

CIREC

MONTHLY NEWS

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

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

Issue 308, 11 July 2016

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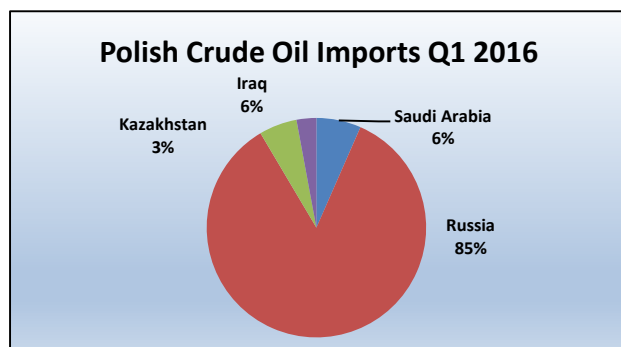
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CENTRAL & SOUTH EAST EUROPE

Petrochemicals

Central European oil imports

PKN Orlen has reached agreement with Rosneft to increase crude oil supplies to Unipetrol from July this year to around 5 million tpa for a period of three years. The revision of the 2013-dated supply deal, previously having foreseen deliveries of only 2.9 million tpa, indicates that Rosneft is to become the dominant supplier until mid-2019. Unipetrol operates two refineries at Litvinov and Kralupy with a combined capacity of 8.7 million tpa. In the first quarter this year, Unipetrol's refineries ran at 66% of capacity, processing 1.43 million tpa of crude oil.



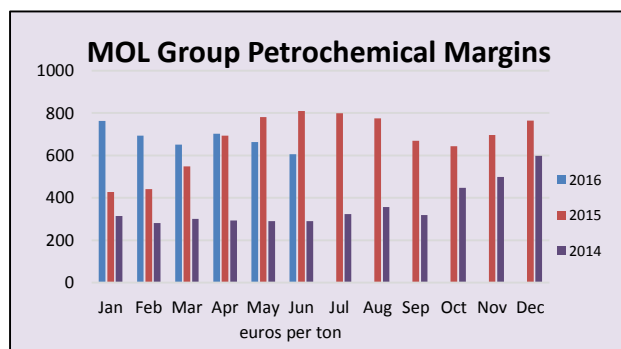
For Poland, Russian oil companies provided 85% of imports in the first quarter this year. Efforts to establish other sources have only thus far proved marginally successful, but may increase in future.

PKN Orlen has reached agreement with Saudi Aramco to supply 200,000 tons per month from May 2016 until the end of the year which could be extended. PKN Orlen had said that some volumes were earmarked for the Czech Republic, besides refineries in Poland and Lithuania.

Grupa Lotos has recently bought a cargo of 2 million barrels of medium sour Iranian crude in a test shipment which may be followed by more purchases. Lotos stated that its agreement to buy the cargo from Iran's state-owned NIOC is a one-off, but could be considered as a basis for further deals. In the first quarter of 2016, Urals crude accounted for 75% of the crude refined in Gdansk, while seaborne imports of other grades represented nearly 20%.

Central European refining & petrochemical margins

The model refining margin group for PKN Orlen rose in June to \$6 per barrel compared to \$5.8 in May and \$11 in June 2015. The petrochemical margin amounted to €979 per ton against €995 per ton. MOL's petrochemical margin dropped in June to €605 per ton against €662 per ton in May and €808 per ton in June 2015. The MOL integrated petrochemical margin is a variable margin indicating market price fluctuations predominantly between high and low density polyethylene as well as polypropylene over naphtha based upon the product yields of MOL Petrochemicals and Slovnaft Petrochemicals.



MOL Group's petrochemical business plays an important role in the company's integrated downstream value chain as 11% of the production of its refineries are destined for the two petrochemical plants in Hungary and Slovakia.

Whilst profits from petrochemicals have risen sharply in the past eighteen months, group production volumes have been in decline until the start-up of the butadiene plant at Tiszaujvaros.

Czech Petrochemical Imports (unit-kilo tons)		
Product	Jan-May 16	Jan-May 15
Ethylene	72.1	4.3
Propylene	72.6	9.8
Butadiene	24.3	8.9
Benzene	42.3	39.1
Ethylbenzene	28.2	0.0

Czech petrochemical imports

Czech imports of ethylbenzene totalled 28,200 tons in the first five months in 2016, necessary to cover the outage at Litvinov. Poland provided 18,375 tons of ethylbenzene in this period, Hungary 7,790 tons and Slovakia 2,005 tons. Poland was also the main supplier of benzene to the Czech Republic, in the first

five months shipping 37,594 tons of the total 42,300 tons imported. Benzene imports were up slightly over 2015 due to increased derivative demand.

The main effects of the Litvinov cracker outage have been felt in availability of olefin monomers and thus imports of ethylene and propylene have risen respectively to 72,100 tons and 72,600 tons for January to May from 4,300 tons and 9,800 tons in 2015. Germany supplied 40,118 tons of ethylene in the first five months in 2016, followed by Belgium with 22,450 tons and Poland 8,912 tons. Propylene imports from January to May this year were sourced from Germany (21,717 tons), the Netherlands (20,379 tons) and Serbia (14,351 tons).

Poland monomer imports, Q1 2016

Propylene imports into Poland totalled 41,724 tons in the first quarter this year, of which 28,341 tons were sourced from Russia and 9,974 tons from Germany. The only other significant supplier was Azerbaijan

Product	Exports	Imports
LDPE	24.3	117.0
HDPE	53.5	68.8
Other Polyethylene	0.2	2.0
Polypropylene	36.8	88.4
Propylene Copolymers	20.0	52.0
Polystyrene	8.3	19.3
PVC	24.2	38.7
PET	47.1	46.0

which delivered 2,610 tons in the first quarter this year. Butadiene imports totalled 19,146 tons in the first quarter, of which Hungary supplied 6,141 tons, the Netherlands 3,752 tons and Austria 3,154 tons.

Styrene imports into Poland amounted to 48,814 tons in the first quarter. The main supplier was the Netherlands with 38,456 tons, followed by Belgium which supplied 5,98 tons and Germany 3,581 tons.

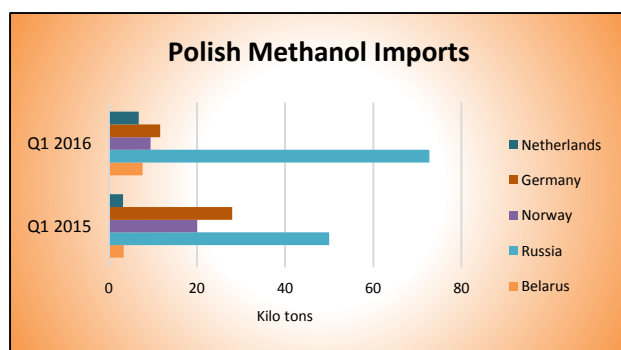
Polish polyolefin imports Q1 2016

Polish polyethylene imports totalled 188,000 tons in the first quarter this year against exports of 78,000

tons. Polypropylene imports totalled 88,400 tons against 36,800 tons. PET is the only commodity polymer where Poland exports more than it imports.

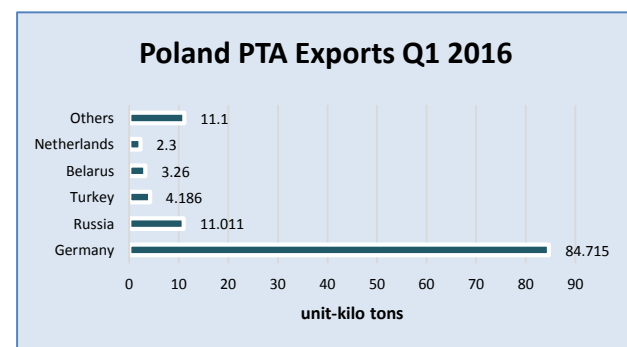
Central European chemical imports

Poland imported 19,240 tons of phenol in the first quarter this year of which 15,694 tons were supplied by Germany and 2,521 tons supplied by Finland. Czech phenol imports amounted to 1,606 tons in the



first quarter where Germany again was the main supplier. Russian phenol was not available for export in the first quarter the only source in April and May was from Ufaorgsintez.

In May, Russian phenol was shipped to Poland, the Czech Republic, Slovakia, Latvia and Ukraine. Polish consumers purchased 340 tons in May, Czech consumers 292 tons, Slovak consumers 280 tons and Latvian traders 108 tons. Another 60 tons was sent to Ukraine. The average price of exported Russian phenol in May continued to show an upward trend: by the end of the month it has increased relative to the level recorded in April, only 1% (or \$ 7) and amounted to \$750 per ton DAF border Russia.



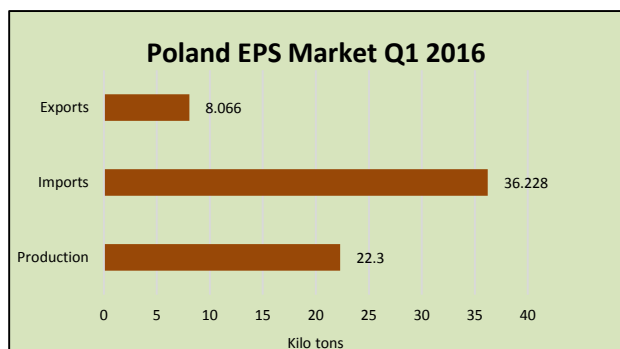
Poland-PTA exports Q1 2016

PTA exports from Poland totalled 115,600 tons in the first quarter this year at an average price of €571 per ton. The major consumer was Germany, accounting for 84,715 tons, and the next largest destination was Russia taking 11,011 tons. Exports comprised 69% of total

sales from PKN Orlen in the first quarter, which totalled 168,000 tons.

Synthos purchases styrenics business from Ineos

The acquisition by Synthos of EPS assets from Ineos represents a major development stage for the group regarding the EPS business. Synthos has agreed to purchase Ineos Styrenics from Ineos for around €80 million. Completion of the transaction is likely to occur in the second half of 2016, subject to customary regulatory approvals. Although Synthos produces EPS at Oswiecim, Poland is heavily dependent on imports for consumption.



In the first quarter Synthos produced 36,200 tons of EPS whilst imports into Poland comprised 22,300 and exports 8,100 tons. Trade both in and out of Poland for EPS is conducted with EU markets, particularly Germany and the Czech Republic. The aim of the acquisition will be to provide high quality expandable polystyrene (EPS) primarily for

insulation materials. Ineos Styrenics is the largest producer of EPS in Europe involving capacity of 310,000 tpa, or 20% of European production capacity.

The synthetic rubber division is the main sector for Synthos. Sales revenues have declined significantly in the past four years although the company has maintained relatively good operating profits. Rubber prices for Synthos fell in the first quarter this year, influenced by lower feedstock costs although these have risen in the second quarter. Due to the failure cracker in Litvinov Synthos is still temporarily forced C4 fraction to buy on the spot market, although this may start to change in the third quarter.

Synthos Oswiecim Rubber Exports Q1 2016

Type	Tons	euros per ton
SBR	50,858	1,029.5
Butadiene Rubber	2,946.4	1,174.8
Butyl Rubber	700.8	1,654.7
Halogenated BR	1,551.0	1,981.8
Latex	2,238.0	853.4

The main raw materials used by the group include butadiene, styrene, ethylbenzene, butyl acrylate, vinyl acetate monomer, ethylene, and benzene and C4 fractions. The Synthos Group has made strenuous efforts

to limit the effects of the accident in Litvinov in subsequent reporting periods by optimizing the supply of raw materials from alternative sources.

Unipetrol awards Talke contact to build logistics facility for polyethylene unit

Unipetrol has awarded Talke a contract worth Kc 700 million to construct a new logistics centre for the new polyethylene unit project (PE3). The contract involves engineering and construction of a logistics facility at Litvinov. Talke will take responsibility for the construction of a logistics facility to handle and package a volume of 270,000 tpa.

The project includes the construction of a battery of 40 storage silos with a total capacity of 16,000 tons. The pneumatic conveying system for the transfer of product from the production site to the storage silos as well as new offices, cloakrooms and social facilities for the new logistics terminal are subject to the contract.

Chemicals

Grupa Azoty product trade

Grupa Azoty exported 24,460 tons of 2-ethylhexanol (2-EH) in the first quarter this year at an average price of €718 per ton. The major destinations for 2-EH exports included France with 7,700, the Czech Republic with 3,764 tons, Germany 3,977 tons and Turkey 3,365 tons.

For caprolactam the two plants belonging to Grupa Azoty at Pulawy and Tarnow exported 18,114 tons in the first quarter this year at an average price of €569 per ton. The major destinations included China (7,000 tons), Thailand (4,000 tons), India and Belgium (both 2,000 tons). Grupa Azoty is in the process of expanding its polyamide facilities at Tarnow in order to increase caprolactam processing and to reduce dependency on export activity, particularly to China.



Melamine margins have been more favourable this year, which has increased profits from exports made by Grupa Azoty Pulawy. For the first quarter exports from the Pulawy plant totalled 15,729 tons all of which was delivered to European markets. The leading buyer was Germany taking 4,703 tons, followed by Austria taking 1,597 tons and Slovenia 1,176 tons.

Grupa Azoty ZAK & research consortium

Grupa Azoty ZAK has helped create Application Centre for OXO and Polymers, in order to develop and promote a model of effective cooperation between science and industry. Other members of the consortium include Ergis SA, SILEKOL, the University of Silesia, Opole University of Technology, Institute of Biopolymers and Chemical Fibres and the Institute of Heavy Organic Synthesis Blachownia.

Grupa Azoty investment challenges

Grupa Azoty is currently in the process of undertaking several major projects, including phosphate investments in Senegal, the propylene plant for the Police division, the polyamide project at Tarnow and the coal gasification projects at Pulawy and Kedzierzyn.

The propylene project is valued at a cost of zł 1.7 billion is the most expensive investment undertaken by Grupa Azoty. Regarding Senegal, Azoty Police holds a license through African Investment Group for access to ilmenite deposits at sands Sud Saint Louis and allowing for the extraction of calcium phosphate deposits in the region of Lam Lam and Kebemer.

Azoty-PKP Cargo logistics

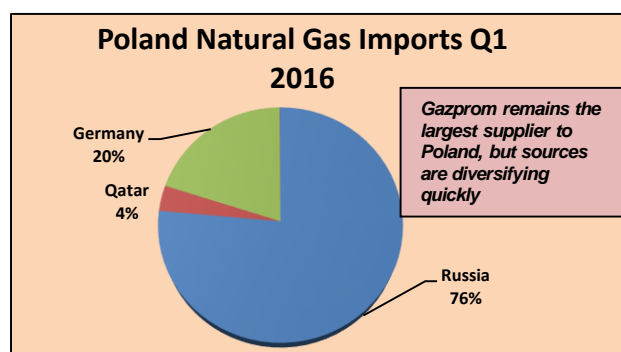
Grupa Azoty and PKP Cargo signed a two-year contract for the carriage of more than 4 million tons of fertilizer products and chemicals and raw materials. The estimated total value of the contract amounts to nearly zł 200 million.

Under the new contract, PKP Cargo will provide comprehensive transport services to Grupa Azoty for both external and internal deliveries. In the past 12 months PKP Cargo transported to the Grupa Azoty 3.5 million tons of products. This involved running an average of nearly 10 trains a day. The new contract should cover around 60% of Azoty's transport requirements.

In the energy sector Grupa Azoty is in the process of building power plants at Kedzierzyn and Pulawy, using coal as the feedstock rather than gas. For Pulawy gas has until now been assumed to be the feedstock for the new power block, but now coal is being reviewed by Grupa Azoty as a possible alternative. This may be partly due to Poland's general strategy of trying to reduce dependency on gas imports from Russia, partly due to the abundance of domestic coal and partly to the availability of improved technology.

Previously Azoty Kedzierzyn analysed the possibility of building a plant for coal gasification in the period 2008-2009, long before the consolidation of the Polish chemical industry and the entry of ZAK into Grupa Azoty. The project was based on coal to produce electricity (309 MW), steam (137 MW) and methanol (550,000 tpa) and limit CO₂ emissions to almost zero.

More than a quarter of CO₂ emitted (960,000 tons) was to be used just for methanol production, but this project did not progress due to the lack of finance.



Grupa Azoty raw material sources

In late June gas deliveries from Gazprom to Poland were reduced by 20% for a period of 16 hours although the effects were minimal. The incident was used by the Polish government to question the reliability of Gazprom as a long term supplier and justify the decision of PGNiG not to

Polish Chemical Production (unit-kilo tons)		
Product	Jan-May 16	Jan-May 15
Caustic Soda Liquid	115.7	126.7
Caustic Soda Solid	54.4	21.1
Soda Ash	515.7	428.9
Ethylene	229.3	231.4
Propylene	167.1	166.3
Butadiene	27.5	24.2
Toluene	6.5	4.1
Phenol	15.1	16.6
Caprolactam	70.3	72.6
Acetic Acid	3.2	4.1
Polyethylene	162.1	164.6
Polystyrene	22.7	19.2
EPS	38.6	28.7
PVC	117.3	136.3
Polypropylene	113.6	108.9
Synthetic Rubber	91.0	80.7
Ammonia (Gaseous)	1211.0	615.0
Ammonia (Liquid)	39.8	626.0
Pesticides	10.9	13.9
Nitric Acid	847.2	1043.0
Nitrogen Fertilisers	887.1	888.0
Phosphate Fertilisers	213.2	191.0
Potassium Fertilisers	174.4	143.6

renew the long term contract which expires in 2022. Grupa Azoty purchased 59.9% of its supplies from PGNiG in 2015, equating to 1.23 billion cubic metres, and the remaining 40.1% from other sources. For electricity Grupa Azoty purchases electricity from major Polish suppliers, i.e. PGE S.A., TAURON Polska Energia S.A. and ENEA S.A. Coal is also bought mainly on the domestic market.

Regarding propylene, the bulk of Azoty's purchases of propylene are made under annual contracts, with supplementary purchases made on the spot market. Phosphate rock is purchased under periodic or spot contracts, chiefly from North African producers, given the material's abundance in the region, as well as the well-developed local sea logistics infrastructure. The group is diversifying its procurement strategy, relying strongly on its own deposits in Senegal.

The buying strategy for phenol is based primarily on supplies from the domestic and the EU markets, supplemented with deliveries from outside Europe. Benzene is mainly supplied under annual contracts, with supplementary purchases made on the spot market (as part of the procurement strategy pursued jointly by the Parent and Grupa Azoty. Benzene is sourced chiefly from domestic and CEE suppliers. Grupa Azoty Group is the largest benzene consumer in Poland.

Poland-Polyol Exports (unit-kilo tons)		
Country	2015	2014
Belarus	1.9	1.3
Belgium	2.1	2.2
Czech	4.4	3.1
Estonia	2.5	3.4
France	1.8	1.5
Germany	11.5	10.7
Hungary	2.7	2.1
Italy	6.5	4.4
Lithuania	1.8	1.3
Netherlands	1.5	2.3
Portugal	1.2	1.4
Romania	2.0	1.3
Russia	3.9	4.7
Spain	1.8	1.9
Sweden	1.2	1.2
Turkey	2.4	1.9
Ukraine	1.1	1.5
Others	7.6	6.1
Total	57.8	52.2

PCC Exol Q1 2016

PCC Exol recorded a net profit of zł 5.18 million in the first quarter against zł 3.13 million in the same period last year. The operating profit amounted to zł 9.29 million against zł 7.95 million, whilst consolidated sales revenues rose slightly to zł 132.98 million from zł 131.55 million. PCC Exol has issued bonds in order to raise finance to support investment.

PCC Exol is the largest producer of surfactants in Poland and in Central and East Europe, and is the only manufacturer of anionic and non-ionic in Poland. In the first quarter exports of polyols totalled 14,638 tons, most of which was distributed in the European market. In 2015 exports of polyols totalled 57,800 tons against 52,200 tons in 2014. Germany was the largest consumer, followed by Italy, the Czech Republic and Russia.

Oltchim expects profits for 2016

Oltchim, which has been insolvent since 2013, expects to achieve a net profit of €110 million after taxes for 2016. This will represent the company's first time in the past decade where it has recorded a profit. Oltchim forecasts a €168 million turnover for 2016, up 0.5% on 2015 and an EBITDA operational profit of €12.2 million (which would be up 27%).

Last year, Oltchim posted its most successful EBITDA since 2008, totalling €9.5 million. Revenues rose 18% over 2014 to €167 million. For 2016 the company expects to increase capacity utilisation to 35% (from 30%) and to start production on a new plasticizer used in PVC processing. Oltchim has seen a rise this year in the sale of oxo alcohols and polyols.

RUSSIA

Russian Chemical Production (unit-kilo tons)

Product	Jan-May 16	Jan-May 15
Caustic Soda	451.6	475.1
Soda Ash	1,142.7	1,281.0
Ethylene	1,161.2	1,168.0
Propylene	912.1	873.0
Benzene	503.3	517.8
Xylenes	242.1	238.4
Styrene	305.4	293.1
Phenol	102.2	102.2
Ammonia	6,700.0	6,100.0
Nitrogen Fertilisers	4,092.0	3,546.0
Phosphate Fertilisers	1,491.0	1,377.0
Potash Fertilisers	3,065.0	3,239.0
Plastics in Bulk	3,279.0	3,004.0
Polyethylene	967.0	741.0
Polystyrene	229.8	221.8
PVC	325.0	370.1
Polypropylene	602.9	563.4
Polyamide	64.0	57.0
Synthetic Rubber	600.7	672.0
Synthetic Fibres	62.5	52.4

Russian chemical production, Jan-May 2016

Russian chemical production increased 3.7% in the first five months in 2016 over the same period in 2015. Some products have recorded falls which has been due to a large part to the extended outages at Angarsk and Sayansk, but overall the production of bulk plastics has risen. The cracker at Angarsk was restarted at the beginning of July thus enabling the restart of derivative units and the PVC plant at Sayanskkhimplast.

Domestic demand for chemical products this year has been rather similar to 2015 in terms of volume. On the plus side, if consumption is falling the declines are marginal but at the same time showing no signs of upward movement. Imports of chemical products are slightly down on 2015, whilst export activity continues to be a profitable source of revenue for some producers due to the benefits of currency exchange.

Russian petrochemical projects

ZapSibNeftekhim project update, July 2016

ZapSibNeftekhim has begun the process of receiving large-scale equipment for the ZapSib-2 project. Shipment of the first batch of equipment for the construction of the olefin cracker started in the South Korean port of Ulsan. From South Korea to the Tobolsk

will be delivered a total of five columns, two of which are for the separation of propane fractions. The length of each column is 106 metres, and the diameter 6.8 metres, weight 917 tons. The equipment will be transported by ship using the Northern Sea Route, initially using the Indian Ocean and the Suez Canal. Delivery to Tobolsk will be made through the Northern Sea Route, using barge heavyweights for further delivery to the industrial port on the rivers Ob and Irtysh.

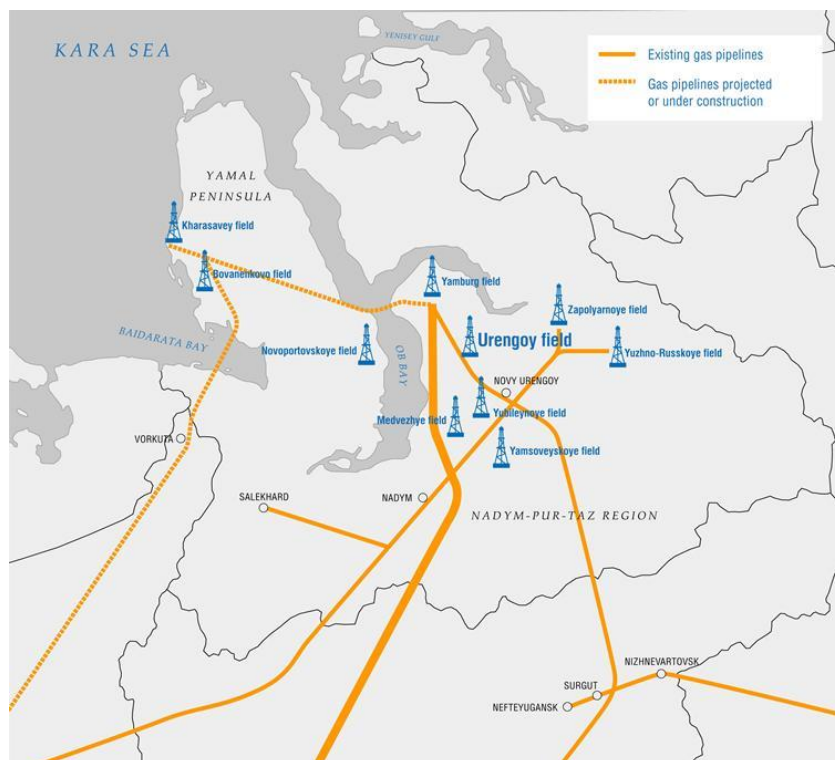
For the whole of 2016 four large-scale delivery shipments are planned, including 58 units of large equipment from South Korea, China, Japan, Italy and Germany, comprising a total of 60,000 tons of freight. In order to take the transportation of oversized cargo at Tobolsk a special infrastructure has been developed including a reconstructed industrial port, constructed bypass roads, etc.



SIBUR mounted its first flare for the ZapSib-2 project at the end of June for natural gas liquids. The flare was provided by domestic company Kosmos-Neft-Gas located at Voronezh. A second flare unit was scheduled to arrive at the end of June 2016.

Yamal-Volzhskiy gas liquid pipeline

Tatarstan and Bashkortostan are considering cooperation for the development of the regional petrochemical industry where the two separate regions might be able to avoid duplicating each other's goals. Currently, the share of the petrochemical complex in the Republic of Tatarstan's industrial production accounts for 57% and in the Republic of Bashkortostan's industrial production 40%. In the first quarter this year 59% of Russian ethylene production originated from the crackers located in Tatarstan and Bashkortostan, including Kazan, Nizhnekamsk, Salavat and Ufa.



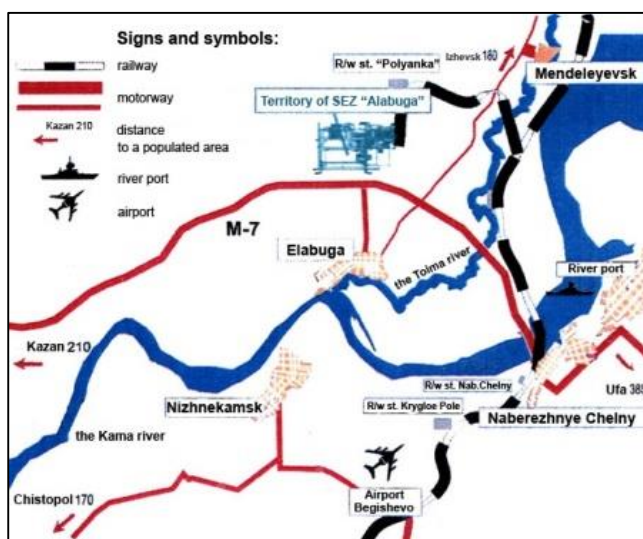
The main long term challenge to both Tatarstan and Bashkortostan, which both possess their own parliaments whilst remaining part of the Russian Federation, is the question of feedstock supply. The project to reconstruct and revive the Yamal-Volga gas liquid pipeline involves the creation of facilities for the extraction of ethane content gas from the Achimov deposits in the Nadym-Pur-Taz region. The pipeline capacity of 5.5 million tpa of light hydrocarbon operated until 1989 following a major accident near Ufa involving more than 500 fatalities. Tatarstan and Bashkortostan are keen to revive the pipeline through a complete overhaul and upgrade in order to meet current day standards.

The consortium members have thus far not been able to solve the financing of the project. The cost of the project at the time of the formation of a consortium of investors Yamal-Volga in 2012 ranged from 80 to 120 billion roubles. In May 2015 the Ministry of Energy estimated that the project cost had risen to 427.3 billion roubles and then again in January 2016 up to 500 billion roubles. A feasibility plan for the pipeline project is scheduled for completion in the fourth quarter this year.

Petrochemical projects Tatarstan

A new idea for Tatarstan has emerged where a special economic zone (SEZ) is to be established focused solely on petrochemicals. This SEZ is to be called Alabuga-2, following the first special economic zone at Alabuga in Tatarstan which houses residents from a wide range of different industrial sectors.

Alabuga-2 is to be established near Nizhnekamsk taking advantage of the existing infrastructure. Alabuga SEZ is the largest special economic zone of industrial type in the Russian Federation, which was founded in 2005 in Tatarstan in the Elabuga district. Its area comprises 40 square kilometres. It employs 48 residents in the SEZ creating 5,500 jobs. A total of 22 plants have already started industrial production.



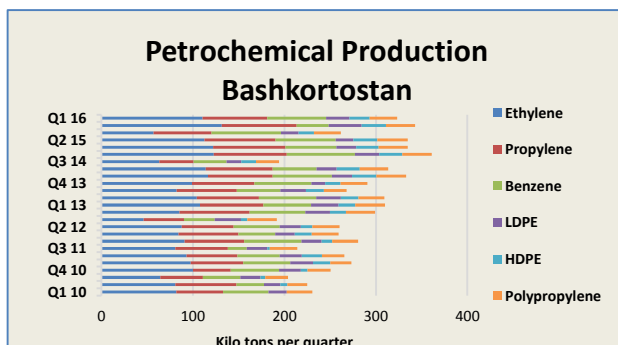
Tatneft may contribute financial support to Nizhnekamskneftekhim for the new ethylene plans, in addition to its feedstock requirements in supplying the new unit of 600,000 tpa. The first phase of the new ethylene complex under planning by Nizhnekamskneftekhim is targeted for 2020, and the second stage with the same capacity by 2025.

The first stage includes plans to produce 300,000 tpa of polyethylene, 180,000 tpa of polypropylene, 200,000 tpa of polystyrene, 163,000 tpa of

propylene derivatives and 110,000 tpa of ethylene derivatives.

Petrochemical projects Bashkortostan

Plans for Bashkortostan have been forced to be revised in the past two years due in part to the collapsed project investments for United Petrochemical Company and the state of the economy which has generally deterred investments. Gazprom neftekhim Salavat cancelled its plans for a million tpa cracker but has nevertheless increased capacity of its EP-300 from 300,000 tpa to 340,000 tpa. The latest project in the company has involved completion of the modernisation of the reactor for block acetylene hydrogenation in ethane-ethylene fraction. Gazprom neftekhim Salavat is the first Russian petrochemical producer to build its own pipeline, which comprises around 4 km, to supply steam to the cracker.



Bashneft has approved a loan of 8 billion roubles (\$125 million) to subsidiary Ufaorgsintez for project support. The company is currently assessing options for ethylene expansion. Bashneft

increased production of petrochemicals increased by 3.7 times in 2015 from 229,000 tons in 2014 to 851,000 tons. This significant rise in volume of petrochemical production was attributable to Bashneft's acquisition of AFK Sistem which previously held ownership of Ufaorgsintez, in addition to other assets in Bashkortostan.

Last year Ufaorgsintez produced 130,600 tons of polypropylene and 100,100 tons of LDPE, which will be reduced in 2016 to 124,900 tons and 96,000 tons respectively. Phenol and acetone production are planned at 70,600 tons and 44,000 tons respectively against 76,900 tons and 48,200 tons in 2015. Production of ethylene-propylene rubber (EPDM) could reach 2,400 tons which would be 17% less than last year. In 2015 Ufaorgsintez sold around 66% of its production in the domestic market.

Product	Jan-Mar 16	Jan-Mar 15
Benzene	42.1	36.8
Styrene	50.5	43.8
PTA	68.2	67.7
Propylene	225.5	205.3
Ethylene Oxide	77.1	71.1
Butadiene	66.6	57.8
Isoprene	17.5	18.9
Isobutylene	46.4	39.2
Ethylene	182.5	161.6
Other Intermediates	355.7	310.1
Other Chemicals	234.4	199.9
Purchases from 3rd parties	0.0	1.1
Total	4743.3	4243.5

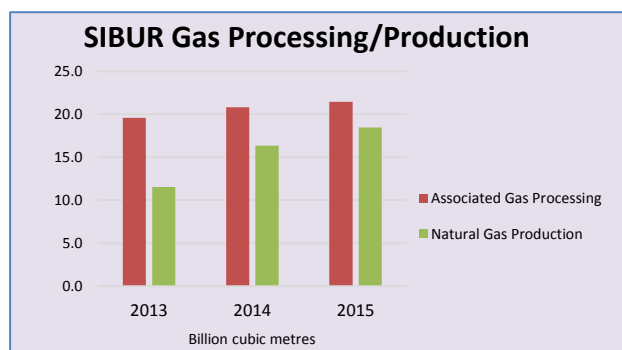
SIBUR Q1 2016

In the first quarter of 2016, SIBUR's revenue from sales of petrochemical products increased by 15.7% to 48.607 billion roubles based on strong performance across all product groups. The growth was primarily attributable to higher sales of basic polymers, whilst growth in revenues from sales of plastics and organic synthesis products was largely attributable to higher BOPP-film sales. The increase in revenues from synthetic rubber was largely a result of completed homologation of thermoplastic elastomers with key clients. Russian rouble depreciation helped significantly to support petrochemical product sales.

SIBUR's division for plastics and organic chemicals increased by 9.1% to 15,890 billion roubles in the first quarter, primarily driven by higher BOPP-film sales volumes on increased production volumes. Bulk polymer revenues rose 28.9% due primarily to higher sales of polypropylene which was facilitated by

increased capacity utilisation at Tobolsk. The rise in revenues was also attributable to higher average selling prices for polypropylene and LDPE due to the Russian rouble depreciation and favourable market environment on the domestic market.

Revenues from synthetic rubber sales rose 3.4% to 9.606 billion roubles in the first quarter, mainly due to completed homologation with key clients for thermoplastic elastomers. Revenues from intermediates and other chemicals rose 23.7% to 7.479 billion roubles as a result of higher revenue from sales of styrene, ethylene and benzene. In the first quarter of 2016, other revenue increased by 77.0% to 5.704 billion roubles, which was primarily attributable to the revenue from NIPIGAZ services as a contractor within Gazprom's Amur GPP project and sales of power following the acquisition of Tobolsk Heating and Power Plant in February 2016.



SIBUR's feedstock base

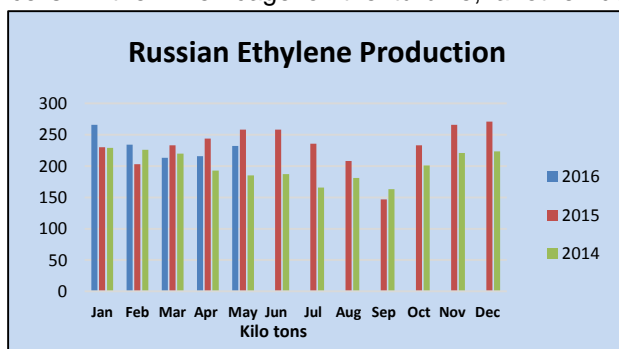
SIBUR purchases associated gas and NGLs from major oil and gas companies in West Siberia, including Rosneft, Gazprom Neft, RussNefte, Lukoil, Novatek and Gazprom, primarily under long-term contracts. In 2014, SIBUR expanded its access to crude NGL sources in West Siberia through commissioning of a crude NGL pipeline connecting Novatek's Purovsky Gas Condensate Plant to the expanded gas fractionation complex at Tobolsk. In March 2014, SIBUR acquired from Rosneft a 49% interest in Yugragazpererabotka giving it 100% ownership and involving new contracts to 2032 for associated gas supplies from Rosneft's fields.

ownership and involving new contracts to 2032 for associated gas supplies from Rosneft's fields.

Russian petrochemical producers & markets

Angarsk Polymer Plant restarts

Angarsk Polymer Plant restarted olefin production at the start of July after almost five months of maintenance and repairs following the accident and forced outage on 8 February. Repairs were carried out by Siemens based at Brno (Czech Republic). In addition to the previously announced damaged cells in the inner cage of the turbine, another defect was discovered by Siemens extending the downtime by at least a month.



In order to minimize downtime, it was decided to combine the annual maintenance shutdown with the repair process so it will mean uninterrupted production for the rest of 2016. Angarsk Polymer Plant was taken over by Rosneft in 2007 after acquiring the assets from YUKOS. In 2015 the company processed 660,000 tons of raw materials and produced 441,000 tons of petrochemical products.

Russian ethylene production was down marginally for the first five months in 2016 due to the outage at Angarsk, but was compensated by the restart of the Stavrolen cracker. In the period January to May 2016 Russian ethylene production totalled 1.161 million tons against 1.168 million tons in 2015.

Nizhnekamskneftekhim alpha olefin expansion

After modernisation Nizhnekamskneftekhim expects to start production of alpha-olefins in the third quarter. Linde has been responsible for upgrading the plant, raising capacity to 37,500 tpa. The aim of the reconstruction was the introduction of the technology a-Sablin, which is co-owned Linde and SABIC. This technology, with a primary output C4-C6 fraction, is highly economical and highly flexible in terms of the possibility of a reaction to produce light and heavy hydrocarbons.

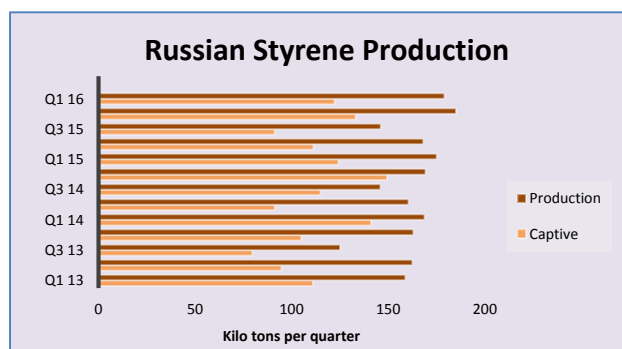
Ethylene price Irkutsk

The Arbitration Court of Irkutsk region will convene on 4 August 2016 to consider the claim of Rosneft which requires to resolve differences over the price of ethylene supplies to Sayanskkhimplast. Accordingly, the parties shall submit economic calculations, confirming the validity of the calculation formulae offered. Sayanskkhimplast is looking for a percentage discount linked to profitability whilst Rosneft argues that the price of ethylene should be linked to the cost of PVC. This tends to

represent an ongoing disagreement between the two companies over the price of ethylene, which seems unlikely to be resolved without intervention.

Russian styrene, Jan-May 2016

Russian styrene production totalled 291,801 tons in the first five months in 2016, lightly up on the previous year. Nizhnekamskneftekhim increased production by 39% in May to 27,800 tons, whilst production for the whole of Russia rose 12% to 59,500 tons. Whilst domestic merchant sales and exports have fluctuated in recent years, captive usage of styrene has increased gradually. This has been particularly the case at



Nizhnekamskneftekhim, which is Russia's largest producer and which now operates four units for polystyrene.

Styrene exports amounted to 9,700 tons in May, slightly down on April. Gazprom neftekhim Salavat exported 7,400 tons in May and SIBUR-Khimprom 2,300 tons. Finland accounted for 70% of exports or 6,800 tons and Turkey 21% or 1,900 tons. According to Chem-Courier Russian styrene exports totalled 56,700 tons in the first five months in 2016, 9%

more than in 2015.

Russian Styrene Domestic Sales (unit-kilo tons)		
Producer	Jan-Jun 16	Jan-Jun 15
Angarsk Polymer Plant	2.0	13.2
Plastik	0.3	1.8
Gazprom n Salavat	25.8	14.2
SIBUR-Khimprom	19.9	17.5
Nizhnekamskneftekhim	0.0	2.0
Total	47.9	48.8
Source: Chem-Courier		

In the first half of 2016 sales of styrene on the domestic market totalled 47,500 tons, down against 48,800 tons in the same period last year. In addition to exports, Gazprom neftekhim Salavat is the largest supplier of merchant styrene on the domestic market, most of which is shipped to Plastik at Uzlovaya which is the only non-integrated domestic plant for the production of styrene. Plastik was formerly part of SIBUR, and previously bought styrene from SIBUR-Khimprom but is now relying more on Salavat. Gazprom neftekhim Salavat has expanded ethylbenzene production capacity this year, but it remains unclear whether Plastik will benefit from this expansion in supply.

Domestic styrene prices have risen several times already this year, helped by the rouble and then the outage at the Angarsk Polymer Plant which started in February. As a result, Russian consumers are considering the alternative sources of raw materials, although it may be difficult to find cheaper imports.

Russian Propylene Domestic Sales (unit-kilo tons)		
Producer	Jan-Jun 16	Jan-Jun 15
Angarsk Polymer Plant	8.3	35.9
Omsk Kaucuk	0.9	3.8
SIBUR-Kstovo	60.4	46.0
Akrilat	0.4	1.7
LUKoil-NNOS	105.6	81.4
Gazprom neftekhim Salavat	0.8	12.0
Nizhnekamskneftekhim	0.0	2.0
Tobolsk-Polymer	0.0	7.7
Ufaorgsintez	0.0	0.6
Total	176.5	196.0
Source: Chem-Courier		

Over the past few years, domestic consumers have been resigned to the fact that the cost calculation for the internal market is based on the export alternatives. The devaluation of the rouble in the past year has further complicated domestic styrene pricing. Market fundamentals point towards a further tightening of supply on the Russian market, possibly indicating the need for debottlenecking.

Russian propylene, Jan-Jun 2016

Russian propylene exports totalled 66,000 tons in the first half of 2016 against 36,000 tons in the same period in 2015, whilst domestic market sales declined from 196,000 tons to 176,000 tons. Due to nearly five months of inactivity in the first half of 2016, Angarsk Polymer Plant shipped only 8,300 tons to the domestic market against 35,300 tons in the same period last year.

Bulk Polymers

Russian polyethylene, Jan-May 2016

Polyethylene imports into Russia amounted to 187,800 tons in the first five months in 2016, 15% down on 2015. LLDPE imports dropped from 89,600 tons in January to May 2015 against 67,400 tons in the same period this year, whilst HDPE imports dropped from 71,600 tons to 52,400 tons. LDPE imports rose from 38,400 tons to 44,400 tons whilst EVA rose from 7,400 tons to 9,400 tons. Gazprom neftekhim Salavat has now maximised capacity utilisation at its HDPE plant, using 15 tons of ethylene

Russian Polyethylene Production (unit-kilo tons)		
Producer	Jan-May 16	Jan-May 15
Angarsk Polymer Plant	6.4	34.6
Kazanorgsintez	270.1	313.9
Stavrolen	118.7	55
Nizhnekamskneftekhim	87.4	94.4
Gazprom n Salavat	62.9	69.3
Tomskneftekhim	105.8	91.9
Ufaorgsintez	42.5	41.5
Total	693.8	700.6

160,000 tons was imported. The Ministry of Industry and Trade stated, however, that will reconsider duties on LLDPE after the start of the ZapSib-2 complex at Tobolsk in 2020. At present Nizhnekamskneftekhim is able to satisfy the full Russian market by volume, but not necessarily by quality or price.

Russian Polypropylene Production (unit-kilo tons)		
Producer	Jan-May 16	Jan-May 15
Ufaorgsintez	51.8	53.9
Stavrolen	47.5	47.2
Moscow NPZ	52.0	47.6
Nizhnekamskneftekhim	91.3	90.6
Polyom	84.3	82.3
Tomskneftekhim	57.5	58.8
Tobolsk-Polymer	217.5	183.3
Total	601.9	553.4

per hour. The capacity of the plant was designed originally to produce 120,000 tpa and the highest level of production was recorded in 2015 at 93,900 tons. Gazprom neftekhim Salavat also produced 34,600 tons of LDPE from the plant of 45,000 tpa.

Nizhnekamskneftekhim has set a production target of 70,000 tons of LLDPE in 2016 against 46,000 tons in 2015. In 2017 the company hopes to produce 100,000 tons of LLDPE which should impact on imported volumes. At the same time the reduction in HDPE production at Nizhnekamsk could lead to increased imports of HDPE. The domestic market for LLDPE comprised 217,000 tons in 2015, of which around

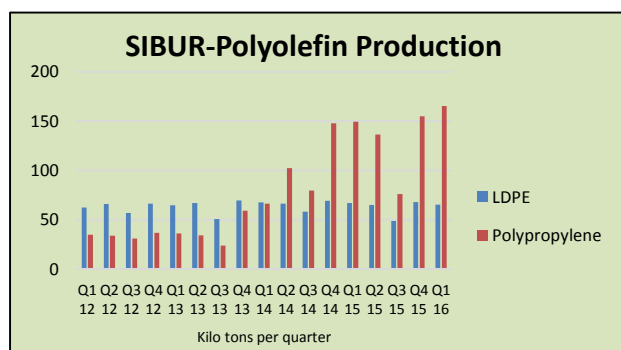
Russian production of polyethylene increased 5% in January to May 2016 to 694,300 tons. HDPE production totalled 418,000 tons, 12% up on 2015 whilst LDPE production fell 9.4% to 253,600 tons. Production of LLDPE amounted to 22,600 tons against 13,600 tons in the first five months of last year.

Russian polypropylene, Jan-May 2016

Russian polypropylene production totalled 602,900 tons in the first five months in 2016 against 563,400 tons last year. Tobolsk-Polymer increased production by 18% to 217,500 tons whilst Kapotnya increased by 14% to 52,900 tons. Polyom at Omsk increased production slightly from 82,300 tons to 84,300 tons whilst Nizhnekamskneftekhim increased by 900 tons to 91,300 tons. Stavrolen was unchanged at 47,500 tons, whilst Tomskneftekhim reduced production by 4% to 57,500 tons and Ufaorgsintez reduced by 2% to 51,800 tons.

SIBUR Polypropylene Sales (unit-kilo tons)		
Sales	Jan-Mar 16	Jan-Mar 15
Exports	63.6	61.3
Domestic Sales	72.0	61.0
Total	135.6	122.3

Polypropylene imports totalled 64,400 tons in the first five months in 2016, 5% down on the same period in 2015. The main increase was recorded in the supply of homopolymer and block copolymers. This year imports of homopolymers from Turkmenistan have been rising.



For the first five months Russian homopolymer imports rose to 30,900 tons from 26,400 tons in the same period in 2016. Block copolymer imports rose 15% in the period January to May 2016 to 12,600 tons, whilst volumes of stat-copolymers fell by 14% to 10,600 tons. SIBUR's domestic sales of polypropylene rose from 61,000 tons in the first quarter last year to 72,000 tons in the same period last year. SIBUR's production has increased at Tobolsk-Neftekhim, whilst further expansion of another 10,000 tpa is being finalised at Tomskneftekhim.

Russian polyethylene outages June-July 2016

Tomskneftekhim stopped LDPE production in late June for scheduled maintenance, and will be down until 30 July. During the shutdown the polyethylene plant will undergo repairs, in addition to commissioning work

for the expanded capacity for LDPE. Polyethylene modernisation will increase capacity by 12.5% to 270,000 tpa. Investments into the project amounted to 1.4 billion roubles.

Gazprom neftekhim Salavat stopped production of LDPE for scheduled maintenance work on 1 July, which will last for around 30 days. The capacity of the LDPE plant is 45,000 tpa. The HDPE plant, which has a capacity of 120,000 tpa. will stop for maintenance on 20 July for around a week. Gazprom neftekhim Salavat produced 17,500 tons of LDPE in January to May 2016 and 45,400 tons of HDPE. Ufaorgsintez was affected slightly by a power outage at the start of July 2016. Overall for Ufaorgsintez expects to reduce production of polyolefins and chemicals.

Russian PVC market, Jan-May 2016

Russian PVC production totalled 310,500 tons in the first five months in 2016, 6% down on the same period last year. RusVinyl produced 133,300 tons in January to May 2016 against 88,600 tons whilst Bashkir Soda increased production by 1% to 105,900 tons. Kaustik at Volgograd reduced production by 10% to 36,000 tons whilst Sayanskkhimplast reduced production from 99,000 tons to 35,300 tons.

Russian PVC Production (unit-kilo tons)		
Producer	Jan-May 16	Jan-May 15
Bashkir Soda	105.9	104.9
Kaustik	36.0	39.8
RusVinyl	133.3	88.6
Sayanskkhimplast	35.3	98.7
Total	310.5	332

RusVinyl began PVC suspension production in August 2014 whilst the production line for emulsion PVC in test mode was launched in December 2014. The design capacity of the plant is 300,000 tpa of suspension and 30,000 tpa of emulsion PVC. Ethylene is sourced from SIBUR-Kstovo where capacity has been expanded to 360,000 tpa to cover the extra requirements. Rock salt is delivered to RusVinyl by water transport from the Astrakhan region and by rail transport from Belarus.

PVC production could amount to around 751,000 tons in 2016, slightly less than consumption estimated at 761,000 tons. Negative trends continue to prevail in the construction market, particularly for window profiles, whilst low consumption is expected to continue in the market for PVC pipes. At the same time, the growth in demand for PVC is being seen in packaging and consumer goods. In terms of trade, Russian PVC Imports in 2016 are forecast to decline by 17% against 2015 to 83,000 tons whilst exports could grow by around 75% rising to 86,000 tons.

Sayanskkhimplast restart

Sayanskkhimplast set out plans in the first week of July to restart PVC deliveries to customers on 11 July, assuming production was allowed to restart. Production of caustic soda and chlorine was restarted at the start of the month, but PVC production could only restart after ethylene had been supplied from Angarsk. Clearly relations between Angarsk Polymer Plant and Sayanskkhimplast are under pressure and there has been a lack of information for Sayanskkhimplast on actual ethylene deliveries.

Paraxylene-PTA-PET Chain

Russian Paraxylene Domestic Sales (unit-kilo tons)		
Producer	Jan-May 16	Jan-May 15
Gazprom Neft	30.6	34.7
Ufaneftkhim	44.7	42.4
Kirishinefteorgsintez	0.2	0.2
Total	75.5	77.3

Russian paraxylene-PTA

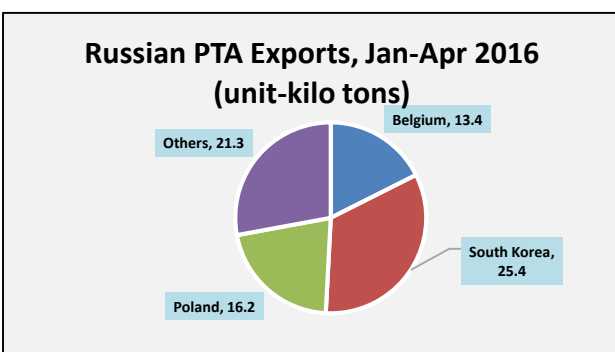
Paraxylene sales on the Russian domestic market totalled 75,500 tons in the first five months in 2016 against 77,300 tons in the same period in 2015. The amount of supplies for each producer has been similar this year to last year, with Ufaneftkhim supplying the largest volume of paraxylene to Polief at Blagoveshchensk. SIBUR owns Polief and is thus

responsible for domestic market paraxylene purchases, which were similar in the first quarter in terms of volume but in terms of cost were up by 17.9%.

Russian Paraxylene Exports (unit-kilo tons)		
Producer	Jan-May 16	Jan-May 15
Gazprom Neft	36.2	13.4
Ufaneftkhim	10.0	2.0
Kirishinefteorgsintez	23.9	26.3
Total	70.0	41.6

The most significant change in paraxylene sales from the three refineries this year has been in export activity where volumes rose from 41,600 tons in the period January to May

2015 to 70,000. Kirishinefteorgsintez shipped 23,900 tons abroad in the first five months in 2016 against 26,300 tons, whilst Ufaneftekhimi increased exports from 2,000 tons to 10,000 tons and Gazprom Neft increased exports from 13,400 tons to 36,200 tons.



Russian PTA market

SIBUR's PTA production at the Polief plant totalled 68,184 tons in the first quarter this year against 67,200 tons in the same period in 2015. Most of the PTA produced by Polief is used internally for PET production, with domestic sales of PTA amounting to only 4,400 tons in the first quarter this year against 3,300 tons in the same period last

year.

SIBUR Paraxylene, PTA-PET Chain (unit-kilo tons)

	Jan-Mar 16	Jan-Mar 15
Paraxylene Purchases	46.4	47.3
PTA Production	68.2	67.2
PTA Domestic Sales	4.4	3.3
PET Production	75.5	74.6

Russian PTA imports totalled 76,333 tons in the first four months in 2016, slightly up on the same period in 2015. The main sources of imports included South Korea (25,600 tons), Poland (16,200 tons) and Belgium 13,400 tons. The zero rate of import duty on PTA for Russia will remain in place at least until 31 December 2017. The prospects for extending the zero duty beyond the end of 2017 seem fairly positive in view of the

need of PET producers to access PTA. The only known PTA project in Russia, which is being planned by SafPet, is not expected to come on stream for several years. The SafPet PTA plant is to be constructed Nizhnekamsk in Tatarstan and the planned capacity is for 210,000 tpa.

Russian MEG Exports (unit-kilo tons)

Destination	Jan-May 16	Jan-May 15
Belarus	24.5	23.2
Lithuania	6.5	9.9
Ukraine	0.0	0.7
Kazakhstan	0.5	1.1
Netherlands	1.5	1.0
Uzbekistan	0.0	0.3
Turkey	2.9	2.3
Others	23.5	9.7
Total	59.4	48.3

Russian MEG, Jan-May 2016

Russian MEG exports were unchanged in May from April at 14,600 tons, of which SIBUR-Neftekhimi supplied 10,000 tons and Nizhnekamskneftekhimi 4,600 tons. From January to May 2016 Russian MEG exports totalled 59,100 tons against 48,300 tons in the same period in 2015. Imports into Russia amounted to 12,700 tons in the first five months in 2016, largely sourced from Saudi Arabia.

Ivanovo PET project-funding

Partly due to the devaluation of the rouble the amount of investment in the Ivanovo PET project has risen to more than 20 billion roubles measured against 17.7 billion roubles at start of 2015. The 20% rise in costs has raised questions whether

Vnesheconombank (VEB) will approve the financing where the application remains under consideration.

To date, the project has received a positive opinion from Glavgosexpertizy, and reached a preliminary agreement with Uhde Inventa-Fischer GmbH for the supply of technology and equipment. The polyester project was initially managed by Ivregionsintez but has since been transferred to the Ivanovo polyester complex, which was established to undertake the project with the involvement of private investment. Ivanovo region is to become a base for creating innovative textile industrial cluster in which it is expected to provide a full cycle of commercialization of innovations, from the idea to the production and marketing of products. The Ivanovo project involves construction of a plant for 200,000 tpa of polyester fibre and PET-granulate. At present local textile manufacturers in the Ivanovo region are required to source materials from other regions in Russia and imports.

In March this year Ivregionsintez signed a contract with the Czech company Unistav to undertake the construction as a project, including provision of working documentation, supply of auxiliary equipment for other facilities, construction and installation and commissioning. Ivanovo Polyester Complex and Unistav have negotiated with the Czech bank CSOB and the Agency for Export Insurance EGAP Czech Republic.

Aromatics

Russian benzene market, Jan-Jun 2016

Benzene imports rose in the first half of 2016, partly covering the shortages incurred from the extended outage at Angarsk Polymer Plant. Production at the Angarsk restarted at the beginning of July which may help to reduce imports in the second half of the year. Benzene purchases by Russian consumers totalled 324,496 tons in the first half of 2016 against 363,995 tons in the same period last year.

Russian Caprolactam Production (unit-kilo tons)		
Producer	Jan-May 16	Jan-May 15
Kuibyshevazot	81.2	70.4
Shchekinoazot	24.3	21.5
SDS Azot	44.4	44.7
Total	149.9	136.6

Source: Chem-Courier

The main cause of lower purchases in 2016 has been due to Kuibyshevazot shifting some feedstock sourcing towards phenol, and has subsequently reduced benzene shipments from 74,846 tons in the first half in 2015 to 56,346 tons this year. Nizhnekamskneftekhim also reduced merchant benzene purchases from 31,945 tons in January-June 2015 to 19,518 tons in 2016 due to its increased production at Nizhnekamsk.

Benzene imports from Kazakhstan

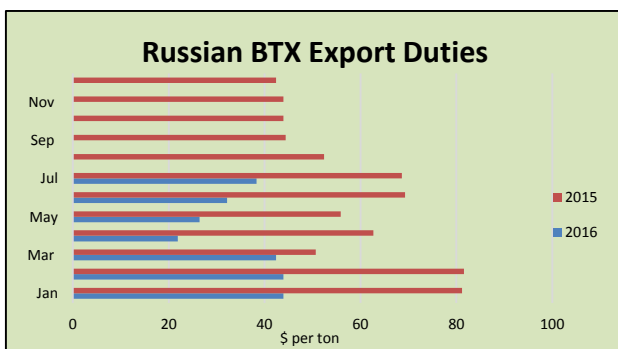
The Atyrau refinery shipped its first batch of benzene to Russia on 4 July, sending it to the Tula region to the south of Moscow. The beginning of industrial production and sales of benzene Atyrau refinery is seen as a significant milestone. A further increase in the production of benzene in at the Atyrau refinery can be expected after the commissioning of the Paramax installation for the production of aromatic hydrocarbons, which is almost in a completed state. Commissioning has taken a long time and now the refinery is producing around 500 tons of benzene a month from its plant capacity of 133,000 tpa. The most probable destination for benzene shipments from Atyrau to the Tula region would be for Shchekinoazot where benzene is used for caprolactam production.

Gazprom neftekhim Salavat-benzene plant modernisation

Gazprom neftekhim Salavat is working on improvements for benzene production and aims to complete the process during 2016. The project involves the introduction of a new scheme to increase the load of the cold unit, whilst also increasing the extraction of hydrogen, ethane, and methane. The company aims to increase the production of benzene, while maintaining the concentration of hydrogen in the hydrodealkylation unit. In the first five months in 2016 Gazprom neftekhim Salavat produced 67,400 tons of benzene against 59,800 tons in the same period last year.

Export duties on aromatics

Russia's export duty on aromatic hydrocarbons increased by 18.9% from 1 July to \$38.3 per ton against \$32.2 per ton in June. In July 2015 the duty stood at \$68.6 per ton. The changes in duty are linked to the so-called tax manoeuvre. In order to avoid an uncontrolled increase in prices of petrochemical raw materials in the domestic market mechanism was introduced tax deductions of amounts of excise duty when purchasing certain petroleum products, including aromatic hydrocarbons for petrochemical plants.



Russian orthoxylene, Jan-Jun 2016

Orthoxylene sales on the Russian domestic market amounted to 11,500 tons in June, 1% down against May. Ufaneftekhimi supplied 5,040 tons to the domestic market in June, followed by Gazprom Neft with 3,920 tons and Kirishinefteorgsintez 2,560 tons. Kamteks-Khimprom increased its purchases of orthoxylene in June by 14% to 6,100 tons or 53% of Russian consumption).

Russian Orthoxylene Domestic Sales (unit-kilo tons)		
Producer	Jan-Jun 16	Jan-Jun 15
Gazprom Neft	28.9	30.9
Ufaneftekhimi	22.2	14.4
Kirishinefteorgsintez	17.2	17.8
Total	68.3	63.0

Source: Chem-Courier.ru

Other consumers included Gazprom neftekhim Salavat which bought 470 tons, Dmitrievsky Chemical Plant which bought 1,200 tons and Russian manufacturers of paints which reduced the volume of orthoxylene in June by 35% to 1,550 tons. Fuel manufacturers, agrochemical, pharmaceutical and other products bought 1,110 tons (10%) whilst another 1,090 tons (9%) were shipped trading companies. For the first half of 2016 sales of orthoxylene on the domestic market totalled 68,290 tons which was 8% up on the

same period in 2015. Orthoxylene exports totalled 38,500 tons in the first five months in 2016, 1.5 times up on 2015.

Russian toluene sales, Jan-Jun 2016

Domestic sales of toluene on the Russian market amounted to 16,230 tons in June, 7% down against May. Gazprom Neft supplied 9,480 tons from Omsk, Kirishinefteorgsintez 3,480 tons, Slavneft-Yaroslavnefteorgsintez 1,500 tons, and Lukoil-Permnefteorgsintez 1,040 tons. In June explosive manufacturers reduced purchases of toluene by 16% against May to 1,500 tons. Companies producing paints reduced purchases of toluene by 20% to 3,250 tons whilst manufacturers of motor fuels and additives increased purchases by 78% up to 5,380 tons. Overall for the first half of 2016 sales of toluene on the domestic market totalled 90,380 tons according to Chem-Courier, and as much as 29% up on the same period last year.

Russian Toluene Production (unit-kilo tons)		
Producer	Jan-May 16	Jan-May 15
Kinef	14.8	10.8
Gazprom n Salavat	5.6	9.4
Slavneft-Yanos	22.0	19.5
LUKoil-Perm	9.6	5.1
Gazprom Neft	42.4	37.9
RN Holding	25.4	18.9
Ufaneftekhim	22.4	22.1
Others	7.3	20.1
Total	149.5	143.7
Source: Chem-Courier.ru		

Russian production of toluene amounted to 36,180 tons in May, 25% up on April. According to Chem-Courier production totalled 149,260 tons for the period January to May 2016, 5% up on 2015. The three largest producers include Gazprom Neft from the Omsk refinery, Rosneft's Ryazan refinery and Slavneft at Yaroslavl. Most of the buyers purchase toluene in small quantities.

Russian phenol, Jan-Jun 2016

Borealis continues to ship phenol from Finland to Russia, having accounted for 2,140 tons in the first six months in 2016. Sales of phenol on the Russian domestic market totalled 66,400 tons in the first half of 2016 against 55,600 tons in the same period in 2015. Whilst formaldehyde resin producers represent the largest application for phenol the largest individual buyer this year has been Kuibyshevazot which it uses for caprolactam production.

Russian Phenol Market Sales by Supplier (unit-kilo tons)		
Producer	Jan-Jun 16	Jan-Jun 15
Novokuibyshevsk PC	12.4	10.2
Kazanorgsintez	26.7	27.8
Ufaorgsintez	4.6	6.4
LUKoil-VNPZ	32.6	20.4
Borealis	2.2	1.0
Total	66.4	55.6
Source: Chem-Courier.ru		

Kuibyshevazot purchased 17,600 tons of phenol in the first half this year, followed by MetaDynea with 14,600 tons and Uralkhimplast with 8,100 tons. Metadynea and Uralkhimplast both use phenol in the production of phenol-formaldehyde resins. Other important consumers include Sterlitamak Petrochemical Plant which uses phenol in the production of anti-oxidants.

Russian phenol production amounted to 19,600 tons in May, 1% down on April. Kazanorgsintez reduced production by 10% to 6,600 tons, whilst Ufaorgsintez and Novokuibyshevsk Petrochemical Company increased production by 3% each to 6,500 tons. Omsk Kaucuk's renovation and modernisation of the phenol-acetone plant, which was forced to stop in March 2014 after an accident, has progressed to the concreting stage, which is scheduled for completion by the end of August. The next stage of construction includes the installation of reinforced concrete shelves for industrial equipment, scheduled for the fourth quarter of 2016.

Kuibyshevazot investment projects

Kuibyshevazot has mapped out four investment projects in 2016 that will increase the capacity for caprolactam and polyamide. By the end of this year Kuibyshevazot intends to put into operation the energy-efficient production unit for cyclohexanone using DSM technology.

The capacity of the new production unit is 140,000 tpa, enabling an increase of caprolactam capacity to 210,000 tpa and in future to 260,000 tpa. The company is constructing its fifth installation for polyamide 6 production which is scheduled for completion before the end of the year. The capacity of the new line amounts to 58,400 tpa which could potentially be used to produce engineering plastics, films and fibres. The launch of the new polyamide-6 will increase total capacity to 208,000 tpa. The project involves costs of

around 1.6 billion roubles. The company produces 99% of polyamide-6 production in Russia. In 2015 Kuibyshevazot processed 77% of its own caprolactam and 35% of polyamide.

In other projects Kuibyshevazot intends to launch a joint venture with Praxair at Togliatti in the second half of 2016 for the production of oxygen, nitrogen and argon. Total funding is estimated at 4 billion roubles. In the first quarter of 2017 Kuibyshevazot is scheduled to launch the joint venture Linde Azot Togliatti for the production of ammonia. In 2015 Kuibyshevazot produced 640,000 tons of ammonia, and 349,600 tons of urea.

Russian C4 Purchases (unit-kilo tons)		
Consumer	Jan-Jun 16	Jan-Jun 15
Omsk Kaucuk	25.7	48.0
Nizhnekamskneftekhim	84.3	66.8
Togliattikaucuk	82.5	78.4
Sterlitamak Petrochemical	1.4	2.9
Total	193.8	196.1

Source: Chem-Courier.ru

Synthetic Rubber

Russian C4 sales, Jan-Jun 2016

C4 sales to the Russian synthetic rubber producers totalled 193,800 tons in the first half of 2016 against 196,100 tons in the same period last year. C4 imports totalled 39,600 tons in the first six months in January to June 2016 against 41,400 tons in 2015. Azerkhimya exported 10,300 tons to the Russian market in the first half this year against 12,900 tons whilst Naftan from Belarus increased exports to 29,300 tons from 27,100 tons. Supplies from the Angarsk cracker should restart in July after production restarted at the beginning of the month.

Russian Synthetic Rubber Exports Jan-Apr 2016	
Country	Quantity (ktons)
Brazil	13.2
Canada	6.7
China	63.7
Czech R	11.5
Hungary	26.4
India	35.9
Japan	6.6
Germany	8.7
Mexico	7.6
Poland	46.6
US	23.4
Ukraine	7.9
Romania	13.7
Serbia	5.8
Slovakia	12.0
Turkey	6.7
Others	54.5
Total	351.0

Nizhnekamskneftekhim to expand butyl rubber capacity

Nizhnekamskneftekhim aims to complete the project to increase the capacity of its butyl rubber plant by February 2017. By September this year, Nizhnekamskneftekhim plans to complete the installation of two heat exchangers. The ongoing reconstruction in the production of butyl rubber will allow to increase the performance output to perform contracts with global suppliers of tyres, including Pirelli, Michelin, Bridgestone, etc.

In April 2015 Nizhnekamskneftekhim launched the fourth unit for isolation and drying of rubber, raising capacity for halobutyl rubber by 40,000 tpa. The first unit was put into operation in 2004, followed by the second unit in January 2007 and third in August 2011.

Butyl rubber production at Nizhnekamsk dates back to 1973. Having license agreements with Canadian and US technology companies been rejected the Russian design institute Yarsintez provided a suitable alternative which has since been upgraded. The original capacity has been increased from 35,000 tpa to 200,000 tpa at present. Around 96% of butyl and halobutyl rubber production from Nizhnekamskneftekhim is exported.



million car tyres and 566,000 other tyres. The company increased truck tyres by 283,000 in 2015 and car tyres by 88,000. Yaroslavl Tyre Plant accounted for 5.7% of the total Russian production of tyres in 2015. The last time the company achieved a net profit was in 2012 when it amounted to 654.3 million

Yaroslavl Tyre Plant 2015

Yaroslavl Tyre Plant (included in the tyre holding Kordiant) increased its production of tyres in 2015 by 17%. As a result of improved production and sales the net loss of the company was reduced from 1.5 billion roubles to 516,000 roubles. Yaroslavl Tyre Plant produced 2.55 million tyres in 2015, comprising 1.97

roubles. Kordiant combines Yaroslavl Tyre Plant, Omskshina, and Kordiant-Vostok. The whole group sold 3.18 million pieces in 2012, 2% down on 2014.

SIBUR Rubber Production & Sales Q1 2016

SIBUR increased production of rubber across the board in the first quarter this year, including more than an 80% rise for thermoplastic elastomers at Voronezhskintezkavkuk. This allowed an increase in domestic sales of thermoplastic elastomers from 6,000 tons in the first quarter last year to 9,200 tons in the same period in 2016. Exports increased to 9,000 tons against 5,400 tons in first quarter last year.

SIBUR-Synthetic Rubber Production (unit-kilo tons)		
	Jan-Mar 16	Jan-Mar 15
Commodity Rubber	72.4	67.5
Speciality Rubber	27.0	24.2
Thermoplastic elastomers	21.2	12.1
3rd part purchases	0.0	0.0
Total	120.5	103.9

SIBUR-Synthetic Rubber Domestic Sales (unit-kilo tons)		
	Jan-Mar 16	Jan-Mar 15
Commodity Rubber	24.2	25.5
Speciality Rubber	2.4	3.0
Thermoplastic elastomers	9.2	6.0
Total	35.7	34.6

SIBUR-Synthetic Rubber Export Sales (unit-kilo tons)		
	Jan-Mar 16	Jan-Mar 15
Commodity Rubber	45.3	42.4
Speciality Rubber	23.0	22.7
Thermoplastic elastomers	9.0	5.4
Total	77.3	70.5

Regarding mainstream synthetic rubber production, SIBUR showed an increase from 67,500 tons to 72,400 tons, whilst speciality rubber rose from 24,200 tons to 27,000 tons. Sales of both commodity and speciality rubbers dropped on the domestic market in the first quarter, whilst exports for both categories rose.

SIBUR produces synthetic rubber at three plants, including Krasnoyarsk, Voronezh and Togliatti. Krasnoyarsk Synthetic Rubber Plant produces nitrile-butadiene rubber, Voronezhskintezkavkuk produces a range of butadiene rubbers whilst Togliattikavkuk produces isoprene and butyl rubber, combined with polybutadiene. Togliattikavkuk produced its 12th million ton of rubber in June this year after 55 years since start-up. In 2015 Togliattikavkuk increased synthetic rubber production by 9% to 156,300

tons whilst Voronezhskintezkavkuk also increased production by 9% to 157,000 tons.

Efremov Synthetic Rubber Plant

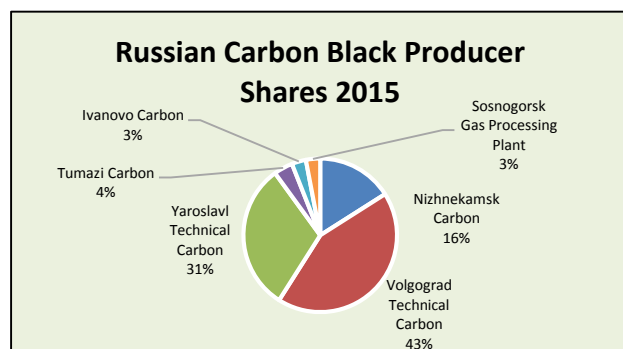
The Minister of Industry and Energy of the Tula region has been in meetings with Tatneft about the situation at Efremov Plant of Synthetic Rubber, where problems include obsolete fixed assets, low levels of investment and butadiene supply problems.

Omsk Kaucuk Q1 2016

Omsk Kaucuk achieved a net profit of 16.450 million in 2015 against a loss of 76.6 million roubles in 2014. Revenues of Omsk Kaucuk increased by 4.7% to 4.89 billion roubles. Cost of sales amounted to 4.23 billion roubles to 4.16 billion roubles in 2014. As a result, the company achieved a gross profit of 666 million roubles in 2015, higher by 30% over 2014. Operating profit amounted to 147.8 million roubles against 239,000 roubles a year earlier.

Profit before tax reached 40.29 million roubles, while in 2014 the loss amounted to 62 million roubles. Last year, the company recorded an increase in volumes of production of rubber, butadiene, and MTBE whilst

reducing volumes of butane and cumene production. Omsk Kaucuk reduced its share in the Russian market for styrene-butadiene rubber by 4% in 2015 to 28%. The company is one of the less profitable petrochemical companies in Russia and managed to record only a minor net profit in 2015.



Nizhnekamsk Carbon Plant investment

Nizhnekamsk Carbon Plant has detailed investment targets for 2016 which envisage an

increase by 17.2% over 2015 to 93.9 million roubles. The company aims to increase carbon black production capacity by 16,000 tpa in 2017. The main consumers of Nizhnekamsk carbon black are Nizhnekamskshina, RTI-Kaucuk, Balakovo RTI, and Quart. Production amounted to 117,000 tons in 2015, 2.8% down on 2014. Russian carbon black exports totalled 178,941 tons in the first four months in 2016, for which Poland was the largest destination taking over 52,000 tons.

Methanol

Russian methanol market overview 2016

Russian methanol production amounted to 326,000 tons in May, 10% up on April. Sibmetakhim stabilized production in May, producing 72,000 tons, whilst Tomet increased production by 14% over April to 63,800 tons. In June one of the two lines operated by Tomet was down for repairs. Regarding trade, methanol exports rose 16% in May over April to 162,500 tons. Finland accounted for 81,600 tons of shipments, followed by Poland with 28,800 tons. Export prices dropped in May to \$140 per ton DAF border Russia, against \$155 per ton in April.

The addition of the new producer last year at Mendelevsk in Tatarstan has provided more product for the domestic market, but volumes remain relatively small and have not impacted significantly. Market fundamentals for methanol in Russia have undergone little change in the past few years, the data for domestic sales, exports and captive consumption differs only slightly in this year against the same period in 2013. In a legal matter a shareholder in Tomet, Andreas Tsivi who lives in Switzerland, has had his assets seized by the Moscow City Court under the pretext that the shares were obtained illegally from transactions involving former owner Togliattiazot.

Methanol consumption trends

MTBE remains a major outlet for methanol, representing around 22% of purchases in the first five months in 2016. Whilst the formaldehyde sector remains the largest consumption outlet for Russian methanol domestic sales, the largest individual buyers are found in the MTBE sector. Nizhnekamskneftekhim is the largest single buyer of methanol in Russia, buying 101,243 tons in the first five months this year against 99,444 tons in the same period last year. The company buys methanol primarily for MTBE production and also synthetic rubber production.

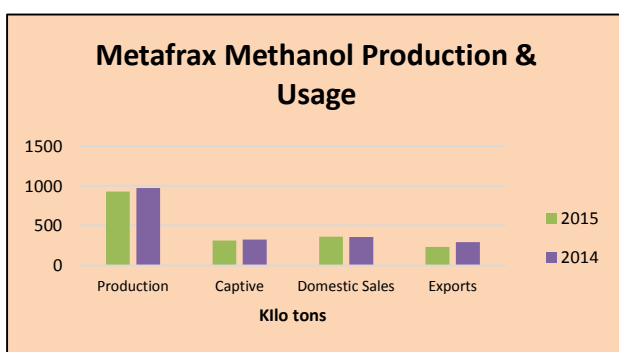
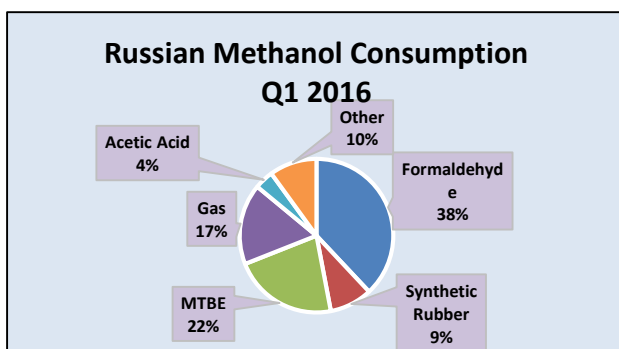
The second largest buyer is Togliattikaucuk, which also produces MTBE and rubber, increased purchases from 41,947 tons in the period January to May 2015 to 48,198 tons in the same period in 2016. Other important buyers this year include Uralorgsintez, SIBUR-Khimprom, Ektos-Volga, Omsk Kaucuk and Tobolsk-Neftekhim.

MTBE appears to offer good growth prospects for methanol sales, in line with the standards applied to Russian refineries in 2016 for environmentally safer fuels. Rosneft's Kuibyshev Refinery recently began comprehensive testing equipment at its new MTBE plant which has been designed to produce 40,000 tpa. Initially, the production of MTBE at the Kuibyshev refinery was planned for launch in late 2015. The complex includes infrastructure facilities such as a park for the storage of methanol, and a railway platform for methanol deliveries.

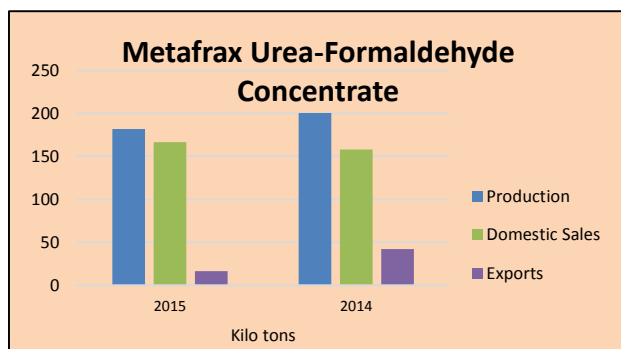
Other MTBE projects underway by Rosneft include the 46,000 tpa plant at Angarsk, 55,000 tpa plant at the Syzran Refinery, and also 55,000 tpa for the Ryazan refinery. Other than Rosneft. Gazprom neftekhim has issued a tender for an MTBE project, comprising 20,000 tpa. The potential contractor will have to develop basic projects for the production of MTBE unit and isobutane alkylation unit. The initial purchase cost of this project was set at 97.6 million roubles.

Metafrax 2015

The largest consumers of methanol produced by Metafrax include Nizhnekamskneftekhim which took 51% of sales in 2015, followed by Omsk Kaucuk with 10%. Metafrax used around 34% of



its own production in 2015 (which amounted to 929,000 tons versus 971,000 tons in 2014). Internal usage amounted to 312,000 tons in 2015 against 324,000 tons in 2014, whilst domestic merchant sales increased from 357,000 tons to 361,000 tons in 2015. Exports took the brunt of lower production in 2015, dropping from 299,000 tons to 231,000 tons.

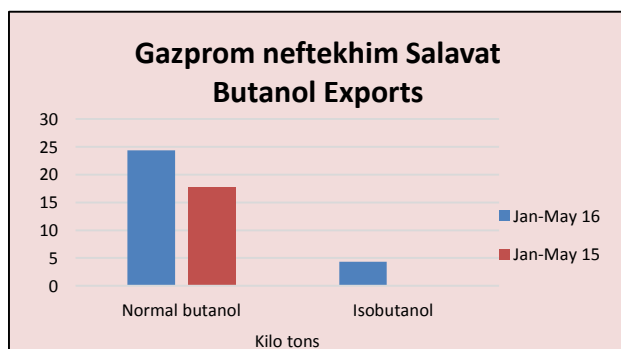


Metafrax other products

Production of commercial urea-formaldehyde concentrate (UFC) in Russia is undertaken by three companies including Togliattiazot Metafrax and Shchekinoazot, with a total capacity of around 400,000 tpa. Metafrax is the largest producer and sells UFC to domestic companies such as Metadynea, Cherepovets plywood mill and Perm plywood mill. Metafrax benefits from using Formox Technology (Sweden) and a sufficient number of its own rail tank cars to ensure compliance with contractual obligations.

Metafrax is the sole producer of pentaerythritol and hexamine in Russia. Production of pentaerythritol totalled 22,000 tons in 2015, of which 57% was exported. Metafrax also produced 1,275 tons of micronized pentaerythritol in 2015. Hexamine production at Gubakha totalled 28,000 tons in 2015, up by a thousand tons in 2014. Around 74% was sent for export. Overall for 2015 Metafrax exported 33.3% of its product sales, and achieved a record net profit of 7.212 billion roubles.

per day, respectively.



and phthalic anhydride. Maintenance was started in May when the catalyst for butanol production was replaced. For the phthalic plant in June Gazprom neftekhim Salavat cleaned valve units in the steam

Metafrax-formaldehyde

The total production of formaldehyde for Metafrax amounted to 352,000 tons in 2015 against 347,000 tons in 2014. Metafrax sold 209,000 tons of formaldehyde on the merchant market in 2015, 96% of which went to the domestic market. Metafrax is striving to develop sales for 55% or concentrate grade in place of the standard 37% where global demand is lowly falling.

The main competitors for Metafrax for the Russian formaldehyde market include Kronospan (Egorievsk), Khimsintez (Chapayevsk), Pigment (Tambov), Akron (Nizhniy Novgorod), and the Sverdlov plant (Dzerzhinsk). Compared with competitors Metafrax has the advantage that in the production of formaldehyde uses its own resources and has sufficient rolling stock to ensure the fulfilment of contractual obligations by volume and terms of delivery. Metafrax has recently granted subsidiary Metadynea a loan of around 500 million roubles to support capital investment.

Metafrax-Casale agreement

Metafrax has chosen the Swiss company Casale as a licensor a new complex for the production of ammonia, urea and melamine to be located at Gubakha. The choice of the licensor and options for the location of production in the two proposed sites worked through JSC NIIK As a licensor for the production of ammonia, urea and melamine was invited Casale SA. It is expected that the performance of a new complex for the stated products will comprise 900, 1255 and 120 tons

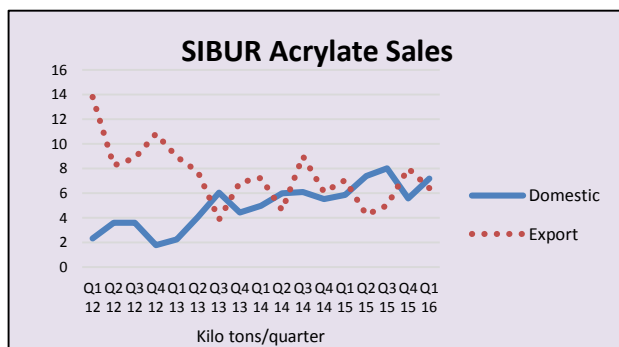
The new facility will be technologically linked to the methanol unit and material flows of raw materials and energy. Most of the products will be used for its own production of urea-formaldehyde concentrate and melamine.

Organic chemicals

Butanol market shutdowns

Gazprom neftekhim Salavat has completed scheduled maintenance on its plants for butanols

pipings. The company sold 8,800 tons of butanols on the domestic market in January to May 2016 against 8,500 tons last year, whilst exports rose from 17,800 tons to 12,200 tons.



SIBUR-Neftekhim completed a 13-day maintenance planned outage at the Aktilat division in late April. Aktilat is the largest Russian consumer of butanols, and in recent years has been increasing acrylate sales on the domestic market whilst at the same time reducing exports. Scheduled maintenance was carried out by four contractors and work included an audit of 54 units of the safety valves and shut-off valves.

Production of acrylic acid and esters was put into operation at the Aktilat plant at Dzerzhinsk in 2004, and the company Aktilat was acquired by SIBUR in mid-2011. Propylene is supplied to the Aktilat division from SIBUR-Kstovo and butanols from SIBUR-Khimprom. Plant capacities include 31,000 tpa of acrylic acid, 40,200 tpa of butyl acrylate and 10,000 tpa of light acrylic esters (methyl and ethyl acrylate).

Russian DOP, Jan-May 2016

DOP imports into Russia amounted to 265 tons in May against 218 tons in April. Polish company Boryszew supplied 244 tons and the remaining 21 tons came from Korean company Aekyung Petrochemical. In the first five months in 2016 DOP imports totalled 1,170 tons which is 22% down on the same period last year.

Russian phthalic anhydride, Jan-May 2016

Phthalic anhydride production in Russia amounted to 6,710 tons in May, 6% down than April. Kamteks-Khimprom produced 6,040 tons. For the first five months of 2016, Russia produced 37,330 tons of phthalic anhydride.

Russian butanol domestic sales, Jan-May 2016

Butanol production amounted to 19,180 tons in May, 11% up on April. The proportion of n-butanol in gross production of butanols in May 2016 was 63%, and the isobutanol 37%. In the first five months of 2016 butanol production in Russia amounted to 97,750 tons, 6% less than in 2015.

Butanol exports amounted to 11,750 tons in May, 24% down on April. Gazprom neftekhim Salavat shipped 9,100 tons and SIBUR-Khimprom 2,650 tons whilst Angarsk Petrochemical Company and Azot Nevinnomyssk did not export in May. China accounted for 43% of exports and Finland 30%. Exports totalled 45,640 tons in the first five months in 2016, 9% down on 2015.

Russian Paint Production (unit-kilo tons)

Sector	Jan-May 16	Jan-May 15
Paint Materials on polymers	350.8	320.0
Other Paints	177.0	137.3
Total	527.7	457.3

Russian paint market Jan-May 2016

Russian production of paints and varnishes based on polymers rose by 9% in the first five months in 2016, whilst production of organic dyes rose by 14.9%. Despite the rises in production, consumption of paints and varnishes decreased by

1.7% in the first five months this year. This is due partly to the reduction in ink supply from abroad, as well as an increase in exports of around 8%. Russian paint manufacturers expect the domestic market to remain stagnant for the remainder of 2016. Demand for industrial coatings are expected to remain stable, whilst and decorative coatings are expected to decrease. Manufacturers generally expect the market situation to repeat the scenario in 2015 which was characterized by reduced sales volumes, coupled to a deterioration of payment discipline of customers and declining profitability.

Overall consumption of paints in the Russian domestic market are estimated to have fallen 9.3% in 2015 against 2014 to around 950,000 tons against 1.040 million tons. Manufacture of paints fell 6.2% in 2015 to 811,000 tons, with a decline taking place in both exports and imports. Imports of paint materials decreased by 8.5% in 2015. Imports of paints into Russia outstrip exports by around 4.5 times, despite the fact that imports fell by 20% in 2015 and that exports rose 5.8%. The average price of Russian exports amounted to \$1,200 per ton, whereas the cost of imported materials was \$3,200 per ton in 2015.

Russian paints market 2015

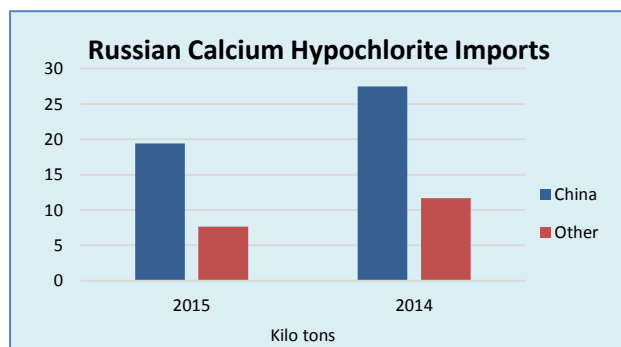
- Consumption fell 9.3% to 950,000 tons
- Manufacture fell 6.2% to 811,000 tons

One of the main problems for the domestic Russian paint manufacturers is that most of the raw materials for the production of coatings are produced abroad. Another problem for Russian companies is that Western companies established in Russia can receive preferential treatment such as tax holidays. At the same time, foreign companies with sites in Russia continue to increase production estimated to be close to 120,000 tpa.

Other products

Calcium hypochlorite project Novocheboksarsk

Chinese company Dezhou Chemicals has been selected by Group Orgsintez to work on the design, installation and training of the personnel for Khimprom's calcium hypochlorite project at Novocheboksarsk. Currently, around 65% of the Russian imports of calcium hypochlorite come from China. The plant is to be introduced in two phases, the first of which scheduled for the end of 2016 resulting in 15,000 tpa of capacity.



The timing of the second phase is scheduled provisionally for 2017, which would raise capacity to 25,000 tpa. Production will be based on Khimprom's idle workshops using existing equipment and its own raw materials. In 2015,

Khimprom exported around 20% of its production, which is focused on Atsetonanil, peroxide, chloroform, chlorinated paraffin, diphenylguanidine, chlorine, etc. The company's capacity utilisation rate last year averaged 89.6%;

New technology for production of methylchlorosilanes at Kazan

Himkompozit, which belongs to the State Corporation Rostec, has developed a unique technology for the production of methylchlorosilanes used for the production of silicone materials by KZSK-Silicon which is a subsidiary of Kazan Synthetic Rubber Plant. The new unit has been designed with a capacity of 25,000 tpa and could later be expanded to 40,000 tpa.

Poligran 2015

Poligran provides production and sale of PVC plasticizers for the production of profile-moulded products, footwear and cable and wire products, providing tolling services for the processing of raw materials.

Russian Plasticized (soft) PVC Producers in 2015:

Manufacturer	Capacity (unit-tpa)
Vladimir Chemical Plant	40,000
Kaustik Sterlitamak	35,000
Bashplast	40,000
Biokhimplast	25,000
Polyplast	12,000
Nobelteh	14,400
POLIGRAN	13,000

Conventionally, PVC plasticizers produced by Poligran can be divided into two groups: unplasticized (rigid) PVC and plasticized (soft) PVC.

Poligran's plasticised PVC compounds focus on small and medium processors which use special properties. Poligran assesses this sector as the most promising for future development. For unplasticized (rigid) PVC compounds in 2015 Poligran holds a leading position. The strategy chosen by Poligran is to hold position by offering competitive prices and improve product quality.

Russian Unplasticized PVC Producers 2015

Producer	Capacity
Biokhimplast	25,000
Polymer -Hemi Rus	25,000
DPO Plastik	11,000
Poligran	27,000

In terms of sales geography, 96% of Poligran's revenues came from domestic market shipments in 2015, followed by 3.2% to Belarus and 0.5% to Kazakhstan. Sales of rigid PVC plasticizers decreased in 2015 in comparison with 2014 due to the economy and also changing market trends. Regarding suppliers RusVinyl at Kstovo was the main supplier of PVC for Poligran in 2015, followed by Kaustik at Sterlitamak and Itochu Plastics.

Another important manufacturer of PVC plasticizers is Vladimir Chemical Plant, which is the market leader for unplasticized PVC. The company has focused in the past two years on production cost reduction through a number of measures including increasing the proportion of fillers to optimize dosing of expensive additives, and the replacement of imported additives to domestic. In 2015 revenues rose 5% to 4.201 billion roubles. Around 80% of revenues are produced from PVC plasticizer sales and the remainder largely unplasticized PVC sales.

Detergent sector Russia

The market for powder detergents in Russia increased in by 2% in real terms in 2015 and 9% in value terms. The largest increase in household chemicals in 2015 came from gels which rose 19% in volume and 32% in value terms. The main sellers of household chemicals on the Russian market include Procter & Gamble, Henkel and Nefis Cosmetics. The latter company is based at Kazan and is 100% Russian owned.

Projects for Nefis Cosmetics 2015

Raising capacity of detergents liquid plant to 12,000 tons per month

Increasing soap production capacity to 2,000 tons per month

All detergent manufacturers are faced with the same issues of fluctuations in raw material costs, transport tariffs, etc. The impact of this risk is mitigated for Nefis Cosmetics by developing its own

resource base, including its own boiler, its own production of plastic containers for liquid detergents and manufacture of surface-active substances used in the production of CMC, etc. In 2015 Nefis Cosmetics reduced the share of imported raw materials from 36.5% to 29.12% in terms of value. The share of exports in total revenues from sales of finished goods, works and services for 2015 comprised 7.7%, thus the company derives most of its revenues from domestic sales.

Belarus

Belarussian polymer imports, Jan-Apr 2016

In the first four months in 2016 PVC imports into Belarus dropped 20% to 6,200 tons, due mainly to the fall in export sales of finished products such as profile-moulded products. By contrast, polyethylene imports rose 13.1% to 35,800 tons and polypropylene rose by 9.3% to 28,000 tons. The largest increase in demand occurred in the propylene copolymers. Russia is the largest supplier of polymers to Belarus, although sources overall are broadly diverse.

Azot Grodno Production (unit-kilo tons)

Product	Jan-May 16	Jan-May 15
Methanol	21.4	33.4
Caprolactam	46.5	51.6
Polyamide primary	40.5	39.6
Polyamide filled	4.1	3.6
Ammonia	489.0	490.3
Urea	469.6	468.3
Fertilisers	349.4	347.4
Fibres	13.4	11.3

Belarussian PET intermediate imports, Jan-Apr 2016

PTA imports into Belarus dropped from 16,355 tons in January to April 2015 to 12,892 tons in the same period this year. Import shipments from Poland to Belarus fell from 16,283 tons to 6,830 tons. The average price for Belarussian PTA imports comprised \$691 per ton in January to April 2016

against \$734 per ton in the same period in 2015.

MEG imports totalled 15,845 tons in the first four months in 2016 against 20,550 tons in the same period last year. Russia has been almost the sole source of imports for Belarus in the past two years. Average prices for MEG imports dropped this year to \$738 per ton from \$842 per ton in January to April 2015.

Belarussian Exports of Organic Chemicals (unit-kilo tons)

Product	Jan-Apr 16	Jan-Apr 15
Acrylonitrile	16.2	8.2
Caprolactam	6.5	12.7
Phthalic anhydride	8.8	10.9
Methanol	16.3	26.6

Belarussian organic chemical exports, Jan-Apr 2016

Acrylonitrile exports from Belarus amounted to 16,177 tons in the first four months in 2016 against 8,231 tons in the same period last year. Turkey has to date accounted for around half of Belarussian exports in 2016. Caprolactam exports dropped

from 12,654 tons in the period January to April 2015 to 6,451 tons in the same period this year. Exports to Taiwan dropped from 7,469 tons to 1,494 tons.

Methanol exports dropped from 26,719 tons in the first four months in 2015 to 16,278 tons this year. Poland and Ukraine have been the main destinations for methanol from Belarus this year, as in 2015. Methanol production has declined in 2016 at Grodno due to technical problems, and whilst exports have fallen imports have risen from 2,266 tons in the period January to April 2015 to 4,113 tons. In May, methanol production in Belarus increased to 2,300 tons against 550 tons in April but overall was down to 21,400 tons for January to May 2016 against 33,400 tons in 2015.

Mogilev carbon black project

The construction of the carbon black plant by Omsk Carbon Group in the free economic zone Mogilev is expected to start production in the near future. Full capacity production of 160,000 tpa is expected to be achieved by the end of 2017. However, domestic consumption is relatively small at present, for example Belarus imported 31,000 tons in 2015 against 42,000 tons in 2014. Thus exports to European markets will play a key role in sales and marketing from the new plant. About 70% of the carbon black used in tyre production, and another 20% in the production of rubber products.

Ukraine

Ukrainian Polypropylene Imports (unit-kilo tons)

Category	Jan-May 16	Jan-May 15
Homo	37.3	27.4
Block	4.2	3.2
Random	5.6	3.5
Propylene copolymers	0.0	1.1
Other	1.3	0.0
Total	48.4	35.2

Ukrainian polymer imports, Jan-May 2016

PVC imports into Ukraine totalled 49,700 tons in the first five months in 2016, 78% higher than in 2015. Imports from the US rose from 8,400 tons in January to May 2014 to 31,200 tons. Imports from Europe dropped slightly from 14,700 tons to 14,500 tons. Russia accounted for 3,800 tons of imports in the first five months in 2016 against 4,600 tons last year.

Polyethylene imports rose 38% in the first five months in 2016, totalling 106,700 tons against 77,300 tons in the same period last year. HDPE imports rose from 33,300 tons to 52,000 tons, whilst LDPE imports rose 9% to 26,400 tons. LLDPE imports rose from 16,600 tons to 23,800 tons, whilst other types of polyethylene rose from 3,200 tons to 4,400 tons. Polypropylene imports rose 38% to 48,400 tons in the first five months this year.

Ukrainian plasticizer alcohols, Jan-May 2016

Phthalic anhydride imports amounted to 445 tons in May against 317 tons in April. Imports of phthalic into Ukraine were sourced mostly from Belarus from Lakokraska at Lida whilst the main Ukrainian buyers were plasticizer producers Polikem and Lizinvest. In the first five months in 2016 Ukrainian imports of phthalic anhydride totalled 1,830 tons which was 22% down on 2015.

DOP imports into Ukraine amounted to 354 tons in May against 315 tons in April. In May Boryszew supplied 215 tons and Deza 138 tons. In the first five months in 2016 DOP imports rose 2.4 times against the same period last year to 1,310 tons.

Lukoil ready to sell Karpatneftekhim

Lukoil is reported to be interested in selling Karpatneftekhim at Kalush which has been idle since the end of 2013. The asset value of the company is estimated at between \$100-350 million. The Karpatneftekhim complex includes 300,000 tpa of PVC, 250,000 tpa of ethylene and 100,000 tpa of HDPE. Proposals have already been received from Polish and German investors, but even if Lukoil sells it has to give a guarantee for the supply of raw materials which can only come from Russia. As a result, Lukoil is ready to sell to another company which may be able to operate the complex more efficiently.

Karpatneftekhim stopped its production for lengthy periods over the past few years due to different reasons. At the end of 2014 Lukoil UKOIL has recognized loss on impairment of assets Karpatneftekhim of \$411 million.

Central Asia/Caucasus

SOCAR Polymer project

Russian company Cryogenmash has signed a contract with SOCAR to supply a cryogenic air separation plant to produce nitrogen for the polypropylene and polyethylene plants in SOCAR Polymer.

The project is being constructed in the Chemical Industrial Park in Sumgait comprising 120,000 tpa of polyethylene and 180,000 tpa of polypropylene. Most of the production is planned to be sent to Turkey and West European markets.

SOCAR reduces spending on OGPC

SOCAR has revised the OGPC project configuration, involving the launch of capacities on processing of oil and gas, petrochemical production. As a result, the cost was reduced from \$7 billion to \$4 billion. To reduce the costs of the project, SOCAR decided to reduce the capacity of the future GPP from 12 billion cubic metres of gas per annum to 10 billion cubic metres per annum. In June 2016, SOCAR signed a memorandum of intent with China National Petroleum Corporation (CNPC). Co-operation has also been developed with Gazprombank, export credit agency EXIAR and Italian export credit agency SACE.

Relevant Currencies

Czech crown. Kc. \$1= 20.852. €1 = 27.444; Hungarian Forint. Ft. \$1 = 229.253. €1 = 310.141; Polish zloty. zł. \$1=3.016. €1 =4.14 Ukrainian hryvnia. \$1 = 15.89. €1 = 19.05; Rus rouble. \$1 = 64. €1= 68

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