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 PETROCHEMICALS

PKN Orlen-propylene project

CB&I has secured a contract from PKN Orlen to provide design and construction for an on-purpose propylene production unit at Plock. Under the contract, CB&I will licence and design a metathesis plant, which will incorporate its Lummus olefins conversion technology. The unit is to be designed to have the capacity to produce 100,000 tpa of polymer-grade propylene for use in internal operations, whilst Orlen's Plock refinery and petrochemical complex will supply feedstock for the unit. Work on the project is scheduled to commence in 2016 and production is expected to start in late 2017 or 2018. PKN Orlen is focusing more on petrochemicals over the next few years, planning to spend around $500 million on projects by 2020.

Poland Propylene On Purpose Projects

- ***PKN Orlen-Capacity 100,000 tpa, start-up 2018***
- ***Grupa Azoty Police-Capacity 400,000 tpa, start-up 2019***

Grupa Azoty Police-propylene project

The other on-purpose propylene project under construction at Police in Poland is one of the key investments for Grupa Azoty, worth at least zl 1.7 million. The capacity of the propylene unit is expected to be approximately 400,000 tpa. At the peak of the investment, the construction site will engage around a thousand employees, and after installation starts will fall to around two hundred people. The first ton of propylene is expected to be produced in the second half of 2019.

Unipetrol cracker reconstruction

Unipetrol has completed work on the reconstruction of the steam cracker at Litvinov, which was damaged in the fire of 13 August 2015. Currently, the final tests are being undertaken before the gradual start-up of production. The tests are required to check the system after a long break in the functioning of the system.

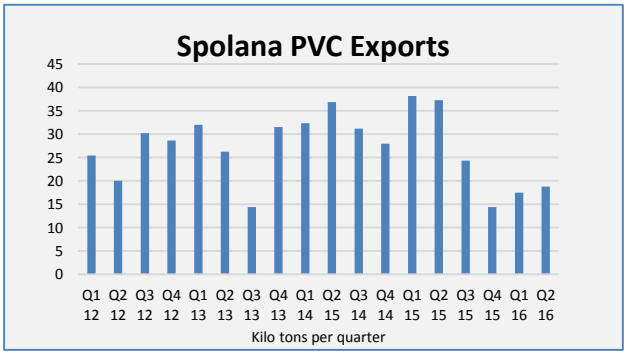
Czech Petrochemical Imports (unit-kilo tons)

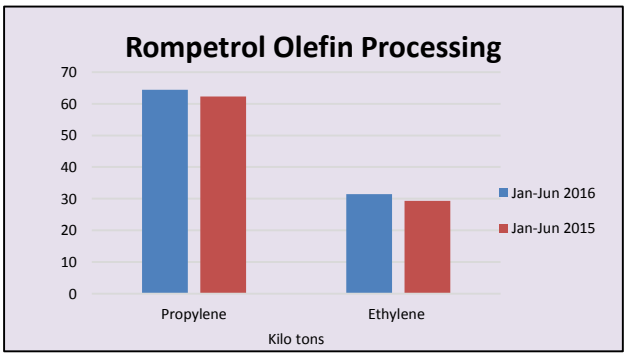
Product	*Jan-Jul 16*	*Jan-Jul 15*
Ethylene	95.5	5.4
Propylene	91.1	14.1
Butadiene	31.3	12.1
Benzene	57.5	51.5
Ethylbenzene	40.3	1.0

Rebuilding the installation lasted a period of over ten months and cost around Kc 4 billion. Linde Engineering undertook the project to reconstruct the damaged cracker at Chempark Záluží, whilst Technip provided some of the major technology components including four new furnaces.

Unipetrol has taken steps to minimize the risk of similar incidents in future. Newly introduced measures include the installation of new valves in the system of safety valves in the column of propylene and ethylene column.

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 for around a year, with imports being sourced mostly from European suppliers. At the same time ethylene supplies have been reduced to PVC producer Spolana, thus impacting on PVC export activity.





Rompetrol Rafinare, Jan-Jun 2016

Rompetrol Rafinare increased its pre-tax profit by 60% in the first six months of 2016 despite turnover dropping by 14%. The company, which manages the Petromidia and Vega refineries, recorded a net profit of €12.6 million whereas the turnover totalled €1.5 billion. By

comparison, Rompetrol Rafinare recorded a turnover of over €1.77 billion in the first six months of last year. The company exported 1.3 million tons of products in the first half of the year, a similar volume to 2015.

The Petromidia refinery at Navodari achieved a record amount of processing in the first half of 2016, at 17,000 tons of crude oil per day. For 2016 Rompetrol Rafinare has set a refining target of 5.35 million tons, most of which will be processed at the Petromidia refinery. The company also intends to process around 195,000 tons of monomers for polymer production. Ethylene is sourced from imports whilst part of the propylene for polypropylene production is produced at the Petromidia refinery.

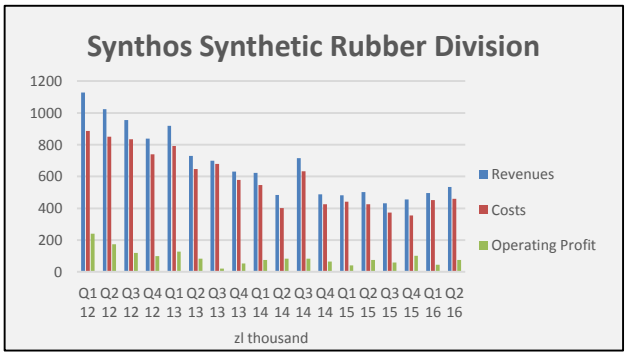
Synthos-Main Product Revenues (zl thousand)		
	Jan-Jun 16	*Jan-Jun 15*
Revenues	2123.0	2174.0
Costs	1716.0	1857.0
Operating Profit	407.0	317.0

Synthos Jan-Jun 2016

For the first half of 2016 the Synthos Group generated revenues of zl 2,123 million and an EBITDA of zl 272 million. Although revenues were down slightly against the zl 2,174 million achieved in the first half of 2015, production costs were much lower this year allowing Synthos to increase its operating profit from zl 317 million to zl 407 million.

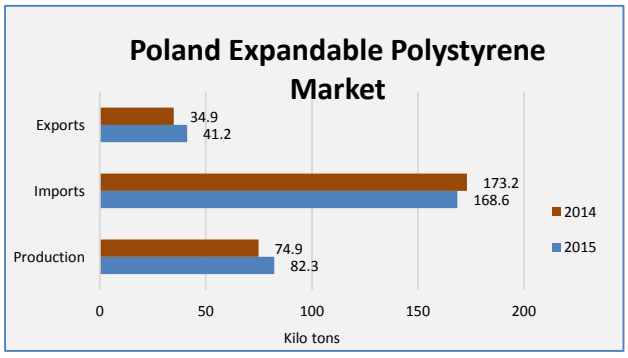
The group's business is divided into four main business segments, including synthetic rubber, styrene plastics, dispersions and adhesives, and plant protection agents. Synthetic rubber has to date provided the core division of the Synthos Group, where revenues have dropped sharply over the past few years due to market conditions. Despite significant price declines in the rubber market the group has been able to maintain reasonable profit levels.

The group produces four different kinds of synthetic rubber: styrene butadiene rubbers, polybutadiene rubbers, high styrene rubbers and nitrile butadiene rubbers (NBR). In recent years the synthetic rubber division has been affected by falling product prices, but the group has managed to maintain reasonable profit margins in line with lower feedstock costs, particularly styrene and butadiene. Synthos buys crude C4s from SABIC for its butadiene extraction unit at Kralupy and butadiene for its rubber operations at Oswiecim, whilst purchasing butadiene from MOL.



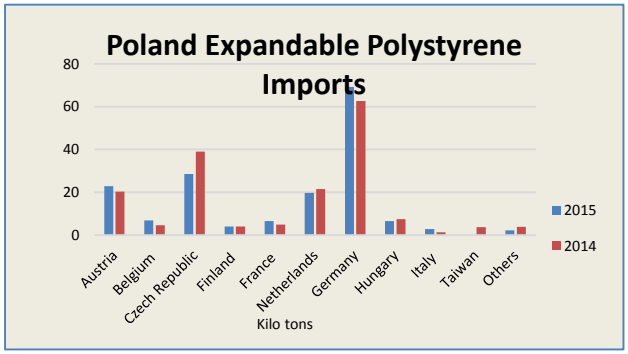
Acquistion of Ineos Styrenics by Synthos approved by EU

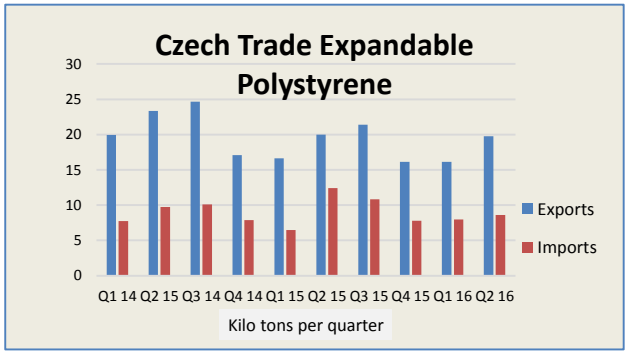
In late August 2016 the European Commission approved the acquisition of Ineos Styrenics by Synthos, and the transaction was successfully completed on 31 August. Synthos, as a result, has become the European leader on the market for expandable polystyrene (EPS). The value of the transaction amounted to €80 million. Expanding the product portfolio and increasing production capacity enable Synthos to strengthen its position as a significant player in the European market.



Synthos already produces EPS at Oswiecim although the Polish market is heavily dependent on imports which totalled 168,600 tons in 2015 against 173,200 tons in 2014. The main sources of imported EPS include Germany, the Czech Republic and the Netherlands. Imports from the Czech Republic are sourced from Synthos Kralupy, from where export activity exceeds import activity. Following the purchase of Ineos Styrenics, Synthos has taken three production plants, two located in northern France (Wingles and Ribécourt) and the third in the Netherlands (Breda). Ineos Styrenics was the largest producer of expandable polystyrene in Europe comprising a total production capacity of 310,000 tpa, which represents around 20% of European capacity. The aim of the newly formed

organisation will be to provide the high quality expandable polystyrene (EPS) and will raise the styrene processing capacity of the Synthos group beyond 600,000 tpa.

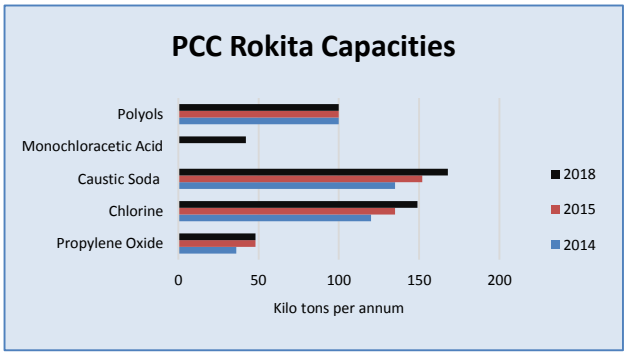




Chemicals

PCC Rokita, Jan-Jun 2016

PCC Rokita completed the construction of its plant for monochloroacetic acid at Brzeg Dolny at the end of the second quarter, which will start production before the end of the third quarter. For the second quarter in 2016 PCC Rokita recorded a consolidated net profit of zl 35.61 million against zl 14.23 million in the same period last year. Operating profit amounted to zl 39.64 million in Q2 2016 against zl 17.92 million. Revenues increased to zl 267.45 million against zl 247.120.



Overall for the first two quarters, PCC Rokita recorded a net profit of zl 65.330 million against zl 19.180 million in the same period in 2015. Sales revenues rose to zl 549.04 million compared with zl 500.950 last year. Higher revenues of the first half of 2016 compared to the same period last year was mainly driven by higher sales of alkalis and to a lesser extent, chlorine, chlorine derivatives products, and polyols, which enabled higher production due to the increased ability of production facilities.

PCC Exol, Jan-Jun 2016

PCC Rokita's surfactant subsidiary PCC Exol increased its EBITDA by 35% in the first half of 2016 to zl 24.3 million whilst the net profit increased by 124% from zl 6.9 million to zl 12.4 million. Revenues for PCC Exol from sales rose 5.2% to zl 265.9 million.

The increase in net profit was primarily the consequence of higher margins which rose from 14.9% in 2015 to 17.5% in 2016 and helped operating result rise 30.1% by zl 1.8 million. Higher sales revenues compared to the first half of 2015 were mainly due to increased sales of high-margin surfactants for industrial applications. The company is in the process of adding more ethoxylation capacity. The domestic market value of surfactants in Poland is currently estimated at over $350 million which could rise to around $400 million by 2018. The main rival to PCC Exol is BASF. Ethylene oxide, sourced mainly from PKN Orlen, and fatty alcohols are the main raw materials used by PCC Exol.

Oltchim may now be sold piece by piece

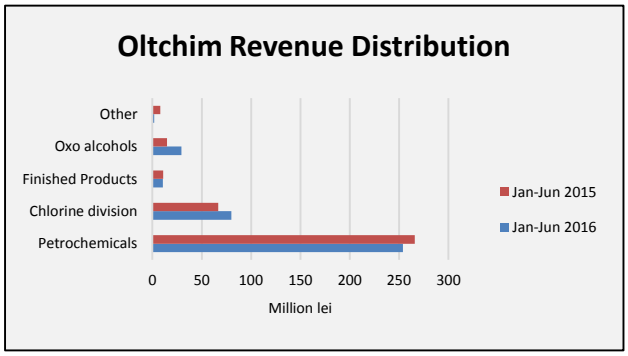
Indications from the Romanian government suggest that efforts to sell Oltchim as a separate entity have been replaced by a more pragmatic approach in selling off individual unit's piece by piece.

Oltchim administrators have hired consultants A T Kearney to advise them for the sell-off, which has been tried on several occasions in recent years but has proved unsuccessful. Local Romanian group SCR, owned by the Romanian investor Stefan Vuza, who owns the chemical producer Chimcomplex Borzesti, wants to acquire some of the assets of Oltchim. However, he is only interested in the group's assets in Oltchim, without the Bradu petrochemical platform next to the Arpechim Pitesti refinery.

Oltchim Financial Performance (million lei)		
	H1 2016	H1 2015
Total income	379,655	366,693
Total expenses	355,260	375,816
Gross Profit/Loss	24,395	-9,124
Net profit	18,599	-9,124
EBITDA	50,921	24,419

Oltchim has made a gradual recovery over the past couple years although capacity utilisation remains low. Oltchim's gross profit of 24.4 million lei in the first half of 2016 represents an improvement of 33.5 million lei over the same period in 2015. Turnover increased by 28 million lei, i.e. by 15.5%. Recording better results has been determined by an increase in sales of polyols and polyethers, which rose by 38% in the first half of 2016, and increased sales of oxo alcohols by 3.7 times. Costs were lower for the company's main raw material propylene.

The oxo alcohol plant at Ramnicu Valcea increased production in April after replacement of the hydrogen catalyst, raising utilisation from 27.6% in the first quarter to 31.6% in the second quarter. This modernisation has led to the increase of finished product quality and increase of production, resulting an increase in sales of 3.2 times for oxo products in the second quarter of 2016 compared to the first quarter. 2-EH, the main product produced in this plant, is sold by Oltchim only for export.



Spolchemie-chlorine plant

Czech producer Spolchemie intends to start production at the new membrane plant at Usti nad Labem in the fourth quarter this year. The conversion from the old mercury plant to the membrane plant will meet the environmental requirements of the European Union. Moreover, from key investments in technology it is essential for the production of chemicals by Spolchemie if the company wants to strengthen its position in the market.

Polish chemical production (unit-kilo tons)		
Product	***Jan-Jul 16***	***Jan-Jul 15***
Caustic Soda Liquid	193.8	182.9
Caustic Soda Solid	41.3	32.8
Soda Ash	723.7	608.3
Ethylene	317.4	325.1
Propylene	232.0	230.3
Butadiene	38.7	36.2
Toluene	9.3	5.7
Phenol	21.8	23.7
Caprolactam	93.9	94.8
Acetic Acid	4.9	6.1
Polyethylene	225.5	232.0
Polystyrene	32.4	24.1
EPS	52.3	44.4
PVC	171.1	188.4
Polypropylene	163.5	146.7
Synthetic Rubber	131.7	113.4
Ammonia (Gaseous)	1523.0	792.0
Ammonia (Liquid)	55.3	814.1
Pesticides	15.6	18.7
Nitric Acid	1305.0	1373.0
Nitrogen Fertilisers	1124.1	1171.0
Phosphate Fertilisers	293.8	283.6
Potassium Fertilisers	246.1	217.5

The total cost of construction and commissioning of the new resources amounted to almost Kc 1.9 billion and represents the largest investment in the history of Spolchemie. Starting membrane electrolysis will enable Spolchemie to strengthen its strategic position as the main producer of potassium hydroxide in Central Europe and a significant player on the EU market. Spolchemie's capacity for potassium hydroxide comprises 60,000 tpa and caustic soda 43,000 tpa.

Grupa Azoty, Jan-Jun 2016

Grupa Azoty reported an EBITDA of zl 695 million in the first half of 2016, on revenue of zl 4.63 billion. The consolidated net profit for the period comprised zl 356 million, against zl 458 million in the first half of 2015. The results were weaker than in H1 2015, with the EBITDA down by zl 82 million, and revenue by zl 476 million. The EBIT and EBITDA margins in H1 2016 were 9.5% and 15%, against 10.5% and 15% respectively in 2015. The EBITDA for Q2 2016 was reported at zl 178 million (against zl 292 million in Q2 2015) and net profit reached zl 49 million (versus zl 152 million), on revenue of nearly zl 2.16 billon (versus zl 2.28 billion).

The second quarter was affected by major shifts in the market environment, particularly in the fertiliser business. The plastics division was struggling against very strong price pressures from customers. The chemical division recorded a clear improvement in performance and profitability, driven primarily by continued positive margins on sales of melamine. The oxo division benefited from sales of Oxoviflex, with a higher premium to propylene than other plasticizers.

RUSSIA

Russian Chemical Production (unit-kilo tons)

Product	*Jan-Jul 16*	*Jan-Jul 15*
Caustic Soda	633.8	661.6
Soda Ash	1,688.7	1,788.0
Ethylene	1,578.2	1,662.0
Propylene	1,253.1	1,179.2
Benzene	690.8	717.6
Xylenes	336.5	321.6
Styrene	426.4	387.5
Phenol	142.2	144.2
Ammonia	9,300.0	8,600.0
Nitrogen Fertilisers	5,587.0	4,998.0
Phosphate Fertilisers	2,027.0	1,939.0
Potash Fertilisers	4,289.0	4,690.0
Plastics in Bulk	4,438.0	4,249.0
Polyethylene	1,266.0	1,064.0
Polystyrene	320.0	306.8
PVC	442.2	470.0
Polypropylene	737.2	816.0
Polyamide	90.3	80.8
Synthetic Rubber	834.7	925.0
Synthetic Fibres	88.5	71.8

Russian chemical production, Jan-Jul 2016

Russian ethylene production totalled 1.578 million tons in the first seven months in 2016 against 1.662 million tons in the same period in 2015, the decline due mainly to the extended outage at Angarsk. Propylene production increased from 1.179 million tons to 1.253 million tons, with the Angarsk outage offset by rises in production at Lukoil's Kstovo refinery and Tobolsk-Polymer. In the polymer sector rises were noted for polyolefins and polystyrene, although PVC production was affected by a five-month downtime period at Sayanskkhimplast. Imports of PVC have risen this year in response to the PVC market shortages, whilst polyethylene imports have been in decline as Russian producers increase their own production combined with a subdued domestic market.

Russian petrochemical projects

ZapSib-2 pyrolysis column delivery

In mid-August SIBUR received the first batch of large equipment for the ZapSib-2 project at Tobolsk from South Korea, including five columns for pyrolysis. In late July, the equipment left the Arctic port Sabetta, after firstly arriving on 20 July from the Norwegian town of Kirkenes. A total of 58 units of large equipment from South Korea, China, Japan, Italy and Germany are to be shipped this year to the ZabSib-2 project at Tobolsk, using through four vessels and totalling 60,000 tons of freight.

For ZapSib-2 SIBUR has attracted long-term debt financing, including funding from export credit agencies of $2.3 billion and credit from the Russian National Welfare Fund worth another $1.75 billion. Another loan of $210 million has been sourced from the Russian Direct Investment Fund. The ZapSib-2 complex can be interpreted as a project aimed at diversifying SIBUR's exposure to revenue risks associated with LPG and energy products. SIBUR's overall strategy of investments in petrochemicals is designed to reduce the dependency on revenues from energy products.

Bashneft upgrade of Ufaorgsintez

In Bashkortostan, Bashneft is undertaking a number of investment projects in Ufaorgsintez, one of which includes an upgrade of the ethanol unit in 2017. The project involves the dismantling of the current pyrolysis furnaces, installation of a new furnace and replacement of steel structures, pipelines, etc. Regarding the olefin cracker, Bashneft has chosen SUE Bashgiproneftekhim to develop a feasibility study for the technical re-equipment. The contractor is invited to make an analysis of four scenarios, calculating the possibility of increasing the production of the existing ethylene capacity to either 150,000 tpa, 160,000 tpa or 250,000 tpa or alternatively constructing a new cracker with a capacity of 300,000 tpa.

Ufaorgsintez-Investment Priorities

- Restoring and increasing pyrolysis capacity
- An increase in the polymerisation of ethylene capacity
- Installation Reconstruction of cumene production
- Expansion of the production of special grades of epoxy resins;

Rosneft-Sinopec to study petrochemical project in East Siberia

Rosneft and China Petrochemical Corporation (Sinopec Group) signed a binding agreement on 20 September at the Vladivostok Eastern Economic Forum on a joint preliminary study of a project for gas processing and petrochemical complex in East Siberia. The document signed further to the Memorandum of Understanding and the Framework Agreement, envisages activities to analyze and select a technology to produce high-tech polymers from raw natural gas and its components. At this stage the two sides plan

to select a site in the vicinity of the Boguchany administrative centre (Krasnoyarsk region) to locate the complex, identify the project configuration and to approve optimal process solutions. In case of a successful completion of the Agreement activities, Rosneft and Sinopec will set up a joint venture to conduct FEED study, construct and operate the Complex.

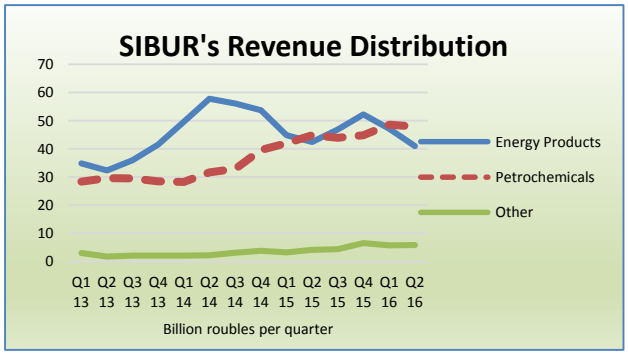
Amur GPP & Amur Gas Chemical Project

The construction process has started for the Amur Gas Processing Plant (GPP) at Svobodny in the Amur Oblast, which may eventually lead to the construction of the Amur Gas Chemical Complex. Linde was selected as the plant licensor for the Amur GPP in 2015, undertaking the project in five phases the last of which will be completed by 2024.

The gas processing plant, which is being designed to produce 42 billion cubic metres of gas per annum, depends on the opening of a section of the Power of Siberia gas transmission system when ready. 2019 has been signalled as the earliest the gas plant could start production, but even then it could take several years to reach its full capacity.

In early September, Minvostokrazvitiya (Russian Ministry of Far East Development) and SIBUR signed a letter of intent for the implementation of the investment project Amur Gas Chemical Complex. Investments in the potential project are estimated in the range of 500 billion roubles and create more than 1,500 jobs. Minvostokrazvitiya did not disclose further details about the intent of the agreement which was signed on 2 September at the Eastern Economic Forum at Vladivostok.

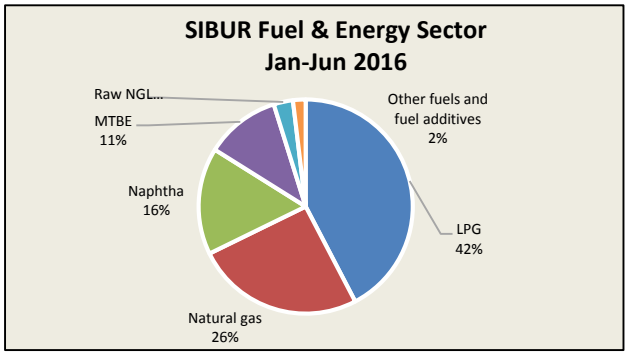
Russian petrochemical producers & markets



SIBUR, Jan-Jun 2016

SIBUR increased its net profit three fold in the first half of 2016 against a more modest increase in revenues of 8.1%. In the first half this year the company recorded a net profit of 63.3 billion roubles from revenues of 196.1 billion roubles. Adjusted profit for distribution decreased by 14.7% to 29 billion roubles.

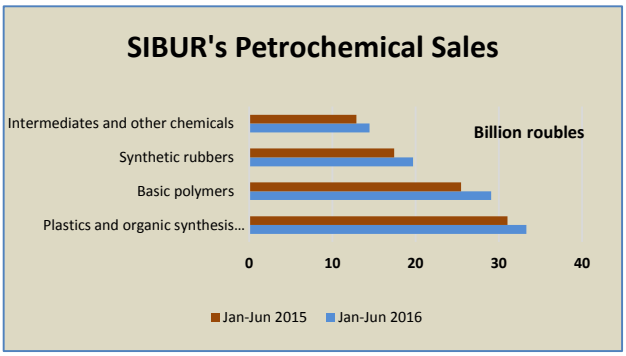
SIBUR's EBITDA increased by 1.2% in the first half of 2016 to 65.4 billion roubles. The rise of the petrochemical division by 38% helped to offset the decline in the fuels and energy sector which fell by 23.7%. SIBUR's EBITDA from the petrochemical division increased to 39.6 billion roubles, exceeding the EBITDA from the fuel and raw materials division, which fell to 29 billion roubles. Petrochemical revenues have been rising for SIBUR in recent quarters and have now established themselves higher than product revenues from the fuel and energy sector.



Apart from continued investments in the petrochemical sector, the rise in sales revenues above the fuel and energy division has been due to a declining oil prices. Sales of fuel and energy products virtually remained at previous year's level in the first half of 2016 and amounted to 88 billion roubles.

LPG represents a key product for SIBUR and whilst volume sales and production are rising

revenues dropped 5% in the first half of 2016 to 37.272 billion roubles from 39.234 billion roubles in 2015. Average LPG prices fell 11.8% which offset the 7.7% rise in sales volumes. SIBUR reduced supplies of LPG to the petrochemicals business in 2016, as SIBUR temporarily replaced it with raw NGL at the crackers at Kstovo and Tomsk. These factors were partially offset by lower volumes of raw NGL supplied by Novatek under processing arrangements and the respective decline in LPG purchases from Novatek after processing raw NGL at Tobolsk-Neftekhim. In the first half of 2016, domestic sales accounted for 21.4% of total LPG revenue, while 78.6% was attributable to export sales.



SIBUR increased sales of LPG by 7.7% in the first half of 2016, whilst revenues from the sale of fuel and raw materials increased by 0.6%. During the first half the company sold 2.19 million tons of LPG whilst sales of natural gas grew by 3.7% to 8.9 billion cubic metres due the expansion of gas processing facilities and the increase in raw material procurement for fractionation at Tobolsk. During the first half of SIBUR's gas processing plants increased the volume of associated gas processing by 5.6% to 10.9 billion cubic metres. The volume fractionation of natural gas liquids increased by 3.6% and amounted to 3.3 million tons.

SIBUR's Monomer & Intermediate Production (unit-kilo tons)

Product	*Jan-Jun 16*	*Jan-Jun 15*
Benzene	81.0	74.9
Styrene	99.5	90.8
PTA	134.3	132.0
Propylene	413.0	407.6
Ethylene Oxide	156.2	145.9
Butadiene	123.5	121.3
Isoprene	34.9	38.1
Isobutylene	79.9	80.5
Ethylene	357.4	332.1
Other Intermediates	640.5	629.9
Other Chemicals	452.0	413.6
Purchases from 3rd parties	0.0	4.1
Total	4743.3	4243.5

Sales of petrochemical products rose by 3.8% in the first half of 2016 to 1.39 million tons. Sales of MTBE and other fuel additives increased by 6% to 316,330 tons whilst production of basic polymers decreased by 1% to 371,770 tons. Sales of synthetic rubber increased by 7.6% to 228,640 tons, which was mainly due to the completion of the homologation process for thermoplastic elastomers to the main consumers.

Volumes of polypropylene sales increased by 5.6% in the first half of 2016 to 258,200 tons, primarily due to increased production at Tobolsk-Polymer. The rise in the production and sales of BOPP films was a factor helping the sale of polypropylene on the domestic market, whilst also helping the increase of sales in plastics and organic synthesis products by 1.3% to 478,800 tons. Sales of semi-finished products and other chemical products increased by 11.4% to 313,100 tons due to the increase the production of styrene at Perm, and ethylene sales growth to RusVinyl for an increase in the production of PVC.

Russian cracker feedstocks, Jan-Aug 2016

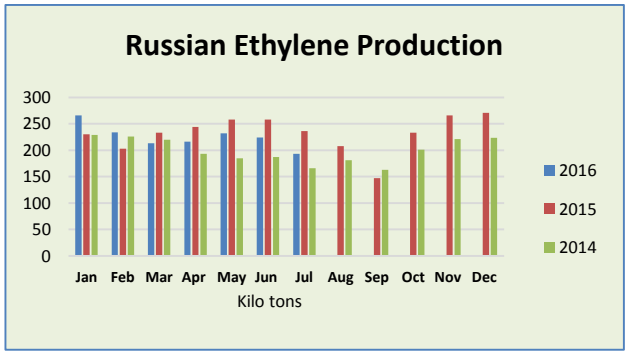
Petrochemical plants in Russia took delivery of 110,600 tons of naphtha in August, 4% up on July. SIBUR shipped 36,800 tons of naphtha in August, 49% up, most of which went to Tomskneftekhim. In the first eight months of 2016 naphtha shipments on the merchant petrochemical market totalled 772,700 tons, 14% more than the same period last year. The increase was due largely to the resumption of operations at Stavrolen, where 494,000 tons has been used and 48% higher than 2015.

NGL sales to petrochemical plants amounted to 89,270 tons in August, down from July. Nizhnekamskneftekhim reduced purchases from 54,000 tons to 22,030 tons whilst SIBUR-Kstovo increased purchases from 31,200 tons to 46,790 tons, Tomskneftekhim from 2,780 tons to 11,290 tons and Angarsk Polymer from 2,160 tons to 7,320 tons. Sales of gas liquids to petrochemical plants totalled 984,000 tons in the first eight months in 2016 against 1.045 million tons in the same period in 2015.

Revenue from SIBUR's base polymer sales increased in the first half of 2016 by 14.2% to 29.1 billion roubles. Revenue in plastics and organic sales increased by 7.3% to 33.3 billion roubles, and synthetic rubber by 13% to 19.7 billion roubles. Overall, revenues from sales of petrochemical products increased by 11.2% and amounted to 96.6 billion roubles. Total revenues for the half year reached 196.1 billion roubles.

SIBUR's total amount of debt decreased in the first half of 2016 by 19.5% to 368 billion roubles as compared to 31 December 2015. Capital investment

company tripled and amounted to 83.6 billion roubles, which is associated with the active phase of the project ZapSibNeftekhim. Overall SIBUR's debt situation is manageable, and should be largely self-correcting after start-up of the ZapSib-2 complex. Until then SIBUR will to some extent be dependent on oil prices and the association to energy product exports. Historically SIBUR has a substantial short-term debt, which is 25%-35% of the total debt and cash exceeds the size of the company. At the end of 2015 SIBUR had short-term debt in the amount of 84 billion roubles.



Russian ethylene, Jan-Jul 2016

Russian ethylene production in July dropped by 17% against June to 193,100 tons. The decline was due to maintenance work at several plants, including a drop of 5.9 times by Tomskneftekhim to 4,400 tons and Nizhnekamskneftekhim by 2.1 times to 25,900 tons. In addition, Gazprom neftekhim Salavat reduced the production of ethylene by 27% to 20,300 tons.

Angarsk Polymer Plant produced 9,500 tons of ethylene in July after being idle for the previous five months. Production totalled 1.6 million tons for the first seven months, similar to 2015. Tomskneftekhim was forced to stop production on 22 August due to voltage drop in power from the Reftinskaya GRES. Rostekhnadzor fined Angarsk Polymer Plant 240,000 roubles for bad safety practices in the production of ethylene.

Russian propylene market, Jan-Jul 2016

Russian propylene production amounted to 118,400 tons in July, 14% down on June due primarily to repairs at Tomskneftekhim which lowered production by 6.6 times to 1,900 tons and Nizhnekamskneftekhim by 2.3 times to 11,500 tons. At the same time, after the resumption of production Angarsk Polymer Plant increased propylene substantially in July to 5,500 tons.

Russian Propylene Exports (unit-kilo tons)		
Producer	***Jan-Jul 16***	***Jan-Jul 15***
Lukoil-NNOS	41.0	0.4
SIBUR-Kstovo	28.2	36.3
Angarsk Polymer Plant	0.0	0.0
Stavrolen	9.2	0.0
Total	78.8	46.7
Source; Chem-Courier		

In the first seven months in 2016 Russian propylene production totalled 962,400 tons which reflected a 6% increase over 2015. Russian propylene production increased by 6% in the second quarter of which Tobolsk-Polymer accounted for 21% of total output. Nizhnekamskneftekhim accounted for 14% of propylene production in the second quarter. Domestic consumption of propylene in Russia by increased by 4% in the second quarter against the same period last year. The key supplier is Lukoil-NNOS which occupies around 60% of the merchant domestic market. Propylene sales on the Russian domestic market amounted to 235,700 tons in the first eight months in 2016, 7% down on the same period in 2015.

Russian styrene, Jan-Jul 2016

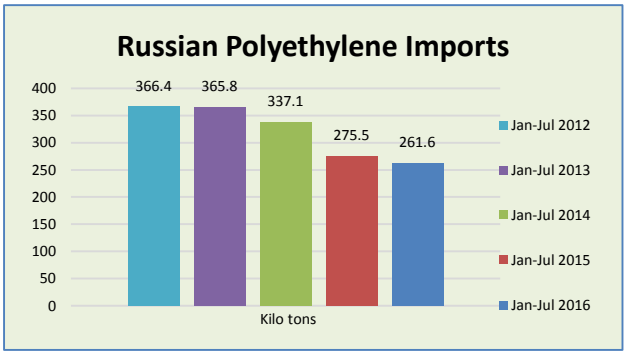
Styrene exports from Russia totalled 68,800 tons in the first seven months in 2016, 10% up on the same period in 2015. Finland accounted for more than 90% of shipments in both years. Styrene production totalled 44,800 tons in July, 22% less than in June. Nizhnekamskneftekhim accounted for 49% of production in July, producing 21,800 tons. Other producers included SIBUR-Khimprom with 11,800 tons, Gazprom neftekhim Salavat 4,900 tons and Angarsk Polymer Plant 2,300 tons after restarting in July. The extended outage of Angarsk Polymer Plant from February to the end of June was the main factor in the slight decline in styrene production in the first seven months in 2016 to 394,100 tons.

Russian Styrene Production (unit-kilo tons)		
Producer	***Jan-Jul 16***	***Jan-Jul 15***
Nizhnekamskneftekhim	174.0	148.5
Angarsk Polymer Plant	6.5	20.2
SIBUR-Khimprom	83.7	69.7
Gazprom Neftekhim Salavat	98.5	87.5
Plastik, Uzlovaya	31.4	24.0
Total	394.0	350.0

Styrene sales on the domestic market rose 6% in January to August 2016 to 63,100 tons. Sales rose 50% in August to 9,400 tons, of which 56% was supplied by Gazprom neftekhim Salavat. SIBUR-

Khimprom delivered by rail 2,200 tons of monomer in August, 45% less than in the previous month and Angarsk Polymer Plant 1,900 tons which was 67% up.

Bulk Polymers



Russian polyolefin imports, Jan-Jul 2016

Imports of polyethylene in the Russian market decreased by 11% during the first seven months of 2016 to 276,200 tons. In July imports increased by 5.6% to 45,400 tons. For January to July 2016 HDPE imports totalled 79,200 tons which is 24% below last year's level. In July, HDPE shipments increased to 14,100 tons compared to 12,700 tons in June.

Demand for LLDPE foreign production for seven months decreased by 17.6% to 100,300 toss although in July imports increased by 26.2% to 18,300 tons. Local producers of stretch films increased their purchases of the Middle East sourced LLDPE, the prices of which have fallen over the summer. LDPE imports increased in the first seven months by 10.2% to 58,600 tons.

Tomskneftekhim-LDPE modernisation

On 15 September Tomskneftekhim held a ceremonial launch of production of its upgraded LDPE plant, which was launched in August. The capacity of LDPE at Tomsk was increased by 12.5% to 270,000 tpa.

Russian polyethylene production, Jan-Jul 2016

Russian HDPE production rose 11% in the first seven months in 2016 to 577,300 tons, whilst LDPE production dropped from 388,400 tons to 334,100 tons. Production of LLDPE in Russia exceeded 47,000 tons in the first seven months of the year compared to 40,000 tons in 2015.

Russian HDPE Production (unit-kilo tons)		
Producer	***Jan-Jul 16***	***Jan-Jul 15***
Kazanorgsintez	279.2	305.2
Stavrolen	155.6	79.1
Nizhnekamskneftekhim	77.7	90.1
Gazprom neftekhim Salavat	64.0	58.5
Total	576.5	449.8

HDPE production was helped by rises by Stavrolen and Gazprom neftekhim Salavat. Nizhnekamskneftekhim switched from HDPE to LLDPE production in June, thus reducing HDPE production for the first seven months to 77,700 tons in 2016 from 79,000 tons in 2015. Kazanorgsintez has reduced production by 8.5% in the first seven months 2016, due to a lack of ethylene, amounting to 279,200 tons. Stavrolen increased production from 80,000 tons in January to July 2015 to 155,600 tons in the same period this year.

Russian Polypropylene Production (unit-kilo tons)		
Producer	***Jan-Jul 16***	***Jan-Jul 15***
Ufaorgsintez	66.6	73.9
Stavrolen	68.4	64.8
Moscow NPZ	74.5	68.0
Nizhnekamskneftekhim	126.5	127.3
Polyom	120.4	117.1
Tomskneftekhim	71.0	81.9
Tobolsk-Polymer	244.7	239.5
Total	772.1	762.2

Kazanorgsintez increased revenues from the sale of polyethylene by 12.5% in the first half of 2016 to 28.350 billion roubles, of which HDPE accounted for 20.145 billion roubles or around 70%. The company stated that the significant increase in sales prices was responsible for higher revenues in 2016 rather than volumes.

Russian polypropylene production, Jan-Jul 2016

In the first seven months of 2016 Russian polypropylene production totalled 772,100 tons. Tobolsk-Polymer produced 244,700 tons January to July 2016 against 240,500 tons in the 2015, Polyom produced 120,400 tons against 117,100 tons, Nizhnekamskneftekhim 126,500 tons versus 127,200 tons and Tomskneftekhim 71,000 tons which is 14% up over last year.

Russian exports of polypropylene totalled 187,600 tons in the first seven months of 2016, down by 19% against 2015. Producers reduced export sales in July to 18,500 tons versus 26,600 tons in June. The

reduction in exports was due in July to scheduled shutdowns for maintenance at Tobolsk-Polymer and Tomskneftekhim. Tobolsk-Polymer accounted for 52% of Russian polypropylene exports in the first seven months, followed by 12% from Polyom at Omsk. Main export destinations in January to July 2016 included Belarus, China and Turkey with 38,600 tons, 30,300 tons and 21,400 tons respectively. Homopolymers accounted for 89% of the shipments.

Russian polypropylene imports, Jan-Jul 2016

Imports of polypropylene increased by 9% over the first seven months of this year to 96,600 tons, including 45,300 tons of homopolymer. Domestic processors continue to import raffia from Turkmenistan. Domestic market polypropylene consumption may achieve slightly higher volumes than polyethylene in this year, but may also be affected by Russia's systemic economic problems which are constraining growth and business expansion.

Russian Polypropylene Imports (unit-kilo tons)

Category	*Jan-Jul 16*	*Jan-Jul 15*
Homopolymers	45.3	36.2
Block	17.9	15.9
Random	18.2	18.1
Other	15.2	15.7
Total	96.6	85.9

SIBUR polyolefins, Jan-Jun 2016

SIBUR's revenue from sales of bulk polymers increased by 14.2% in the first half of 2016 to 29.086 billion roubles from 25.480 billion roubles in the same period in 2015. The rise was primarily driven by higher average prices for polypropylene and LDPE, linked to the Russian rouble depreciation, and slightly better domestic market. Domestic sales accounted for 66.1% of SIBUR's bulk polymers revenue in the first half of 2016.

SIBUR Polyolefins (unit-kilo tons)

Production	*Jan-Jun 16*	*Jan-Jun 15*
LDPE	125.8	131.3
Polypropylene	301.3	285.7
Purchases from third parties	63.6	60.8
Total	490.6	477.8
Total Sales	***Jan-Jun 16***	***Jan-Jun 15***
LDPE	113.6	130.5
Polypropylene	258.2	245.9
Total	371.8	376.4

Revenue from SIBUR's polypropylene sales increased by 16.7% in the first half of 2016 to 18.968 billion roubles from 16.252 billion roubles. These rises were due to a 10.5% increase in average prices and a 5.6% increase in sales volumes. Higher polypropylene production at Tobolsk-Polymer and higher third-party purchases from NPP Neftekhimya accounted for the rise in volumes. The scheduled maintenance shutdown at Tomsk at the end of first half of 2016 resulted in the decrease in production and higher inventory accumulation at Tomskneftekhim. In the first half of 2016, domestic sales accounted for 58.7% of SIBUR's polypropylene revenue, and subsequently 41.3% was attributable to export sales.

LDPE sales revenues for SIBUR increased by 9.6% in the first half of 2016 to 10.118 billion roubles from 9.228 billion roubles. Average prices rose 26.4% whilst sales volumes dropped 13.3%. The increase in the average price was largely a result of Russian rouble depreciation and temporary shortage caused by unscheduled shutdowns. In the first half of 2016, domestic sales increased to 80.0% of SIBUR's LDPE revenue from 61.8% in 2015, whilst at the same export sales decreased to 20.0% from 38.2%.

Russian PVC Imports (unit-kilo tons)

Source	*Jan-Aug 16*	*Jan-Aug 15*
US	10.5	5.8
China	76.0	33.6
Europe	6.5	6.2
Others	0.2	1.7
Total	93.2	47.3

Russian PVC, Jan-Aug 2016

For the first eight months in 2016 Russian imports of PVC amounted to 93,200 tons, against 47,3.00 tons in the same period in 2015. The extended outage at Sayanskkhimplast is the main factor behind the rise in PVC imports in 2016. Another factor over the summer months has also been strong seasonal demand.

Imports from China amounted to 26,300 tons in August against 18,400 tons in July, bringing Chinese imports to a total of 70,000 tons for the first eight months in 2016 against 33,600 tons in 2015. Imports from the US amounted to 3,200 tons in August against 3,000 tons in July, bringing total imports to 10,500 tons in January to August 2016 from 5,800 tons last year.

At the same time, Russian PVC suppliers continue to increase the volume of exports. In the eight months of 2016 shipments to consumers in other countries has risen 17.8% to around 40,400 tons. September

import volumes have shown signs of softening quite significantly, partly due to revival of Sayanskkhimplast and partly due to inventory.

Russian PVC Production (unit-kilo tons)		
Producer	***Jan-Aug 16***	***Jan-Aug 15***
Bashkir Soda	169.8	157.5
Kaustik	57.2	63.2
RusVinyl	209.4	153.9
Sayanskkhimplast	62.8	147.7
Total	499.2	522.3

As reported by individual companies, some contracts for Chinese deliveries are delayed, and as a result, significant amounts of resin at the August contracts will be shipped in September.

In the first eight months this year PVC production in Russia decreased by 5% and amounted to 499,300 tons. Sayanskkhimplast produced only 62,800 tons in the first eight months against 148,000 tons in 2015. Kaustik reduced production by 11% to 57,200 tons, whilst Bashkir Soda increased by 8% to 169,800 tons and RusVinyl from 153,900 tons to 209,400 tons.

Russian polycarbonate

In the first seven months of 2016 the production of polycarbonate in Russia increased by 11% to 41,600 tons. Kazanorgsintez produced 4,300 tons in July against 6,040 tons in June. Polycarbonate sales for Kazanorgsintez rose in the first half of 2016 from 4.32 billion roubles in the first half of 2015 to 5.22 billion roubles in 2016. Around 80% of production at Kazanorgsintez comprises sheet extrusion. Russia's imports of polycarbonate decreased by 58% to about 6,000 tons in January-July 2016. Sabic Innovative Plastics imported 6,300 tons of polycarbonate granules for sheet extrusion in the period January to July 2015, but almost nothing in 2016. In 2015 Kazanorgsintez placed 64,000 tons on the domestic market which is 17% more than in 2014. Under soft government direction Kazanorgsintez will seek to sell its production on the domestic market firstly before any thoughts are given to export opportunities.

Due to the ethylene outage at Angarsk Sayanskkhimplast estimates a loss of around 85,000 tons of PVC this year. Production stopped completely on 14 March, after production dropped in the first two months by 20% to 35,300 tons. Caustic soda production is expected to lose around 45,000 tons from the halt in production at Sayansk. As Sayanskkhimplast is the major employer in the local region, the stoppage this year was not only for the company itself, but also for the local budget and related organisations.

Russian PTA-PET

SIBUR-Bashneft paraxylene contract

SIBUR and Bashneft signed long-term contract in August for the supply of paraxylene from the Ufaneftekhim refinery to be sent to Polief at Blagoveshchensk in Bashkortostan. The agreement will run until 2036 inclusive, during which Bashneft will supply from Ufaneftekhim a minimum of 120,000 tpa of paraxylene.

The cost of raw materials for the production of PTA will be based on international prices, whilst volumes of supplies can be increased by mutual agreement of both parties. The agreement with SIBUR may help to strengthen Bashneft's project plans to expand paraxylene capacity from 165,000 tpa to 260,000 tpa. For its part, SIBUR's current consumption of paraxylene at Polief is around 170,000 tpa which means that Bashneft supplies more than two thirds of requirements for PTA production. Additional supplies of paraxylene are purchased from Gazprom Neft at the Omsk refinery.

SIBUR Paraxylene, PTA-PET Chain (unit-kilo tons)		
	Jan-Jun 16	***Jan-Jun 15***
Paraxylene Purchases	86.0	87.4
PTA Production	134.3	132.0
PTA Domestic Sales	5.1	4.0
PTA Exports	0.5	1.4
PET Production	147.8	149.8

SIBUR's PET Production & Sales (unit-kilo tons)		
	Jan-Jun 16	***Jan-Jun 15***
Production	147.7	149.9
Domestic	143.7	157.8
Exports	3.3	1.0
Total Sales	147.0	158.8

SIBUR paraxylene purchases, Jan-Jun 2016

In the first half of 2016, SIBUR's costs for paraxylene increased by 15.6% against the same period in 2015 to 3.478 billion roubles from 3.008 billion roubles. This increased the percentage of paraxylene in the company's total feedstock and materials expenses to 9.0% from 7.7% last year. The growth in paraxylene costs was attributable to a 17.6% increase in prices following rouble depreciation, despite lower international benchmark prices. SIBUR's paraxylene purchasing

volumes were largely flat, amounting to 86,000 tons in the first six months from 87,400 tons in January to June 2015.

Russian PET, Jan-Jul 2016

Russian PET consumption totalled 363,000 tons in the first seven months in 2016, of which 55,400 tons were imported. The largest supplier of PET on the Russian market remains Yisheng Petrochemical which accounted for 24,000 tons of imports in the period January to July 2016. Russian PET production increased by 8% in the first seven months and amounted to 318,000 tons. Exports of PET fell by 33% to 11,000 tons, of which around 10,000 tons were sent to Belarus.

In the first half of 2016, SIBUR's revenue from PET sales remained largely flat at 9.920 billion roubles compared to 9.886 billion roubles in 2015. The increase in sales volumes was primarily a result of inventory movements. In the first half of 2016, domestic sales accounted for 97.7% of total PET revenue, while 2.3% was attributable to export sales.

SIBUR MEG revenues, Jan-Jun 2016

In the first half of 2016, SIBUR's revenue from sales of glycols increased by 15.2% to 5.118 billion roubles on a 10.8% increase in sales volumes and a 4.0% increase in prices. The increase in sales volumes was largely attributable to a 9.6% increase in production volumes following the capacity expansion at Dzerzhinsk in 2015, as well as shorter maintenance shutdowns compared to the previous year. In the first half of 2016, SIBUR's glycols revenue was split 50/50 between the domestic and export markets.

Russian MEG, Jan-Jul 2016

MEG sales to the Russian domestic market totalled 13,700 tons in July, 107 tons more than in June. SIBUR-Neftekhim shipped 10,500 tons from its Dzerzhinsk plant and Nizhnekamskneftekhim 2,800 tons. Polief bought 8,200 tons in July, BaltTechProm 2,300 tons and Obninskorgsintez 2,400 tons. Sales on the domestic market totalled 82,300 tons in the first seven months in 2016 which was 8% down on 2015. Russian MEG imports amounted to 3,000 tons in July, all of which came from Saudi Arabia. From January to July, Russian MEG imports rose seven-fold over the same period in 2015 and totalled 18,943 tons.

Aromatics

Russian Benzene Production (unit-kilo tons)

Producer	*Jan-Jul 16*	*Jan-Jul 15*
Angarsk Polymer Plant	13.0	45.2
Chelyabinsk MK	0.0	0.0
Gazprom Neft	65.5	65.6
Stavrolen	4.5	5.9
Lukoil-Permnefteorgsintez	23.4	29.7
Magnitogorsk MK	36.7	37.8
Nizhnekamskneftekhim	122.3	122.3
Novolipetsk MK	8.5	17.8
Gazprom neftekhim Salavat	92.4	75.6
Severstal	19.6	22.5
SIBUR-Kstovo	44.6	42.5
Slavneft-Yaroslavlorgsintez	37.7	36.0
Kirishinefteorgsintez	42.4	30.6
Ryazan Refinery	19.4	16.6
Ufaneftekhim	51.6	58.4
Ural Steel	6.4	5.8
Uralorgsintez	47.6	47.1
Zapsib	42.9	39.4
SANORS	18.2	14.2
Total	696.7	712.8

Source: Chem-Courier

Russian benzene market, Jan-Jul 2016

Benzene production in Russia amounted to 85,700 tons in July, 5% less than in June. Nizhnekamskneftekhim reduced production to 9,300 tons due to maintenance and Gazprom Neft by 18% to 7,400 tons. At the same time after the repairs Lukoil-PNOS increased the production of benzene in 1.9 times up to 3.700 tons. In addition, Ufaneftekhim and Ryazan refineries increased production in July by 32% to 8,200 tons and 22%, to 3,300 tons respectively.

In the first seven months in 2016 Russian benzene production totaled 652,400 tons, according to Chem-Courier, which was 3% down on the same period in 2015. At the end of August Stavrolen restarted the shipment of benzene which had been suspended at the end of January. Sales by Stavrolen were restarted to Kuibyshevazot, shipping around a thousand tons. Export duties on aromatic hydrocarbons from Russia decreased by 11% from 1 September to $32 per ton, from $38.3 in August an $36 in July.

Russian toluene, Jan-Jul 2016

Toluene sales to the Russian domestic market by rail rose 11% in July over June to 18,020 tons, of which Gazprom Neft accounted for 9,660 tons, Lukoil-Permnefteorgsintez 3,090 tons and Kirishinefteorgsintez

2,780 tons. Explosive manufacturers reduced the volume of purchases by 26% in July to 1,120 tons, whilst paint manufacturers increased their purchases by more than 30% to 4,240 tons. Manufacturers of motor fuels and additives decreased volumes of toluene by 4% to 5,170 tons.

For the first seven months in 2016 sales of toluene to the Russian domestic market totalled 108,410 tons which is 34% up on the same period last year. Toluene production in July amounted to 34,100 tons which was 4% lower than in the previous month. Production totalled 218,720 tons in the first seven months in 2016, 14% up on the same period in 2015.

Russian Orthoxylene Domestic Sales (unit-kilo tons)		
Producer	***Jan-Jul 16***	***Jan-Jul 15***
Gazprom Neft	32.6	34.9
Ufaneftekhim	26.8	18.8
Kirishinefteorgsintez	19.8	21.7
Total	79.1	75.3
Source; Chem-Courier		

Russian orthoxylene exports 2015

Russian orthoxylene exports totalled 62,200 tons of orthoxylene in the first seven months in 2016, 49% up on the same period last year. Exports were sent mostly to Finland for further distribution. According to Chem-Courier, orthoxylene sales to the domestic market amounted to 10,800 tons in July which is 6% less than in June. Ufaneftekhim supplied 4,540 tons, Gazprom Neft. 3,630 tons and Kirishinefteorgsintez 2,570 tons.

In the domestic market Kamteks-Khimprom reduced the purchase of orthoxylene in July by 14% against June to 5,220 tons, whilst other consumers included Gazprom neftekhim Salavat with 470 tons and Dmitrievsky Chemical Plant 710 tons. Russian manufacturers of paints purchased 1,550 tons in July, unchanged from June. Sales of orthoxylene on the domestic market totalled 79,000 tons in the first seven months in 2016, 5% up on 2015.

Russian phenol, Jan-Jul 2016

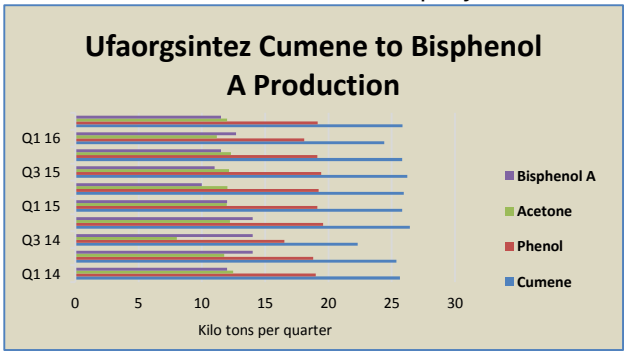
Phenol sales to the domestic market amounted to 12,000 tons in July, 10% up on June. Phenol imports from Borealis continue to be bought in the Russian market, shipping 690 tons in July which went to consumers by Metadynea, YM Sverdlov and Astatine. Russian phenol production dropped 25% in July against June, amounting to 14,100 tons. The main factor was that Kazanorgsintez reduced production due to scheduled maintenance, falling 80% to 1,100 tons.

Russian Phenol Production (unit-kilo tons)		
Producer	***Jan-Jul 16***	***Jan-Jul 15***
Ufaorgsintez	43.8	38.3
Kazanorgsintez	39.5	39.3
Novokuibyshevsk Petrochemical	50.0	40.2
Omsk Kaucuk	0.0	0.0
Total	133.3	117.8
Source; Chem-Courier		

Phenol revamp at Ufaorgsintez

Bashneft is seeking preferential treatment in terms of taxation by the regional government for the reconstruction of the cumene plant for Ufaorgsintez. The volume of capital investments in the reconstruction project will be in excess of 1 billion roubles. The intention to carry out the reconstruction of the production of cumene Ufaorgsintez started in 2014. The owners at the time, the United Petrochemical Company, identified Badger Licensing LLC as the licensor and project developer.

With the assistance of the US company the intention was to optimize production processes, deletion of technological chain aluminium chloride. The capacity of the cumene capacity is 120,000 tpa although production rarely exceeds 100,000 tpa. Ufaorgsintez produces bisphenol A from its own production of phenol and acetone.



Omsk Kaucuk, phenol-acetone reconstruction

Omsk Kaucuk (included in GC Titan) has completed the foundation stages for the new plant for phenol-acetone production. The company will begin installation of equipment in the near future. The recovery of the production of phenol-acetone

involves the modernisation of other plants belonging to the production chain, in accordance with modern requirements in the field of industrial safety. Reconstruction at Omsk is scheduled to be completed in 2018, involving a doubling of capacity which is based on the latest technology of alkylation of benzene. Also, the company intends to give up the aluminium chloride as a catalyst. Production of phenol and acetone was decommissioned by Omsk Kaucuk in March 2014 due to a major accident.

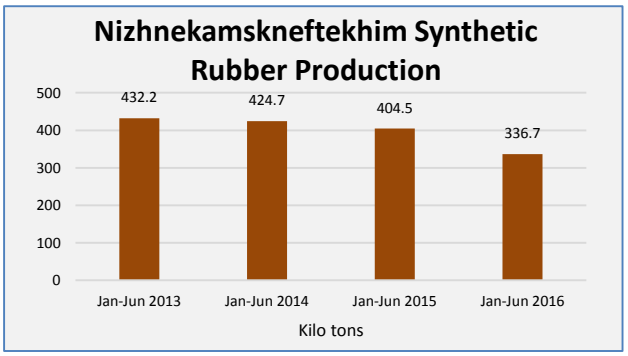
Kuibyshevazot-cyclohexanone unit start

Kuibyshevazot has started a new production unit at the end of August for cyclohexanone, whilst at the same time increasing the capacity of caprolactam production to 210,000 tpa. Future plans include an expansion of caprolactam capacity to 260,000 tpa in order to support the expansion of polyamide-6, technical and textile yarns, cord fabric, engineering plastics. The construction of the energy-efficient production of cyclohexanone, based on DSM technology, cost approximately 8.3 billion roubles.

Synthetic Rubber

Nizhnekamskneftekhim isobutylene & isoprene rubber expansion

Nizhnekamskneftekhim intends to put into operation an installation for the production of isobutylene by the end of the year, as part of providing the feedstock base for isoprene monomer production. Isobutylene is considered by Nizhnekamskneftekhim to be more economical in the production of isoprene monomer than isopentane, which it has traditionally used. The new isobutylene unit is expected to be completed before the end of 2016, with a capacity of 160,000 tpa, together with a 100,000 tpa unit for formaldehyde.



As part of the reconstruction process isoprene rubber capacity is being increased from 280,000 tpa to 380,000 tpa. The new isobutylene unit is also helpful in the production of MTBE and particularly butyl rubber where capacity at Nizhnekamsk is scheduled to rise to 220,000 tpa by February 2017. Butyl rubber capacity is being expanded to fulfill contracts with global tyre suppliers such as Pirelli, Michelin and Bridgestone. At the end of 2014 Nizhnekamskneftekhim held a 42% share in the world market for polyisoprene rubber and 16% in butyl rubber. Last year Nizhnekamskneftekhim produced 198,000 tons of butyl rubber, of which 126,900 tons was halogenated. In the first half of 2016 Nizhnekamskneftekhim produced 336,700 tons of synthetic rubber which is lower than in 2015, 2014 and 2013 due to weaker markets.

Russian C4 Supplies (unit-kilo tons)

Supplier	*Jan-Aug 16*	*Jan-Aug 15*
Angarsk Polymer	6.5	45.2
Kazanorgsintez	0.3	0.3
Stavrolen	25.7	22.1
SIBUR-Kstovo	51.1	35.9
Tomskneftekhim	35.2	45.4
Ufaorgsintez	17.8	19.9
Naftan (Belarus)	33.7	34.6
Azerkhimya	15.1	18.6
Others	0.9	9.2
Total	246.5	278.0

Source; Chem-Courier

Russian C4 sales, Jan-Jul 2016

C4 sales on the Russian domestic market increased 40% in August against July to 28,500 tons following completed maintenance shutdowns. Overall though for the first eight months in 2016 sales of C4s dropped 12% to 246,500 tons. The decline was due mainly to the extended outage at Angarsk Polymer Plant.

Omsk Kaucuk, Jan-Jun 2016

Omsk Kaucuk achieved a net profit of 6.73 million roubles in the first half of 2016 against a loss of 71.42 million roubles in 2015. Revenues rose 7% to 2.54 billion roubles, whilst the cost of sales increased by 6% to 2.23 billion roubles. The operating profit amounted to 41.4 million roubles, and the profit before tax 14.7 million roubles. In the second quarter Omsk Kaucuk reduced its share of production of alphamethylstyrene rubber (SKMS) in the Russian market from 20% to 18%.

Overall synthetic rubber capacity at Omsk Kaucuk is running at no more than 50% due to market difficulties. The Russian market for SKMS, for example, decreased by 17% in the second quarter of 2016

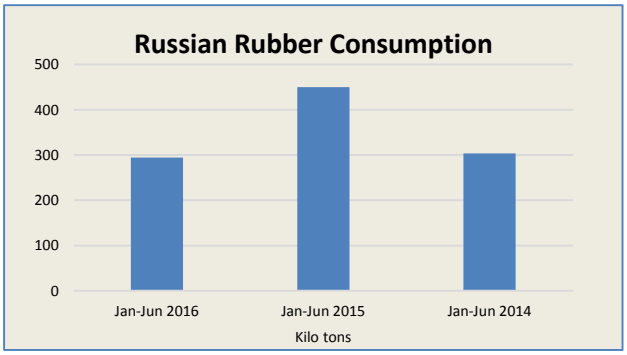
Omsk Kaucuk-maintenance outage

Omsk Kaucuk (included in GC Titan) stopped for scheduled maintenance in mid-September, which is expected to last until the end of the month. The maintenance shutdown includes the repair of 25 vehicles, repair of technological pipelines, and a technological audit of 14 columns. It is also expected to audit valves and control valves, flare facilities, repair of furnaces and substation equipment.

according to Omsk Kaucuk. Production of methyl styrene butadiene rubbers, and both exports and imports, fell in the second quarter whilst exports of Russian SKMS decreased by 19% compared to the same period last year. Omsk Kaucuk plans to revive latex production over the next few months. Omsk Kaucuk is faced by challenges from the significant fluctuations in prices of petrochemical products, and a depreciation of the rouble in relation to foreign currencies. This has led to a rise in the cost of imported raw materials and whilst increasing revenues from export operations has created more uncertainty for the company.

Efremov Synthetic Rubber Plant-isbutylene modernisation

Modernisation of the isobutylene plant is being undertaken by Efremov Synthetic Rubber Plant in the Tula region, as part of the strategy to revive production. The investment project is expected to require around 1.5 billion roubles of the company's own funds. In the next few years the company claims that the plant will be supported by orders from the Russian defence sector.



Russian synthetic rubber production & trade

The Russian domestic synthetic rubber consumption dropped in the first half of 2016 sharply against the same period in 2015, and taken volumes back to 2014 levels. The rise in consumption in 2015 on the back of the tyre industry has faded in 2016, combined with lower consumption in other rubber application areas.

Russian Synthetic Rubber Exports (unit-kilo tons)

Country	*Jan-Jun 16*	*Jan-Jun 15*
Belarus	15.5	15.6
Belgium	9.4	8.5
Brazil	17.6	25.9
Canada	8.9	12.6
China	80.5	56.1
Czech Republic	17.0	13.2
Germany	14.0	13.2
Hungary	39.4	35.8
India	55.1	45.4
Finland	1.5	1.6
Malaysia	1.8	2.2
Mexico	14.6	2.0
Poland	67.0	63.7
Romania	19.9	18.1
Slovakia	17.8	14.9
Japan	9.3	8.0
Latvia	3.5	7.1
Lithuania	4.6	7.4
Taiwan	5.9	10.3
Turkey	13.6	10.0
Ukraine	11.7	6.0
USA	31.3	27.5
Vietnam	5.5	4.4
Others	43.0	78.0
Total Exports	508.2	487.4

Russian synthetic rubber production dropped by around 9% in the first half of 2016, whilst exports rose to totalled 508,200 tons against 487,400 tons in the first half in 2015. China is the largest recipient of Russian synthetic rubber exports, taking 80,500 tons in the first six months in 2016 against 56,100 tons in January to June 2015. The largest regional market for Russian exports remains Central Europe, including Poland (67,000 tons in the first half of 2016), Hungary (39,400 tons), Romania (19,900 tons), Slovakia (17,800 tons) and the Czech Republic (17,000 tons).

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 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 Jan-Jun 2016

In the first half of 2016, SIBUR's revenue from synthetic rubber sales increased by 13.0% to 19.694 billion roubles based on higher sales of commodity rubbers and thermoplastic elastomers. Results were largely helped by the completed homologation for key clients for thermoplastic elastomers, which resulted

in higher sales, as well as material inventory sales in commodity rubbers. This helped offset market weakness in other areas of the rubber division. In the first six months of 2016, domestic sales accounted for 32.3% of total synthetic rubber revenue, leaving 67.7% attributable to export sales.

SIBUR-Synthetic Rubber Production (unit-kilo tons)

	Jan-Jun 16	*Jan-Jun 15*
Commodity Rubber	133.1	141.8
Speciality Rubber	49.3	50.6
Thermoplastic elastomers	35.9	29.0
3rd part purchases	0.7	0.0
Total	219.1	221.4

SIBUR-Synthetic Rubber Domestic Sales (unit-kilo tons)

	Jan-Jun 16	*Jan-Jun 15*
Commodity Rubber	51.6	46.4
Speciality Rubber	5.3	4.6
Thermoplastic elastomers	14.0	13.8
Total	70.9	64.8

Commodity Rubbers

In the first half of 2016, SIBUR's revenue from sales of commodity rubbers increased by 14.8% to 11.663 billion roubles from 10.159 billion roubles in the same period in 2015. Sales in physical terms rose 8.9%, whilst prices rose by 5.5%. The rise in commodity rubber sales in the first half of 2016 was facilitated through high inventory sales despite a 6.1% decrease in production. Lower in production was attributable to the shifts in the maintenance shutdowns at Togliattikaucuk and Voronezhsintezkaucuk. SIBUR substantially decreased inventories in the first half of 2016 due additional demand from tyre producers on the domestic market and the maintenance shutdown of third-party synthetic rubber production facilities. In the first six months of 2016, domestic sales accounted for 36.7% of total commodity rubber revenue, leaving 63.3% attributable to export sales.

Thermoplastic Elastomers

In the first half of 2016, SIBUR's revenues from sales of thermoplastic elastomers (TEPs) increased by 37.8% to 3.675 billion roubles from 2.668 billion roubles on an 18.8% increase in sales volumes and a 15.9% growth in the average price. The increase in sales volumes was attributable to higher production as a result of the completed homologation of thermoplastic elastomers with key clients by the end of 2015. SIBUR also cancelled discounts applied for premarketing sales that were applied in 2015. In the first six months of 2016, domestic sales accounted for 40.9% of total thermoplastic elastomers revenue, while 59.1% was attributable to export sales.

SIBUR-TEP Sales (unit-kilo tons)

	Jan-Jun 16	*Jan-Jun 15*
Domestic	14.0	13.8
Exports	22.0	16.5
Total	36.0	30.4

The most modern installation in SIBUR's rubber division is located a Voronezh where capacity for thermoelastomers was doubled in 2013. The new plant increased SIBUR's production of TEPs from 35,000 tpa to 85,000 tpa. The capacity at the plant is still not running 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-Synthetic Rubber Export Sales (unit-kilo tons)

	Jan-Jun 16	*Jan-Jun 15*
Commodity Rubber	92.6	86.0
Speciality Rubber	43.1	44.8
Thermoplastic elastomers	22.0	16.5
Total	157.7	147.3

Sales of TEPs 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.

Reliance-SIBUR butyl rubber project-India

Reliance Industries and SIBUR have agreed on raising a loan of $330 million for the production of butyl rubber at the Jamnagar petrochemical complex in India. The design capacity of the new plant is 120,000 tpa, and is expected to be the biggest in India. The project is scheduled to be completed no earlier than 2018 according to SIBUR. The share of Reliance Industries in the joint venture is 74.9%, and SIBUR 25.1%.

Methanol

Russian methanol, Jan-Jul 2016

Domestic methanol sales on the Russian market amounted to 110,800 tons in July, 3,300 tons more than in June. Metafrax shipped 34,000 tons in July, 55% higher than June, whilst Azot at Nevinnomyssk

increased by 15% to 3,500 tons. Tomet reduced sales by 20% in July to 27,300 tons, Shchekinoazot reduced by 18% to 7,000 tons, Azot by 4% to 6,700 tons, Sibmetakhim by 2% to 21,500 tons and Ammoni by 2% to 8,300 tons.

MTBE consumers accounted for 43% of purchases in July whilst manufacturers of formaldehyde and its derivatives accounted for 33% of product sold on the market (15% and 18%, respectively). MTBE production decreased by 1% in the second quarter against the same period in 2015 due to reduced volumes by Omsk Kaucuk and Tobolsk-Neftekhim. Moreover, domestic MTBE consumption in Russia fell by 7% in the second quarter compared to the same period in Q2 2015. Reduced consumption was due to a decrease in the production of gasoline as well as increased use of TAME.

Russian Methanol Domestic Sales by Producer (unit-kilo tons)

Supplier	*Jan-Jul 16*	*Jan-Jul 15*
Azot Nevinnomyssk	14.0	11.9
Azot Novomoskovsk	50.1	61.7
Metafrax	224.5	203.4
Sibmetakhim	187.6	256.3
Tomet	226.7	187.8
Shchekinoazot	56.8	15.8
Ammoni	53.4	0.0
Others	19.1	22.7
Total	832.0	759.6

Source; Chem-Courier

Methanol production in Russia amounted to 278,000 tons in July, which is 8% down on June due largely to scheduled maintenance stops. Sibmetakhim resumed full production after a stoppage in June and produced 74,700 tons in July, 30% up. Ammoni increased production by 11% over June to 12,100 tons, Azot at Novomoskovsk increased production by 16% to 24,000 tons and Shchekinoazot increased by 3% to 42,000 tons. Tomet reduced production 70% in July to 17,000 tons, whilst other marginal decreases were noted for Azot at Nevinnomyssk and Metafrax. In August both Ammoni and Metafrax undertook maintenance shutdowns.

Metafrax stopped production shut for maintenance at the start of August and restarted by the end of the month. Domestic methanol prices have been rising in the past two months, rising by around 10% over the first half of the year to a range of 14,000-26,000 roubles per ton (including VAT). Tomet continues to sell the methanol at the lowest price whilst the upper limit is offered by Metafrax and Shchekinoazot. The cost of methanol in the Volga Federal District trading companies varies in the range of 16,500-20,500 roubles per ton including VAT, depending on the terms of delivery.

Russian Methanol Exports (unit-kilo tons)

Producer	*Jan-Jul 16*	*Jan-Jul 15*
Azot Nevinnomyssk	0.0	0.0
Azot Novomoskovsk	109.2	103.9
Akron	0.0	0.1
Metafrax	263.9	155.6
Sibmetakhim	282.9	230.1
Tomet	97.3	103.3
Shchekinoazot	208.4	186.1
Total	961.8	779.1

Source; Chem-Courier

Methanol producers are currently not shipping through the Odessa terminal at present whilst delivering to Romania and Slovakia through other routes. Exports amounted to 130,000 tons in July, 5% less than in June. Finland accounted for 65% of exports in July, 82,000 tons, whilst 18,500 tons was sent to Poland, 8,500 tons to Romania and 10,500 tons to Slovakia. Ukraine took 1,400 tons in July, 15% down on June.

Russian Chemical Commodity Exports

Product	*Jan-Jul 16 Kilo tons*	*Jan-Jul 16 USD Mil*	*Jan-Jul 15 Kilo tons*	*Jan-Jul 15 USD Mil*
Ammonia	2,101	541	1,813	741
Methanol	903	146	728	202
Nitrogen Fertilisers	7,358	1,336	6,208	1,512
Potash	5,581	1,188	7,938	2,129
Mixed Fertilisers	5,447	1,639	5,298	1,958
Synthetic Rubber	584	730	567	844

Russian fertiliser producers, H1 2016

Fosagro increased production of mineral fertilisers by 8.7% in the first half of 2016 to 3.68 million tons. Production of nitrogen fertilisers rose by 10.1% to 800,000 tons and phosphate fertilisers and feed phosphates by 8.3% to 2.9 million tons. Evrokhim reduced net income by 15.8% in the first half of 2016 to $436 million, whilst the gross profit decreased by 19.6% to $864 million. The EBITDA decreased by 24.7% to $585 million. Akron recorded a net profit of 12.837 billion roubles in the first half of 2016, up by 6.4% over 2015. Akron's revenue decreased by 1.69% in January-June to 51.199 billion roubles, and the EBITDA by 9.15% to 18.408 billion roubles. The EBITDA margin in the first six months of this year decreased by 3% to 36%.

Mitsubishi methanol project Sakhalin

An agreement of intent was signed on 1 September at the Eastern Economic Forum at Vladivostok for the construction of a methanol plant on Sakhalin, signed by Mitsubishi Corporation RUS and the regional government. Consideration is being given by Mitsubishi to constructing a plant with a capacity of 1 million tpa of methanol, which could create at least 2,000 jobs during the project stages and 130-160 employees after plant-start-up. Before the project can progress to the construction stage the question of gas supply needs to be resolved.

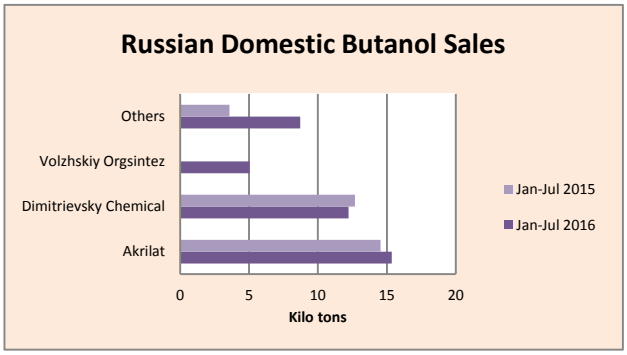
National Chemical Group-Nakhodka

Foundation for Development of the Far East and the National Chemical Group (NHG) signed a memorandum of intent for the project Nakhodka Plant of Fertilisers. The document was signed on 2 September at the Eastern Economic Forum held at Vladivostok. According to the Ministry of Eastern Development (Minvostokrazvitiya), the design capacity of the plant is being constructed to produce 1.1 million tpa of ammonia, 2 million tpa of urea and 1 million tpa of methanol. The total investment in the project is estimated at 70.5 billion roubles ($1.08 billion), supported by the Foundation for Development of the Far East which provides direct financing of projects under 5% per annum in roubles for a period of ten years or longer.

Ammoni-2

Japan Bank for International Cooperation (JBIC) has agreed to provide 100% of finance for the Ammoni-2 project at Mendeleevsk in Tatarstan. JBIC seems to have thus far circumvented financial sanctions. In February 2016 Tatneft, Ammoni, Mitsubishi Heavy Industries (MHI) and Sojitz Corporation signed a memorandum on the construction of the second complex in Tatarstan for the production of mineral fertilisers. The current complex uses around 1 bcm per annum.

The NHG project is being located in the village of Kozmino, near the port of Vostochny. Gas is planned to be sourced from the Power of Siberia; consumption is estimated at 3.2 billion cubic metres per annum. Originally production was scheduled for start-up by January 2018, output at full capacity in the spring of 2019, but these start-up dates have been pushed back.



Russian N-butanol Exports (unit-kilo tons)

Producer	*Jan-Jul 16*	*Jan-Jul 15*
Gazprom neftekhim Salavat	40.6	28.0
SIBUR-Khimprom	3.6	8.3
Angarsk Petrochemical	0.5	10.1
Azot Nevinnomyssk	0.2	9.5
Dmitrievsky Chemical Plant	0.8	0.2
Total	45.7	76.9

Russian Isobutanol Exports (unit-kilo tons)

Producer	*Jan-Jul 16*	*Jan-Jul 15*
Gazprom n Salavat	4.3	0.0
SIBUR-Khimprom	8.9	0.2
Angarsk Petrochemical	0.0	5.8
Dmitrievsky Chemical Plant	0.1	0.6
Total	13.2	6.6

Source; Chem-Courier

Organic chemicals

Russian butanol domestic sales, Jan-Jul 2016

Domestic sales of butanol amounted to 5,100 tons in July 18% less than in June. The proportion of n-butanol in the gross sales volume was 91%, and the isobutanol in July 2016 9%. SIBUR-Khimprom supplied 2,430 tons in July (48% of Russia's supply), Gazprom neftekhim Salavat 2,180 tons, Azot Nevinnomyssk 340 tons (7%), and the Angarsk refinery 110 tons (2%).

Akrilat purchased 1,750 tons of butanols in July, Dmitrievsky Chemical Plant 2,000 tons and Volzhskiy Orgsintez 450 tons. Overall, from January to July 2016 the domestic supply of butanol to the Russian market amounted to 42,130 tons which was 5% higher than the same period in 2015. Russian production of butanols amounted to 18,540 tons in July, 10% down on June. Gazprom neftekhim Salavat produced 11,210 tons in July, SIBUR-Khimprom 5,550 tons, Azot at Nevinnomyssk 1,640 tons and Angarsk Petrochemical 130 tons. According to Chem-Courier, Russian butanol production totalled 136,780 tons in the first seven months in 2016, 6% down on 2015.

Russian butanol exports, Jan-Jul 2016

Butanol exports dropped 2.7 times in July against June to 2,950 tons. The proportion of normal butanol in the exports accounted for 72%, whilst Chinana was the main destination taking 49% of deliveries. Other markets in July included Ukraine (17%) and Poland

(17%). According to Chem-Courier, Russian exports of normal butanol and isobutanol totalled 59,900 tons in the first seven months in 2016, 32% down on the same period in 2015.

Russian phthahlic anhudride, Jan-Jul 2016

Phthalic exports from Russia totalled 23,970 tons in the first seven months in 2016, 22% down on 2015. Volumes in July amounted to 950 tons of which the main recipients were Poland (46%), Finland (34%) and Uzbekistan (6%). In the domestic market the main consumers include the Roshalsky Plant of Plasticizers, which bought more than half of the domestic supply of phthalic anhydride in 2015, and the Ural Plant of Plasticizers. Both companies belong to the Neftekhimprom Group which prior to 2015 purchased phthalic anhydride from foreign supplies, including Lakokraska at Lida in Belarus. The situation changed in early 2015 resolving past disagreements due to economic factors.

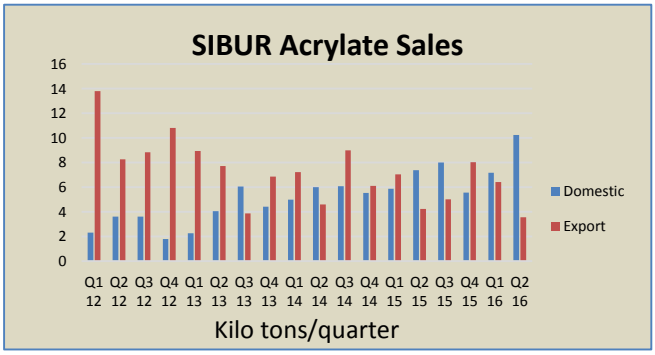
Russian Phthalic Anhydride Production (unit-kilo tons)		
Producer	***Jan-Jul 16***	***Jan-Jul 15***
Gazprom neftekhim Salavat	4.2	4.2
Kamteks-Khimprom,	44.3	51.6
Total	48.6	50.8

Phthalic anhydride production in Russia amounted to 6,270 tons in July, 26% more than in June. Kamteks-Khimprom increased production by 52% to 5,900 tons and Gazprom neftekhim Salavat decreased by 66% to 370 tons. According to Chem-Courier, from January to July 2016, Russia produced 48,569 tons of phthalic anhydride 13% less in 2015.

Russian plasticizer alcohols, Jan-Jul 2016

SIBUR-Khimprom supplied 3,575 tons of 2-EH to the domestic market in July, 76% more than in June. The main buyers of 2-ethylhexanol in July included Akrilat at Dzerzhinsk which took 1,467 tons. For the first seven months in 2016 the Russian market shipped 19,100 tons of 2-ethylhexanol to the domestic market, 14% more than the same period last year.

DOP imports into Russia amounted to 242 tons in July, against 310 tons in June. Polish co0mpany Boryszew was responsible for all of imports in July. For the first seven months in 2016 DOP imports into Russia amounted to 1,730 tons which was 3% up on the same period in 2015.



SIBUR, oxo alcohols, Jan-Jun 2016

In the first half of 2016, SIBUR's revenue from sales of alcohols decreased by 19.3% to 2.786 billion roubles from 3.454 billion roubles in 2015. The results this year were based on a 12.6% fall in the average price and a 7.7% decrease in sales volumes.

Domestic prices fell by 6.6% whilst export prices fell by 17.0%. Lower sales volumes were attributable to a 2.4% decrease in production due to the maintenance shutdowns in the first half of 2016, and higher internal use following the expansion of the acrylates capacity. In the first half of 2016, SIBUR's domestic sales accounted for 54.5% of total alcohols revenue, leaving 45.5% attributable to export sales.

Other products

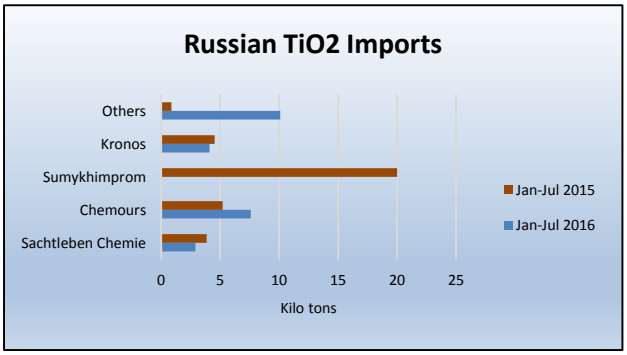
Megapolis-BOPP plant start-up

A new BOPP plant was opened at Rostov on 23 August by the company Waterfall, owned by the group Megapolis. The project was originally intended for completion by May 2014, and then September 2015 but has been delayed by financial problems. According to information on the official website of the project, the plant will operate two lines for the production of three and five-layer film width of 8.7 metres.

High-tech production line of five-layer film will allow to produce more than 20 different types of BOPP film. The design capacity of 60,000 tpa includes two lines; the second line will be opened in the autumn of 2016. Biaksplen, which is part of SIBUR and is the main Russian producer of BOPP, comprises a total capacity from its five plants of 180,500 tpa.

Russian titanium dioxide imports, Jan-Jul 2016

Imports of titanium dioxide (TiO2) into the Russian market decreased by 41% over the first seven months of 2016 to 24,700 tons. The main factor behind the decline was the complete cessation of shipments of imported Ukrainian TiO2 from Sumyhimprom, compared against 20,000 tons in the same period in 2015. To date, Sumykhimprom is focused on meeting demand in the domestic Ukrainian market due to the blockade of the Crimea and difficulties in sourcing TiO2 from Crimean Titan. As a result, Sumykhimprom does not offer export quantities for the Russia market at present.



Chemours (formerly DuPont) has significantly increased its import share to Russia in the first seven months, rising by 46% to 7,600 tons. Deliveries from the Finnish producer Sachtleben Chemie fell by 33% to 2,900 tons. Imports from Kronos TiO2 decreased by 11%, totalling 4,100 tons from January to July 2016.

Empils-new plant for varnishes and resins

Empils at Rostov has begun construction of the complex for the production of semi-finished varnishes and resins. The capacity of the plant is being designed to produce 30,000 tpa, 75% of which is financed from the company's own funds. The new unit will allow Empils to be able to produce new organic paints (epoxy, urethane alkyd, alkyd-styrene, alkyd, phenolic, melamine-formaldehyde primers, enamels, varnishes and resins). This will increase the flexibility of production and will reduce the cost and reduce the losses in output. Last year, the company sold more than 45,000 tons of paint, 5% up on 2014.

Belarus

Belarussian petrochemical production

Benzene production in Belarus totalled 74,200 tons in the first seven months in 2016 against 78,700 tons in 2015. Naftan produced 4,300 tons of propylene in July, 37% down against June, and ethylene dropped 34% to 6,000 tons. Polymir at Novopolotsk is planning to repair stopping at the first stage of the high-pressure polyethylene production in September. The second phase was decommissioned as a result of the June crash.

Azot Grodno Production (unit-kilo tons)

Product	*Jan-Aug 16*	*Jan-Aug 15*
Methanol	41.4	62.9
Caprolactam	75.1	94.1
Polyamide primary	68.4	70.3
Polyamide filled	7.9	6.8
Ammonia	781.6	875.2
Urea	749.3	837.7
Fertilisers	552.6	622.1
Fibres	23.3	21.2

Naftan in Belarus currently is finishing work on the construction of a new park for the storage of LPG. The tank farm will be capable of receiving, storing and shipping to rail LPG produced at the enterprise installations. The design capacity of the park is 2,000 cubic metres and shipment can be carried out simultaneously in 24 railroad tank cars.

Azot Grodno production, Jan-Aug 2016

Azot at Grodno increased the production of marketable products in value terms by 3.8% in the first eight months of 2016. The company managed to obtain a significant increase in tonnage for tyre cord fabrics, fibres and yarns.

Belarussian Organic Chemical Exports (unit-kilo tons)

Product	*Jan-Jun 16*	*Jan-Jun 15*
Acrylonitrile	22.9	15.8
Caprolactam	6.5	14.7
Phthalic anhydride	12.5	15.0
Methanol	18.0	33.6

For the first eight months, the company increased its in tonnage figures for the polyamide by 4.1% to 68,410 tons, cord fabric production increased by 35.7%, amounting to 23,860 thousand running metres, fibres and filaments 23.9% to 23,180 tons.

At the same time the production of ammonium sulphate at Grodno fell by almost 10% to 227,240 tons. Methanol production decreased by 24.8% to 41,410 tons and caprolactam decreased by 10.9% to 75,120 tons. Methanol production is expected to rise in the remaining part of the year.

Belarussian Phthalic Anhydride Exports (unit-kilo tons)

Country	*Jan-Jun 16*	*Jan-Jun 15*
Russia	4.5	2.0
Ukraine	2.0	2.0
India	1.14	5.3
Egypt	0.2	1.4
Poland	3.7	2.8
Others	0.9	1.5
Total	12.5	15.0

Belarussian chemical trade, Q1-Q2 2016

Methanol exports from Belarus in the first half of 2016 totalled 18,014 tons against 33,568 tons in the same period in 2015. Exports to Poland rose from 7,650 tons in the first half of 2015 to 8,885 tons in 2016, whilst volumes to Ukraine fell from 15,166 tons to 7,289 tons.

Caprolactam exports from Belarus declined from 14,671 tons in the period January to June 2015 to 6,451 tons in 2016, with Azot not exporting in either May or June. For acrylonitrile exports, the largest destination for Belarussian product in the first half of 2016 was Turkey accounting for 12,066 tons, followed by the Netherlands with 3.912 tons. Phthalic anhydride exports from Belarus dropped to 12,500 tons in the first half of 2016 from 14,978 tons. Polyethylene exports rose from 65.656 tons to 68,245 tons.

Regarding imports, paraxylene shipments from Russia increased from 3,565 tons in the first half of 2015 to 7,029 tons in the same period in 2016. PTA imports dropped slightly to 25,281 tons from 26,255 tons in the first half in 2015. Poland is the dominant supplier of PTA accounting 13,273 tons in the first half of 2016 followed by South Korea with 9,547 tons. 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 PET Raw Material Imports (unit-kilo tons)

Product	*Jan-Jun 16*	*Jan-Jun 15*
Paraxylene	7.0	3.6
PTA	25.3	26.2
MEG	26.8	33.2

Belarussian Polymer Imports (unit-kilo tons)

Product	*Jan-Jun 16*	*Jan-Jun 15*
PVC	22.5	22.3
Polypropylene	45.9	39.0
LDPE	36.9	25.9
HDPE	20.7	14.2
Polystyrene	30.6	29.1

Belarussian PVC imports dropped 21% in the first six months of 2016 to 9,800 tons of which 74% came from Russia whilst imports of polyethylene rose by 20.8% to 57,600 tons. LDPE and LLDPE imports rose from 30,100 tons to 36,900 tons, whilst HDPE dropped 17.7% to 20,700 tons. Polypropylene imports increased by 15.4% to 44,900 tons. Imports of homopolymer PP rose to 30,400 tons in the first six months of 2016 compared to 27,200 tons a year earlier. Russian producers were the main suppliers, accounting for 92% of shipments.

Central Asia

SOCAR to take over methanol plant from AzMeCo in Azerbaijan

SOCAR could become the owner of the Azerbaijani methanol plant by the end of 2016, which is currently owned by AzMeCo. Legal steps are necessary in order to transfer ownership and SOCAR is currently waiting for an appropriate judgment. At the same time SOCAR has not specified how much money the company will require for the acquisition of a methanol plant. The methanol plant's transfer to SOCAR will lead to a unified chain of production, which will increase the efficiency of the enterprise.

SOCAR urea project

SOCAR expects to complete construction of a new urea plant into operation in Azerbaijan in 2017. The plant will consist of three production sites including ammonia, urea and urea granules. The plant will produce 1,200 tons of ammonia daily, leading to 2,000 tons per day of urea (700,000 tpa). Domestic market requirements for urea consumption are estimated approximately at 150,000-200,000 tpa. Samsung Engineering is undertaking the project.

The need to transfer ownership from AzMeCo to SOCAR is due to the debts incurred from the plant. The transaction result in clearing the debt of the plant, whilst also may involve transferring the source of gas supply from Gazprom to SOCAR. AzMeCo is the only methanol producing plant in the South Caucasus and Central Asian region, having been commissioned in January 2014. The main buyer of the methanol produced at the plant is BP, whilst methanol is mainly shipped via the Georgian Kulevi port. AzMeCo invested around $500 million into the construction of the methanol plant which has a capacity of 720,000 tpa.

SOCAR to complete modernisation of ethylene-propylene plant

SOCAR expects to complete the modernisation of the Ethylene-Polyethylene plant at Sumgait by 2018. The bulk of this work will begin in January next year and possibly by the end of 2017 the plant

will be able to produce enough propylene to start polypropylene production. The capacity of the Ethylene-Polyethylene plant will be increased from 130,000 tpa to 180,000 tpa. The project's costs are estimated at $300 million. Technip has been engaged as a contractor for the Azerkhimya to implement the initial work on the detailed engineering and procurement support for the Ethylene-Polyethylene plant renovation.

Kazakh polymer imports, Jan-Jul 2016

Imports of polyethylene into Kazakhstan dropped 19% in the first seven months in 2016 to 53,500 tons against 66,200 tons in 2015. HDPE imports dropped 3% to 39,800 tons, LDPE dropped 8% to 10,900 tons, and LLDPE rose to 2,800 tons from 2,400 tons. Polypropylene imports fell 1% to 13,100 tons. Imports of PVC into Kazakhstan increased in the first seven months of 2016 by 3% to 28,400 tons.

Kazakh Polymer Imports (unit-kilo tons)

Product	*Jan-Jul 16*	*Jan-Jul 15*
HDPE	39.8	41.5
LDPE	10.9	4.7
LLDPE	0.8	1.2
PVC	28.4	25.6
PET	0.0	0.0
Polypropylene	13.1	11.8

Kazakh polypropylene project

The construction of a polypropylene unit at Atyrau region planned by the United Chemical Company, which had been put on hold, may be revived based on Chinese financing. Accordingly, a 100% EPC contract been has approved by the China Development Bank and the signing of a loan agreement is scheduled for September 2016. Kazakhstan Petrochemical Industries (KPI) will take responsibility for operating the plant when completed whilst being controlled by United Chemical Company (51%) and Almex Plus (49%).

The start of polypropylene production is expected in 2020. The second stage of investment at Atyrau, which involves identifying a foreign partner, involves the construction of a gas chemical complex which will include units for polyethylene and butadiene. In 2015, LG Chem decided to withdraw its interest in the Atyrau gas-chemical project, and United Chemical Company in Kazakhstan is looking for a new partner.

Turkmenistan ammonia & fertiliser projects

Turkmenistan is laying foundations for constructing a new chemical complex at Ovadan-Depe in the Akhal province involving a consortium of companies such as Kawasaki Heavy Industries and Rönesans, based on technology supplied by Haldor Topsoe. According to the plans of designers, the plant will be able to recycle 1.785 billion million cubic metres of gas. Turkmengaz signed a contract for the construction of the plant last year.

Mitsubishi Corp and Instaat Yatirim ve Dis Ticaret have reached an agreement with the government of Turkmenistan for the construction of a large-scale fertiliser plant in Turkmenistan. The project will be undertaken in collaboration with Mitsubishi Heavy Industries for the Turkmen state-owned company Turkmenkhimiya. The plant, to be constructed at Garabogaz on the northwest coast of the Caspian Sea, will consist of an ammonia plant with production capacity of 750,000 tpa and a urea plant with a production capacity of 1 million tpa.

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 €1= 72.0

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