Chemical Information Resources for East Europe and CIS

CIREC MONTHLY NEWS

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

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CENTRAL & SOUTH-EAST EUROPE

Czech Petrochemical Imports (unit-kilo tons)

Product	*Jan-Oct 17*	*Jan-Oct 16*
Ethylene	2.7	124.2
Propylene	35.7	121.0
Butadiene	34.7	48.0
Benzene	66.7	68.1
Ethylbenzene	20.0	50.9
Styrene	12.7	13.6

Czech Petrochemical Exports (unit-kilo tons)

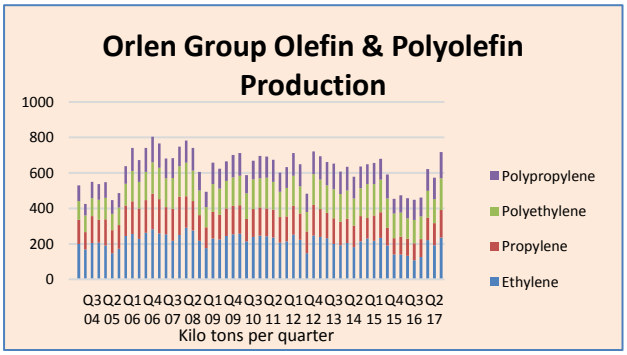
Product	*Jan-Oct 17*	*Jan-Oct 16*
Ethylene	56.3	1.2
Propylene	22.2	4.1
Butadiene	4.1	2.5
Benzene	16.9	10.8
Ethylbenzene	105.7	0.2

Czech petrochemical trade, Jan-Oct 2017

Ethylene exports from the Czech Republic totalled 56,300 tons in the first ten months in 2017 against only 1,200 tons in the same period in 2016, whilst imports dropped to 2,700 tons from 124,200 tons. The resumption of cracker activity at Litvinov also impacted heavily on ethylbenzene trade from the Czech Republic, where exports rose to 105,700 tons from only 200 tons in January to October 2016 whilst imports dropped from 50,900 tons in the same period in 2017. Propylene imports into the Czech Republic dropped from 121,000 tons in the first ten months in 2016 to 35,700 tons in the same period in 2017.

Orlen wants to take full control of Unipetrol

PKN Orlen has launched a bid to take full control of Unipetrol to integrate its businesses more closely and overcome differences with minority shareholders. At present Orlen owns a 62.9% stake in Unipetrol and has launched a conditional voluntary tender offer for shares in the Czech company. The offer is conditional on PKN Orlen acquiring at least 90% of Unipetrol's share capital. The transaction is in line with the Group's strategy for 2017–2021, which envisages integration of refining assets, and extension of the petrochemical value chain.



Unipetrol owns the refineries at Litvínov and Kralupy, local retail chain Benzina (400 service stations), and Spolana. The current ownership structure prevents Orlen from reaping the full benefits of the initiatives put in motion in the Czech Republic, including efforts to improve the refining and sales efficiency and investments in the petrochemical assets. Tenders in the offer will be accepted from 28 December 2017 to 30 January 2018, and the transaction is scheduled to be settled on 23 February 2018. Acquiring a 90% and 100% equity interest would cost zl 3.05 billion and zl 4.2 billion respectively. The transaction will be financed with PKN Orlen's own funds and with a syndicated loan facility available to the company.

Orlen restarts PTA production

The force majeure declared by PKN Orlen in November for PTA production at Wloclawek was lifted on 14 December. The plant had to be shut because of a problem in the heat exchanger, according to Orlen, but production and deliveries to customers have since restarted.

Unipetrol's new furnace and reduced production

Unipetrol is investing Kc 1.2 billion into a new furnace room at its plant at Litvínov which will be used to produce high-pressure steam for its ethylene unit. Construction will commence in the first quarter in 2018 to be completed in 2020. The implementation of the energy block will be undertaken by Austrian company Bertsch Energy.

In December Unipetrol limited the production of partial oxidation of natural gas (ROH) at its petrochemical site in Litvinov due to a fire which occurred on 12 December 2017. The volume of production of a steam cracker with a capacity of 545,000 tpa was reduced, and plants producing hydrogen and ammonia were closed. The company restored the first part of the POX unit by 27 December and the second part will be revived in the first half of January. Operation of the steam cracker and the refinery is expected to return to its standard performance at the same time.

Spolana closed mercury plant

Spolana closed the production of caustic soda and chlorine at Neratovice on 30 November 2017 in compliance with legal instructions based on environmental grounds. Thus, Spolana has closed plants based on amalgam electrolysis with a capacity of 112,000 tpa for caustic soda and 100,000 tpa for chlorine

in accordance with all necessary measures for environmental safety. Unipetrol is still evaluating the implementation of the project to build the production of membrane electrolysis at Neratovice. Spolana's PVC plant will continue to work in regular mode due to supplies from traders of ethylene dichloride. PVC production was affected in 2016 by the cracker fire at Unipetrol, which forced Spolana to stop between 18 August 2016 to 22 November 2016. Spolana's PVC capacity stands at 135,000 tpa and will thus now operate on imported raw materials.

Rompetrol Rafinare, Jan-Sep 2017

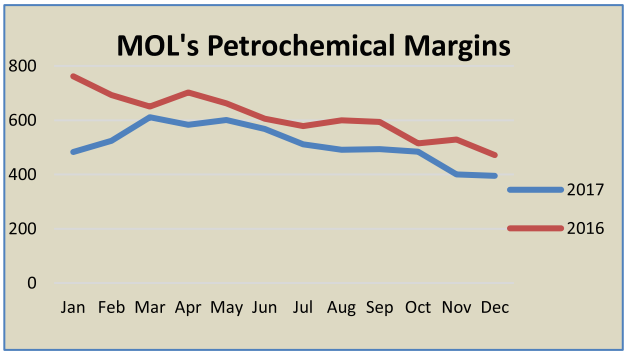
Rompetrol Rafinare, a member of KMG International, posted a net consolidated profit of $56 million in the first nine months of 2017, almost tripled compared to the same period in 2016. The consolidated operating result (EBITDA) also recorded an increase of 26% in the first nine months in 2017 compared to the same period of 2016, rising to over $152 million. Gross turnover totalled $2.8 billion in the first nine months of 2017, up 12% from the same period in 2016.

Rompetrol Rafinare Monomer Processing (unit-kilo tons)				
	Q3 17	*Q3 16*	*Jan-Sep 17*	*Jan-Sep 16*
Ethylene	16	17	44	48
Propylene	35	22	95	87

Rompetrol is the only polypropylene producer in Romania. In the first nine months of 2017, the total production of polymers was 102,500 tons, down 5% against 108,500 tons in January to September 2016. The LDPE plant runs 100% on imported ethylene, whilst the polypropylene plant operates on propylene supplied from the Petromidia refinery.

MOL support approved by European Commission

The European Commission has found Hungary's €131 million investment aid to MOL Petrolkémia Zrt's Tiszaújváros plant to be in line with EU State aid rules. The investment aid granted by Hungary will support MOL's plans to invest €874 million to introduce the production of polyols and propylene glycols at Tiszaújváros. The project is expected to create new direct jobs at Tiszaújváros located in the northern Hungary region, an area eligible for regional aid.



The Commission found that without the public funding, the project would not be carried out at Tiszaújváros. The Commission also found that the aid merely compensated the company for costs incurred by carrying out the project at Tiszaújváros rather than an alternative location. The Commission therefore concluded that the positive effects of the project on regional development clearly outweigh any distortion of competition brought about by state aid.

Grupa Azoty-polypropylene license selected

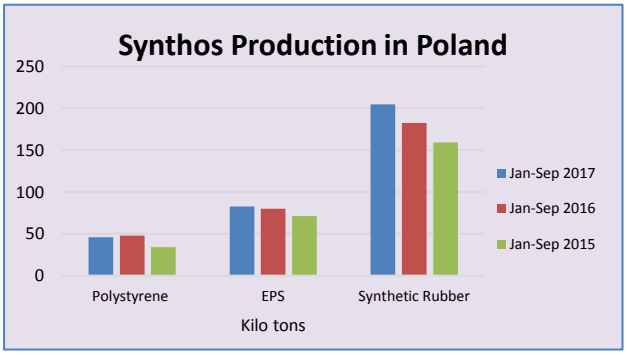
In late 2017 the supervisory board of PDH Polska from Grupa Azoty selected the license for polypropylene production for the Polimery Police project. According to Azoty, the best offer was presented by Grace Technologies, Polimery Police is a production complex that consists of installations for the production of propylene and polypropylene, a port with a base of raw material reservoirs and auxiliary and logistic infrastructure. PDH Polska will supply the propylene and already has a license for Oleflex technology for propane dehydrogenation. According to the schedule, construction works will start at the end of 2019. while the planned date of their completion is the end of 2022.

The total value of capital required for the investment in the integrated PDH-PP complex has been estimated at €1.27 billion, of which nearly €1 billion consists of capital expenditure (CAPEX), and the remaining part is related to financing costs during the construction period.

Synthos, Jan-Sep 2017

Synthos increased revenues by 63.7% in the first three quarters to zl 5.43 billion in the first three quarters of 2017. The group recorded EBITDA of zl 474 billion (+54.9%) and net profit of zl 339 million (+79.4%). The rises resulted mainly from organic growth and acquisitions (INEOS Group, 31 August 2016). In the third quarter Synthos generated zl 151 million in EBITDA versus zl 145 million in EBITDA in the same period in 2016. The company's revenues in the third quarter of 2017 amounted to zl 1.725 billion.

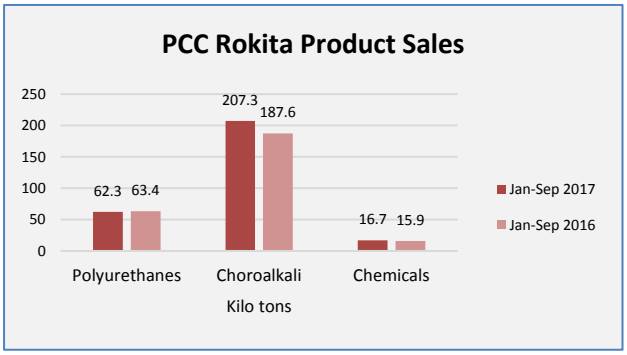
The cumulative EBITDA of the group for the three quarters of 2017 amounted to zl 652 million, compared to zl 456 million in the corresponding period of the previous year. The reason for the increase in EBITDA was mainly the results achieved by the synthetic rubber division, including higher margins at Kralupy helped by the restart of the Unipetrol petroichemical complex (resumed delivery of C4 fraction, benzene and ethylene from Unipetrol).



In the first three quarters in 2017 the costs of raw materials accounted for 86.3% of the Synthos Group's cost of sales. In the first quarter of 2017, high prices of butadiene and natural rubber had a positive effect on the group's results. Conversely n Q2 and Q3 2017 butadiene from the level of €1750 per ton in April to €775 per ton in September 2017 while natural rubber prices dropped from €1970 per ton in March to €1590 in September. In the third quarter styrene prices rose while benzene and ethylene prices remained stable.

PCC Rokita, Jan-Sep 2017

PCC Rokita recorded a consolidated net profit of zl 25.63 million in the third quarter of 2017 against zl 30.49 million in the same period in 2016. PCC Rokita's operating profit amounted to zl 33.94 million compared to zl 31.59 million. In Q1-Q3 2017, total sales revenues rose to zl 941.36 million compared to zl 814.43 million whilst the net profit for the period from Q1-Q3 2017 rose to zl 109.64 million against zl 92.46 million. The gross margin on sales remained high at 26%.



In 2017 PCC Rokita's new line for polyether polyols for semi-finished products reached full production capacity, adding another 5,000 tpa of products. The group has continued to work on increasing the production capacity of the membrane electrolysis plant and the expansion of the propylene oxide plant. PCC Rokita started a new polyester polyol plant in the second quarter in 2017, with a capacity of 13,000 tpa, and sales from this unit are in progress. Also in the second quarter, the start-up of mixers commenced as part of the construction project for the installation of polyurethane systems (about 25,000 tpa) was successfully completed.

PCC Rokita Key Factors Q1-Q3 2017

- Limited supply of TDI
- Increase in products sold by 1.7%
- Increase in EBITDA by 12%
- High demand for polyols for rigid applications in Q2-Q3
- Polyurethanes took 49.4% of revenues in Q1-Q3
- Exports accounted for 61% of polyurethane sales

Overall, the polyols segment saw its positive business performance continue through the third quarter of 2017, although down on the second quarter due to scheduled maintenance and repair work in August 2017. Expansion of the product portfolio through the inclusion of polyester polyols is expected to lead to further growth in the polyols segment going forward.

The sales and earnings performance of the surfactants segment again remained positive through the third quarter of 2017. At the same time, average purchase prices for feedstocks such as fatty alcohols rose. The biggest challenge for the entire polyether polyol industry is still the significant reduction in the availability of TDI. There is currently no clear information on the timing of the restoration of the TDI balance to the market, mainly in the context of the technical difficulties of the manufacturer.

PCC Rokita-ethylene oxide storage

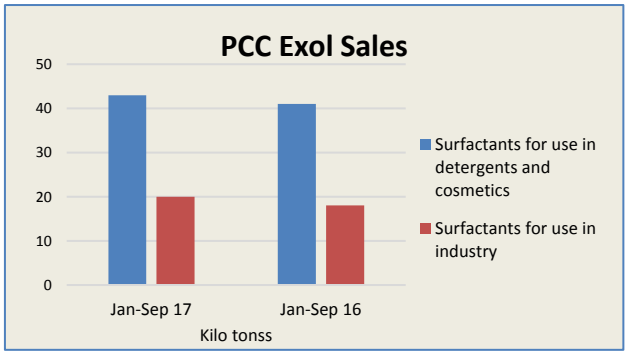
In the third quarter in 2017, PCC Rokita started preparations for expanding the ethylene oxide storage base. Completion is planned for the first quarter of 2018. The aim of the investment is to ensure the security of raw material supply, due to increased demand.

In addition, the market for raw materials for the production of polyether polyols continued to trend upward. The prices of propylene and ethylene rose regularly each month, as in

the previous periods, starting in the second quarter of 2016, which directly translated into higher costs of major raw materials such as propylene oxide and ethylene oxide. The most important event in the polyurethane division last year was the acquisition by PCC Rokita of a 25% stake in Thai producer IRPC Polyol.

PCC Exol, Jan-Sep 2017

PCC Exol Group incurred sales costs of zl 19.8 million in the first three quarters in 2017, zl 2.0 million higher than in the same period of 2016. Palm kernel oil costs rose affecting margins whilst ethylene oxide costs remained high. The beginning of the third quarter brought lower ethylene prices, which reduced the cost of ethylene oxide. On 25 October 2017, PCC Exol received guarantees from PCC Rokita worth zl 30 million for ethylene oxide purchases from PKN Orlen.



Revenues from the sale of surfactants for use in cosmetics and detergents in value terms increased by zl 42.9 million to zl 225.1 million (i.e. by 23.5%). However, in terms of volume, sales increased by only 5.0% to total 43,000 tons. The PCC Exol Group achieved profit margin on sales of 13.8%, which was 3% down on the three quarters of 2016.

Polish Chemical Production (unit-kilo tons)

Product	*Jan-Oct 17*	*Jan-Oct 16*
Caustic Soda Liquid	290.1	260.3
Caustic Soda Solid	64.6	58.2
Ethylene	407.8	380.6
Propylene	288.5	284.7
Butadiene	49.9	46.2
Toluene	17.2	13.2
Phenol	37.3	32.7
Caprolactam	137.1	136.4
Acetic Acid	19.9	7.7
Polyethylene	294.4	270.2
Polystyrene	45.9	48.0
EPS	82.7	79.8
PVC	240.8	216.7
Polypropylene	229.7	201.8
Synthetic Rubber	204.6	182.5
Ammonia (Gaseous)	2304.0	2133.0
Ammonia (Liquid)	81.4	79.2
Pesticides	43.6	23.7
Nitric Acid	1965.0	1914.0

The most important investment currently underway by PCC Exol is the expansion and increase of capacity of the ethoxylation plant I, at Brzeg Dolny by 15,000 tpa. This investment includes the construction of installations for the production of high ammonium oxyalkylates and installations for the production of glycine, along with the necessary infrastructure and storage facilities. The start-up of the oxyalkylates production plant has been shifted by Exol to 2020 from the planned 2018 date.

CIECH Group results Jan-Sep 2017

Ciech's revenues in third quarter of 2017 amounted to zl 836.3 million compared to zl 853.9 million in the third quarter of 2016. Good results were obtained by the organic segment (AGRO business, resins, foam). Ciech increased the capacity of sodium bicarbonate in the third quarter. Whilst soda ash sales increased in volume but were affected by higher prices of raw materials such as coke, anthracite and coal.

Despite the higher prices of raw materials and problems with their availability, the group has generated higher revenues and EBITDA. By investing in a new warehouse for long blocks of foam in 2018, Ciech's Foams business will be able to better respond to higher demand. Regarding fuel, Ciech Soda Polska has concluded a new contract with the Polish Mining Group (PGG) for the supply of coal, assuming supplies of 250-300,000 tpa starting from 2018. Currently, Ciech controls about 20% and 40% shares in the markets for herbicides and glyphosate-based products respectively. In the polyurethane foams area, the group continues to enjoy high demand from manufacturers of furniture related products.

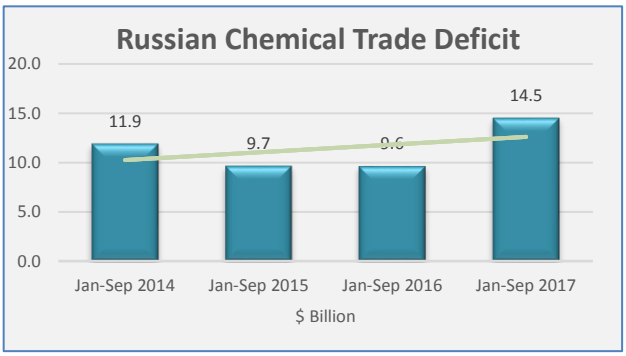
Ciech's Financial Performance, Jan-Sep 2017

	Soda division	TOTAL
Revenues from third parties	1,759,993	2,617,650
Revenue from inter-segment transactions	35,692	-
Total sales revenues	**1,795,685**	**2,617,650**
Cost of sales	(1,258,153)	(1,982,180)
Gross profit /(loss) on sales	**537,532**	**635,470**
Selling costs	(175,579)	(189,497)
Operating profit /(loss)	**356,153**	**381,443**
Profit /(loss) before tax	**343,719**	**332,668**
Net profit /(loss) for the period	**-**	**256,309**
EBITDA	490,976	563,220

RUSSIA

Russian chemical industry, Jan-Sep 2017

Russia's deficit in chemical industry product trade rose significantly in 2017 to $14.5 billion against $9.6 billion in the same period in 2016. This is partly due to higher prices and partly due to a more stable economic environment measured against the very difficult years of 2014-2016.



Russia may be meeting more of its own demand in bulk polymers due to the introduction of new capacity over the past few years, but still relies on large volumes of imports for polyethylene, polypropylene and polystyrene. The country also remains weak in the area of fine chemicals, pharmaceutical intermediates and household chemicals.

In the organic chemical sector Gazprom neftekhim Salavat introduced a new plant for acrylic acid and butyl acrylates in 2017, which has thus affected the butanols market in Russia, but investment in organic chemicals in Russia is relatively small. SIBUR is constructing plants for DOTP plasticizers at Perm and maleic anhydride at Tobolsk, but a range of other intermediate products are still required in order to allow development of the domestic chemical industry.

Russian Chemical Production (unit-kilo tons)

Product	*Jan-Oct 17*	*Jan-Oct 16*
Caustic Soda	1,009.5	919.0
Soda Ash	2,870.0	2,502.9
Ethylene	2,342.0	2,316.0
Benzene	1,562.2	1,667.2
Xylenes	1,121.0	1,005.8
Ammonia	386.4	465.3
Nitrogen Fertilisers	499.8	603.4
Phosphate Fertilisers	124.5	203.2
Potash Fertilisers	13,700.0	13,300.0
Plastics in Bulk	8,207.0	7,835.0
Polyethylene	2,939.0	2,880.0
Polystyrene	7,100.0	6,316.0
PVC	6,407.0	6,391.0
Polypropylene	1,647.0	1,769.0
Polyamide	452.4	447.8
Synthetic Rubber	768.8	659.8
Synthetic Fibres	1,195.9	1,108.2

Chemical production rose by around 5% in the first ten months in 2017, although consumption has lagged some way behind. Production in the Russian chemical industry continued to rise in 2017 as new capacity increased operational rates. It should also be noted that a wide range of new projects are under stages of construction, preparation or planning.

SIBUR's flagship ZapSibNeftekhim project at Tobolsk, including 1.5 million tpa of ethylene, represents the significant addition to the petrochemical sector in Russia for several decades. New ethylene capacity is being planned for the Volga-Urals, including Nizhnekamskneftekhim and Kazanorgsintez, and the long-term focus of Russian petrochemical projects in Siberia and the Russian Far East appears to be intensifying.

Since 2014, petrochemical producers have benefited from the weak rouble which has made exports more profitable whilst at the same time the weak rouble has helped producers displace imports. This has been helpful to a point, but for continued success domestic producers require the domestic market to grow. Consumption improved slightly in 2017 against 2014-2016, but is held back above all by a weak GDP. Political inertia means that is very difficult to bank on solid growth in Russia in the coming years, and economic prospects remain subdued at best.

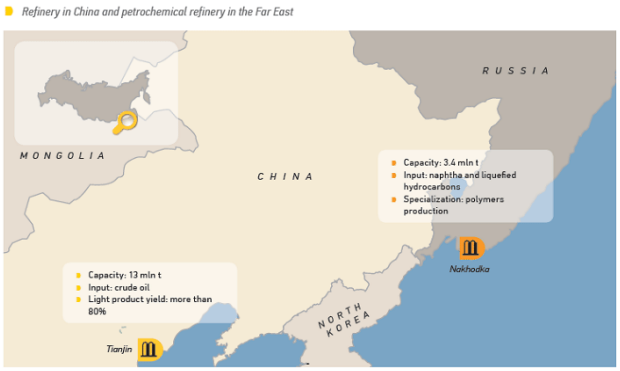
Russian chemical companies were affected in 2017 by higher production costs, eroding profit levels. Nizhnekamskneftekhim and Kazanorgsintez both registered lower profits in the three quarters in 2017 as raw material and energy costs outpaced revenue increases. Kuibyshevazot typified the performance of Russian producers in 2017, by increasing production and revenues but facing hikes in raw material prices and thus driving down net profitability.

Russian petrochemical projects

VNHK project documentation

Rosneft's Eastern Petrochemical Company (VNHK) has completed around half of its project documentation to date, including infrastructural investments such as the railway and highway. Infrastructure projects include the reconstruction of the water intake in Ekaterinovka, the road access to the production complex, the residential micro-district, and the gas pipeline, etc.

Construction of the VNHK refinery and petrochemical complex, owned by Rosneft, could start in the near future, although there is strong local opposition to the project. The collection of signatures under the petition to prohibit the construction of a petrochemical cluster and a sea terminal in the Gulf of Vostok states that the complex could release into the atmosphere of harmful substances of about 50,000 tpa. All of the emissions could threaten human health. Moreover, the coastline (beaches and recreation centres of Nakhodka, Livadia, Volchanets, etc.) will become unusable and the marine reserve Gulf of Vostok will cease to exist.



The existence of all agriculture in Primorye will come under threat, whilst for Nakhodka the petition argues that it will be impossible to live in the triangle of three large oil ports and next to a huge petrochemical complex. To date, more than 25,000 signatures have been collected against the construction and the petition will be sent to Putin, although this is unlikely to have any impact.

Gazprom-SIBUR ethane supply for Amur Gas-Chemical & GPP capacity

Talks between Gazprom and SIBUR on deliveries from the Amur Gas Processing Plant (GPP) of ethane to the Amur Gas-Chemical Complex. According to Gazprom processing Blagoveshchensk, the supply of ethane could reach up to 2.5 million tpa. SIBUR is currently working on a project for the construction of the Amur Gas-Chemical Complex which is technologically connected with the Amur GPP of Gazprom.

The capacity of the Amur GPP could be increased from 42 to 56 billion cubic metres of gas per annum, depending on demand. By In April 2021 two technological lines will be put into operation, and by December the third one will be launched. By December 2024, it is planned to launch all six lines with a capacity of 7 billion cubic metres each.

Gazprom processing Blagoveshchensk is the main investor and customer of the Amur GPP. The construction is carried out 15 kilometres from the town of Svobodny in the Amur Region, on the banks of the Zeya River. Works have been conducted since October 2015. Currently, communications, road, rail and river infrastructure are being built. To start the construction of technological facilities, a territory of more than 800 hectares has been prepared, whilst construction of the plant in full started at 3 August 2017. The gas processing plant will be able to allow to produce up to 2.6 million tons of ethane, 1.6 million tons of liquefied

petroleum gases, up to 60 million cubic metres of helium and up to 38 billion cubic metres of commercial gas per annum.

ZapSibNeftekhim-construction progress

Overall progress in the construction of ZapSibNeftekhim amounted to 68.4% in November 2017. The design stage was completed by 98.2%, whilst construction and installation work had achieved 50.4%. The supply of materials and equipment had been completed by 87.2%. In November, the number of builders on the site reached 20,300 people from 38 direct contract organisations from Russia and abroad. The construction of the complex involves 1,300 units of equipment.

ZapSibNeftekhim Construction Progress

Category	Jun-17	Oct-17	Nov-17
Overall	56%	65%	68.4%
Design	75%	97.6%	98.2%
Construction	38%	45.8%	50.4%
Industrial facilities	50%	71.3%	74%
Metal structures	55%	77%	82%
Materials & equipment	66%	87%	89.1%
Logistics	28%	40%	45%
Steam Cracker	58%	67.4%	70.2%
Polyethylene	43%	64.5	67.3%
Polypropylene	43.6%	69.1	71.7%

The progress of work on the pyrolysis unit had achieved 67.4% by November. The polyethylene and polypropylene units had completed 67.3% and 71.7% respectively. The construction of industrial facilities had completed at 74%. 117,600 tons of metal structures were installed on the ZapSibNeftekhim site (82% of the total work volume), 273.400 cubic metres of foundations (94%) were installed, whilst 321.7 km of underground pipelines (89%) have been laid.

The configuration of the ZapSibNeftekhim project involves the construction of pyrolysis units with a capacity of 1.5 million tpa of ethylene (Linde AG technology) and 500,000 tpa of propylene, 240,000 tpa of high-margin by-products (butadiene, butene-1, MTBE, pyrobenzene). The project also envisages the construction of a production of various polyethylene grades with an aggregate capacity of 1.5 million tpa (INEOS technology), polypropylene production facilities with a capacity of 500,000 tpa (technology from LyondellBasell).

ZapSibNeftekhim-financing

Despite SIBUR providing a large amount of the funds, large sums have been allocated from the state coffers under the National Welfare Fund (NWF). The NWF is a fund created at the expense of taxes to finance the pension system. Although SIBUR has utilised domestic companies where possible a substantial proportion of the project has been awarded to foreign suppliers in respect to design solutions, technologies and equipment. Not only is technology sourced from abroad, but work on transportation, unloading and installation of large and heavy components of ZapSibNeftekhim was given to a Dutch company Mammoet.

Russian feedstocks & petrochemicals

Russian ethylene production Jan-Oct 2017

Russian ethylene production rose 15% in October over September to 205,800 tons. After completing maintenance Nizhnekamskneftekhim produced 52,800 tons of ethylene in October, 2.5 times higher than in September whilst SIBUR-Kstovo increased production 2.8 times to 27,200 tons. In October, the repair work continued at Stavrolen and thus did not produce ethylene. At Kazanorgsintez repair work was carried out in the first half of October and production fell 18% to 20,430 tons. For the first ten months of 2017, Russia produced 2.35 million tons of ethylene, which is 3% more than in the same period in 2016.

Russian Ethylene Production (unit-kilo tons)

Producer	*Jan-Oct 17*	*Jan-Oct 16*
Angarsk Polymer Plant	160.7	86.2
Kazanorgsintez	476.3	426.2
Stavrolen	222.0	251.7
Nizhnekamskneftekhim	505.8	500.5
Novokuibyshevsk Petrochemical	46.4	51.4
Gazprom n Salavat	254.8	276.5
SIBUR-Kstovo	306.1	300.1
SIBUR-Khimprom	40.9	64.3
Tomskneftekhim	230.8	189.2
Ufaorgsintez	104.7	105.1
Total	2348.4	2251.2

Russian propylene production was unchanged in October at 133,168 tons. SIBUR-Khimprom increased production of the product to 6,023 tons, which is 91% up on September and SIBUR-Kstovo increased production by 92% to 12,115 tons. Tomskneftekhim also increased production by 10% to 13,226 tons. For the first ten months in 2017 Russian propylene production totalled 1.580 million tons against 1.667 million tons in 2016. The largest proportional rise was reported by Tomskneftekhim. Increasing from 112,700 tons in January to October 2016 to 125,300 tons in the same period in 2017. ***Full historical production data is available on CIREC's Statistical Database at*** www.cirec.net***.***

Russian Propylene Exports (unit-kilo tons)		
Company	***Jan-Oct 17***	***Jan-Oct 16***
Lukoil-NNOS	71.2	56.7
SIBUR-Kstovo	53.5	36.7
Omsk Kaucuk	2.0	0.0
Angarsk Polymer Plant	0.0	0.4
Stavrolen	7.0	14.0
Total	133.8	107.8

Russian propylene exports, Jan-Oct 2017

Propylene exports amounted to 12,740 tons in October which is 44.6% less than in September. Russian plants supplied 152,880 tons of propylene which is 18% more than in the same period of 2016. Exports of propane-propylene fractions totalled 61,440 tons, 27% down on 2016.

Russian propylene sales Jan-Oct 2017

Russian propylene sales on the domestic market amounted to 34,990 tons in October, of which Lukoil-NNOS provided 19,490 tons. In October, Saratovorgsintez purchased 17,450 tons of monomer from Lukoil NNOS. Shipments of propylene from Angarsk Polymer Plant increased by 35% in October to 9,140 tons after completing maintenance on the butanols plant. From January to October 2017, Russian enterprises purchased 301,000 tons of propylene, 4% more than in the same period in 2016. Sales of propane-propylene fractions totalled 138,400 tons in the first ten months in 2017, 8.6% less than in 2016.

Russian Propylene Domestic Sales (unit-kilo tons)		
Company	***Jan-Oct 17***	***Jan-Oct 16***
Angarsk Polymer Plant	57.7	29.5
SIBUR-Kstovo	75.8	89.7
Lukoil-NNOS	157.8	158.8
Others	11.5	8.4
Total	302.1	286.8

Russian propylene Q1-Q3 2017 market overview

In the first three quarters in 2017 Russian propylene production increased by 49,000 tons to 1.75 million tons. Rises in production was ensured by two producers Angarsk Polymer Plant (+40,100 tons) and SIBUR-Tobolsk (+38,800 tons). The maximum decline in the production of propylene in 2017 was recorded at NPP Neftekhimiya at the Moscow refinery where production dropped by 40,100 tons to 58,800 tons. This resulted from large-scale reconstruction at the refinery and thus Neftekhimiya did not receive sufficient volumes of propane-propylene fractions for processing.

In the first three quarters Russian propylene consumption rose 10,000 tons over 2016 to 1.61 million tons. The increase in domestic consumption was due to an increase in the production of polypropylene and acrylic acid. Gazprom neftekhim Salavat's subsidiary Acryl Salavat produced 48,000 tons of butyl acrylate in the first three quarters in 2017, whilst the production of butanols dropped by 35,900 tons to 56,800 tons.

From January to September 2017, domestic producers exported 140,000 tons of propylene, which is 36,800 tons more than in the same period in 2016. The main direction of supply of the Russian monomer is Poland which imports up to 16,000 tons of propylene per month. Exports from Russia to Poland dropped by 13,000 tons in the first three quarters in 2017 to 74,900 tons. The fall was due to the reemergence of Karpatneftekhim at Kalush which is located much closer the Polish border; in the third quarter 2017, Karpatneftekhim shipped 12,100 tons of monomer to Grupa Azoty. Deliveries of Russian propylene to Belarus in 2017 rose to 36,700 tons against 29,000 tons in the first three quarters in 2016.

Russian Styrene Production (unit-kilo tons)		
Producer	***Jan-Oct 17***	***Jan-Oct 16***
Nizhnekamskneftekhim	251.2	249.5
Angarsk Polymer Plant	29.6	16.8
SIBUR-Khimprom	94.7	112.3
Gazprom n Salavat	137.1	145.7
Plastik, Uzlovaya	48.8	43.3
Total	561.5	567.7

Russian styrene sales Jan-Oct 2017

Styrene sales on the Russian domestic market amounted to 10,200 tons in October, raising the total to 84,430 tons for the first ten months which was 2.9% up on 2016. The resumption of shipments of styrene from Plastik amounted to 960 tons, whilst the supply of monomer from SIBUR-Khimprom decreased by 5.6 times to 498 tons.

For the first ten months of 2017, Russian enterprises shipped 60,800 tons of styrene to the domestic market, which is 4% less than in the same period in 2016. The decrease in

domestic sales was due to a drop-in shipment from SIBUR-Khimprom and Gazprom neftekhim Salavat by 21% and 17% respectively. Styrene exports from Russia totalled 91,280 tons in the first ten months in 2017, 11% down on 2016.

Bulk Polymers

Russian HDPE Production (unit-kilo tons)		
Producer	***Jan-Oct 17***	***Jan-Oct 16***
Kazanorgsintez	414.0	396.9
Stavrolen	206.7	224.7
Nizhnekamskneftekhim	64.7	115.5
Gazprom n Salavat	76.0	89.7
Total	761.4	826.8

Russian HDPE production, Jan-Oct 2017

HDPE production totalled 760,000 tons in the first ten months in 2017 to 761,400 tons against 828,800 tons in the same period in 2016. Kazanorgsintez increased production by 4% to 413,800 tons, whilst Nizhnekamskneftekhim dropped production from 117,800 tons to 64,700 tons due to increased focus on LLDPE. Gazprom neftekhim Salavat produced 76,000 tons, which is 17% lower than in 2016 and Stavrolen reduced production by 8% to 206,100 tons.

Russian polyethylene production in total amounted to 1.408 million tons in the first ten months in 2017, 1% up on 2016. LDPE production rose 10% to 540,100 tons and LLDPE rose from 49,000 tons in January to October 2016 to 107,000 tons.

Russian Polypropylene Imports (unit-kilo tons)		
	Jan-Oct 17	***Jan-Oct 16***
Homopolymers	48.2	64.4
Block	37.8	26.8
Random	26.8	28.7
Other	31.6	24.3
Total	144.4	144.2

Russian polypropylene imports Jan-Oct 2017

Russian polypropylene imports totalled 144,400 tons in the first ten months in 2017 against 144,200 tons in the same period in 2016. Homopolymer imports dropped to 48,200 tons from 64,500 tons whilst block copolymer supplies rose to 37,800 tons against 26,800 tons. Imports of propylene copolymers amounted to 26,800 tons against 28,600 tons, whilst other propylene polymer imports amounted to 31,600 tons against 24,200 tons.

Russian Polypropylene Production (unit-kilo tons)		
Producer	***Jan-Oct 17***	***Jan-Oct 16***
Ufaorgsintez	102.2	91.4
Stavrolen	85.1	82.3
Neftekhimya	86.7	96.9
Nizhnekamskneftekhim	175.3	161.9
Polyom	174.4	157.6
Tomskneftekhim	116.4	94.2
Tobolsk-Polymer	418.0	325.9
Total	1158.1	966.4

Russian polypropylene production, Jan-Oct 2017

Russian polypropylene production rose 2% in the first ten months in 2017 to 1.160 million tons. SIBUR Tobolsk produced 418,000 tons, 12% up which was due to a lack of a shutdown. Nizhnekamskneftekhim reduced production by 3% to 175,300 tons, whilst Polyom and Tomskneftekhim increased polypropylene output by 4% and by 10% respectively to 174,400 tons and 116,400 tons. Stavrolen at Budyennovsk reduced production by 8% to 85,000 tons, Ufaorgsintez, which is now part of the Rosneft group, increased production slightly to 102,300 tons and due to maintenance Neftekhimya at Moscow reduced production by 20% to 86,700 tons.

Russian PVC Production (unit-kilo tons)		
Producer	***Jan-Oct 17***	***Jan-Oct 16***
Bashkir Soda	204.4	204.4
Kaustik	138.8	72.8
RusVinyl	254.4	245.6
Sayanskkhimplast	212.5	104.3
Total	810.1	627.1

Russian PVC, Jan-Oct 2017

PVC production in Russia increased 17% in the first ten months to 735,400 tons against 627,000 tons. RusVinyl produced 254,400 tons which is 4% up on 2016, Sayanskkhimplast increased production to 212,500 tons versus 104,300 tons in the previous year whilst Bashkir Soda reduced production from 204,400 tons to 197,300 tons. Kaustik at Volgograd produced 71,200 tons against 72,800 tons.

Russian PVC imports amounted to 43,000 tons in the first ten months of 2017 against 123,100 tons in 2016. Exports totalled 65,300 tons against 43,000 tons in the first ten months in 2016. Low demand from the domestic market and

growth in domestic production volumes were the main reason for the reduction of imports. Imports from China amounted to 39,600 tons in January-October 2017 against 95,700 tons in the first ten months in 2016, and imports from Europe decreased to 2,600 tons against 5,900 tons. Imports from the US dropped to 264 tons against 10,500 tons in the first ten months in 2016. During September-October, an almost complete cessation of imports of acetylene PVC imports from China took place due to high prices.

Paraxylene-PET Chain

Russian PTA Imports (unit-kilo tons)

Country	*Jan-Oct 17*	*Jan-Oct*
Belgium	27.0	27.4
India	34.8	2.1
China	74.6	29.4
South Korea	31.6	36.9
Poland	9.5	19.8
Thailand	29.1	0.3
Turkey	1.0	0.0
Total	207.6	115.9

Russian paraxylene, Jan-Oct 2017

Paraxylene exports from Russia totalled 80,300 tons in the first ten months in 2017 against 51,400 tons in the same period in 2016. Gazprom Neft reduced exports from 45,700 tons in January to October 2016 to 31,700 tons in the same period in 2017, whilst Kirishinefteorgsintez increased shipments from 13,900 tons to 48,700 tons.

Domestic sales of paraxylene rose in the first ten months in 2017 to 152,200 tons from 147,700 tons in the same period in 2016. Ufaneftekhim reduced sales to Polief slightly from 92,400 tons to 80,600 tons, whilst Gazprom-Neft increased paraxylene sales from 49,300 tons to 71,600 tons.

Russian PTA imports, Jan-Oct 2017

In the first ten months in 2017 Russian PTA imports totalled 207,600 tons against 115,900 tons in the same period in 2016. China supplied 74,600 tons in January to October 2017 against 29,400 tons in 2016, and other major suppliers in 2017 included Belgium and India with 27,000 tons and 34,800 tons respectively.

It is expected that in 2018 SIBUR will stop production of PTA for modernisation for four months. PTA imports are thus expected to rise in 2018, whilst in the PET sector Mogilevkhimvolokno should increase PET sales to the domestic market. In 2019 SIBUR plans to increase capacity for PTA production at Polief, investing considerable sums.

Impact of Russian PET projects on market

Slow growth rates in demand for PET bottle grade resin in Russia are encouraging PET producers to examine other application areas. PET sheets, non-woven fibres and PET film are all areas with varying degrees of growth prospects although technically not all producers are geared up to switch products.

Russian non-bottle PET market (unit-kilo tons)

	Market 2017	Imports	Production	Growth Rate
PET sheets	2.9	0.4	2.5	3.5%
Non-woven	215	115	100	12.5
PET film	32.5	23.5	9	3.4

Russian PET Production (unit-kilo tons)

Producer	*Location*	*Q1 17*	*Q2 17*	*Q3 17*
Evroplast (Senezh)	Moscow	30.0	30.0	32.0
SIBUR-PETF	Tver	19.9	19.9	21.0
Alko-Naphtha	Kaliningrad	34.0	34.0	43.5
Polief	Blagoveshchensk	55.0	52.6	52.29
Total		138.9	149.1	144.3

SIBUR-PETF has started selling PET fibre, but there is a required process of homologation which means that it can take time to build a customer base. SIBUR-PETF was put into operation in 2003 and operates plants for the production of PET with a capacity of up to 75,250 tpa and a line for the production of secondary PET with a capacity of 1,500 tpa.

Another factor helping producers to look at other PET products is through the expected prospect of new producers entering the market in the next few years. In three to four years after the launch of new plants the market may become oversupplied, and those producers either located well geographically or possess a feedstock advantage will be best placed to survive. Alko Naphtha is well placed in this regard due to its location in Kaliningrad and is currently expanding its capacity to 600 tons per day.

Senezh, however, is not back-integrated into oil and would face challenging competition if SafPet reaches the market which may force them to close the business. Following modernisation for Senezh the plant has increased productivity up to 320 tons per day (at plant design 250). The target for 2017 was set by Senezh at 112,000 tons. The company has chosen the position of entering new brands, for example, PET for kegs. According to Senezh, consumers have seen the advantages of plastic packaging: which unlike aluminum is disposable and recyclable (in the case of Senezh there is a separate subdivision engaged in these activities).

Etana PET & PTA projects

The projected capacity of the plant for PTA is 1 million tpa, for PET 1.5 million tpa. The infrastructure of the site has been completed, and in 2018 construction is expected to start. The significance of the Etana project is that currently agricultural produce in the Kabardino-Balkaria region cannot be shipped and marketed to other parts of Russia due to a lack of packaging materials. PET production is being designed to solve these problems. Not only will the plant serve domestic markets, but will allow pre-packaged vegetables and water also to be exported to China.

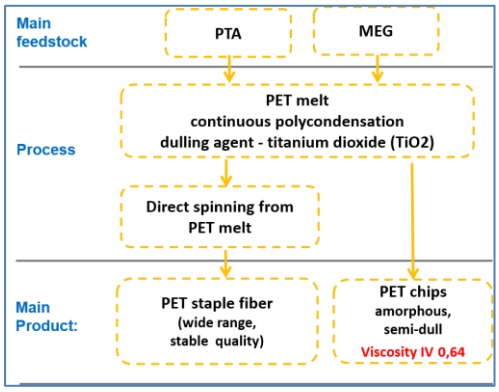
Taneko-aromatics start-up & SafPet project

Taneko has set a target to start paraxylene production at the Nizhnekamsk refinery in late 2019 or early 2020, but even this forecast may be delayed. The new aromatics complex under design and construction at Nizhnekamsk consists of 147,000 tpa of paraxylene and 60,000 tpa of benzene.

The introduction of the new aromatics complex will provide the basis for the production of PTA and PET under the jv SafPet, including capacities of 210,000 tpa and 250,000 tpa respectively.

For the PET plant, MEG is expected to be made available from nearby Nizhnekamskneftekhim. PTA production start-up is expected in the third quarter in 2019, conditional on the paraxylene start-up. In addition to PTA, SafPet is considering the possibility of launching the production of linear alkylbenzenes (LAB) with the capacity of 80,000 tpa. According to Tatneftekhiminvest-Holding, UOP processes are expected to be applied including Molex, Pakol, and DeFine.

SafPet is currently waiting for a building permit. The plant design could be adapted to reorganise the enterprise for 200,000 tpa of food-grade bottled PET, 87,500 tpa of fibre and 25,000 tpa of PET film. The production is planned to be launched in 2020, the suppliers of raw materials are expected to be Nizhnekamskneftekhim and Taneko. At the moment, equipment is being purchased mainly from overseas whilst auxiliary equipment may be sourced mostly from Russian companies.



Ivanovo Polyester Project-start-up date affected by contractor delays

The launch dates for the Ivanovo Polyester Complex (IPC) will be shifted due to a force majeure situation with the general contractor which took place in the middle of 2017. Work is reported to have resumed in the early autumn.

The capacity of the future complex will be 175,000 tpa of polyester fibre and 30,000 tpa of textile PET. Part of the production is planned to be processed in the industrial park at Vichuga, and part to export. In December 2016, a contract was signed for the supply of equipment, supervision and maintenance with Uhde Inventa-Fischer GmbH, part of the ThyssenKrupp Industrial Solutions group.

For the Ivanovo Polyester Plant 441.5 million roubles has been allocated over period of three years to create the infrastructure in the Vichuga district to support construction. The funds will be spent on the construction of energy facilities, engineering networks, roads and other structures. It is planned to build an access road to an industrial site near the village of Staraya Golchikha, as well as engineering networks for an industrial park.

Framework agreements have been concluded for the supply of about 65,000 tpa of MEG with SIBUR and Nizhnekamskneftekhim. A contract was signed with Posco Daewoo Co. for the supply of PTA in the amount of 155,000 tpa.

Aromatics

Russian benzene production, Jan-Oct 2017

Russia produced 103,900 tons of benzene in October, which is 18% more than in September. Nizhnekamskneftekhim and SIBUR-Kstovo both increased output of aromatic raw materials to 17,700 tons and 6,200 tons respectively, which was 3.2 and 3.6 times more than in September. The Omsk refinery reduced production of benzene by 33% to 5,000 tons in favour of an increase in the production of toluene. In addition, the Angarsk Plant of Polymers increased output of the product by 21% to 7,500 tons. In the first ten months in 2017, Russian benzene production totalled 1.069 million tons which was 7% up on 2016.

Russian Benzene Production (unit-kilo tons)

Producer	*Jan-Oct 17*	*Jan-Oct 16*
Angarsk Polymer Plant	65.4	27.3
Gazprom Neft	65.5	75.4
Stavrolen	63.5	11.9
LUKoil-Perm	41.8	30.5
Magnitogorsk MK	48.2	46.8
Nizhnekamskneftekhim	172.6	155.6
Novolipetsk MK	29.3	11.0
Gazprom n Salavat	143.3	122.0
Severstal	26.9	26.0
SIBUR-Kstovo	67.9	52.8
Slavneft-Yanos	62.2	50.6
Kirishinefteorgsintez	53.4	50.5
Ryazan Refinery	26.9	26.1
Ufaneftekhim	58.1	67.2
Ural Steel	10.1	8.0
Uralorgsintez	73.2	64.2
Zapsib	46.2	55.3
Novokuibyshevsk PC	14.7	20.3
Total	1069.2	901.7

Russian benzene production, Jan-Oct 2017

The Russian market of benzene has been subject to deficit over the past decade due to the lack of economic and tax incentives to develop aromatics from oil refineries. Other factors have included the lag in the pace of increase in benzene output in petrochemical complexes from the growing demand for processing.

Benzene sales on the Russian domestic market amounted to 57,620 tons in October 11.3% up on September. SIBUR-Kstovo increased the supply of aromatic raw materials by 52%, to 4,240 tons after maintenance whilst the Angarsk Plant of Polymers increased the supply by 46% to 4,890 tons and Gazprom neftekhim Salavat increased shipments by 48% to 6,970 tons. The increase from Salavat was due to the expansion of production of aromatic raw materials. Shipments from the Omsk refinery decreased by 22% to 5,430 tons, which is 22% less than in September. The Ryazan refinery reduced supplies of benzene by 35%, to 1,970 tons. For the first ten months in 2017, Russian sales of benzene on the domestic market totalled 519,790 tons unchanged from 2016.

Benzene exports from Russian petrochemical plants and refineries rose 21% in October to 4,380 tons. SIBUR-Kstovo increased its exports 2.7 times in October to 1,360 tons and Kirishinefteorgsintez increased by 34% to 3,020 tons. For the first ten months in 2017, Russian enterprises shipped 85,300 tons of benzene for export whilst imports, by contrast, dropped by 19% in the period January to October 2017 to 10,080 tons.

Russian Orthoxylene Domestic Sales (unit-kilo tons)

Producer	*Jan-Oct 17*	*Jan-Oct 16*
Gazprom Neft	68.8	39.1
Ufaneftekhim	44.6	42.7
Kirishinefteorgsintez	19.0	26.8
Total	132.3	108.6

Russian Orthoxylene Exports (unit-kilo tons)

Producer	*Jan-Oct 17*	*Jan-Oct 16*
Gazprom Neft	23.9	48.0
Kirishinefteorgsintez	15.1	18.5
Ufaneftekhim	26.9	20.9
Total	65.9	87.5

Russian orthoxylene domestic sales, Jan-Oct 2017

Orthoxylene deliveries to the Russian domestic market amounted to 14,800 tons in October and followed by 15,000 tons in November. Kamteks-Khimprom purchased 9,070 tons in October, whilst Gazprom neftekhim Salavat purchased 1,290 tons. In addition, Russian manufacturers of paint and varnish materials increased the volume of purchased orthoxylene in October compared to September by 11%, to 2,620 tons and producers of fuel, agrochemistry, pharmaceutical and other products purchased 1,410 tons. Orthoxylene sales on the domestic market jumped 23% in the first eleven months to 123,700 tons. Orthoxylene exports totalled 65,710 tons which was 26% down on the same period in 2016.

Russian toluene domestic sales, Jan-Oct- 2017

Domestic toluene deliveries of toluene by rail amounted to 14,920 tons in October 2% less than in September. Gazprom Neft from the Omsk Refinery supplied 37% (5,530 tons), Kirishinefteorgsintez 26%

(3,950 tons), Lukoil-Permnefteorgsintez 25% (3,690 tons), Slavneft-Yanos 8% (1,210 tons), and Severstal 4% (540 tons). Manufacturers of explosives reduced purchases of toluene in October by 23% to 830 tons, whilst companies that produce paint and varnish materials increased the volume of purchased raw materials by 11% to 3,560 tons (24%).

Manufacturers of motor fuels and additives reduced purchases of toluene by 7% to 6.240 tons (42%). In addition, 180 tons of toluene (1%) was purchased by companies using it as a solvent in the production of rubbers, 2,580 tons (17%) by manufacturers of other products, and 1,540 tons (10%) by trading companies. In the first ten months in 2017 Russian sales of toluene on the domestic market totalled 153,630 tons which is 3% more than the same period in 2016.

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

Producer	*Jan-Oct 17*	*Jan-Oct 16*
Novokuibyshevsk PC	36.4	38.1
Kazanorgsintez	11.4	10.0
Ufaorgsintez	43.0	54.8
Borealis	4.1	0.4
Total	95.0	103.2

Russian phenol production, Jan-Oct 2017

Russian phenol production amounted to 15,800 tons in October 7% less than in September. Due to less demand from Kuibyshevazot for phenol for caprolactam, the Novokuibyshevsk plant reduced production volumes compared to September by almost 25%. Ufaorgsintez, and Kazanorgsintez conversely increased the volumes of output in comparison with September. Ufaorgsintez despite the ongoing reconstruction of the cumene unit, increased production volumes by almost 3%, and Kazanorgsintez by 4%.

Russian Caprolactam Exports (unit-kilo tons)

Producer	*Jan-Oct 17*	*Jan-Oct 16*
Kuibyshevazot	37.8	40.9
SDS Azot	87.9	73.5
Shchekinoazot	46.9	45.2
Total	172.6	159.7

Russian caprolactam market, Jan-Nov 2017

Russian caprolactam exports totalled 172,600 tons in the first ten months in 2017 against 159,700 tons in the same period in 2016. Kuibyshevazot reduced shipments to 37,800 tons from 40,900 tons, and SDS Azot increased from 73,500 tons to 87,900 tons. Shchekinoazot shipped 46,900 tons in the first ten months, up from 45,200 tons in the same period in 2016.

Synthetic Rubber

Russian C4s, Jan-Oct 2017

C4 sales in the Russian domestic market amounted to 19,960 tons in October, 3% more than in September. SIBUR-Kstovo increased shipments by 65% in October to 6,490 tons after maintenance was undertaken in September. The Angarsk Plant of Polymers in October increased shipments by 2.18 times to 2,500 tons. Also, from the Ufaorgsintez site, the supply of C4s increased by 18% to 2,410 tons. Due to pyrolysis repairs Kazanorgsintez reduced shipments by 66% to 1,310 tons. From September to November repairs were carried out by Stavrolen.

Russian C4 Purchases (unit-kilo tons)

Consumer	*Jan-Oct 17*	*Jan-Oct 16*
Omsk Kaucuk	38.4	48.8
Nizhnekamskneftekhim	154.2	132.9
SIBUR Togliatti	154.1	131.0
Sterlitamak Petrochemical	0.0	2.4
Total	346.7	315.0

In the first ten months in 2017, Russian companies sold 269,000 tons of C4s on the domestic market, which is 6.8% more than in the same period of 2016. Imports comprised 71,800 tons, accounting for around 25% of the market.

Russian synthetic rubber exports, Jan-Oct 2017

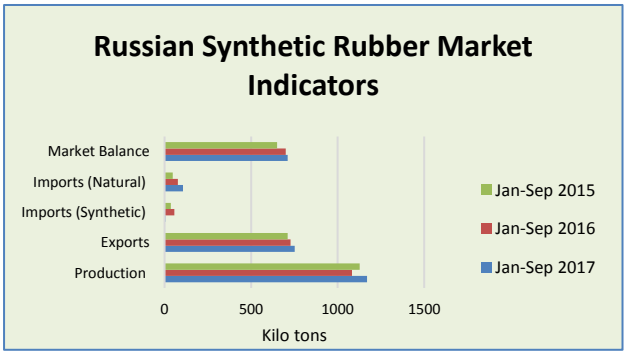
Synthetic rubber exports from Russia rose slightly in the first ten months in 2017 to 843,000 tons against 808,000 tons in the same period in 2016, whilst revenues rose from $1039 million to $1484 million. Average prices per ton rose in 2017 although recently have started to show signs of weakening. By product category, isoprene rubber exports saw the largest rise in volume in 2017, totalling 252,100 tons in January to October 2017 against 216.300 tons in the same period in 2016. Russian export and domestic prices for isoprene tend to run in parallel, sometimes domestic prices can exceed export prices. Russian export sales of halogenated butyl rubber have also increased last year, rising from 100,300 tons to 109,300 tons, whilst butyl rubber shipments fell from 109,700 tons in January to October 2016 to 108,000 tons.

Russian Synthetic Rubber Exports (unit-kilo tons)		
Category	*Jan-Oct 17*	*Jan-Oct 16*
E-SBR	30.8	21.3
Block	29.6	28.9
SSBR	7.4	6.9
SBR	69.3	61.5
Polybutadiene	197.8	187.8
Butyl Rubber	108.0	109.7
HBR	109.3	100.3
NBR	21.7	24.7
Isoprene Rubber	252.1	216.3
Others	16.9	50.5
Total	843.0	808.0

Regarding export destinations, China and Poland were the two largest markets for Russian rubber shipments in January to October 2017. Other major markets included Hungary and India. Central and East Europe remains the largest geographical area for Russian synthetic rubber exports.

Russian demand for synthetic rubber, Jan-Sep 2017

Russian consumption of rubber in the first three quarters in 2017 amounted to 711,000 tons against 700,000 tons in the same period in 2016. The production of tyres in Russia, according to forecasts, could grow by a total of 9.8% for 2017 to a total of 50.3 million units. The largest tyre manufacturers in Russia remain Nokian Tyres and Nizhnekamskshina. Exports has been aan important driver in tyre production in the past couple of years, with outward shipments exceeding inward shipments for the first time in 2016. Last year exports totalled 23.9 million units which could fall to around 20 million this year due to increased consumption on the domestic market.



In recent years, the decline in the solvency of consumers has provoked a crisis not only in the automobile industry, but also in the tyre industry. Demand in the Russian tyre industry fell by around 20% in 2015-2016 against 2012-2013, and in terms of price brands premium grades suffered at the expense of medium priced grades. Tyre manufacturers have compensated for the lack of demand in the domestic market through export activity, which for Nokian for example now accounts for around 70% of sales. In terms of raw materials natural rubber provides around a quarter of requirements for Russian tyre manufacturers, largely supplied through imports from South East Asia.

SIBUR Togliatti-isoprene

SIBUR Togliatti is modernising its isoprene plant aimed at reducing raw material consumption and energy consumption, whilst improving the efficiency of processes and the competitiveness of products. After completion of the modernisation of butyl rubber production unit (BK-60) at the SIBUR site in Togliatti, the project for the technical re-equipment of isoprene is the most significant and capital-intensive. The main consumers of Togliatti isoprene rubber SKI-3 are tyre companies, such as Bridgestone, Pirelli, Nokian, Cordiant, Kenda, and Nexen.

Completion for the re-equipment of the production of isoprene is planned by 2019. In 2016 the company produced 167,000 tons of synthetic rubbers and 96,000 tons of MTBE. The Togliatti site of SIBUR is ready to increase demand for butyl rubber, after completing the BK-60 project in time.

SIBUR Togliatti has sent more than 80 specialists Togliatti to Tobolsk to work on the new monomers and polymer complex ZapSibneftekhim. Only well-trained specialists can successfully master modern technologies. Today, the Togliatti site of SIBUR prepares the personnel not only for its own needs, but also for the production in Tobolsk of deep processing of hydrocarbon raw materials in polyolefins with a capacity of 2 million tpa.

Nizhnekamskneftekhim, synthetic rubber expansion

An important event for Nizhnekamskneftekhim in 2017 included the launch of a new 100,000 tpa plant for the production of formaldehyde. The plant was launched on 1 September 2017, raising total capacity to 260,000 tpa. Formaldehyde at the old Nizhnekamsk plant is produced with a concentration of 40%, and the new installation gives a concentration of 55% based on technology from the Swedish company Johnson Matthey Formox.

The production of formaldehyde on a new plant is carried out by the method of oxidative dehydrogenation of methanol on a stationary layer of catalyst KN. The new installation of formaldehyde is the first of three projects implemented as part of the program to increase the production of isoprene rubber SKI-3 to 330,000 tpa whilst other projects such as the reconstruction of the production of isoprene and isobutylene is continuing.

Russian Methanol Production (unit-kilo tons)		
Producer	*Jan-Oct 17*	*Jan-Oct 16*
Shchekinoazot	429.4	405.1
Sibmetakhim	723.5	617.7
Metafrax	901.0	877.0
Akron	82.9	63.3
Azot, Novomoskovsk	198.3	265.4
Angarsk Petrochemical	2.2	0.6
Azot, Nevinnomyssk	101.9	100.5
Tomet	639.2	543.3
Ammoni	175.9	102.4
Totals	3254.2	2975.2

SIBUR Togliatti supplied rubber in two new market regions in 2017, to Turkey and South America. Export deliveries to Argentina, Venezuela and Ecuador were carried out for the first time. SIBUR-Togliatti s exports around 60% of its products for export. Traditional destinations include the markets of India, Thailand, Vietnam, China, Pakistan, Korea, the US and Canada. In 2016 SIBUR Togliatti's revenue amounted to 12.08 billion roubles and net profit amounted to 911.8 million roubles.

Methanol & related products

Russian methanol production, Jan-Oct 2017

Methanol production in Russia rose 14% in October over September to 370,000 tons. The rise was due to the completion of planned repairs, and at the same time the traditional growth of demand for the product in the fourth quarter. Tomet increased production by 84% to 77,000 tons, whilst Sibmetakhim reduced production by 1% to 81,700 tons. Shchekinoazot increased by 13% to 47,700 tons, and Azot by 6% to 21,000 tons. Ammoni produced 18,000 tons and Akron 9.300 tons, Nevinnomyssk Azot 3%, or 11,000 tons.

Other Russian producers in October included Azot at Novomoskovsk which accounted for 7% of production, Ammoni at Mendeleevsk 6%, Nevinnomyssk Azot 4%, and Akron at Novgorod 3%. Russian production of methanol for the first ten months in 2017 totalled 3.254 million tons against 2.975 million tons in the same period in 2016.

Russian Methanol Domestic Sales (unit-kilo tons)		
Producer	*Jan-Oct 17*	*Jan-Oct 16*
Azot Nevinnomyssk	24.0	25.0
Azot Novomoskovsk	75.5	76.3
Metafrax	320.0	329.9
Sibmetakhim	282.3	266.8
Togliattiazot	394.1	325.9
Shchekinoazot	56.4	72.5
Ammoni (Mendeleevsk)	89.3	64.5
Others	3.4	22.6
Total	1245.0	1064.6

Russian methanol domestic sales, Jan-Oct 2017

Domestic sales of methanol amounted to 134,300 tons in October which is 11% higher than in September. Of the producers Sibmetakhim sold 27,300 tons in October, increasing shipments in comparison with September by 15%, Metafrax 39,500 tons, rising by 11%, and Tomet 38,200 tons which was 9% more. Sales on the Russian domestic market for the first ten months in 2017 totalled 1.245 million tons against 1.065 million tons in the same period in 2016.

Russian Methanol Exports (unit-kilo tons)		
Producer	*Jan-Oct 17*	*Jan-Oct 16*
Azot Novomoskovsk	114.1	133.0
Akron	34.5	1.0
Metafrax	316.8	351.5
Sibmetakhim	354.0	349.7
Tomet	181.5	136.6
Ammoni	4.5	0.0
Shchekinoazot	265.5	288.8
Total	1271.0	1164.9

Russian methanol exports, Jan-Oct 2017

Russian methanol exports amounted to 160,200 tons in October against 159,000 tons in September. Sibmetakhim accounted for 32% of Russian exports in October, or 51,200 tons, followed by Metafrax with 37,900 tons and Shchekinoazot 31,100 tons, and Tomet 20,400 tons. Finland accounted for 57% of Russian exports in October, accounting for 91,800 tons followed by Poland with 26,800 tons, Slovakia 10,500 tons and Romania 8,000 tons. In October, Turkish consumers stopped buying Russian methanol. The average cost of exported methanol in October was about $250, versus $254 in September.

Nakhodka Fertiliser Plant-methanol production by 2021

The Nakhodka Fertiliser Plant (NZMU) has signalled the third quarter of 2021 as the target date to be put its new methanol plant into operation followed by the ammonia plant in the first quarter of 2022. As raw materials and fuel in production in the village of Kozmino, Primorsky Kray, natural gas and seawater will be used as a source of water supply.

The NZMU has appealed to the provisional Governor of Primorye with a request to help resolve the issue of including land plots issued for the plant's activities in the boundaries of the TOR Neftekhimicheskiy. Local companies will be involved in the construction, the cost of which will amount to more than 25 billion roubles, tax deductions will be made from them. NZMU expects to complete the process of attracting foreign partners to the project capital by the end of the year.

NZMU has already concluded a 20-year contract with Gazprom to supply 3.15 billion cubic metres of natural gas annually, supplied by pipeline. The total cost of the project is estimated at $6.3 billion. Currently, funding is structured through Russian and foreign banks, which will provide around 70% of total capital and the remaining 30% from the company's own funds. The financial closure was expected to take place by the end of 2017. It is planned to produce 1.1 million tpa of ammonia, 2 million tpa of urea and up to 2 million tpa of methanol.

Akron, increased ammonia production 2017

Akron Group increased production of mineral fertilisers by 18.8% in the first nine months to 4.55 million tons. The increase has been facilitated through the stable operation of the new ammonia unit launched in 2016 at Veliky Novgorod and the modernisation of the main production facilities at both production sites of the group. The Akron Group increased the production of complex fertilisers by 45% in the first three quarters to 2.09 million tons, whilst the production of mixed fertilisers increased 14 times to 449,000 tons.

Organic chemicals

Russian Butanol Production (unit-kilo tons)		
N-Butanol		
Producer	***Jan-Oct 17***	***Jan-Oct 16***
Angarsk Petrochemical Company	28.4	2.1
Evrokhim	12.5	14.5
Gazprom Neftekhim Salavat	40.4	67.6
SIBUR-Holding	29.9	32.8
Total	111.2	107.2
Isobutanol		
Producer	***Jan-Oct 17***	***Jan-Oct 16***
Angarsk Petrochemical Company	13.0	0.7
Gazprom Neftekhim Salavat	20.4	31.0
SIBUR-Holding	31.7	40.1
Total	65.1	71.5

Russian butanol production, Jan-Oct 2017

Russian butanols production amounted to 16,110 tons in October 7% less than in September. The share of n-butanol in the gross volume of butyl alcohols production in October 2017 was 62%, and isobutanol.

Russian butanol exports, Jan-Oct 2017

In October, exports of butanols from Russia amounted to 3,350 tons, 2.3 times less than it was shipped abroad in October 2016. The share of n-butanol in Russian export volumes in October 2017 was 32%, and isobutanol 68%. Gazprom neftekhim Salavat shipped 2,020 tons of butanols (60% of Russian exports) to foreign markets, SIBUR-Khimprom 1,240 tons (37%) and another 3% (90 tons) sent from the Dmitrievsky Chemical Plant.

Angarsk Petrochemical Company did not export butanols in October. Ukraine was the main destination for Russian butanol exports in October, accounting for 41% of deliveries, followed by Poland (26%), Turkey (17%) and Netherlands (7%). In the first ten months in 2017, exports of butanols from Russia amounted to 29,010 tons which is 2.8 times less than in the same period last year.

Russian butanol domestic sales, Jan-Oct 2017

Domestic butanol sales amounted to 5,940 tons in October 1% up on September. The share of n-butanol in the gross sales volume in October 2017 comprised 88%, and isobutanol 12%. SIBUR-Khimprom increased shipments in October by 10% to 3,040 tons, followed by Angarsk Polymer Plant 1,250 tons and Gazprom neftekhim Salavat 1,250 tons. Volumes of shipments of alcohols from Azot at Nevinnomyssk increased by 23% to 420 tons.

Akrilat increased purchases of butanols in October over September with 21%, to 2,540 tons whilst the Dmitrievsky Chemical Plant reduced purchases by 34% to 970 tons. Other buyers included Volzhsky Orgsintez which bought 880 tons. In total, from January to October 2017, sales of domestic butanols to the Russian market amounted to 56,390 tons which is 9% less than in the same period last year.

Russian plasticizer alcohols, Jan-Oct 2017

DOP imports into Russia amounted to 1,300 tons in October against 2,010 tons in September. In October 2017, Boryszew accounted for 660 tons and the remainder was supplied by the Korean company Aekyung Petrochemical. In the first ten months in 2017, imports of DOP into Russia totalled 6,950 tons which is almost three times higher than in the same period in 2016.

Russian Phthalic Anhydride Production (unit-kilo tons)

Producer	*Jan-Oct 17*	*Jan-Oct 16*
Gazprom n Salavat	8.0	7.4
Kamteks	75.9	58.0
Total	83.9	65.5

The production of phthalic anhydride in Russia increased by more than six times compared to September of this year to 8,250 tons. In the first ten months in 2017, the production of phthalic anhydride in Russia amounted to 83,900 tons which is 28% more than in the same period last year.

Russian N-butanol Exports (unit-kilo tons)

Producer	*Jan-Oct 17*	*Jan-Oct 16*
Gazprom n Salavat	3.2	56.2
SIBUR-Khimprom	4.7	5.2
Angarsk Petrochemical	2.3	0.5
Azot Nevinnomyssk	1.8	0.5
Dmitrievsky Chemical Plant	1.3	0.8
Total	13.3	63.2

Russian Isobutanol Exports (unit-kilo tons)

Producer	*Jan-Oct 17*	*Jan-Oct 16*
Gazprom n Salavat	4.6	5.4
SIBUR-Khimprom	7.7	14.3
Angarsk Petrochemical	0.4	0.0
Dmitrievsky Chemical Plant	0.1	0.1
Total	12.6	19.8

Russian exports of phthalic anhydride amounted to 3,686 tons in October, of which 20% went to India, Egypt (13%), Poland (13%), Finland (10%), Peru (9%) and Uzbekistan (8%). In the first ten months in 2017, phthalic anhydride exports from Russia rose 30% over 2016 to 37,200 tons.

Acryl Salavat, production Jan-Oct 2017

Gazprom neftekhim Salavat held a ceremony to launch the production of acrylic acid and butyl acrylate on Friday, 1 December. The complex operates acrylic acid production capacity of 80.000 tpa, which is processed into butyl acrylate (80,000 tpa) and glacial acrylic acid (35,000 tpa). Propylene is supplied from the Monomer plant at Salavat. Investments in the project amounted to about 39 billion roubles.

Russian Butanol Domestic Sales (unit-kilo tons)

Producer	*Jan-Oct 17*	*Jan-Oct 16*
Gazprom n Salavat	7.6	21.7
SIBUR-Khimprom	26.5	29.7
Angarsk Petrochemical	11.7	1.4
Azot Nevinnomyssk	2.4	3.9
Totals	48.2	56.7

The acrylate complex, managed by Acryl Salavat is one of the ten major sub-divisions of Gazprom neftekhim Salavat's investment programme, which are planned to be completed in the coming years. In December 2012, the company signed an EPC contract with Mitsubishi Heavy Industries, Ltd. (Japan), the Sojitz Corporation (Japan) and Renaissance Construction (Turkey) for the construction of the complex.

In the first ten months in 2017, Acryl Salavat produced 65,000 tons of products, mostly butyl acrylates. In July 2017 the complex was stopped for its first scheduled repair to eliminate problems and make changes in the technological process after the tests.

SIBUR, DOTP project

SIBUR Holding has started construction of a new production unit of plasticizer dioctyl terephthalate (DOTP) at the SIBUR-Khimprom site (Perm). The cost of the investment project is estimated at about 6.95 billion roubles (excluding VAT). Production capacity of the new plant is being designed to produce 100,000 tpa, with the launch scheduled for the second quarter of 2019. The licensor selected was the Korean company Aekyung Petrochemical, and the general designer selected is NIPIgazpererabotka (Krasnodar).

In 2017 the Ministry of Industry and Trade of the Russian Federation and SIBUR-Khimprom signed a special contract, which will operate for a period of eight years. This means that SIBUR will be completely exempted from the property tax and will be able to take advantage of the profit tax rate reduced from 16.5% to 13.5%.

Other products

Russian Organic Chemical Exports (unit-kilo tons)

Product	*Jan-Oct 17*	*Jan-Oct 16*
N-Butanol	14.0	60.2
Isobutanol	15.0	22.2
2-EH	17.6	29.8
Pentaerythritol	9.0	6.9
Phenol	3.5	7.3
Ethylene Oxide	12.9	13.7
Formaldehyde	18.1	24.6
Acetone	17.5	41.6
Acetic Acid	40.6	48.7
VAM	33.4	20.4
Butyl Acetate	31.4	22.1
Butyl Acrylate	30.0	25.9
Phthalic Anhydride	21.0	8.4

Russian Chemical Commodity Exports

	Jan-Oct 17	*Jan-Oct 17*	*Jan-Oct 16*	*Jan-Oct 16*
Product	Kilo tons	USD Mil	Kilo tons	USD Mil
Ammonia	2,745	583	3,129	744
Methanol	1,314	358	1,220	203
Nitrogen Fertilisers	10,380	1,864	10,361	1,789
Potash	8,221	1,554	7,532	1,527
Mixed Fertilisers	8,535	2,238	7,577	2,193
Synthetic Rubber	843	1,484	808	1,039

MDI/TDI Imports for Eurasian Customs (unit-kilo tons)

Product	*Jan-Oct 17*	*Jan-Oct 16*
MDI	111.9	111.1
TDI	34.8	35.4

Ukrainian methanol, Jan-Oct 2017

Purchases of imported methanol by Ukrainian consumers in October increased by 40% compared to September up to 2,400 tons (against 1,700 tons. Grodno Azot increased its shipments to Ukrainian consumers almost twice in October to 1,000 tons whilst Russian suppliers provided 1,400 tons. The total volume of imports of the Russian product to Ukraine was distributed between Shchekinoazot and Tomet, which resumed the supply of products to Ukraine. Metafrax stopped supplying commodity methanol to Ukraine in October.

Ukrainian trading companies resumed purchases of imported methanol in October and purchased 630 tons (26% of total imports into the country). Leadership in terms of purchases fell on domestic producers of formaldehyde and its derivatives, KarpatSmol which bought 1,400 tons in October. Gas companies purchased about 305 tons of methanol (13%), reducing purchases by 56%.

Calcium hydroxide Novocheboksarsk

Khimprom at Novocheboksarsk is progressing on its project to launch the production of calcium hydroxide (hydrated lime), consisting of a capacity of 40,000 tpa, which is to be launched in 2018. The developer of the basic project and equipment supplier is the Italian company Cimprogetti. Calcium hydroxide is used primarily in the production of building materials: concrete, plaster mixes, etc. Slaked lime is also used in agriculture.

TechnoNikol-Khabarovsk & Alabuga

By the end of 2018, TechnoNikol plans to open a factory for the production of drainage systems and an enterprise for recycling waste into secondary polystyrene in the Khabarovsk TOR. TechnoNikol wants to develop the recycling of polymers, including expanded polystyrene. The company's interest in using secondary polymer is explained by a fivefold difference in the cost of primary and secondary raw materials.

TechnoNikol is also targeting the construction of a unit for the production of mounting foams, to be located in the Alabuga Special Economic Zone in Tatarstan. Investments in the project will amount to about 600 million roubles. The first plant was commissioned in 2016 in Ryazan. According to current estimates, the share of imports in the Russian market for installation foams is about 60% and the new plant is intended to reduce this share.

Vyazemsky Synthetic Products Plant

Vyazemsky Synthetic Products Plant in the Smolensk region is modernising the production of esters of natural fatty acids and other oleochemical products. Part of the funds for the project in the form of a soft loan is ready to provide the Industrial Development Fund (FRP). The project provides for the production in Vyazma of 1,800 tpa of esters and other oleochemical products (surfactants, special waxes). Vyazemsky Synthetic Products Plant produces 2-ethylhexyl stearate, glyceryl cocoate, glyceryl stearate citrate, glyceryl stearate PEG -100 stearate, sorbitan stearate, pentaerythrityl distearate.

Ukraine

Karpatneftekhim capacity close to full utilisation

Karpatneftekhim ran at 90% of capacity in November 2017 across the entire range of products, based mostly on naphtha. In 2018 Karpatneftekhim

plans to start production of methyl tert-butyl ether (MTBE). In the first ten months Karpatneftekhim used 222,000 tons of feedstocks.

In August 2017, Karpatneftekhim from Kalush increased the volume of exports of propylene to 5,460 tons which is 36% more than in July. The increase in supplies is due to the increased capacity utilization at Karpatneftekhim. In the first two months of production, Karpatneftekhim exported 9,480 tons of propylene all of which was delivered to Polish company Grupa Azoty ZAK at Kedzierzyn. Karpatneftekhim has also started exporting C4s, shipping 3,100 tons to Nizhnekamskneftekhim in August.

Ukrainian imports of phthalic anhydride/DOP, Jan-Oct 2017

Ukraine imported 481 tons of DOP in October against 347 tons in September. Deza accounted for 42% of imports in October, followed by Boryszew with 35%, Teknor Apex (US) with 10% and Aekyung 9%. In the first ten months in 2017, the import of DOP into Ukraine amounted to 3,440 tons.

Ukrainian benzene exports, Jan-Oct 2017

Ukrainian benzene exports amounted to 3,000 tons in October, all of which was shipped from Karpatneftekhim. The entire volume of domestic monomer was shipped to Latvia. In the first ten months in 2017 Ukrainian benzene exports totalled 29,200 tons which was 20% up on the same period in 2016.

Belarussian Acrylonitrile Exports (unit-kilo tons)

Product	*Jan-Oct 17*	*Jan-Oct 16*
Russia	1.7	2.3
Hungary	2.7	4.0
India	2.0	0.0
Iran	3.4	0.4
Netherlands	12.7	4.0
Romania	0.1	0.3
Turkey	17.1	16.1
UAE	0.3	0.0
Portugal	1.6	0.0
Total	41.4	27.1

Belarussian Organic Chemical Exports (unit-kilo tons)

Product	*Jan-Oct 17*	*Jan-Oct 16*
Acrylonitrile	41.4	26.9
Caprolactam	7.4	6.5
Phthalic anhydride	20.0	17.0
Methanol	17.4	24.4

Belarus

Belarussian chemical production, Jan-Oct 2017

Naftan increased benzene production by 17% in October to 7,850 tons. Caprolactam production at Grodno Azot increased by 4%, to 9,360 tons. In addition, 6,860 tons of ethylene and 4,240 tons of propylene were produced in Belarus in October 5% and 9% more than in September, respectively. In the first ten months in 2017 Belarusian plants produced 65,000 tons of propylene, 97,700 tons of benzene, 90,200 tons of ethylene and 92,700 tons of caprolactam.

In the first ten months Polimir produced 50,800 tons of LDPE which is 38% less than in 2016. The main reason for such a significant reduction in output was the fire that took place at the end of June 2016 at one of the ethylene plants, which led to a two-fold reduction in olefin production. Polymir by the first of October stopped a part of the facilities for preventive maintenance, the simple capacity lasted about a month.

Belarussian organic chemical trade, Jan-Oct 2017

Belarussian acrylonitrile exports totalled 41,100 tons in the first ten months in 2017 against 27,100 tons in the same period in 2016. The two largest destinations for Belarussian exports were the Netherlands and Turkey. In other areas of chemical trade, methanol shipments fell to 4,400 tons in January to July 2017 from 21,000 tons in the same period in 2016. This is due to major market changes which has transformed Belarus from a net exporter of methanol to net importer.

Belarussian Methanol Market (unit-kilo tons)

	Jan-Oct 17	*Jan-Oct 16*
Production	69.3	56.3
Exports	17.4	27.2
Imports	36.6	13.4
Balance	88.5	42.5

Caprolactam exports have fallen in the past two years due to increased domestic processing, whilst phthalic anhydride shipments from Belarus rose to 20,000 tons in January to October 2017 against 17,000 tons in the same period in 2016.

Imports of PTA in the first ten months totalled 60,600 tons in 2017 against 45,400 tons in the same period in 2016. The main supplier of PTA to Belarus in January to October 2017 was South Korea with 28,500 tons against 21,100 tons in the same period last year. Average prices rose in 2017 to $757 per ton against $690 in 2016. MEG imports into Belarus amounted to 62,000 tons in the first ten months in 2017, of which Russia supplied almost all, against a total of 53,300 tons in January to October 2016.

Belarussian Polymer Imports (unit-kilo tons)		
Product	Jan-Oct 17	Jan-Oct 16
PVC	28.5	24.3
Polypropylene	80.8	79.2
LDPE	33.8	15.1
LLDPE	29.8	32.4
HDPE	41.5	37.4
Polystyrene	52.8	56.5

Belarusian polymer imports, Jan-Oct 2017

In January-October 2017, Belarussian PVC imports increased by 38% and amounted to 28,500 tons. The key suppliers of resin were producers from Russia. In January-October 2017, their share in the Belarusian market comprised about 85%. The second place in the volume of supplies is occupied by manufacturers from Germany with a share of about 12%.

Polypropylene imports into Belarus increased to 80,800 tons in the first ten months in 2017 against 79,200 tons in the same period in 2016.

Mogilevkhimvolokno-first phase of invetsment strategy

Mogilevkhimvolokno has begun to implement the first phase of the investment project which will allow the company to produce up to 50,000 tpa of polyester products from PTA. The company plans to complete the reconstruction by 2020, and will complete the first stage of modernisation in June 2018. The first stage of the project includes the organisation of production of PET pellets for technical purposes and the launch of a new polyester fibre production by direct moulding with a capacity of 50,000 tpa based on the existing continuous polycondensation plant. The total cost of the project will be about €47 million.

Belarussian PTA Imports (kilo tons)		
Country	***Jan-Oct 17***	***Jan-Oct 16***
Belgium	6.052	0
Poland	16.3	20.1
Russia	5.7	2.2
South Korea	28.5	21.1
Portugal	0.0	1.0
Thailand	0.0	1.1
Turkey	1.0	0.0
Others	2.978	0
Total	60.6	45.4

During the modernisation of production for a while, the production of bottled PET will be stopped. From July 2018, the company plans to resume the production of food PET. The second stage of the project is planned for 2018-2020, its implementation will be carried out in parts. The first stage includes the construction of a solid phase pre-polycondensation plant with a capacity of 30,000 tpa and the organization of production of technical polyester yarns of various types with a total capacity of 16,500 tpa.

The second part includes the modernisation of the existing PET production with its transfer to the use of PTA instead of DMT, followed by the production of polyester fibres (including bicomponent fibres) and non-woven materials. The total cost of the second stage of production is estimated at €85 million. Mogilevkhimvolokno possesses capacities for DMT at 138,250 tpa, 105,000 tpa of textile PET and 80,000 tpa of food grade PET. The capacity to produce polyester fibres is currently rated at 67,000 tpa.

Central Asia/Caucasus

SOCAR-urea plant to start in 2018

SOCAR's expects to achieve an operating profit from its urea plant will be up to $150 million. This $750 million project will start production in the first half of 2018, and profits from export of the plant's products are expected to be at the level of $140-150 million per annum. After reaching the designed capacity, the company will be able to produce 650-660,000 tpa. A quarter of production is planned for sale on the domestic market. The remaining volumes will be exported, to Turkey, Georgia and the markets of the Black Sea and Mediterranean regions.

SOCAR Methanol 2017

SOCAR Methanol plans to double the supply of methanol to the domestic Azerbaijan market in the next two to three years. Currently around 5% of the plant's products are supplied to the domestic market. In 2017 the plant produced around 265,000 tons of methanol, 6% up on plan, yielding $35 million. The strategic goal of the company is to double the volume of supplies to the domestic market. The terminal is actively used in the transhipment of our products for export, the terminal is capable of handling 60,000 tpa of methanol. The capacity of the plant is 650-700,000 tpa.

SOCAR Gas Processing & Petrochemicals

SOCAR's gas processing and petrochemical complex SOCAR GPC is scheduled to be launched in 2022. The project involves the construction of a gas processing plant with a capacity of 10 billion cubic metres per

Navoiazot PVC & methanol projects

The construction of PVC and caustic soda production at Navoi in Uzbekistan is reported to be close to completion. The contractor of the project is the consortium of Chinese companies China CAMC Engineering and HQC Shanghai, and the main source of financing was a preferential purchasing loan issued by the Export-Import Bank of China. The project with a total cost of $439.8 million is realized on an area of 33 hectares and is designed for 36 months. After commissioning, the complex will produce 100,000 tpa of PVC, 75,000 tpa of caustic soda and 295,400 tpa of methanol.

annum and a polymer plant that will consist of a pyrolysis plant and a polyethylene plant with a capacity of 600,000 tpa and propylene plant with 130,000 tpa.

The Dutch ING Bank, the State Development Bank of China and the Russian Gazprombank act as financial consultants to SOCAR GPC. On 19 June 2015 SOCAR and Gazprombank signed an agreement on financing the construction of plants for the production of polypropylene and HDPE under SOCAR Polymer. Gazprombank's investment committee approved a loan for SOCAR Polymer in the amount of $489 million for a period of ten years.

Kazakh Polymer Imports (unit-kilo tons)

Product	*Jan-Oct 17*	*Jan-Oct 16*
HDPE	76.4	60.1
LDPE	18.0	14.2
LLDPE	5.6	4.2
PVC	41.7	47.9
PET	52.0	51.5
Polypropylene	27.0	25.2

Kazakh polymer imports, Jan-Oct 2017

In January-October, imports of PVC to Kazakhstan decreased by 6% to 45,500 tons against 48,400 tons in 2016. China supplied around 91% of shipments in the first ten months in 2017. Polyethylene imports rose 25% to 100,000 tons against 79,900 tons. HDPE imports rose 28% to 76,400 tons, LDPE rose 13% to 18,000 tons whilst LLDPE rose from 4,300 tons to 5,600 tons.

Imports of polypropylene into Kazakhstan amounted to 27,200 tons in first ten months of 2017, up 26% over 2016. The main increase in demand occurred for propylene copolymers. Polypropylene exports from Kazakhstan totalled 18,500 tons in the first ten months of 2017 against 14,700 tons in the same period in 2016.

Kazakh gas-chemical complex construction starts

Construction of the first integrated gas chemical complex in Kazakhstan has started in the Atyrau region. The project is located at Karabatan which is a few kilometres from the facility for preparing oil from the offshore field Kashagan. However, only polypropylene capacity is being constructed at present and polyethylene will be started at a later stage. At this phase, it is planned to build an enterprise designed to produce 500,000 tpa of polypropylene which start operations in May 2021, reaching full capacity by 2023.

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 = 22.9 €1 = 24.9: Rus rouble. $1 = 65.2 €1= 73.70

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