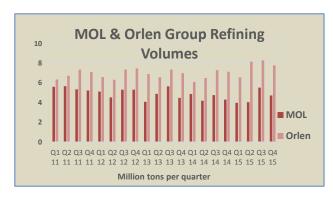
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Issue 303, 25 February 2016

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# **CENTRAL & SOUTH EAST EUROPE**



## **Central European refining 2015**

Refining volumes in Central and South East Europe totalled 80.3 million tons in 2015 against 74.9 million tons in 2014. Although the MOL Group reduced refining utilisation in Hungary, higher volumes were reported by the Orlen Group at each of its divisions in Poland, the Czech Republic and Lithuania.

Refining margins continue to perform well although Central European refiners integrated into petrochemical production have witnessed

the largest margins. Olefin margins for PKN Orlen achieved €1050 per ton in January against €1015 in December, measured against €821 in January 2015 and €762 in January 2014. Oil refining margins are less attractive than petrochemicals but still remain above average yields.



In Romania, Petrom recorded one-off losses in the fourth quarter of 2015 due to the steep drop in oil prices. OMV Petrom's total gas sales volumes decreased by 7% in the fourth quarter last year, mainly due to lower demand from the chemical industry despite significantly higher off-take by the Brazi power plant. Petrom's Petrobrazi refinery is scheduled for a one-month

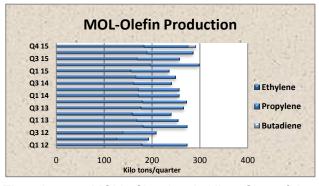
planned shutdown and turnaround in the

second quarter this year.

Refineries not integrated upstream showed the best results in 2015. The operating profit of Orlen Lietuva in Lithuania amounted to \$289 million in 2015 against a loss of \$74 million, despite a substantial drop in revenues. In 2015 the Mazeikiu refinery processed a total of 8.48 million tons of crude oil, up 13% on 2014. Orlen Lietuva to the largest company in Lithuania, which is also the largest exporter and discharge the highest taxes. Slovnaft in Slovakia recorded a net profit of €214 million in 2015 against a loss of €71 million in 2014, despite an overall 12% fall in revenues.

#### MOL, Q4 & 2015

MOL's integrated petrochemical margin rose to €761.8 per ton in January this year, down slightly from €763.5 in December. MOL's average petrochemical margins for 2015 amounted to €679.7 against €359.2 in 2014, thus representing an increase of 89% and helping to drive the downstream profitability



of the group. Refinery margins rose from \$3.4 per barrel in 2014 to \$6.1 in 2015. However, the impact on the oil prices on the upstream group resulted in a net loss of Ft 437.7 billion (\$1.57 billion) for the fourth quarter.

MOL started its new 130,000 tpa butadiene plant in 2015, producing 16,000 tons in the fourth quarter and shipping 12,000 tons to customers. MOL is currently exporting output to Poland and Germany, whilst it will soon start construction of its new synthetic rubber at

Tiszaujvaros. MOL's Slovak subsidiary Slovnaft increased revenues in its petrochemical division by 20% in 2015 to €444 million. In Q4 2015, Slovnaft's the average value of petrochemical margins increased by 47% compared to Q4 2014 amounting to €606 per ton mainly due to increased LDPE quotation prices and decreased virgin naphtha quotation prices.

#### **MOL** ethylene outage

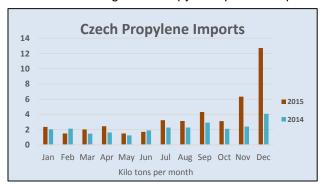
MOL Petrochemicals suffered an accident at the Tiszaujvaros plant on 21 January 2016 which originated in the Olefin-1 plant. This affected the LDPE plant which had to be shut down, whilst the other plants operated at reduced loads. Normal production was restarted on 4 February after repairs had been completed.

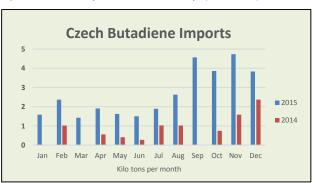
Ethylene production increased for MOL to 737,000 tons in 2015 against 655,000 tons in 2014, with subsequent rises in LDPE and HDPE production. Polypropylene production rose to 534,000 tons for the MOL Group in 2015 against 443,000 tons in 2014. MOL's full-year EBITDA for 2015 totalled \$2.5 billion. The company is targeting EBITDA around \$2 billion for 2016,

based on an estimate of crude prices of \$35 per barrel. Discussions were recently held by MOL with Iran for possible crude deliveries via the Adria Oil Pipeline.

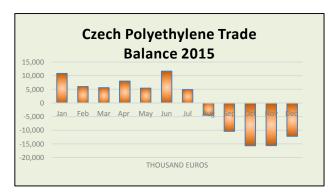
#### **Czech petrochemical trade**

Since the accident at the Litvinov cracker in August last year imports of petrochemicals into the Czech Republic increased compensating for the lack of domestic supply. This has included imports of ethylene which is used at Litvinov, Kralupy and Neratovice, propylene for use at Litvinov and Sokolov and for butadiene for usage at Kralupy. Unipetrol's export shipments of ethylene to Germany (Boehlen) and





propylene to Poland and Slovakia have been stopped whilst the Litvinov cracker undergoes reconstruction.



44,440 tons in 2015 against 26,340 tons in 2014.

Ethylene imports have been sourced largely from Poland in recent months, and increased from 3,564 tons in 2014 to 37,125 tons in 2015 against most was delivered in the last four months of the year.

Propylene imports into the Czech Republic rose sharply in the last two months of 2015, particularly in December when volumes amounted to 12,706 tons, sourced from a number of destinations including Germany and the Netherlands. Imports of propylene totalled

#### **Unipetrol-Air Products**

Air Products and Unipetrol have signed a new long-term agreement until 2027, sees Air Products continuing to supply industrial gases from its existing air separation unit (ASU) to meet Unipetrol's needs. The contract also includes the provision of operational and maintenance services on industrial gas production equipment at Litvinov. Located on Unipetrol's manufacturing site, Air Products' ASU will also continue to supply additional liquid capacity produced to meet the industrial gas needs of its other customers across the Czech Republic and Central Europe. Air Products produces key raw materials that meet Unipetrol's direct needs in the area of Chempark Zaluzi.

Butadiene imports into the Czech Republic totalled 31,983 tons in 2015 against 5,043 tons in 2014. Most of the imports in the latter part of 2015 were sourced from the Netherlands and the new MOL plant at Tiszaujvaros in Hungary.

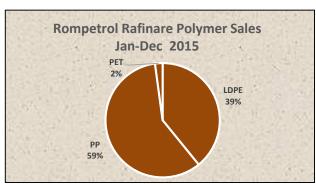
In the polymer division the Czech balance of trade for polyethylene shifted from a net surplus to a net deficit in the latter part of 2015, whilst the marginal trade deficits for polypropylene and PVC intensified. Overall polyethylene exports, dominated largely by HDPE, were 41,000 tons down in 2015 from the total 341,000 tons exported in 2014. Aggregate imports of polyethylene into the Czech Republic exceeded

exports in 2015 for the first time in many years; import volumes totalled 323,000 tons against exports of 300,000 tons.

#### **Rompetrol Rafinare 2015**

Rompetrol Rafinare, part of KMG International Group, registered a net consolidated result of \$62 million in 2015 against a loss in 2014. The operational result (EBITDA) amounted to \$112 million in 2015, 30% higher than in 2014 (\$86 million). The drop in the oil price, however, meant that revenues fell 32% to \$3.8 million. The refinery capacity utilisation at Petromidia and Vega refineries averaged 76.48% in 2015. Rompetrol Rafinare is in the process of the Romanian government's sale of 26.7% stake to KazMunaiGaz.

Petromidia accounts for more than 40% of Romania's refining capacity processed 4.95 million tons of crude in 2015 against 5.05 million tons in 2014. Installations were temporarily stopped for the scheduled maintenance for 40 days in 2015. Petromidia produced 2.47 million tons of diesel fuel in 2015, whilst the Vega refinery processed record quantities of bitumen (80,000 tons) and of hexane (71,000 tons).

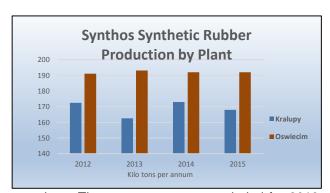


Rompetrol Rafinare decreased petrochemical sales by 4.5% in 2015 to 142,000 tons from 149,000 tons. Polymer production declined by 29% in the fourth quarter in 2015 to 28,000 tons against 39,000 tons in the same quarter in 2014.

#### Synthos C4 & butadiene agreements

Synthos reported a consolidated net profit of zl 426 million in 2015 from revenues of zl 4.058 billion. Production of synthetic rubber was unchanged for the Oswiecim plant in 2015, whilst

the Kralupy plant in the Czech Republic saw lower production due to butadiene shortages. At the end of 2015 Synthos signed contracts with SABIC for the supply of C4 fraction, and a new three-year contract with MOL for the supply of butadiene from the new plant at Tiszaujvaros.



The main challenge to Synthos in recent months has involved the diversification of ethylbenzene feedstocks. The company normally imports around 115-120,000 tpa of ethylbenzene from the Czech Republic, but as the Litvinov cracker has been closed for repairs since August last year it has forced Synthos to purchase from other sources.

## PCC Rokita-propylene contract

PCC Rokita. signed a contract with Ruhr-Petrol GmbH from Hamburg for the supply of

propylene. The agreement was concluded for 2016 and its value is €13 million (58 million zl). PCC Rokita receives propylene, propylene oxide, which is the raw material for the production of polyether polyols.

PCC Rokita began the liquidation of the company PCC Prodex Bel Ltd, based in Minsk in February. PCC Prodex Bel Ltd was established in 2012. The purpose of the company was to operate in the production and sale of one and two-component polyurethane systems, but since its foundation PCC Rokita has established other jvs in the Philippines and Thailand which has shifted interest away from Belarus.

#### **Chemicals**

## Oltchim-goals for 2016

Oltchim recorded a modest operating profit of €9.5 million in 2015 against a loss in 2014. Production increased for a number of products, particularly for oxo alcohols, and this helped the company's overall

turnover to rise by 18% to €167 million. Investments remain small and amounted to €3.8 million in 2015, sourced from own funds.

Oltchim Product Revenues (bil Lei)		
Product Group	Jan-Dec 15	Jan-Dec 14
Petrochemicals	491.8	440.3
Chlorine division	141.8	124.2
Finished Products	22.6	24.4
Materials for construction	2.5	5.0
Sales to Pitesti	0.1	0.2
Oxo alcohols	78.2	22.1
Other	11.0	10.9
Total	748.0	627.0

Although the company's operating profit managed to improve last year, maintenance costs left Oltchim in the red. Oltchim is trying to improve the status of the company in order to make it more attractive for a buyer, even despite numerous unsuccessful attempts of privatisation.

Chimcomplex retains a strong interest in acquiring Oltchim to create a large Romanian chemical company. Oltchim, which has been insolvent since 2013, has set targets for a net profit of €110 million in 2016, which would represent the first profit for many

years. Oltchim's capacity utilisation is set to rise from 30% to 35% in 2016, whilst production of a new plasticizer used in PVC processing is to be started.

## Spolchemie-membrane plant close to completion

Construction of a membrane electrolysis for chlorine production and hydroxides by Spolchemie at Usti

nad Labem is now close to completion. Production could start in the summer this year.



The largest investment in the history of the chemical plant should be operational this summer. The project has cost Kc 1.5 billion in construction, based on technology from China. In the hydroxides, which are used in the chemical, textile, metallurgy, water and food have long belonged to the European market leaders and operate a new membrane electrolysis will enable to consolidate its market

position.

Polish Chemical Production (unit-kilo tons)		
Product	Jan-16	Jan-15
Caustic Soda Liquid	25.7	30.2
Caustic Soda Solid	5.0	6.2
Soda Ash	96.2	93.3
Ethylene	48.4	48.3
Propylene	35.3	35.8
Butadiene	5.3	5.3
Toluene	1.4	0.8
Phenol	2.7	2.9
Caprolactam	14.0	14.5
Acetic Acid	0.5	0.4
Polyethylene	34.0	34.5
Polystyrene	5.2	3.7
EPS	6.7	4.2
PVC	22.7	26.1
Polypropylene	26.3	20.9
Synthetic Rubber	16.7	15.4
Ammonia (Gaseous)	244.0	125.0
Ammonia (Liquid)	8.2	117.0
Pesticides	1.6	2.5
Nitric Acid	220.0	214.0
Nitrogen Fertilisers	180.0	182.0
Phosphate Fertilisers	39.4	39.3
Potassium Fertilisers	34.8	27.0

Construction of new membrane electrolysis was initiated many reasons. The first of these was the new European legislation restricting the use of mercury. Integration enables the production of a chemical plant in the use of the output of electrolysis for the actual production of epoxy resins. The new electrolysis consumes during its operation, 60,000 tpa of salt, 1.5 times more than the annual consumption of all of salt in the Czech Republic.

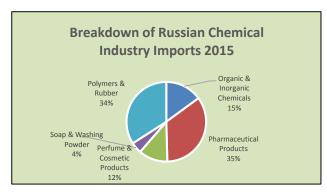
## **Grupa Azoty projects**

Grupa Azoty ZAK is awaiting corporate approvals on the launch of a new ester plant at Kedzierzyn. Last year's investment in a new plasticizer proved to be a success, and now the company wants to start a new esters special plant with a capacity of 10,000 tpa. While the installation for the plasticizer Oxoviflex operates on a continuous basis the special ester plant would operate on batch mode.

## Anwil record year in 2015

Anwil achieved record results in 2015, achieving 97% capacity utilisation and surpassing production of six million tons since the plant start-up. In the past year, the company reorganised its logistics, including packaging and improved the railway sidings, helping to reduce costs for delivery.

# **RUSSIA**



#### Russian chemical trade 2015

Russian chemical companies have to date reported strong rouble profit rises for 2015, but equally the reduced value of the rouble against international currencies creates issues for regarding capital investments. Purchases of new equipment for plastics processing, for example, declined 20-25% for most of the bulk-polymers in 2015 against 2014.

The rouble and weaker economy also has direct impact on imports which declined by 27.6% in 2015 against 2014 in terms of cost, whilst falling by

volume by 15.0%. The physical imports of cosmetic products decreased by 15.4% in 2015, whilst plastics and articles by 25.7%, and rubber products by 21.8%. Despite the falls the share of chemical products in the commodity structure of Russian total imports in January-December 2015 increased to 19.1% against 16.8%. The increase was due to bigger falls in imports taking place in other sectors.

Russian Chemic	al Production	(unit-kilo tons)
Product	Jan-16	Jan-15
Caustic Soda	98.8	85.6
Soda Ash	273.0	268.0
Ethylene	252.9	230.0
Propylene	195.0	171.7
Benzene	115.0	106.0
Xylenes	50.4	51.2
Styrene	57.0	58.8
Phenol	21.0	20.2
Ammonia	1,300.0	1,200.0
Nitrogen Fertilisers	838.0	700.0
Phosphate Fertilisers	s 309.0	200.0
Potash Fertilisers	656.0	600.0
Plastics in Bulk	629.0	595.0
Polyethylene	159.0	150.0
Polystyrene	47.5	37.2
PVC	75.8	74.1
Polypropylene	128.0	115.0
Polyamide	12.4	11.9
Synthetic Rubber	133.0	128.0
Synthetic Fibres	10.8	10.5

The weaker domestic currency has also helped Russian chemical exports which rose by 3.6% in physical terms in 2015, but declined by value by 12.4%. The fall in revenues was largely due to lower product prices in the chemical industry, driven down by low oil prices. The share of chemical industry exports for Russia amounted to 6.5% in January-December 2015, rising from 5.1% in January-December 2014. The physical exports of inorganic chemistry products increased by 11.6%, fertilisers by 1.7%, plastics by 22.0%, and rubber by 18.4%.

#### Russian chemical production, January 2016

Russian production of chemicals in January increased by 4.7% against January 2015. Ethylene production amounted to 252,900 tons in January against 230,000 tons in January 2015, whilst benzene rose from 106,000 tons to 115,000 tons. The volume of production of xylenes in January fell to 50,400 tons against 51,200 tons in the same month last year. Caustic soda production rose from 85,600 tons in January 2015 to 98,800 tons in January 2016, due to the rise in production by RusVinyl.

Bulk polymer production amounted to 629,000 tons in January against 595,000 tons in January 2015, whilst at the same time Russia recorded a fall of 3.6% in finished products from polymers. Production of finished products did show an increase in January 2016 against December 2015, but this may be due to seasonal factors.

## Russian petrochemical projects

## ZapSibneftekhim construction update

ZapSibNeftekhim has completed construction of temporary water supply, whilst work is underway on the creation of the railway infrastructure to serve the project. More than 2 km of building tracks were laid in January on the construction site at ZapSibNeftekhim, and this will connect the construction site to the railway station Denisovka at Tobolsk. Work on the construction of the railway infrastructure has been undertaken by a Russian company OOO Gornostroitelny holding.

#### **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%.

The site of the new railway track allows to transport building materials and equipment for the construction process. In the future, these tracks will be used for the export of finished products from the petrochemical complex. In addition, a bypass is under construction next to the bridge over the railway line station Denisovka for large vehicles. From April to September 2016 commissioning of five new road junctions is planned in addition to preparing several small roads. The new road infrastructure will help to avoid congestion in the delivery period of goods to the construction site.

#### Uralkhimmash-ZapSibNeftekhim

Uralkhimmash has been commissioned by ThyssenKrupp Industrial Solutions to manufacture equipment for the complex ZapSibNeftekhim. The contract includes the production and delivery to the October 2016 low-pressure discharge containers weighing 50 tons and a height of 16 metres, the discharge capacity of high pressure mass of 178 tons and a height of 19 metres. By February 2017 Uralkhimmash is required to manufacture and ship another 23 units of heat exchange equipment to Tobolsk. The company is currently manufacturing 12 spherical tanks of 600 cubic metres, for which delivery to Tobolsk is scheduled prior to the end of the first quarter of 2016.

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 has provided the feedstock base for the ZapSibNeftekhim project. As of January 2016 ZapSibNeftekhim employed 3,622 people in the construction process, of which people from Tobolsk comprised 38%, other Russian citizens 41%, and foreign nationals 11%. ZapSibNeftekhim involves the construction of a cracker of 1.5 million tpa of ethylene, 500,000 tpa of propylene and 100,000 tpa of butane-butylene fractions for the production of 2 million tpa of various grades of polyethylene and polypropylene.

#### SIBUR-Tobolsk power station (CHP)

SIBUR intends to purchase the Fortum Tobolsk CHP from the Tobolsk administration, which is the main supplier of heat and electricity to Tobolsk. The CHP provides around 85% of supplies to Tobolsk-Neftekhim and Tobolsk-Polymer. Tobolsk CHP was launched in 1980 and currently includes capacities of is 665.3 MW, and heat 2.58 GW. The launch of the Tobolsk-Polymer in 2013 increased SIBUR's demand for process steam, which will have increased much further after the start-up of ZapSibNeftekhim. The purchase of the CHP will enable SIBUR to continue the development of production capacity at Tobolsk.

The total investment in the project ZapSibNeftekhim is almost \$9,5 billion, of which up to \$1,75 billion will be drawn from the NWF as debt financing. Before \$3,3 billion will provide international co-investors, Russian Direct Investment Fund and commercial banks. SIBUR plans to invest in the project about \$4.45 billion.

## **SIBUR-NIPIGas**

SIBUR has created a new division NIPIgazpererabotka (NIPIGas), involved in the field of design and engineering. The current main activity of NIPIGas is the design of the ZapSibNeftekhim complex, in which

the central task is to design infrastructure and common facilities: provide it with all necessary resources, etc. NIPIGas from its Tyumen office is involved in a number of other major projects such as the Amur gas processing plant and the Yamal LNG project.

Nizhnekamskneftekhim Cracker Feedstocks			
Feedstock 2015 2020			
Naphtha	72%	80%	
Gas Liquids	28%	20%	

#### Nizhnekamskneftekhim to increase naphtha consumption

Nizhnekamskneftekhim intends to change the feedstock ratio for petrochemical production of naphtha to gaseous feedstock to 80/20 as opposed to roughly 72/28 at present. The aim is to

transfer production to increased volumes of naphtha in place of gas liquid feedstock.

The orientation towards naphtha is mainly down to the expansion of naphtha availability from the Taneko refinery at Nizhnekamsk, where capacity is being currently expanded, and to an extent the lack of progress in the investment of the Yamal-Volga gas liquid pipeline. Nizhnekamskneftekhim is currently planning the construction of two new furnaces which would reduce the need for gas feedstocks. Longer term the company is working on two ethylene crackers of 600,000 tpa, to be introduced in 2020 and 2025 respectively.

Tatarstan-Privatisation Shares to be offered		
Company %		
Tatneft	4.31	
Nizhnekamskneftekhim	22.088	
Taneko	9	

## Tatarstan considering sale of assets

The government of Tatarstan has indicated that it could be ready to sell shares in its major companies Nizhnekamskneftekhim, Tatneft and Taneko. The Tatar government has outlined plans to sell 22.088% of shares in Nizhnekamskneftekhim, 4.31% in

Tatneft and a 9% stake in the refinery complex Taneko. The aim of privatisation is to attract investment in production and innovative structures, and to optimise the structure of the state property. It is expected that

the shares will be privatised through a public auction or entering into the authorized capital of joint stock companies.

#### Stavrolen-gas processing plant

Lukoil launched its first gas processing plant in February at Budyennovsk comprising a capacity of 2.2 billion cubic metres per annum and partly serving the Stavrolen petrochemical complex. The project will utilise associated gas from two Lukoil fields in the North Caspian Sea, namely Korchagin and Filanovsky. Associated gas supplies from the second field will begin in August and September. Part of the associated gas will be processed at the complex into olefins, which are then used in the production of polyethylene and polypropylene by Stavrolen. Investment in the project on the transportation and processing of associated gas amounted to \$1.5 billion. The second phase of the GEA taking gas capacity to 6.5 billion cubic metres per annum will not be available before 2019.

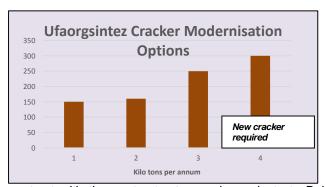
To date, the market prices for a package of Nizhnekamskneftekhim and Tatneft is estimated at 16.9 billion roubles and 31 billion roubles respectively. The Tatar Republic owns 28.6% shares of Nizhnekamskneftekhim (25.2% in the authorized capital) through its institution Svyazinvestneftekhim. It owns 33.6% of the share capital of Tatneft and 9% Taneko.

#### **Bashneft-Ufaorgsintez**

Bashneft has received an application from eight companies to participate in a feasibility study for the modernisation project for the cracker at Ufaorgsintez. The group has also launched a tender for research into long term supply/demand balances into olefins and polyolefins.

Ufaorgsintez has issued a tender for a feasibility study for investment in the modernisation of the ethylene cracker,

with proposals to be submitted by 7 March. 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. Under the contract, the contractor must submit a draft for 28 weeks. Applications for participation in the tender has thus far been met by eight Russian companies.

Ufaorgsintez has asked for proposals by 29 March to select a contractor for the supply of export products by rail. The company intends to sign a

contract with the contractor to supply products to Belarus, Ukraine, Kazakhstan, Lithuania, Latvia and Estonia. Additional supplies are available in Uzbekistan, Tajikistan, Finland, Poland, Slovakia, Hungary, Mongolia, China, Kyrgyzstan, etc.

## Russian petrochemical producers & markets

Russian Ethylene Production (unit-kilo tons)		
Producer	Jan-16	Jan-15
Angarsk Polymer Plant	16.9	18.7
Kazanorgsintez	52.1	52.2
Stavrolen	23.3	0.0
Nizhnekamskneftekhim	52.2	54.9
SANORS	5.3	7.5
Gazprom n Salavat	30.7	27.0
SIBUR-Kstovo	32.5	29.9
SIBUR-Khimprom	5.0	4.4
Tomskneftekhim	23.6	23.5
Ufaorgsintez	11.4	11.8
Total	252.9	229.9

# Russian petrochemical feedstocks & ethylene prodcution, Jan 2016

Naphtha sales on the domestic market for petrochemical producers totalled 112,300 tons in January, 28% up on December. Shipments to Stavrolen increased by 25,800 tons to 77,600 tons in January, which was due to a decrease in NGL processing at the facility. Purchases of gas liquids by petrochemical producers amounted to 133,460 tons, 2% down on December. Ufaorgsintez purchased liquids for the first since February 2015, although it was only 3,040 tons.

Russian naphtha exports totalled 13.2 million tons in 2015, 4% up on 2014. The growth in exports was made possible by extra supply from Gazprom neftekhim Salavat, the Komsomolsk refinery, Lukoil-NNOS at Kstovo and the Omsk refinery.

Isobutane deliveries to the domestic market, predominantly for MTBE production, amounted to 64,960 tons

in January which was 6% more than in December. Propane sales to petrochemical plants totalled 16,750 tons in January, 2.3 times more than in December. Kazanorgsintez purchased 16,550 tons of propane in January against only 7,000 tons in December.

Russian ethylene production increased in January 2016 against the same month in 2015. The main difference between the two months of a year apart was the restart of Stavrolen, producing 23,300 tons in January 2016 against zero in the same month last year. Angarsk Polymer Plant stopped the ethylene

Russian Propylene Domestic Sales (unit-kilo tons)		
Producer	Jan-16	Jan-15
Angarsk Polymer Plant	6.4	8.1
Omsk Kaucuk	0.0	0.9
SIBUR-Kstovo	9.1	9.9
Akrilat	0.0	1.7
LUKoil-NNOS	18.7	14.7
Tomskneftekhim	0.0	0.0
Gazprom neftekhim Salavat	0.0	0.0
Nizhnekamskneftekhim	0.0	2.0
Tobolsk-Polymer	0.0	3.0
Ufaorgsintez	0.0	2.3
Total	34.2	42.5

production in February for technical reasons, and the outage could last for weeks or even several months. This would be damaging for Angarsk Polymer and Sayanskkhimplast which has declared force majeure on deliveries for March and April. Last year Sayanskkhimplast was forced to reduce PVC production due to ethylene shortages. In 2015 Angarsk Polymer Plant started the process of upgrading cracker capacity to 454,000 tpa of ethylene and 210,000 tpa of propylene.

## Russian propylene, Jan 2016

Russian propylene sales on the domestic market declined in January, against the same month in 2015, due to mainly to lower demand. Export activity has continued the strong trend from 2015 and amounted to 11,900 tons versus 1,000 tons in January 2015. The important event last for year for Russian propylene took place at Kstovo

where Lukoil-NNOS increased capacity after installation of a new cracking unit. Previously Lukoil-NNOS was focused almost entirely on the domestic market, predominantly selling most of its propylene to Saratovorgsintez, but since the expansion the company has not only been able to increase sales on the export market but also on the domestic market.

Exports of Russian propylene decreased by 17% in January to 10,900 tons in January, mainly due to reduced shipments from Stavrolen and Gazprom neftekhim Salavat. At the same time, SIBUR-Kstovo boosted the export of propylene by 26% to 7,200 tons and Lukoil-NNOS by 25% to 3,700 tons. In January, Russian exports of propane-propylene increased by 1.7 times to 7,300 tons. The Ryazan refinery increased exports by 1.6 times against December to 5,600 tons, whilst Slavneft-Yanos increased exports by 1.9 times to 1,800 tons.

## Russian styrene, Jan-Dec 2015

Styrene production totalled 674,500 tons in 2015 against 645,000 tons in 2014, with the largest producer Nizhnekamskneftekhim increasing production to 300,300 tons against 280,900 tons. Angarsk Polymer Plant increased production from 35,600 tons to 49,100 tons and SIBUR-Khimprom from 123,000 tons to 130,000 tons. Gazprom neftekhim Salavat recorded a fall from 157,400 tons to 150,200 tons whilst Plastik at Uzlovaya dropped 3,200 tons to 45,000 tons. Plastik is the only non-integrated Russian

Russian Styrene Production (unit-kilo tons)			
Producer Jan-Dec 15 Jan-Dec 14			
Nizhnekamskneftekhim	300.3	280.9	
Angarsk Polymer Plant	49.1	35.6	
SIBUR-Khimprom	130.0	123.0	
Gazprom n Salavat	150.2	157.4	
Plastik, Uzlovaya	45.0	48.2	
Total	674.6	645.0	

styrene producer, and has found securing ethylbenzene supplies harder to secure since it was SIBUR.

Regarding exports, Russian shipments totalled 116,600 tons in 2015, 4% down on 2014. Gazprom neftekhim Salavat was the major exporter, providing around 80% shipments. Gazprom neftekhim Salavat is also the largest merchant supplier to the domestic market, providing around 60% of shipments. Domestic styrene sales totalled 109,300 tons in 2015 against 64,000 tons in 2014, the increase due largely to increased demand

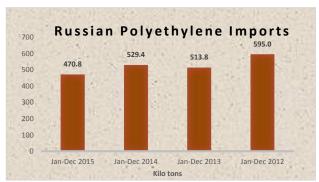
from SBR producers and slightly less export activity as Russian producers looked more inward. Nizhnekamskneftekhim used nearly all of its styrene production captively in 2015.

In January, exports of Russian styrene decreased by 6% to 12,800 tons. SIBUR-Khimprom reduced exports by 50% to 1,000 tons, whilst Plastik increased shipments 2.6 times to 572 tons. Gazprom neftekhim Salavat increased shipments to foreign markets by 11% to 11,20 tons.

## **Bulk Polymers**

## Russian polyolefin imports, Jan-Dec 2015

Russian polyethylene consumption is estimated to have risen in 2015 slightly over 2014 to 1.89 million



tons, but was still 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.

Polyethylene imports into Russia totalled 470,800 tons in 2015, reflecting the general decline in volumes since 2012. HDPE imports fell in 2015 to 194,400 tons against 300,600 tons in 2014, partly due to currency factors and partly due to revived domestic production at Stavrolen. LDPE imports fell by 17% in 2015 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.

Russian polyethylene imports, Jan 2016 Polyethylene imports into Russia dropped 46% in January against December to 26,000 tons. The rouble's steady decline, linked to the trend in oil prices, impacted sharply on buying capability of consumers. The largest reduction was seen for LLDPE to 7,700 tons against 16,300 tons in December. HDPE imports fell 44% to 8,800 tons, whilst LDPE imports dropped from 10,200 tons to 6,200 tons. The main decrease occurred in the purchase of polyethylene for laminated paper manufacturers and cable and wire products. polyethylene Other imports, including ethylene vinyl acetate, fell to 3,500 tons in January against 6,200 tons in December.

Russian Polypropylene Market (unit-kilo tons)		
	Jan-Dec 15 Jan-Dec 14	
Production	1274.9	1035.0
Exports	350.1	223.9
Imports	138.1	157.6
Market Balance	1062.9	968.7

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		D

Transneft, one of the largest consumers of large-diameter
pipes (LLDPE) in Russia, reduced purchases by 36% in
2015. In 2016 the company intends to carry out the
replacement of 1,482 km of pipelines, 15% more
compared to 2015 and this may help demand.

## Russian polypropylene market

Polypropylene imports amounted to 11,000 tons in January, 27% up on January 2014 and slightly higher than the 10,500 tons imported in December.

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 2015 despite a slowdown in the third quarter due to maintenance at several plants. Consumption rose by around 9% in 2015, and was the best performing bulk polymer in Russia.

(unit-kilo tons)			
Producer	Jan-16	Jan-15	
Bashkir Soda	22.4	22.7	
Kaustik	8.2	8.4	
RusVinyl	23.5	18.4	
Khimprom	0.0	0	
Sayanskkhimplast	21.7	24.6	

75.8

Total

74.1

**Russian PVC Production** 

## Russian PVC market, Jan 2016

Russian production of PVC rose by 6% in January compared with December 2015 to 75,800 tons. Despite the low demand in the domestic market, almost all manufacturers have continued to increase their capacity. Bashkir Soda Company produced 22,400 tons of PVC against 22,000 tons in December. In 2015 the company produced 242,200 tons, which is 9% up on 2014. Sayanskkhimplast increased production by 42% in January to 21,700 tons after more ethylene was available from Angarsk. Last year Sayanskkhimplast reduced production by 26% to 208,500 tons.

Kaustik produced 8,200 tons in January against 8,100 tons in December. In 2015 Kaustik increased production by 5% to 95,400 tons. RusVinyl produced 23,500 tons of PVC on January of which 1,200 tons comprised emulsion grade, compared to 25,400 tons and 1,000 tons respectively in December. RusVinyl produced 236,000 tons of PVC in 2015.

PVC imports into Russia amounted to 2,000 tons in January against 4,800 tons in December and 4,400 tons in January 2015. China supplied 1,100 tons in the first month in 2016 and the US 900 tons. PVC exports from Russia amounted to 4,400 tons in January 2016, against 46,000 tons for the whole of 2015. Russian PVC converters reduced investments by 50% in 2015 against 2014.

#### Sayanskkhimplast-force majeure

Sayanskkhimplast, the second largest Russian PVC producer, has reportedly declared force majeure on polymer deliveries in March and April. Sayanskkhimplast was forced to stop production of PVC in mid-February and in late February declared force majeure on PVC deliveries for two months due to a forced production outage.

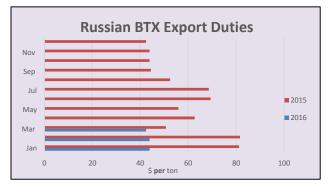
The stoppage in February was caused by the ethylene outage at Angarsk which started on 11 February and may last until mid-April. Taking into account the duration of the ethylene production downtime at the Angarsk plant the reopening of PVC capacity at Sayanskkhimplast is not expected until the second half of April. At the same time, Sayanskkhimplast will now not need to shut in August for a maintenance turnaround as scheduled. Production at Sayanskkhimplast is completely dependent on Angarsk Polymer Plant and will remain so until the Kovytka-Sayansk-Irkutsk pipeline is constructed.

## Paraxylene-PTA-PET Chain

Russian Paraxylene Domestic Sales (unit-kilo tons)		
Producer	Jan-16	Jan-15
Gazprom Neft	5.2	9.4
Ufaneftekhim	10.0	10.0
Kirishinefteorgsintez	0.2	0.0
Total	15.4	19.3

## Russian paraxylene sales, Jan 2016

Russian paraxylene sales on the domestic market amounted to 15,400 tons in January against 19,300 tons in January last year. Exports rose from 7,300 tons to 12,600 tons in January 2016. The increase was due to a combination of lower domestic demand from Polief and the much weaker rouble. This has made exports more profitable and attractive for producers.



Export duties have also been advantageous due to the fall in duties. 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. The rate of excise duty on aromatic hydrocarbons: benzene, paraxylene, orthoxylene in 2017 will rise to 3,500 roubles per ton from 3,000 roubles per ton in 2016. It will almost certainly depend on the oil price in the dollar/euro conversion.

#### Russian PTA duties held at 0% to end-2017

The Eurasian Economic Region confirmed the rate of import customs duties for PTA on 12 February, extending the zero rating from 1 January 2016 to 31 December 2017 inclusive. The Eurasian Economic Region includes Russia, Belarus, Kazakhstan, Armenia and Kyrgyzstan, but only the first two countries of



those five actually import PTA. The zero rate of import duty on the goods category was introduced and enacted from 2 September 2014 which ran to 31 December 2015 before coming under reconsideration.

#### Russian MEG, Jan 2016

MEG sales on the domestic market dropped 40% in January against December to 10,650 tons. SIBUR was responsible for 9,340 tons, 2,830 tons less than in December. Nizhnekamskneftekhim also reduced sales by 88% to 1,210 tons and small

trading companies by almost four times to 104 tons). Amongst consumers, Polief was the largest buying 7,310 tons in January followed by Senezh with 1,370 tons. The remaining 18% to Russian customers was taken by Obninsk Orgsintez (862 tons), BaltTechProm (591 tons), and small trading companies (513 tons).

MEG exports amounted to 6,910 tons in January, down against December by 3,670 tons. SIBUR-Neftekhim accounted for 61% of export shipments, or 4,240 tons (34% less than in December 2015). Nizhnekamskneftekhim exported 2,670 tons in January, down by 25% (910 tons) less than in December.

The main focus of export sales of MEG is Belarus, which bought 2,590 tons of Russian MEG (37% of total exports). Lithuania took 2,200 tons in January, or 32% of shipments, followed by the Netherlands with 21% or 1,480 tons. The remaining 10% was divided between Kazakhstan (156 tons, 80% less than in December), Latvia (154 tons, 40%), Ukraine (43 tons, 90%), and other countries (230 tons).

Russian Domestic MEG Purchases (unit-kilo tons)		
Consumer	Jan-16	Jan-15
Polief	7.3	8.0
Senezh	1.4	0.7
Alko Naphtha	0	0.0
Obninskorgsintez	0.9	0.3
Others	1.1	0.1
Total	10.7	9.1

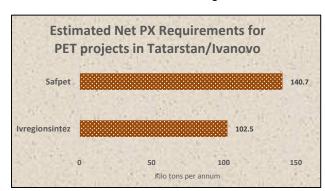
Whilst exports dropped in January imports rose three times against December to 4,150 tons. US companies accounted for 51% of imports into Russia or 2,120 tons, which was up 600 tons than in December 2015. Saudi Arabia provided imports of 2,030 tons. All Russian imports in January were bought by the Senezh PET plant.

#### **Ivregionsintez-PET project**

The polyester complex being constructed at Vichuga in the Ivanovo region could provide the basis of a textile cluster utilising products from the plant. The PET complex under construction at Vichuga could radically change the Russian market for chemical fibres and

yarns to Russia, which is dominated by imports. The new plant (planned for the beginning of the 2020s) could reduce imports considerably from 118,000 tons in 2014 to levels of around 50-52,000 tpa. Total consumption of polyester fibres and yarns in Russia amounted to 215,000 tons in 2014, and yet domestic production was only 63,600 tons.

The raw material situation presents the biggest challenge to Ivregionsintez, particularly PTA. Discussions have been undertaken between Ivregionsintez and SIBUR over PTA from Polief, and also Tatarstan where



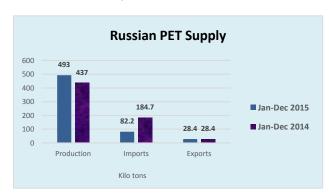
consideration is being given towards constructing paraxylene and PTA facilities. Kazakhstan could potentially construct a PTA plant at Atyrau to combine with the paraxylene plant, but the distances may be too far for deliveries to be economic.

#### SafPet PTA/PET project

The Tatar company SafPet has acquired the license and basic documentation of the licensor for the PTA and PET projects from La Seda, whilst the license for the production of PET equipment

installation has been given to Russian company Khimteks. Safpet has now finalised a tender for the development of basic engineering and design documents between the Western engineering companies and Russian design organizations.

SafPet's planned capacities include 210,000 tpa of PTA and 250,000 tpa of PET. The estimated start-up date is 2019-2020. The company aims to produce three types of PET, including fibre and film, which are currently fully imported into the Russian Federation. An important feature of the project is the availability of local raw materials, MEG from Nizhnekamskneftekhim and paraxylene from Taneko at Nizhnekamsk



(although the PX unit is yet to be constructed). Tatneft has provided a commitment for commissioning the installation of production of paraxylene consisting of an aromatics reformer together with the introduction of SafPet's installation for PTA production. SafPet has already signed a long-term agreement for the supply of paraxylene to 2026.

#### Russian PET trade and consumption 2015

The demand for PET fell in the Russian market due to the deterioration of the economy and

reduced consumption of preforms. Despite the overall decrease in consumption of PET in Russia in 2015, Russian production increased by 13% and amounted to 493,000 tons. Polief and SIBUR-PETF increased production by 8% each whilst Alko Naphtha increased production by 55% over 2014.

The market for PET consumption in Russia decreased by around 8% in 2015 against 2014 and amounted to 547,000 tons. The market is still displacing imported brands, giving preference to Russian raw materials. The processors pass on Russian raw materials due to the unpredictability of exchange rates and the cost of imported material. Imports of PET for the production of bottles in 2015 fell by 55% and amounted to 82,200

tons. The export of PET resin from Russia in 2015 totalled 28,400 tons in 2015, unchanged from 2014.

Russian Benzene Sales			
(unit-ki	lo tons) Jan-16	Jan-15	
Synthesis Total	54.3	54.3	
Angarsk Polymer Plant	4.6	4.7	
SIBUR-Kstovo	7.1	3.6	
Severstal	1.9	3.3	
Uralorgsintez	7.2	7.4	
Kirishinefteorgsintez	5.3	4.9	
West Siberian MC	6.2	5.5	
Ryazan NPZ	2.7	3.4	
Slavneft-Yanos	5.4	6.2	
Gazprom Neft (Omsk)	7.1	11.9	
Gazprom n Salavat	1.7	3.0	
Stavrolen	4.3	0.0	
Kuibyshevazot	0.0	0.0	
Ufaneftekhim	0.9	0.0	
ArcelorMittal	0.0	0.4	
Nitration Total	1.1	3.0	
Novolipetsk MK	1.1	3.0	
Crude	12.2	9.5	
Chelyabinsk MK	1.4	0.5	
Altay-Koks	3.5	0.5	
Koks	2.4	3.1	
Magnitogorsk MK	3.9	3.4	
Nizhny Tagil MK	0.9	1.5	
Moskoks	0.0	0.1	
Ural Steel	0.0	0.2	
Full Total	67.5	66.8	

## **Aromatics**

## Russian benzene, January 2016

Benzene sales in the Russian domestic market were stable in January, amounting to 67,500 tons against 66,800 tons in the same month last year. The main difference in market purchases came from reduced shipments to Kuibyshevazot, which bought greater volumes of phenol. By contrast both Azot at Kemerovo and Shchekinoazot increased benzene purchases in January.

Benzene sales from refineries and petrochemical plants on the Russian domestic market amounted to 57,800 tons in January, 3% down on December. Ufaneftekhim reduced rail deliveries by 2.1 times to 931 tons, whilst Stavrolen reduced shipments by 19% to 4,300 tons and Gazprom Neft by 14% to 7,500 tons. In January Angarsk Polymer Plant increased domestic sales by 1.6 times to 4,600 tons and SIBUR-Kstovo by 20% to 7,100 tons. Benzene imports from ArcelorMittal Temirtau were not carried out in January, although 126 tons were delivered to Kuibyshevazot in December.

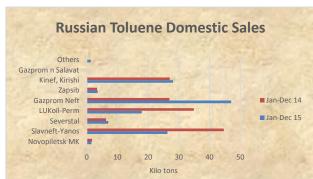
Stavrolen did not supply benzene to the domestic market in February, whilst an accident that took place on 11 February at Angarsk Polymer Plant also affected availability. Benzene from Angarsk could be unavailable for the next couple of months. In February, many Russian producers have left the price of benzene on the level of January whilst others raised prices by 3-5%.

Russian benzene production for synthesis and nitration amounted to 109,100 tons in January, unchanged from December 2015. Declines in production were noted at Stavrolen, where due to maintenance volumes declined by 14% to 4,500 tons, Slavneft-Yanos which dropped 12% to 5,700 tons and Novokuibyshevsk Petrochemical by 21% to 2,300 tons. At the same time, in January Novolipetsk Metallurgical Combine increased production of benzene by 11% to 405 tons, and the Angarsk Polymer Plant by 8%, to 6,700 tons.

#### Russian toluene, January 2016

Toluene production amounted to 26,350 tons in January, 4% less than in December and 21% lower than in January 2015. Gazprom Neft produced 10,200 tons, the Ryazan Refinery 5,260 tons, Slavneft-Yanos 5,090 tons, and Ufaneftekhim 1,860 tons. Other producers included Kirishinefteorgsintez 1,470 tons, Gazprom neftekhim Salavat 820 tons, West Siberian MK 800 tons, Severstal 460 tons, Perm Refinery 330 tons, and Novolipetsk Steel 50 tons.

Toluene deliveries to the Russian domestic market amounted 11,080 tons in January, 28% more than in December and 22% higher than in January 2015. Deliveries were supplied by Gazprom Neft, 4,950 tons of



45%, Slavneft-Yanos 3,300 tons or 30%, Lukoil-Permnefteorgsintez 1,110 tons or 10%, Kirishinefteorgsintez 1,030 tons or 9%, Severstal 600 tons or 5% and West Siberian MK 100 tons or 1%.

Manufacturers of explosives increased their purchases of toluene in January 2016 compared with December by 76% and amounted to 1,610 tons. Companies producing paints increased by 2%, to 3,100 tons whilst producers of lubricants

and additives for motor fuels increased their purchases of toluene by 89% to 1,780 tons. Another 240 tons of toluene was purchased by the rubber producers in January.

Russian OX	Russian OX Production (unit-kilo tons)			
Producer	Jan-Dec 15	Jan-Dec 14		
Gazprom Neft	101.3	74.9		
Ufaneftekhim	56.8	66.5		
Kinef, Kirishi	55.3	49.7		
Total	213.4	191.1		
Russian OX D	omestic Sales	(unit-kilo tons)		
Producer	Jan-Dec 15	Jan-Dec 14		
Gazprom Neft	58.9	61.9		
Ufaneftekhim	41.9	36.4		
Kinef	34.7	45.3		
Total	135.5	143.6		
Russian C	X Exports (un	it-kilo tons)		
Producer	Jan-Dec 15	Jan-Dec 14		
Gazprom Neft	48.4	27.4		
Ufaneftekhim	4.2	11.7		
Kinef	28.3	9.5		
Total	80.9	48.6		

#### Russian orthoxylene, January 2016

Orthoxylene deliveries to the Russian domestic market amounted 13,270 tons in January, 2% less than in December but 4.3 times up on January 2015. Gazprom Neft shipped 6,160 tons from the Omsk refinery, followed by Ufaneftekhim supplying 3,690 tons and Kirishinefteorgsintez 3,420 tons.

Kamteks-Khimprom reduced purchases of orthoxylene in January by 15% compared to December 2015, up to 9,020 tons or 68% of Russian consumption. Gazprom neftekhim Salavat purchased 1,470 tons in January after being idle in December. Russian manufacturers of paints increased purchases of orthoxylene in January 2016 by 14%, to 1,670 tons. Fuel manufacturers, agrochemical, pharmaceutical and other products purchased 1,780 tons (13%), whilst another 800 tons was shipped to trading companies.

In January 2016 exports of orthoxylene from Russia amounted to 6,400 tons against 2,470 tons in December and 3,990 tons in January 2015. Gazprom exported 4,900 tons, and Kirishinefteorgsintez 1,480 tons). Russian orthoxylene was delivered mainly to Finland (6,380 tons, accounting for 99.6% of total exports).

## Russian phenol market, Jan 2016

Russian domestic phenol sales amounted to 11,800 tons in January, up against both December and January last year. The increase in sales volumes was primarily due to stop of production of bisphenol A by

, ,				
Russian Market Phenol Sales by Supplier (unit-kilo tons)				
Producer	Jan-16	Jan-15		
Omsk Kaucuk	0.0	0.0		
Samaraorgsintez	4.8	2.2		
Kazanorgsintez	1.3	0.6		
Ufaorgsintez	5.6	2.7		
LUKoil-VNPZ	0.1	0.0		
Borealis	0.0	2.1		
Total	11.8	7.6		

Ufaorgsintez, freeing up more phenol for the merchant market. Ufaorgsintez shipped 5,600 tons in January, increasing shipments over December by 36%.

In January 2016 Ufaorgsintez resumed deliveries of phenol to foreign markets shipping 850 tons. Volumes were exported to Poland, Latvia and Slovakia, amounting respectively to 450 tons, 285 tons and 112 tons.

Amongst the producers Ufaorgsintez and Novokuibyshevsk Petrochemical provided around 80% of sales to the domestic market in January. Kazanorgsintez exported 121 tons in

January, although not a large volume it was the first time the company has exported phenol for several years and before the start-up of the bisphenol A plant. Borealis sold 295 tons of phenol on the Russian market in January, 48% less than in December due to increased supplies from Ufaorgsintez. Regarding phenol consumers, Kuibyshevazot made the largest purchases in January of 4,300 tons against zero tons in January 2015. Aside Kuibyshevazot, the remainder of the market remained similar to last year. Metadynea was the other largest buyer, purchasing 2,337 tons against 1,889 tons in January 2015.

Russian Phenol Consumers (unit-kilo tons)		
Consumer	Jan-16	Jan-15
Kuibyshevazot	4.0	0.0
Metadynea	2.3	1.9
Uralkhimplast	1.2	1.1
Others	4.3	4.6
Total	11.8	7.6

Other important phenol consumers include Uralkhimplast and Shchekinoazot, both of which produce phenol-formaldehyde resins. About 5% of the total sold in January in the domestic market went to Sterlitamak Petrochemical Plant for phenol antioxidants, amounting to 580 tons which was 43% down on December.

#### **Ufaorgsintez-cumene upgrade**

Ufaorgsintez is considering three companies for the reconstruction of the cumene plant. According to the results of the tender selection among applicants will be carried out on the basis of the prices of services, as well

as experience in conducting general contractor for at least three years at the facilities of petrochemical and chemical industries. The Contractor will be able to order 50% of the work subcontracted to pass. His decision to announce the tender commission on 18 March.

The intention to carry out reconstruction of the production of cumene Ufaorgsintez stated back in 2014. Then the United Petrochemical Company, identified Badger Licensing as the licensor and, a subsidiary of ExxonMobil. Ufaorgsintez's current cumene production technology has been recognized as ineffective. The capacity of the plant is 120,000 tpa.

Kuibyshevazot-Production (unit-kilo tons)			
Product	Jan-Dec 15	Jan-Dec 14	
Polyamide-6	135.4	141.5	
High Tenacity Tech Yarns	13.5	15.1	
Tyre Cord Fabric	5.7	6.0	
Caprolactam	176.3	181.1	
Ammonia	640	575.0	
Urea	349.6	319.9	
Ammonium Nitrate	585.1	569.2	
Ammonium Sulphate	210.4	193.8	

#### **Kuibyshevazot 2015**

Kuibyshevazot increased revenues by 23% in 2015 to 38 billion roubles, whilst the net profit of the company increased by 2.7 times to 5 billion roubles. Improved performance was due to the increase in production of ammonia, ammonium nitrate, urea, as well as a significant rise in export revenues. Last year Kuibyshevazot installed a new rectification unit in the production of caprolactam, which improved the quality and reduced the cyclohexanone consumption by 3%. It also reduced electricity costs by 1.5%.

The company continues to work on the energy-efficient production of cyclohexanone. Joint projects with Linde and Praxair, costing 13 billion and 4 billion roubles respectively, form major parts of Kuibyshevazot's investment strategy. In addition, the company is working on a jv Trammo (USA). Kuibyshevazot's production of caprolactam is integrated into polyamide which is then used by subsidiaries Kurskkhimvolokno, the Balashov plant in the Saratov region and Kuibyshevazot Engineering Plastics in China. Kurskkhimvolokno increased the production of chemical fibre, yarn and fabric by 16.2% in 2015 to 18,600 tons and is undergoing modernisation.

## **Synthetic Rubber**

Russian C4 Supplies (unit-kilo tons)			
Supplier	Jan-16	Jan-15	
Angarsk Polymer	2.2	7.0	
Krasnoyarsk Synthetic Rubber	0.0	0.1	
Kazanorgsintez	4.0	3.0	
Stavrolen	6.4	7.0	
SIBUR-Kstovo	7.2	0.4	
Gazprom neftekhim Salavat	0.0	0.0	
Tomskneftekhim	6.4	6.9	
Ufaorgsintez	2.1	2.8	
Naftan (Belarus)	4.5	5.5	
Total	32.9	32.7	

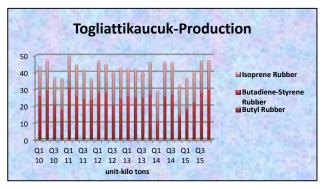
also through the use of anti-blocking agents, which allowed the company to reduce the amount of time required for the cleansing equipment.

#### Russian C4s, January 2016

Russian C4 sales on the domestic market amounted to 32,900 tons in January 2016 against 32,700 tons in January 2015. Naftan in Belarus was the sole importer in January, whilst the rest of the market was supplied evenly by the main domestic petrochemical producers. Regarding consumers, Nizhnekamskneftekhim purchased 17,000 tons in January against 8,900 tons in the same month last year due to higher rubber production, whilst Togliattikaucuk purchased 13,700 tons against 13,800 tons in January 2016.

## **Toglattikaucuk production 2015**

Togliattikaucuk produced 56,400 tons of butyl rubber in 2015, 3,300 tons more than in 2014. The rise was due to the absence of a major maintenance shutdown in 2015 and which allowed the company to reduce the amount of time



For the production of isoprene Togliattikaucuk increased production from 72,600 tons in 2014 to 75,000 tons in 2015. The increase was due to less downtime for technical repairs, as well as the involvement of isobutane-isobutylene fraction in the production process. Isoprene monomer production fell slightly Togliattikaucuk by 1,100 tons against 2014, totalling 57,800 tons in 2015. Togliattikaucuk increased the production of concentrated isobutylene by 19% in 2015 to 42,600 tons. The main factors that influenced the increase included

a new technological scheme and the transition to a new catalyst, developed by a Russian company.

The production of styrene butadiene rubber increased by 33% and totalled 42,100 tons. In total Togliattikaucuk produced a total of 156,300 tons of synthetic rubber in 2015, 9% up on 2014. The main consumers of the plant's production include the major manufacturers of tyre industry: Pirelli, Bridgestone, Nokian, Kordiant, and Voltyre-Prom.

#### Nizhnekamskneftekhim-isobutylene & butyl rubber improvements

Nizhnekamskneftekhim took delivery in February of two containers with cyclones from Russian engineering

Russia	Russian Chemical Commodity Exports			
	Jan-Dec 15	5 Jan-Dec 14	Jan-Dec 15	Jan-Dec 14
Product	Kilo tons	\$Mil	Kilo tons	\$Mil
Ammonia	3,585	1,356	3,635	1,565
Methanol	1,261	331	1,510	564
Nitrogen Fertilisers	11,594	2,672	12,148	3,244
Potash	11,185	2,958	10,460	2,700
Mixed Fertilisers	8,857	3,221	8,272	3,039
Synthotic Pubbor	027	1 377	826	1 780

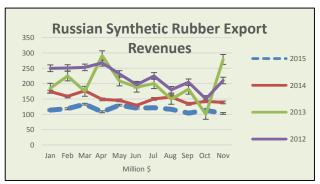
equipment supplier Uralkhimmash, which will now be installed in the production of isobutylene. Containers with cyclones are intended for dedusting contact regeneration gas from entrained catalyst in the production of isobutylene.

The production of isoprene through isobutylene and formaldehyde at Nizhnekamskneftekhim began in 1981. In 2006, the company introduced the one-step synthesis method enabling the production of high polymerisation monomer with the concentration of more than 99%.

Nizhnekamskneftekhim also launched a new automatic loading rack in February at the butyl rubber plant. The automatic loading rack is designed for loading flotation reagents, obtained by further processing of dimethyldioxane isoprene monomer, into tanks. The whole process is completely sealed, and exhaust vapours are utilized in a closed flare system. According to Nizhnekamskneftekhim, the daily volume of the shipment will be 100 tons of flotation reagents. The main consumers of flotation reagents and absorbents from Nizhnekamskneftekhim include companies from Sterlitamak, Ufa, Moscow and Dzerzhinsk.

#### Russian synthetic rubber market

Russian synthetic rubber revenues totalled \$1.377 billion in 2015 against \$1.780 billion in 2014 despite the increase in volume sales. Revenues fell last year partly due to lower oil and butadiene prices, but also global



demand which remains weak. International efforts are underway to try and arrest the decline in global prices such is the crisis faced by some producers, particularly for natural rubber.

Indonesia, Malaysia and Thailand, the largest producer of natural rubber in the world, reached an agreement in January on the reduction of exports of raw materials by 20% in order to increase prices. Restrictions will last from March to August, during this period overseas shipments fall by about 615,000 tons. Together, these three countries,

which produce 70% of the total rubber in the world, form the international tripartite council rubber industry (International Tripartite Rubber Council, ITRC). Indonesia agreed to cut its exports by 238,736 tons, while Malaysia and Thailand pledged to reduce their overseas shipments by 52,259 tons and 324,005 tons,

respectively. Indonesia, Thailand and Malaysia supply 67% of the world's rubber. In addition to reducing exports, the countries also agreed to increase domestic consumption of natural rubber, such as in infrastructure projects. The council is optimistic the measures will trigger a recovery in rubber prices and ensure fair and remunerative prices to all smallholders and other stakeholders in the industry.

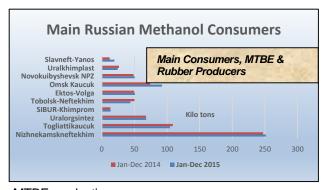
#### **Methanol**

#### Russian methanol, Jan 2016

Russian methanol production dropped 4% in January against December to 317,000 tons. Metafrax produced 95,000 tons in January against 95,200 tons in December, whilst Sibmetakhim reduced production by 4% to 74,400 tons.

Russian Methanol Domestic Sales by Producer (unit-kilo tons)		
Supplier	Jan-16	Jan-15
Azot Nevinnomyssk	1.8	3.0
Azot Novomoskovsk	8.7	9.8
Metafrax	37.1	32.6
Sibmetakhim	31.6	42.9
Togliattiazot	36.8	35.9
Shchekinoazot	6.2	2.6
Ammoni	2.3	0.0
Others	3.7	4.4
Total	128.0	131.3

Domestic sales of methanol amounted to 128,000 tons in January, 5% down on December. Shchekinoazot shipped 6,200 tons in January, 27% up over December, but this still only amounted to 5% of total shipments. Tomet shipped 36,800 tons in January, 26% up on December, whilst Ammoni at Mendeleevsk dropped 70% to only 2,300 tons. Azot reduced sales by 35% to 8,700 tons, whilst Sibmetakhim reduced sales by 10% to 31,600 tons and Metafrax by 29% to 37,100 tons. MTBE consumers accounted for 34% of purchases in January, whilst another 24% went to gas companies and 14% to formaldehyde producers. MTBE purchases fell 15% to 44,100 tons, 15% less than in December.



Regarding consumers, trade patterns in Russia are very stable with the major buyers comprising the **MTBE** and rubber producers. Nizhnekamskneftekhim is the largest individual consumer of methanol in Russia, purchasing 251,300 tons in 2015 against 247,000 tons in 2014. Other important buyers Togliattikaucuk, which bought 104,500 tons in 2015 against 108,300 tons in 2014. The largest rise in 2015 was recorded by Omsk Kaucuk where purchases rose 18,000 tons over 2014 to 92,200 tons. The reason for the rise was the increase in

MTBE production.

Russian Methanol Exports (unit-kilo tons)		
Producer	Jan-16	Jan-15
Azot Novomoskovsk	15.3	12.5
Metafrax	31.2	25.3
Sibmetakhim	36.2	30.5
Tomet	15.5	24.6
Shchekinoazot	31.0	38.0
Total	129.2	131.0

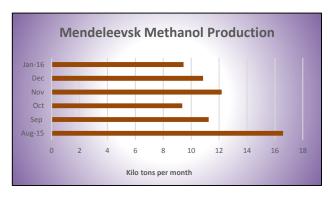
Russian methanol exports dropped 1% in January against December to 129,000 tons despite expectations of a rise in volumes. Shchekinoazot aimed to ship around 6,100 tons through the Odessa ICC in February, which is almost twice the amount in January. Sibmetakhim exported 36,200 tons, Metafrax 31,200 tons and Shchekinoazot 31,000 tons. Azot at Novomoskovsk and Tomet exported 15,300 and 15,500 tons respectively. The largest importer of Russian methanol is still Finland, accounting for 66,300 tons in

January and 4% up against December. Poland accounted for 25,500 tons of shipments in January, Romania 6,700 tons and Slovakia 18,200 tons. Romania reduced purchases by 60%, whilst Poland doubled the volume of imports in January.

Volumes of supplies of commodity methanol Russian production to foreign markets, is likely to decline, which will be due to a decrease in purchases of methanol by Finnish re-exporters working with Chinese consumers. This reduction in the supply of commercial methanol in Finland, domestic producers can

offset the build-up of shipments to other European countries (in particular in Poland, Romania, Slovakia).

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.



#### Ammoni-Mendeleevsk official opening

Ammoni at Mendeleevsk officially commissioned its complex on 12 February for the production of ammonia, methanol and urea. The plant will produce 2,050 tons of ammonia and 680 tons of methanol per day. Consumers of methanol include Nizhnekamskneftekhim. For ammonia the company plans to sell for agriculture plan to produce urea and ammonium nitrate. 30% of the issued to Zavada nitrogen fertiliser will be sold in Russia, the remaining 70% in the CIS countries, Europe and Asia.

Construction of the complex started in 2011 and was undertaken by Haldor Topsoe. The assembly production lines were provided by a consortium of Japanese companies Mitsubishi Heavy Industries, Sojitz Corporation and the Chinese company China National Chemical Engineering Company. The complex cost about \$1.4 billion to build.

Uralkhim Production (unit-kilo tons)		
Product	Jan-Dec 15	Jan-Dec 14
Ammonium nitrate	2928	2940
Ammonia	825	832
Urea	1186	1110
Complex fertilisers	617	522
Phosphate fertilisers	1041	41
Other fertilisers	22	17
Other chemical	231	238

Capacity of the complex includes 717,000 tpa of ammonia (without methanol) or 455,000 tpa of ammonia and 238,000 tpa of methanol. Other capacities include 717,000 tpa of urea and 300,000 tpa of ammonium nitrate. The volume of natural gas consumption is about 1 billion cubic metres.

## Uralkhim 2015

Uralkhim increased production of commodity output by 4% in 2015, including rises of 6% for ammonia and 7% for urea. Uralkhim produced 5.89 million tons of products in 2015. Urea production amounted to 1.19 million tons and ammonia

825,000 tons. Uralkhim owns production capacities at Azot Berezniki, Kirov-Chipetskiy Fertiliser Plant KChKhK (Kirov region), Voskresensk Mineral Fertilisers (Moscow region), and Mineral fertilisers (Perm).

## **Organic chemicals**

Russian Butanol Production (unit-kilo tons)		
N-buta	nol	
Producer	Jan-16	Jan-15
Angarsk Petrochemical	0.0	1.5
Evrokhim	1.4	2.2
Gazprom n Salavat	7.7	5.8
SIBUR-Holding	3.2	2.8
Total	12.3	12.4
Isobuta	nol	
Producer	Jan-16	Jan-15
Angarsk Petrochemical	0.0	0.8
Gazprom n Salavat	3.5	2.8
SIBUR-Holding	4.5	4.3
Total	8.0	8.0

## Russian butanols, Jan 2016

Butanol production amounted to 20,270 tons in January, 10% down against December and marginally lower than in January 2015. The proportion of n-butanol in butanol production in January 2016 was 61%, and isobutanol 39%. Due to the low demand the Angarsk Petrochemical Company did not produce in January. Gazprom neftekhim Salavat produced 11,240 tons (55% of total Russian production), SIBUR-Khimprom 7,620 tons (38%), and Azot Nevinnomyssk 1,400 tons (7%).

#### Russian butanol domestic sales, Jan-Dec 2015

The Russian butanols market saw little change in 2015 in regard to production and domestic consumption and exports. At the same time the sharp fall in the value of the rouble managed to offset the sharp drop in Asian butanol

prices. The main challenge for Russian butanol producers is selling into the Chinese market where domestic production is rising thereby affecting export possibilities. In 2015 Russian butanol exports to China totalled 89,000 tons, but are expected to be lower in 2016. Despite the weaker rouble, it has not been enough to generate profits from exports to the Asian region.

Gazprom neftekhim Salavat is hoping that its new acrylate complex, currently under construction, will alleviate the dependence on export activity and increase internal processing of butanols. By contrast Angarsk Petrochemical Company is totally dependent on exports to China and thus faces a dilemma of whether to continue producing. The other two producers SIBUR-Khimprom and Azot at Nevinomyssk sell very little to China and thus are not affected directly.

Russian Butanol Domestic Sales				
(unit-kilo tons)				
Producer	Jan-16	Jan-15		
Gazprom n Salavat	0.9	1.5		
SIBUR-Khimprom	4.0	0.4		
Angarsk Polymer Plant	0.1	0.0		
Azot Nevinnomyssk	0.4	0.4		
Others	0.0	2.0		
Total	5.4	4.2		

tons and Volzhskiy Orgsintez 570 tons.

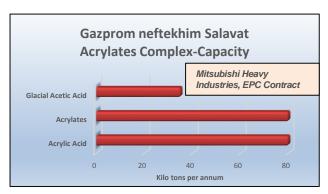
#### Russian butanol domestic sales, Jan 2016

Domestic sales of butanols amounted to 5,400 tons in January, 40% less than in December 2015, but 35% more than in January 2015. The proportion of n-butanol in the gross sales volume in January 2016 was 79%, and the isobutanol 21%.

SIBUR-Khimprom supplied 4,020 tons in January (75% of Russia's supply), Gazprom neftekhim Salavat 870 tons (16%), Azot Nevinnomyssk 390 tons (7%) and from inventory Angarsk Petrochemical 110 tons (2%). Regarding consumers, Akrilat purchased 2,300 tons in January, Dmitrievsky Chemical Plant 810

## Russian butanol exports, Jan 2016

In January 2016 the export of butanols from Russia amounted to 2,710 tons against 10,690 tons and 12,250 tons in January 2015. The proportion of normal butanol in the total Russian exports accounted for 15%, and the isobutanol 85%. SIBUR-Khimprom shipped 2,340 tons of butanol (87% of Russia's exports), Gazprom neftekhim Salavat 230 tons (8%), and Azot Nevinnomyssk 130 tons (5%). Angarsk Petrochemical Company in January of this year, as well as in December, not to ship products to foreign consumers. The maximum volume of butanol was exported from Russia to Latvia (58% of the gross deliveries), the Netherlands (13%), Turkey (13%) and Ukraine (11%).



#### Gazprom neftekhim Salavat-acrylate project

The acrylate project at Salavat has made progress in construction in recent months, and when completed will not only provide a vertical chain for petrochemicals at the complex, but will allow Bashkortostan to develop new applications in the production of paints and the production of superabsorbents.

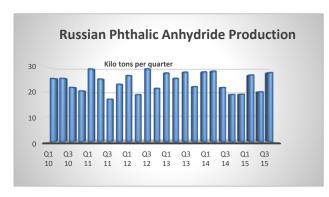
Currently the superabsorbents used in Russia are almost completely dependent on imports. Already there are negotiations on the establishment of Based on Japanese technology, the construction

production facilities at Salavat for superabsorbents. Based on Japanese technology, the construction process started in 2013 and is somewhat behind schedule but may achieve completion by 2017 if not earlier. The plant under construction will be the second of its kind in Russia. The Akrilat plant in the Nizhny Novgorod region was opened over ten years ago.

Environmental approval has recently been granted for the Salavat project, whilst some staff from Gazprom neftekhim Salavat have been sent to Japan for training. In the first phase of operations it is expected that acrylates will shipped on to the merchant market, either domestic or export, and therefore there is currently a study of the logistics system in order to ensure unhindered shipment.

#### Russian phthalic anhydride, Jan 2016

Phthalic anhydride exports from Russia totalled 5,340 tons in January which is 17% less than in December last year, but more than twice higher than in January 2015. India was the largest destination for Russian



exports accounting for 25%, followed by the United Arab Emirates (19%), Pakistan (12%), China (10%) and Finland (8%). Other destinations included the USA (7%), Brazil (7%) and Poland (6%). The sole Russian exporter is Kamteks-Khimprom.

Russian production of phthalic anhydride amounted to 9,670 tons in January, 17% more than in December and 77% higher than in January 2015. Gazprom neftekhim Salavat revived its small unit in January after being idle in December,

whilst Kamteks-Khimprom at Perm accounted for 91% of production in January at 8,790 tons.

## Other products

#### Kaustik increases tax contributions by 98% in 2015

Kaustik at Volgograd became a joint stock company on 9 February, due to the need to comply with new regulations imposed by the government. Kaustik produced 94,700 tons of PVC in 2015, 3% higher than in 2014. In 2015, Kaustik (part of Nikokhim) transferred 1.291 billion roubles in taxes to the Volgograd administration, 98.2% up on 2014. The company was the largest taxpayer in the Volgograd region.

#### Russian titanium dioxide consumption 2015

Imports of titanium dioxide into Russia fell by 17% in 2015 to 64,500 tons. The fall mainly stemmed from international companies whilst imports from companies Crimean Titan and Sumyhimprom increased. Imports of titanium dioxide from Sumyhimprom increased by 14% and amounted to 11,500 tons, whilst Crimean Titan increased deliveries by 11% to 15,000 tons. Du Pont recorded the largest fall of 6,300 tons to 10,000 tons in 2015.

#### **PPG-Lipetsk**

PPG Industries is planning to complete construction of the plant for the production of liquid paints, water-based and solvent-based, at the Lipetsk SEZ in September and October 2016. Due to EU sanctions PPG Industries plant construction was suspended and the timing shifted by almost a year. However, the company's management has decided to continue construction. The design capacity of the plant is 25,000 tpa, to be targeted on the automotive, packaging and marine industries.

Imports of titanium dioxide from Kronos fell by 3.5% and amounted to 7,900 tons. Sachtleben Chemie shipped 6,500 tons to Russia in 2015, 14% higher than in 2014. Market players attributed the overall fall of imports from the devaluation of the rouble. Prices from Sumyhimprom and Crimean Titan are much cheaper than most global players, whilst growth in demand for Finnish grades in the past year was due to the fall of the euro against the dollar.

#### **Gazprom Khimvolokno-polyester yarns**

packaging and marine industries. Gazprom Khimvolokno at Volzhskiy plans in 2016 to complete the investment project for the production of polyester yarn for technical and cord fabric. The total volume of polyester yarn was 12,900 tpa. The products will be used in the production of tyre cord and industrial fabrics, as well as geotextiles. Production equipment was supplied by German companies and Buhler Barmag. Gazprom Khimvolokno is controlled by Gazprom neftekhim Salavat which acquired shares in SIBUR-Volzhskiy in December 2011 for 75 million roubles. The company produces cord fabric, technical fabrics, polyester geogrid, etc.

#### **Bashkir Soda Company-raw materials**

The Bashkortostan Government has established a working group to address the issue of raw material supply to Bashkir soda Company at Sterlitamak. Bashkir Soda currently operates on limestone deposits from the nearby mountain Shahtau which were found in the middle of the 20th century. This raw material base is expected to be soon exhausted, and the company is striving to locate a new source of feedstock. The limestone deposits of Shihan Tratau mountain have been identified as the most viable alternative, but this mountain has status of natural monuments of regional importance and is protected by law.

Proposals have been made to Bashkir Soda to develop the Gumerovsk deposit, located 30 kilometres from Sterlitamak the production of soda, but there are doubts over the amount of resources available. Thus efforts are being made to remove the law Shihan Tratau mountain, although this may meet strong local resistance.

Last year Bashkir Soda transferred 6.4 billion roubles in taxes to the local and federal budgets which was 2.5 billion roubles more than in 2014. The drop in the value of the rouble in 2015 has made many Russian chemical companies successful based on the domestic currency, and in the case of Bashkir Soda Company the 64% rise in revenues provided the opportunity to increase profits and contribute increased taxes to Bashkortostan budget.

Belarussian Methanol Exports (unit-kilo tons)			
Country	Jan-Dec 15	Jan-Dec14	
Russia	7.8	1.6	
Ukraine	28.2	10.7	
Poland	20.8	40.4	
Lithuania	14.4	16.4	
Czech Republic	0.0	0.7	
Estonia	0.0	0.1	
Total	71.2	69.9	

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#### Belarussian chemical trade 2015

Methanol exports from Belarus in 2015 totalled 71,300 tons against 69,600 tons in 2014. The significant change took place in export destination, shifting from Poland to Ukraine.

Whilst methanol exports to Poland dropped from 40,400 tons in 2014 to 20,600 tons in 2015, volumes to Ukraine increased from 10,700 tons to 28,200 tons. Methanol production increased slightly in 2015 to 85,300 tons from 83,000 tons in 2014.

Belarussian Caprolactam Exports (unit-kilo tons)			
Country	Jan-Dec 15	Jan-Dec 14	
Russia	0.0	0.1	
India	0.3	0.0	
Indonesia	4.7	2.1	
Malaysia	0.4	0.0	
China	12.3	9.9	
Taiwan	15.3	21.7	
Total	32.9	33.8	

Caprolactam exports from Belarus declined from 33,400 tons in the period January to December 2014 to 32,300 tons in 2015, due largely to the fall in shipments to Taiwan from 21,700 tons to 15,300 tons. Caprolactam is produced in Belarus by Azot at Grodno where production totalled 128,100 tons in 2015 against 121,100 tons in 2014.

For acrylonitrile exports, the largest destination for Belarussian product in 2015 was Turkey accounting for 14,100 tons followed by Hungary with 12,600 tons, followed by and the Netherlands 9,000 tons. Acrylonitrile is produced in Belarus by Naftan.

Belarussian Acrylonitrile Exports (unit-kilo tons			
Product	Jan-Dec 15	Jan-Dec 14	
Russia	2.4	1.0	
Belgium	0.0	8.8	
Hungary	12.6	3.5	
Germany	0.0	2.5	
Netherlands	9.0	11.4	
Romania	0.1	0.0	
Turkey	14.1	2.2	
UAE	0.0	1.6	
Emirates	0.0	7.0	
Others	0.431	0	
Total	38.6	38.0	

Phthalic anhydride exports from Belarus increased to 24,100 tons in the in 2015 from 18,100 tons, due largely to shipments to India (5,486 tons) which did not take place in 2014 and increased shipments to Poland. Phthalic anhydride is produced in Belarus by Lakokraska at Lida.

Polyethylene exports rose from 112,919 tons to 121,645 tons. Russia was the main destination for Belarussian exports, followed by Lithuania and Ukraine. Production of polyethylene by Polimir in 2015 totalled 128,500 tons against 136,000 tons in 2014. Imports dropped in 2015 to 105,090 tons against 120,206 tons in 2014.

Belarussian Phthalic Anhydride Exports (unit-kilo tons)			
Country	Jan-Dec 15	Jan-Dec 14	
Russia	5.7	12.3	
Ukraine	3.5	3.3	
India	5.5	0.0	
Egypt	1.3	0.0	
Poland	6.1	2.0	
Others	1.9	0.5	
Total	24.1	18.1	

Import sources for polyethylene were much more diversified than export destinations, with Russia supplying around 30% of inward shipments. Russia was far more prominent in polypropylene imports, supplying 71,535 tons to Belarus in 2015 from the country total of 84,985 tons. Polypropylene imports fell slightly in 2015 from 86,249 tons in 2014, of which Russia supplied 45,809 tons.

Regarding aromatic 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-Dec 15	Jan-Dec 14	
Paraxylene	12.4	19.0	
PTA	49.4	38.3	
MEG	64.6	55.0	

Paraxylene imports into Belarus fell from 18,953 tons in January to December 2014 to 12,444 tons in the same period in 2015, whilst PTA imports by contrast rose from 38,300 tons in 2014 to 49,400 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 64,600 tons in 2015 against

55,000 tons in 2014. Russia accounted for almost all imports in both years.

## **Ukraine**

#### Ukrainian polymer imports, Jan 2016

In January imports of polyethylene into Ukraine decreased by 14% against December and totalled 17,100 tons. HDPE imports declined from 10,200 tons to 9,100 tons, LDPE fell from 5,200 tons to 4,200 tons whilst LLDPE dropped from 3,700 tons to 3,100 tons. PVC imports fell 39% in January against December to 4,100 tons. Imports from Russia fell from 960 tons to 340 tons, despite Russian producers offering the lowest price in comparison with producers from Europe and the US. PVC deliveries in Russia were affected by the problems with freight road transport.

Regional authorities in the northern part of the Lugansk region are interested in a restart of the Lisichansk polypropylene plant. The 100,000 tpa plant has been idle since 2012, after Rosneft acquired the Lisichansk



refinery from TNK-BP. The refinery stopped production in 2012 As it was affected by an increase in excise duties on fuel in Russia and an increase in imports of petroleum products from Belarus, is not taxable. The capacity of the oil refinery at Lisichansk is 6.5 million tpa.

#### **Ukrainian fertilisers & methanol**

Azot at Severodonetsk launched the production of ammonium nitrate in February. Supplies of ammonia to produce ammonium nitrate were delivered by Azot Cherkassy. In the second half of

February the Severodonetsk unit was aiming to produce 17-18,000 tons of ammonium nitrate. Odessa Portside Plant stopped work at one of the two ammonia plants in January due to low profitability of production at current natural gas prices established by Naftogaz.

Lower methanol prices in January resulted in increased imports into Ukraine, rising against December. Azot at Grodno in Belarus was the main supplier followed by Russia. The average cost of methanol purchased in January amounted to \$335 per ton DAF border of Ukraine, recorded in December against \$462 per ton.



Russian methanol in January was imported at \$280 per ton DAF border, which is almost 40% cheaper than a month earlier. The average cost of the Belarusian methanol also decreased by 40% and amounted to \$350 per ton DAF border of Ukraine.

## **Central Asia**

#### Karachaganak gas-chemical project?

Kazakhstan is considering the construction of a gaschemical complex on the Karachaganak gas condensate field, and may particularly increase efforts following the withdrawal of LG-Chem from the Atyrau project. KazMunaiGaz and KazTransGaz have both looked at on technical and economic parameters of building a gaschemical complex the project at the Karachaganak gas processing plant.

Projects at Karachaganak have been considered previously, but agreement proved difficult between the Kazakh state based companies and the international consortium KPO (Karachaganak Petroleum Operating), which is engaged in the development field. Karachaganak oil and gas field located in the northwest of Kazakhstan. The area of the site is 280 square kilometres; the reserves are estimated at more than 1.2 billion tons of oil and condensate and over 1.35 trillion cubic metres of natural gas. Karachaganak Petroleum Operating BV is the operator of the field and will manage the project until 2038.

#### Kazakhstan seeks partner to replace LG Chem

Kazakhstan is looking for a new partner to support the second phase of construction of integrated gas chemical complex in the Atyrau region following the withdrawal of LG Chem from the project. Kazakh organisation United Chemical Company is looking for an international company to finance and support the olefin and polyolefin project at Atyrau, involving 500,000 tpa of polypropylene and 800,000 tpa of polyethylene. LG Chem withdrew from the project in early 2016 due to uncertainty over oil prices.

## **SOCAR** suspends OGPC project

SOCAR has suspended work on the project for the oil and gas processing and petrochemical complex OGPC due to low oil prices. Active work on the project of gas processing and petrochemical complex has



been temporarily frozen due to fluctuations in the world oil market. Should prices rise again SOCAR is ready to resume work on the project.

The OGPC project involves two stages. The first stage in 2020 includes planned commissioning of a gas processing plant with a capacity of 12 billion cubic metres per annum.

Raw materials for processing at GPP have been designated to be sourced from SOCAR's fields Azeri-Chirag-Guneshli, Umid, Babek, and Shah-Deniz. The second stage includes the petrochemical complex, the launch of which is

targeted for 2020. The complex It will produce polyethylene of high and low pressure, polypropylene with a total capacity of 860,000 tpa after been revised downwards from 1.1 million tons. Both project phases could still be launched in 2020, but construction work would need to be revived at some stage this year for this to happen.



## **SOCAR** polymer project

SOCAR and Maire Tecnimont signed an EPC-contract in February for the project to construct a new LDPE plant for the jv SOCAR-Polymer. The contract is worth \$180 million. Maire Tecnimont has been selected as the general contractor; construction will start in 2016 and will be completed in 2018.

Capacity of the new plant is planned at 120,000 tpa. Currently, Maire Tecnimont has been building a polypropylene plant on the territory of Sumgait Chemical Plant Park with a capacity of 180,000 tpa. The contract for €350 million between the parties was signed in April last year. SOCAR Polymer was established by SOCAR, where it holds 51% of shares whilst the remaining 49% is owned by Pasha Holding, Gilan Holding, Azersun Holding.

Russian Petrochemical Prices				
Product	Region/Terms	12/02/2016	5/02/2016	29/01/2016
Roubles per ton (inclusive of VAT)				
Ethylene	Volga	34800-41000	34800-41000	36300-40000
Propylene	FCA Volga	25000-30000	33000-35000	35000-39000
	FCA Siberia	15000-18000	20000-25000	25000-30000
Benzene	FCA North West	42000-45000	42500-44500	42000-44500
	FCA Volga	42500-44000	42500-44000	41000-43000
	FCA Siberia	42000-45000	42000-45000	40000-43000
Styrene	FCA Volga	77000-85000	77000-85000	70000-80000
Methanol	FCA Volga	12500-27000	12500-23600	12500-23600
	FCA Siberia	14000-21500	14000-18500	14000-20500
	CPT Ural	15000-21500	15500-20500	16000-23000
N-Butanol	FCA Volga	50000-53000	50000-53000	50000-53000
	FCA Siberia	42000-43000	42000-43000	42000-43000
	CPT Central	52500-55000	52500-55000	52500-55000
Isobutanol	FCA Volga	45000-50370	40000-50370	40000-50370
	FCA Siberia	41000-42000	41000-42000	41000-42000
	CPT Central	47000-53000	47000-53000	47000-53000
Toluene	FCA North West	35000-35200	35000-35200	35000-35200
	FCA Central	34000-35000	34000-35000	34000-35000
	FCA Siberia	34000-36300	34000-36300	34000-36300
	FCA Volga	32000-34000	32000-34000	32000-34000
Orthoxylene	FCA Central	44000-45000	44000-45000	44000-45000
	FCA Volga	33300-34000	33300-34000	33000-33350
	FCA North West	37050-38000	37050-38000	37050-38000
	FCA Siberia	35000-36000	35000-36000	35000-36000
	CPT Central	41000-42000	41000-42000	41000-42000
	CPT Volga	33300-34000	33300-34000	33000-33350
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	90000-93000	90000-93000	90000-93000
Phenol	EXW Volga	71000-77000	70500-77000	70500-77000
	FCA Volga	71000-77000	71000-74000	71000-74000
	FCA Siberia	71000-77000	71000-75000	71000-75000
	CPT Central	71000-77000	71000-75000	71000-75000
Acetone	FCA Volga	29500-46000	29500-31000	29500-31000
DOP	FCA Volga	94000-104000	94000-95000	91000-92000
МТВЕ	FCA Volga	43500-49800	40000-45000	40000-45000
	FCA Siberia	46000-49800	43000-46000	43000-46000
	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. zl. \$1=3.016. €1 =4.14 Ukrainian hryvnia. \$1 = 22.9 €1 = 24.9: Rus rouble. \$1 = 73.2 €1 = 79.0

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