suspension PVC in Ukraine decreased by 20% compared to the same period in 2016 and amounted to 39,400 tons. Demand fell in May from local producers of pipes and window profiles. US deliveries to Ukraine rose in May to 6,400 tons from 3,000 tons, the rise due to restrictions from European manufacturers in the last three months. Overall European imports totalled 18,500 tons for the first five months against 13,900 tons. Russian imports totalled 7,600 tons in the first five months against 3,800 tons in January to May 2016.

Ukrainian PVC Imports 2016

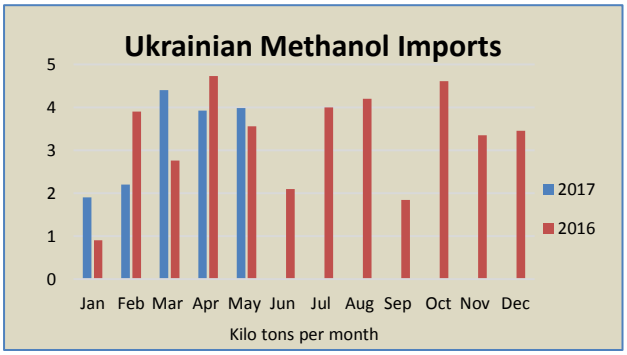
Country	*%*
Russia	5
USA	50
Poland	9
Belgium	5
Germany	8
Hungary	17

Polypropylene imports into Ukraine rose 4% in the first quarter to 28,400 tons. Imports of 200 tons from 21,200 tons in Q1 2016, whilst block copolymer imports rose ns and random copolymers dropped from 3,000 tons to 2,800 tons.

In 2016 the PVC market in Ukraine rose by 28% over 2015 to 109,000 tons. The fall this year has been due mainly to the higher prices offered by US and European producers. Other factors playing a part in reduced volumes include poor weather conditions for

the beginning of the construction season and news about the launch of Karpatneftekhim. In 2016, the United States, Hungary and Russia were the three largest suppliers of suspension PVC to Ukraine, which shipped to Ukrainian consumers 54,600 tons, 18,000 tons and 9,900 tons, respectively.

This year imports from the US have fallen due to price, whilst imports from Europe and Russia have risen. The price of imported resin for the five months of 2017 increased by 20%. On 23 February, the Ministry of Economic Development and Foreign Trade of Ukraine introduced a temporary ban on the supply of products of RusVinyl and Kaustik. The order began on 4 April 2017, driven mainly by the need to defend the domestic caustic market. Therefore, Russian plants continue to supply PVC to Ukrainian consumers.



Ukrainian chemical imports, Jan-May 2017

Imports of phthalic anhydride into Ukraine amounted to 585 tons in May (against 337 tons in April) of which 339 tons was supplied by Belarussian company Lakokraska, Kamteks-Khimprom 180 tons, Petkim Petrokimya 44 tons and Iranian company Movalledan Shimi 21 tons. Purchasers included Lizinvest with 330 tons and Polikem 84 tons. In the first five months of 2017, phthalic anhydride supplies into Ukraine amounted to 1,630 tons which is 11% less than for the comparable period in 2016.

DOP imports into Ukraine amounted to 228 tons in May (against 203 tons in April), all of which was supplied by Czech company Deza. For the first five months imports amounted to 1,150 tons which was 12% less than in the same period in 2016.

Central Asia/Caucasus

Azerbaijan Chemical Exports (unit-kilo tons)

Product	*Jan-Jun 17*	*Jan-Jun 16*
Polyethylene	47.9	52.5
Propylene	19.2	22.2
C4s	13.2	15.3

SOCAR-shutdown

SOCAR is to stop petrochemical production at the Azerkhimya plant at Sumgait from 10 August for 40 days for maintenance. During the shutdown, a number of new facilities will be added including preparations for the expansion of propylene capacity to 150,000 tpa by January 2018. Furthermore, the reconstruction capacity of polyethylene plant will be increased from 60,000 tpa to 105,000 tpa. Following the second phase of modernisation of the plant capacity will be increased to 185,000 tpa.

Turkmenistan gas-chemical project plans

Turkmenistan is considering expanding its plans for gas-chemical production beyond the large project under construction at Kiyanly on the Caspian coast. A newer project envisages reconstructing the installation of natural gas processing and production of liquefied gas at Bagaja field in Lebap province where it wants to build a gas chemical complex. This could include capacities of 80,000 tpa of butadiene-styrene rubber and 45,000 tpa of polystyrene.

Chemical Projects Turkmenistan

Product	*Capacity (ktpa)*	*Location*
LLDPE	200	Kiyanly
Polypropylene	390	Kiyanly
PVC	100	Kiyanly
Caustic Soda	82	Kiyanly
HDPE	200	Yylanly
SBR	80	Lebap
Polystyrene	45	Lebap

A large investment project has also been proposed on the fields of the Central Karakum, located near the gas compressor installation Yylanly in Dashoguz province. In the first phase this could include a gas processing plant of 2 billion cubic metres per annum, and 70,000 tpa of LPG, before moving to the phase to build an HDPE plant of 200,000 tpa.

The major project already under construction at Kiyanly involves plants for HDPE, with a capacity of 200,000 tpa, polypropylene 390,000 tpa, and 100 tpa of PVC. In addition the complex will produce 82,000 tpa of caustic soda and 10,000 tpa of hydrochloric acid. Another gas processing plant is also under construction at Ovadan-depe, whilst other project ideas under assessment in Turkmenistan include methanol and formaldehyde which could be located at Mary.

Turkmenistan-BOPP project

The Turkmenbashi complex of oil refineries (TKNPZ) is completing the commissioning of the BOPP film. The plant's capacities allow to produce up to 21,000 tpa. The company will produce BOPP-film of two types: transparent single-layer and co-extrusion. The latter features gas barrier properties and high thermoformability. A special layer of polyamide allows the use of such films for the manufacture of vacuum and high-strength packaging for goods subjected to freezing.

United Chemical Company-methanol project

United Chemical Company continues to work on the configuration of the methanol production project. The possibility of building capacity for 0.9, 1 and 1.6 million tpa of methanol is being considered. Previously United Petrochemical Company studied the possibility of building 200,000 tpa of methanol in the special economic zone National Industrial Petrochemical Technopark at Atyrau oblast, at least 500,000 tpa of ammonia.

SOCAR Methanol

SOCAR Methanol Company plans to reach 80-90% of capacity by 2019. The plant produced 80,000 tons in 2016, and the target for 2017 is 250,000 tpa. In 2017-2018 the company plans to carry out major repairs to increase the production load and capacity of the plant up to 650,000 tpa. In the future, the company is considering a move to a two-year a turnaround. Assessment is underway regarding the possible development of other products such as formaldehyde, and additives for fuels.

Domestic Russian Chemical. Polymer & Synthetic Rubber Prices (euros per ton)			
Product	***May-17***	***Apr-17***	***Average 2017***
Ethylene	530.5	490.8	543.2
Propylene	587.3	682.8	511.2
Benzene	578.9	691.7	612.9
Xylenes	541.1	597.7	545.6
Toluene	566.2	525.4	576.2
Styrene	1148.2	1222.7	1084.9
MEG	632.6	599.0	672.2
Phenol	903.7	1060.6	1024.4
Acetic acid	516.4	499.9	517.5
Polyethylene	1150.4	1155.2	1198.7
Polystyrene	1375.4	1316.6	1334.2
PVC	798.0	785.9	785.2
Epoxy resins	2307.8	2375.9	2475.6
Polypropylene	1150.4	1118.3	1178.8
Amino-resins	270.9	250.3	265.4
Phenolic resins	469.7	484.5	489.9
Silicone polymers	2307.8	2144.3	2375.3
Synthetic rubber	1692.1	1689.6	1635.9
SKMS	1712.7	1501.5	1511.3
Butadiene rubber	1543.1	1464.1	1480.1
NPR	1683.2	1834.4	1683.5
Isoprene rubber	2173.9	1946.4	1979.1
Other synthetic rubber	2138.0	2269.1	2265.2

Relevant Currencies

Czech crown. Kc. $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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