

CIREC

MONTHLY NEWS

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

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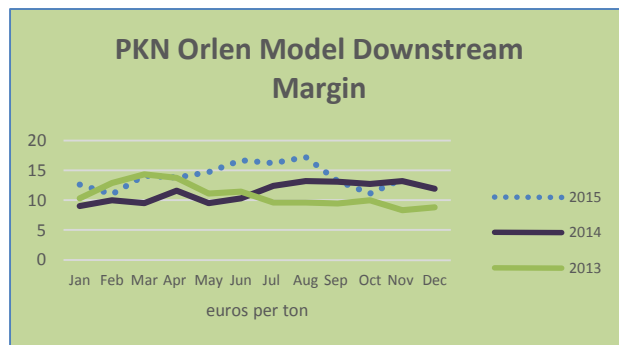
Czech Republic | Slovakia | Hungary | Poland | Bulgaria | Romania | Croatia | Slovenia | Yugoslavia | Baltic States | Russia | Belarus | Ukraine | Transcaucasus | Central Asia | Kazakhstan

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CENTRAL & SOUTH EAST EUROPE



Polish refining margins

Grupa Lotos reported an increase in model refining margins in November to \$8.6 per barrel against \$5.85 in October after several months of declining numbers. In the first half of 2015 Lotos managed to achieve record high margins of \$10.32 per barrel before declining in the third quarter to \$7.41.

The revival in the last two months of 2015 stemmed from the increases in the Urals/Brent spread, i.e. the difference between the prices of

crude extracted from the bottom of the North Sea, a reference to the European market, and the quotations of Russian oil exports. Orlen's downstream division reported declining margins in the latter part of 2015, but overall still remained higher than in the same period in 2014.

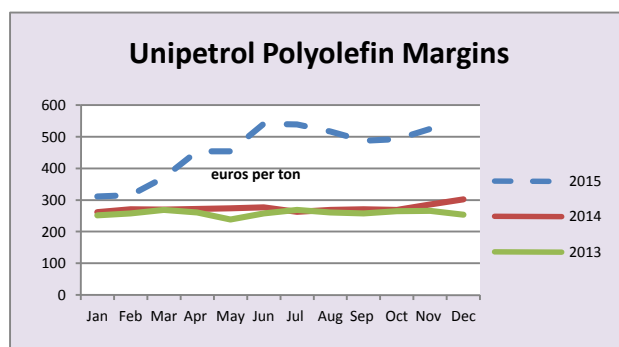
Latvian transshipment of Russian propylene

The Latvian company Latvijas propāna gāze plans to double the volume of transshipment of propylene in 2016 through the marine terminal in Riga. In late 2014 Latvijas propāna gāze signed a cooperation agreement with SIBUR, which allowed it in 2015 to direct the export of 40,000 tons of propylene. In 2016, the company hopes to increase the volume of transshipment by another 40,000 tons.

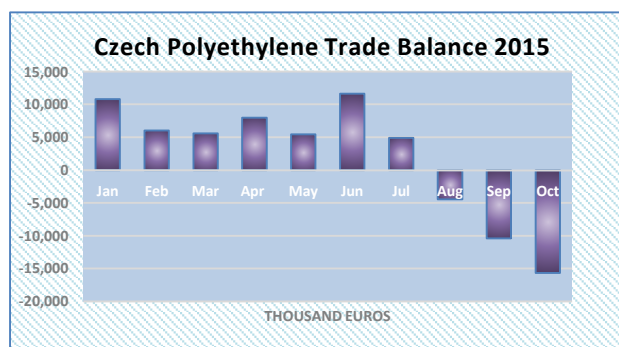
Latvijas propāna gāze is the largest supplier of liquefied natural gas market in Latvia. At its disposal are the base for bottling and storage of liquefied natural gas in Riga, Valmiera, Ventspils and Daugavpils, as well as a network of gas stations across the country. Latvia does not have its own facilities for the production of liquefied gases, as a transportation channel for other countries, in particular Russia.

Unipetrol ethylene reconstruction

Unipetrol has selected Linde Engineering to undertake engineering, procurement and construction management in the reconstruction of damaged cracker at Chempark Záluží. Technip is expected to provide some of the major technology components, such as four new furnaces distillation.



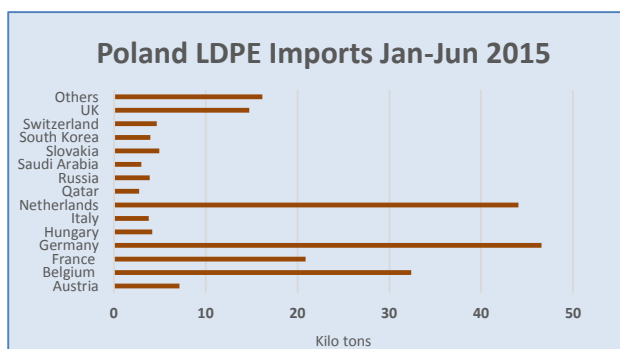
According to the schedule, steam cracker at Litvinov is to be fully restored by October 2016. Partial resumption is targeted for July this year. The costs of the damages at the cracker were estimated at Kc 597 million. The impact of the accident on the Czech polyethylene market has been to shift the country's traditional surplus into deficit, with imports being sourced mostly from European suppliers. The steam cracker accident at Litvinov from last August will not impact plans to invest Kc 19 billion in the period 2013-2017.



Central European polyolefins

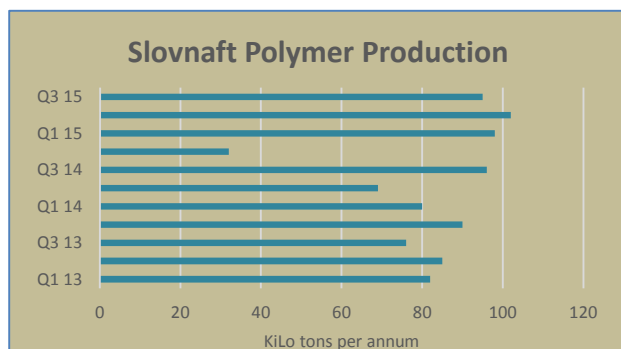
After achieving record polyolefin margins in 2015 Unipetrol starting a Kc 8.5 billion investment early this year into a new polyethylene unit at Litvinov. The project was announced in September 2015. Based on Ineos technology, the turnkey PE3 plant is scheduled to replace one of the site's current PE units (PE1). The other existing plant (PE2), with a capacity of 200,000 tpa, will not be affected.

Unipetrol is making its biggest ever capital investment, nearly €304 million, in the overall project which will contribute to greater integration of Unipetrol's petrochemical and refining production. The technology will allow Unipetrol to compete the leading European producers in the area of product quality and, at the same time, ensure even better safety and reliability of the production.



HDPE is the main category of polyethylene produced by the Orlen Group, including Unipetrol and Basell Orlen Polyolefins, whilst LDPE is not produced in the Czech Republic and only in small volumes in Poland. Imports of LDPE into Poland amount to around 400,000 tpa at current rates, and thus may prove a target market for Slovnaft's new LDPE unit in Slovakia. In the first half of 2015 Poland imported 209,000 tons of LDPE, for which Slovnaft accounted for only around 5,000 tons. The major suppliers into Poland included

Germany and the Netherlands.



Slovnaft's new LDPE4 unit at Bratislava will start commercial production at the beginning of 2016. The new unit, which will replace three out-of-date units with a combined capacity of 180,000 tpa, will increase production flexibility, reduce production costs, and improve product qualities. It also ensures higher naphtha off-take from the refinery.

Petrohemija-LDPE upgrade

At the end of 2015 Petrohemija started repairs on its LDPE plant at Pancevo, is estimated in value at about 4.5 million euros. The investment is aimed at improving strengthening energy and operational efficiency and of h is expected to provide savings in production of around three million euros per annum. The company has previously focused on modernising the HDPE unit.

Unipetrol-Polymer Institute Brno

In November 2015 the Polymer Institute Brno provisionally agreed to join Unipetrol, following up the previously announced merger between Unipetrol and Benzina. The Polymer Institute Brno will operate as a branch factory, and as an integrated part of Unipetrol RPA. The planned merger of the two entities is to strengthen the position of Unipetrol RPA on the Czech market for refined products and petrochemicals.

In 2014, the Polymer Institute Brno produced 1,121 tons of additive concentrates, and production is estimated to have grown by 8% in 2015. The Institute is considering investing into a new production line that would increase the product portfolio in the area of concentrates, UV stabilisers and colours. Other important items in the company's range include fire retarders and thermos-stabilisation concentrates.

MOL's Petrochemical Investments

Butadiene	Plant commissioned in Q3 2015 Commercial production by the end of 2015
SSBR	Construction of a new 60 ktpa plant begins soon. Commissioning, followed by commercial production in 2017
LDPE4	Commercial production in Q1 2016

Rompotrol Rafinare

Romania wants to sell up to half of its 26.7% stake in Rompotrol Rafinare, and the majority shareholder of the company KMG International is the only potential buyer so far. The government previously announced that he wants to get at least \$200 million from the sale of 26.7% stake in Rompotrol Rafinare and will hold the auction so as to comply with EU regulations, after signing the 2013 agreement with KMG on the sale of shares.

MOL-JSR rubber project

In the first quarter this year MOL is ready to begin construction of the new SSBR plant at Tiszaujvaros, whilst Slovnaft at Bratislava will start production at its new 220,000 LDPE plant. The new rubber plant will have a capacity of 60,000 tpa will be based on a jv between Japan's JSR Corporation and the MOL Group, on a ratio of 51/49. Production will be launched in 2017. The

partnership with JSR creates an opportunity for MOL to continue to expand its range of petrochemical products, and also the supply of butadiene which started in the latter part of 2015. The 130,000 tpa

butadiene plant was officially opened on 10 November and should attain full capacity in the first half of 2016. The unit, constructed at the site of MOL Petrochemicals in Tiszaújváros, will produce feedstock material for synthetic rubber. Some major tyre manufacturers have already commenced production in Hungary in advance of the SSBR plant. Also there is regional access from Hungary to West Europe's major tyre manufacturers, as well as to Central-East Europe, Russia, and Turkey, where the expansion of tyre production is expected.

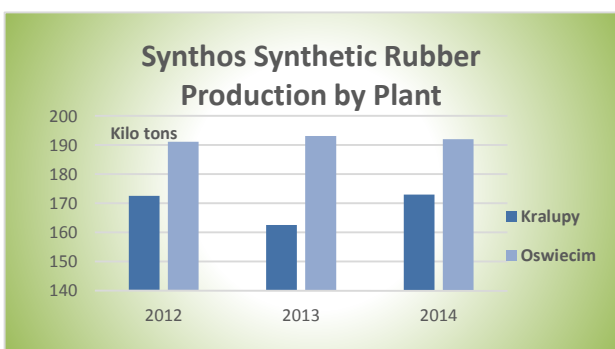
MOL's Refined & Petrochemical Product Merchant Sales (unit-kilo tons)		
Country	Jan-Sep 15	Jan-Sep 14
Hungary	3,233	3,289
Slovakia	1,188	1,261
Croatia	1,310	1,324
Italy	1,351	1,596
Others	6,181	6,427
Total	13,263	13,927

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. In the first nine months of 2015, MOL Group's petrochemicals business segment represented 35% of the total downstream clean EBITDA result.

Synthos C4 & butadiene agreements

Synthos has signed two contracts with SABIC Petrochemicals BV for a total value of approximately zł 1.578 billion. The first, worth contract is worth zł 1.026 billion for the supply of C4 fraction, and the second, worth zł 552 million for

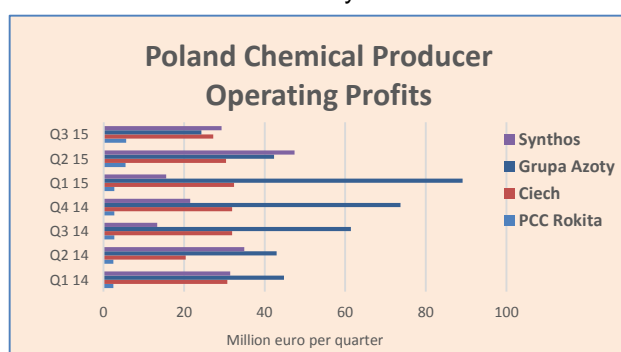
deliveries to Synthos Kralupy. This agreement was authorised on 1 January 2016 and will apply until 31 December 2018. After this period, the contract will be automatically extended for successive annual periods, unless previously terminated by either party.



Synthos buys crude C4 from SABIC for its butadiene extraction unit at Kralupy and butadiene for their rubber operations in Oswiecim, Poland. The raffinate-1 that remains after the processing of crude C4 is returned to

SABIC to fulfil its feedstock requirements for the MTBE plant in Geleen.

On 14 December, Synthos concluded an additional three-year contract with MOL for the supply of butadiene from the new plant at Tiszaújváros. The contract was signed for butadiene supply worth up to zł 365 million, with Kralupy expected to be the destination in 2016 and Oswiecim in 2017 and 2018. Deliveries are to be concentrated on Kralupy in 2016 whilst the Litvinov cracker is repaired after the accident in August last year. MOL's butadiene plant was commissioned in late 2015 and is now ready for commercial sales. Initially MOL will be active in the merchant market and should remain market based until the rubber plant is constructed.



of Synthos and Ciech, but revenues were much higher as shown in the graphic opposite.

A key strategic goal for Grupa Azoty is maximising the economies of scale through its supply chain, particularly in relation to logistics and raw materials including gas. The integration of Grupa Azoty has focused heavily on coordinated logistics between the four main plants in transporting 11.5-12.0 million tpa of products. Around 4.5 million tons consists of raw materials and the remainder finished products

to customers. Logistics is one of the most important business areas of Grupa Azoty, accounting for expenditure of around zł 800 million per annum including zł 270 million of internal logistics.

Chemicals

Grupa Azoty-coal gasification project

Following mergers and acquisitions in the past few years Grupa Azoty is now well established as Poland's largest chemical producer, excluding PKN Orlen. In terms of operating profits, Azoty's performance in the third and fourth quarters last year was not too far ahead

Polish Chemical Production (unit-kilo tons)		
Product	Jan-Nov 15	Jan-Nov 14
Caustic Soda Liquid	300.8	271.6
Caustic Soda Solid	59.8	72.3
Soda Ash	989.9	969.2
Ethylene	405.8	428.7
Propylene	356.4	304.7
Butadiene	56.3	50.8
Toluene	11.4	11.9
Phenol	32.7	28.9
Caprolactam	150.5	154.6
Acetic Acid	11.0	8.3
Polyethylene	337.4	295.8
Polystyrene	47.3	52.3
EPS	76.5	66.6
PVC	301.0	253.7
Polypropylene	236.0	209.0
Synthetic Rubber	185.2	180.4
Ammonia (Gaseous)	1197.5	1219.9
Ammonia (Liquid)	1170.2	1211.6
Pesticides	24.6	30.4
Nitric Acid	2157.0	2172.0
Nitrogen Fertilisers	1796.0	1768.0
Phosphate Fertilisers	425.2	371.2
Potassium Fertilisers	335.0	289.0

Grupa Azoty holds second place in the EU for the production of nitrogen fertilisers and compound fertilisers. Products such as melamine, caprolactam, nylon, oxo alcohols or titanium dioxide also have a strong position in the chemical sector found its application in many industries.

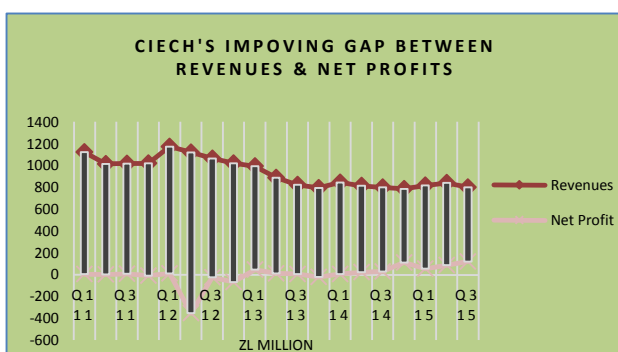
Grupa Azoty is intensively diversifying sources of gas supply, one solution of which involves the construction of a power unit at Kedzierzyn based on the gasification of coal. Grupa Azoty ZAK selected coal for its new power plant primarily for logistical reasons. As pointed out in the economics of the project one of the main roles played by transport large quantities of coal. The plant is planned to process 900,000-1 million tpa of coal.

Ciech improving results

Ciech's financial status has improved since restructuring, meaning that whilst revenues have declined at the same time net profits have risen as a result of the increased efficiencies. The Group offers various chemical products: soda ash (second place in Europe), baking soda, salt, polyester resins and epoxy products, glass products and other chemicals.

The most important project pursued in 2015 was the development of the production capacity of the soda ash plant at Inowroclaw from 600,000 tpa to 800,000 tpa.

The first stage of the investment called SODA +200 project resulted in an increase in the plant's capacity of 60,000 tpa of finished goods. At the same time, in the near-by plant at Janikowo, an investment aimed at intensifying the production of salt was completed. As a result, the production of these goods increased from 1,000 to 1,700 tons per day. The Ciech Group now operates eight production plants and trading companies and service providers.



Environmental investments

Synthos has selected German company Wandschneider for the construction of a waste incineration plant at Oswiecim. The capacity of the plant is 150-160,000 tpa, and designed for processing waste from the local area.

PCC Rokita-polyols

PCC Rokita intends to develop polyols and polyurethane systems, as well as products under its own brand Crossin Insulations. According to the strategy, the company intends to expand sales of polyols and polyurethane systems not only on the existing European markets as well as on the markets of Southeast Asia, India and China through the activities set up in Thailand's IRPC-PCC. The group commenced the development of its own brand of polyurethane insulation used to insulate buildings complex under the name Crossin Insulations.

Grupa Azoty opened a research installation at Kedzierzyn for energy use of waste gases, including waste hydrogen. The installation is a unique nationwide solution to reduce the environmental burden associated with chemical production and coking while increasing its profitability.

Spolana has begun working with environmental centre in Kralupy nad Vltavou to address environmental issues from the Neratovice plant.

Spolana not only seeks to increase production efficiency, but also reducing the impact on its surroundings. Spolana is also preparing to shut down its mercury electrolysis unit in 2017, and to replace it with a membrane plant.

RUSSIA

Russian Chemical Production (unit-kilo tons)

Product	Jan-Nov 15	Jan-Nov 14
Caustic Soda	1,010.0	974.4
Soda Ash	2,811.0	2,316.6
Ethylene	2,516.0	2,171.8
Propylene	1,740.9	1,479.4
Benzene	1,106.7	1,040.1
Xylenes	495.7	458.9
Styrene	602.5	587.1
Phenol	224.2	220.3
Ammonia	13,600.0	13,351.7
Nitrogen Fertilisers	7,830.0	7,388.8
Phosphate Fertilisers	2,940.0	2,777.3
Potash Fertilisers	7,338.0	7,634.5
Plastics in Bulk	6,590.0	5,793.9
Polyethylene	1,624.0	1,440.2
Polystyrene	484.0	491.4
PVC	714.3	633.6
Polypropylene	1,224.7	940.2
Polyamide	130.0	130.9
Synthetic Rubber	1,327.1	1,183.7
Synthetic Fibres	118.1	118.7

Russian chemical industry, Jan-Nov 2015

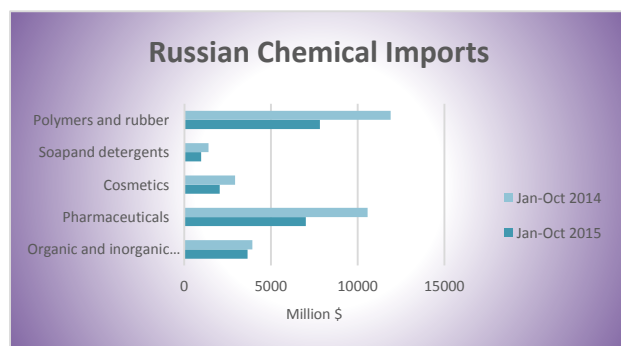
Russian chemical production increased by 4.1% in January-November 2015 over 2014, driven to a large extent by rises in the production of polyethylene which rose by 11.3%, polypropylene by 25.3% and PVC by 25%. All of these products benefited from a combination of rising capacity utilisation at new plants and higher output at existing plants. Polystyrene production decreased by 0.4% in the period January to November, the only main polymer to record a fall. A common theme for bulk polymers in 2015 was the decline in import activity, due in part to higher production and in part to lower consumption.

In the processing sector declines were noted in the production of synthetic fibres and yarns, whilst the index for the manufacturing of rubber and plastic products fell by 3.5% following the patterns in GDP. Production of plastic goods in January-November declined by 4.6% due to lower production for plates, sheets, tubes and profiles. One area to benefit in 2015 was car tyres where the manufacture increased by 9.1% whilst production of tyres and truck tires fell by 1.8%.

Prospects for Russian chemical industry 2016

Prospects for the Russian chemical industry in 2016 appear reasonable assuming the economy does not contract further from its falls in 2015. Profits are not likely

to see the same degree of rises as recorded in 2015 over 2014 but should still remain positive. Low energy prices have provided benefits to chemical and petrochemical producers in the past year, although these prices have been damaging for the general economy and the chemical processing sector.



A number of key projects, either under construction or planning, should see progress in 2016, particularly Zapsibneftekhim at Tobolsk. Conversely a number of projects depend on finding financial backers, which is much harder due to the imposition of sanctions in July 2014. Some companies have looked towards China as a source of finance, but generally Chinese loans entail higher interest rates than West European banks whilst some sort of equity share is required as part of the arrangement. Removing sanctions would possibly provide a psychological lift for the

Russian economy but there are no signs of this happening at the moment.

Russian petrochemical projects

SIBUR-Amur Gas-Chemical Complex

Gazprom's plans for a gas processing plant and SIBUR's plans for a gas-chemical complex in the Amur region will provide the basis for significant local economic development in a Russian region which has hitherto seen no investment in the chemical industry. The key for the projects has been Russian government's decision to build the Power of Siberia gas pipeline to China in 2014. Due to a 30-year contract between Gazprom and China's CNPC for the annual supply of 38 billion cubic metres of gas, Gazprom has

already started construction of the pipeline Power of Siberia which is to go through the Amur region. The pipeline has thus created the opportunity to build the gas processing and petrochemical plants.



SIBUR plans to make a final decision on the feasibility of building the Amur chemical complex, technologically connected with the Amur GPP, at the end of 2017. However, SIBUR may be in a position in 2016 to select technology licensors.

In processing around 49 billion cubic metres of gas per annum, the gas processing plant is being designed to produce ethane, pentane, propane, butane and helium for the domestic market in Russia and for export. It is expected that at the peak of construction project for the Amur GPP, up to 15,000 people could be employed whilst after construction the plant should offer around 5,000 permanent jobs.

The gas processing plant depends on the opening of a section of the Power of Siberia gas transmission system when ready. 2019 has been signaled as the earliest the gas

plant could start production, but even then it could take several years to reach its full capacity. The gas chemical plant is currently envisaged for a start-up date of around 2022, but this remains a provisional guideline. Regarding markets, the Russian Far East might only provide moderate opportunities for selling

SIBUR-Sinopec

In December the Russian Intergovernmental Commission approved a deal for Sinopec to buy 20% stake in SIBUR for \$1.388 billion. In the first phase Sinopec receives 10%, then in the next three years the right to purchase another 10%.

products from the Amur Gas-Chemical Complex, whilst China would provide the largest opportunity, particularly after Sinopec had gained the right to acquire 20% of SIBUR's capital. From the point of view of exports, the Asia-Pacific markets are attractive, but competition in them is greater, hence much will depend on the opportunity to compete in quality and price.

Nizhnekamskneftekhim ethylene project

Nizhnekamskneftekhim plans to complete construction of the first olefin

Nizhnekamskneftekhim Ethylene Expansion Plans		
	First Phase Ethylene 600,000 tpa Plant 2020	Second Phase Ethylene 600,000 tpa Plant 2025
Polyethylene	300	600
Polypropylene	180	180
Polystyrene	200	200
Propylene Derivatives	163	155
Ethylene Derivatives	110	-
MDI	-	93

complex and to begin commissioning in 2019. In the near future

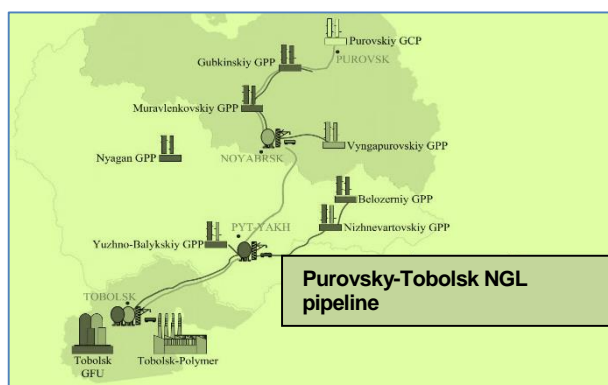
Nizhnekamskneftekhim intends to sign contracts for the first phase of detailed design for the new ethylene plant. By May 2016, the company wants to complete the process for the design and supply of equipment on the basis of a

fixed price. Nizhnekamskneftekhim is currently examining potential credit resources, including export credit agencies, both European and Asian (Japan, China), and a number of banks.

ZapSibneftekhim construction update

ZapSibNeftekhim has completed construction of temporary water supply, whilst work is underway on the creation of the railway infrastructure. When completed ZapSibNeftekhim will be by far the largest

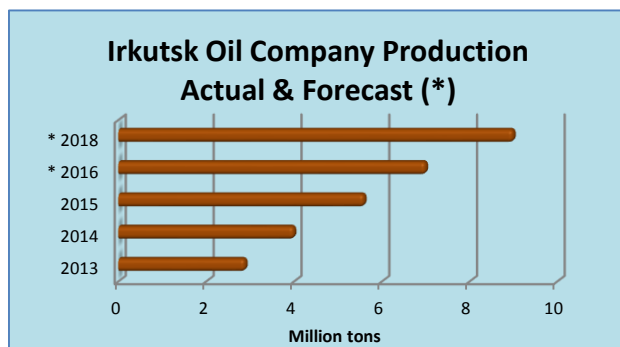
petrochemical complex in Russia. The project involves the construction of a pyrolysis capacity of 1.5 million tpa of ethylene, 500,000 tpa of propylene and 100,000 tpa of C4s. Polymer capacities comprise a total of 2 million tpa.



ZapSibNeftekhim will be part of the Tobolsk industrial area, which combines the already operating enterprise Tobolsk-Neftekhim and Tobolsk-Polymer. The introduction of the NGL pipeline from the Purovsky Plant to Tobolsk-Neftekhim (shown left) has provided the feedstock base for the ZapSibNeftekhim project.

INK-gas supply for gas-chemical complex

Irkutsk Oil Company (INK) is negotiating with the Ministry of Energy and Gazprom for the supply of gas through the pipeline Power of Siberia in order to support the needs of the planned gas-chemical complex at Ust-Kut. INK wants to build a plant for the processing of associated gas from the pipeline Power of Siberia, linking it with the fields Yarakta and Markovski.



Ethane would be available from the gas plant for the chemical complex at Ust Kut. The provisional target date of 2019 would require that construction would have to start this year in order for this target to be met. The design capacity of the polyethylene plant was originally set at 650,000 tpa but has since been reduced to 500,000 tpa.

Prospects for building a polyethylene plant may depend on other projects in eastern parts of Russia. The EBRD has already advanced loans to the company, based on environmental benefits that may result from investment at Ust-Kut. INK wants to build two gas processing plants at Ust Kut with a total processing capacity of more than 7 billion cubic metres of gas per annum, about 500 km of product pipelines, a gas fractionation plant, and a station for the shipment of liquefied gases. The first stage of the project involves the production of propane-butane based on the Ust Kut deposits, and will later be extended to include ethane.

INK holds licenses for 22 sites of hydrocarbons in the Irkutsk Region and Yakutia, and is one of the twenty largest Russian companies for hydrocarbon reserves. Proven reserves amount to more than 160 million tons of oil and 150 billion cubic metres of gas. INK produced around 5.6 million tons of oil and gas condensate in 2015, 27% up on 2014, and the forecast for 2016 is 7 million tons.

Kovytkta-Sayansk-Irkutsk gas pipeline

The revived project to build a gas pipeline Kovytkta-Sayansk-Irkutsk has been included in the Russian government approved list of facilities for the transportation of gas in the eastern parts of the country, which mainly focuses on the Power of Siberia gas pipeline and Amur gas processing plant. The Irkutsk region has been interested in utilising gas reserves for some time. Sayanskkhimplast has recognised support at regional level in addition to federal level for constructing the pipeline, but ultimately depends on what financial resources are available and which of the routes on offer will be selected.

The pipeline Kovytkta-Sayansk-Irkutsk was originally conceived when TNK-BP owned the Kovytkta field, but was then shelved after Gazprom took control. The aim to provide natural gas to the south of the Irkutsk region has now been included in the list of government priorities. Sayanskkhimplast previously considered constructing its own olefin complex based on Kovytkta gas, and this is more relevant now considering that ethylene supply from Angarsk has become more limited.

SIBUR's Main Trends, Jan-Sep 2015

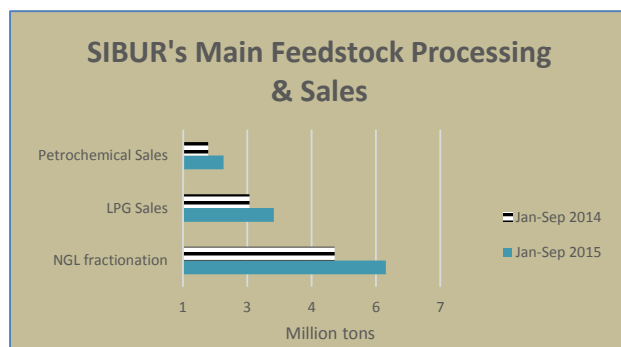
- Total revenue increased by 19.3%
- Associated gas processing volumes increased by 3.2%
- Natural gas liquids fractionation volumes increased by 26.3%
- Polypropylene production increased by 45.8%
- LPG sales volumes increased by 22.4%
- Naphtha sales decreased by 50.6%
- Plastics and organic chemical sales increased by 21.4%
- Revenue from sales of energy products increased by 2.2%
- Revenue from sales of petrochemicals increased by 40.8%
- ZapSibNeftekhim financing totalled 18.2 billion roubles (net of VAT)

Russian petrochemical producers & markets

SIBUR, Jan-Sep 2015

SIBUR increased revenues by 19.3% in the first three quarters in 2015, and increased the production of plastics and organic chemicals by 21.4% against 2014. Revenues for fuel and raw material sales increased by 2.2% in January to September 2015 to 133.8 billion roubles, which would have been higher had naphtha exports not been stopped through Ust-Luga. In the first nine months in 2015

SIBUR's revenues from petrochemical sales increased by 40.8% due in part to the increase in physical production and in part due to the devalued rouble and the impact on export revenues.



SIBUR was able to report increases in volume sales for not only petrochemicals but also for LPGs and NGLs in January to September 2015. LPG sales revenue increased by 2.6% and amounted to 58.9 billion roubles. Sales volumes of LPGs increased by 22.4%, which was due to increased production by 18.6% as a result of the expansion of the transport infrastructure and increased fractionation capacity in 2014, which allowed SIBUR to process increased volumes of natural gas liquids. The increase in production was partly offset by an increase in the supply of raw materials

for the petrochemical industry, in particular for capacity utilisation at Tobolsk-Polymer.

SIBUR's Monomer & Intermediate Production (unit-kilo tons)		
Product	Jan-Sep 15	Jan-Sep 14
Benzene	113.9	88.1
Styrene	126.9	128.3
PTA	200.2	185.9
Propylene	522.3	395.2
Ethylene Oxide	209.0	126.8
Butadiene	173.4	143.5
Isoprene	49.5	50.0
Isobutylene	108.6	116.8
Ethylene	470.2	350.1
Other Intermediates	916.5	893.9
Other Chemicals	594.5	504.8
Purchases from 3rd parties	9.4	10.1
Total	3,494.3	2,993.4

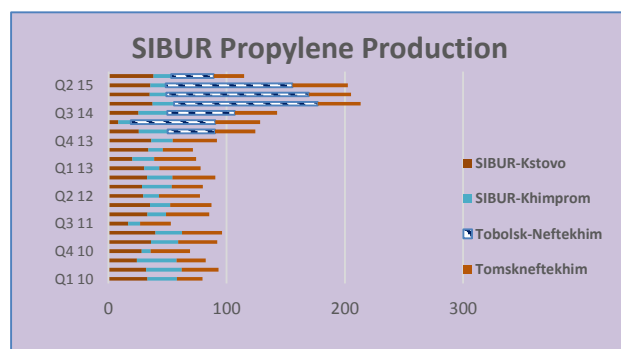
SIBUR's average price of LPG decreased in January to September 2015 by 16.2% in rouble terms, reflecting the dynamics of the international market prices. Natural gas sales revenues for SIBUR increased by 14.1% and totalled 31.2 billion roubles as a result of the consolidation of 100% of the JV Yugragazpererabotka after taking full control of in March 2014.

Naphtha sales revenues decreased by 57.1% in the first three quarters and amounted to 23.2 billion roubles, while sales volumes decreased by 50.6%. The decrease is due to the termination of purchases of naphtha for resale. MTBE revenues increased by 14.1% and reached 16.0 billion roubles against the backdrop of rising prices in rouble terms by 14.6%.

SIBUR petrochemical division, Jan-Sep 2015

In the first nine months of 2015, SIBUR's revenues from sales of petrochemical products increased by

40.8% and amounted to 130.7 billion roubles. The increase is due to increased sales of base polymers, plastics and organic synthesis products and other chemical products as a result of capacity expansion. The devaluation of the Russian rouble was also an important factor in 2015.

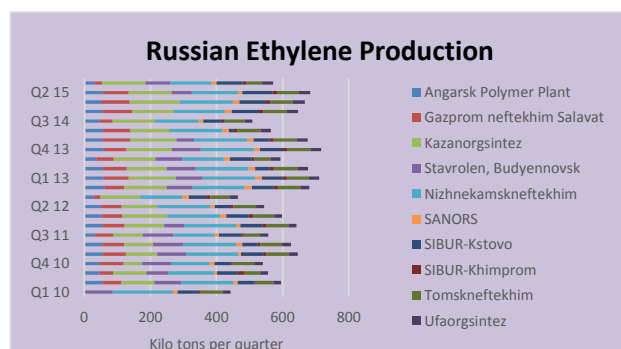


Synthetic rubber sales saw an increase last year against the background of a low base in 2014. Revenue from sales of synthetic rubber increased by 29.2% to 8.1 billion roubles due to higher capacity utilisation, the weakening of the rouble and increased shipments of thermoplastic elastomers.

Tobolsk-Polymer's production of polypropylene provided a major driver in the growth of revenues for SIBUR, accounting for around 18% of total petrochemical sales. Since start-up of the

Tobolsk polypropylene plant, SIBUR's total propylene production has overtaken ethylene production. Propylene volumes are likely to remain higher than ethylene until the start-up of the Zapsib-2 complex.

Higher sales of intermediates for SIBUR in the first three quarters of 2015 was attributable to the expansion of the steam cracker in Kstovo, as well as providing ethylene supplies to RusVinyl. SIBUR's revenues from the sales of plastics and organic synthesis products increased by 44.6% in the first three quarters in 2015, helped by the expansion of production capacity for PET and BOPP film and a rise in glycol production.



Russian ethylene, Jan-Nov 2015

Russian ethylene production totalled 2.3 million tons for the first eleven months in 2015 against 2.2 million tons in 2014, the slight rise made due mainly to the restart of the Budyennovsk cracker. Aside some modernisation at Salavat and Kstovo towards the end of the 2015, there were no significant technical developments last year that could lead to a noticeable rise in production in 2016.

In terms of gas liquids for Russian petrochemical plants, market purchases rose in 2015 to 1.34 million tons in January to November against 1.29 million tons in 2014. All of the plants listed in the graphic above use naphtha to some degree. Even Kazanorgsintez which is predominantly based on ethane, which it sources from Gazprom at Orenburg and Tatneft at Minnibayevo, possesses a 100,000 tpa naphtha based ethylene plant. Kazanorgsintez supplements its ethane purchases through purchases of propane-butane and propane.

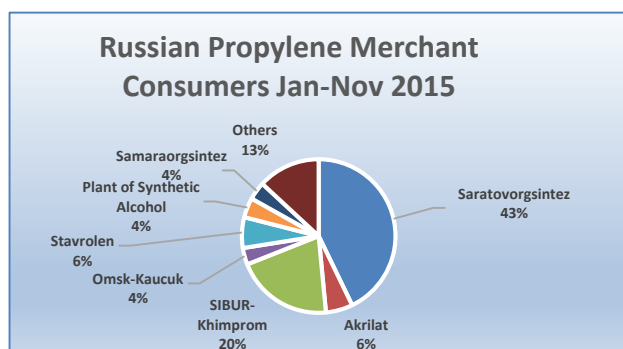
Russian Propylene Domestic Sales (unit-kilo tons)		
Producer	Jan-Nov 15	Jan-Nov 14
Angarsk Polymer Plant	58.7	76.1
Omsk Kaucuk	4.1	2.4
SIBUR-Kstovo	80.7	66.7
Akrilat	3.7	8.2
LUKoil-NNOS	175.9	124.0
Tomsneftekhim	0.1	8.7
Gazprom neftekhim Salavat	15.5	24.5
Nizhnekamskneftekhim	2.0	2.7
SIBUR-Khimprom	0.0	1.1
Stavrolen	4.2	3.4
Tobolsk-Polymer	11.0	6.6
Ufaorgsintez	5.0	0.0
Total	360.9	324.4

Russian propylene market, Jan-Nov 2015

Propylene sales on the Russian domestic market rose 30% in November over October to 37,400 tons, due mainly to the resumption of deliveries from SIBUR-Kstovo (rising 2.5 times to 8,700 tons). Furthermore, Lukoil-NNOS increased shipments to domestic consumers by 24% in November to 22,000 tons following expansion. Propylene sales on the domestic market totalled 360,900 tons in the period January to November 2015, 9% up on 2014.

Regarding propane-propylene fractions, domestic shipments of fell 31% in November against October to 10,000 tons. The Ryazan refinery, owned by Rosneft, reduced domestic sales at the expense of exports in November. Sales on the domestic market totalled 140,800 tons in the first eleven months in 2015, unchanged from 2014. Exports of propane-propylene fractions totalled 48,536 tons in the period January to November 2015, mostly supplied from the

Ryazan refinery and mostly delivered to Poland.



In the Russian merchant market for propylene the acrylonitrile producer Saratovorgsintez remained the largest buyer in 2015, accounting for 150,000 tons in January to November most of which was sourced mostly from Lukoil-NNOS.

SIBUR-Khimprom, which uses propylene for oxo-alcohol production, is the second largest buyer in the Russian market, accounting for 72,000 tons in the first eleven months this year. Other buyers of merchant propylene include Akrlat at Dzerzhinsk, for the production of acrylates, Samaraorgsintez for

cumene, and the Plant of Synthetic Alcohol which uses propylene for the production of isopropanol.

Stavrolen purchased 22,700 tons of merchant propylene in January to November 2015 for the production of polypropylene, but that was mostly prior to the restart of the cracker at Budyennovsk which took place in April. Most of the propylene produced is used captively for polypropylene, and the company sells only small volumes on the merchant market. Other petrochemical producers, such as Nizhnekamskneftekhim,

Kazanorgsintez, Tomskneftekhim and Ufaorgsintez occasionally need to purchase small volumes of merchant propylene to supplement their own production.

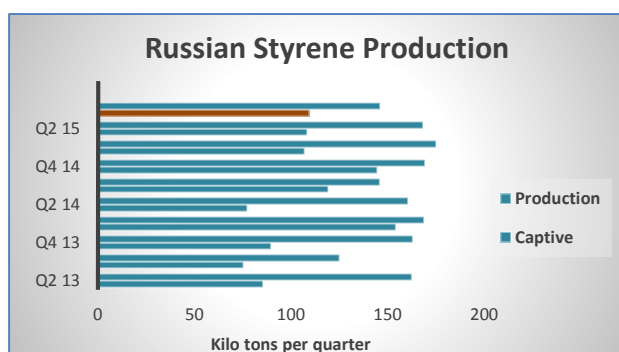
Russian Propylene Exports (unit-kilo tons)		
Producer	Jan-Nov 15	Jan-Nov 14
Lukoil-NNOS	11.3	0.0
SIBUR-Kstovo	48.6	16.5
Angarsk Polymer Plant	10.4	0.0
Total	71.8	16.5

Due to increased supply this year Russian propylene exports totalled 71,800 tons in the period January to November 2015 against 16,500 tons in 2014. Poland accounted for 52% of Russian propylene exports in January to November 2015, whilst SIBUR-Kstovo accounted for the largest share of shipments following increases in capacity in 2014. Lukoil-NNOS may now be able to export greater volumes following the launch of its

new catalytic cracking complex.

Russian propylene production totalled 1.7 million tons in the period January to November 2015, against 1.5 million tons in 2014. The most significant addition in propylene production took place last year at Tobolsk-Polymer all of which was used captively for the production of polypropylene.

Russian production slowed in the third quarter after maintenance, for example Tomskneftekhim increased monomer production by 6.1 times in October against September to 12,800 tons, and



Nizhnekamskneftekhim 3.5 times to 27,500 tons. Titan's two plants at Omsk also increased production 2.5 times over September to 18,000 tons. Production totalled 1.3 million tons in January to October 2015, 13% up on 2014.

Russian styrene, Jan-Nov 2015

Styrene sales on the domestic market increased by 14% in November to 13,100 tons. Angarsk Polymer Plant shipped 2,500, 42% more than in October. In addition, Gazprom neftekhim Salavat increased sales volumes of styrene in November

by 14%, to 6,200 tons. In the first eleven months in 2015 sales of styrene monomer on the domestic market amounted to supplied 93,800 tons of domestic monomer is 30% more than in the same period of 2014.

Bulk Polymers

Russian HDPE Imports (unit-kilo tons)		
Category	Jan-Nov 15	Jan-Nov 14
Extrusion	43.1	54.5
Pipe	38.3	79.6
Film	17.1	35.9
Blow	23.6	49.3
Injection	42.2	44.3
Others	12.1	10.5
Total	176.4	274.1

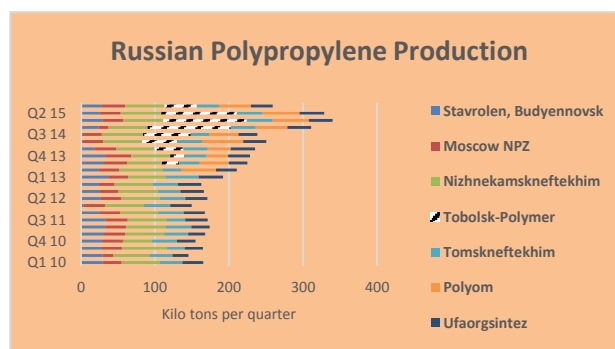
Russian polyolefin imports, Jan-Nov 2015

Imports of HDPE in Russia decreased by 36% in the first eleven months of 2015 to 176,400 tons against 274,100 tons in 2014. In total imports of polyethylene totalled 495,000 tons for January to November 2015, against 629,700 tons in the same period in 2014. LLDPE imports declined by 11% to 174,700 tons, partly affected by increased production by Nizhnekamskneftekhim.

LDPE imports fell 17% to 85,400 tons, whilst ethylene vinyl acetate imports dropped 6% to 17,800 tons. In other polyethylene imports, volumes rose slightly from 36,200 tons to 40,800 tons. Polyethylene production increased 7.3% in 2015, with the most significant increase occurring in LLDPE.

Overall for 2015 Russian polyethylene consumption is estimated provisionally to have risen slightly over 2014 to 1.89 million tons, but was lower than the 1.98 million tons recorded in 2013. Growth prospects for 2016 are constrained by the economic situation in Russia which shows no sign of improvement.

Polypropylene imports declined by 19% to 127,600 tons in January to November 2015 against 157,400 tons. Block grades of polypropylene fell 35% to 26,800 tons due to factors such as the economic effects of rouble devaluation and the rise in production by Tobolsk-Polymer and Polyom at Omsk.



Russian polypropylene

Polypropylene exports from Russia rose sharply in 2015 as the impact of higher utilisation levels at Tobolsk-Polymer and Polyom, coupled with the revival of the Stavrolen plant provided a strong surplus. Production rose 25% in the first eleven months in 2015 despite a slowdown in the third quarter due to maintenance at several plants. Even for the third quarter production was higher than in the same quarter in 2014 and higher than historical quarterly records.

The two largest markets for Russian polypropylene in the first three quarters in 2015 were China, accounting for 76,000 tons, and Turkey 54,000 tons. It is not clear if sales to Turkey may decline following the fall-out in Russian-Turkish political relations. Other destinations for Russian polypropylene include Uzbekistan, which bought 14,700 tons in January to September 2015, and Ukraine which purchased 15,900 tons. Business in Ukraine is expected to continue this year, but sales to Uzbekistan may be affected by the start-up of the Ustyurt Gas-Chemical Complex which is expected in 2016. The complex includes a polypropylene plant with a capacity of 83,000 tpa.

SIBUR Polyolefin Sales (unit-kilo tons)		
Polypropylene	Jan-Sep 14	Jan-Sep 13
Exports	64.9	23.7
Domestic Sales	106.0	69.4
Total	170.8	93.1
LDPE	Jan-Sep 14	Jan-Sep 13
Exports	56.4	51.7
Domestic Sales	77.2	69.6
Total	133.6	121.3

As for the domestic market polypropylene consumption may achieve slightly higher volumes than polyethylene in this year, but will also be affected by Russia's systemic economic

problems which are constraining growth and business expansion.

SIBUR polyolefins, Jan-Sep 2015

SIBUR benefited significantly in 2015 from the polypropylene sales and production conducted by Tobolsk-Polymer. Polypropylene sales increased by volume from 93,100 tons in January to September 2014 to 170,800 tons in the same period in 2015. In financial terms, polypropylene revenues increased 28.4% over the three quarters last year. SIBUR reduced polypropylene: purchases from third parties, mostly the Moscow plant, by 66.2% in the first three quarters in 2015 to 1.5 billion roubles. Purchase volumes decreased by 74.0% as a result of increased production at Tobolsk-Polymer.

Russian PVC Imports (unit-kilo tons)		
Source	Jan-Nov 15	Jan-Nov 14
US	18.3	56.0
China	61.9	169.7
Europe	10.7	30.5
Others	1.0	22.5
Total	91.9	278.7

Russian PVC market

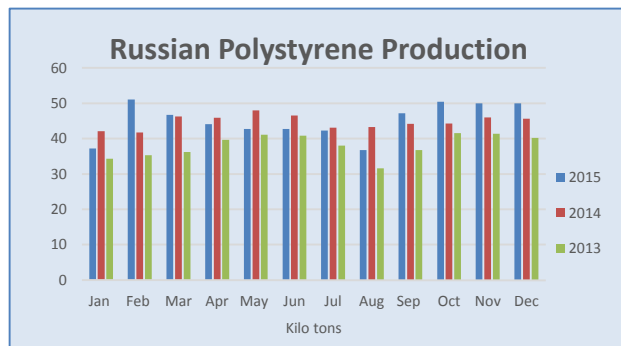
PVC imports totalled 91,900 tons in the period January to November 2015, three-fold less than in 2014. At the same time export sales of Russian resin increased six-fold following the increase in production and at the same time a decline in consumption. Russian PVC exports totalled 39,100 tons in the period January to November 2015 against 6,200 tons in the same period in 2014.

Imports from China increased in November against October, rising from 7,600 tons to 10,600 tons, but overall for the period January to November 2015 acetylene based imports fell to 61,900 tons against 174,000 tons in 2014. Imports from the US declined from 58,300 tons in January to November 2014 to 18,300 tons in 2015. Imports comprised 11% of the Russian PVC market in the first eleven months in 2015 against 32% in the same period in 2014. The combined effect of higher domestic production and weak economic growth meant that importers found

the Russian market much more difficult in 2015 than in previous years. Despite the devaluation of the rouble, imports still have a role to play in the Russian market should domestic prices rise too far.

Russian polystyrene & ethylbenzene

Russian polystyrene plants increased production in 2015, all with the exception of Plastik at Uzlovaya which decreased production by around 10%. The decline at Plastik was due to a shortage of ethylbenzene as Plastik is the only non-integrated domestic plant for the production of styrene. Previously, the plant received raw materials from SIBUR-Khimprom, but after the divestment Plastik was forced to seek new suppliers.



at 11,000 tpa and ABS at 23,000 tpa. The company can process 6-8,000 tpa of plastics internally. Most of the company's customers are located in Russia and Belarus.

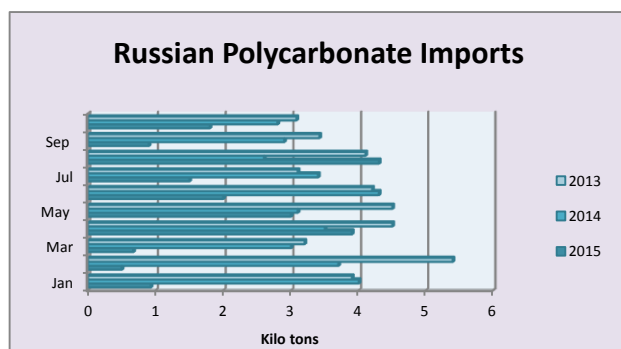
Russian polystyrene imports, Jan-Nov 2015

Imports of polystyrene into Russia declined by 36% in the first eleven months in 2015, amounting to only 18,200 tons. Imports of high-impact polystyrene (HIPS) fell 32% to 16,000 tons.

Manufacturers of packaging reduced purchases of imported polystyrene by 41% to 6,300 tons. Demand for polystyrene in the electronics sector fell by 33% and amounted to 6,300 tons. In the construction sector imports of GPPS decreased by 29% in January-November, amounting to 5,000 tons. The main importer of general purpose polystyrene in Russia remains Styrolution, shipping 14,000 tons in January to November 2015 which was 19% less than in 2014.

Russian polycarbonate market, Jan-Oct 2015

Russian polycarbonate consumption dropped 4% in the period January to October 2015, totalling 74,100 tons. Estimated consumption of PC-extrusion granules decreased by 7% compared to the same period in 2014 and amounted to 62,000 tons.



Kazanorgsintez produced 54,800 tons of polycarbonate in the first ten months in 2015, 5% up on 2014. From total production 87% comprised sheet extrusion grade.

Imports declined by 38% in January to November 2015 to 21,000 tons. Imports of polycarbonate sheet extrusion decreased by 41% to 15,000 tons. Sabc Innovative Plastics has been not supplying product to the Russian market in the past two months. Due to the absence of domestic polycarbonate production for the injection

moulding sector Russian imports were down solely due to weaker demand, dropping only 6% to 3,200 tons in January to November 2015.

After building up a small surplus Kazanorgsintez exported 420 tons in November, the first month in 2015. Although Kazanorgsintez did not export polycarbonate in the first ten months in 2015, over-supply in the domestic market towards the end of the year revived interest in foreign shipments. Polycarbonate imports into Russia have dropped steadily in recent years, and only amounted to 19,500 tons in the first ten months in 2015 against 47,700 tons in 2012. In 2013 and 2014, imports for January to October totalled 39,400 tons and 33,300 tons respectively.

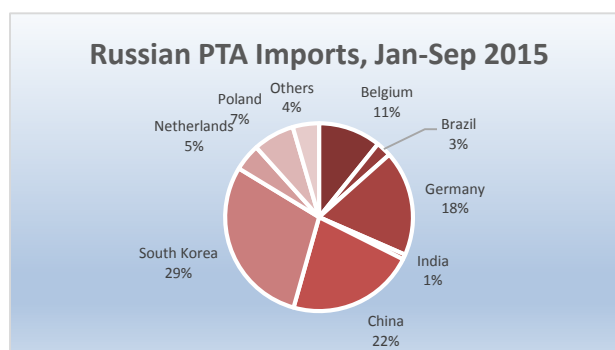
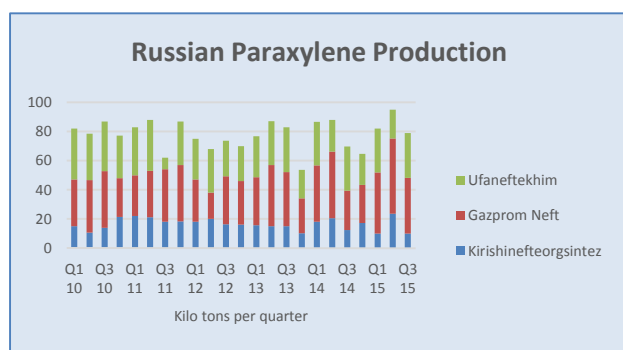
Aromatics

Russian orthoxylene exports 2015

Russian exports of orthoxylene totalled 72,450 tons in the first eleven months in 2015, 49% up on 2014. Exports increased in volume in the second half of 2015 as the weaker rouble combined with weak domestic demand pushed producers towards foreign markets. In November Russian producers exported 11,440 tons against only 1,560 tons in October and 2,000 tons in November 2014. The largest Russian orthoxylene exporter in 2015 was Gazprom Neft at Omsk which accounted for around 75% of shipments.

Russian paraxylene-PTA

Russian paraxylene production remained stable in the first three quarters in 2015, whilst PTA imports rose in response to higher PET production. The main sources of PTA imports into Russia in the period January to September 2015 included China, South Korea and Germany.



The zero rate of import duty on PTA for Russia will be extended for a period up to 31 December 2017, as decided by the Eurasian Customs Union. PTA duties will continue at 0% from the start of January 2016 until 31 December 2017, aimed at meeting the growing needs of the domestic market. The import duty of 0% for PTA was established by the Eurasian Economic Union for the period from 2 September 2014 to 31 December 2015 inclusive, coming down from 5%. Other members of the Eurasian Customs Union include Belarus (which also imports PTA), Kazakhstan and Armenia.

SIBUR Paraxylene, PTA-PET Chain (unit-kilo tons)		
	Jan-Sep 15	Jan-Sep 14
Paraxylene Purchases	87.399	87.368
PTA Production	200.199	185.86
PTA Domestic Sales	7.142	17.743
PTA Exports	2.394	14.284
PET Production	222.3	205.8

SIBUR paraxylene purchases

SIBUR's paraxylene costs rose 31.5% in the first three quarters in 2015, whilst volumes rose by 8.6%. PET production rose 8% at SIBUR's two plants of Polief at Blagoveshchensk in Bashkortostan and SIBUR-PETF

at Tver.

SIBUR's PET Production & Sales (unit-kilo tons)		
	Jan-Sep 15	Jan-Sep 14
Production	222.3	205.8
Domestic	232.7	198.6
Exports	1.6	0.6
Total Sales	234.3	199.2

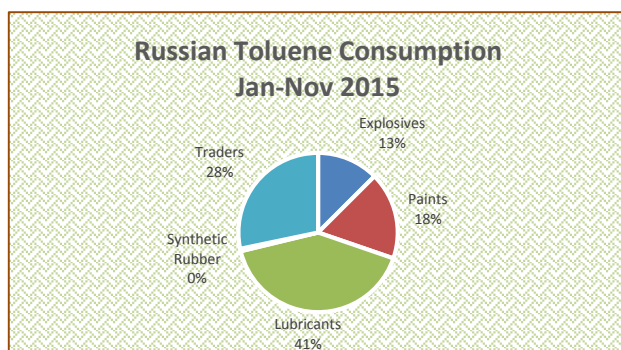
The average price for paraxylene increased 21.1% for SIBUR in the first three quarters in 2015, as a result of the tax manoeuvre that was introduced for the Russian oil industry in 2015. However, SIBUR is eligible for an offsetting tax deduction, as the group processes paraxylene into non-excisable petrochemical products.

Regarding PET production, SIBUR increased volumes from 205,800 tons in the first three quarters in 2014 to 222,300 tons in the same period in 2015, due mostly to the expansion at Polief. The

Ministry of Land and Property Relations of Bashkortostan wants to sell its 17.5% stake in Polief.

Russian toluene sales, Jan-Nov 2015

Toluene shipments to domestic customers amounted to 12,060 tons in November, 6% more than in October but 12% lower than in November 2014. Consumption totalled 124,140 tons in the period January to November 2015, 7% down against the same period in 2014. Main applications remain paints, lubricants and explosives, although most consumers are of relatively small size. The largest toluene producers in



Russia comprise Gazprom Neft at Omsk, Slavneft at Yaroslavl and Ufaneftekhim at Ufa. Production is either consumed internally or sold domestically, with no export activity.

Russian benzene market, Jan-Oct 2015

Russian companies produced 990,600 tons of benzene in the first ten months in 2015, against 962,200 tons in the same period in 2014. Nizhnekamskneftekhim remained the largest producer, producing 162,800 tons against 156,900 tons in January to October 2014.

Nizhnekamskneftekhim also purchased 58,000 tons of benzene on the merchant market in January to November 2015 against 31,804 tons in the same period in 2014. The second largest benzene producer in

Russian Benzene Production (unit-kilo tons)		
Producer	Jan-Oct 15	Jan-Oct 14
Angarsk Polymer Plant	58.5	73.1
Chelyabinsk MK	0.0	7.0
Gazprom Neft	77.9	77.6
Stavrolen	24.9	12.7
LUKoil-Permnefteorgsintez	41.0	38.1
Magnitogorsk MK	54.2	55.0
Nizhnekamskneftekhim	162.8	156.9
Novolipetsk MK	23.3	16.6
Gazprom neftekhim Salavat	107.0	107.0
Severstal	32.5	30.5
SIBUR-Kstovo	54.0	28.2
Slavneft-Yaroslavlorgsintez	55.0	55.2
Kirishinefteorgsintez	44.9	60.5
Ryazan Refinery	20.9	21.9
Ufaneftekhim	79.8	60.5
Ural Steel	8.0	7.7
Uralorgsintez	68.9	73.0
Zapsib	56.2	51.8
SANORS	20.8	28.9
Total	990.6	962.2

Russia in January to October 2015 was Gazprom neftekhim Salavat which produced 107,000 tons, the same as in 2014. Gazprom neftekhim Salavat sells surplus benzene, shipping 15,500 tons in the first eleven months in 2015 against 11,800 tons in the previous year.

Other major Russian benzene producers include refineries such as Gazprom Neft, Ufaneftekhim, Slavneft, Uralorgsintez and Kirishinefteorgsintez, followed by the coke based producers Zapsib, Magnitogorsk MK, and Severstal.

Kuibyshevazot is the largest Russian consumer of benzene, accounting for 139,000 tons of shipments in January to November 2015 against 120,000 tons in 2014. Other caprolactam producers Azot at Kemerovo and Shchekinoazot are also major consumers. Kazanorgsintez purchased 59,231 tons of benzene in January to November 2015, for phenol production, against 58,061 tons in 2014. The other non-integrated phenol producer Novokuibyshevsk Petrochemical Company increased purchases in the first eleven months in 2015 to 53,569 tons against 43,092 tons in 2014.

Merchant benzene sales on the domestic market totalled 668,600 tons in January to November 2015, against 700,700 tons in 2014. The decline was due mainly to lower consumption in the phenol sector, attributable to the continued outage at Omsk Kaucuk. Manufacturers of explosives accounted for 34,400 tons of market benzene in January to November 2015, divided between Promsintez at Chapayevsk and the Sverdlov plant at Dzerzhinsk.

Russian Benzene Consumption by Product (unit-kilo tons)		
	Jan-Nov 15	Jan-Nov 14
Caprolactam	274.8	277.6
Phenol	117.5	142.1
Styrene	128.1	121.3
Explosives	34.4	33.7
Others	113.7	125.9
Totals	668.6	700.7

Caprolactam accounts for around 40% of Russian benzene merchant market purchases and was down slightly against 2014, whilst styrene (which accounts for around 20% of the market) improved slightly. During the first eleven months of 2015, Russian companies bought 3,200 tons of Kazakh benzene, 17% less than the same period of 2014.

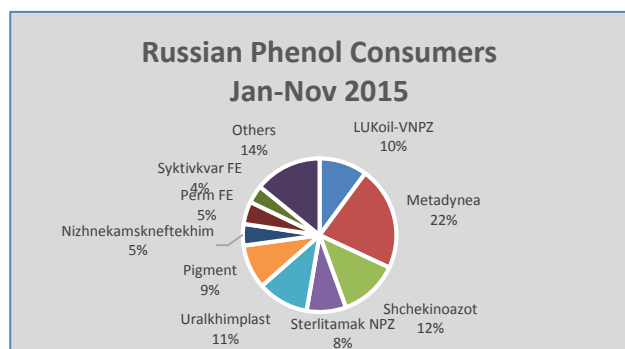
Russian phenol, Jan-Sep 2015

Phenol sales on the Russian domestic market totalled 99,700 tons in the period January to November 2015 against 100,100 tons in 2014. To compensate for the absence of Omsk Kaucuk from phenol (and acetone) production, the three operating producers have all increased sales in the past two years. Ufaorgsintez is the only phenol and acetone producer in Russia which uses its own benzene and propylene feedstocks, and

increased phenol domestic sales from 31,600 tons in the period January to November 2014 to 99,700 tons in 2015. Phenol imports totalled 3,800 tons in January to November against 2,100 tons in the same period last year. The sole importer is Borealis.

Metadynea is the largest domestic phenol consumer in Russia, accounting for 21,600 tons of shipments in the period January to November 2015 against 9,300 tons in 2014. The increase in purchases in 2015 was the result of the amalgamation between Metadynea and Karbolit in the previous year.

Russian Phenol Sales by Supplier (unit-kilo tons)		
Producer	Jan-Nov 15	Jan-Nov 14
Omsk Kaucuk	0.0	10.9
SANORS	45.4	43.5
Kazanorgsintez	13.0	12.0
Ufaorgsintez	39.8	31.6
LUKoil-VNPZ	0.8	0.1
Borealis	3.8	2.1
Total	102.8	100.1



Other important consumers included the Lukoil refinery at Volgograd, accounting for 10% of purchases in January-November 2015, Shchekinoazot (12%), Uralkhimplast (11%), and Pigment at Tambov (9%). Phenol-formaldehyde resin manufacture remains the largest application area, followed by other areas such as wood panel industries, anti-oxidants and alkylphenols.

Phenol production totalled 188,300 tons in the first eleven months in 2015 against 220,600 tons in the same period in 2014. Kazanorgsintez was the largest captive producer for phenol, utilising the largest share of production for bisphenol A. Ufaorgsintez is the other Russian producer of bisphenol A, but produces larger volumes of phenol than Kazanorgsintez. Novokuibyshevsk Petrochemical Company (SANORS) sells most of its phenol production on the merchant domestic market, but also produces derivatives such as para-tertiary butylphenol. SANORS has reduced export activity for phenol since Omsk Kaucuk was forced to stop production in March 2014.



Russian aromatic duties

The rate of export duty on aromatic hydrocarbons was reduced by 9% from 1 December. Deliveries

of aromatics were carried out in December at \$42.4 per ton against \$43.9 per ton in November. By comparison, in January 2015 the duty rate was \$81.6 per ton.

Synthetic Rubber

Russian C4 Supplies (unit-kilo tons)		
Supplier	Jan-Nov 15	Jan-Nov 14
Angarsk Polymer	62.7	53.8
Kazanorgsintez	27.8	26.8
Stavrolen	54.6	63.6
SIBUR-Kstovo	65.6	52.3
Tomskneftekhim	60.6	65.0
Ufaorgsintez	23.9	24.2
Naftan (Belarus)	49.0	42.1
SANORS	0.5	0.0
Azerkhimya	22.2	11.3
Others	8.3	3.8
Total	375.3	342.9

Russian C4 sales, Jan-Nov 2015

C4 sales on the domestic market totalled 375,300 tons in the period January-November 2015 against 342,000 tons in 2014. The increase was partly due to the rise in Russian synthetic rubber production, which was helped last year by the devaluation of the rouble.

Consumption of merchant based C4s in the Russian market is undertaken by four of the major synthetic rubber producers, Togliattikaucuk and Nizhnekamskneftekhim being the largest buyers. Nizhnekamskneftekhim purchased 140,600 tons in January to November 2015, and Togliattikaucuk bought 141,100 tons.

The largest Russian C4 merchant suppliers include Angarsk Polymer Plant, SIBUR-Kstovo, Tomskneftekhim and

Russian Synthetic Rubber Exports, Jan-Sep 15		
Country	(Kilo tons)	(\$ million)
Belarus	23.1	33.0
Belgium	11.8	17.2
Brazil	43.4	69.7
Canada	17.2	23.2
China	72.8	117.7
Czech Republic	21.5	34.6
Germany	19.1	25.9
Hungary	56.5	102.4
India	62.7	92.1
Italy	7.8	9.8
Japan	26.2	45.9
Latvia	9.8	15.5
Lithuania	9.3	14.0
Poland	94.6	135.0
Romania	29.5	41.2
Serbia	10.6	14.9
Slovakia	23.2	38.1
South Korea	8.9	13.0
Spain	5.7	10.0
Taiwan	14.0	16.1
Turkey	30.9	44.9
Ukraine	11.9	15.7
USA	39.7	62.6
Thailand	5.5	7.6
Vietnam	6.9	9.0
Others	49.3	51.9
Total	711.9	1061.0

the early stages of assessment and depends on the time-scale for the construction of the refinery and petrochemical complex. As part of the petrochemical complex Eastern Petrochemical Company (VNKH), butadiene capacity is planned at 200,000 tpa.

SIBUR-Synthetic Rubber Production (unit-kilo tons)		
	Jan-Sep 15	Jan-Sep 14
Commodity Rubber	189.4	162.8
Speciality Rubber	72.8	65.9
Thermoplastic elastomers	45.0	34.5
3rd part purchases	0.0	0.4
Total	307.1	263.6
SIBUR-Synthetic Rubber Domestic Sales (unit-kilo tons)		
	Jan-Sep 15	Jan-Sep 14
Commodity Rubber	66.5	70.2
Speciality Rubber	7.2	8.8
Thermoplastic elastomers	23.3	17.8
Total	97.0	96.8

Stavrolen. The largest source of imported C4s is from Naftan in Belarus which shipped 49,000 tons in the period January to November 2015 against 42,100 tons in 2014. Azerkhiymya in Azerbaijan supplied 22,200 tons in January-November 2015, up from 11,300 tons whilst other small volumes were imported from Iran.

Russian synthetic rubber production & trade

Russian synthetic rubber production rose 13% in the first eleven months in 2015 against the same period in 2014. Producers started to raise capacity utilisation in the latter part of 2014, as the rouble declined in value making exports more profitable. International markets also made a small recovery in the first half of 2015, but that seems to have since weakened and Russian production has started to slow in the second half of the year.

Currently around 70% of synthetic rubber production in Russia is exported. Exports totalled 711,900 tons in the first three quarters in 2015 for total revenues of \$1.061 billion. China and India were major destinations for Russian exports, taking 72,800 and 62,700 tons respectively.

The largest regional market, however, remained Central Europe, including Poland (94,600 tons), Hungary (56,500 tons), Romania (29,500 tons), Slovakia (23,000 tons) and the Czech Republic (21,500 tons). Turkey imported 30,900 tons in the first three quarters in 2015, and this trade may slow down in 2016 as a result of difficult political relations between Ankara and Moscow.

Regarding investments in the synthetic rubber industry, the main flagship project involves Rosneft's proposed jv with Synthos and Pirelli at Nakhodka in the Russian Far East. At this stage the project concept remains in

SIBUR, synthetic rubber Jan-Sep 2015

SIBUR's sales revenues from synthetic rubber increased by 32.0% in the first three quarters in 2015, totalling 26.6 billion roubles. The rise was due to higher capacity utilisation compared to 2014 amid a sharp the fall in commodity prices and the devaluation of the Russian rouble.

Completed homologation with key clients for thermoplastic elastomers additionally contributed to the revenue growth. In the reporting period, sales volumes of general purpose rubbers and thermoplastic elastomers increased by 14.5% and 59.8%, respectively.

SIBUR produced 307,100 tons of synthetic rubber in the first three quarters in 2015 against 263,600 tons in the

same period in 2014. The largest rise was recorded in commodity rubbers, rising from 162,800 tons to 189,400 tons in 2014. SIBUR produces rubber at three main sites in Russia, at Voronezh, Togliatti and Krasnoyarsk.

SIBUR-Synthetic Rubber Export Sales (unit-kilo tons)		
	Jan-Sep 15	Jan-Sep 14
Commodity Rubber	124.5	96.7
Speciality Rubber	64.7	60.6
Thermoplastic elastomers	26.3	13.3
Total	215.6	170.5

The most modern installation in SIBUR's rubber division is located at Voronezh where capacity for thermoelastomers was doubled in 2013. The new plant increased SIBUR's production of TEPs from 35,000 tpa yearly to 85,000 tpa. Capacity at the plant is still not at 100% utilisation, but production did increase in the first three quarters from 34,500 tons in 2014 to 45,000 tons in 2015.

SIBUR-TEP Sales (unit-kilo tons)		
	Jan-Sep 15	Jan-Sep 14
Domestic	23.3	17.8
Exports	26.3	13.3
Total	49.6	31.0

Both Russian domestic and export sales of TEPs increased in 2015, due mainly to the homologation process which allowed the possibility for shipping more volume. Sales totalled 49,600 tons in January to September 2015 against 31,000 tons in the previous year. Domestic demand for TEPs is closely aligned to the demand for polymer-bitumen binders and Russia's investment programme for roads.

Methanol

Russian Methanol Domestic Sales by Producer (unit-kilo tons)		
Supplier	Jan-Nov 15	Jan-Nov 14
Azot Nevinnomyssk	16.0	20.5
Azot Novomoskovsk	101.0	98.9
Metafrax	287.2	315.3
Sibmetakhim	409.1	318.9
Togliattiazot	353.8	341.6
Shchekinoazot	31.3	16.9
Ammoni	32.3	0.0
Others	27.6	18.5
Total	1258.3	1130.6

Russian methanol, Jan-Nov 2015

Domestic sales of methanol on the Russian market amounted to 140,800 tons in November, 600 tons more than in October. Metafrax shipped 35,000 tons in November, 18% up on October. Whilst Ammoni at Mendeleevsk increased volumes by 10% to 10,200 tons. Shchekinoazot reduced sales by 37% in October to 4,600 tons, whilst Azot at Novomoskovsk sold 9,000 tons. Sibmetakhim and Tomet were the largest suppliers in November shipping 36,700 tons and 40,000 tons respectively. MTBE consumers accounted for 36% of purchases in November, whilst domestic gas companies took 22% and formaldehyde producers 17%.

Russian methanol exports dropped 2% in November against October to 127,000 tons despite expectations of a rise in volumes. Sibmetakhim exported 40,600 tons, Metafrax 26,400 tons and Shchekinoazot 29,200 tons. Azot at Novomoskovsk and Tomet exported 15,100 and 16,100 tons respectively. Finland accounted for 52% of exports in November, or 66,400 tons. Poland and Slovakia both reduced imports of Russian methanol 30% in November to 17,800 tons and 15,200 tons respectively.

Russian Methanol Exports (unit-kilo tons)		
Producer	Jan-Nov 15	Jan-Nov 14
Azot Nevinnomyssk	0.0	16.3
Azot Novomoskovsk	159.8	169.9
Akron	0.9	4.9
Metafrax	251.1	277.1
Sibmetakhim	351.0	374.7
Tomet	189.6	193.8
Shchekinoazot	297.8	342.1
Total	1250.3	1378.7

Russian methanol exports were virtually reversed with domestic shipments in 2015, with the total shipments abroad almost the same as for domestic sales in 2014 and exports for 2014 almost the same as domestic sales in 2015. Shchekinoazot and Metafrax reduced exports to concentrate on internal processing in the formaldehyde sector, whilst Sibmetakhim and Tomet came close to maintaining export volumes.

Russian methanol market

Methanol proved one of the more successful chemical products for Russian domestic consumption in 2015, with domestic shipments rising by around 10% over 2014. Domestic sales of methanol have increased in 2015 partly due to more advantageous pricing for producers compared to exports, and also the growth in derivative production such as MTBE and

formaldehyde. Most producers increased domestic sales in 2015, with the exception of Metafrax which reduced both domestic sales and exports at the expense of increased domestic processing.

Methanol production rose 64% in October over September to 342,000 tons, after several plants returned to full production following maintenance. Metafrax accounted for 28% of production in October, Sibmetakhim

Russian Chemical Commodity Exports				
Product	Jan-Oct 15	Jan-Oct 15	Jan-Oct 14	Jan-Oct 14
	Kilo tons	USD Mil	Kilo tons	USD Mil
Ammonia	2,901	1,114	3,009	1,256
Methanol	1,024	280	1,241	480
Nitrogen Fertilisers	9,179	2,151	10,088	2,687
Potash	10,329	2,750	8,213	2,138
Mixed Fertilisers	7,436	2,733	6,829	2,480
Synthetic Rubber	790	1,177	690	1,515

(22%) and Tomet (21%). Other producers included Shchekinoazot (13%) and Azot Novomoskovsk (8%). Metafrax produced 95,000 tons in October, six times higher than in September whilst Sibmetakhim

increased production 2.5 times to 76,000 tons. Tomet produced 70,300 tons in October, 1% less than in September. Ammonia at Mendelevsk has provided additional methanol to the

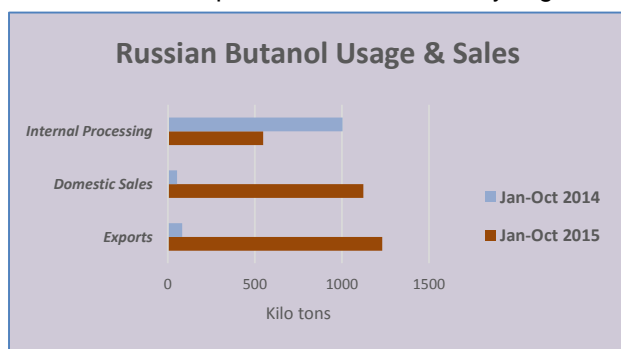
market since August 2015.

Metafrax restarted production in October after its maintenance shutdown that started in August, whilst Sibmetakhim also restarted in October after a four-week shutdown. The launch of new production unit at Mendelevsk has added a new player to the market, but production is relatively small. Production at the new Mendelevsk plant in Russia started in August, most of which was sold on the domestic market. The complex produces ammonia, methanol and urea and can consume up to 1 billion cubic metres of natural gas per annum.

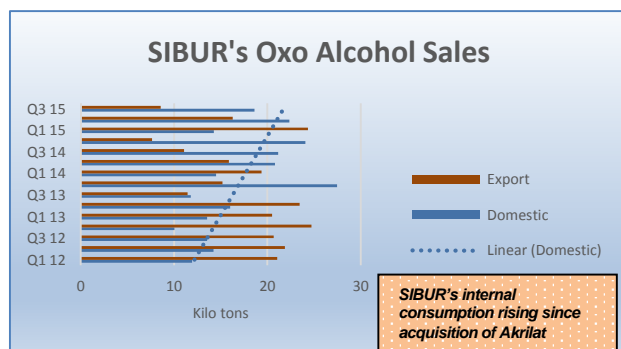
Organic chemicals

Russian butanol domestic sales, Jan-Oct 2015

Russian butanol producers recorded only slight changes in production in the first ten months in 2015, but the market distribution underwent a shift towards exports whilst at the same time reducing internal processing. Butanols production totalled 201,380 tons in the first ten months in 2015, 4% up on 2014. The proportion of n-butanol in gross production was 63%, and isobutanol 37%.



increased exports from 28,956 tons in January-October 2014 to 52,051 tons in 2015. Gazprom neftekhim Salavat saw the largest fall in captive usage, falling from 25,271 tons in January to October 2014 to 15,096 tons in 2015. Lower plasticizer production at Salavat gave way to increased exports in 2015, as the company



of domestic sales. Azot at from 2,423 tons in January-October 2015 to 3,463 tons in 2015, mainly processed into butyl acetate.

Gazprom neftekhim Salavat is aiming to increase internal processing by constructing its acrylate complex, although the completion date for this project remains unconfirmed.

SIBUR-Khimprom is the other main captive user of butanols, processing 26,099 tons in January to October 2015 against 27,144 tons in the same period in 2014. Despite the slight reduction, since the acquisition of Akrlat at Dzerzhinsk the general trend for SIBUR in recent years for oxo alcohols in total has been lower export sales at the expense

The company exports most of its production, shipping 14,485 tons in the first ten months in 2015 against 15,570 tons in 2014.

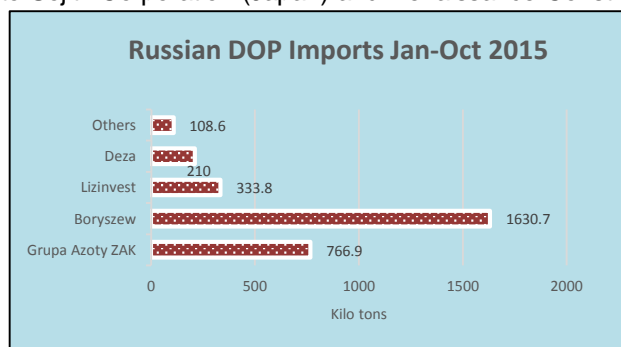
Russian N-butanol Exports (unit-kilo tons)		
Producer	Jan-Oct 15	Jan-Oct 14
Gazprom neftekhim Salavat	41.8	20.5
SIBUR-Khimprom	2.6	7.0
Angarsk Petrochemical	24.8	18.2
Azot Nevinomyssk	1.5	0.7
Dmitrievsky Chemical Plant	0.2	0.3
Total	70.8	46.7
Russian Isobutanol Exports (unit-kilo tons)		
Producer	Jan-Oct 15	Jan-Oct 14
Gazprom n Salavat	10.7	8.5
SIBUR-Khimprom	11.2	15.6
Angarsk Petrochemical	11.1	12.4
Dmitrievsky Chemical Plant	0.2	0.2
Total	33.0	36.4

Russian butanol exports, Jan-Sep 2015

Butanol exports from Russia amounted to 13,940 tons in October, 73% more than in September and 2.7 times more than in October 2014. The proportion of normal butanol in total Russian exports in September 2015 was 74%, and isobutanol 26%. Gazprom neftekhim Salavat exported 7,230 tons of butanols, Angarsk Petrochemical Company 5,460 tons, SIBUR-Khimprom 920 tons, and Azot Nevinomyssk 190 tons. China took 57% of Russian exports in October, followed by Finland (26%) and Poland (6%). From January to October 2015, butanol exports totalled 103,800 tons which is 27% higher than the same period in 2014. The significant change took place in n-butanol exports which rose from 46,700 tons in January-October 2014 to 70,800 tons in 2015.

Acrylate project Salavat

The Ministry of Economic Development of Bashkortostan has included the acrylate project for Gazprom neftekhim Salavat in the list of priority investment projects to be carried out in the republic. Gazprom neftekhim Salavat signed an EPC contract with Mitsubishi Heavy Industries in December 2012, in addition to Sojitz Corporation (Japan) and Renaissance Construction (Turkey) for the construction of the complex.



Inclusion on the priority list for the Ministry of Economic Development of Bashkortostan list does not give much more than modest regional support for the project and key to its completion depends on funds being provided from the Federal government in Moscow.

The project includes 80,000 tpa of acrylic acid and 35,000 tpa of glacial acrylic acid, with construction scheduled originally for the fourth quarter in 2016. As the project is not well advanced this completion date has been rendered void and

there is no sign at this stage when the project could be completed.

Russian plasticizer alcohols, Jan-Oct 2015

DOP imports into Russia amounted to 822 tons in October against 283 tons in September. Polish companies Boryszew and Azoty provided all imports in October, accounting for 800 tons and 22 tons respectively. DOP imports totalled 3,010 tons in January to October 2015 against only 151 tons in the same period in 2014.

Russian production of phthalic anhydride amounted to 9,660 tons in October, 1.5 times higher than in September. Gazprom neftekhim produced 660 tons, whilst Kamteks-Khimprom increased output by 93% over September by 93, to 8,700 tons. Production totalled 75,700 tons in January to October 2015, 10% down on 2014.

Russian Phthalic Anhydride Production (unit-kilo tons)		
Producer	Jan-Oct 15	Jan-Oct 14
Gazprom neftekhim Salavat	5.9	7.7
Kamteks-Khimprom,	69.8	76.8
Total	75.7	84.5

In October, exports of phthalic anhydride from Russia amounted to 3,440 tons which is 16% less than in September but nearly 1.5 times more than in October 2014. The maximum amounts of phthalic anhydride in October 2015 from Russia exported to China (30% of the gross volume of deliveries), Pakistan (24%), US (11%), Finland (8%), Poland (8%) and the United Arab

Emirates (7%).

In November, exports of phthalic anhydride from Russia amounted to 4,610 tons of which 35% went to India, 12% to the United Arab Emirates, Finland (11%), Pakistan (11%), Poland (8%), Turkey (6%) and the USA (5%). From January to November 2015, exports of phthalic anhydride from Russia amounted to 42,090 tons, 27% lower than in 2014.

Russian paints sector

The Russian paint sector witnessed lower consumption in 2015 as low solvency affected demand. Production was virtually unchanged for paints based on polymers, whilst an increase was recorded for other paints. The achievement of positive results by the Russian paint companies was only possible by reducing the share of competitors' products on the market.

Russian Paint Production (unit-kilo tons)		
Sector	Jan-Oct 15	Jan-Oct 14
Paint Materials on polymers	713.6	714.8
Other Paints	340.4	302.9
Total	1054.0	1017.7

The devaluation of the rouble has started the process of paint manufacturers looking to localise the production of

fillers that were previously imported. Sibelco in the Moscow area aims to start a new plant at the end of 2016 with a capacity of 19,000 tpa for the production of barium sulphate and aluminum hydroxide. Domestic supplier RIF-Mikromramor expanded capacity last year for fillers and starting in January 2016 will be able to ship to the market an additional 7,000 tons of micro calcite, raising capacity to 13,000 tons of products per month.

In 2015 the average supply to the domestic market amounted to 6,700 tons. It argued that the qualitative characteristics of Russian fillers are inferior to imported products although almost all the major manufacturers have switched to domestic products.

Pigment Tambov 2015

Pigment at Tambov produced 85,000 tons of products in the first three quarters in 2015, increasing revenues 14% to 4.8 billion roubles. This year Pigment has recorded a 32% rise in the production of acrylic emulsions, followed by sulphamic acid 17%, optical brighteners 10%, and semi-finished varnishes and additives for concrete by 5%. Exports rose 30% in the first three quarters in 2015.

Whilst the rouble's fall in value may have reduced import competition for paints, Russian manufacturers of industrial coatings are still heavily dependent on imported raw materials. Many brands of polyurethane and epoxy resins, pigments, and virtually all speciality chemicals are imported, and thus costs of production have risen sharply this year. Russian paint manufacturers have been reluctant to pass these costs on to the end-user due to the economic

instability. The difficulty in transferring raw material cost hikes on to the end-user has impacted on profitability and some manufacturers have been forced to cut back on R&D, which is an essential area of development if Russia wishes to reduce import dependency.

Belarus

Belarussian Organic Chemical Exports (unit-kilo tons)

Product	Jan-Sep 15	Jan-Sep 14
Acrylonitrile	25.2	26.6
Caprolactam	23.0	26.3
Phthalic anhydride	19.1	14.3
Methanol	54.4	48.6

Belarussian chemical production, Jan-Nov 2015

Polymir at Novopolotsk produced 120,100 tons of LDPE in the first eleven months in 2015 against 124,000 tons in 2014. The decline in output last year was due to longer downtime. Polymir was founded in 1968 and uses technology from Courtaulds, Asahi Chemical Co. Ltd, Kanematsu Goshu, SNIA BPD, etc.). LDPE capacity at Polymir is 130,000 tpa which was exceeded in 2014 when the company produced a total of 136,000 tons. Belarus produced 119,000 tons of benzene in January to November 2015, against 112,00 tons in the same period in 2014.

Belarussian Phthalic Anhydride Exports (unit-kilo tons)

Country	Jan-Sep 15	Jan-Sep 14
Russia	3.4	9.7
Ukraine	2.8	2.6
India	5.5	0.0
Egypt	1.3	0.0
Poland	4.4	1.8
Others	1.7	0.5
Total	19.1	14.6

Belarussian chemical trade, Q1-Q3 2015

Methanol exports from Belarus in the first three quarters in 2015 totalled 54,401 tons against 48,605 tons in the same period in 2014. The significant change took place in export destination, shifting from Poland to Ukraine. Whilst methanol exports to Poland dropped from 30,555 tons in the first three quarters of 2014 to 13,576 tons in 2015, volumes to Ukraine increased from 4,255 tons to 21,638 tons.

Caprolactam exports from Belarus declined from 26,300 tons in the period January to September 2014 against 23,000 tons in 2015, due largely to the fall in shipments to

Taiwan from 16,227 tons to 10,336 tons. For acrylonitrile exports, the largest destination for Belarussian product in the first three quarters of 2015 was Hungary accounting for 8,583 tons, followed by Turkey with 8,053 tons and the Netherlands 7,000 tons. Phthalic anhydride exports from Belarus increased to 19,100 tons in the first three quarters in 2015 from 14,300 tons, due largely to shipments to India (5,486 tons) which did not take place in 2014. Polyethylene exports rose from 84,472 tons to 88,667 tons.

Regarding imports, both paraxylene and orthoxylene shipments fell in the first three quarters in 2015. Orthoxylene imports for Belarus declined from 4,469 tons from January to September 2014 to 926 tons in 2015, due to higher domestic production.

Belarussian PET Raw Material Imports (unit-kilo tons)		
Product	Jan-Sep 15	Jan-Sep 14
Paraxylene	8.2	17.5
PTA	40.6	32.0
MEG	45.0	41.7

Paraxylene imports fell from 17,488 tons in January to September 2015 to 8,247 tons in 2015, whilst PTA imports by contrast rose from 32,000 tons in the first three quarters in 2014 to 40,550 tons in 2015. Mogilevkhimvolokno tended to replace paraxylene with PTA largely over cost. Russia is the sole supplier of paraxylene to Belarus, whilst Poland is the dominant supplier of PTA accounting for around 75% of deliveries last year. For MEG, Belarus imported 45,039 tons in the first three quarters in 2015 against 41,722 tons in the same period in 2014. Russia accounted for almost all imports in both years.

Belarussian Polymer Imports (unit-kilo tons)		
Product	Jan-Sep 15	Jan-Sep 14
PVC	21.9	26.5
Polypropylene	61.3	62.5
LDPE	39.2	38.1
HDPE	30.5	41.2
Polystyrene	46.2	52.9

Regarding polymer imports, PVC inward shipments amounted to 21,900 tons in the first three quarters, 26.1% down on 2014. Polyethylene imports fell from 86,247 tons to 76,114 tons, sources of imports vary but the largest volumes come from Russia and West Europe. Polystyrene imports into Belarus are sourced partly from Russia, accounting for around two thirds of the market in January to September 2015 (31,096 tons from 46,166 tons), although overall imports declined from 52,880 tons in 2014. Homo polypropylene imports from Russia increased in 2015 as increased availability from plants at Tobolsk, Omsk and Budyennovsk helped control the market. Imports from Russia rose from 27,621 tons in 2014 to 39,826 tons in January to September 2015, with total imports rising from 41,119 tons to 43,933 tons. Overall polypropylene imports, including copolymers, fell slightly to 61,300 tons.

Ukraine

Ukrainian HDPE Imports (unit-kilo tons)		
Category	Jan-Nov 15	Jan-Nov 14
Film	40.7	41.5
Blow	13.1	16.9
Pipe	13.0	15.0
Injection	16.8	16.0
Other	0.0	5.2
Total	83.6	94.5

Ukrainian polymer imports, Jan-Nov 2015

HDPE imports totalled 83,400 tons in the first eleven months in 2015, 12% down on 2014. Film grade HDPE imports totalled 40,700 tons in January to November 2015, 2% down on 2014. Ukrainian PVC imports amounted to 79,100 tons in the first eleven months in 2015, 28% down on the same period in 2014. Imports from the US fell from 62,300 tons to 31,700 tons in 2015.

Polypropylene imports totalled 85,700 tons in the first eleven months in 2015, 16% down on 2014. The main decline was recorded in the import of homopolymers, which totalled 51,300 tons in January to September 2015 against 73,000 tons in the same period last year.

Ukrainian titanium dioxide producers

Regarding Crimean Titan, the company has found a new route for exporting titanium dioxide. This became necessary after the blockade of Crimea began on 20 September started by the Crimean Tatars. Products are now transported by truck to the port of Sevastopol, and then sent by ship to Novorossiysk. The successful sending the first batch of titanium dioxide, which the partners took place in November, allowing you to plan increasing the volume of exports.

Ukrainian methanol

Methanol imports into Ukraine amounted to 3,000 tons in October, twice lower than in September. Azot at Grodno supplied 2,300 tons to the Ukrainian market in October. Gas companies accounted for 45% of purchases, or 1,300 tons. KarpatSmol purchased 655 tons in October, 22% of total imports, and twice lower than in September.

Central Asia

Uzkhimprom-Casale

The Uzbek chemical holding Uzkhimprom has signed a memorandum in late 2015 with Casale SA for the modernisation of two chemical plants. In accordance with the memorandum, the Swiss company is to take part in the modernisation of the fertiliser division at Navoiyazot and the fertiliser producer Maxam-Chirchik. The total preliminary cost of chemical plants modernisation projects is \$830 million. Under the agreements, the Swiss company until the end of the first quarter of 2016 will present its technical proposals for the modernization of production on both chemical plants.

The non-concentrated nitric acid production capacity must be increased by 1.4 times, up to 500,000 tpa during the reconstruction. Maxam-Chirchik plans to begin construction of a new ammonia production plant worth \$610 million, aimed for completion in 2019. The project envisages the establishment of the facilities for the production of 660,000 tpa of ammonia over three years. In 2014 Uzkhimprom produced 136,510 tons of phosphate fertilisers and 96,360 tons of potash fertilisers.

SOCAR aims to upgrade chemical industry by 2020

SOCAR has stated it will completely upgrade Azerbaijan's chemical industry by 2020. The energy and holding company plans to carry out full modernisation of the chemical production facilities by late 2019, partly financed by using funds from the state budget. One of the main tasks is to provide the new plants to be

Details of Sumgait Chemical Industrial Park	
Area	168 hectares
Projects	40
Polypropylene Project	Maire Tecnimont
Polypropylene Licensor	LyondellBasell
Project Management	Fluor
Overall cost for polyolefin production	\$750m, €350m for polypropylene project
HDPE Licensor	Ineos

constructed as part of SOCAR Polymer's project in conjunction with the raw material base. The first stage in this process involves the liquidation of old enterprises.

SOCAR Polymer's project is being implemented at the Sumgait Chemical Industrial Park (SCIP), which is located

approximately 30 km north of Baku. The chemical park is being constructed to support the growth of high-tech industrial fields in Azerbaijan and attract investments to bolster the non-oil sector in the country.

SOCAR-OGPC

SOCAR intends to determine investors for the project on establishing a new gas processing and petrochemical complex (OGPC) in the first half of 2016, which is to be located 60 km from Baku. The OGPC project has multiple interfaces not only between process units, utilities, and offsite facilities, but also between the new gas processing and petrochemical facilities. The project is estimated to cost around \$17.1 billion. This project is not expected to be completed until 2022-2023. The capacities of the OGPC refinery comprise 8.5-9 million tpa of crude, a gas processing plant of 12 billion cubic metres per annum, whilst petrochemical production will exceed 1 million tpa.

The project consists of two plants, 180,000 tpa of polypropylene and 120,000 tpa of polyethylene. SOCAR-Polymer aims to start the production of polypropylene in 2017, and the production of polyethylene in 2018. Around 30% of polyolefin production will be consumed domestically whilst the main part will be exported to the markets in Turkey and West Europe. Maire Tecnimont has been selected as the contractor for the polypropylene project whilst the EPC contract for the HDPE project has not been awarded yet.

Turkmenistan Sumitomo

Sumitomo Corp has won a \$300 million order for a 400-megawatt gas-fired power plant in Turkmenistan. Sumitomo said it aimed to complete the construction of the simple-cycle gas-fired plant in 2018, and that the main equipment such as a gas turbine and power generator would be procured from Mitsubishi Hitachi Power Systems Ltd. Japanese companies are already involved in large-scale projects in Turkmenistan, building plants to process natural gas into fertilisers, ethylene, polyethylene and polypropylene, as well as into liquid fuel.

Kazakh polymer imports, Jan-Oct 2015

HDPE imports declined by 6% in January to October 2015 to 65,600 tons against 69,700 tons in the same period in 2014. Pipe grade polyethylene accounted for around 60% of HDPE imports, followed by film grade HDPE which accounted for 10% of volumes. Russian sources accounted for around 65% of imports in January to October 2015, followed by South Korea and Uzbekistan.

Kazakh Polymer Imports (unit-kilo tons)		
Product	Jan-Oct 15	Jan-Oct 14
HDPE	65.6	69.8
LDPE	11.6	17.0
LLDPE	3.1	4.5
PVC	43.6	61.3
PET	38.0	61.3
Polypropylene	17.1	22.3

PVC imports amounted to 43,600 tons in January to October 2015, 29% down on 2014 when imports totalled 61,300 tons. The reason for the decline was the fall in PVC imports that were sent to Russia, dropping from around 20,000 tons to 10,000 tons. China accounted for 98% of imports in January to October 2015. Polypropylene imports amounted to 17,100 tons in January to October 2015, 21% down on 2014. Exports of polypropylene from Kazakhstan decreased by 11% in the first ten months in 2015 to 19,300 tons.

Russian Petrochemical Prices				
Product	Region/Terms	11/12/2015	04/12/2015	27/11/2015
<i>Roubles per ton (inclusive of VAT)</i>				
Ethylene	Volga	42500-43000	42500-43000	43600-43700
Propylene	FCA Volga	35000-45000	35000-45000	35000-45000
	FCA Siberia	25000-30000	25000-30000	25000-30000
Benzene	FCA North West	40000-44500	40000-44500	40000-44500
	FCA Volga	41000-45000	41000-43400	41000-43400
	FCA Siberia	40000-42000	40000-42000	40000-42000
Styrene	FCA Volga	66000-80000	66000-80000	69000-80000
Methanol	FCA Volga	18800-24000	24000-25000	26400-29500
	FCA Siberia	20000-25000	24000-26000	26400-29500
	CPT Ural	20000-26000	24000-26000	26400-29500
N-Butanol	FCA Volga	50000-53000	50500-53000	53000-56000
	FCA Siberia	42000-43000	42000-43000	46500-47000
	CPT Central	52500-55000	53000-55500	55500-58500
Isobutanol	FCA Volga	44000-50370	49000-50370	50000-51000
	FCA Siberia	41000-42000	41000-42000	40000-41000
	CPT Central	47000-53000	51500-53000	52500-53500
Toluene	FCA North West	38800-39500	38900-39500	41500-42650
	FCA Central	38000-40500	40500-41000	40500-41000
	FCA Siberia	34000-36300	34000-36300	41000-41500
	FCA Volga	37000-38000	37000-38000	38500-40000
Orthoxylene	FCA Central	44000-45500	44000-45000	48500-49000
	FCA Volga	37500-38500	37500-38500	38900-39500
	FCA North West	37050-38000	37050-38000	42000-42500
	FCA Siberia	35000-36000	35000-36000	41000-42000
	CPT Central	41000-42000	41000-42000	46000-46500
	CPT Volga	37500-38500	37500-38500	38900-39500
	CPT Ural	68000-68600	68000-68600	68000-68600
Phthalic Anhydride	FCA Central	72000-74000	72000-74000	72000-74000
	FCA Volga	68000-68600	68000-68600	68000-68600
	CPT Central	68000-68600	68000-68600	68000-68600
	CPT Ural	68000-68600	68000-68600	68000-68600
Pentaerythritol	FCA Central	80000-83000	80000-83000	80000-83000
Phenol	EXW Volga	72000-75000	72000-83000	72000-83000
	FCA Volga	72000-75000	74000-80000	74000-80000
	FCA Siberia	72000-76000	76000-83000	76000-83000
	CPT Central	7200-76000	76000-83000	76000-83000
Acetone	FCA Volga	36500-38000	38000-46000	39000-45000
DOP	FCA Volga	88000-90000	96000-98000	96000-98000
MTBE	FCA Volga	48500-52000	52000-66000	52000-66000
	FCA Siberia	50000-58000	52000-66700	52000-66700
	CPT Central	50000-58000	52000-66700	52000-66700
MEG	FCA Volga	62000-68000	62000-68000	64000-68000
	CPT Central	63500-68000	63500-68000	65500-68000
Monoethanolamine	EXW Volga	80240	80240	80240
	FCA Volga	81000-84000	81000-84000	81000-84000

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 = 22.9 €1 = 24.9; Rus rouble. \$1 = 64.8 €1= 70.0

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