

# CIREC

## MONTHLY NEWS

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

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

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### MARKET NEWS

- RUSSIAN DOMESTIC BUTANOL SALES RISE 20% IN FIRST QUARTER, 2-EH SALES UP 30%
- RUSSIAN DOMESTIC PHENOL SALES BOOSTED THIS YEAR BY PURCHASES BY KUIBYSHEVAZOT
- ORTHOXYLENE SALES ON RUSSIAN DOMESTIC MARKET UP 13% IN Q1, PX SLIGHTLY DOWN
- RUSSIAN PAINTS MARKET DECLINED BY 1.7% IN Q1 THIS YEAR
- METHANOL EXPORTS FROM RUSSIA TOTALLED 358,000 TONS IN Q1, DOMESTIC SALES 387,200 TONS

### COMPANY NEWS

- PKN ORLEN REDUCES NET PROFIT IN FIRST QUARTER DUE TO OIL SWINGS AND UNIPETROL OUTAGE
- SYNTHOS REACHES AGREEMENT TO PURCHASE EPS BUSINESS FROM INEOS STYRENICS
- GRUPA AZOTY ACHIEVES NET MARGIN OF 20.9% IN Q1 AGAINST 17% IN Q1 2015
- METAFRAX INCREASES REVENUES BY 4.63% IN FIRST QUARTER BUT NET PROFITS FALL BY 52%
- SIBUR'S POLYPROPYLENE PRODUCTION RISES DRIVEN LARGELY BY TOBOLSK-POLYMER

### TRADE NEWS

- CZECH MONOMER IMPORTS CONTINUE TO SUPPORT POLYMER PRODUCTION & EXPORTS
- RUSSIAN CHEMICAL TRADE DEFICIT RISES IN Q1 DESPITE ECONOMIC DOWNTURN
- RUSSIAN PROPYLENE EXPORTS CONTINUE TO RISE DESPITE EXTENDED DOWNTIME AT ANGARSK
- RUSSIAN POLYPROPYLENE EXPORTS DROP TO 96,000 TONS IN Q1 2016, 22% DOWN

### PRODUCTION NEWS

- SLOVNAFT TO START NEW LDPE UNIT AT BRATISLAVA IN COMING WEEKS
- SIBUR RESTARTS ACRYLATE ESTER PRODUCTION AFTER SHUTDOWN AT DZERZHINSK
- RUSSIAN OLEFIN PRODUCTION AFFECTED BY THE ANGARSK OUTAGE BUT STILL UP ON Q1 2015
- SYNTHETIC RUBBER PRODUCTION IN RUSSIA DROPS IN FIRST QUARTER DUE TO LOWER DEMAND

### PROJECT NEWS

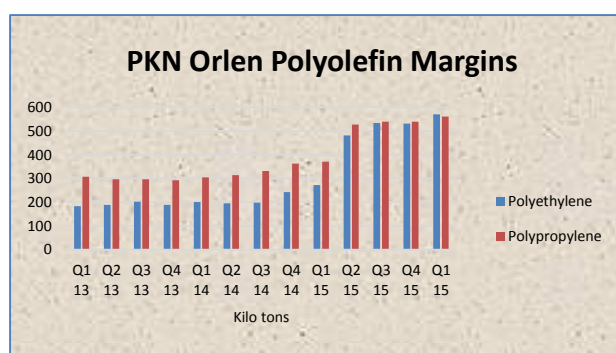
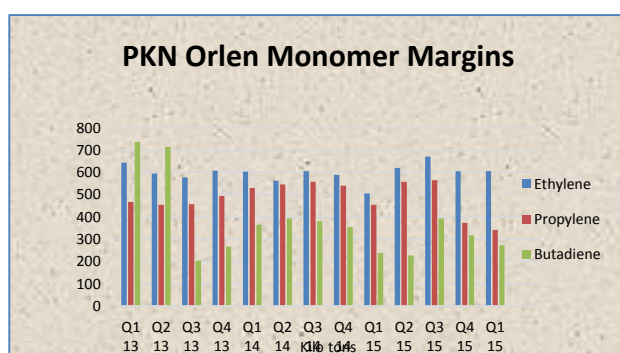
- PTA PROJECTS IN RUSSIA TAKE INCREASED FOCUS, DEPENDENT ON PARAXYLENE SUPPLY
- LUKOIL & SNF TO START CONSTRUCTION OF POLYACRYLAMIDE PLANT AT SARATOV IN MID-2016
- RUSSIAN ETHYLENE PROJECT UPDATE INCLUDING NOVY URENGOY, UFAORGSINTEZ & ZAPSIB-2
- UZBEKNEFTEGAZ UNDERTAKING ETHYLENE EXPANSION PLANS AT SHURTAN GAS CHEMICAL

## CENTRAL & SOUTH EAST EUROPE

### PKN Orlen Q1 2016

PKN Orlen's net profit amounted to zł 337 million in the first quarter of 2016., down from zł 756 million in the same period last year. Fluctuating refining margins were partly responsible to the reduction, coupled with the extended downtime at Unipetrol. PKN Orlen increased crude oil throughput by 11% in the first quarter and capacity utilisation by 2%, and these factors contributed to an increase in total sales by 8%. Due to the need to ensure a stable supply of oil PKN Orlen may try to reduce its dependency on Russia, which is by far the most dominant source. Most of the oil supplied to Plock comes primarily from Russia, as well as Saudi Arabia, Kazakhstan, Norway and the UK.

For refineries in the Czech Republic, crude was supplied in the first quarter from Russia, Algeria, Azerbaijan, Kazakhstan and Libya. By contrast, the Lithuanian refinery in Mazeikiai was supplied mainly from Russia in the first quarter, and also from Algeria, Azerbaijan, Iraq, Kazakhstan and Nigeria.

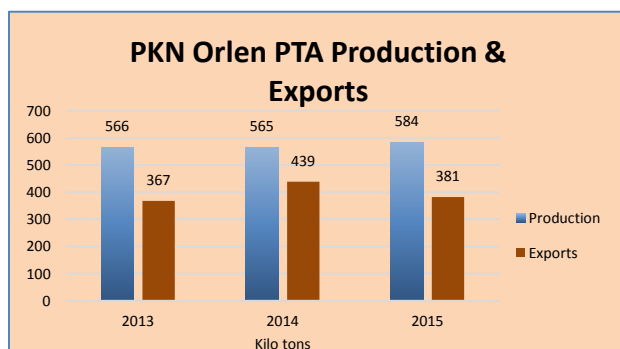


In the downstream division, Orlen achieved an EBITDA of zł 1.755 billion in the first quarter against zł 1.753 billion in 2015. The petrochemical sector tended to offset the weakness in refining. Regarding energy projects, PKN Orlen continued work in the first quarter on the launch of CCGT power unit at Wloclawek (463 MWe) and at the same time is continuing the construction of a similar plant at Plock (596 MWe).

Orlen Group (Poland) Production (unit-kilo tons)		
Product	Jan-Mar 16	Jan-Mar 15
Ethylene	140.5	137.3
Propylene	99.9	98.5
Butadiene	15.6	13.6
Toluene	4.2	2.4
Phenol	11.0	9.0
Polyethylene	97.9	96.7
Polypropylene	68.2	65.1

For the petrochemical sector, margins remained stable for monomers against the first quarter in 2015, but were much higher for polyolefins having started to climb in the second quarter last year. PKN Orlen increased ethylene production at Plock to 140,500 tons in the first quarter against 137,300 tons last year. Production for other petrochemicals at Plock slightly exceeded last year's volumes. Although polyolefin production was only slightly up on 2015 levels the high margins meant that polyethylene and polypropylene were the most profitable products for

Orlen in the first quarter.



### PKN Orlen-PTA

Orlen's PTA production at Wloclawek amounted to 167,000 tons in the first quarter against sales of 168,000 tons. Last year around 65% of Orlen's sales were sent for export, down 78% against 2014. The major export destination for Orlen's PTA is Germany, last year accounting for 279,000 tons of the total exports of 381,000 tons.

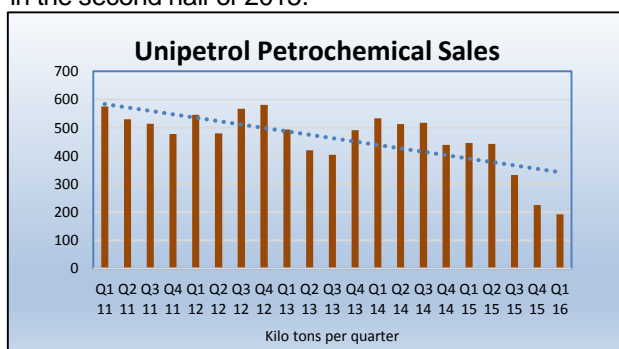
Paraxylene is supplied mostly from Plock for PTA production at Wloclawek and supplemented through small volumes of imports, amounting to 11,204 tons in 2015 and 17,483 tons in 2014. Poland does not export paraxylene.

### Unipetrol Q1 2016

Unipetrol's steam cracker outage was the main cause of the group's lower EBITDA of Kc 559 million in the first quarter in 2016 against Kc 2,897 million in the same period last year. Revenues declined from Kc 23,795 billion to Kc 17,896 billion despite a rise of refinery product sales by 46%. In addition to the cracker outage, which followed the accident on 13 August 2015, Unipetrol undertook a planned outage at its operational units in March. The financial results of the company were helped by the significant increase in refinery sales and higher sales of retail division. Unipetrol's insurance policy should facilitate some compensation for the cracker outage, estimated at around Kc 2.9 billion of lost business in the first quarter alone. Another Kc 4 billion could be claimed for the period in the second half of 2015.

#### Unipetrol Polyolefin Sales (unit-kilo tons)

Product	Q1 16	Q1 15
HDPE	22	86
PP	37	75



Unipetrol's downstream division was affected not only by lower petrochemical production, affecting the group's ability to maximise benefits from strong petrochemical margins, but also by lower refining margins and the effect of inventory revaluation due to the decline in crude oil prices. Unipetrol also recorded higher fixed costs in Ceska rafinérská (after taking over the stake from Eni). Margins for polyolefins helped offset the negative factors in addition to higher refinery product sales after higher refinery utilisation.

#### Czech Petrochemical Imports (unit-kilo tons)

Product	Q1 16	Q1 15
Ethylene	48.9	3.8
Propylene	46.7	5.9
Butadiene	12.7	5.4
Benzene	27.4	25.7

In the refinery part of the downstream division, Unipetrol processed 1.429 million tons of crude in the first quarter in 2016 due to the of acquisition of ENI stake in Česká rafinérská on April 2015 and reliable production at the Kralupy refinery. The sales of refinery products for Unipetrol increased by 46% in the first quarter to 1.538 million tons. The results of petrochemical part of the downstream division were significantly affected by the steam cracker outage, which is already into its tenth month. This had the effect in the first quarter of reducing sales volumes of petrochemicals by 57% to 193,000 tons.

#### Czech Polyethylene Trade (unit-kilo tons)

Exports	Q1 16	Q1 15	Q1 14
LDPE	14.5	16.3	14.5
HDPE	20.3	69.1	57.8
Ethylene Vinyl Acetate	0.3	0.4	0.2
Other Polyethylene	5.3	5.5	5.9
Total	40.4	91.3	78.4
Imports	Q1 16	Q1 15	Q1 14
LDPE	39.4	35.5	31.0
HDPE	34.3	21.2	21.0
Ethylene Vinyl Acetate	2.2	2.1	2.7
Other Polyethylene	8.4	6.9	5.3
Total	84.3	65.6	60.0

The full acquisition by Unipetrol of Česká rafinérská is a major boost to Unipetrol's refining volumes where have risen significantly in the past year. Česká rafinérská and the Czech pipeline company MERO ČR signed an amendment in March concerning transportation tariffs. This covers storage and transportation of crude oil via the IKL and Druzhba pipelines from January 2016 and also new contract for TAL deliveries.

#### Litvinov cracker repairs

Regarding the Litvinov cracker repairs are proceeding to schedule, already the transportation of four new furnaces has been completed. Renovations are expected to be completed by July with a restart in August at around 80% utilisation. Aside the cracker Unipetrol has also proceeded with preparatory works for construction of the new polyethylene unit. The main part of the project will begin in June.

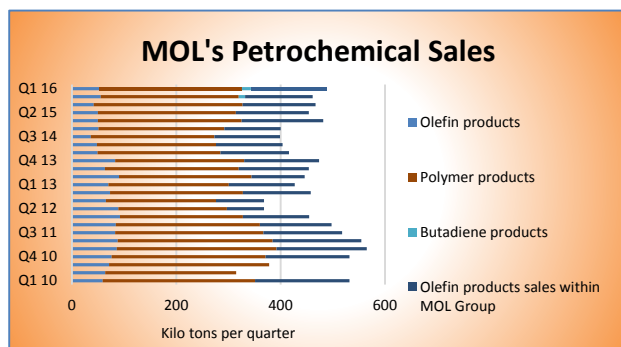
#### Butadien Kralupy shutdown

Butadien at Kralupy underwent maintenance between 10 April and 10 May. The company is based on a JV between Synthos and Unipetrol and operates a butadiene plant with a capacity of 120,000 tpa, in addition to the synthetic rubber facilities which include polybutadiene and butadiene-styrene rubber.

#### MOL-Q1 2016

MOL posted a 165% jump in first-quarter net profit due largely to the downstream divisional performance. The net profit rose to Ft 77.2 billion (\$282 million) from Ft 29.2 billion in the same period last year. MOL's upstream division posted an EBITDA of Ft 42 billion in Q1 2016, 4% lower against Q4 2015 and 30% down on Q1 2015. The division continues to feel the effects from

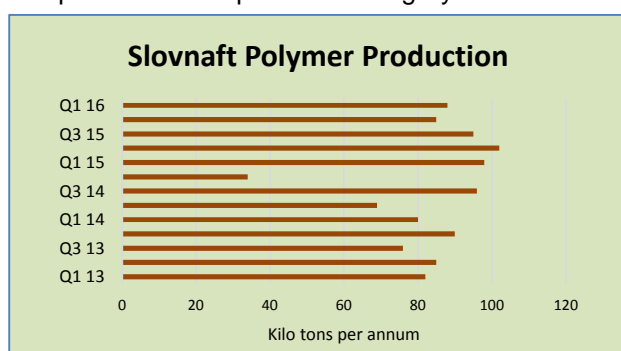
the decline in oil and gas prices, which has only partly been offset by rising production. By contrast to the upstream division, the downstream division delivered a record-high profit for the first quarter of Ft 93 billion which was 22% up.



Whilst lower refinery margins were recorded, petrochemicals represented the main driver of MOL's downstream division. The integrated margin was up 37% in the first quarter against the same period in 2015, amounting to €702 per ton. In addition, higher sales volumes of around 5% had a positive impact on performance.

MOL Group's petrochemical business plays an important role in the company's integrated downstream value chain as 11% of the production of its refineries are destined for the petrochemicals. Whilst profits from petrochemicals have risen sharply in the past eighteen months, production volumes have tended to decline since 2010, even allowing for the start-up of the butadiene plant at Tiszaújváros.

two petrochemical plants in Hungary and Slovakia.



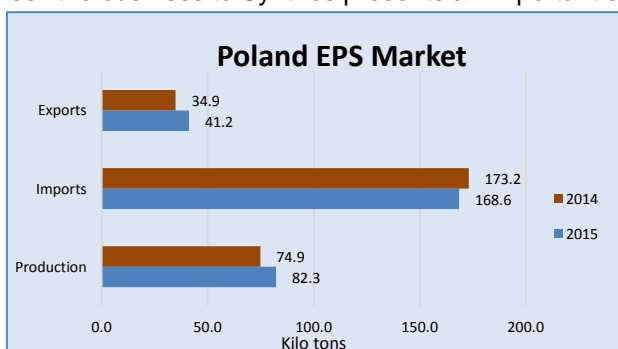
#### Slovnaft LDPE

Slovnaft's new LDPE4 unit at Bratislava will start commercial production in the near future according to MOL. The new unit, which has replaced three out-of-date units with a combined capacity of 180,000 tpa, will increase production flexibility, reduce production costs, and improve

product qualities. It also ensures higher naphtha off-take from the refinery.

#### Synthos purchases styrenics business from Ineos

Synthos has agreed to purchase Ineos Styrenics from Ineos for around €80million. The agreement to sell the business to Synthos presents an important step in the ongoing development of the group's EPS business. Completion of the transaction is likely to occur in the second half of 2016, subject to customary regulatory approvals.



Ineos Styrenics produces EPS for the building, construction and packaging industries at manufacturing sites at Wingles and Ribécourt in France and Breda in the Netherlands. The three production sites are supported by its technology centre at Breda, which is a purpose-built research, development and product testing facility, including a research laboratory and pilot plant facilities. Although Synthos produces EPS at Oswiecim, Poland is heavily dependent on imports for consumption.

Synthos Oswiecim Rubber Exports				
Type	Ktons 2015	Ktons 2014	€/ton 2015	€/ton 2014
SBR	179.8	164.4	1,179.3	1,438.0
Butadiene rubber	10.0	10.5	1,324.0	1,480.0
Nitrile rubber	2.4	10.1	4,522.0	3,454.0
Butyl rubber	1.4	1.1	2,120.0	2,492.0
Halogenated BR	5.3	5.6	2,377.0	2,423.0
Latex	4.3	5.0	1,270.0	1,427.2

#### Synthos Q1 2016

Synthos achieved revenues of zł 1.018 billion in the first quarter in 2016 against zł 974 billion in the same period in 2015. Operating profits rose from zł 137 million in the first quarter in 2016 to zł 175 million in 2015. Net profits fell from zł 92 million to zł 50 million, which was due to lower margins. Synthos was affected in the first quarter by the downturn in the Polish construction industry.



<b>Czech Synthetic Rubber Imports (unit-kilo tons)</b>			
<b>Product</b>	<b>Q1 16</b>	<b>Q1 15</b>	<b>Q1 14</b>
SBR	12.2	9.4	10.1
Butadiene rubber	5.8	6.3	6.3
Isoprene rubber	2.5	2.2	2.2
EPDM	8.2	7.0	7.0
Others	5.0	3.8	3.8
<b>Total</b>	<b>33.6</b>	<b>28.8</b>	<b>29.5</b>

<b>Czech Synthetic Rubber Exports (unit-kilo tons)</b>			
<b>Product</b>	<b>Q1 16</b>	<b>Q1 15</b>	<b>Q1 14</b>
SBR	18.7	15.1	17.2
Butadiene rubber	18.6	17.6	17.8
Others	1.2	0.4	1.9
<b>Total</b>	<b>38.5</b>	<b>33.1</b>	<b>36.8</b>

The main raw materials used by the group include butadiene, styrene, ethylbenzene, butyl acrylate, VAM, ethylene, and benzene and C4 fractions. The Synthos Group was affected in the first quarter 2015 by the ongoing cracker outage at Litvinov which has halted deliveries by pipeline of ethylene, benzene and C4s to Synthos Kralupy. This event had a negative but limited impact on the financial results of the Synthos Group and has led to efforts to seek alternative sources.

The synthetic rubber division is the main sector for Synthos. Sales revenues have declined significantly in the past four years although the company has maintained

relatively good operating profits. The SSBR plant at Oswiecim is being gradually phased in to the rest of the rubber complex.

### Polish tyre production, Q1 2016

Tyre production in Poland rose in the first quarter from 9,108 million pieces to 9,967 million pieces. In terms of tonnage tyre production equated to 127,800 tons in the first quarter against 126,600 tons in the same period last year. The passenger car division is the most important sector in the Poland tyre industry. Global players, such as Goodyear, Michelin, Continental, Bridgestone, and Pirelli, among others are few of the prominent brands operating in Poland's tyre market. Bridgestone operates two tyre manufacturing plants in the country, and Goodyear and Michelin operate one tyre plant each in Poland.

<b>Polish Tyre Production (unit-thousand pieces)</b>		
<b>Sector</b>	<b>Jan-Mar 16</b>	<b>Jan-Mar 15</b>
Car Tyres	8,091.0	7,931.0
Bus & truck Tyres	1,065.0	1,102.0
Agricultural tyres	81.1	75.1
<b>Total</b>	<b>9,237.1</b>	<b>9,108.1</b>

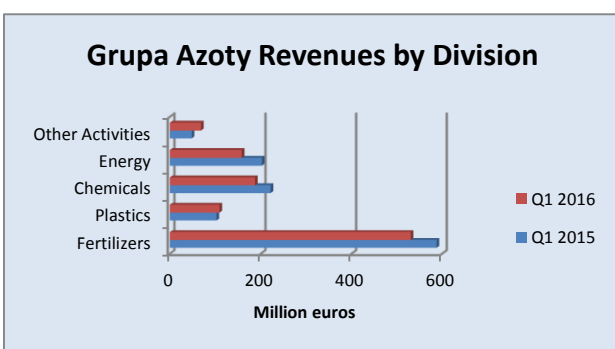
  

<b>Polish Tyre Production (unit-ktons)</b>		
<b>Sector</b>	<b>Jan-Mar 16</b>	<b>Jan-Mar 15</b>
Car Tyres	69.6	67.7
Bus & truck Tyres	50.7	50.2
Agricultural tyres	0.0	7.1
<b>Total</b>	<b>120.3</b>	<b>125.0</b>

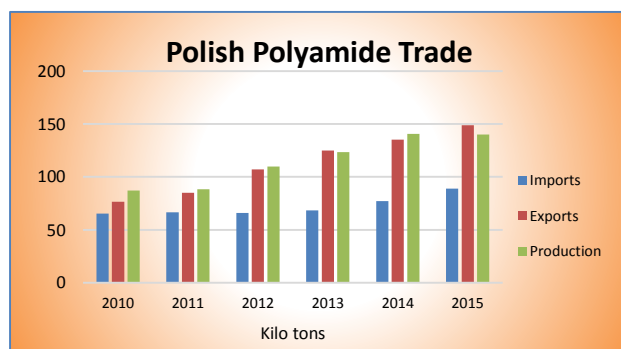
## Chemicals

### Grupa Azoty Q1 2016

Grupa Azoty reported a 1.4% fall in its first-quarter net profit, as falling fertiliser prices outweighed lower gas costs. The group posted a net profit of zł 272 million (\$70.1 million) on sales of zł 2.475 billion, compared against zł 297 million and zł 2.834 billion in the first quarter in 2015. The gas price decline and deterioration of global economic conditions were followed by a decrease in fertiliser prices and related semi-products, mainly urea (down 32%) and ammonia (down 34%).



Grupa Azoty's net profit of zł 307 million matched against the first quarter net profit for 2015 at zł 306 million, but this year the EBITDA margin of 20.9% was higher than in the first quarter in 2015 when it achieved 17%. From the individual product sectors Azoty has struggled this year in pricing for polyamide 6 and caprolactam whilst the fertiliser division improved largely due a 40% reduction in natural gas prices. Grupa Azoty achieved a net profit of zł 691.85 million for the whole of 2015, against zł 265 million in 2014 whilst revenues rose 1% by zł 10.240 billion. Revenues grew by 1% despite the turmoil in market prices and downward pressure from lower prices of crude oil and natural gas. The operating profit in 2015 amounted to slightly more than zł 830 million against zł 303.5 million in 2014.



### Grupa Azoty-Uhde polyamide project

Eiffage Construction is expected to finish the contract for general contracting for the polyamide II project at Tarnow by the end of 2016. Construction started in February and two columns have been installed of 20 metres in height and 25 tons in weight providing the base for two lines. The opening is scheduled for the second quarter of 2017 adding another 80,000 tpa of capacity.

Azoty's construction of a new installation for a polyamide 6 unit was started in September 2015 at Tarnow. Azoty's combined polyamide capacity at Tarnow and Guben currently totals 92,000 tpa and the new unit will raise capacity to 170,000 tpa, including 30,000 tpa of composites. After start-up of Polyamide 11, Grupa Azoty should become the second largest producer of polyamide 6 in Europe.

The new polymerisation plant will use Uhde Inventa-Fischer's two-stage polyamide 6 process, Overproportional Refeeding Process (OPRP®) developed by Uhde Inventa-Fischer. The overall design concept enables the plant to be integrated into the existing industrial complex, thus allowing the use of existing infrastructure as well as the direct supply of the caprolactam feedstock produced at Tarnow.

Poland's polyamide exports totalled 148,673 tons in 2015 of which 92,104 tons was shipped to Germany predominantly composed of polyamide-6 at €1981/ton. Imports of polyamide totalled 88,848 tons in 2016, of which 37,305 tons was sourced from Germany and were predominantly grades other than polyamide-6 at €2474/ton.

### Oltchim Q1 2016

Oltchim at Ramnicu Valcea achieved a gross profit of €1.3 million in the first quarter, compared with a loss of €846,000 in the same period in 2015. The last time the company recorded total profits was in 2006. Turnover was €37.8 million in the first quarter, 9% down on the same period in 2015. This was due to weaker oil prices, although the amount of chemicals sold were higher.

Polish Chemical Production (unit-kilo tons)		
Product	Jan-Mar 16	Jan-Mar 15
Caustic Soda Liquid	85.8	77.1
Caustic Soda Solid	19.7	14.8
Soda Ash	315.2	266.3
Ethylene	140.5	137.3
Propylene	99.9	98.5
Butadiene	15.6	13.6
Toluene	4.2	2.4
Phenol	11.0	9.0
Caprolactam	41.5	43.1
Acetic Acid	1.8	1.9
Polyethylene	97.9	96.7
Polystyrene	14.8	11.1
EPS	22.2	13.6
PVC	73.0	81.9
Polypropylene	68.2	65.1
Synthetic Rubber	51.1	47.4
Ammonia (Gaseous)	722.0	369.0
Ammonia (Liquid)	24.6	365.0
Pesticides	6.0	9.2
Nitric Acid	656.0	621.0
Nitrogen Fertilisers	536.0	535.0
Phosphate Fertilisers	122.3	118.5
Potassium Fertilisers	108.2	86.4

Oltchim Sales Revenues (€ mil)		
Product Group	Q1 16	Q1 15
Petrochemicals	26.0	30.5
Chlorine division	8.9	7.4
Finished Products	1.2	1.3
Oxo alcohols	1.6	1.3
Other	0.4	1.0
Total	38.1	41.4

The EBITDA represented an improvement of €1.2 million compared to the same period last year and €14.2 million before the first quarter of 2013. In the first quarter of 2016 the value of exports and intra-community deliveries totalled €27.4 million and represented 73% of turnover. The main shareholder is the Ministry of Economy, with 54.8% of the shares. Chimcomplex is very interested in purchasing Oltchim, although there is no imminent sign of a deal being done.

### Ciech reports strong first quarter results

In the first quarter of 2016 the Ciech Group increased its EBITDA by 17.6% and amounted to zł 206 million. The EBITDA margin of 25% meant an increase of 1.4% over the same period in 2015. The group was supported by lower prices of energy and raw materials used for soda ash production (natural gas, coal, coke), and additional support was the weakening of the zloty and the Romanian leu. Aside soda ash, Ciech is concentrating on developing its plant protection agent business at Organika Sarzyna.

## RUSSIA

### Russian Chemical Production (unit-kilo tons)

Product	Jan-Mar 16	Jan-Mar 15
Caustic Soda	267.9	297.2
Soda Ash	634.7	790.0
Ethylene	713.7	666.8
Propylene	545.1	503.1
Benzene	315.1	313.4
Xylenes	145.5	153.9
Styrene	183.4	178.6
Phenol	61.7	60.2
Ammonia	4,000.0	3,700.0
Nitrogen Fertilisers	2,577.0	2,100.0
Phosphate Fertilisers	915.0	800.0
Potash Fertilisers	1,877.0	1,800.0
Plastics in Bulk	1,968.0	1,766.0
Polyethylene	432.2	430.8
Polystyrene	137.7	135.0
PVC	211.0	211.2
Polypropylene	360.7	339.8
Polyamide	37.6	34.4
Synthetic Rubber	371.0	412.0
Synthetic Fibres	36.2	31.3

### Russian chemical production, Q1 2016

Russian chemical production increased 3.7% in the first quarter this year, with most products recording higher volumes with the exception of caustic soda and xylenes. Ethylene production totalled 713,700 tons in the first quarter against 666,800 tons in the same period last year whilst benzene increased slightly from 313,400 tons to 315,100 tons.

Xylene production fell from 153,900 tons in the first quarter in 2015 to 145,500 tons in 2016, whilst caustic soda production fell from 297,200 tons to 267,900 tons due to the outage at Sayanskkhimplast. During the first three months of 2016 Russian companies produced about 5.3 million tons of fertilisers, which is 5.4% more than in 2015.

Kazanorgsintez showed good results for the first quarter increasing revenues from 17.212 billion roubles to 20.419 billion roubles, and increasing net profits from 4.745 billion roubles to 6.475 billion roubles. Kazanorgsintez recorded revenue rises for LDPE, HDPE and polycarbonate.

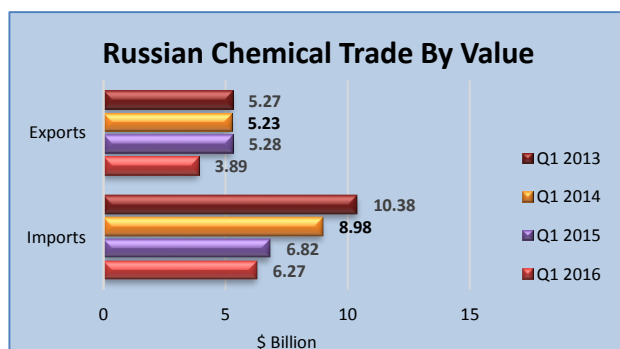
Despite the weakness in the synthetic rubber market Nizhnekamskneftekhim increased revenues from 36.711 billion roubles in the first quarter in 2015 to 38.616 billion roubles in 2016, whilst net profits made a sharp rise from

4.712 billion roubles to 8.661 billion roubles.

In contrast to 2015 not all companies are continuing to report profit rises as the benefits of devaluation may be starting to level off. After achieving a 52% increase in net profits for the whole of 2015 Metafrax reduced its net profit by 10.3% for the first quarter of this year to 1.43 billion roubles, whilst revenues rose by 4.7% to 4.65 billion roubles. Revenues for Volzhskiy Orgsintez were virtually unchanged at 3.808 billion roubles in the first quarter, but the net profit fell from 1.223 billion roubles to 1.052 billion roubles.

### Russian chemical trade deficit widens in Q1 2016

Over the past few years, Russian trade in chemical products has fallen significantly due to the weak economy. Imports have fallen significantly since 2013 whilst exports had seen little change. However, in the first quarter this year Russian chemical exports dropped 27% against the same period in 2015.



The reason for lower export values in 2016 is attributed to predominant commodity nature of Russian chemical exports.

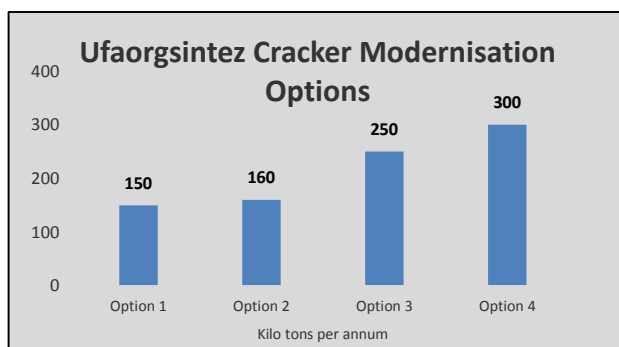
Commodity chemical prices have dropped in line with lower crude and gas prices over the past year thus affecting Russian export values. By contrast the type of higher added value chemical products imported by Russia have for a large part retained

their price levels. The net effect of these trends is that the deficit in Russian chemical trade was larger in the first quarter than in last year. This tends to be the result of the type of exports and type of imports undertaken by Russia rather indicating an improvement in economic activity.

## Russian petrochemical projects

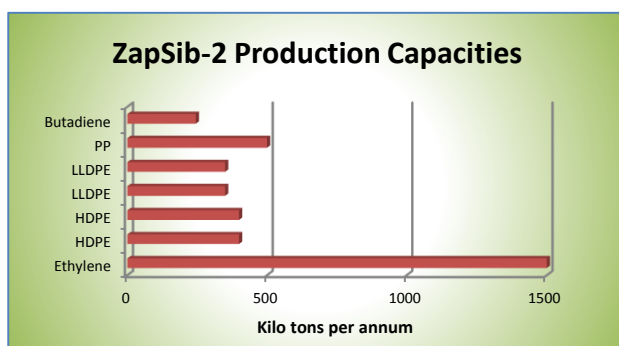
### Russian ethylene project updates

A start-up date for the Novy Urengoy Gas Chemical Complex is still only at the provisional stage of 2018, but time is not a factor in this project. A large part of the infrastructure is being worked on or completed. Gazprom is currently progressing with its investment to construct a railway cargo terminal which is located 80 km east of Novy Urengoy at the station Korotchaev. The terminal should be operational by 2018 including access roads, a loading dock for polyethylene and a pumping station for propane-butane. The plant design of 420,000 tpa of LDPE is intended to serve both domestic and export markets, including around 200,000 tpa intended for China. The raw material for the production of ethylene and polyethylene at the Novy Urengoy Gas Chemical Complex is to be sourced from the Urengoy gas condensate field.



Bashneft has selected Bashgiproneftekhim to develop a feasibility study for the revamp of the cracker at Ufaorgsintez in Bashkortostan. Bashgiproneftekhim is required to analyse several upgrade scenarios as shown in the graphic opposite. If the option to produce 250,000 tpa is selected for example, it could mean that propylene capacity at Ufaorgsintez rises to 128,200 tpa. The largest alternative is to add a new cracker of up to 300,000 tpa, which may provide the optimal scenario but depends on finance. The feasibility study should be ready for delivery after 28 weeks

from the date of signing the contract.



SIBUR's ZapSib-2 project at Tobolsk is progressing to schedule and will consist of the largest and most important project being undertaken by the group, not to mention the whole of Russia. For SIBUR, the project includes an increase in pyrolysis capacity by 1.5 million tpa and polymers by 2 million tpa.

By tripling the production capacity of polymers and doubling the domestic processing of LPGs the project will have a profound effect on SIBUR's

revenues and profitability. The ZapSib-2 complex should reduce exposure to revenue risks that might be associated with the volatility in LPG and energy products, and it could mean that petrochemicals could rise from around 40% to 60%. For ZapSib-2 SIBUR has attracted long-term debt financing, including funding from export credit agencies of \$2.3 billion and credit from the National Welfare Fund worth \$1.75 billion. Another loan of \$210 million has been sourced from the Russian Direct Investment Fund. Fitch expects SIBUR's capex to peak in 2016-2018 and the group to start benefiting significantly from this major investment after 2020.

### Russian LPG Production (unit-kilo tons)

Naphtha sales	Q1 16	Q1 15
SIBUR-Holding	1,534.8	1,471.4
Rosneft	240.6	171
Bashneft	109.7	93.8
Tatneft	115.2	106.9
TAIF	332.8	351.3
LUKoil	419.1	295
Gazprom	375.2	375.1
Surgutneftegaz	119.3	126
Gazprom processing	128.6	334
Others	655.5	360
Total	4,030.8	3,684.5

period in 2015. The return of Stavrolen to full production is the reason for the substantial increase in naphtha deliveries. Around half of the producers do not require purchases or merchant naphtha, buying or accessing naphtha through their integrated refining structures.

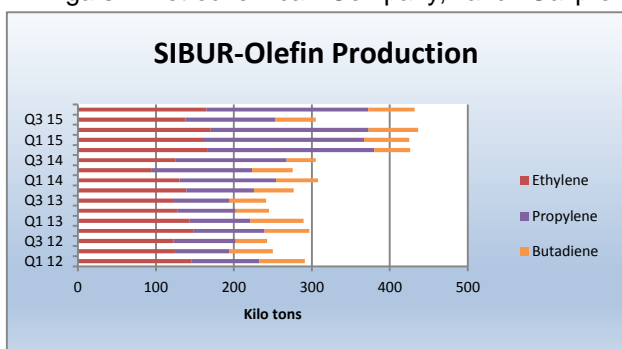
## Russian petrochemical producers & markets

### Russian feedstocks, Jan-Apr 2016

Russian petrochemical plants purchased 389,900 tons in the first four months this year against 237,800 tons in the same



These producers include Ufaorgsintez, linked to the Ufa refineries, Angarsk Polymer Plant, linked to the Angarsk Petrochemical Company, and Gazprom neftekhim Salavat which has its own refinery.

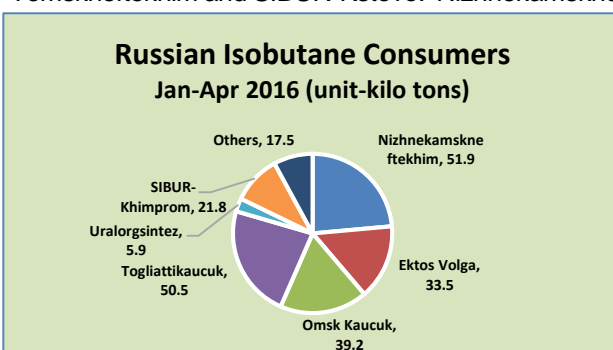


Nizhnekamskneftekhim is integrated through its ownership structure into naphtha access. The ethylene producers which are dependent on the merchant market for naphtha supply include Stavrolen, Tomskneftekhim and SIBUR-Kstovo.

Russian companies shipped nearly 1.37 million tons of natural gas liquids to domestic consumers in 2016, which is 10% more than in the same period in 2015. LPG production in Russia increased from 3.685 million tons in the first quarter to 4.031 million tons in the same period in 2016. SIBUR increased

production from 1.471 million tons to 1.534 million tons due to expansion at Tobolsk-Neftekhim.

From the 1.37 million total sales of gas liquids to the Russian domestic market in January to April this year, petrochemical plants purchased 517,600 tons against 503,500 tons in the same period last year. Most of the petrochemical producers buy gas liquids, but the dominant buyers include the SIBUR producers Tomskneftekhim and SIBUR-Kstovo. Nizhnekamskneftekhim and Gazprom neftekhim Salavat occasionally



enter into the market for gas liquids. SIBUR uses two major types of hydrocarbon feedstock, associated gas and natural gas liquids (NGLs), as well as LPG and naphtha. SIBUR produces NGLs at its own GPPs and GFUs and also purchase them from third parties. LPG and naphtha are produced by SIBUR through fractionation of crude NGL.

For the first four months Russian MTBE producers bought 220,350 tons of isobutane, 23% more than in the same period in 2015.

Consumers in April included Omsk Kaucuk with 10,730 tons, Togliattikaucuk 8,880 tons, Nizhnekamskneftekhim 7,850 tons, EKTOS-Volga 6,510 tons, SIBUR-Khimprom 5,190 tons, Ufaneftkhim 1,360 tons and Uralorgsintez 680 tons.

Russian Propylene Domestic Sales (unit-kilo tons)		
Producer	Jan-Mar 16	Jan-Mar 15
Angarsk Polymer Plant	8.3	21.5
Omsk Kaucuk	0.8	3.4
SIBUR-Kstovo	38.5	23.1
Akriat	0.4	1.7
LUKoil-NNOS	71.5	41.8
Gazprom neftekhim Salavat	0.3	0.8
Nizhnekamskneftekhim	0.0	2.0
SIBUR-Khimprom	0.0	0.0
Tobolsk-Polymer	0.0	4.7
Ufaorgsintez	0.0	2.8
Total	119.9	101.8

Source: Chem-Courier

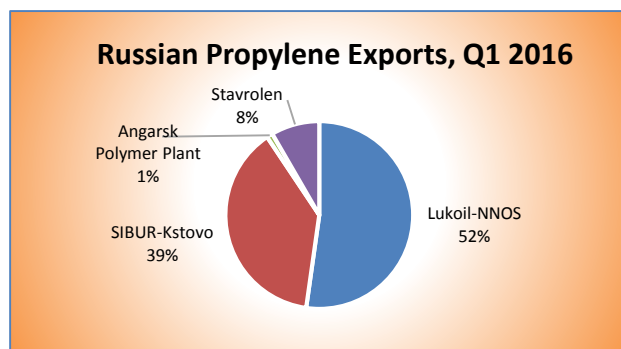
#### Russian olefin market, Jan-Mar 2016

Russian ethylene production totalled 713,700 tons in the first quarter against 666,800 tons in the same period in 2015. Stavrolen at Budyennovsk produced 74,900 tons in January to March 2016 against zero in the same period in 2015, as the plant was down for major maintenance, but the restart was offset partly by the outage at Angarsk Polymer Plant after an accident in early February.

Propylene production amounted to 567,600 tons in the first quarter in 2016 against 503,100 tons. Angarsk Polymer Plant even managed to produce more

propylene than in the first quarter last year, whilst Stavrolen produced 22,000 tons in the period January to March 2016. Lukoil-NNOS at Nizhniy Novgorod increased production to 78,500 tons in the first quarter in 2016 from 41,400 tons in 2015 following expansion and modernisation.

In the first quarter exports of propane-propylene fractions totalled 23,300 tons, 34% higher than the same period in 2015. Propylene monomer exports increased 1.7 times in March over February, despite the outage at Angarsk, and amounted to 21,100 tons. Moreover, Lukoil-NNOS boosted propylene exports by 28% over



February to 8,400 tons and SIBUR-Kstovo increased shipments 2.8 times to 3,500 tons. In the first quarter propylene exports totalled 44,300 tons which was 3.4 times higher than in the same period last year.

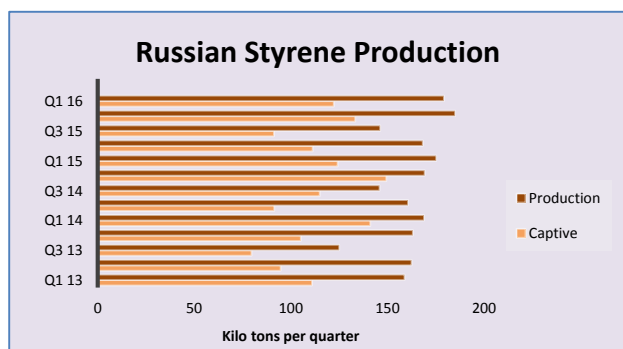
#### Russian styrene, Jan-Mar 2016

Russian styrene production totalled 179,159 tons in the first quarter against 185,019 tons against 175,178 tons in the same period last year.

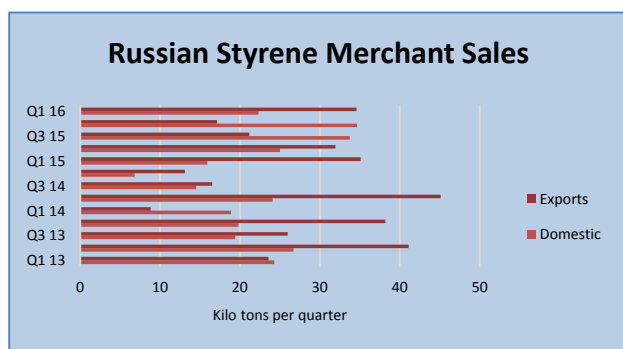
Styrene production achieved record volumes in

the fourth quarter last year of 185,019 tons reflecting that Russian plants are operating at full capacity. Whilst domestic merchant sales and exports have fluctuated in recent years, captive usage of styrene has increased gradually. This has been particularly the case at Nizhnekamskneftekhim, which is Russia's largest producer and which now operates four units for polystyrene.

Regarding export activity Russian shipments of styrene totalled 34,592 tons in the first quarter this year against 35,100 tons in the same period in 2015. This year Angarsk Polymer Plant has been forced to suspend styrene production, which it uses for its own EPS production and exports the remainder. Gazprom neftekhim Salavat is the main Russian exporter, accounting for 25,500 tons in the first quarter against 33,100 tons in the first three months in 2015. Major export destinations include Finland and Turkey.



In addition to exports, Gazprom neftekhim Salavat is the largest supplier of merchant styrene on the domestic market, most of which is shipped to Plastik at Uzlovaya which is the only non-integrated domestic plant for the production of styrene. Plastik was formerly part of SIBUR, and bought styrene from SIBUR-Khimprom but is now relying more on Salavat. Gazprom neftekhim Salavat has expanded ethylbenzene production capacity this year, but it remains unclear whether Plastik will benefit from this expansion in supply.



Domestic styrene prices have risen several times already this year, helped by the rouble and then the outage at the Angarsk Polymer Plant which started in February. As a result, Russian consumers are considering the alternative sources of raw materials, although it may be difficult to find cheaper imports. Over the past few years, domestic consumers have been resigned to the fact that the cost calculation for the internal market is based on the export alternatives. The devaluation of the rouble in the past year has further complicated domestic styrene pricing. Market fundamentals

point towards a further tightening of supply on the Russian market, possibly indicating the need for debottlenecking.

## Bulk Polymers

#### Russian polyethylene, Jan-Mar 2016

Russian polyethylene production amounted to 445,500 tons in the first quarter against 430,800 tons in the same period last year. HDPE production amounted to 225,200 tons against 227,300 tons in 2015, whilst LDPE production fell from 174,000 tons to 162,500 tons. The fall in LDPE production was due to the enforced outage at Angarsk Polymer Plant.

Russian Polyethylene Production (unit-kilo tons)		
Producer	Jan-Mar 16	Jan-Mar 15
Angarsk Polymer Plant	6.4	20.6
Kazanorgsintez	187.9	190.9
Stavrolen	40.0	30.8
Nizhnekamskneftekhim	63.9	64.7
Gazprom n Salavat	26.0	36.1
Tomskneftekhim	95.6	63
Ufaorgsintez	25.7	24.7
Total	445.5	430.8

LLDPE production was carried out by Nizhnekamskneftekhim in the first quarter and amounted to 22,300 tons. The Ministry of Industry and Trade of Russia has rejected the initiative placed by Nizhnekamskneftekhim to apply import duties on LLDPE. The Ministry of Industry and Trade states that as the sole supplier of LLDPE Nizhnekamskneftekhim would be the main beneficiary and that consumers would not be better off.

The Ministry of Industry and Trade stated, however, that will reconsider duties on LLDPE after the start of the ZapSib-2 complex at Tobolsk in 2020. At present Nizhnekamskneftekhim is able to satisfy the full

Russian market by volume, but not necessarily by quality or price.

Regarding recent production outages for polyethylene, Kazanorgsintez resumed LDPE operations in May after an unplanned shutdown following an accident. Stavrolen resumed production on 13 May at the HDPE plant at Budyennovsk after stopping on 5 May. The capacity of the Stavrolen's HDPE plant is 300,000 tpa, but is running below capacity.

Russian Polypropylene Production (unit-kilo tons)		
Producer	Jan-Mar 16	Jan-Mar 15
Ufaorgsintez	29.9	31.7
Stavrolen	29.2	28.9
Moscow NPZ	32.2	28.4
Nizhnekamskneftekhim	54.6	53.7
Polyom	49.7	49.0
Tomskneftekhim	35.6	35.0
Tobolsk-Polymer	129.5	113.1
Total	360.7	339.8

#### Russian polypropylene, Jan-Mar 2016

Russian polypropylene amounted to 360,700 tons in the first quarter, 6% up on the same period in 2015. Tobolsk-Polymer produced 129,500 tons in the first quarter against 113,600 tons in January to March 2015, whilst Polyom at Omsk increased production from 49,000 tons to 49,700 tons. Nizhnekamskneftekhim produced 54,600 tons in January to March 2016 against 53,700 tons in 2015 and Tomskneftekhim remained unchanged at 35,600 tons.

In the first three months of 2016 Russian polypropylene exports amounted to 96,100 tons 22% down against the same period last year when they totalled 122,500 tons. In March, Russian producers exported 38,700 tons against 30,300 tons in February. Tobolsk-Polymer is the largest Russian exporter, accounting for 56% of shipments in the first quarter. The key export destinations include the markets of China, Belarus and Turkey.

SIBUR Polypropylene Sales (unit-kilo tons)		
Sales	Jan-Dec 15	Jan-Dec 14
Exports	182.8	154.2
Domestic Sales	339.3	239.4
Total	522.0	393.7

SIBUR benefited significantly in 2015 from the polypropylene sales and production conducted by Tobolsk-Polymer. Polypropylene sales increased by volume in 2015 to 522,000 tons from 393,700 tons in 2014, due to the increased volumes coming out of Tobolsk. In financial terms, polypropylene revenues increased from 9.469 billion roubles in 2014 to 16.376 billion roubles in 2015, although the gap is smaller when taking the devaluation into account. The Tobolsk plant has also allowed SIBUR to reduce polypropylene: purchases from third parties, mostly the Moscow plant.

Russian PVC Production (unit-kilo tons)		
Producer	Jan-Mar 16	Jan-Mar 15
Bashkir Soda	63.9	63.9
Kaustik	23.7	23.6
RusVinyl	77.7	54.9
Sayanskkhimplast	35.3	56
Total	200.6	198.4

#### Russian PVC market, Jan-Mar 2016

Russian PVC production totalled 200,600 tons in the first quarter this year against 198,400 tons in the same period in 2015. The rise in production by RusVinyl from 54,900 tons in the first quarter in 2015 against 77,700 tons in the same period in 2016 was offset by the decline of 37% by Sayanskkhimplast to 35,300

tons in the first quarter this year. At Sterlitamak Bashkir Soda produced 63,900 tons in the first quarter, 9% up on last year.

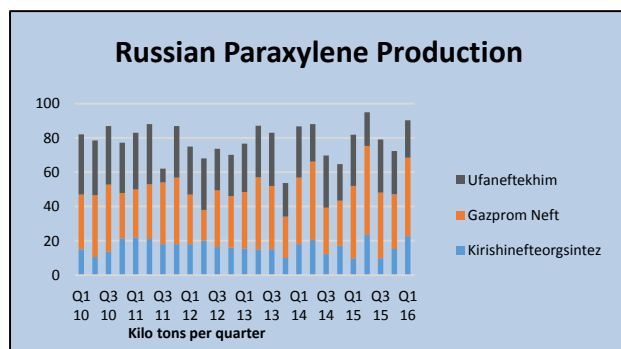
Kaustik at Volgograd started scheduled maintenance on 13 May, expected to last until 31 May. RusVinyl is planning to undertake a shutdown in September whilst Bashkir Soda expects to operate uninterrupted during 2016. PVC production in Russia rose 1% in the first quarter this year to 200,600 tons.

### Russian polycarbonate Jan-Mar 2016

In the first three months of 2016 the production of polycarbonate in Russia increased by 7% to 18,600 tons. Despite the surplus of material in the market, Kazanorgsintez is maintaining high capacity utilisation. Most of the production is concentrated on sheet extrusion, which corresponds to the structure of consumption of the Russian market. 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. In the first quarter this year polycarbonate revenues accounted for 12.7% of total revenues for Kazanorgsintez. Revenues from the sale of polycarbonates for the first quarter 2016 increased by 22.7% due to the increase in sales prices and increased volume.

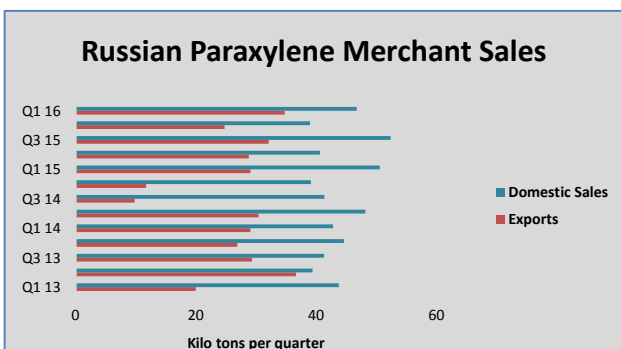
## PTA-PET Chain



### Russian paraxylene, Q1 2016

Russian paraxylene production totalled 90,000 tons in the first quarter this year. Paraxylene sales on the domestic market amounted to 46,800 tons against 50,600 tons in the first quarter last year whilst exports rose from 29,100 tons to 37,600 tons.

Domestic sales of paraxylene have increased in the last few years due to an increase in PTA production at Polief, but may have probably peaked until new capacity for PTA is added. Export activity has revived in recent quarters as refiners take advantage of higher margins for paraxylene over orthoxylene.



### SIBUR-Safpet PTA projects

SIBUR is considering expanding the capacity of the PTA plant at Polief from 240,000 tpa to 350,000 tpa. The key consideration is whether SIBUR can agree the extra supply of paraxylene from Bashneft. In view of the cancelled RusPETF project at Ufa, which was intended to consume paraxylene from Ufaneftekhim, Bashneft is more

willing to consider commitments to SIBUR.

In Tatarstan, the Safpet project is contingent on the development of the aromatics and paraxylene unit at the Taneko refinery at Nizhnekamsk which is under construction. Creating a new PTA production site at Safpet in Tatarstan will also be connected to the PET project, and any surplus PTA to be sold on the merchant market replacing possible imports. Safpet intends to invest around 3.1 billion roubles in the project of its own funds, supported by around another 700 million roubles as a loan.

Currently the zero rate of import duty on PTA helps Russian importers and the duty rate will remain in place up to 31 December 2017. The import duty of 0% for PTA was established by the Eurasian Economic Union for the period from 2 September 2014 to 31 December 2015 inclusive, coming down from 5%. Other members of the Eurasian Customs Union include Belarus (which also imports PTA), Kazakhstan and



Armenia. After 2017 the continuation of the zero rate will depend on what progress has been made on PTA projects.

### Russian PET project updates

Meetings between Chinese investors and the Kabardino-Balkaria administration have taken place recently regarding the PET and PTA projects at Nalchik. The Etana project involves a total capacity of 1.5 million tpa, broken down into stages of 500,000 tpa by 2018 and the remaining 1.0 million tpa by 2020. Some reports have expressed doubts about the necessity of this project, noting that the entire demand of the Russian market of PET is less than 500,000 tpa. However, due to Chinese participation in the project most of the production is expected to be targeted on the Chinese market.

To date the Kabardino-Balkaria administration and the Chinese partners have agreed a roadmap or general outline of the project. The signing of the contract is scheduled for August-September this year,

Russian PET Projects		
Company	Location	Capacity (ktpa)
Safpet	Tatarstan	250
Etana	Kabardino-Balkaria	1500
Ivregionsintez	Ivanovo	170

and the beginning of the construction process in the fourth quarter. The first phase of the project is expected to focus on engineering, transport and energy infrastructure. The Chinese partners include China Petroleum Technology and Development Corporation (CPTDC) and China Kunlun Contracting and Engineering Corporation (CKCEC).

For the Ivanovo PET project, which does not include PTA, the development of the local Industrial Park Vichuga represents is the most important economic and strategic project for the region in the past three decades. Due to the existing industrial profile in the textile and clothing industry of the Ivanovo region has sufficient human resources to utilise this resource base. In addition to the PET plant under construction at Vichuga, a recycling plant for 50,000 tpa is also planned to be constructed. The Industrial Park Vichuga is part of the technological infrastructure of the innovation of textile industrial cluster.

### Russian MEG, Jan-Mar 2016

MEG sales on the domestic market totalled 28,000 tons in the first quarter this year, of which around 20,000 tons was bought by Polief. Figures were largely unchanged from last year. Smaller domestic consumers of

Russian MEG Market (unit-kilo tons)		
	Jan-Mar 16	Jan-Mar 15
Exports	30.2	18.7
Imports	9.8	0.0
Domestic	31.2	28.2

MEG include BaltTechProm which purchased 597 tons in March and Obninskorgsintez which bought 288 tons.

Until the development of the PET industry in Russia most of the MEG production was exported, but now the market is considerably more balanced. SIBUR-Neftekhim supplied most of the shipments on the domestic market in the first quarter, whilst also

being the largest exporter.

### Nizhnekamskneftekhim-MEG upgrade

Nizhnekamskneftekhim has launched a cleaning unit of ethylene glycol in the installation of MEG-1 at the ethylene oxide plant. The company has carried out pilot tests on checking if the quality of ethylene glycol is suitable for the manufacturers of synthetic fibres and PET. Glycol production at Nizhnekamskneftekhim started in 1980 with a capacity of 63,000. During this time, production capacity was increased from 63,000 tpa which has been since expanded to 110,000 tpa. In October 2015 Nizhnekamskneftekhim acquired assets from Petrokam which has expanded MEG capacity to 170,000 tpa.

According to Chem-Courier, Exports amounted to 30,150 tons in the first quarter this year against 31,196 tons in January to March 2015. Nizhnekamskneftekhim exported 11,290 tons in the first quarter, whilst using most of its production for captive consumption in ant-freeze, etc. Important export destinations for Russian MEG exports include Belarus and Lithuania.

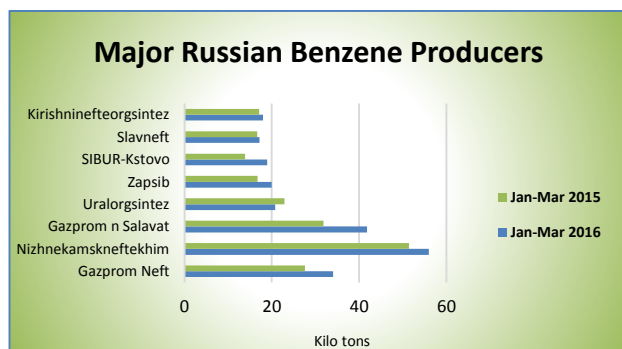
MEG imports amounted to 5,630 tons in March, of which 5,100 tons was supplied from Saudi Arabia. All product of Saudi Arabia was purchased by TD Ecopolymer. At the same time Senezh purchased 528

tons from the Indian market. The average cost of monoethylene glycol foreign production was \$700/ton DAF Russian border. Imports amounted to 9,823 tons in the first quarter whilst nothing was imported in the same period last year.

## Aromatics

## Russian benzene market, Jan-Mar 2016

Russian benzene production totalled 321,500 tons in the first quarter this year against 306,200 tons in the same period in 2015. Whilst Angarsk Polymer Plant reduced production from 19,600 tons to 9,300 tons, increases were noted for both Gazprom Neft at Omsk and Gazprom neftekhim Salavat.



Total benzene sales, including petrochemical and coke grades, on the Russian domestic market totalled 207,260 tons in the first quarter in 2016 against 209,906 tons in the same period last year. The largest suppliers to the domestic market include Gazprom Neft at the Omsk refinery followed by SIBUR-Kstovo, Uralorgsintez, Kirishi, etc. Falls in deliveries were noted in February and March at Angarsk Polymer due to the ongoing cracker outage which is expected to be resolved in the next few weeks.

The major changes on the consumption market have seen Kuibyshevazot reducing its purchases from 41,672 tons in the first quarter in 2015 against 26,856 tons in the same period in 2016. The decline was attributed to usage of alternative feedstocks. Nizhnekamskneftekhim also reduced merchant benzene purchases from 17,677 tons in January-March 2015 to 8,162 tons in 2016 due to its increased production.

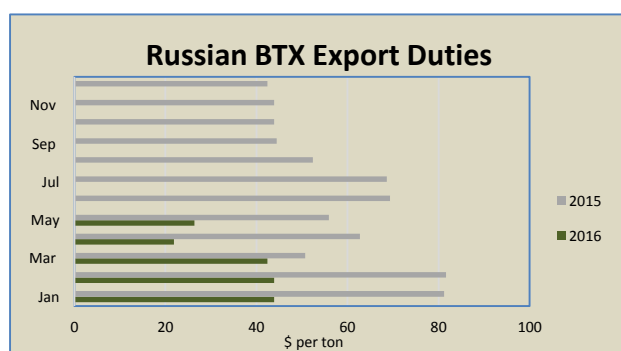
Russian Caprolactam Production (unit-kilo tons)		
Producer	Jan-Mar 16	Jan-Mar 15
Kuibyshevazot	48.7	44.4
Shchekinoazot	15.3	14.5
SDS Azot	28.5	30.0
Total	92.5	88.9

Source: Chem-Courier

Increases were noted this year for other caprolactam producers Azot at Kemerovo, which bought 28,082 tons against 26,680 tons in the first quarter in 2015, and Shchekinoazot which purchased 14,328 tons against 11,551 tons. Other consumers recording an increase included Kazanorgsintez which increased from 11,709 tons to 14,837 tons, and SIBUR-Khimprom which increased from 21,992 tons to 27,998 tons.

## Gazprom neftekhim Salavat-benzene plant modernisation

Gazprom neftekhim Salavat is working on improvements for benzene production and aims to complete the process during 2016. The project involves the introduction of a new scheme to increase the load of cold unit, whilst also increasing the extraction of hydrogen, ethane, and methane. The company aims to increase the production of benzene, while maintaining the concentration of hydrogen in the hydrodealkylation unit. In the first quarter in 2016 Gazprom neftekhim Salavat produced 41,849 tons of benzene against 31,900 tons in the same period last year.



## Export duties on aromatics

The export duty on aromatic hydrocarbons increase by 20.5% in May from \$21.9 per ton in April to \$26.4 per ton. In March, the export duty rate was \$15.8 per ton. In February, shipments of benzene, xylenes and toluene were shipped at \$20.8 per ton. In January, the rate of duty amounted to \$29.3 per ton, while the previous year it reached \$81.6 per ton.

## Russian xylenes , Jan-Mar 2016

Xylene production amounted to 144,700 tons in the first quarter against 151,000 tons in the same period in 2015. Orthoxylene sales on the domestic market and the export market both rose this year. According to Chem-Courier, in the first quarter orthoxylene sales on the domestic market totalled 33,700 tons against 27,600 tons in the same period in 2015, whilst exports rose 50% to 22,800 tons. Orthoxylene sales were helped in the first two months of 2016 by higher demand from application sectors such as paints and explosives, although market numbers are gradually realigning

with 2015 levels. Paraxylene sales on the domestic market amounted to 46,800 tons against 50,600 tons in the first quarter last year whilst exports rose from 29,100 tons to 37,600 tons.

<b>Russian Toluene Production (unit-kilo tons)</b>		
<b>Producer</b>	<b>Jan-Mar 16</b>	<b>Jan-Mar 15</b>
Kinef	6.7	5.9
Gazprom n Salavat	3.4	6.2
Slavneft-Yanos	14.8	10.6
LUKoil-Perm	5.3	2.7
Gazprom Neft	23.7	27.4
RN Holding	15.2	10.8
Ufaneftekhimi	10.9	14.3
Others	4.4	10.2
<b>Total</b>	<b>84.4</b>	<b>88.1</b>

#### **Russian toluene sales, Jan-Mar 2016**

Russia produced 32,360 tons of toluene in March, 26% up on February. According to Chem-Courier production for the first quarter totalled 84,370 tons, 10% down on the same period in 2015. At the same time merchant rail deliveries on the domestic market rose from 30,600 tons to 40,600 tons, attributed to increased demand from fuel/lubricant and explosive manufacturers. The three largest producers include Gazprom Neft from the Omsk refinery, Rosneft's Ryazan refinery and Slavneft at Yaroslavl. Most of the buyers purchase toluene in small quantities.

#### **Russian phenol, Jan-Mar 2016**

Phenol production in Russia amounted to 60,800 tons in the first quarter against 60,600 tons in the same period last year. For the first quarter Russian phenol sales on the domestic

market amounted to 31,700 tons against 22,700 tons in the same period in 2015.

Whilst urea-formaldehyde producers represent the largest application for phenol the largest individual buyer this year has been Kuibyshevazot which has been purchasing phenol for caprolactam production. According

<b>Russian Phenol Market Sales by Supplier (unit-kilo tons)</b>		
<b>Producer</b>	<b>Jan-Mar 16</b>	<b>Jan-Mar 15</b>
Novokuibyshevsk PC	12.4	10.2
Kazanorgsintez	3.1	2.5
Ufaorgsintez	15.9	9.6
LUKoil-VNPZ	0.2	0.0
Borealis	0.1	0.4
<b>Total</b>	<b>31.7</b>	<b>22.7</b>

to the company's annual report in order to ensure the stabilization of the hydrocarbon feedstock Kuibyshevazot has adopted a policy of increasing the number of suppliers and long-term contracts.

This has meant that for the production of caprolactam the company has implemented a programme of partial transition to an alternative feedstock phenol. After Kuibyshevazot the next largest buyers include Metadynea and Uralkhimplast, both of which use phenol in the production of phenol-formaldehyde resins. Other important consumers include

Sterlitamak Petrochemical Plant which uses phenol in the production of anti-oxidants.

## **Synthetic Rubber**

<b>Russian C4 Purchases (unit-kilo tons)</b>		
<b>Consumer</b>	<b>Jan-Apr 16</b>	<b>Jan-Apr 15</b>
Omsk Kaucuk	13.5	28.6
Nizhnekamskneftekhim	59.2	43.1
Togliattikaucuk	54.6	51.2
Sterlitamak Petrochemical	0.4	1.4
<b>Total</b>	<b>127.7</b>	<b>124.2</b>

Source: Chem-Courier.ru

#### **Russian C4 sales, Jan-Mar 2016**

Nizhnekamskneftekhim increased production of synthetic rubber by 4% in the first quarter this year to 166,000 tons. The company has been required to increase its purchases of C4s, rising from 43,100 tons in the first four months in 2015 to 59,200 tons in the same period last year. Synthetic rubber producers have been forced to import more C4s whilst the cracker at Angarsk Polymer Plant has been idle waiting for equipment parts to be delivered. Butadiene prices have been affected by the outage In April Kazanorgsintez

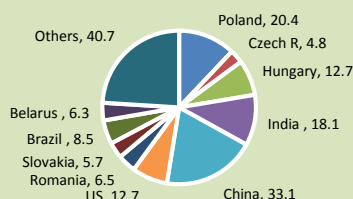
increased C4 prices by 15% to 38,000 roubles per ton whilst Ufaorgsintez raised prices 6% to 34,000 roubles per ton.

#### **Nizhnekamskneftekhim-isobutylene**

Nizhnekamskneftekhim is currently working on an installation of equipment in the dehydrogenation of isobutane to isobutylene. Production of the four pieces of equipment were organized at the Dzerzhinsk plant of chemical engineering and will be delivered by 2016. The capacity of the dehydration installation is 160,000 tpa. Nizhnekamskneftekhim uses isobutylene in the production of isoprene. The production of isoprene through isobutylene and formaldehyde at Nizhnekamskneftekhim began in 1981 and in 2006 the company

fully mastered the one-step synthesis method. This allows the company to obtain high polymerization monomer purity with the concentration of the basic substance of more than 99%.

### Russian Synthetic Rubber Exports (Jan-Feb 2016, unit-kilo tons)



### Russian synthetic rubber market Q1 2016

Russian synthetic rubber exports declined in both volume and by price per ton in the first quarter this year. Prices per ton in the first quarter were over half of the levels being recorded in 2013, and since then each year prices have fallen. Butadiene prices also fell this year, but only marginally against 2015 and thus profit margins on rubber exports are much reduced.

Russian synthetic production totalled 371,000 tons in the first quarter against 412,000 tons in the same period last year. The reduction was largely attributable to weak demand both in domestic and export markets. Rubber usage in the production of tyres rose in the first quarter but not all tyre producers buy rubber from domestic producers.

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

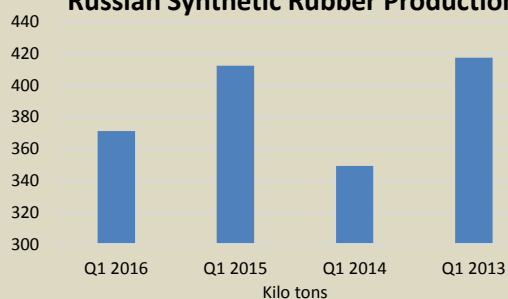
Tyre category	Jan-Mar 16	Jan-Mar 15
Car Tyres	80.5	75.7
Lorry tyres	66.0	68.3
Agricultural tyres	36.3	33.6
Total	182.8	177.5

The tyre industry has benefited generally from the devaluation of the rouble, although the first quarter has not been successful for some manufacturers. The main achievement for tyre manufacturers in 2015 was to establish export links at the expense of the domestic market. In terms of domestic sales, the tyre market in Russia fell by an estimated 17% in 2015 to 36.74 million pieces and is projected to drop by another 6% in

2016. Consumption of passenger tyres fell by 17% in 2015 to 28.44 million units, whilst winter tyres fell less than the summer. Tatneft reduced tyre production by 21.5% in the first quarter this year in passenger and truck tyres.

Tyre manufacturer Kordiant believes that the market is entering a phase of pent-up demand in the sale of winter tyres has fallen for three consecutive years. The devaluation of the rouble severely reduced import volumes in 2015, reducing imports of car tyres by 31% compared to 2014 and totalled 13.76 million units.

### Russian Synthetic Rubber Production



Production increased by 9% in 2015 to 36.5 million units, of which almost half went to export: mainly in Germany, Finland and the Czech Republic.

### Sterlitamak rubber plants 2015

On 28 April Sintez-Kaucuk at Sterlitamak (controlled by the group TAU-Neftekhim) suffered an accident at its rubber plant, injuring three staff but no fatalities. The accident has resulted in a far more intensive examination of safety practices for the workers at the plant and Sintez-Kaucuk has been fined by the regional government.

### Russian Chemical Commodity Exports

Product	Jan-Mar 16 Kilo tons	Jan-Mar 16 USD Mil	Jan-Mar 15 Kilo tons	Jan-Mar 15 USD Mil
Ammonia	859	242	800	372
Methanol	333	60	358	97
Nitrogen Fertilisers	3,009	667	2,662	691
Potash	3,090	674	3,947	1,057
Mixed Fertilisers	2,244	533	2,459	636
Synthetic Rubber	262	293	241	365

Sintez-Kaucuk at Sterlitamak recorded a net profit of 176.7 million roubles in 2015, 47% higher than in 2014 when the profit was 120 million roubles. The company's revenue increased by 16%, to 13.8 billion roubles. Accounts receivable increased from the company 1.71 billion to 1.97 billion roubles, and

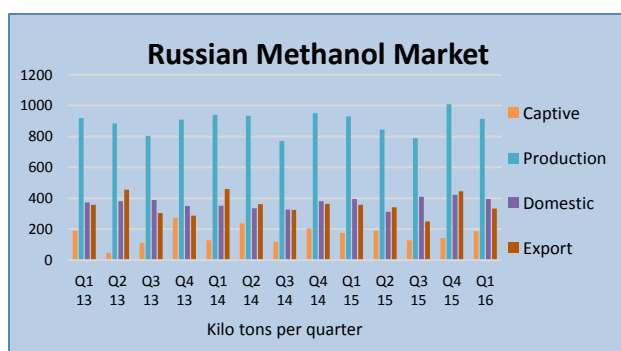
accounts from 2.38 billion to 2.40 billion roubles.



Sterlitamak Petrochemical Plant achieved a net profit of 80.07 million roubles in 2015, 1.7 times less than in 2014. SNHZ Revenues increased by 17.8% whilst the cost of sales increased by 17.9% and amounted to 6.26 billion roubles. The gross profit rose 17.4% to 1.13 billion roubles, whilst the operating profit rose 35.2% to 658.45 million roubles. Revenues fell from 2.16 billion to 1.96 billion roubles. Sterlitamak Petrochemical Plant The only enterprise in Russia for the production of phenolic antioxidants Agidol.

TAU Neftekhim produces polyisoprene rubber of different grades and butadiene-styrene copolymer rubbers from the Sintez-Kaucuk division, whilst the Sterlitamak Petrochemical Plant division produces phenolic antioxidants, MTBE and the production of catalysts. The synthetic rubber sector provides 80% of the company's revenues and MTBE 5%. Around 50% of production is exported. The company sells around 2,000 tons per month of butadiene polymerisation grade.

## Methanol

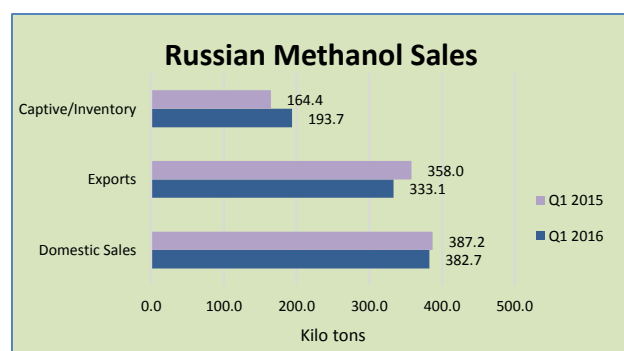


### Russian methanol market overview 2016

Market fundamentals for methanol in Russia have undergone little change in the past few years, the data for domestic sales, exports and captive consumption differed only slightly in the first quarter this year against the same period in 2013.

The addition of the new producer last year at Mendelevsk in Tatarstan has provided more product for the domestic market, but volumes remain relatively small and have not impacted significantly.

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. Methanol

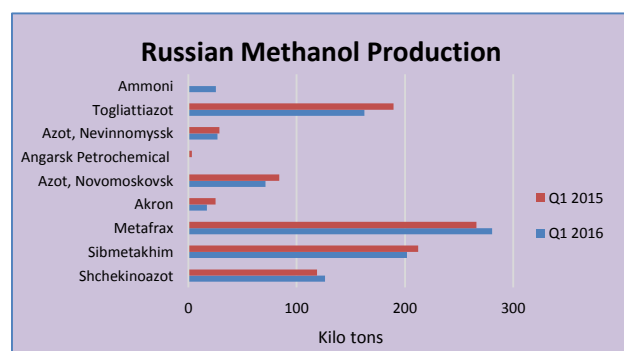


exports from Russia declined in the first quarter from 358,000 tons in 2015 to 333,100 tons in 2016. The major exporters included Sibmetakhim, Shchekinoazot, Metafrax and Azot at Novomoskovsk.

### Methanol consumption trends Q1 2016

Sibmetakhim sells about half of its production on the domestic market, following Metafrax and Tomet by volume. Domestic merchant sales fell slightly in the first quarter this year to 382,700 tons against 387,200 tons in the same period in

2015. Russian production of acetic acid increased 4% in 2015 to 178,485 tons, most of which is produced at Nevinomyssk, utilising methanol from Azot's plant is consumed captively.

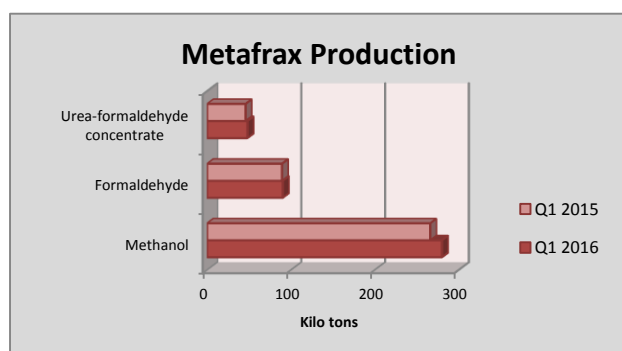


Overall captive usage coupled with inventory stock rose in the first quarter from 164,400 tons in the first quarter last year against 193,700 tons in the same period in 2016. Metafrax is by far the largest captive user of methanol in Russia, increasing consumption from 84,700 tons in the first quarter in 2015 to 107,800 tons in the 2016. Metafrax is pursuing a strategy of increasing internal processing and reducing the dependency on both exports and domestic merchant sales.

Russian methanol production amounted to 300,900 tons in March, Metafrax accounted for 32% of total production. Other producer shares included Sibmetakhim (22%), Tomet (18%), Shchekinoazot (14%) and Azot Novomoskovsk (7%). Russian methanol prices remain stable within the range of 12,500-21,800 roubles per ton. Tomet charges the lowest price, offering spot prices, whilst Metafrax charges the highest based on contract levels.

### Metafrax Jan-Mar 2016

Metafrax reduced its net profit by 10.3% for the first quarter of this year to 1.43 billion roubles, whilst revenues rose by 4.7% to 4.65 billion roubles. The decline was attributed by Metafrax to the difficulties in passing on raw material costs onto the end-user. Thus, the cost of sales increased more than revenues, growing by 11.6% to 2.2 billion roubles. The financial performance of the company declined also due to falling commodity prices on the international markets, and the negative effect of exchange rate differences. The share of exports in total sales decreased by 5.5% to 38.7% as the company focused more on the domestic market.



Methanol production at Gubakha totalled 280,500 tons in the first quarter in 2016, 4.3% up on the same period in 2015. Urea-formaldehyde concentrate and formaldehyde production were largely unchanged from 2015. For 2016 Metafrax had set a target of an 8-10% increase in net profits, but that seems unlikely after the first quarter.

In 2015 Metafrax has invested 2.67 billion roubles in the development of the plant capacities, which is 2.5 times more than in 2014. Some investment has gone towards updating rolling stock (acquiring railroad tank cars for transportation of methanol), whilst other funds have gone towards the first stage of reconstruction of the methanol unit including the modernisation of the reformer furnace. Other projects include the continued construction of a second production unit of low methanol concentrated formaldehyde.

For 2016 the company aims to spend around 5.7 billion roubles.

### Shchekinoazot-DME plant

Shchekinoazot has commissioned ThyssenKrupp Uhde Engineering to construct a plant for the production of dimethyl ether perfume quality, with a capacity of 20,000 tpa. The site is undergoing preparation at present with the construction period estimated at four years. Raw materials for the new plant include methanol, which can be taken from Shchekinoazot's M-450 plant.

In 2016 Metafrax is undertaking the second phase of the reconstruction of the methanol unit which will bring plant capacity to 3,375 tons per day. Other projects include the completion and start-up of the 55% formaldehyde plant with a capacity of 90,000 tpa.

Regarding product sales, SGS has approved products produced by Metafrax to conform to the requirements of ISO 9001: 2008. The certificate of conformity is subject to successful completion of surveillance audits by the certification body. The certification included activities for the production of methanol, formaldehyde, urea formaldehyde concentrate, hexamine and pentaerythritol (including micronized products), sodium formate, and polyamide 6 granulated.

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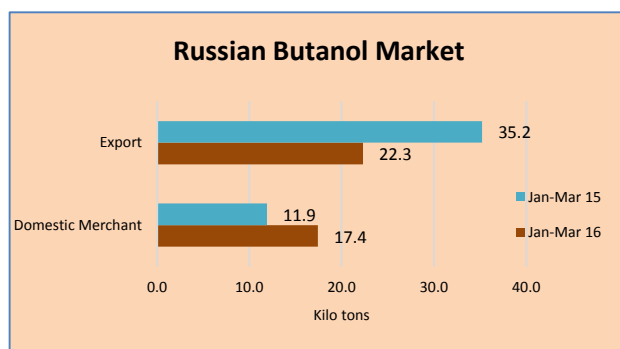
## Organic chemicals

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### Russian butanol domestic sales, Jan-Mar 2016

Butanols production totalled 61,360 tons in the first quarter in 2016, 6% less than in the same period last year. According to Chem-Courier, the proportion of n-butanol in gross production was 62%, and isobutanol 38%.

Production of butanols in March amounted to 19,330 tons which was 11% down against February. The Angarsk plant was idle due to the lack of propylene from the Angarsk Polymer Plant, whilst other producer shares included Gazprom neftekhim Salavat (54%), SIBUR-Khimprom (39%), and Azot at



Nevinomyssk (7%). For the first quarter the Salavat plant increased production from 22,800 tons to in 2015 to 35,300 tons this year. Overall, taking into account the fall in export sales and concomitant rise in domestic merchant sales, the Russian butanols market was up by around 3,000 tons in the first quarter this year measured against the same period in 2015.

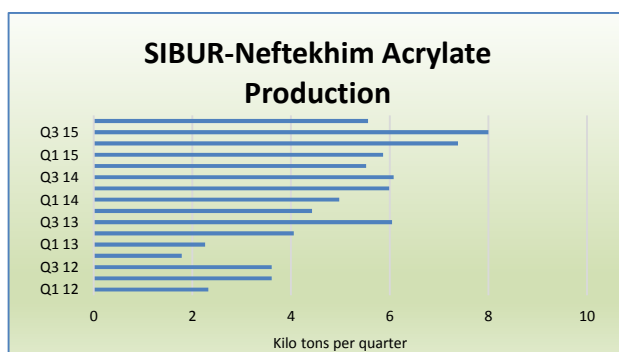
#### Russian butanol domestic sales, Jan-Apr 2016

Butanol sales on the domestic market amounted to 5,780 tons in April, 6% down on March.

SIBUR-Khimprom supplied 2,510 tons, Gazprom neftekhim Salavat 2,020 tons, the Angarsk refinery 720 tons and Azot at Nevinomyssk 520 tons. Akrlat purchased 1,430 tons in April, 32% down on March whilst Dmitrievsky Chemical Plant purchased 1,900 tons which was unchanged. Other consumers included Volzhskiy Orgsintez with 930 tons. In the first four months this year domestic sales of butanols rose 17% to 25,000 tons.

#### SIBUR-Neftekhim, acrylate shutdown April

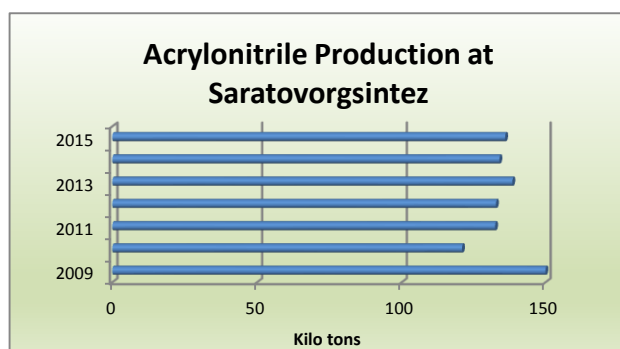
SIBUR-Neftekhim completed a 13-day maintenance planned outage at the Akrlat division in late April.



Scheduled maintenance was carried out by four contractors and work included an audit of 54 units of the safety valves and shut-off valves. Production of acrylic acid and esters was put into operation at Dzerzhinsk in 2004, and the company Akrlat was acquired by SIBUR in mid-2011. Propylene is supplied to the Akrlat division from SIBUR-Kstovo and butanols from SIBUR-Khimprom. Plant capacities include 31,000 tpa of acrylic acid, 40,200 tpa of butyl acrylate and 10,000 tpa of light acrylic esters (methyl and ethyl acrylate).

#### Other solvents

Metafrax produced 7,500 tons of pentaerythritol in the period January to April 2016, which is 4% less than in the same period in 2015. 2-EH sales on the Russian domestic market rose 32% in the first four months in 2016, totalling 10,914 tons. Major consumers in Russia include Kamteks-Khimprom and fuel/explosive manufacturers Biysk Oleum Plant and the Sverdlov plant. The rise in sales was due to the increase in production of fuel additives which have become profitable since the devaluation of the rouble.



#### Saratovorgsintez to expand acrylonitrile

Lukoil plans to expand production capacity for acrylonitrile at Saratovorgsintez by 2018, from 150,000 tpa to 190,000 tpa. In 2015 Saratovorgsintez increased sodium cyanide capacity to 30,000 tpa from 18,000 tpa after the addition of a new line.

#### Polyacrylamide project-Saratov

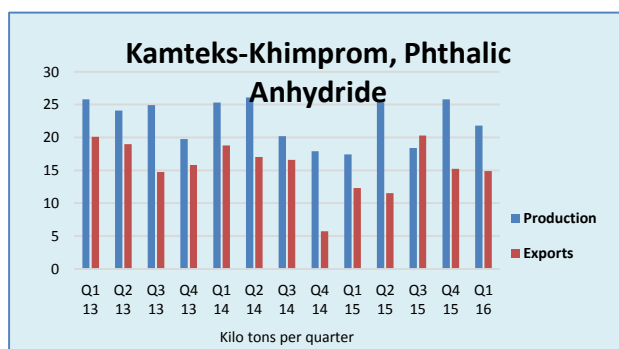
Also at the Saratovorgsintez site, Lukoil and the French company SNF expect to start production of polyacrylamide in 2018 with a capacity of

20,000 tpa. Construction was initially scheduled to start in 2014, but was delayed by two years.

Lukoil is exploring the use of polyacrylamide in chemical EOR technologies. Therefore, the company expects to achieve localization of consumption of acrylonitrile and additional load-free infrastructure Saratovorgsintez, as well as import substitution of substantial quantities of chemicals. In 2015, Saratovorgsintez capacity was increased by sodium cyanide to 30,000 tpa from 18,000 tpa.

### Russian phthalic anhydride market, Q1 2016

In the first quarter in 2016 production totalled 23,440 tons which is 23% up on the same period in 2015. Russian production of phthalic anhydride amounted to 6,460 tons in March, 12% less than in February. Kamteks-Khimprom was the sole producer whilst the Salavat plant remains idle. The most significant feature of the phthalic anhydride market in Russia last year involved the restoration of commercial activity between Kamteks-Khimprom and the Neftekhimprom Group.



Kamteks-Khimprom exports around 70% of its phthalic anhydride production, as the domestic market remains relatively small. The Roshalsky Plant of Plasticizers accounted for 63% of domestic phthalic anhydride shipments in 2015, according to Chem-Courier, followed by Kaustik at Sterlitamak with 19%, and paint manufacturer Empils with 5%. The Neftekhimprom Group purchased 3,600 tons of phthalic anhydride from Kamteks-Khimprom in 2015 for usage at the Roshalsky Plant of Plasticizers.

#### Russian Paint Production (unit-kilo tons)

Sector	Jan-Mar 16	Jan-Mar 15
Paint Materials on polymers	167.0	155.6
Other Paints	97.0	73.6
Total	263.9	229.2

### Russian paint market Q1 2016

Consumption of paints and varnishes based on polymers in Russia decreased by 1.7% in the first quarter this year. This is due to the reduction in ink supply from abroad, as well as an increase in exports of around 8% against an increase in production of 2%.

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

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

### Khimprom acetanilide expansion

Khimprom is expanding production of acetanilide this year, by investing around 75 billion roubles in the modernisation of the plant at Novocheboksarsk. The aim is to increase capacity from 875 tons per annum to 1,100 tons per annum. Acetanilide is used by tyre manufacturers as a stabilizer, one of its main characteristics involves slowing down the process of aging of tyres. Atsetonil helps protect rubber against thermal aging and to improve its resistance to cracking and oxidation. The decision to expand capacity was taken by Khimprom to meet demand from the tyre industry.

#### Percarbonate-packaging

Khimprom subsidiary Percarbonate, located at Novocheboksarsk, has installed a new packaging line for sodium percarbonate in bags of 25 kg. The company believes that it is attractive to buyers who do not require large volumes of deliveries of production in big bags (1 ton each). Also, the new packaging may be interesting for traders. Percarbonate hopes through the new packaging line to increase sales by around 300 tons per annum.

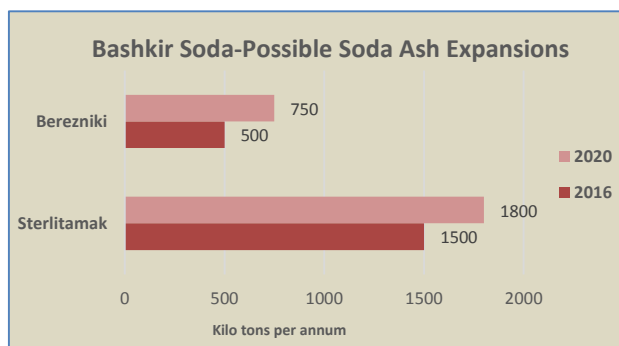
### Other products

#### Nikokhim Sinopec

Nikokhim has reached agreement in principle with Sinopec to implement plans to build a gas chemical complex in the Volgograd region. The aim is to produce calcium hypochlorite, expand the line for the production of magnesium oxide, in addition to discussing the



establishment of production of chlorohydrin, epoxy resins, and isocyanates. Nikokhim's main production assets located at Volgograd include Kaustik and Polygran.



#### Bashkir Soda-soda ash expansion

Having examined possible investment areas Bashkir Soda Company appears to have decided plans to increase production of soda ash as an alternative to PVC capacity at Sterlitamak, the prospects of which are limited due to constraints in ethylene supply. The aim is to increase capacity of soda ash production at Berezniki from 500,000 tpa to 750,000 tpa and at Sterlitamak by 20% to 1.8 million tpa, all of which should be completed by 2020. In parallel, the company is considering the possibility of increasing the production of flake caustic soda from 50,000 tpa to 70,000 tpa. Another project under consideration involves the production of sodium carbonate with a capacity of 180,000 tpa.

Fosagro Production (unit-kilo tons)		
Product	Jan-Mar 16	Jan-Mar 15
Ammonia	297.9	300.0
Urea	264.9	235.0
Ammonium nitrate	129.9	118.0
Aluminium fluoride	11.3	6.0
Phosphoric acid	587.7	525.0
Sulphuric acid	1,285.4	1,162.0
Sodium Tripolyphosphate	20.9	30.0

#### Fosagro Q1 2016

Fosagro increased fertiliser production by 10.2% in the first quarter in 2016, including an increase of 13.1% for phosphate fertilisers to 1.5 million tons whilst 0.4 million tons of nitrogen fertilisers which was unchanged. Akron reduced production of fertilisers by 0.3% in Q1 2016, compared to 2015, to 1.298 million tons. The reduction

was due primarily to modernisation.

### Belarus & Ukraine

#### Belarussian polymer/petrochemical market

Polymir was forced stop polyethylene production in late April due to an accident at the ethylene plant. Polymir at Novopolotsk produced 120,100 tons of LDPE in the first two months in 2015 against 124,000 tons in 2014. LDPE production in Belarus amounted to 10,900 tons in January, 4% up on December. Production was suspended from 27 April to 5 May.

A further planned shutdown for maintenance will take place at Novopolotsk from 12 June for the polyethylene plant for 14 days, whilst the monomer plant will undertake a shutdown from 22 June to 10 July. In the second half of July, two weeks of scheduled repairs will take place in the production of acrylic fibres, whilst in September another 30 days will be required for the second phase of polyethylene maintenance.

Belarussian Exports of Organic Chemicals (unit-kilo tons)		
Product	Jan-Feb 16	Jan-Feb 15
Acrylonitrile	8.5	6.9
Caprolactam	3.1	7.8
Phthalic anhydride	3.9	3.0
Methanol	11.5	12.8

PVC imports declined by 17.4% in the first two months, amounting to 2,800 tons of which 2,400 tons came from Russia. Polypropylene imports increased by 1.9% and amounted to 12,800 tons. Homopolymer imports amounted to 8,200 tons in the first two months against 8,800 tons in the same period last year. Russia supplied 93% of Belarussian homopolymer imports. Copolymer imports rose 22% in the first two months to 4,200 tons.

#### Ukrainian polymer imports, Jan-Mar 2016

Imports of polyethylene into Ukraine amounted to 62,600 tons in the first quarter in 2016, 38% up on 2015. Polypropylene imports into Ukraine rose 26% in the first quarter to 27,300 tons against 21,700 tons in the same period in 2015. The largest increase was in the supply of propylene homopolymer. In March, the volume of imports of polypropylene in Ukraine increased to 9,700 tons against 8,900 tons in February. Ukrainian PET imports decreased by 4% in the first quarter to 26,400 tons. The share of Chinese PET in the volume of imports of the first quarter amounted to 56%. At the same time, imports from China grew by around 2.4 times and amounted to almost 15,000 tons. The largest supplier of Chinese PET in the first quarter was

### Ukrainian Polypropylene Imports (unit-kilo tons)

Category	Jan-Mar 16	Jan-Mar 15
Homo	21.2	16.1
Block	2.5	2.3
Random	3.0	2.6
Propylene copolymers	0.0	0.4
Other	0.4	0.0
Total	27.1	21.4

Yisheng Petrochemical (which supplied 5,400 tons in the first quarter against only 330 tons in the first quarter of 2015. Other increased imports included brands Jiangsu Sanfangxiang, Shanghai Hengyi Polyester and Zhejiang Wankai. Imports of the Lithuanian NeoGroup amounted to almost 9,000 tons in the first quarter which is 16% down on 2015. Belarussian PET imports amounted to 800 tons in the first quarter against 2,500 tons in 2015.

### Ukrainian methanol, Jan-Mar 2016

The Ukrainian Ministry of Economic Development and Trade (MEDT) is supporting the restart of the methanol plant at Severodonetsk in order to reduce the need for imports. Azot at Severodonetsk stopped production in May 2014 due to the military conflict in east Ukraine, similarly to Stirol at Gorlovka. Both companies are controlled by Group DF Dmitry Firtash. Efforts are underway to restart methanol production at Severodonetsk in June.

### Ukrainian plasticizer alcohols, Jan-Mar 2016

Ukrainian imports of phthalic anhydride amounted to 575 tons in March, against 141 tons in February. Azot at Grodno accounted for 96% of imports into Ukraine in March, whilst Polikem accounted for 47% of purchases and Lizinvest 17%. In the first quarter imports of phthalic anhydride into Ukraine amounted to 1,070 tons, 19% down from the same period in 2015.

The cancellation of import duties on imported DOP into Ukraine from the start of 2016 has contributed to rise in import shipments this year. Imports in the first quarter totalled 641 tons, more than double than in the same period in 2015. For the whole of 2015 Imports totalled 4,690 tons, 27% lower than in 2014.

DOP imports amounted to 361 tons in March according to Chem-Courier, against 178 tons in February. Deza supplied 176 tons in March, Boryszew 156 tons and Grupa Azoty 28 tons.

Imports of methanol amount to around 2,000 tons per month. Ukrainian methanol imports rose 1.5 times in March against February to 2,800 tons. Shchekinoazot supplied 1,700 tons in March, followed by Azot at Grodno with 1,100 tons. Traders accounted for 65% of import purchases, or 1,800 tons, followed by KarpatSmol with 600 tons and Ukrainian gas companies 310 tons. The average cost of Ukrainian imported methanol in March in amounted to \$295 per ton DAF border of Ukraine, recorded against \$355 per ton DAF in February.

### Other Ukrainian chemical news

Ukraine is introducing an anti-dumping duty of 26% on the Russian caustic soda imports from 6 June. The duty is being introduced for a period of five years and results from an investigation into Russian caustic pricing between 2011 to 2014. The sole Ukrainian producer of caustic soda Dniproazot, has been affected in volume sales and reduced plant utilisation.

In the first quarter of 2016 Rivneazot, part of the holding Ostchem, produced more than 300,000 tons of fertilisers, including 155,400 tons of ammonium nitrate, 129,800 tons of calcium ammonium nitrate. Production for the company rose 3% in the first quarter over 2015.

The Odessa Port Plant incurred a net loss of 418.6 million hryvnia in the first quarter against a net profit of 90.1 million hryvnia in the same period in 2015. Revenues fell by double to 1.72 billion hryvnia, which is almost two times less than in the previous year. The capacity of the company includes 450,000 tpa of ammonia, and 330,000 tpa of urea. However, the most interesting assets may include the transportation terminal which can ship 4.3 million tpa of ammonia, 5 million tpa of urea and 1 million tpa of methanol. The State Property Fund of Ukraine intends to offer a tender in June and July of this year.

### Samsung urea project Sumgait

Samsung Engineering plans to complete construction of the Sumgait urea plant in the first quarter in 2018. Construction work began 18 February 2014, and has been delayed by a number of factors. The plant will consist of three production sites including ammonia, urea and urea granules. Capacity of the plant comprises 1,200 tons of ammonia and 2,000 tons of urea per day. The project cost is estimated at around €500 million, excluding VAT.

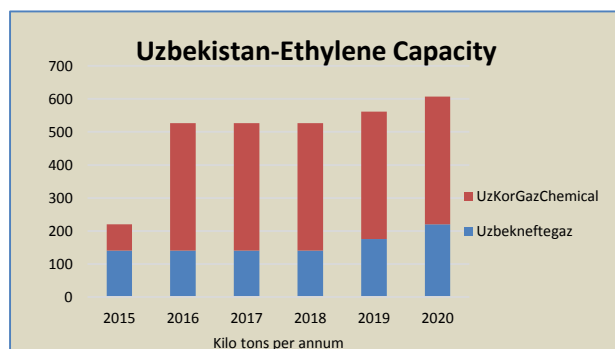
### Central Asia/Caucasus

### AzMeCo-methanol plant transfer to SOCAR

SOCAR is undertaking evaluation of the methanol plant owned by AzMeCo in order to decide whether to bring the plant inside the group. Depending on the results of the evaluation, the assets are expected to handed over to SOCAR. The need to transfer AzMeCo to the state company SOCAR has arisen

due to the debt owed to the International Bank of Azerbaijan.

The methanol plant's transfer to SOCAR will lead to a unified chain of production, which is intended to increase plant efficiency. AzMeCo is one of the largest investments made in the non-oil sector of Azerbaijan. The only methanol producing plant in the South Caucasus and Central Asian region, AzMeCo was commissioned in January 2014. The main buyer of the methanol produced at the plant is BP which is mainly shipped through the Georgian Kulevi port. Currently, methanol is exported from Azerbaijan to Turkey, Romania, Slovenia, the Netherlands and Belgium. Methanol capacity for AzMeCo stands at 720,000 tpa.



### Shurtan Gas Complex

Uzbekneftegaz has marked out plans to invest around \$478 million into the further development and expansion of the Shurtan Gas Chemical Complex. The company is exploring the possibility of financing from its own funds and the possible attraction of credit resources of the Fund for Reconstruction and Development of Uzbekistan.

At the end of last year, Uzbekneftegaz signed a Memorandum of Understanding on the joint study project with the South Korean company GS E & C. The project provides for an increase of ethylene production from the current 140,000 tpa to 220,000 tpa including 75,000 tpa of a bimodal high density polyethylene while maintaining the level of natural gas processing. This will be achieved by replacing the feed gas for raw materials with a high content of ethane from 3.6% to 6%.

The expansion of the petrochemical capacity will allow Uzbekistan to not only keep its niche in the import markets where competitors have intensified in recent years, but also displace a number of foreign manufacturers due to the cheaper price.

Shurtan Gas Chemical Complex was launched in 2001. Its construction involved a consortium led by ABB Lummus Global, and Mitsui, Toyo Engineering, Nissho Iwai and ABB Soimi. At present the complex can handle up to 4 billion cubic metres of raw gas per annum. Production capacities include 3.5 billion cubic metres of methane per annum, more than 125,000 tpa of polyethylene pellets, 100,000 tpa of liquefied gas, 100,000 tpa of gas condensate and about 1,500 tpa of granulated sulphur.

Product	Jan-Mar 16	Jan-Mar 15
HDPE	16.1	15.7
LDPE	7.1	4.7
LLDPE	0.8	1.2
PVC	4.3	6.2
Polypropylene	5.9	4.8

### Kazakh polymer imports, Jan-Mar 2016

Imports of PVC into Kazakhstan amounted to 4,900 tons in the first quarter, 21% down on the same period last year. China provided 99% of supplies for the first three months in 2016. Polyethylene imports increased by 12% in the first quarter to 24,000 tons. Imports rose in March due to both seasonal factors and the aim of consumers to form additional reserves of raw materials covering planned downtime for Russian producers.

Polypropylene imports into Kazakhstan amounted to 5,900 tons in the first quarter, 24% up on the same period in 2015.

Russian Petrochemical Prices				
Product	Region/Terms	29/04/16	6/05/16	13/05/16
<i>Roubles per ton (inclusive of VAT)</i>				
Ethylene	Volga	39700-41500	39700-41500	38940-45500
Propylene	FCA Volga	25000-30000	25000-30000	25000-30000
	FCA Siberia	n/a	n/a	n/a
Benzene	FCA North West	47000-48000	47000-48000	47000-48500
	FCA Volga	47500-48400	47500-48400	46000-48400
	FCA Siberia	46000-47500	46000-47500	46000-47500
Styrene	FCA Volga	83000-87000	83000-87000	83000-87000
Methanol	FCA Volga	14000-15500	14000-15500	13500-15500
	FCA Siberia	14000-16500	14000-16500	14000-16500
	CPT Ural	15000-17000	15000-17000	14200-18000
N-Butanol	FCA Volga	50000-50500	50000-50500	50000-50500
	FCA Siberia	50000-50500	50000-50500	50000-50500
	CPT Central	50000-50500	50000-50500	50000-50500
Isobutanol	FCA Volga	39000-50370	39000-50370	39000-50370
	FCA Siberia	44000-45000	44000-45000	44000-45000
	CPT Central	44000-50000	44000-50000	44000-50000
Toluene	FCA North West	37000-38000	37000-38000	40000-40400
	FCA Central	39000-40000	39000-40000	40000-40500
	FCA Siberia	36000-39000	36000-39000	36000-39000
	FCA Volga	36000-37000	36000-37000	39000-41000
Orthoxylene	FCA Central	47000-48000	47000-48000	47000-48000
	FCA Volga	37400-38400	37400-38400	40000-40200
	FCA North West	38000-38500	38000-38500	38000-38500
	FCA Siberia	38000-38500	38000-38500	38000-38500
	CPT Central	44000-44500	44000-44500	44000-44500
	CPT Volga	37400-38400	37400-38400	40000-40200
Phthalic Anhydride	FCA Central	72000-74000	72000-74000	77000-79000
	FCA Volga	68000-68600	68000-68600	72800-73400
	CPT Central	68000-68600	68000-68600	72800-73400
	CPT Ural	68000-68600	68000-68600	72800-73400
Pentaerythritol	FCA Central	93000-95000	93000-95000	93000-95000
Phenol	EXW Volga	76000-78000	76000-78000	78000-80000
	FCA Volga	78000-83500	78000-83500	78000-84000
	FCA Siberia	79000-85000	79000-85000	79000-85000
	CPT Central	79000-85000	79000-85000	79000-85000
Acetone	FCA Volga	24500-35000	24500-35000	29000-40000
DOP	FCA Volga	89000-91000	89000-91000	86000-88000
MTBE	FCA Volga	45900-51900	45900-51900	45900-51900
	FCA Siberia	47000-51900	47000-51900	47000-51900
	CPT Central	48000-53900	48000-53900	48000-53900
MEG	FCA Volga	52500-57000	52500-57000	51400-54000
	CPT Central	54000-58000	54000-58000	53500-56000

Source: [www.chem-courier.ru](http://www.chem-courier.ru)

Rus rouble, 16 May 2016-\$1 = 65.2 €1= 73.70



*Relevant Currencies*

Czech crown. Kc. \$1=20.852. €1=27.444: Hungarian Forint. Ft. \$1=229.253. €1=310.141: Polish zloty. zl. \$1=3.016. €1=4.14 Ukrainian hryvnia. \$1=22.9 €1=24.9: Rus rouble. \$1=65.2 €1=73.70

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