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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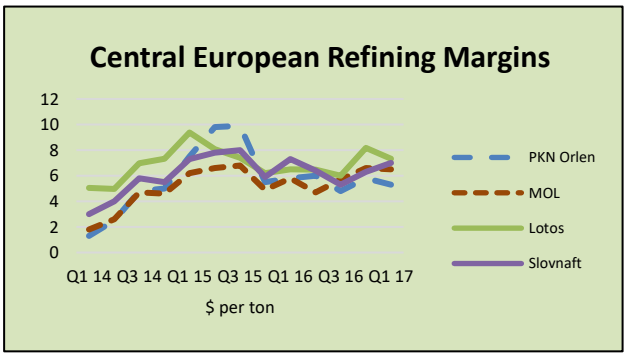
CENTRAL & SOUTH EAST EUROPE

Central European refining & petrochemical margins

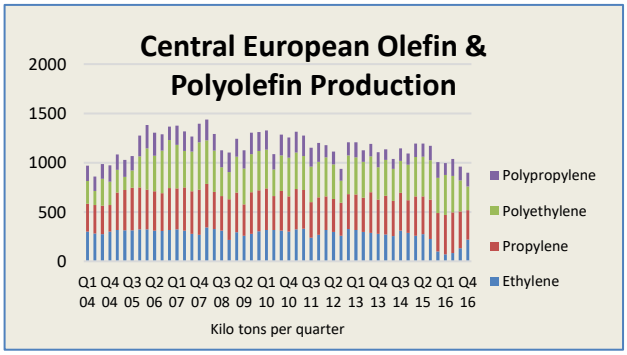
PKN Orlen's refining margins were recorded at $5.30 per barrel in March, which was also the average for the first quarter in 2017. Other refiners have reported similar margin trends this year. Orlen's petrochemical margin rose to €1001 per ton in March, the highest level since January 2016. Margins for Orlen rarely exceed €1000 per ton for petrochemicals, except notably for a four-month period in the middle of 2015. Unipetrol's petrochemical margin for olefins, which are calculated differently from Orlen, rose to €439 per ton in March from €396 in February. Polyolefin margins rose to €445 per ton in March against €438 per ton, against €548 in March 2016.



Regarding crude supply, a number of refiners in central Europe that mainly utilise Urals crude have been taking Iranian crude in recent months, including both MOL and PKN Orlen. In addition, Grupa Lotos has arranged to receive a shipment of Iranian heavy crude in May. Lotos is in talks about term deals with Iran's state-owned NIOC and state-owned Saudi Aramco, as well as from other countries including Nigeria. Lotos plans to test various crude grades in its new delayed coker unit (DCU) which should be completed in 2018 before committing to term deals. Grupa Lotos refined 2.324 million tons of crude Q1 2017 and made product sales of 2.272 million tons.

Czech Petrochemical Imports (unit-kilo tons)

Product	*Jan-Feb 17*	*Jan-Feb 16*
Ethylene	0.5	37.9
Propylene	7.4	29.7
Butadiene	8.5	8.2
Benzene	13.7	19.1
Ethylbenzene	7.7	8.8



Unipetrol-Neste Jacobs

Unipetrol signed an agreement with Neste Jacobs in April to perform a comprehensive energy efficiency study of the Litvinov oil refinery. The energy efficiency study will be performed by utilizing Neste Jacobs' proprietary NAPCON energy performance analysis. The study will review existing energy consumption and production within the refinery process units.

Following the restart of the Litvinov cracker in the fourth quarter last year, ethylene and imports into the Czech Republic have declined sharply whilst other petrochemicals continue to be imported.

Slovnaft maintenance investment April-June 2017

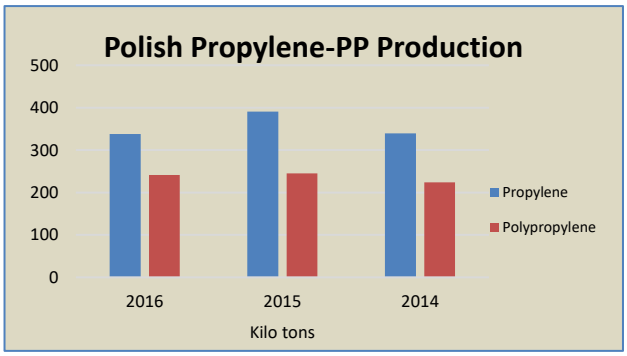
Slovnaft started a maintenance shutdown in April lasting until June, including the refinery and cracker. The extended shutdown will cost around €57 million of which €33 million has been allocated for repairs and another €24 million for modernisation. The aim is to reduce energy consumption in the production of crude oil products and to increase safety measures and standards. The plan is to resume the sixteen units at full operation in mid-June 2017. The status and operational efficiency of the new LDPE unit could become clearer after completion of the shutdown.

Slovnaft has outlined plans over the next few years involve investment into petrochemicals, endorsing the approach of MOL which is aiming to reduce the dependence on refining in its portfolio. MOL has set out ambitious targets for investing around $1.5 billion every five years over the next fifteen years in order to expand its production of chemicals. MOL operates refineries in Hungary, Slovakia and Croatia and has exploration and production assets in the North Sea and other countries such as Pakistan, Iraq, and Russia. Under the targets, MOL wants to reduce the dependence of motor fuel in its sales balance to below 50% from 70% at present to provide feedstock for MOL's chemicals business. New investments would come on

top of two projects of LDPE at Slovnaft, where construction is already completed, and synthetic rubber at MOL's TVK division in Hungary where construction should be completed by the end of 2017.

PDH Poland contractors and share issue

PDH Poland is considering general contracting companies for the turnkey project at Police. The contract includes installation for propylene, also plans for a sea terminal for unloading and storage of propane and the supply of electricity. The tender provides the option in the form of construction of a plant for the production of polypropylene, or to examine possible options. Originally, the deadline for submitting claims was established on 20 February 2017, and then it was extended to 1 March. Selecting the general contractor is expected to take place by December 2017.



Shares have been created for investments into PDH Poland, valued at around zl 2.69 billion. Up to 5.2 million shares have been offered to support the construction of the 427,000 tpa propylene plant. The PDH project could refocus the main interest of Grupa Azoty towards the north of Poland rather than the south at Tarnow. Opinions on the construction of the PDH plant at Police are varied, although from a market point of view, the extra propylene is seen as helping the supply/demand balance.

PKN Orlen-propylene supply to Basell Orlen Polyolefins

PKN Orlen signed an agreement with Basell Orlen Polyolefins (BOP) in April for the sale of 100,000 tpa of propylene over a long-term period. Under the contract PKN Orlen will supply propylene to the BOP, the production of which will increase at Plock following the installation of the metathesis unit which is under construction. Completion of installation and commissioning is planned for the second half of 2018.

Polish Chemical Production (unit-kilo tons)

Product	*Jan-Feb 17*	*Jan-Feb 16*
Caustic Soda Liquid	57.1	55.6
Caustic Soda Solid	13.4	13.5
Soda Ash	205.3	199.2
Ethylene	78.5	93.9
Propylene	55.6	66.7
Butadiene	8.6	10.2
Toluene	3.8	2.6
Phenol	7.1	7.0
Caprolactam	28.2	26.7
Acetic Acid	2.8	1.0
Polyethylene	53.9	66.1
Polystyrene	8.4	9.5
EPS	10.9	12.5
PVC	48.4	49.4
Polypropylene	43.5	42.7
Synthetic Rubber	41.4	33.6
Ammonia (Gaseous)	501.0	474.0
Ammonia (Liquid)	15.8	16.2
Pesticides	8.4	3.8
Nitric Acid	410.0	440.0
Nitrogen Fertilisers	353.0	349.0
Phosphate Fertilisers	83.9	76.3
Potassium Fertilisers	81.2	68.5

The metathesis unit at Plock is being designed to produce propylene polymer quality. The company's current propylene capacity is 450,000 tpa and the investment will increase production capacity to 550,000 tpa. The annual value of the agreement between PKN Orlen and BOP amounts to approximately zl 350 million and is an extension of the original agreement in 2002 when BOP was founded.

Rompetrol Rafinare-petrochemical investment

KMG International is considering opening a new petrochemical unit at its subsidiary Rompetrol Rafinare. Given that the global commercial and financial results were very good this year, KMG is considering investments in the refining and petrochemical sectors. In particular, the group is considering HDPE production.

Rompetrol Rafinare recorded a consolidated operational EBITDA of $182.5 million in 2016, up by 62% on 2015 but the net consolidated profit in 2016 dropped by 23% to $49.8 million. The operational results achieved records for the Petromidia and Vega refineries following the upgrade of production installations. In 2016, the Petromidia refinery 5.4 million tpa, 9% up on 2015. Propylene production at Petromidia's refinery totalled 125,000 tons in 2016, whilst MTBE production totalled 41,000 tons. Rompetrol Rafinare exported 2.5 million tons of refinery and petrochemical products in 2016, up by 3.7% over 2015, and shipped mainly to the partners in the Black Sea region. Polymer processing for Rompetrol Rafinare rose 5% in 2016 to 149,524 tons.

The company is the sole producer of polypropylene and LDPE in Romania. Whilst producing most of its own propylene Rompetrol remains 100% dependent on ethylene imports for polyethylene production.

HIP Petrohemija-privatisation

At the end of March Serbia invited expressions of interest in the privatisation of MSK Kikinda, HIP Petrohemija and chemical fertiliser producer HIP Azotara Pancevo. Potential investors will be able to submit their letters of interest to the economy ministry by 3 May. After analysing the asset value of the three companies, their strategic importance for the country and the content of the submitted letters of interest, the economy ministry will pick the best privatisation model.

Serbian Chemical Exports (unit-kilo tons)

Product	*Jan-Dec 16*	*Jan-Dec 15*
Polyethylene	118.8	78.8
Polypropylene	18.5	17.4
Styrene Butadiene Rubber	14.8	10.0
Methanol	110.4	5.2
Acetic Acid	64.3	4.2

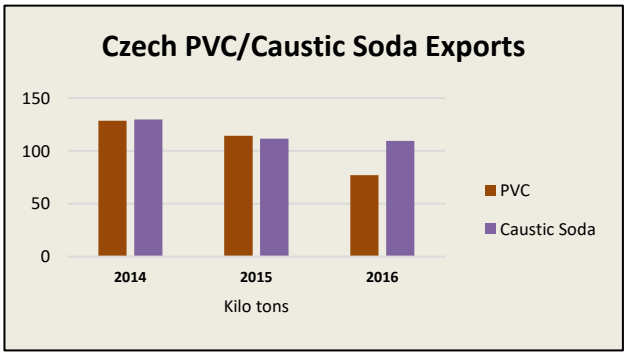
HIP Petrohemija owns petrochemical plants in Pancevo, Elemir and Crepaja. The company specialises in the production of high- and low-density polyethylene and other petrochemical products. The Serbian government owns 54.89% of HIP Petrohemija's share capital, while NIS controls 12.72%. In 2016 HIP Petrohemija exported 118,800 tons of polyethylene against 78,800 tons in 2015.

Oltchim sale delayed to June to allow due-diligence

The Romanian Ministry of Economy has informed that the sale procedure for Oltchim is at an advanced stage. Receivers have temporarily postponed the final stage of the procedure of sale by June 2017 at the request of bidders. They are now carrying out due diligence activities. Oltchim is owned by the Ministry of Economy, will be offered as nine constituent parts. At the same time the institution has continued dialogue with representatives of the European Commission to ensure that the strategy of recovery packages Oltchim is conducted in an open, transparent and non-discriminatory way.

The assets offered for sale include plants chlorine-alkali, oxo-alcohols, propylene oxide, plastics and service site, which includes the incineration of waste, water, maintenance and storage capabilities, etc. Other assets include the rail track, PVC processing, the petrochemical plant, and phthalic plant.

Companies that are interested in acquiring one of the nine asset packages of Oltchim can submit their binding offers until 26 June. The nine asset packages have a total market value of €293.7 million, and the starting price will be €307 million. The potential buyers of Oltchim need to pay compensation wages to all the employees who will be laid off, according to AT Kearney. If they decide to keep a part of the current employees, they can get a bonus of €5,000 for each employee. However, they can keep maximum 50% of the current number of employees.



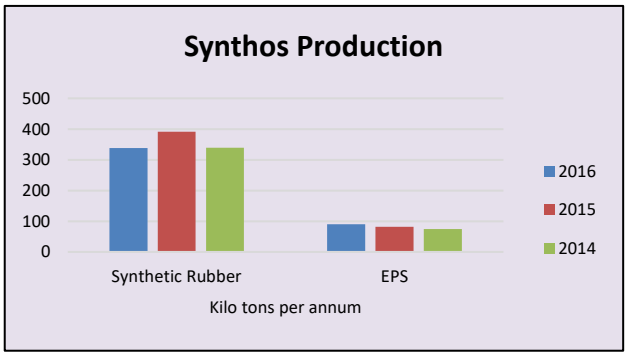
Spolana seeking extension on mercury plant

Spolana is looking to delay its statutory termination on its mercury plant at Neratovice for another five months until the end of November 2017. The company has recently requested an extension of the integrated permit until the end of November.

The reason for the request is necessary to ensure the operation until such time as a replacement technology started production of PVC from the externally supplied raw materials. The Neratovice plant is permitted to run on mercury until the summer. Options in the short term are limited to importing chlorine, but a decision on the extension until November may be available by the end of April.

Synthos-Michelin

Synthos and Michelin have extended a nearly decade-old licensing agreement that will allow Synthos to increase capacity at Kralupy. This involves the expansion of capacity for neodymium polybutadiene rubber (Nd BR rubber) from 65% to 132,000 tpa. The Synthos Group's styrene processing capacity exceeds 600,000 tpa.



Prices of raw material are an important component of the group's operating expenses. In 2016, the group's costs of raw material purchases accounted for 77.8% of total operating expenses. The group's key raw materials include: butadiene, styrene, ethylbenzene, butyl acrylate, vinyl acetate monomer, ethylene, benzene and C4 fraction.

The cracker in Litvinov supplies Czech entities from the Synthos Group with raw materials for production of ethylbenzene/styrene and butadiene, transported by pipelines. In connection with the accident of the cracker at August 2015, resulting in a year-long outage, raw materials had to be supplied by rail transport from other supply sources. Volatility in current butadiene costs represents a challenge for Synthos in 2017 and the impact on synthetic rubber prices. Styrene costs have also been fluctuating, but possibly are less of a threat to margins.

Central European tyre market

In April, Indian company Apollo Tyres opened a greenfield investment for a tyre plant at Gyöngyöshalász in Hungary. The Hungarian government has supported the investment with a grant of Ft 16 billion. The plant, which is Apollo's second in Europe, will put out two million tyres per annum once it reaches full capacity in the second half of 2018.

Polish Tyre Production (unit-thousand pieces)

Sector	*Jan-Dec 16*	*Jan-Dec 15*
Car tyres	31,550.0	31,006.0
Bus and truck tyres	4,084.0	4,369.0
Tractor tyres	295.6	286.9
Total	35,929.6	35,661.9

Polish Tyre Production (unit-kilo tons)

Sector	*Jan-Dec 16*	*Jan-Dec 15*
Car tyres	274.9	266.3
Bus and truck tyres	200.1	199.1
Tractor tyres	27.9	27.1
Total	502.8	492.6

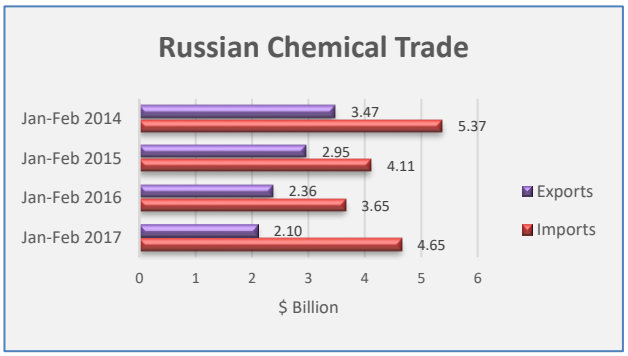
The growing demand for tyres and the increasing vehicle fleet in the country could encourage new flagship tyre manufacturers to enter the country in order to capitalize on the bolstering demand for tyres in Hungary. Among prominent tyre manufacturing companies with a strong presence in the country are Michelin, Hankook, Continental, Goodyear and Bridgestone. Hungary's strategic geographical location in Central Europe, and supportive investment policies, has made the country a prominent investment destination for various automotive companies.

In the Czech Republic Hanwha Corp recently clinched an order for a logistics automation facility project of about 90 billion won ($81 million) from Nexen tyre. The Nexen Tyre Czech plant is located at Zatec, 70 km northwest of Prague and will serve as a base for its tyre production in Europe. Hanwha Corp. will supply general engineering services to perform detailed design, purchase and construction simultaneously by building an automation system for the entire process.

Grupa Azoty-coal energy projects

Grupa Azoty signed a letter of intent on 20 April 2017 with the Tauron group for the coal gasification project intended for Kedzierzyn. The project is worth €400-600 million. The Polish Ministry of Energy assumes that the investment in coal gasification at Kedzierzyn could lead to the consumption of approximately 1 million tpa of coal. The project to build a plant at Kedzierzyn has been under review for many years, in which natural gas for fertiliser production can be replaced by synthesis gas produced by gasification of coal. The project is now at the stage of study (i.e. Preliminary Front End Engineering Design) and accompanying analysis, including market factors. The investment decision will depend on the economics of the project, and is crucial not only for Grupa Azoty's new products and raw materials, but also the Polish mines in finding a major customer for several million tons of coal per annum. The unresolved questions regarding the coal gasification project relate to finance and where are the funds going to be sourced.

RUSSIA



Russian chemical trade and production 2017

The deficit in Russian trade in chemical industry products rose in the first two months in 2017 to $2.550 billion from $1.290 billion in the same period in 2016. Since 2014 the government has been pushing the significance of import substitution, and whilst it is possible to replace polyolefin imports with domestic production, higher added value chemical products require a much longer lead time to develop. The overall economic position has stabilised since the significant falls in 2015, but any growth is seen as minimal. As often emphasised by domestic and international economists, much more needs to be done regarding reform, particularly as oil revenues can no longer be relied upon to support the economy.

Russian Chemical Production (unit-kilo tons)

Product	*Jan-Mar 17*	*Jan-Mar 16*
Caustic Soda	307.9	267.9
Soda Ash	850.0	634.7
Ethylene	766.0	713.0
Propylene	365.0	379.8
Benzene	378.0	315.1
Xylenes	146.6	145.5
Styrene	174.5	183.4
Phenol	56.5	61.7
Ammonia	4,100.0	4,000.0
Nitrogen Fertilisers	2,471.0	2,577.0
Phosphate Fertilisers	818.0	915.0
Potash Fertilisers	2,085.0	1,877.0
Plastics in Bulk	1,936.0	1,968.0
Polyethylene	525.0	555.0
Polystyrene	127.0	137.7
PVC	233.2	211.0
Polypropylene	364.0	383.0
Polyamide	38.7	37.6
Synthetic Rubber	452.0	371.0
Synthetic Fibres	38.9	36.2

In the first quarter in 2017 increases in Russian chemical production were noted for caustic soda, soda ash and nitrogen fertilisers. Ethylene production increased to 766,000 tons in the first quarter against 713,000 tons in 2016, whilst benzene showed a significant rise which has facilitated the rise in export activity.

Polymer production volumes were either up or down slightly in the first three months, with no major changes in market conditions. Synthetic rubber production has seen a notable rise to 452,000 tons against 371,000 tons in Q1 2016, as producers have increased utilisation rates in response to higher prices. The most important change has been this year in the Russian butanol market where the start-up of the new acrylate complex at Salavat has resulted in a reduction in availability for both domestic sales and the merchant market.

Russian gov't waives VAT on equipment imports

The Russian government decree of 7 April expanded the list of technological equipment where VAT can be waived, including equipment used in the petrochemical industry. Currently, the import of technological equipment is subject to VAT, which leads to an increase in the amount of funds required for modernisation. The new decree exempts VAT of 18% on plant equipment for olefins, methanol; and polyethylene. This should in theory aid domestic producers, but it is not uncommon for the government to add a counter-measure which diminishes the advantage of positive steps.

VNHK Project-Main Objectives

- VNHK is to use naphtha and LPGs that are currently exported
- Terminal for petrochemical complex to be located at Vostochny Port
- Project facilitates entry to the Asia-Pacific market for petrochemicals

Siberia & Russian Far East

VNHK road access & marine terminal

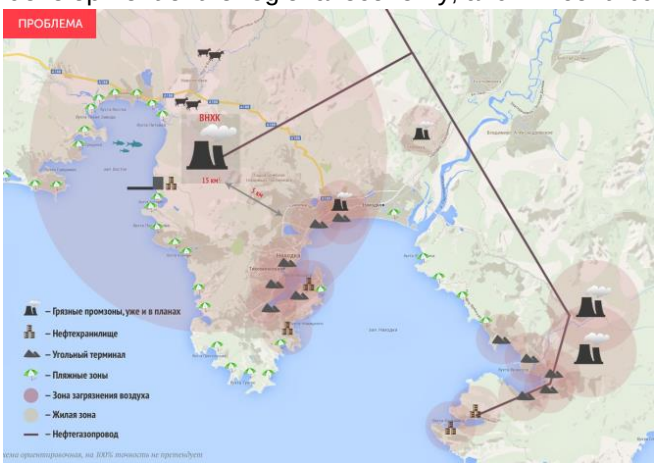
A 15-km road is under construction between the VNHK site at Nakhodka and Novolitovsk closer in land in the Primorsky Kray and linking with the federal highway A-188. Construction is being carried out under TOR Petrochemical where the VNHK complex is being built in the Elizarova area of the Partizansk district. The petrochemical project includes plans to produce monoethylene glycol, polyethylene, polypropylene, in addition to aromatic hydrocarbons and ethylbenzene.

The Eastern Petrochemical Complex (VNHK) is Bing designed to be able to produce more than 100,000 tons of motor fuel per month. One of the several large-scale tasks aims to ensure the growing needs of the regions in the Far East in high-quality motor fuel. The second task is to replace the export of raw materials to the production of goods with high added value.

Rosneft has proposed to include a marine terminal in the infrastructure for VNHK, in which the capacity at the Vostochny Port could be up to 3.5 million tpa. The cost of construction is estimated at around 55 billion roubles, but it is unclear at this stage how this would be financed. Local groups in the Nakhodka region have written to Putin requesting that this marine terminal should not be constructed due to environmental damage and pollution it will cause. Moreover, there are economic arguments against the construction of a stand-alone terminal, suggesting it would be better to expand the existing oil terminal at Vostochny.

TOR Petrochemical-VNHK

The establishment of TOR Petrochemical based VNHK will give an additional impetus to the development of the regional economy, and will contribute to the creation of processing industries in the Far East. The cluster approach will be based around the VNHK complex where the products will be produced with higher added value. The growing demand for petrochemical products in the Asia-Pacific region offers good opportunities for Russia in this region.



Related industries to be developed near the petrochemical cluster include the construction, energy, transportation, manufacturing of plastic products, which will open up broad prospects for small and medium-sized businesses. The first phase of the project includes a refinery with a planned capacity of 12 million tpa of oil, which is scheduled for completion by 2020. The second phase comprises the petrochemical complex should be completed by 2022.

Oil product capacities for VNHK include 1.6 million tpa of petrol, 800,000 tpa of jet fuel, 6 million tpa of diesel fuel, 600,000 tpa of coke, 2.2 million tpa of naphtha and 400,000 tpa of liquefied hydrocarbon gases. Petrochemical capacities include 900,000 tpa of polyethylene, 700,000 tpa of polypropylene and 700,000 tpa of monoethylene glycol.

VNHK Project Design Aims	
Product	Capacity (tpa)
Gasoline	1.6 million
Kerosene	800,000
Diesel fuel	6 million
Naphtha	2.2 million
LPGs	400,000
Polyethylene	900,000
Polypropylene	700,000
MEG	700,000

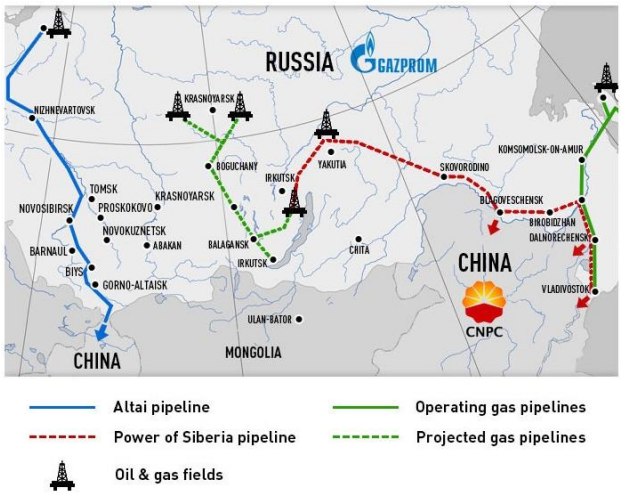
VNHK-raw materials

The main supply of oil to VNHK will flow through the East Siberia-Pacific Ocean pipeline (ESPO) to Nakhodka. Regarding gas, Gazprom is ready to build the necessary transportation capacity to connect with the VNHK complex. The gas pipeline may be completed even earlier than the refining and petrochemical plants will be built. VNHK's demand for natural gas has been estimated at 4.5 billion cubic metres per annum. Initially Rosneft planned to supply the gas to VNHK from Sakhalin-1 but has since changed its plans.

Petrochina-Power of Siberia

The Chinese oil company PetroChina intends to spend $3.2 billion in 2017 on the construction of the eastern route of the gas pipeline Power of Siberia and the second China-Russia oil pipeline, which extends from the outlet of the pipeline Eastern Siberia-Pacific Ocean (ESPO).

It is forecast that capital expenditures made by China for pipelines in 2017 will amount to 22.2 billion yuan ($3.2 billion), which will be mainly focused on the construction of key oil and gas pipeline routes,



such as the fourth pipeline Shaanxi-Beijing, eastern route Power of Siberia and the second Sino-Russian oil pipeline. Under the contract signed in 2014 between Gazprom and China's CNPC, on the eastern route will supply 38 billion cubic metres of gas per annum for 30 years. The first deliveries could begin in 2019.

Gazprom has until now built more than 650 kilometres of the pipeline Power of Siberia. This year the company hopes to construct 600 km in total. To date, it has completed construction of a temporary crossing point across the state border as part of a cross-border transfer of the underwater section of Siberia forces across the Amur River. The total length of the pipeline will comprise about 4,000 km, including eight compressor stations.

Gazprom selects Chinese company for Amur Gas Processing Plant

Gazprom has selected China Petroleum Engineering & Construction Corporation (SRESS affiliated with CNPC) to participate in the construction of the Amur Gas Processing Plant (GPP) for the EPC-contract terms. The contract between NIPIGas (general contractor performs construction management Amur ILI) and SRESS will be signed in the near future.

Under the contract with SRESS, the Chinese company will design and take responsibility for the manufacturing and supply of equipment and construction of compressor stations, gas fractionation, etc. One of the prerequisites of cooperation is to attract Russian manufacturers of compressor equipment, and automation systems to work.

River terminal-Amur Gas Processing Plant

A river terminal for the construction of the Amur Gas Processing Plant (GPP) has been established on the Zeya River in the Amur Oblast. The terminal will facilitate the transportation of large equipment and some construction materials for the construction of the Amur GPP for Gazprom and for SIBUR. Construction of the terminal is scheduled for completion in 2017. The builders have to build bridges across the river Great Pera and overpass over the highway. In addition, it will be necessary to build railways uncommon length of about 45 km and two stations.

ZapSibNeftekhim project update

The design of ZapSibNeftekhim had attained 86.6% of project schedule by the end of February 2017. Other details of the project included the supply of equipment and materials at 57.8%. Installation of the pyrolysis unit had achieved 44%, polyethylene 30%, polypropylene 33% and the logistics platform 10%. ZapSibNeftekhim will be part of the Tobolsk industrial platform that combines already running production of monomers and polymers.

ZapSibNeftekhim Project Construction Status End of Feb 2017

- Cracker-44%
- Polyethylene-30%
- Polypropylene-33%

ZapSibNeftekhim in March signed 42 contracts for the supply of building materials for the common facilities and logistics platforms, and the polyethylene installation. Contracts have been signed with companies from Perm, Tula, St Petersburg, Kazan, Tomsk, Chelyabinsk, Krasnokamenka and Georgievsk. The Tyumen companies provide supply supports for pipes and pipe products, electro and lighting products and other equipment for power supply. Moscow companies will be responsible for transportation to the site of construction equipment, including cable wires and piping elements. Regarding finance for the new complex SIBUR has used funds this year from the National Welfare Fund, running over the first six months. Funding for the project was initially planned in the amount of $9.5 billion in three currencies roubles, euros and dollars.

Russian feedstocks & petrochemicals

Russian Propylene Domestic Sales (unit-kilo tons)

Producer	*Jan-Mar 17*	*Jan-Mar 16*
Angarsk Polymer Plant	20.4	10.3
Omsk Kaucuk	1.0	0.0
SIBUR-Kstovo	16.5	29.5
LUKoil-NNOS	54.7	57.9
Tomskneftekhim	0.3	0.0
Gazprom neftekhim Salavat	0.0	0.4
Stavrolen	2.0	0.0
Total	95.0	98.0

Russian propylene sales, Jan-Mar 2017

Propylene sales to domestic consumers amounted to 27,200 tons in March, unchanged from February. Lukoil-NNOS shipped 15,900 tons in March, whilst SIBUR-Kstovo supplied 4,300 tons which was 27% down against February. Angarsk Polymer Plant increased production by 26% to 7,000 tons. For the first quarter sales of propylene monomer on the domestic market amounted to 91,500 tons which is 6% less than in the same period last year. Kazanorgsintez also began repairs on 13 April on the pyrolysis unit.

For propane-propylene fractions, sales fell by 46% in March to 4,600 tons. Planned downtime at Slavneft-Yanos meant that deliveries were not undertaken. In recent months, the Slavneft-Yanos fractions (were shipped largely to and NPP Neftekhimya at Moscow. Rosneft's Ryazan plant reduced shipments by 14% to 6,100 tons. In the first quarter this year sales of propane-propylene fractions on the Russian domestic market amounted to 37,400 tons.

Russian styrene, Jan-Mar 2017

Styrene sales on the domestic market amounted to 9,830 tons in March, 54% up on February. Gazprom neftekhim Salavat supplied 4,680 tons in March, SIBUR-Khimprom 4,280 tons and Angarsk Polymer Plant 871 tons. For the first quarter of 2017, domestic sales rose 4% to 22,750 tons.

Styrene exports rose 1.2% in March over February to 14,020 tons. Gazprom neftekhim Salavat shipped 9,640 tons in March, SIBUR-Khimprom 2,680 tons and Angarsk Polymer Plant 1,640 tons. Finland accounted for 8,990 tons of shipments in March, China 1,640 tons, and Turkey 1,520 tons. In the first quarter this year exports of styrene amounted to 40,810 tons or 9.6% more than in the same period of 2016.

Bulk Polymers

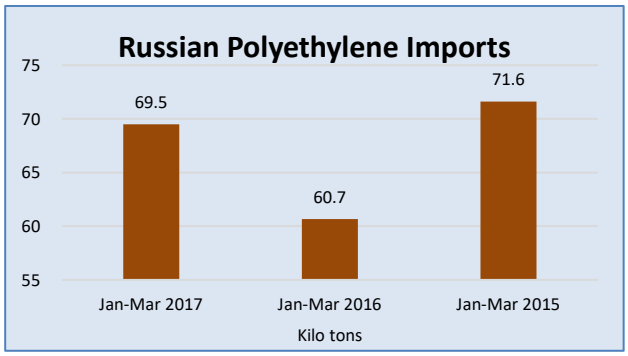
Russian polyethylene imports, Jan-Mar 2017

Polyethylene imports into Russia rose 5% in the first quarter to 114,800 tons against 109,400 tons in the same period in 2016. In March, imports grew to 45,300 tons against 38,700 tons in February. HDPE imports rose in March to 17,900 tons, including increased deliveries from Uzbekistan, bringing the Russian total to 42,500 tons in the first quarter versus 30,000 tons in Q1 2016.

LLDPE imports dropped to 33,600 tons in the first quarter this year against 41,900 tons. The fall was due largely to the increase in production by Nizhnekamskneftekhim. LDPE imports dropped slightly from 24,800 tons to 22,300 tons.

Russian polyethylene production, Jan-Mar 2017

Domestic production of polyethylene totalled 525,000 tons in the first quarter against 555,000 tons in the same period last year. Stavrolen stopped production of polyolefins for scheduled maintenance in April for around ten days. The previous outage took place in December last year. In the first two months in 2017 Stavrolen produced 40,100 tons of polyethylene and 19,600 tons of polypropylene. Kazanorgsintez halted LDPE production on 13 April for around a month. In the first quarter Kazanorgsintez produced 59,900 tons of LDPE. Regarding further shutdowns Gazprom neftekhim Salavat, Angarsk Polymer Plant and Tomskneftekhim all plan shutdowns in July this year.



Astrakhan polyethylene project, construction start Q4 2017

A project for the construction of a new polyethylene plant at Astrakhan will start in the fourth quarter, based at the Astrakhan Gas Processing Plant which is owned by Gazprom. The project is currently at

the stage of pre-project solutions, and if construction meets the schedule commissioning can be expected in 2020. Linde will be engaged in the project as contractors, using a site of 75 hectares to 100 hectares. The main source of feedstock has been designated as the Astrakhan gas condensate field. The production capacity of the plant will amount to 300,000 tpa, 70% of which is targeted for export.

Russian Polypropylene Production (unit-kilo tons)		
Producer	***Jan-Feb 17***	***Jan-Feb 16***
Ufaorgsintez	21.1	20.1
Stavrolen	19.6	18.8
Moscow NPZ	18.2	21.7
Nizhnekamskneftekhim	35.3	36.2
Polyom	35.4	34.0
Tomskneftekhim	23.2	23.6
Tobolsk-Polymer	78.0	84.9
Total	230.8	239.3

Russian polypropylene, Jan-Mar 2017

Russian polypropylene production amounted to 230,800 tons in the first two months in 2017, against 239,300 tons in the same period in 2016. Polypropylene imports into Russia totalled 35,100 tons in the first quarter, 1% down on the same period in 2016. Homopolymer imports dropped from 16,100 tons to 10,700 tons whilst block copolymers rose from 7,700 tons to 10,800 tons. Imports of stat-propylene copolymer rose to 6,500 tons against 6,100 tons in the first quarter in 2016 6.5 thousand tons against 6,100 tons a year earlier whilst other propylene polymer imports rose to 7,100 tons versus 5,800 tons.

Russian PVC Production (unit-kilo tons		
Producer	***Jan-Mar 17***	***Jan-Mar 16***
Bashkir Soda	65.0	63.9
Kaustik	22.6	23.7
RusVinyl	77.6	77.7
Sayanskkhimplast	59.6	35.3
Total	224.8	200.6

Russian PVC market, Jan-Mar 2017

Russian PVC production totalled 224,700 tons in the first quarter in 2017, 12% up on the same period in 2016. The growth is mainly due to Sayanskkhimplast which worked in the first quarter this year without interruption. The company produced 59,600 tons in January to March 2017 against 35,300 tons in 2016. RusVinyl produced 77,600 tons, unchanged from last year. Paste production amounted to 2,500 tons in March. Bashkir Soda Company produced 65,000 tons in Q1 2017 against 64,000 tons whilst Kaustik reduced the production of PVC by 4.6% to 22,600 tons.

PVC imports increased 33% in the first quarter this year to 4,800 tons from 1,600 tons in the same period in 2016. Imports from China amounted to 1,800 tons in February and 1,200 tons in March. PVC exports increased by 4% in the first quarter this year to 24,500 tons. In March, Russian exports amounted to 5,700 tons and in February 6,000 tons.

Russian polycarbonate Jan-Mar 2017

In January-March 2017 the production of polycarbonate by Kazanorgsintez totalled 18,700 tons compared to 18,600 tons in Q1 2016. Production amounted to 6,700 tons in March against 5,400 tons in February. A maintenance period is planned for the summer months, although the dates are not yet confirmed. Extrusion grade polycarbonate accounted for 78% of production in the first quarter 14,500 tons. The remaining 4,200 tons comprised injection moulding grades.

PX-PTA-PET

Russian PET Production (unit-kilo tons)		
Producer	***Jan-Dec 16***	***Jan-Dec 15***
Senezh	90.8	84.5
SIBUR-PETF	74.8	81.6
Alko-Naphtha	154.9	119.5
Polief	213.6	225.5
Total	534.0	511.1

Etana PET project

Investment is the PET project in the Kabardino-Balkaria region of southern Russia is now estimated at 12.9 billion roubles as opposed to original estimates of 12.3 billion roubles. The project consists of three sections, the aquifer province polymer complex, the preparation and bottling of bottled water and the transport logistics hub.

At the start of February 2017, the Kabardino-Balkaria government met with the North Caucasian railway branch of Russian Railways to consider the infrastructure requirements for the Etana PET and PTA projects. These projects are being implemented by the government of Kabardino-Balkaria together with state corporations of China and

includes three sectors, focused on polymer for the production of bottled drinking water and transport and logistics. The main destination route is intended to be China, both for raw materials and product sales.

The Etana project involves a total capacity of 1.5 million tpa, broken down into stages of 500,000 tpa by 2018 and the remaining 1.0 million tpa by 2020. Some reports have expressed doubts about the necessity of this project, noting that the entire demand of the Russian market of PET is less than 500,000 tpa.

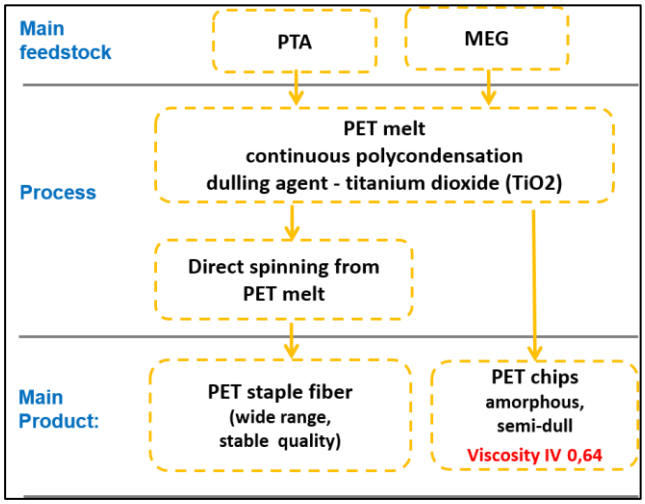
Russian PTA Imports (unit-kilo tons)

Country	*Jan-Feb 17*	*Jan-Feb 16*
Belgium	3.9	3.5
India	4.9	0.0
China	4.0	0.0
South Korea	-5.6	6.6
Poland	-0.3	4.4
Thailand	0.0	0.3
France	0.0	0.0
Portugal	0.0	0.0
Total	5.9	13.8

However, due to Chinese participation in the project most of the production is expected to be targeted on the Chinese market. The PTA project seems less certain and further news is awaited. The Chinese partners include China Petroleum Technology and Development Corporation (CPTDC) and China Kunlun Contracting and Engineering Corporation (CKCEC).

Ivanovo Polyester Complex

The construction of the Ivanovo polyester project is set to start in the middle of 2017 despite suggestions that the required environmental report for VEB bank financing was inaccurate. An independent review of the plant and its side-effects is likely to be undertaken, but in reality may have little effect. The plant will process a huge amount of highly toxic chemicals which is of concern to the local administration, although the project managers insist that the plant will not emit waste.



Ivanovo Polyester Complex (IPK) signed a contract on 1 December 2016 with Uhde Inventa-Fischer for the supply of equipment, installation and service for the PET project at Vichuga in the Ivanovo region.

Earlier in 2016 a contract was signed with the Czech company Unistav for working documentation, supply of auxiliary equipment and construction, installation and commissioning works. Czech government insurance group EGAP has insured the engineering company Unistav for Kc 3.5 million for the project.

Ivanovo Polyester Complex submitted the documents for state examination in February, which if approved would mean that construction of the new facilities can start in the first half of 2017. Ivanovo Polyester Complex has already signed agreements for MEG supplies from SIBUR and Nizhnekamskneftekhim of around 65,000 tpa. Import requirements of 155,000 tpa are expected to be met through imports. PTA supply is still under review, although imports are expected to be required in the early stages of production.

Russian MEG Sales (unit-kilo tons)

Company	*Jan-Mar 17*	*Jan-Mar 16*
SIBUR-Neftekhim	23.4	27.9
Nizhnekamskneftekhim	6.9	0.5
Others	0.9	0.3
Total	31.2	28.7

Russian MEG market, Jan-Mar 2017

MEG sales on the domestic market fell 12% in March to 8,850 tons. SIBUR-Neftekhim shipped 8,670 tons of MEG to domestic consumers, 33% more than in February, whilst Nizhnekamskneftekhim reduced sales by 98.5% to 54 tons. Kazanorgsintez delivered 57 tons of MEG by rail in March against zero in February, whilst trading companies increased shipments three-fold to 66 tons. Polief increased MEG purchases by 14.7% to 7,410 tons whilst BaltTechProm reduced purchases by 33% to 1,200 tons and small trading companies down by 62.7% to 242 tons. Obninskorgsintez did not purchase MEG in March. For the first quarter of 2017, Russian consumers bought 31,190 tons of MEG on the domestic market, unchanged from 2016.

Aromatics

Russian Benzene Consumers (unit-kilo tons)

Consumer	*Jan-Mar 17*	*Jan-Mar 16*
Kuibyshevazot	50.3	26.9
Azot Kemerovo	32.3	28.1
Shchekinoazot	13.7	14.7
Kazanorgsintez	16.5	19.8
Zapsib	10.0	13.5
SIBUR-Khimprom	21.0	28.0
Promsintez	3.9	4.4
Uralorgsintez	19.8	20.2
Others	20.1	20.5
Exports	47.2	15.5
Total	234.7	191.7

Russian benzene production, Jan-Feb 2017

Russian benzene production amounted to 107,200 tons in February, or 10% less than in January and then recovered to 131,000 tons in March. Production totalled 378,000 tons in the first quarter in 2017 against 315,100 tons in the same period in 2016. Production was boosted this year by the full occupancy of the Angarsk plant, whilst other plants including Kirishinefteorgsintez, Severstal and SIBUR-Kstovo increased utilisation levels.

Benzene sales for synthesis and nitration amounted to 54,500 tons in March, 3% more than in February. Domestic sales in March were helped by lower export activity. SIBUR-Kstovo increased sales 1.8 times to 6,600 tons and Slavneft-Yanos increased 1.5 times to 3,300 tons. At the same time, due to the required repairs at Kuibyshevazot, Stavrolen reduced sales by 31% to 4,500 tons. In the first quarter sales of benzene on the domestic market totalled 162,800 tons which is unchanged from 2015.

Kazakhstan has started deliveries of crude coal benzene from ArcelorMittal Temirtau to Uralorgsintez. SIBUR subsidiary Uralorgsintez recycles coal crude benzene, containing 65-80% of the basic substance, receiving therefrom benzene for synthesis, wherein the concentration of benzene greater than 99%. In April SIBUR closed a 22 billion rouble deal to sell Uralorgsintez to Russian company EKTOS.

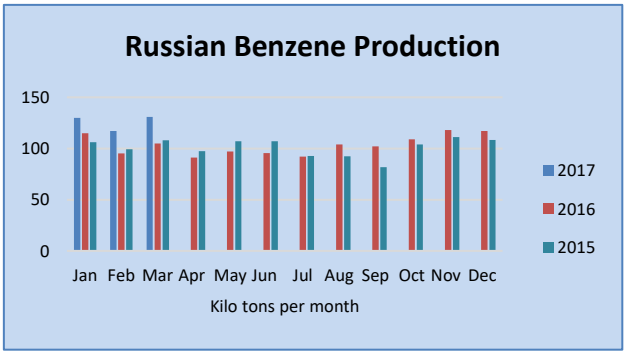
Altai-Koks, Q1 2017 & 2016

In the first quarter in 2017, Altai-Koks produced 11,300 tons of crude benzene, in addition to 21,800 tons of ammonium sulphate. Altai-Koks (part of the NLMK group) produced about 4.06 million tons of dry coke in 2016, which is 0.7% higher than in 2015. Crude benzene production amounted to 42,000 tons in 2016 and ammonium sulphate 90,000 tons. Altai-Koks is one of the largest Russian coke plants., including a capacity of 4.2 million tpa of dry coke.

Nizhnekamskneftekhim-benzene expansion

Nizhnekamskneftekhim intends to increase the production of benzene by 50,000 tpa in 2017 which will allow it to stop buying merchant benzene. The construction of two new pyrolysis furnaces and installation of benzene extraction of GTC's technology at the ethylene plant, will allow Nizhnekamskneftekhim to increase benzene production.

In 2016 the company produced 212,800 tons of benzene. In October 2016 Nizhnekamskneftekhim concluded a contract with GTC Technology (USA) for the basic design, technical services, the supply of corporate catalyst, solvent and equipment. Licensed technology GT-BTX® is to be implemented on existing olefins production EP-600 and applied to a new installation.



Kuibyshevazot-cyclohexanone restart

Kuibyshevazot plans to complete the revamp of the cyclohexanone unit at the end of May after suffering a large fire on 12 March. The 140,000 tpa plant was introduced in August 2016. Costs of reconstruction totalled 9.8 billion roubles. The plant launch last year, with the technology supplied by DSM, was designed to reduce the cost of production of caprolactam by around 12%, by reducing the consumption of benzene, caustic soda, electricity and steam.

Shchekinoazot caprolactam modernisation

Shchekinoazot is close to completion of its investment programme for the past year on caprolactam plant modernisation. However, in the production of cyclohexanone the company still faces bottlenecks that require additional work, in particular ensuring an increase in the circulation of cyclohexane. Primarily, this

reconstruction of internal devices stripper cyclohexane. To increase the capacity of caprolactam Shchekinoazot will undertake the reconstruction of hydroxylamine separation.

Russian Orthoxylene Domestic Sales (unit-kilo tons)

Producer	*Jan-Mar 17*	*Jan-Mar 16*
Gazprom Neft	17.5	16.0
Ufaneftekhim	14.5	8.4
Kirishinefteorgsintez	7.2	9.3
Total	39.3	33.7

Russian orthoxylene, Jan-Mar 2017

Orthoxylene sales on the domestic market rose 42% in March over February to 13,440 tons. Gazprom Neft supplied 6,320 tons, Ufaneftekhim 4,540 tons and Kirishinefteorgsintez 2,580 tons. Kamteks-Khimprom increased purchases of orthoxylene in March compared to February by 38% to 5,830 whilst Gazprom neftekhim Salavat reduced purchases by only 1% to 1,080 tons. Dmitrievsky Chemical Plant increased purchases of orthoxylene almost twice to 1,510 tons, whilst Russian manufacturers of paint and varnish materials increased purchases of orthoxylene by 34%, to 3,090 tons.

Orthoxylene exports from Russia rose to 20,790 tons in March, against 8,120 tons in February. Higher European prices attracted more Russian orthoxylene on the market, led by Kirishinefteorgsintez with 8,080 tons followed by Gazprom Neft with 6,760 tons and Ufaneftekhim 5,890 tons. About 80% of shipments were exported from Russia to Finland (16,720 tons). Other destinations included the Netherlands 3,510 tons. For the first quarter this year exports totalled 30,460 tons, 31% up on the same period in 2016.

Russian Toluene Domestic Sales (unit-kilo tons)

Producer	*Jan-Mar 17*	*Jan-Mar 16*
Novopiletsk MK	0.1	0.0
Slavneft-Yanos	4.5	8.2
Severstal	1.2	1.7
LUKoil-Perm	1.1	5.6
Gazprom Neft	15.4	17.0
Zapsib	10.7	0.5
Kinef, Kirishi	6.2	7.5
Gazprom Neftekhim Salavat	1.7	0.0
Others	0.1	0.0
Total	41.0	40.6

Russian toluene sales, Jan-Mar 2017

Toluene deliveries to the Russian domestic market amounted to 14,970 tons in March, 6% more than in February. Gazprom Neft- supplied 42% of deliveries from the Omsk Refinery (6,260 tons), Slavneft-Yaroslavnefteorgsintez 29% (4,310 tons), Kirishinefteorgsintez 20% (3,030 tons), Severstal 4% (650 tons), Lukoil-Permnefteorgsintez 3% (480 tons), West- Siberian Metallurgical Plant 1% (190 tons), and Novolipetsk MK (50 tons).

Buyers in March included explosive manufacturers (1,430 tons), 2.3 times up from February, whilst paint manufacturers increased purchases by 42% to 4,490 tons. Manufacturers of motor fuels and additives to them reduced purchases of toluene by 29% to 3,600 tons (24%). In addition, 480 tons of toluene were purchased by companies using it as a solvent for the production of synthetic rubber, 1,710 tons (11%) and manufacturers of other products, and 3,250 tons (22%) are trading companies. In the first quarter of 2017, 40.960 tons were shipped to the Russian domestic market which is 1% higher than in the same period in 2016.

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

Producer	*Jan-Mar 17*	*Jan-Mar 16*
Novokuibyshevsk PC	12.1	12.4
Kazanorgsintez	3.1	3.1
Ufaorgsintez	13.3	15.9
Borealis	0.1	0.1
Total	28.6	31.6

Synthetic Rubber

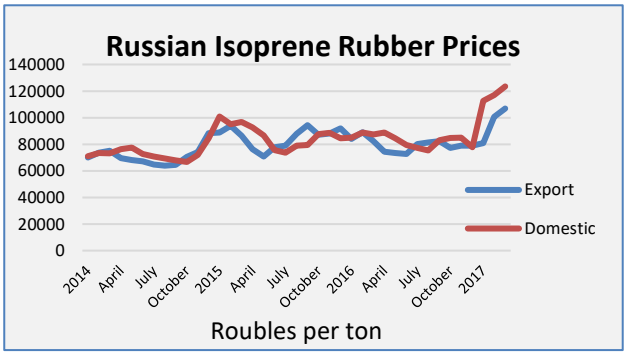
Russian C4 Purchases (unit-kilo tons)

Consumer	Jan-Mar 17	Jan-Mar 16
Omsk Kaucuk	16.2	9.4
Nizhnekamskneftekhim	44.1	46.9
SIBUR Togliatti	48.4	41.2
Sterlitamak Petrochemical	0.0	0.4
Total	108.7	97.8

Source: Chem-Courier.ru

Russian C4 sales, Jan-Mar 2017

C4 sales on the Russian domestic market amounted to 31,500 tons in March, 7% up on February. The leading suppliers included SIBUR-Kstovo with 8,600 tons, Tomskneftekhim 6,900 tons and Stavrolen 6,594 tons. Angarsk Polymer Plant increased sales by 21% to 2,900 tons whilst Kazanorgsintez reduced shipment by 19% to 3,700 tons. The two largest rubber producing plants Nizhnekamskneftekhim and SIBUR Togliatti (Togliattikaucuk) both increased purchases of C4s slightly in March. In the first quarter, domestic sales totalled 108,700 tons which was 12% up on the same period in 2016.



Russian rubber prices Q1 2017

Isoprene rubber prices for Russian producers have risen in the first quarter this year after several years of trending along the bottom line. Market prices for synthetic rubber have improved due partly to natural rubber shortages. Signs of pressure on butadiene prices could affect synthetic rubber prices, but fears may be offset by scheduled and unscheduled maintenance shutdowns for butadiene facilities in Asia and Europe. An unexpected surge of demand for butadiene in China, starting in the fall of 2016 and continuing into 2017, caused Asian butadiene prices to soar as high as $3,000 per ton. North American and European prices, though never as high as in Asia, rose accordingly.

Krasnoyarsk Synthetic Rubber Plant 2016

Krasnoyarsk Synthetic Rubber Plant produced 41,000 tons of butadiene-nitrile rubber in 2016, which is 6% more than in 2015. The main stimulus for production growth was the promotion of the site's products in China and Russia and entering new markets of Brazil, Vietnam, Colombia, Peru, and Serbia.

Efremov Synthetic Rubber Plant 2016

Efremov Synthetic Rubber Plant reduced the net loss in 2016 2.97 times in comparison with 2015 to 77.1 million roubles. Revenues fell 30.8% to 2.86 billion roubles.

Omsk Kaucuk-latex production

Omsk Kaucuk has recently completed the reconstruction of latex production facilities based on installation of new production equipment. Production of latexes installed included nine pieces of equipment, comprising six pumps with tight magnetic clutches. In addition to the environmental impact the reconstruction will reduce electricity consumption by about 20% whilst it will increase the stability and security of the entire process chain.

Omsk Kaucuk started latex production in 1965, the current capacity stands 13,000 tpa. Production was halted in 2010 before reconstruction started two years ago. In mid-April a pilot batch of products was shipped to customers. The new brand latex is stable and high adhesion, can be used in the light industry for impregnation of carpets, as well as in the oil to prepare a cement-latex solution.

Kurskrezinotekhnika 2017

Kurskrezinotekhnika plans to use 350 million roubles in 2017 for the purchase of new equipment. This amount will be directed to the acquisition of a line of high pressure hoses, which will develop the production of new products for the Russian market. This equipment is to be delivered to the company in May and is to be launched in August. Kurskrezinotekhnika also intends to buy equipment for vulcanizing tape total value of 250 million roubles for introduction by 2018.

In 2016, the company achieved sales 4.4 billion roubles whilst investing 44 million roubles on the modernisation of equipment for bag production and the production of wetsuits. Kurskrezinotekhnika is on a par with Saransk plant Rezinotekhnika part of the holding Rubex Group, which was formed in 2013. It specialises in developing, manufacturing and supplying highly specialized rubber products for industrial sectors.

Russian tyre market

Pirelli and Rostec's tyre jv in Russia produced 8.4 million tyres in 2016, based on the Kirov and Voronezh plants which were 6.2 million and 2.2 million tyres respectively. The company supplies around 20% of its production for export, whilst 80% was sold on the domestic market. Pirelli and Rostec's jv was created in 2008 and then expanded in 2011 after buying plants from SIBUR.

Rubber used in Russian Tyre Industry (unit-kilo tons)

Tyre category	*Jan-Dec 16*	*Jan-Dec 15*
Car Tyres	41.0	38.0
Lorry tyres	7.5	6.8
Agricultural tyres	1.8	1.4
Total	50.2	46.2

In the period 2012-2014 around €100 million was invested in the modernisation of the Voronezh plant, improving product quality and mastering the production of tyres with a diameter of 16 to 21 inches. Voronezh Tyre Plant increased tyre production by almost 25% in 2016. The company increased its exports to Europe, North America and the CIS.

Russian Chemical Commodity Exports

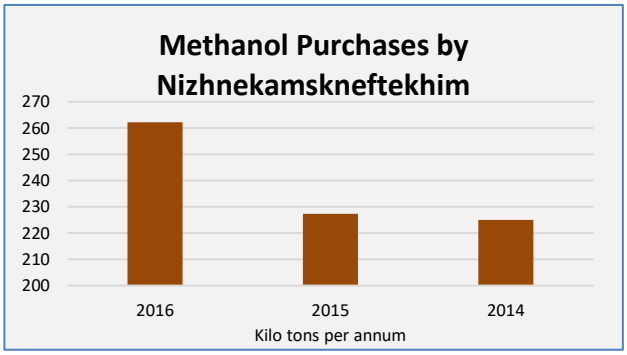
	Jan-Feb 17	*Jan-Feb 17*	*Jan-Feb 16*	*Jan-Feb 16*
Product	***Kilo tons***	***USD Mil***	***Kilo tons***	***USD Mil***
Ammonia	393.8	73	478	140
Methanol	268.0	67	201	38
Nitrogen Fertilisers	1557.1	270	1,657	331
Potash	744.0	135	1,554	365
Mixed Fertilisers	1539.8	390	1,251	421
Synthetic Rubber	175.9	291	168	199

Methanol & Ammonia

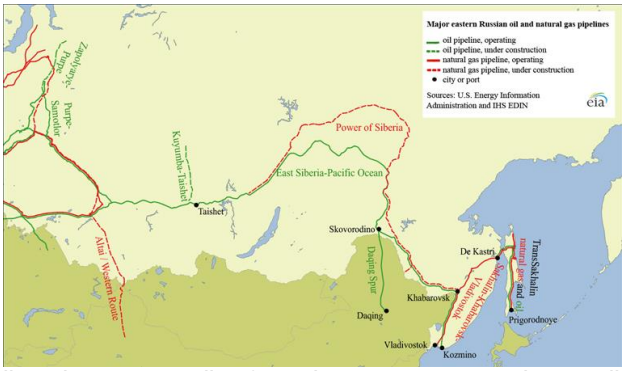
Russian methanol market 2017

Russian methanol production fell by 10% in February against January to 318,000 tons, partly due to the shorter month. Metafrax accounted for 27% of Russian production, followed by Tomet and Sibmetakhim with 21% and 25% respectively. The only producer to increase production in February was Ammoni at Mendeleevsk, rising 1% to 16,000 tons. Shchekinoazot: reduced production by 25% to 32,400 tons whilst Sibmetakhim and Akron both reduced production by 10% each to 78,500 tons and 7,400 tons respectively. Metafrax produced 86,200 tons, which was 9% less than in January.

Russian methanol production totalled 3.647 million tons in 2016 against 3.571 million tons in 2015. Russian methanol merchant sales are evenly divided between exports and the domestic market. Russian methanol exports rose in 2016 whilst domestic merchant sales and captive consumption fell. Shchekinoazot and Metafrax reduced exports to concentrate on internal processing in the formaldehyde sector, whilst Sibmetakhim and Tomet came close to maintaining export volumes.



Regarding domestic consumers Nizhnekamskneftekhim remains the largest single buyer on the Russian market, and is expected to increase demand in 2018. The increase in isoprene capacity at Nizhnekamsk is forecast to drive up required shipments to 330,000 tpa for Nizhnekamskneftekhim whilst also the rise in MTBE capacity is a factor helping to drive domestic demand for methanol. Domestic production of methanol is seen through the prism of surplus at present, with producers running their own processing facilities at full capacity and still possessing excess product for merchant sale. Metafrax is currently selling in the spot export market and prices are under pressure and thus the prospect of increased domestic consumption is a welcome sign.



Skorovodino methanol project

Tehnolizing at Skovorodino is considering whether to add MTBE production at its methanol project in the Amur Oblast. The company would though need to rely on Gazprom supplying butane from the Amur GPP which is under construction. Although this may be commercially unviable Gazprom has been instructed by Putin to direct butane supplies from the Amur GPP to Skovorodino instead of exporting butanes. The company has formulated an LPG export strategy from the Amur GPP to the Vanino port on the Pacific coast, which is being built. Gazprom has now addressed to the Ministry of Energy of the Russian Federation with a request to reimburse part of the costs that the company may incur regarding the MTBE project at Skovorodino.

The company Tehnolizing owns the oil terminal at Skovorodino, but due to falling oil transhipment volumes after the launch of the ESPO oil pipeline the group decided to restructure the business and to start producing methanol. The facility also plans the production of MTBE. The project capacity of the new methanol is expected to be around 1.2 million tpa.

Nakhodka fertiliser & methanol project

Preparation for the construction of the complex for the production of mineral fertilisers and methanol at Nakhodka is reported ready to start in the near future. Construction is almost ready to start works on site

and creation of facilities for storage of materials, as well as a temporary camp for workers, engineers and managers. The plant is based on similar European plants located in the Netherlands and Germany. The project is aimed at achieving the industrial and export potential not only Nakhodka, but also the whole region of Primorsky Kray.

Main features of Nakhodka Chemical Complex

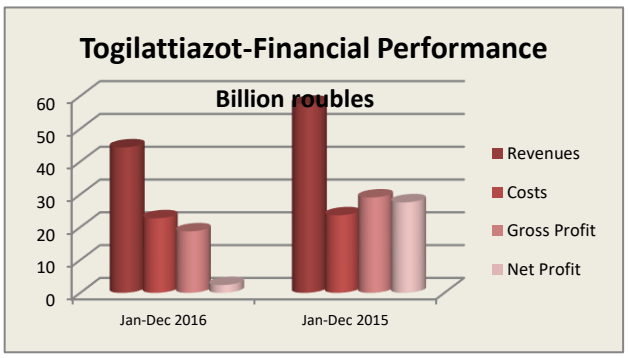
- Ammonia Capacity, 1.1 million tpa
- Urea, 2 million tpa
- Methanol, 1 million tpa

The project will require up to 12,000 personnel involved in the construction of the facility during the peak period. The construction of the processing plant is taking place on a site of 600 hectares in the bay of Kozmino. The plant will use gas supplied via the Power of Siberia pipeline. Under the terms of the contract, Gazprom will supply up to 8 million cubic metres of gas per annum up 2027. The plant should reach its design capacity by 2022, after that the production volumes will amount to 1.1 million tpa of ammonia, 2 million tpa of urea and 1 million tpa of methanol.

The project includes the reconstruction of existing engineering communications, the construction of a sea terminal and an extensive social infrastructure. In the area of the Wrangel Bay a housing estate will be constructed for ten thousand people with educational and health care institutions.

Togliattiazot 2016

Revenues for Togliattiazot fell by 30% in 2016 and amounted to 44.35 billion roubles. Profit from sales fell 3.7 times and amounted to 7.34 billion roubles, whilst profit before tax fell almost 12 times to 2.39 billion roubles. The decrease in Togliattiazot's revenue is due to the drop in prices on the world market for ammonia and urea. The revenue for the reporting period decreased against the backdrop of maintaining the total sales volume in 2016, 2 million tons.



The cost of sales of the company decreased by 4% and amounted to 22.74 billion roubles. Commercial expenses increased by 20%, to 11.28 billion roubles. Administrative expenses decreased by 1% and amounted to 2.99 billion roubles. Other expenses in 2016 amounted to 4.96 billion roubles against revenues a year earlier.

Togliattiazot continued the strategic investment programme aimed at modernising and increasing the efficiency of production facilities. The volume of investments in the reporting period amounted to 6.2 billion roubles. By 2019 Togliattiazot aims to complete construction of its eighth ammonia unit with a capacity of 1.86 tons per day, 680,000 tpa, increasing capacity by 22.7% from the current 3 million tpa.

Fosagro Production (unit-kilo tons)

Product	*Jan-Dec 16*	*Jan-Dec 15*
Ammonia	1,198.6	1,111.4
Urea	1,036.1	978.1
Phosphate fertilisers	5,929.9	5,353.1
Nitrogen fertilisers	1,495.0	1,433.4
Ammonium nitrate	458.9	455.3
Aluminium fluoride	46.0	36.1
Phosphoric acid	2,261.5	2,170.1
Sulphuric acid	4,296.1	4,711.2
Sodium Tripolyphosphate	92.9	123.5

Russia currently operates 28 ammonia plants, which produce more than 13 million tpa. All of the main players intend to increase output, and an additional 3 million tpa of capacity is expected to arrive by 2020. The devaluation of the rouble has made Russian ammonia capacity growth projects attractive in comparison with competitors. even with the over-production and low dollar price of products.

Fosagro new ammonia and urea plants

Fosagro could launch a new production unit for ammonia at the Cherepovets site in July 2017, followed by the urea plant in September. The new ammonia unit (capacity 760,000 tpa) undertook tests in late 2016 before commissioning, whilst the last delivery of components and equipment for the urea were supplied before the end of the year. Capacity of the new unit for production of urea, which will be the third for the Cherepovets site, amount to 500,000 tpa. Construction work on the urea unit began in 2015.

Organic chemicals

Russian N-butanol Exports (unit-kilo tons)		
Producer	***Jan-Mar 17***	***Jan-Mar 16***
Gazprom neftekhim Salavat	2.0	12.2
SIBUR-Khimprom	0.7	2.5
Angarsk Petrochemical	0.0	0.0
Azot Nevinnomyssk	0.6	0.2
Dmitrievsky Chemical Plant	0.1	0.7
Total	3.4	15.7
Russian Isobutanol Exports (unit-kilo tons)		
Producer	***Jan-Mar 17***	***Jan-Mar 16***
Gazprom n Salavat	2.2	0.5
SIBUR-Khimprom	3.1	3.3
Angarsk Petrochemical	0.0	0.0
Dmitrievsky Chemical Plant	0.1	0.0
Total	5.3	3.8

Russian butanol exports, Jan-Mar 2017

Exports of butanols from Russia amounted to 3,040 tons in March against 8,830 tons in March 2016, the decline due the rise in internal processing. The share of n-butanol in Russian exports in March 2017 was 55%, and isobutanol 45%. SIBUR-Khimprom shipped 1,590 tons of butanols (52% of exports) to foreign markets, and Gazprom neftekhim Salavat 1,210 tons (40%). Other suppliers included Azot at Nevinnomyssk with 120 tons and the Dmitrievsky Chemical Plant with 110 tons. Finland took 40% of Russian exports in March, followed by Ukraine with 32% and Turkey 14%. Isobutanol was the only type of butanols shipped to Ukraine, whilst only n-butanol was shipped to Finland.

In the first quarter in 2017 exports of butanols from Russia amounted to 8,020 tons, 57% less than in the same period last year. Isobutanols have increased this year whilst n-butanol exports fell as more product was used captively by Gazprom neftekhim Salavat.

Russian butanol sales, Jan-Mar 2017

Sales of butanols on the domestic market amounted to 7,480 tons in March, 64% more than in February. The share of n-butanol in the gross sales volume in March 2017 was 79%, and isobutanol 21%. SIBUR-Khimprom increased shipments by 34% to 5,530 tons (74% of the total Russian supply), whilst the Angarsk plant increased more shipments by 14% to 1,040 tons (14%). Gazprom neftekhim Salavat could only supply 660 tons of butanol to the domestic market, although that was up against 60 tons in February. Azot at Nevinnomyssk increased deliveries by 15% to 250 tons.

Russian Butanol Consumption (unit-kilo tons)		
Consumer	***Jan-Mar 17***	***Jan-Mar 16***
Akrilat	5.2	6.8
Dmitrievsky Chemical	2.3	4.9
Plant of Synthetic Alcohol	0.0	0.4
Volzhskiy Orgsintez	2.4	1.9
Roshalsky Plant of Plasticizers	0.2	0.0
Others	5.9	5.3
Total	16.0	19.3

Akrilat at Dzerzhinsk bought 2,440 tons in March which was 55% up on February whilst Dmitrievsky Chemical Plant increased purchases more than twofold to 1,360 tons (18%). The company Nefttorgservis increased consumption by 4%, to 1,210 tons all of which was isobutanol. Volzhskiy Orgsintez also bought 900 tons in March. In the first quarter of 2017, the volume of supplies of domestic butanols to the Russian market amounted to 16,710 tons which is 14% less than in the same period last year.

Russian Butanol Domestic Sales (unit-kilo tons)		
	Jan-Mar 17	***Jan-Mar 16***
Gazprom n Salavat	0.9	5.0
SIBUR-Khimprom	10.4	10.4
Angarsk Polymer Plant	1.2	0.7
Azot Nevinnomyssk	0.7	1.2
Others	3.8	1.9
Totals	16.0	19.3

In April, the volume of the supply of butanols from Gazprom neftekhim Salavat and the Angarsk petrochemical company increased on the Russian market, helping to alleviate supply side pressure. At the same time, Gazprom neftekhim Salavat raised the selling prices of its products by 1,000 roubles. In the first half of April, n-butanol of the enterprise was offered at 51,000 roubles per ton, including VAT, and isobutanol at 50,870 roubles per ton, including VAT. In the Siberian Federal District, Angarsk Petrochemical Company was offering butanols at 41,000 roubles per ton, including VAT (n-butanol) and 39,000 roubles per ton, including VAT (isobutanol), respectively.

Until now the butanol producers either sold product on the domestic market or exports, but internal processing was relatively small. That position changed at the end of 2016 following the start-up of the new acrylate complex. In view of the declining export opportunities in the Chinese market, the start-up of the Salavat project and subsequent switch to internal processing represents a major change for the butanols market.

Ural Plant of Plasticizers faces possible closure

In April the Urals department of Rostekhnadzor (government safety institution) initiated a case against Ural Plant of Plasticizers which could result in a closure for at least a short period. The commission departments during the site inspection revealed 70 violations of industrial safety requirements. The site inspection was carried out in the period from 6 March to 27 on March based on the examination of plasticizer production, the warehouse of finished goods and the hazardous materials transport section.

Russian Phthalic Anhydride Production (unit-kilo tons)		
Producer	***Jan-Dec 16***	***Jan-Dec 15***
Gazprom neftekhim Salavat	9.0	6.9
Kamteks-Khimprom,	75.3	86.9
Total	84.3	93.8

Ural Plant of Plasticizers specializes in the production of dioctylphthalate, dioctyl adipate, dioctyl sebacate, dibutyl sebacate, dibutyl phthalate. Russia's only produces DOTP plasticizer, which is in line with European environmental requirements. In 2016, the company mastered the production of PVC plastic compounds.

Russian Phthalic Anhydride Market (unit-kilo tons)		
	2016	2015
Production	84.3	93.8
Export	38.9	48.6
Import	8.2	6.0
Market Balance	53.6	51.2

Russian phthalic anhydride market

Exports of phthalic anhydride from Russia amounted to 4,630 tons in March, 6% less than in February. Main destinations included Egypt (19%), Poland (13%), India (11%), China (11%), Finland (11%) and Tunisia (8%). Kamteks-Khimprom exported 13,630 tons in the first quarter which is 8% down on 2016.

The main application area for phthalic anhydride in Russia is the production of phthalate plasticizers followed by the production of alkyd paint and varnish materials. Both sectors have been fairly stagnant in recent years and overall consumption volumes have not seen much change. Production amounted to 84,300 tons in 2016 which was 10% down on 2015. Kamteks-Khimprom reduced production by 13% to 75,320 tons (89% of production in Russia). In addition, the company increased the production of dioctyl phthalate at its own capacities by 32%.

Other products

Kaustik Volgograd 2016

Kaustik (Volgograd, part of the Nikokhim group) increased its net profit by 41% in 2016 whilst revenues rose by 2.3% to 16.6 billion roubles. The company experienced a rise in production costs 14% in 2016. PVC accounts for 31.4% of the company's product sales, caustic soda 35%, including soda liquid 13%, and soda granulated 22%.

Russian Caustic Soda Production (tons)			
Producer	**2016 Capacity**	**Production 2015**	**Production 2016**
Total	**1,488**	**1,094.8**	**1132.8**
Kaustik Volgograd	**235**	**232.0**	**235.7**
Sayanskkhimplast	193	152.3	112.0
BSK Sterlitamak	267	187.8	203.8
Khimprom, Novocheboksarsk	97	94.7	96.6
Plant of Polymers KChKhK	205	94.0	99.4
Ilimkhimprom	130	71.9	71.2
Chlor Novomoskovsk	70	69.2	70.3
Khimprom, Kemerovo	45	32.3	35.5
RusVinyl	225	147.3	199.8
Norilsk Nickel	21	13.3	8.5

The gross profit of Kaustik amounted to 6.73 billion roubles against 5.12 billion roubles in 2015. Profit from sales increased by 42% to 4.17 billion roubles. Profit before tax amounted to 2.78 billion roubles, and net profit 2.299 billion roubles.

Khimprom Novocheboksarsk 2016

Khimprom at Novocheboksarsk increased its net profit 2.7 times in 2016 whilst revenues grew by 19.5% to 8.45 billion

roubles. The cost of production increased from 4.6 billion roubles to 5.5 billion roubles, whilst the gross profit rose 17.9% to 2.9 billion roubles. The profit from sales amounted to 1.26 billion roubles.

The main increase in production and sales came in hydrogen peroxide and rubber chemicals used in the production of automobile tyres as well as caustic. The production of hydrogen peroxide was increased by 40% to 95,000 tpa in terms of 30% concentration. Profit before tax increased by 2.6 times to 850.9 million roubles and the net profit amounted to 668.72 million roubles against 241.05 million roubles in 2015.

Russian Chlorine Merchant Sales (tons)		
Producer	**2015**	**2016**
Total	**107,467**	**107,253**
Kaustik Volgograd	32,865	35,091
Ilimkhimprom	38,064	33,439
Khimprom, Novocheboksarsk	23,201	23,897
Khimprom, Kemerovo	5,427	6,482
Chlor Novomoskovsk	3,462	2,446
Soda-Chlorate	4,020	1,601
Sayanskkhimplast	200	4,108
Solikamsk Magnesium Plant	228	189

Russian caustic soda market 2016

Russian companies increased their production of caustic soda by 3% in 2016 to 1.13 million tons. Current capacity allows the maximum production of 1.49 million tpa. Production leaders included Kaustik at Volgograd, Bashkir Soda Company and RusVinyl, which produced 235.700 tons, 203,800 tons and 199,800 tons respectively. Khimprom at Kemerovo increased production by 10% to 35,500 tons, whilst Khimprom at Novocheboksarsk increased production by 2% 96,600 tons and Chlor at Novomoskovsk by 2% to 70,300 tons.

Sayanskkhimplast reduced production to 112,000 tons against 152,000 tons in 2015, whilst Ilimkhimprom at Bratsk reduced production by 1% to 71,200 tons. Chlorine merchant sales were unchanged at 107,250 tons of which 33% was supplied by Kaustik at Volgograd (35,090 tons). Ilimkhimprom at Bratsk produced 33,440 tons of chlorine, which is 12% below 2015 whilst Khimprom at Novocheboksarsk shipped 23,890 tons of chlorine.

Nefis Cosmetics 2016

Nefis Cosmetics increased revenue by 40% in 2016 to 18 billion roubles. The net profit increased more than 5 times and amounted to 778 million roubles. A significant rise in sales was achieved in liquid detergents and toilet soap by 22% for each product group in physical terms. The production capacity of liquid detergents increased to 12,000 tons per month last year, whilst the production capacity of toilet soap rose to 2,000 tons per month. After the major global brands, Nefis Cosmetics has retained third place in the Russian market of washing powders and the second place in the market of washing-up liquids.

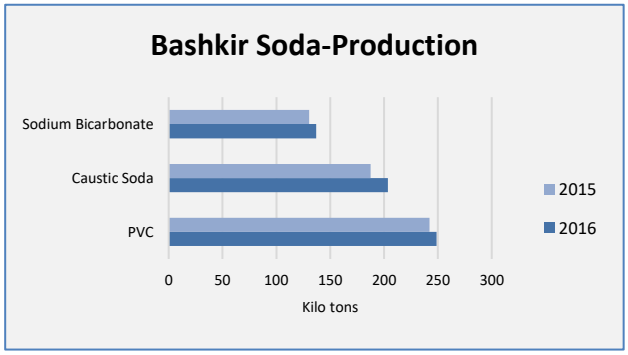
Calcium hypochloritie project-Novocheboksarsk

Orgsintez Group plans to start production of high concentrations of calcium hypochlorite on site at Khimprom (Novocheboksarsk) in the fourth quarter of 2017. The project is scheduled to run two lines with capacity of 15,000 tpa. Investment in the first phase of the project, as of May 2016 was estimated at $9.6 million. The licensor and developer of the project is the Dezhou Chemicals.

Production will be based on one of the shops using available raw materials (caustic and chlorine). The company plans to produce calcium hypochlorite on two technologies, using calcium and sodium. This will enable a faster response to changing market demands. Currently, highly concentrated calcium hypochlorite is imported into Russia from China, estimated at around 25,000 tpa.

Bashkir Soda 2016

Bashkir Soda produced 1.6 million tons of soda ash in 2016 at its two plants Sterlitamak and Berezniki, 6.3% higher than in 2015. Liquid caustic soda production, undertaken at Sterlitamak, rose 8.5% to 204,000 tons whilst PVC also Sterlitamak rose 2.7% to 249,000 tons. Sodium bicarbonate production rose 5% to 137,000 tons.



Bashkir Soda Company increased its net profit in 2016 by 48.3% whilst revenue rose 17%. The company received proceeds in the amount of 39.1 billion roubles. Cost of sales increased by 11.5% to 22.9 billion roubles, whilst raw material costs rose by 15.2% to 10.54 billion roubles. The

company's gross profit rose 25.6% to 16.26 billion roubles. Profit from sales amounted to 14.34 billion roubles, and net profit 10.9 billion roubles.

Polyplastik 2016

Russian plastics converter Polyplastik increased overall sales by 2.3% in 2016, although the domestic market dropped by around 3%. Sales were up in 2016 largely due to major orders from SIBUR, including a tender for 15,000 tons of pipes for water supply for ZapSibNeftekhim. The Far East is also becoming more important for Polyplastik following the launch of a new plant at Khabarovsk in 2016. Polyplastik plans to increase its gradually share of exports in total sales to around 30% by 2019. This year is expected to be difficult for manufacturers of plastic pipes rather difficult, as no new major projects are expected to be introduced. The major fall in pipe consumption took place in 2015 when sales from Polyplastik dropped by around 15%.

Polyplastik Contracts & Targets

- 2016 sales helped by tender for ZapSibNeftekhim for 15,000 tons of pipes
- Agreement with BASF for joint projects in automotive industry
- Company aims to increase export sales to around 30% by 2019

Polyplastik and BASF signed an agreement on cooperation in the framework of the implementation of joint projects for the automotive industry. Polyplastik and OOO PSMA Rus signed a new agreement for the supply of polymer composite materials to be used in the manufacture of parts for Peugeot and Citroen cars. The agreement was signed on 31 January at Kaluga.

Belarus

Polymir, Jan-Mar 2017

In the first three months of 2017 Polymir produced 15,800 tons of LDPE which was 53% down against 2016 when volumes totalled 33,700 tons. Production this year has been affected by the fire last June which continues to affect production at the second line of 65,000 tpa. The exact timing of line under repair is not known but the launch will occur is unlikely to take place prior to 2018.

Belarussian Polymer Imports (unit-kilo tons)

Product	*Jan-Feb 17*	*Jan-Feb 16*
PVC	3.5	2.8
Polypropylene	13.7	12.8
LDPE	13.7	8.1
HDPE	6.4	5.4
Polystyrene	9.0	10.0

Belarussian polymer & chemical trade, Jan-Feb 2017

Partly due to the long-term maintenance on one of the two production lines for polyethylene at Novopolotsk, LDPE imports into Belarus rose to 13,890 tons in the first two months against 8,083 tons in the same period in 2016. Prices for LDPE imports dropped to $1,289 per ton from $1,357 per ton last year. The main source of LDPE imports this year has been Saudi Arabia. HDPE imports rose to 6,393 tons from 5,334 tons in January-February 2016.

Mogilevkhimvolokno PTA Imports (unit-kilo tons)

Country	*Jan-Feb 17*	*Jan-Feb 16*
Poland	2.1	2.0
Russia	1.0	0.0
South Korea	8.6	2.0
Portugal	0.0	1.0
Thailand	0.0	1.0
Total	11.8	6.0

Polypropylene imports into Belarus, including copolymers and homopolymers, rose to 13,011 tons in the first two months versus 12,789 tons last year.

Belarussian Acrylonitrile Exports (unit-kilo tons)

Product	*Jan-Feb 17*	*Jan-Feb 16*
Russia	0.2	0.7
Hungary	0.0	3.0
India	2.0	0.0
Iran	2.4	0.0
Netherlands	3.8	0.6
Romania	0.0	0.1
Turkey	2.0	4.0
Poland	0.1	0.0
Total	10.4	8.3

The largest increase occurred in the external supply injection moulding propylene copolymers, whilst overall the largest type of polypropylene imported was homopolymer which rose to 8,437 tons. Russian producers were the main suppliers to the Belarussian market. Regarding synthetic rubber imports, shipments totalled 6,209 tons in January and February 2017 against 7,116 tons in the same period in 2016. Most of the synthetic rubber supplies were sourced from Russia.

PTA imports into Belarus totalled 11,975 tons in the first two months in 2017 against 6,028 tons in the same period in 2016. Prices per

ton rose to $731 per ton from $684 per ton based on January-February 2016. The average price per ton for Belarussian PTA imports for the whole of 2016 was $690 against $765 in 2016. The main supplier in 2017 has thus far been South Korea, which shipped 8,362 tons in January to February, followed by Poland with 2,112 tons.

Paraxylene imports into Belarus totalled 6,244 tons in January to February 2017 against 2,200 tons in the same period last year. All of the paraxylene was sourced from Russia. MEG imports into Belarus totalled 67,438 tons in January to December 2016 versus 60,495 tons in 2015. Russian producers supplied almost all of the market requirements, whilst Saudi Arabia supplied smaller volumes.

Belarussian Organic Chemical Exports (unit-kilo tons)		
Product	***Jan-Feb 17***	***Jan-Feb 16***
Acrylonitrile	10.4	4.2
Caprolactam	1.3	2.1
Phthalic anhydride	3.5	1.2
Methanol	3.0	6.3

Acrylonitrile exports amounted to 10,377 tons in the first two months in 2017 against 8,492 tons last year. Average prices rose this year to $1,127 per ton against $708 per ton in the first two months in 2016. The average price for Belarussian acrylonitrile exports amounted to $875 per ton for the whole of 2016 against $1,078 per ton in 2015. The major destinations for Belarussian acrylonitrile exports in January and February 2017 comprised the Netherlands, Iran and India.

Caprolactam exports restarted in February 2017, nine months after the last shipments were made from Grodno. Belarus sent 517 tons to Indonesia in February at $1,004 per ton and 749 tons to Taiwan at $1,474 per ton. Methanol exports continue to remain low, totalling 2,966 tons in the first two months in 2017 against 11,500 tons in the same period in 2016.

Ukraine

Ukrainian Polymer Imports (unit-kilo tons)		
Product	***Jan-Dec 16***	***Jan-Dec 15***
PVC	100.5	85.8
LDPE	68.6	52.4
LLDPE	58.8	45.0
HDPE	125.9	93.4
Ethylene Vinyl Acetate	13.6	9.9
PP	119.6	96.2

Ukrainian polyethylene imports

Ukrainian imports of polyethylene increased by 2% in the first two months in 2017 to 39,700 tons, including 21,500 tons in February against 18,200 tons in January. HDPE imports declined to 15,000 tons from 18,700 tons in the first two months in 2016 whilst LDPE imports rose 11% to 11,800 tons. LLDPE imports saw the largest rise to 10,600 tons against 7,900 tons whilst other types of polyethylene rose to 2,200 tons versus 1,200 tons in 2016.

Ukrainian PVC imports

Ukrainian imports of PVC amounted to 14,100 tons in the first two months in 2017, 24% below the same level in 2016. Russian PVC exports amounted to 2,800 tons in the first two months in 2017, 87% up on the same period in 2016. Further prospects of the Ukrainian market of PVC are associated with the launch of Karpatneftekhim which could take place in May 2017.

Ukrainian Polypropylene Imports (unit-kilo tons)		
Category	***Jan-Feb 17***	***Jan-Feb 16***
Homo	14.4	13.6
Block	1.6	1.6
Random	1.6	2.1
Propylene copolymers	0.0	0.0
Other	0.5	0.4
Total	18.1	17.6

Ukrainian Polypropylene Market (unit-kilo tons)				
	2016	***2015***	***Jan-Feb 17***	***Jan-Feb 16***
Production	0.0	0.0	0.0	0.0
Import	111.3	89.2	18.1	17.6
Export	0.0	0.0	0.0	0.0
Market Balance	111.3	89.2	18.1	17.6

Ukrainian polypropylene imports totalled 18,100 tons in the first two months in 2017, 3% up on the same period in 2016. Homopolymer imports rose from 13,600 tons to 14,300 tons whilst block copolymer imports rose from 1,600 tons to 1,900 tons. Imports of stat copolymers fell from 2,000 tons to 1,600 tons.

Ukrainian polypropylene market rise

Last year the Ukrainian polypropylene market recorded a significant increase over 2015. Large quantities of the product were imported

from Saudi Arabia, Russia, Slovakia, and Hungary. Turkmenistan also increased exports into Ukraine in 2016, totalling 5,400 tons against 540 tons in 2015, whilst Uzbekistan through of UzKorGasChemical supplied 3,000 tons. The leader in supply in 2016 was SABIC. This year, the capacity of the Ukrainian market may increase by another 10-12%.

Karpatneftekhim preparing to launch production of the end of May

Karpatneftekhim has scheduled a restart for the end of May, including the commissioning of all facilities ethylene, polyethylene, PVC, caustic soda, etc. The plant will process 50-70,000 tons for raw materials per month. Preliminary agreements with supplies already have been made. Karpatneftekhim has a capacity for ethylene production of 250,000 tpa, PVC 300,000 tpa, caustic soda 200,000 tpa, and polyethylene 100,000 tpa.

Ukrainian benzene exports

The export of Ukrainian benzene for synthesis increased 33.6 times to 6,000 tons in February. The significant increase is primarily due to the resumption, for the first time since August 2016, of the sale abroad of the products of Ukrtatnafta. In March, the export of Ukrainian benzene decreased by 3.4 times to 1,800 tons. Ukrtatnafta, reduced sales by 4.7 times to 1,100 tons whilst Zaporozhkoks reduced shipments by 9% to 638 tons. For the first quarter in 2017, Ukrainian exports of benzene amounted to 8,000 tons, 26% less than in the same period in 2016.

Ukrainian chemical imports, Jan-Feb 2017

Imports of phthalic anhydride into Ukraine amounted to 210 tons in February against 142 tons in January and 141 tons in February 2016. The sole supplier in February was the Belarusian company Lakokraska at Lida. Polikem was the main buyer taking 189 tons. In the first two months in 2017 imports of phthalic anhydride amounted to 352 tons which is 29% less than for the same period in 2016.

DOP imports into Ukraine amounted to 229 tons in February against 283 tons in January. Czech producer Deza accounted for 185 tons in February and the other 44 tons from the Polish producer Boryszew. In the first two months in 2017, DOP imports to Ukraine totalled 512 tons which is 83% more than the same period in 2016.

Methanol imports into Ukraine amounted to 2,200 tons in February, 13% more than in January. Russian producers accounted for 2,100 tons in February, 36% up on January, whilst Belarussian producer Azot at Grodno supplied only 80 tons which was down by 80%. The main buyers included gas-producing enterprises which accounted for 40% (or 903 tons). The share of domestic trading companies in February was about 30% (673 tons), and producers of formaldehyde and its derivatives 28% (618 tons). The average cost of methanol purchased by Ukrainian consumers abroad in February in dollar terms increased in January by almost 10%, to $300 per ton DAF Ukraine's border, against the recorded $275 per ton DAF border of Ukraine in January.

Kazakh Polymer Imports (unit-kilo tons)

Product	*Jan-Dec 16*	*Jan-Dec 15*
HDPE	73.3	67.2
LDPE	17.1	16.3
LLDPE	5.5	5.3
PVC	51.0	49.0
Polypropylene	24.5	22.5

Central Asia/Caucasus

Kazakh polymer imports, Jan-Feb 2017

In the first two months of this year, imports of polypropylene rose in Kazakhstan by 49% to 5,100 tons from 3,400 tons. Imports amounted to 3,100 tons in February against 2,000 tons in January. Kazakhstan produces polypropylene at Pavlodar, but does not produce polyethylene at present.

Shurtan Gas Chemical Complex expansion

Uzbekneftegaz has increased its plans for expanding capacity of the Shurtan Gas Chemical Complex. Instead of increasing capacity from 125,000 tpa to 200,000 tpa the Uzbek gas company now aims to raise capacity to 500,000 tpa.

In accordance with a new concept, Uzbekneftegaz wants to use naphtha produced from the synthetic GTL unit at Shurtan for the production of olefins and the production of new grades of polymers. Project costs were originally estimated at over $400 million. Of this amount, about $100 million will be allocated from the Fund for Reconstruction and Development of Uzbekistan, another $250 million from a foreign partner, and the rest of the equity Uzbekneftegaz. All work is scheduled for completion by the end of 2019.

Atyrau gas & chemical complex

The construction of infrastructure for the gas-chemical complex at Atyrau is reported to have been completed, having been supported by the Kazakh government. Initial investments of around $2.5 billion have been estimated to cover project costs, which could be aided by loans from China. The project for the construction of an integrated petrochemical complex consists of two phases, the first of which involves the construction of a polypropylene plant with a capacity of 500,000 tpa and the second comprising a polyethylene plant of 800,000 tpa together with a butadiene unit. The construction of a

Azerbaijan Chemical Production (unit-kilo tons)		
Product	***Jan-Dec 16***	***Jan-Dec 15***
Ethylene	103.9	107.1
Polyethylene	98.3	103.3
Propylene	52.0	56.2
Isopropanol	9.0	11.4
Barium Sulphate	59.8	61.6
C4s	19.5	24.7
Methanol	117.9	95.8

polypropylene production could begin in the summer of 2017 whilst the polyethylene project may not start until 2020.

Azerbaijan chemical production, Jan-Mar 2017

Azerkhimya produced 5,200 tons of propylene in March, 26% more than in February. From the production 960 tons was processed into isopropanol. In the first quarter Azerkhimya produced 14,400 tons of propylene, 4% up on the same period in 2016. C4 sales amounted to 8,700 tons in the first quarter against zero in the first three months last year.

Azerbaijan-ethylene, propylene and polyolefin projects

Azerbaijan is set to increase the capacity of propylene production by 2.5 times later in 2017 from 60,000 tpa to 150,000 tpa. The modernisation of the ethylene-polyethylene plant at Sumgait is being undertaken in several stages aimed for completion in mid-2019. Technip has thus far provided only an indicative timetable. Around €30 million was invested in 2016 into the ethylene modernisation and another €80 million should be required this year. Aside the revamping of old plants which are around 30 years old, SOCAR is working on the new SOCAR-Polymer project at Sumgait which will produce polyethylene and polypropylene.

Domestic Russian Chemical Prices (€ per ton)

Product	*Feb-17*	*Mar-17*	*Average 2017*
Ethylene	561.9	579.8	564.9
Propylene	395.6	519.8	428.6
Benzene	582.7	718.2	598.0
Xylenes	521.6	553.3	529.8
Toluene	567.7	627.6	596.5
Styrene	1022.7	1091.0	1017.8
Plasticizer Alcohols	703.6	731.1	703.6
Butanols	185.5	192.4	198.7
MEG	690.3	772.1	709.8
Phenol	967.7	1248.4	1052.7
Acetic acid	520.8	545.0	523.7
Polyethylene	1220.5	1243.9	1229.4
Polystyrene	1267.3	1435.9	1326.3
PVC	767.9	815.4	780.7
Epoxy resins	2527.8	2642.0	2564.9
Polypropylene	1207.3	1224.3	1208.5
Amino-resins	263.9	277.8	268.6
Phenolic resins	476.0	524.1	498.4
Silicone polymers	2635.5	2273.5	2474.8
Synthetic rubber	1523.3	1787.1	1599.2
SKMS	1569.4	1494.4	1447.4
Butadiene rubber	1405.5	1572.9	1464.5
NPR	1539.0	1931.3	1633.2
Isoprene rubber	1887.1	2070.9	1925.1
Other synthetic rubber	2103.6	2435.1	2306.3

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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