

# CIREC

## MONTHLY NEWS

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

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

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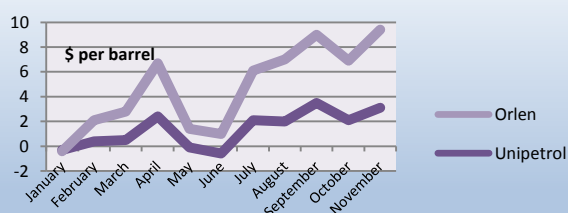
## CENTRAL & SOUTH EAST EUROPE

### Petrochemicals

#### Unipetrol-Ceska Rafinerska

Czech antitrust office UOHS has granted permission to Unipetrol to become the exclusive owner of Ceska Rafinerska as the merger will not cause a Fundamental Breach of competition on markets. The planned merger with Czech Refinery has been challenged by the Union of the Czech Petroleum Independents. Ceska Rafinerska opened a new line of selective hydrodesulfurization at Kralupy in December. The new production unit for Kc 600 million to better remove sulphur from motor fuels.

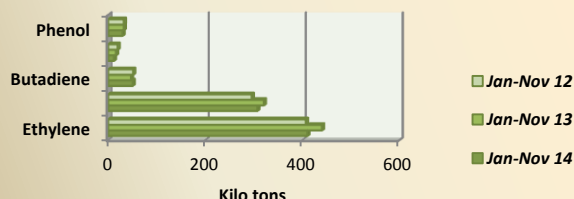
**Orlen Group Refining Margins 2014**



Unipetrol and PKN Orlen are starting to witness benefits from the lower oil prices, with margins ending 2014 strongly. Unipetrol saw its refining margin rising to \$3.10 per barrel in November, up from \$2.10 per barrel in the previous month. Conditions for Unipetrol's refining business were additionally supported by the Urals-Brent price differential, although the discount to Brent was unchanged from October at \$1.30 per barrel. Urals

supplied through the Druzhba pipeline accounted for 63.5% of Unipetrol crude feedstock last year. The remainder consisted mainly of Azeri crude, which is supplied via the Transalpine (TAL) and Ingolstadt-Kralupy-Litvinov (IKL) pipelines to the Kralupy refinery.

**PKN Orlen Petrochemical Production Plock Division**



#### PKN Orlen-Siemens

PKN Orlen signed with a consortium of Siemens for undertaking a turnkey power plant CCGT at Plock and comprehensive agreement for the service block the main equipment for a period of about twelve years. The value of the contracts comprises zł 1.3 billion for construction and another zł 0.3 billion for a service contract.

The new power plant in Plock power of 596 MW is being designed to significantly increase the efficiency of producing electricity and heat. A key element of the investment will be using a solution of a modern gas

turbine, increasing the profitability of the use of gas for production processes.

The key to Orlen's petrochemicals business is the olefin unit with a maximum annual capacity of 700,000 tpa of ethylene and 380,000 tpa of propylene. PKN Orlen produces monomers as a feedstock for the polymer units at Basell Orlen Polyolefins (BOP) and the PVC unit at the Anwil Group. Other petrochemical products are sold to customers on the domestic market, such as PCC Exol and Synthos, and abroad. The pipeline infrastructure linking the PKN Orlen units with the Anwil Group's and BOP's plants are a major source of competitive advantage.

BOP specialises in polymer production and operates polyethylene and polypropylene units with a total annual production capacity of 820,000 tpa, including 320,000 tpa of HDPE, 100,000 tpa LDPE and 400,000 tpa of polypropylene.

MOL Group Petrochemical Projects				
Product	MOL subsidiary	Capex \$ mil	Capacity (ktpa)	Start-up
LDPE	Slovnaft	350	220	Q4 2015
Butadiene	TVK	130	130	Q2 2015
S-SBR	TVK	116	60	Q4 2017

new plant.

#### MOL-synthetic rubber & butadiene plants

Construction of TVK's synthetic rubber plant at Tiszaujvaros will begin in 2015, at a cost of \$100 million. The technology for the plant is being supplied by Japan's JSR Corporation, which also possesses 51% in the jv with MOL for the

The plant capacity is being designed to produce 60,000 tpa of S-SBR which is in growing demand due amongst other things changes in regulations on emissions and fuel consumption. The rubber plant is expected to start selling

product in 2017. The butadiene plant of 130,000 tpa, also under construction at the TVK site, is expected to start commission in the first quarter in 2015 and production to start in the second quarter.

#### TVK-power plant

TVK has agreed to buy 74% of power plant TVK-ERŐMŰ in northern Hungary from regional power distributor ÉMÁSZ. TVK's holding in the power plant will grow to 100%, as it already owns a 26% stake. The deal is to be closed in the first half of next year, enhancing the security of TVK's energy supply. The combined cycle plant has been built ten years ago with a cost of Ft 10 billion by Alstom Power with specifications to produce 34MW per hour of electricity and 250 tons per hour of steam.

Polish Chemical Production (unit-kilo tons)		
Product	Jan-Nov 14	Jan-Nov 13
Caustic Soda Liquid	271.6	284.6
Caustic Soda Solid	72.3	74.2
Soda Ash	969.2	959.1
Ethylene	416.3	440.3
Propylene	304.7	320.3
Butadiene	50.8	47.0
Toluene	11.9	16.3
Phenol	28.9	32.3
Caprolactam	154.6	145.2
Acetic Acid	8.3	7.3
Polyethylene	295.8	307.5
Polystyrene	57.0	51.2
EPS	66.6	73.6
PVC	253.7	287.5
Polypropylene	209.0	234.2
Synthetic Rubber	180.4	177.7
Ammonia (Gaseous)	1219.9	1172.8
Ammonia (Liquid)	1211.6	1092.6
Pesticides	30.4	19.6
Nitric Acid	2172.0	2063.0
Nitrogen Fertilisers	1768.0	1661.0
Phosphate Fertilisers	371.2	338.9
Potassium Fertilisers	289.0	278.5

#### Chemoservis Dwory-Synthos

Chemoservis Dwory has signed a zł 6.3 million deal with Synthos Dwory 7 for delivery of the assembly line for the S-SBR project at Oswiecim. The contract includes delivery of the SSBR installation to Synthos SA research and development centre.

#### Oltchim to remain in state hands

Oltchim's privatisation deadline passed in December with no bids, which means that it will be another three years before the company is put up for sale again. Despite interest from domestic, Chinese and Turkish investors no bids were received for joint Oltchim and Arpechim petrochemical assets. The expectation is that Oltchim will continue to partly operate with restructuring. Despite outstanding debts, the company achieved an operating profit of 336,000 in October, and 400,000 in November.

### Chemicals

#### Spolchemie-chlorine modernisation

Spolchemie at Ust nad Labem has begun construction of a new chlorine unit based on membrane electrolysis. The cost of the investment is estimated around Kc 1.26 billion. At the same time the company launched a project for applying modern technologies for the production of epichlorohydrin and hydrochloric acid.

The supplier of the new electrolysis plant for production of chlorine and hydroxides is Kovoprojekta Brno, whilst the production technology was provided by Chinese company BlueStar. The building should be ready by the end of next year, when permission for Spolchemie to use mercury technology expires. The EU is providing around Kc 200 million in loans to support the chlorine upgrade, and another Kc 120 million for the project on the use of modern technology for the production of epichlorohydrin and hydrochloric acid.

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Czech Chlorine Plants (unit-kilo tons)		
Company	Location	Capacity (kt/ya)
Spolana	Neratovice	135
Spolchemie	Usti nad Labem	61

#### Energochemica Strazske chemical project plans

Similar pressures for chlorine conversion are faced in Slovakia where mercury based chlorine production at Novaky is required by EU directive 2010/75 to have finished by 2017. However, instead of replacing the mercury plant at Novaky, located in the west of Slovakia, the holding company Energochemica is examining prospects of investing several hundred million dollars in chemical production facilities at Strazske in the east of the country. This would replace the Novaky chemical plant and establish a new chlorine plant based on membrane electrolysis.

It has been known for some time that the former Novacke chemical plants based in the west of Slovakia must replace the old non-organic mercury salt electrolysis. Novacke chemické závody was sold to Fortischem in 2011, which is a subsidiary of Energochemica. Czech company Energochemica wants to construct a new chlorine plant utilising the salt deposits at Zbudza which is several kilometres from Strazske. At the same time Fortischem at Novaky is expected to cease production at Novaky.

#### Ethanol project Strazske update

Biochemtex and Beta Renewables have signed a contract with the Mossi Ghisolfi Group for the construction of a bioethanol plant for Energochemica at Strazske with a capacity of 55,000 tpa. The technology has been developed in Italy by PROESA Beta Renewables, and start-up is expected in the first half of 2017.

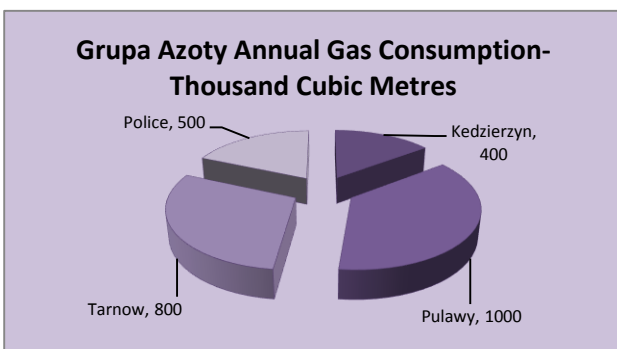
Biochemtex will provide basic engineering, critical equipment and technical services for the construction of the plant. The enzymes used in the production process will be provided by the Danish company Novozymes and yeasts from French Leaf Technologies. The lignin, co-product of the process of production of bioethanol, will be used in the CHP to produce the energy and the steam necessary for the operation of the plant, while the excess of electricity will be sold to the grid.

After taking over Novacke chemicke zavody Fortischem developed plans to invest in technology, where there had been little change for the two previous decades. Two carbide furnaces needed replacing in addition to the mercury electrolysis. However, plans have been hampered by a range of problems.

In October last year, the European Commission concluded that NCHZ had benefitted from incompatible state aid during its bankruptcy procedure and that this aid has to be paid back. Moreover, the investigation showed that Fortischem, which acquired practically the entire NCHZ business, is the economic successor of NCHZ and thus also benefitted from the aid. Therefore, both NCHZ and Fortischem are liable for paying back the aid.

#### Grupa Azoty-gas supply

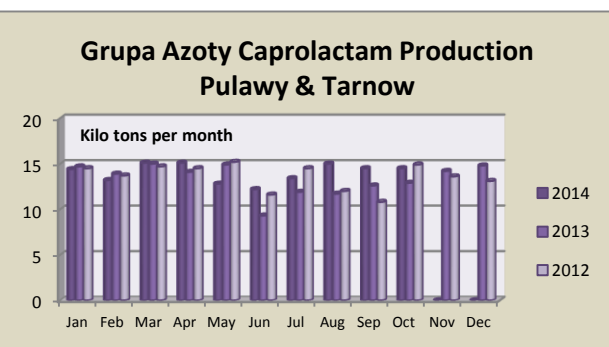
Grupa Azoty Police and PGNiG signed an annex on its gas supply contract in December, the estimated value of which was zł 197.4 million. Although Grupa Azoty is starting to purchase gas from alternative sources, PGNiG remains the most important supplier for the group. Grupa Azoty consumes around 2.3 billion cubic metres in total, of which the Police plant accounts for around 500 million cubic metres. The annex signed in December extends supply for the Police plant with PGNiG to 1 October 2016.



Despite the liberalisation of the gas market in Poland, PGNiG remains the largest partner for Grupa Azoty. In future the share of gas supplies from PGNiG to Grupa Azoty should fall as more transport options open.

Ultimately, the group would like to buy about half of the PGNiG gas needed. The rest would come from other sources. Natural gas is the primary raw material for Grupa Azoty-Pulawy, consuming about 1 billion m<sup>3</sup> per annum in the production of ammonia. Natural gas accounts for about 35% of the total costs of the company.

The parent company of Grupa Azoty at Tarnow possesses numerous gas fields nearby meeting around 60% of consumption. Other plants at Police and Kedzierzyn are well placed to receive gas from the West, whilst Pulawy is mostly dependent on pipeline supplies from the East. As a positive development Pulawy does now have the possibility of reverse in Yamal where German companies sell gas back to Poland. ZA Pulawy made some important steps in 2010 to protect the company against a possible lack of gas. By investing in storage facilities the Pulawy plant at least has some time to try and find alternative sources should supplies through PGNiG be affected.



polyamide 6 plant, worth over zł 300 million. The plant is being constructed in order to make better use of caprolactam. The plant of 60,000 tpa is expected to be constructed within two years. The new plant will not help Azoty's caprolactam chain, it will make the group one of the three largest of the six European producers of polyamide. Currently, Azoty occupies fifth position amongst integrated producers of polyamide 6, behind BASF, Lanxess, DSM Engineering Plastics, Radici and Domo Chemicals.

Polyamide provides around 15% of group revenues. Capacity stands at 45,000 tpa at Tarnow, and 48,000 tpa at Guben in Germany. Caprolactam capacity for Azoty comprises 70,000 tpa at Pulawy and 102,000 tpa at

#### Grupa Azoty-Uhde Inventa Fischer

Grupa Azoty and Uhde Inventa-Fischer have signed a contract for the start of construction at Tarnow of a



Tarnow. Not all production of caprolactam can be processed captively by Azoty and thus exposure to export markets in Asia creates uncertainty over profits. The solution is a reworking of caprolactam to polyamide 6.

In the period of the strategy, the key elements of the Group's product portfolio in the field of engineering plastics remain polyamides, polyoxymethylene and modified plastics. It is assumed also increase the production capacity of existing construction materials and further product diversification in this sector.

<b>Ciech Revenues-Organic Division (zł thousand)</b>		
<b>Product</b>	<b>Jan-Sep 14</b>	<b>Jan-Sep 13</b>
TDI	0.0	49.5
Resins	260.1	314.6
Polyurethane foams	170.6	151.9
Plastics	0.1	30.2
EPI	0.0	1.7
Total	430.9	547.9
<b>Ciech Revenues-Soda Division (zł thousand)</b>		
<b>Product</b>	<b>Jan-Sep 14</b>	<b>Jan-Sep 13</b>
Soda Ash Heavy	825.7	809.3
Soda Ash Light	281.6	243.6
Salt	124.0	119.9
Sodium Bicarbonate	113.1	95.2
Calcium Chloride	16.4	16.7
Total	1360.8	1284.6

### **Ciech, strategy 2014-2019**

The Supervisory Board of the Ciech Group has adopted a strategy for 2014-2019, comprising a focus on the soda ash division and plant protection products. Ciech has given up ideas of selling Organika-Sarzyna, and is aiming to develop the range of pesticides produced by the company.

Ciech is currently undergoing rebranding under its new ownership of KI Chemistry. The Polish Treasury received around zł 620 million from the sale of its 37.9% stake in Ciech which gives Kulczyk Investments Group approximately 51.14% of Ciech.

Revenues were lower in the first three quarters this year for Ciech due to the restructuring and closure of some plants but the EBITDA showed an increase. The group intends to continue to focus on organic growth and investment in their own plants, mainly in the soda and organic sectors. The group

has recently increased capacity for saturated polyester resins at Organika-Sarzyna and is expanding soda ash capacity in Poland by another 200,000 tpa in 2015.

KI Chemistry has committed to supporting the company in its current activity and take action to strengthen financial market situation and the company. It also pledged to integrate Ciech business with companies from the group which

### **Vitrosilicon-Solvay agreement**

Ciech subsidiary Vitrosilicon has signed a long-term contract with Solvay Advanced Silicas for the supply of vitreous sodium silicate to its site at Gorzow in Poland. Vitrosilicon is based in south-western Poland and produces a range of silicate raw materials. The estimated value of the contract between Vitrosilicon and Solvay Advanced Silicas is zł 550 million.

belongs to KI Chemistry. After its process divestment over the past couple of years, Ciech's main production area is soda ash in which it possesses 1.2 million tpa of capacity in Poland and 1.0 million tpa abroad.

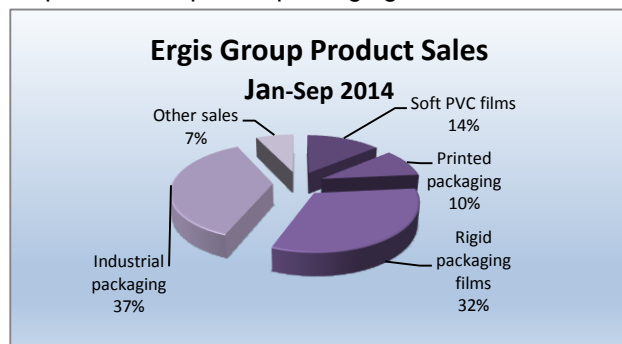
### **PCC Exol, Jan-Sep 2014**

PCC Exol achieved an operating profit of €4.97 million in January to September 2014 against €5.73 million in

2013. Sales revenues reached €138.38 million in the third quarter against €116.90 million in 2013. During the first three quarters the company achieved €3.52 million in consolidated net profit, compared with €4.27 million in 2013. Revenues increased to €389.95 million compared with €345.52 million. The net profit for the first three quarters amounted to €2.85 million against €2.30 million in 2013. PCC Exol is the only manufacturer of anionic and non-ionic surfactants in Poland.

### **Ergis to launch second PET film line**

Polish plastic film producer Ergis intends to launch a second PET film production line at Ergis SA Oława and acquire a new plastic packaging line in for its Flexergis subsidiary at Nowy Sacz. The company wants to increase the capacity of PET film from 5,000 tpa to 6,000 tpa



The Ergis Group achieved revenues of zł 505.3 million in the first three quarters in 2014, 2.8% up on 2013. The net profit was unchanged at zł 17.7 million. Raw material prices dropped in the third quarter, and revenues were lower than in the same period last year. The group has been affected by lower EU food exports to Ukraine and Russia, lowering the demand for packaging. The main polymers purchased by Ergis include LLDPE, PVC and PET. Four of the company's

six production plants are located in Poland, while the other two are in Germany.

## RUSSIA

### Russian chemical industry prospects 2015

The sharp fall in the rouble value last year has created considerable uncertainty over the Russian economy and the potential impact on the chemical industry. Whilst the lower valued currency can help improving the profitability of fertiliser and other chemical product sales, and help consumers displace imports with domestic production, the deficit in Russian chemical product trade largely offsets these advantages.

Russian Chemical Commodity Exports				
	Jan-Oct 14	Jan-Oct 13	Jan-Oct 14	Jan-Oct 13
Product	Kilo tons	USD Mil	Kilo tons	USD Mil
Ammonia	3,009	1,256	2,808	1,353
Methanol	1,241	480	1,158	412
Nitrogen Fertilisers	10,088	2,687	9,579	2,803
Potash	8,213	2,138	5,183	1,841
Mixed Fertilisers	6,829	2,480	7,592	2,951
Synthetic Rubber	690	1,515	777	1,905

The Russian chemical industry last year experienced low growth in many application sectors and even slight declines. Although not affected directly, the chemical and petrochemical industries may be restricted in access to capital and could also suffer as a consequence of the economic slowdown anticipated for 2015. Already Nizhnekamskneftekhim has pushed back its

investment plans for its new cracker several years due to the weakness of the Russian economy, and other producers may follow.

Russian Chemical Production (unit-kilo tons)		
Product	Jan-Nov 14	Jan-Nov 13
Caustic Soda	974.4	945.9
Soda Ash	2,316.6	2,261.0
Ethylene	2,171.8	2,416.0
Propylene	1,201.8	1,164.1
Benzene	1,040.1	1,090.5
Xylenes	458.9	447.1
Styrene	528.6	605.6
Phenol	210.5	258.1
Ammonia	13,351.7	13,040.0
Nitrogen Fertilisers	7,388.8	7,409.0
Phosphate Fertilisers	2,777.3	2,848.0
Potash Fertilisers	7,634.5	6,380.0
Plastics in Bulk	5,793.9	5,518.0
Polyethylene	1,440.2	1,671.0
Polystyrene	491.4	416.8
PVC	633.6	588.7
Polypropylene	940.2	766.4
Polyamide	130.9	124.8
Synthetic Rubber	1,183.7	1,365.0
Synthetic Fibres	118.7	119.1

Although growth in chemical production was minimal in 2014, the country saw some important developments including the polypropylene plant at Tobolsk-Polymer reaching full capacity, the start-up of the RusVinyl chlorine-PVC complex, and the outline of several large-scale projects for East Siberia and the Russian Far East. The increase in LPG production by Tobolsk-Neftekhim, following the expansion of gas fractionating capacity to 6.6 million tpa, is a major development tied to the future construction of the Zapsibneftekhim petrochemical complex at Tobolsk.

### Russian petrochemical projects

#### Baikal Polymer Complex

The Irkutsk Oblast in East Siberia is likely to receive the most interest for Russian petrochemical investments in 2015, not only in the north at Ust-Kut but also to the south at Angarsk, Usolye and Sayansk. The aim is that all three locations become sub-clusters for chemical industry development under the broader title of Baikal Polymer Complex.

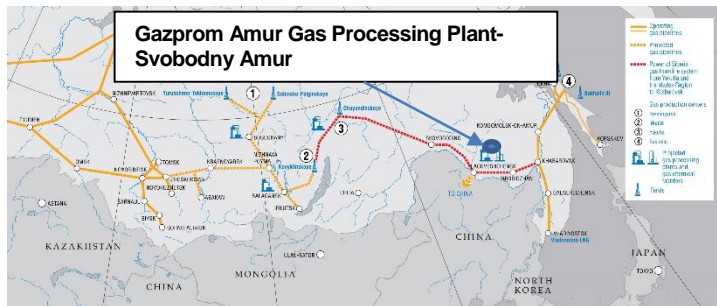
However, whilst the gas pipeline connection to Ust-Kut can be built with relative ease the Sayansk-Usolye-Angarsk pipeline provides greater challenges. The expansion of Sayanskneftekhim, for example, is limited by the availability of ethylene which can only be resolved through the gas pipeline being constructed followed by a gas-chemical complex. Gazprom has already assessed the construction of the pipeline to Sayansk as being unprofitable. Without the pipeline from Kovytko, the only other option is to supply

Sayanskneftekhim with gas from small fields but this may not be cost-effective.

Angarsk Polymer Plant intends increase ethylene capacity to 450,000 tpa from 300,000 tpa and polyethylene capacity to 200,000 tpa from 200,000 tpa. Sayanskneftekhim wants to build a plant for polyethylene with a capacity of 1 million tpa and increase PVC capacity to 450,000 tpa. The Angarsk project appears feasible as it represents capacity increases and do not necessarily depend on gas, but the plans for Sayanskneftekhim are much less certain. The best prospects for the Irkutsk Oblast are found at Ust Kut which can produce polyethylene from local gas fields, building a pipeline from the Yarakta field. This will allow the production of propane, butane, helium at Ust Kut before the ethylene-polyethylene plant is constructed.

### SIBUR creates Amur Chemical Complex

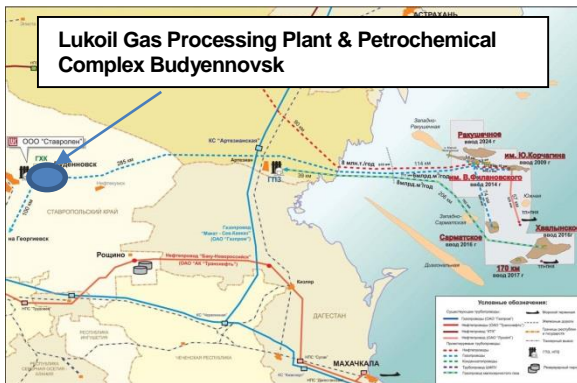
SIBUR has registered a subsidiary company Amur Chemical Complex in the Amur region to focus on the production of petroleum products, production of plastics and synthetic resins. However, the decision to build the Amur petrochemical complex is only likely to progress with the support of a foreign partner which can share the financial



risks and to support the holding in entering the Asian market. The project concept depends initially on the construction of the gas processing plant and ethane contracts. SIBUR's first plans for petrochemicals include 1.2 million tpa of ethylene, 800,000 tpa of high density polyethylene and 400,000 tpa of LDPE.

fractionating plant for Amur was awarded to Research Design Institute of Oil and Gas PETON at Ufa. Project documentation needs to be completed by 31 March 2015.

The project includes the design of gas processing and helium complex in the area Svobodny Amur which is around 66 km to the north of Belogorsk. The total area of the complex is 800 hectares. Overall, the project provides for the launch of seven production lines of gas separation performance of 7 billion cubic metres per annum. For gas supplies to China (up to 48 billion cubic meters per annum) Gazprom is expected to start an eighth line of similar capacity.



For commercial helium is planned to commission three lines with total capacity of 60 million cubic metres per annum. According to the plan construction will begin in 2015 and is scheduled commissioning of the first stage of the plant.

### Lukoil investments at Budyennovsk

Construction of Lukoil's first line of the gas processing plant at Budyennovsk is reported to be in the final stages and could be ready for production in late 2015. The design capacity of the first line is 2 billion cubic metres of gas per annum. The second phase of capacity of up to 6.5 billion cubic metres of gas is to be introduced by 2019.

The pipeline to transport associated gas from the North Caspian is also nearing completion. The capacity of the pipeline is 8 billion cubic metres of associated gas per annum, whilst the total length stands at 263.3 kilometres. In addition, a new high-efficiency power plant is being built at Budyennovsk for the gas-chemical complex, with a capacity of 135 MW. This will fully meet the demands of the gas-chemical complex in electrical and thermal energy. Any surplus energy can be sold to local consumers. The power unit includes two industrial gas turbines (Trent-60 Rolls-Royce) each with a capacity of 60 MW, two steam turbines (Siemens SST-400) with capacity of 15 MW. The fuel for the power plant will be associated gas from oil fields in the Caspian Sea. The Budyennovsk petrochemical complex is now targeted for start-up in 2021 with the addition of ethylene capacity of 255,000 tpa to the existing plant of 300,000 tpa run by Stavrolen.

### ZapSibNeftekhim petrochemical project to continue despite sanctions

Prospects for the development of the Tobolsk industrial site are not expected to suffer as the result of sanctions imposed on Russia by the international community for its involvement in the Donbass and the annexation of Crimea. The outlook for other olefin projects appears less certain.

ZapSibNeftekhim-Petrochemical Project			
Product	Licensors	Contractor	Capacity (kt/a)
Ethylene	Linde	Linde	1500
HDPE	INEOS	Technip	400
HDPE	INEOS	Technip	400
LLDPE	INEOS	Technip	350
LLDPE	INEOS	Technip	350
PP	LyondellBasell	ThyssenKruppUdde	500

ZapSibNeftekhim involves the construction of pyrolysis unit capacity of 1.5 million tpa of ethylene (technology company Linde AG), as well 500,000 tpa of propylene and 100,000 tpa of C4s.

Various grades of polyethylene are to be produced with a total capacity of 1.5 million tpa (technology INEOS), the installation of a polypropylene production capacity of 500,000 tpa (technology

LyondellBasell). Total investment in the project is estimated at about \$9.5 billion including already incurred costs

and projected costs of commissioning, the infrastructure of the production site and other work. The project is expected to be completed in 2019-2020.

## Russian petrochemical producers & markets

### SIBUR-Neftekhim completes ethylene oxide expansion

SIBUR-Neftekhim restarted ethylene oxide and glycol production on 19 December following maintenance and capacity expansion. The project has increased the capacity of the plant for the production of commodity ethylene oxide from 264,000 tpa to 300,000 tpa, as well as improve the safety and efficiency of the equipment. The plant is also benefiting from new generation of catalysts, the use of which will increase the product yield.

### SIBUR, Jan-Sep 2014

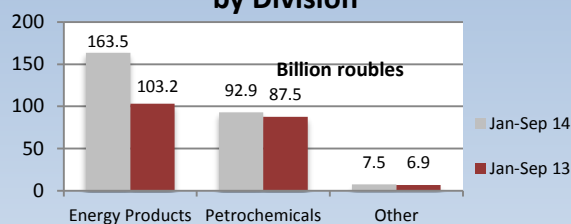
SIBUR reduced its net profit for the first three quarters in 2014 by 31% to 24.8 billion roubles. Despite benefiting from increases in LPG and naphtha sales, the group net profit was down partly due to a foreign exchange loss of 20.3 billion roubles. The EBITDA for the three quarters in 2014 amounted to 73.1 billion roubles, an increase of 28.3% over 2013. The growth in operating profits was helped by the completion of major

investment projects and the acquisition of a 49% stake in Yugragazpererabotka. In the first nine months in 2014, operating expenses increased by 43.1% 219.332 billion roubles from 153.297 billion roubles in 2013. As a percentage of total revenue, operating expenses increased to 83.1% in January to September 2014 from 77.6% in 2013.

Revenue in the first nine months in 2014 increased by 33.5% and amounted to 263.9 billion roubles. Revenues benefited primarily from the fuel and raw material divisions which increased by 54.8% over 2013 to 163.5 billion roubles. SIBUR has demonstrated a significant increase in fuel and raw material sales due to the expansion of

trade through the terminal at Ust Luga on the Baltic coast. In addition, the expansion of capacities for transportation of raw materials and gas fractionation at Tobolsk allowed SIBUR to increase production of LPG and naphtha. Tobolsk-Neftekhim increased the fractionation of natural gas liquids (NGLs) by 16.4% in the first three quarters over 2013 to 4.533 million tons.

**SIBUR's Revenues Q1-Q3 2014  
by Division**



The petrochemical division reflected a more mixed picture, but overall revenue from sales of petrochemical products increased by 6.1% and totalled 92.9 billion roubles. The quantity of sales of petrochemical products decreased by

1% to 1.6 million tons. The weakest part of the petrochemical division was the synthetic rubber business where difficult market conditions resulted in a decline in revenues by 19.2% to 20.1 billion roubles.

Conversely, mainly due to the start-up of the polypropylene plant at Tobolsk-Polymer, revenues from base polymers rose by 57.4% to 26.1 billion roubles. The increase in capacity for the production of PET at Blagoveshchensk and the start of a new production unit for BOPP film, both had a positive impact on revenues in plastics and organic chemicals.

**SIBUR's Energy Based Product Sales  
(billion roubles)**

<b>Domestic</b>	<b>Jan-Sep 14</b>	<b>Jan-Sep 13</b>
LPG	10.301	8.44
Naphtha	0.953	4.514
Natural Gas	27.361	17.15
MTBE	13.995	9.546
Crude Gas Liquids	4.271	4.048
Other Fuels/Additives	1.491	2.306
<b>Exports</b>	<b>Jan-Sep 14</b>	<b>Jan-Sep 13</b>
LPG	47.064	33.673
Naphtha	53.02	14.163
MTBE	0	1.558
Crude Gas Liquids	3.372	2.587
Other Fuels/Additives	1.399	1.1

### SIBUR-energy products, Jan-Sep 2014

Revenue from sales of energy products increased by 58.4% in September 2014 to 163.457 billion roubles from 103.169 billion roubles in the corresponding period of 2013 primarily on a significant increase in sales volumes, as well as an increase in the average prices.

Energy products sales volumes were driven by a substantial expansion of trading activities following the launch of the Ust-Luga transshipment facility in the end of 2013, which resulted in a significant increase in naphtha sales volumes. The acquisition from Rosneft of a 49% stake in OOO Yugragazpererabotka (JV) in March 2014, resulted in consolidation of 100% of natural gas volumes produced at the GPPs of the JV, and resulted in higher sales of natural gas.

SIBUR yielded 35.3% of energy product sales from the domestic market compared to 49.4% in 2013, while export sales accounted for 64.7% versus 50.6% in 2013. The increase



in export volumes was attributable to higher naphtha and LPG seaborne sales following the launch of the Ust-Luga transshipment facility.

<b>SIBUR-LPG Usage &amp; Sales (unit-kilo tons)</b>		
	<b>Jan-Sep 14</b>	<b>Jan-Sep 13</b>
Sales to Petrochem division	605.0	503.6
Domestic Sales	641.2	615.3
Exports	1910.2	1548.8
Total	3156.4	2667.7

newly launched pipeline sections.

The growth in sales volumes was also attributable to higher trading volumes and moderate inventory sales versus substantial inventory accumulation in 2013. These factors were partially offset by higher volumes supplied to SIBUR's petrochemicals business following the launch of Tobolsk-Polymer that consumes propane as feedstock. SIBUR's average prices increased by 15.6% in Russian rouble terms (3.3% in US dollar terms) reflecting the dynamics of international market prices and Russian rouble depreciation. In the period January to September 2014, domestic sales accounted for 18.0% of total LPG revenue, while 82.0% was attributable to export sales.

<b>SIBUR-Naphtha Usage &amp; Sales (unit-kilo tons)</b>		
	<b>Jan-Sep 14</b>	<b>Jan-Sep 13</b>
Sales to Petrochem division	498.3	486.5
Domestic Sales	35.4	216.0
Exports	1781.8	605.8
Total	2315.5	1308.3

#### **SIBUR-LPGs**

In the period January to September 2014, SIBUR's revenue from LPG sales increased by 36.2% to 57.365 billion roubles from 42.113 billion roubles in 2013 on a 17.9% increase in sales volumes and a 15.6% increase in the average price. The increase in external LPG sales volumes on an 11.5% production growth was a result of higher fractionation volumes primarily due to the launch of the second gas fractionating unit at Tobolsk and expanded access to the additional volumes of raw NGL via the

#### **SIBUR-Naphtha**

In the period January to September 2014, SIBUR's revenue from naphtha sales increased 189.0% to 53.973 billion roubles from 18.677 billion roubles in the first nine months of 2013 on a 121.1% increase in sales volumes and a 30.7% growth in average prices. External naphtha sales volumes surged on substantial expansion of trading activities initiated following the launch of the Ust-Luga transshipment facility in the end of 2013.

Average prices increased by 30.7% in Russian rouble terms (16.8% in US dollar terms) on relatively flat international market prices and export duties (in US dollar terms) supported by Russian rouble depreciation. In the period January to September 2014, SIBUR's share of export sales increased to 98.2% of total naphtha revenue from 75.8% in the corresponding period of 2013, while 1.8% and 24.2%, respectively, were derived from domestic sales. The change in the mix was primarily attributable to the expansion of international trading operations after the launch of the Ust-Luga transshipment facility.

<b>SIBUR's Monomer &amp; Intermediate Production (unit-kilo tons)</b>		
<b>Product</b>	<b>Jan-Sep 14</b>	<b>Jan-Sep 13</b>
Benzene	88.1	102.7
Styrene	128.3	115.2
PTA	185.9	196.7
Propylene	395.2	223.6
Ethylene Oxide	126.8	112.2
Butadiene	143.5	157.8
Isoprene	50.0	25.3
Isobutylene	116.8	50.9
Ethylene	350.1	394.3
Other Intermediates	893.9	630.3
Other Chemicals	504.8	517.3
Purchases from 3rd parties	10.1	4.3
Total	2,993.4	2,530.6

#### **SIBUR petrochemicals, Jan-Sep 2014**

In the period January to September 2014, SIBUR's revenue from sales of petrochemical products increased by 6.1% to 92.850 billion roubles from 87.491 billion roubles in 2013. The increase was achieved mainly on higher revenue from sales of basic polymers and plastics & organic synthesis products, which was significantly offset by lower revenue from sales of synthetic rubbers.

The growth in revenue from sales of basic polymers was primarily attributable to higher polypropylene production following the launch of Tobolsk-Polymer in the second half of 2013. The growth in revenues from sales of plastics & organic synthesis products was mainly attributable to capacity expansions in PET and BOPP-films. Revenue from sales of synthetic rubbers continued to decline in a persistently weak market environment.

#### **Russian propylene, Jan-Nov 2014**

Domestic market sales of propylene increased 1.6 times in November against October to 31,000 tons. Lukoil-NNOS increased sales of 9.4 times to 8,100 tons in November after maintenance, whilst Nizhnekamskneftekhim boosted supply of monomer to Stavrolen 1.9 times to 2,700 tons.

**Stavrolen restart by April**

Stavrolen plans to reach full capacity at the Budyennovsk petrochemical complex by April 2015 after completing repairs following the February accident last year. Production of polypropylene by Stavrolen was launched on 13 October, based on merchant propylene. Work continues to attract residents in the industrial park, which will be based on polymers produced by Stavrolen.

On the other hand, Angarsk Polymer Plant reduced sales by 9%, to 7,300 tons. In the period January to November 2014, domestic sales totalled 326,700 tons which was 10% up on 2013. In November imports of propylene from Azerbaijan rose 3.4 times over October to 1,400 tons. Stavrolen was the sole destination.

during the month. During the first eleven months of 2014 domestic companies exported 18,500 tons of monomer, i.e. 31% less than in 2013.

In November, exports of Russian propylene fell by half to 3,200 tons due mainly to SIBUR-Kstovo not exporting

Regarding propane-propylene fractions, sales on the domestic market totalled 144,700 tons for January to November 2014 which was 13% less than in 2013. Exports of propane-propylene fractions totalled 9,300 tons in the period January to November last year.

Russian propylene production amounted to 119,000 tons in November, 7% up on October. The rise was due mainly to the return of Lukoil-NNOS after maintenance, increasing production nine times over October to 8,100 tons. Kazanorgsintez increased production by 1.6 times to 4,100 tons and SIBUR-Khimprom 1.5 times, up to 7,000 tons. However, Titan at Omsk reduced the production of propylene by 30% in November to 12,700 tons. Russian propylene production totalled 1.3 million tons in the period January to November 2014, 6% down on 2013.

**Russian Propylene Domestic Sales  
(unit-kilo tons)**

<i>Producer</i>	<i>Jan-Nov 14</i>	<i>Jan-Nov 13</i>
Angarsk Polymer Plant	76.1	58.8
Omsk Kaucuk	2.4	2.8
SIBUR-Kstovo	66.7	107.5
Akriat	8.2	2.0
LUKoil-NNOS	124.0	118.6
Tomskneftekhim	8.7	0.2
Gazprom n Salavat	24.5	1.5
Nizhnekamskneftekhim	2.7	1.5
SIBUR-Khimprom	1.1	1.6
Stavrolen	3.4	2.9
Tobolsk-Polymer	6.6	0.0
Total	324.4	297.4

Ethylene production fell by 10.9% in January-November 2014 to 2.171 million tons. Production in November rose 10% in November to 221,000 tons following maintenance. The main reason for the growth rate was that Kazanorgsintez increased production 1.7 times to 47,500 tons. In addition, Nizhnekamskneftekhim increased ethylene production 6% to 52,400 tons.

Production of benzene in November rose by 6.3% to 99,600 tons. Production totalled 1.040 million tons in January to November, down 5.1% against 2013. Xylene production in January-November increased by 2.3% 458,900 tons. In November xylene production amounted to 39,700 tons against 26,000 tons in October.

**Russian styrene, Jan-Nov 2014**

Russian styrene sales rose 13% in November over October to 7,700 tons. Angarsk Polymer Plant increased its sales by 1.5 times to 1,800 tons whilst SIBUR-Khimprom increased by 37%, to 2,900 tons. At the same time, the supply of styrene from Gazprom neftekhim Salavat fell 15% to 3,000 tons. In the period January to November 2014 domestic sales of styrene monomer totalled 72,300 tons, 13% down on 2013.

Styrene production rose 11% in November to 58,500 tons. Nizhnekamskneftekhim increased production by 19% in November over October to 24,900 tons whilst Gazprom neftekhim Salavat increased by 9% to 15,600 tons. At the same time, Plastik at Uzlovaya reduced output by 3%, to 3,800 tons. In the period January to November 2014 Russian styrene production totalled 589,300 tons which was 6% more than in the same period in 2013.

**Bulk Polymers****Russian polypropylene, Jan-Nov 2014**

Russian polypropylene production rose 21% in the period January to November 2014 to 938,800 tons. In November production of polypropylene in Russia dropped to 105,000 tons after the record level of 109,600 tons in October. The rise in production last year is due to increased capacity utilisation at the two new sites Polyom and Tobolsk-Polymer. Oversupply of polypropylene in the domestic market and the devaluation of the rouble gave impetus to a major increase in export volumes of polypropylene in November, rising to 18,400 tons. Exports slowed down over the third quarter due to plant maintenance, but were revived in the fourth quarter due to higher production combined with advantages from the devalued rouble.

<b>SIBUR Polyolefins (unit-kilo tons)</b>		
<b>Production</b>	<b>Jan-Sep 14</b>	<b>Jan-Sep 13</b>
LDPE	191.2	181.7
Polypropylene	247.6	93.4
Purchases 3 <sup>rd</sup> parties	120.5	136.6
Total	559.4	411.7
<b>Sales</b>	<b>Jan-Sep 14</b>	<b>Jan-Sep 13</b>
LDPE	245.6	255.2
Polypropylene	211.1	183.7
Total	456.7	438.9

Exports are being shipped to Europe, South America, Turkey and China. In the first eleven months in 2014 Russian polypropylene exports totalled 156,300 tons against 93,100 tons in 2013.

Nearly all Russian producers are engaged in bringing new grades of polypropylene on to the market. However, it is not possible to completely abandon imports as some special high quality grades that are not produced in the country. Despite the efforts of domestic producers to expand the assortment of product Russian processors of copolymers have still been dependent on imports until recently. The heavy devaluation of the rouble in late 2014 led to a sharp reduction in demand for imported propylene copolymers.

Moreover, during 2014, Nizhnekamskneftekhim mastered five new grades of copolymers of propylene and ethylene, increasing capacity for copolymers by 11,000 tpa. Overall, since the start of the plant mastered the production of polyolefin 57 grades of polypropylene and 34 grades of polyethylene. The plans for 2015 include the development of a random copolymer polypropylene 4445T and development of new block copolymers with high ethylene content (12-15%).

<b>Russian Polypropylene Imports (unit-kilo tons)</b>		
<b>Category</b>	<b>Jan-Nov 14</b>	<b>Jan-Nov 13</b>
Homopolymers	51.1	68.5
Block	41.0	50.9
Random	32.0	36.1
Other	33.3	30.4
Total	157.4	185.9

Due mainly to the increase in production and to a lesser extent the devalued rouble, imports of polypropylene into Russia declined by 19% in the period January to November 2014. Imports totalled 157,400 in January to November 2014 against 185,900 tons in the same period in 2013.

#### Russian polyethylene, Jan-Nov 2014

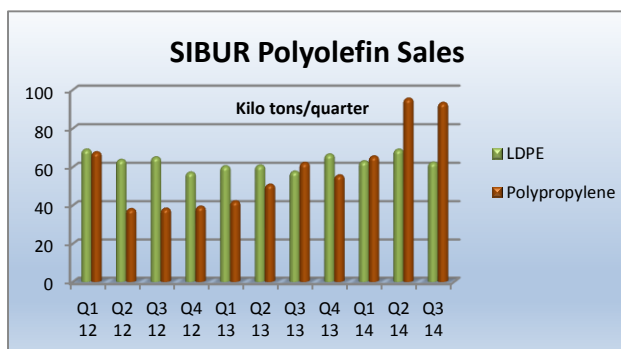
Russian polyethylene production totalled 1.440 million tons in January to November 2014 against 1.671 million tons in the same period in 2013. The main cause of the reduction has been the outage at Stavrolen, which took place in February 2014, and subsequently shut the HDPE plant. HDPE production in Russia fell 20% in the period January to November 2014 to 745,000 tons.

<b>Russian HDPE Imports (unit-kilo tons)</b>		
<b>Category</b>	<b>Jan-Nov 14</b>	<b>Jan-Nov 13</b>
Extrusion	54.4	65.3
Pipe	78.8	64.1
Film	36.8	42.3
Blow	49.3	36.8
Injection	43.0	33.4
Others	13	14.8
Total	275.3	256.7

As a result of the extended outage, HDPE imports into Russia rose 3% in January to November 2014 to 275,500 tons. The falling value in the rouble against other currencies meant that the import trend was in noticeable decline towards the latter part of 2014. This pattern was also reflected in a slowdown of LLDPE imports. Volumes totalled 192,900 tons in the period January to November 2014, against 191,800 tons in the same period in 2013.

#### SIBUR, Jan-Sep 2014

In the period January to September 2014, SIBUR's revenue from sales of basic polymers increased by 57.4% to 26.135 billion roubles from 16.605 billion roubles in the first nine months in 2013. The increase was largely attributable to higher polypropylene sales volumes following the launch of Tobolsk-Polymer plant in the second half of 2013, as well as higher prices for polypropylene and LDPE.



expansion at BOPP-film production sites at Tomsk and Novokuibyshevsk versus moderate inventory sale in the corresponding period of 2013. Domestic sales accounted for 65.2% of total polypropylene revenue in the first three quarters last year.

In the period January to September 2014, SIBUR's revenue from sales of polypropylene increased by 86.0% to 14.768 million roubles from 7.938 billion roubles in 2013. The rise in polypropylene was primarily attributable to a 165.1% increase in polypropylene production following the launch of Tobolsk-Polymer in the second half of 2013.

It was partially offset by lower purchases of polypropylene from third parties, higher internal use following the capacity

<b>SIBUR Polyolefin Sales (Billion roubles)</b>		
<b>Polypropylene</b>	<b>Jan-Sep 14</b>	<b>Jan-Sep 13</b>
Exports	9,313.0	6,059.0
Domestic Sales	14,795.0	11,044.0
Total	24,108.0	17,103.0
<b>LDPE</b>	<b>Jan-Sep 14</b>	<b>Jan-Sep 13</b>
Exports	4,161.0	4,985.0
Domestic Sales	5,477.0	6,059.0
Total	9,638.0	11,044.0

In the period January to September 2014, SIBUR's revenue from sales of LDPE increased by 31.2% to 11.367 billion roubles from 8.667 billion roubles in the corresponding period of 2013. The increase in LDPE sales volumes was attributable partly to higher production volumes due to a shorter maintenance shutdown at Tomskneftekhim. In the period January to September 2014, domestic sales accounted for 64.3% of total LDPE revenue.

#### Russian PVC, Jan-Nov 2014

Russian PVC production increased slightly in the first eleven months in 2014 to 589,100 tons. Russian PVC imports fell four-fold in November against October to 8,700 tons from 33,400 tons, influenced by a range of factors including the devaluation of the rouble, lower seasonal demand, and possibly most significantly the start-up of the RusVinyl complex. In total, Russian PVC imports declined by 19% compared with the same period in 2013 to 278,700 tons. Only Chinese producers were able to increase their sales to the Russian market last year, increasing by 35% in January to November 2014 to 174,000 tons.

RusVinyl will produce four types of suspension PVC and three types of emulsion grade, which compensates for the loss of the Khimprom plant at Volgograd. In addition to RusVinyl, Bashkir Soda Company increased the capacity of the PVC unit at Sterlitamak from 210,000 tpa to 230,000 tpa last year. The Sterlitamak plant may not need a shutdown in 2015, having undertaken a maintenance shutdown in October. Sayanskkhimplast undertook a shutdown for most of August last year and may also run production without stoppages during 2015.

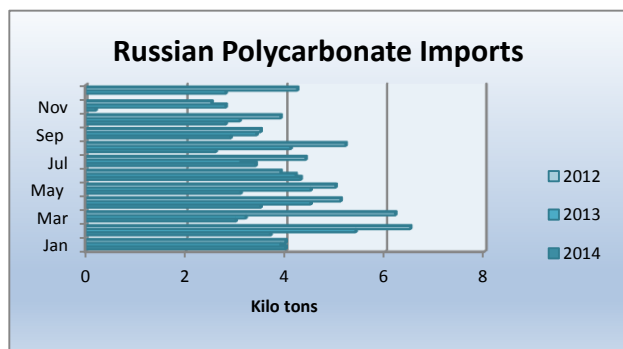
<b>Russian PVC Imports (unit-kilo tons)</b>		
<b>Source</b>	<b>Jan-Nov 14</b>	<b>Jan-Nov 13</b>
US	58.3	163.4
China	174.0	131.3
Europe	34.5	35.2
Others	11.2	12.4
Total	278.0	342.4

The PVC emulsion market has faced shortages following the stoppage of the Khimprom plant at Volgograd. This plant has been on the verge of permanent closure during 2014, stopping and restarting intermittently, before closing in late November which may be its final output. When RusVinyl is operational, the new emulsion plant should be capable of meeting Russian domestic demand in full but in the meantime consumers have had to rely on imports.

#### Russian polycarbonate, Jan-Nov 2014

Russia's consumption of bottle polycarbonate amounted to 2,500 tons in January-November 2014, down 19% against 2013. This sector of the polycarbonate market is totally dependent on imports, and imports have been affected by the devaluation of the rouble. The most popular European producers in Russia include SABIC Innovative Plastics (11% from the total imports in January-November 2014) and Styron (11%).

However, most of the imported volume occurred for Asian producers: Samyang Corporation (29%), LG Chem (25%), and Mitsubishi Engineering-Plastics Corp (21%).



polycarbonate or else seek polymeric counterparts in the more affordable price. Another solution could be to import finished products, and this has been seen in the injection and blow moulding sectors.

Russia's production of polycarbonate totalled 56,300 tons in the first eleven months of 2014, up 8% over the same period in 2013. Kazanorgsintez concentrated on the output of sheet extrusion polycarbonate in 2014, accounting for 87% of production against 13% of injection moulding grades. Production of injection moulding grades were reduced to the required levels of the domestic market, amounting to 800-900 tons per month.

#### Russian ABS, Jan-Nov 2014

Russian imports of ABS dropped by 11% in January-November imports to 34,000 tons. Despite the overall decline in Russian imports ABS, LG Chem supplies rose by 5% and amounted to 14,400 tons. Other suppliers included Samsung Cheil Industries, Styrolution, Kumho and Styron.



## PTA/PET Chain

## Ivanovo-PTA

The Ivanovo Region Governor and Russian Energy Minister have examined the issue of PTA supply to the Ivanovo region to support the PET/polyester project under construction. Similarly to the plans for a PTA project in the Stavropol region a plant at Ivanovo would depend on the availability of paraxylene and possible co-operation with SIBUR and Gazprom Neft. Further examination of project possibilities are to come under review in 2015.

SIBUR's PX, PTA & PET Matrix (unit-kilo tons)		
Product	Jan-Sep 14	Jan-Sep 13
Paraxylene Purchases	126.8	128.3
PTA Production	185.9	196.7
PTA Domestic Sales	17.7	57.6
PTA Exports	14.3	7.0
PET Production	205.8	142.3

while 0.3% was attributable to export sales.

## SIBUR PET, Jan-Sep 2014

In the period January to September 2014, SIBUR's revenue from PET sales increased by 33.8% to 9.913 billion roubles from 7.411 billion roubles. This resulted from a 37.1% increase in sales volumes and a 2.5% decline in average prices. The increase in sales volumes was primarily attributable to a 44.6% growth in production volumes following the completion of a PET capacity expansion at Blagoveshchensk (increase in capacity from 140,000 tpa to 210,000 tpa). Domestic sales and accounted for 99.7% of total PET revenue in the first three quarters last year,



Paraxylene purchases and PTA production for SIBUR were similar in 2014 against 2013, but the significant rise in PET production meant that SIBUR increased captive consumption of PTA and reduced merchant sales to other Russian PET producers.

## Russian PET, Jan-Nov 2014

PET imports totalled 178,000 tons in January to November 2014, 14% up on 2013. The import trend was downwards in the latter part of 2014 due to the devaluation of the rouble. Long term contracts mean that imports have continued even though the rouble has dropped sharply in value. Imports are expected to fall in 2015.

## Alko-Naphtha-Baltic Industrial Park

The Baltic Industrial Park at Kaliningrad, on the banks of the Vistula, is being created as a petrochemical cluster for which Alko-Naphtha will provide the main source of raw materials. The territory of the park consists of a piece of land already mastered of 119 hectares, as well

as long-term development of the site area of 127.5 hectares.

In recent months Alko-Naphtha has faced problems regarding finances and has been ordered by the court to pay MDM Bank more than €68 million. This is in connection with credit issued by the bank which has not been repaid by Alko-Naphtha. Another financial court case recently resulted from a dispute over MEG supply from Nizhnekamskneftekhim. Alko-Naphtha is the main chemical plant in the Kaliningrad region and its difficulties impact on the local industry.

Alko-Naphtha benefits from subsidies from the Kaliningrad SEZ. The Special Economic Zone in the Kaliningrad region was created on 1 April 2006 up to April 1, 2031 for the socio-economic development of the region. Investors are exempt from taxes on income and on capital in the first six years of residency SEZs, and in the next six years they pay 50%. Part of the benefits should be abolished in 2016. To date, Alko-Nafta has substantial debts on loans including 68 million euros to the MDM Bank.

Russian MEG Market, Jan-Nov 2014	
Source	Kilo tons
Domestic Sales	96.7
Exports	51.7
Imports	18.9

## Russian MEG, Jan-Nov 2014

MEG sales on the Russian domestic market rose 50% in November against October to 14,100 tons. SIBUR-Neftekhim sold 10,600 tons, 75% of total sales and the remainder was sold by Nizhnekamskneftekhim and Kazanorgsintez. Polief was the main consumer, accounting for 50% of purchases or 7,000 tons. Senezh in November significantly increased its purchases of MEG, increasing 83% to 3,500 tons. MEG imports increased

in November to 2,200 tons from only 61 tons in October. This was due to the resumption of purchases by TH Ecopolymer at Kaliningrad in November, which accounted for almost 98% (or 2,100 tons) of all imported to Russia.

In the period January to September 2014, SIBUR's revenue from sales of glycols decreased by 45.5% to 2.831 billion roubles from 5.199 billion roubles in 2013. This was due largely to a 33.6% decrease in production volumes due to the shutdowns at Kstovo and Dzerzhinsk. SIBUR recorded higher internal use following the PET production capacity expansion at Polief, where glycols form a key raw material.

## Aromatics & derivatives

Russian Benzene Sales (unit-kilo tons)		
	Jan-Nov 14	Jan-Nov 13
<b>Synthesis Total</b>	514.4	490.6
Angarsk Polymer Plant	54.2	41.2
SIBUR-Neftekhim	32.0	62.8
Severstal	32.0	29.5
Uralorgsintez	77.6	50.8
Kirishinefteorgsintez	55.5	46.3
West Siberian MC	55.5	46.8
Ryazan NPZ	23.3	22.2
Slavneft-Yanos	55.1	43.2
Gazprom Neft (Omsk)	81.3	83.6
Gazprom Neftekhim Salavat	11.8	4.3
Stavrolen	14.3	25.1
Ufaneftekhimi	15.0	6.7
Zaporozhkoks	0.0	5.4
Ukratnafta	0.0	10.3
Yasinovsky Coke	3.2	9.8
ArcelorMittal	3.6	2.6
<b>Nitration Total</b>	28.1	31.7
Novolipetsk MK	18.5	19.6
Chelyabinsk MK	12.3	12.2
<b>Crude</b>	107.3	128.8
Altay-Koks	25.4	29.0
Koks	27.9	26.5
Magnitogorsk MK	41.1	42.7
Nizhny Tagil MK	11.1	13.4
Novokuznetsk MK	1.9	5.7
Moskoks	6.6	6.8
Ural Steel	2.8	4.8
<b>Full Total</b>	649.8	639.0

### Russian benzene, Jan-Nov 2014

Russian benzene production amounted to 96,000 tons in November, 7% more than in October. Last month, after maintenance at the Omsk refinery Gazprom Neft increase production by 6.4 times, to 8,400 tons. Nizhnekamskneftekhim increased production of by 24% to 16,500 tons whilst Lukoil-PNOS reduced production of benzene 23% to 3,700 tons and Kirishinefteorgsintez by 18% to 4,800 tons. In the first eleven months in 2014 Russian benzene production totalled 1.040 million tons against 1.090 million tons in 2013.

Lukoil has merged the companies Lukoil-Perm Refinery and Lukoil-Permneftegazpererabotka, the merger took place between October and November 2014. Lukoil-Permneftegazpererabotka is a supplier of natural gas liquids or further processing, whilst Lukoil-Perm Refinery produces aromatics.

Benzene sales on the domestic market amounted to 51,600 tons in November, 9% more than in October. Sales increased after the completion of maintenance at the Omsk refinery, where Gazprom Neft increased shipments 1.6 times against October to 4,100 tons. In addition, the Ryazan Refinery increased sales volumes of aromatic raw materials by 1.6 times to 3,800 tons and Angarsk Polymer Plant 1.5 times to 6,300 tons. Shipments of benzene from Kirishinefteorgsintez decreased 26% to 4,300 tons and West Siberian MK 22% to 5,400 tons. Sales of benzene in January to November 2014 totalled 556,000 tons which was 5% less than in 2013.

ArcelorMittal did not sell benzene in Russia in November for the first month in 2014. Benzene shipments from Kazakhstan totalled 3,900 tons in January to November 2014, 18% up on 2013.

### Russian orthoxylene, Jan-Nov 2014

Russian producers sold 12,740 tons of orthoxylene in November, 86% more than in October. The Omsk refinery was down for maintenance in October, selling only 200 tons in the month before returning in November to ship 5,710 tons. Ufaneftekhimi shipped 3,750 tons and Kirishinefteorgsintez 3,230 tons. Kamteks-Khimprom acquired 6,610 tons in November, 46% of Russia's total purchases and Gazprom neftekhim Salavat 470 tons, which was 3%. Exports of orthoxylene amounted to 48,500 tons in the first eleven months in 2014, 26% more than 2013.

Russian manufacturers of paints increased their purchases of orthoxylene rose by 11% in November to 2,010 tons, 14% of consumption, whilst another 32% or 3,990 tons was shipped to consumers in fuel, agrochemical, pharmaceutical and other products. The remainder of sales went to trading companies.

**Russian toluene, Jan-Nov 2014**

Domestic shipments of toluene by rail to Russian consumers in November amounted to 13,480 tons, 20% more than in October and 36% higher than in November 2013. For January to November 2014, sales on the domestic market totalled 133,100 tons, 8% higher than in 2013. The growth was driven by increased demand across the board from manufacturers of industrial explosives, paint manufacturers and consumers in fuel and lubricants.

<b>Russian Toluene Production (unit-kilo tons)</b>		
<b>Producer</b>	<b>Jan-Nov 14</b>	<b>Jan-Nov 13</b>
Kinef	24.3	31.9
Gazprom N Salavat	13.1	8.2
Slavneft-Yanos	54.2	46.5
LUKoil-Perm	32.1	40.4
Gazprom Neft	73.2	84.2
RN Holding	35.9	39.6
Ufaneftekhim	26.8	41.4
Others	16.6	20.5
<b>Total</b>	<b>276.2</b>	<b>296.6</b>

In November, Russia produced 30,700 tons of toluene which was 22% more than in October, but 9% lower than in November 2013. Gazprom Neft stopped the Omsk refinery in October for a scheduled maintenance, and resumed production in November. Production totalled 280,700 tons in the period January to November 2014, 10% down on 2013.

**Russian phenol, Jan-Nov 2014**

Phenol production in Russia amounted to 20,400 tons in November, 2% more than in October. Kazanorgsintez produced 6,500 tons which is 9% higher than in October. Samaraorgsintez produced the same as in October, 7,500 tons, whilst Ufaorgsintez reduced production slightly to 6,400 tons.

<b>Russian Phenol Sales by Supplier (unit-kilo tons)</b>		
<b>Producer</b>	<b>Jan-Nov 14</b>	<b>Jan-Nov 13</b>
Omsk Kaucuk	10.9	44.5
Samaraorgsintez	43.5	32.9
Kazanorgsintez	12.0	8.1
Ufaorgsintez	31.6	21.5
Neftekhimya	0.0	0.2
Sterlitamak NPZ	0.0	0.1
LUKoil-VNPZ	0.1	0.1
Borealis	2.1	1.2
<b>Total</b>	<b>100.1</b>	<b>108.4</b>

Domestic sales of phenol in November fell 18% against October to 7,500 tons, supported by only a small degree by imports from Finland. Samaraorgsintez supplied 3,300 tons in November, 7% less than in October. Kazanorgsintez reduced the volume of sales more significantly by 15%: to 1,900 tons. Ufaorgsintez reduced deliveries by 35% to 2,300 tons.

Regarding purchases, phenol-formaldehyde manufacturers took 6,700 tons in November or 90% of total shipments. Other purchases were made by Kuibyshevazot, 180 tons, for the production of caprolactam. Small volumes were also bought by manufacturers of antioxidants and additives.

The weakness of the rouble was the main factor behind the reduction in imports from Borealis in November, dropping 12% against October to 87 tons. The sole Russian consumer of Finnish phenol was SPE Astatine. Despite the currency advantage for exports Samaraorgsintez reduced phenol exports in November by 45% against October to 460 tons from the Russian total of 1,025 tons. Ufaorgsintez was responsible for the remainder of the exports. Of the exports in November all went to phenol-formaldehyde resin producers in Latvia and Poland.

**Russian polyamide, Jan-Nov 2014**

Russian exports of polyamide increased 10% in the period January to November 2014 to 90,500 tons. Kuibyshevazot remains the main Russian source of polyamide with a capacity of 215,000 tpa. In the first eleven months in 2014 polyamide exports for usage in the textile industry increased by 11% to 49,600 tons. This included products Volgamid 24, Volgamid 24 SD, Volgamid 34, Volgamid 32, etc. Exports of compounding polyamide (Volgamid 25, Volgamid 27) increased by 34% to 31,200 tons. Exports of injection polyamide increased by 60% over January to November 2014 to 2,000 tons. Deliveries of polyamide film (Volgamid F34) decreased by more than twice to 7,000 tons due to the reorientation of production for the domestic market.

Imports of engineering plastics based on polyamide fell by 15% in the period January to November 2014 and amounted to 12,000 tons. Imports of additives or polyamide copolymers for film extrusion remained unchanged in the first eleven months at 3,200 tons and this sector may benefit from import substitution.

**Synthetic Rubber****Russian C4s, Jan-Nov 2014**

C4 sales on the Russian domestic market amounted to 26,500 tons in November, 6% more than in October. Kazanorgsintez doubled sales in November to 3,800 tons, whilst Tomskneftekhim increased sales 20% to 7,800

<b>Russian C4 Sales by Consumer (unit-kilo tons)</b>		
<b>Consumer</b>	<b>Jan-Nov 14</b>	<b>Jan-Nov 13</b>
Omsk Kaucuk	68.4	68.8
Nizhnekamskneftekhim	134.6	123.2
Togliattikaucuk	120.0	146.4
Sterlitamak Petrochemical Plant	8.1	4.2
<b>Total</b>	<b>331.0</b>	<b>342.5</b>

tons in the period January to November 2014, 1.6 times more than in 2013. C4 prices fell in December due partly the falling European prices for butadiene and partly lower demand.

<b>SIBUR-Synthetic Rubber Production (unit-kilo tons)</b>		
	<b>Jan-Sep 14</b>	<b>Jan-Sep 13</b>
Commodity Rubber	162.8	220.9
Speciality Rubber	65.9	66.2
Thermoplastic elastomers	34.5	25.9
3rd part purchases	0.6	7.1
<b>Total</b>	<b>263.8</b>	<b>320.0</b>

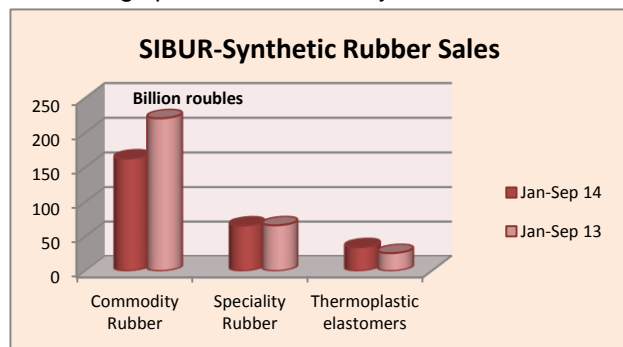
<b>SIBUR-Synthetic Rubber Sales (million roubles)</b>		
	<b>Jan-Sep 14</b>	<b>Jan-Sep 13</b>
Commodity Rubber	85.5	102.6
Speciality Rubber	81.4	130.0
Thermoplastic elastomers	166.9	232.6
<b>Total</b>	<b>334</b>	<b>465</b>

<b>SIBUR-Synthetic Rubber Sales (million roubles)</b>		
	<b>Jan-Sep 14</b>	<b>Jan-Sep 13</b>
Domestic Sales	8.8	10.3
Exports	60.2	55.1
<b>Total</b>	<b>69.0</b>	<b>65.3</b>

commodity rubbers declined on a 25.1% decrease in production. In the period January to September 2014, SIBUR reduced production volumes of commodity rubbers on the back of the unfavourable market environment. The decrease in sales volumes was also attributable to moderate inventory sales as compared to substantial destocking in the respective period of 2013. Additionally, SIBUR reduced product purchases under third-party manufacturing arrangements.

The average prices for commodity rubbers declined, following the dynamics in European and Asian market prices.



rubber revenue, while 57.9% was attributable to export sales.

tons. In November, SIBUR-Kstovo reduced sales by 16%, to 5,900 tons. In the period January to November 2014 sales of C4s on the domestic market dropped 14% against 2013 to 252,700 tons.

C4 imports fell 29% in November against October to 5,300 tons. Belarus and Azerbaijan were the only sources of imported product. Omsk Kaucuk reduced imports 2.8-fold to 540 tons, whilst Nizhnekamskneftekhim reduced purchases by 20% to 4,700 tons. Imports totalled 89,600

#### SIBUR-synthetic rubber, Jan-Sep 2014

SIBUR's revenue from synthetic rubber sales decreased by 19.2% in the first three quarters in 2014 to 20.124 billion roubles from 24.908 billion roubles in the same period in 2013. Commodity rubbers was the main product group affected, while revenue from specialty rubber sales was relatively flat and revenue from thermoplastic elastomers sales slightly increased.

The increase in specialty rubber sales volumes was primarily attributable to higher production volumes of NBR at Krasnoyarsk. In 2013 the plant undertook a shutdown, which was not repeated last year. Other factors included a capacity expansion of butyl rubber at Togliatti. Revenues from sales of thermoplastic elastomers was supported by growth in sales volumes as a result of the commercial launch of the new thermoplastic elastomers production facility at Voronezh (capacity of 50,000 tpa). In the first three quarters in 2014, domestic sales accounted for 36.4% of total synthetic rubber revenue.

In the period January to September 2014, SIBUR's revenue from sales of commodity rubber fell by 30.7% to 11.889 billion roubles from 17.159 billion roubles in 2013. This was due to a 29.7% decrease in sales volumes and a 1.4% decline in average prices. Sales volumes of

Asian prices for natural rubber, which is a benchmark for polyisoprene rubber declined on average by nearly 30% in US dollar terms.

European prices for styrene-butadiene rubber (ESBR) were down 5% in euro terms, while prices for butadiene declined by almost 18% in euro terms. At the same time European prices for styrene declined by 6% in US dollar terms. The negative dynamics of the international market prices was largely compensated by the Russian rouble depreciation. In the period January to September 2014, domestic sales accounted for 42.1% of total commodity



**SIBUR-FMC catalyst contract, Jan-Nov 2014**

SIBUR has signed an agreement with the American chemical company FMC Chemicals and TD Halmek, which is a distributor of FMC, for the supply of catalysts. The contract will remain in effect until the end of 2015. Under the agreement, FMC Chemicals in cooperation with TD Halmek will deliver to the Voronezh production site n-butyl lithium, which is used as a catalyst for the production of thermoplastic elastomers. Under the agreement, FMC Chemicals will also provide technical support for the application and use of the catalyst in the Voronezh area.

**Gazprom Neft, polymer bitumen binders**

Gazprom Neft increased sales volumes of polymer-modified bitumen binder (PBB) and bitumen emulsions (BE) by 31% in the third quarter last year. According to Gazprom Neft, the third quarter was marked by starting the installation of the WSP and BE in the framework of a joint venture with Total, signing an agreement on cooperation in the use of modern bituminous materials with Avtodor, as well as agreements in the field of regulatory and technical regulations in the application of polymeric materials in road construction with SIBUR and the Federal Road Agency. The company established a specialized subsidiary last year entitled Gazprom Neft-Bituminous Materials. The company is a leader in sales of bitumen production in Russia with a market share of 26%.

<b>Russian Tyre Manufacturers</b>	
Manufacturer	Capacity (mi pieces pa)
Yaroslavl Tyre Plant (Kordiant)	4.9
Voltyre Prom (Kordiant)	2.7
Omskshina (Kordiant)	2.8
Kordiant-East (Kordiant)	3.1
Amtel/Pirelli at Kirov and Voronezh	9.6
Nizhnekamskshina	16.3
Altai Tyre Plant	1.7
Michelin	1.7
Nokian 2 plants (Leningrad Oblast)	16.5
Yokohama Lipetsk	1.4

**Russian Tyre News**

Tyre manufacturers in Russia are set to increase prices 7-15% in early 2015, having been affected by the sharp devaluation of the rouble. Foreign suppliers could increase prices by as much as a third. The largest net importers include Hankook, Kumho, Goodyear, Belshina, Bridgestone, Sumitomo, Toyo, and others.

Among the traditional Russian manufacturers is Nizhnekamskshina, with a capacity of 16.3 million tyres per annum and Kordiant, which includes the company Uralshina,

Voltyre-Prom, Kordiant East, Omskshina and Yaroslavl tyre factory. Nokian Tyres plant in St. Petersburg (the largest foreign producer of tyres in Russia), and the lion's share of production goes abroad. However, the composition includes imported rubber additives that are purchased in euros, thus limiting the advantages of a cheaper rouble.

Imports from China also represent a problem for the domestic manufacturers. China accounted for 64% of total imports of truck tyres into Russia 2013, taking an estimated 23% of the total Russian market. As a result of import pressure, Russian tyre manufacturers were forced last year to incur losses in order to compete with Chinese importers. In late 2014 the Eurasian Economic Commission (Customs Union) began a new anti-dumping investigation against China regarding truck tyres.

**Methanol****Russian methanol, Jan-Nov 2014**

Russian methanol production amounted to 308,200 tons in November, 16% more than in October. Metafrax, Sibmetakhim and Tomet accounted for about 70% of the production in November with Shchekinoazot taking 14%. Tomet increased production 2.5 times in November over October to 73,800 tons, whilst Sibmetakhim increased production 33% to 70,600 tons. Metafrax produced 90,300 tons in November against 93,000 tons in October.

<b>Russian Methanol Exports (unit-kilo tons)</b>		
Producer	Jan-Nov 14	Jan-Nov 13
Azot Nevinnomyssk	16.3	0.0
Azot Novomoskovsk	169.9	99.2
Akron	4.9	9.4
Metafrax	277.1	340.4
Sibmetakhim	374.7	307.2
Tomet	193.8	221.1
Shchekinoazot	342.1	231.8
Total	1378.7	1209.1

Domestic sales of methanol amounted to 132,000 tons in November, 15% more than in October. Metafrax, Sibmetakhim and Tomet accounted for 86% of sales. Tomet increased sales 54% in November to 35,300 tons. Sibmetakhim increased sales 10% to 40,000 tons and Metafrax increased by 2% to 37,800 tons. The major consumers in November included the MTBE producers and domestic gas producers, together accounting for 55% of purchases.

Another 30% was sold to domestic producers of rubber and formaldehyde and its derivatives.

Russian methanol exported 8,000 tons through the Odessa terminal in November and expected to ship 17,300 tons in December. Destinations for Russian methanol via the Odessa terminal include Israel, Turkey and Romania, whilst Tomet is the main supplier through this route.

Russian producers exported 108,400 tons of methanol in November, 16% more than in October. The rise was attributable to the devaluation of the rouble against other currencies. Sibmetakhim accounted for 30% of exports, followed by Metafrax with 25% and Shchekinoazot 21%. Azot at Novomoskovsk and Tomet at Togliatti remain the least important Russian exporters. Finland accounted for 55% of Russian methanol exports in November, i.e., 58,600 tons which was 40% up over October. Other destinations included Poland with 12,200 tons, Slovakia with 15,600 tons and Romania 12,600 tons. Consumers in Poland and Slovakia in November reduced the volume of purchases of Russian methanol compared to October by 10% and 18%, respectively, whilst consumers in Romania increased by almost 50%.

#### **Ammonium Mendeleevsk to start in 2015**

The Ammonium project at Mendeleevsk in Tatarstan for ammonia, methanol and urea is scheduled to start production in the fourth quarter in 2015. The project is being managed by Mitsubishi Heavy Industries and NIIK. The construction of the complex should be completed by March 2015, with commissioning to take place in August. Previously the company was aiming to start production in March 2015. The complex will include a combined unit for the production of ammonia with a capacity of 455,000 tpa and methanol with a capacity of 238,000 tpa. Another unit for urea is being constructed with a capacity of 717,500 tpa. Ammonium nitrate production capacity will also increase to 450,000 tpa.

#### **Fosagro-ammonium sulphate & Ust Luga**

Fosagro plans to launch a new production unit at Cherepovets for ammonium sulphate with a capacity of 300,000 tpa. The plant is being targeted for a start-up in 2017. The cost of the investment is estimated at 2.7 billion roubles which will be financed by Fosagro's own resources and borrowed funds. Equipment for the project is being supplied by the German company GEA Messo PT.

For the production of ammonium sulphate the new unit will use sulphuric acid and ammonia which are produced at Cherepovets. The production of ammonium sulphate will increase the company's raw material security, and remove risks in chemical production components necessary for the

production of complex fertilisers. Currently Fosagro is the largest consumer of ammonium sulphate in Russia, which buys products from various chemical and metallurgical enterprises. Other projects being undertaken by Fosagro at Cherepovets include new facilities for ammonia and granulated urea, with respective capacities of 760,000 tpa and 500,000 tpa.

Fosagro plans in 2015 to increase the handling of fertilisers through the port of Ust-Luga. Fosagro plans to tranship around 48% of its exports through the Ust-Luga port on southern part of the Gulf of Finland, which translates into around 2 million tpa. The increase in shipments through Ust Luga is due to the reorientation of the Estonian port of Muuga and the Finnish port of Kotka. Fosagro is planning to construct its own terminal at Ust-Luga. The deep water area of the port (17.5 m) in combination with a short approach channel (3.7 km) make Ust-Luga port the only Russian port on the Baltic Sea capable of dry cargo ships of up to 75,000 tons and tankers with deadweight up to 160,000 tons.

### **Organic Chemicals**

<b>Russian Butanol Production (unit-kilo tons)</b>		
<b>N-Butanol</b>		
<b>Producer</b>	<b>Jan-Nov 14</b>	<b>Jan-Nov 13</b>
Angarsk Petrochemical	28.8	29.2
Evrokhim	17.2	16.8
Gazprom n Salavat	61.3	78.5
SIBUR-Holding	31.5	30.9
Total	138.7	155.4
<b>Isobutanol</b>		
<b>Producer</b>	<b>Jan-Nov 14</b>	<b>Jan-Nov 13</b>
Angarsk Petrochemical	13.6	14.2
Gazprom n Salavat	25.8	29.9
SIBUR-Holding	37.3	37.4
Total	76.6	81.6

#### **Russian butanols, Jan-Nov 2014**

Butanol production in November amounted to 20,500 tons, 17% less than in October but 9% higher than in November 2013. The share of n-butanol in production was 61% and isobutanol 39%. Gazprom neftekhim Salavat produced 9,890 tons or 48% of total production, whilst SIBUR-Khimprom accounted for 34% producing 6,940 tons. Other producers included Angarsk Petrochemical with 2,050 tons and Azot Nevinomyssk with 1,650 tons. In the period January to November 2014, Russian butanol production totalled 214,600 tons, 11% more than in 2013. The product shares for 2014 were consistent at 61% for n-butanol and 39% for isobutanol.

Butanol sales on the domestic market amounted to 6,800 tons in November, 6% up on October and 40% higher than in October 2013. N-Butanol accounted for 74% of sales and isobutanol 26%. SIBUR-Khimprom shipped 4,830 tons in November, accounting

Russian Butanol Domestic Sales		
Producer	Jan-Nov 14	Jan-Nov 13
Gazprom n Salavat	24.5	16.1
SIBUR-Khimprom	28.4	15.4
Angarsk Polymer Plant	2.0	8.5
Azot Nevinnomyssk	2.6	15.8
Others	4.9	36.8
Total	62.4	55.8

for 71% of Russian supplies, Gazprom neftekhim Salavat neftekhim 1,750 tons (25%), Azot at Nevinnomyssk 190 tons (3%), and Angarsk Petrochemical Company 600 tons (1%).

Dmitrievsky Chemical Plant reduced purchases of butanols by 31% to 1,630 tons in November, whilst Aktilat increased purchases 85% to 2,640 tons. Other buyers include the manufacturer of flotoreagents Volzhskiy Orgsintez at 480 tons. In the period January to November 2014 Russian butanol purchases totalled 67,700 tons which was 22% more than for the same

period in the previous year. The proportion of n-butanol was 78%, and isobutanol 22%.

Russian Butanol Exports (unit-kilo tons)		
	Jan-Nov 14	Jan-Nov 13
<b>N-Butanol total</b>	89.7	59.0
Gazprom Neftekhim Salavat	43.1	37.3
SIBUR-Khimprom	20.5	5.1
Angarsk Petrochemical	7.0	14.8
Azot Nevinnomyssk	18.2	0.9
Dmitrievsky Chemical Plant	0.9	0.9
<b>Isobutanol total</b>	22.5	30.8
Gazprom Neftekhim Salavat	8.5	15.4
SIBUR-Khimprom	15.6	28.5
Angarsk Petrochemical	12.4	8.5
Dmitrievsky Chemical Plant	0.2	0.2

Domestic butanol consumption could be helped by the value of the rouble remains so low against the dollar and euro. In particular, the difficulties for domestic consumers to pay for imported paints and paint raw materials has created an opportunity for domestic paint and solvent producers. Signs of import substitution were seen last year for Russian Paints which produced 25,360 tons of paints in the first nine months, of which production of waterborne paints rose by 6%, industrial paints by 5% and powder paints by 10%.

Butanol exports rose 2.3 times in November to October, amounting to 11,870 tons. This was 2.1 times higher than in November 2013. N-butanols accounted for 81% of exports in November 2014. Exports rose due to low demand on the domestic market and the weakness of the rouble against the dollar. China accounted for 74% of Russian shipments and Finland 13%. Of the Russian

producers Gazprom neftekhim Salavat neftekhim exported 10,290 tons, accounting for 87%, Angarsk Petrochemical Company 1,300 tons (11%), and SIBUR-Khimprom 230 tons (2%). From January to November 2014, exports of butanol from Russia totalled 97,400 tons which is 22% less than in the same period in 2013. N-butanol accounted for 60% of exports and isobutanol 40%.

Rouble devaluation is helping to push up prices of domestic paints, but these products still remain lower priced compared to imported products of similar grade. Aside the issue of cost, some paint manufacturers in Russia are seeking to increase dependency on locally produced raw materials due not only cost but also convenience. Jotun, for example, aims to increase its usage of domestic materials to 80% of total costs by 2017. Other manufacturers may be impeded by the lack of production in certain product areas.

#### SIBUR plastics & organic chemicals, Jan-Sep 2014

In the period January to September 2014, SIBUR's revenue from sales of plastics and organic chemicals increased by 5.3% to 33.012 billion roubles from 31.350 billion roubles in the same period in 2013. The increase was primarily attributable to higher sales volumes of PET and BOPP-films, as well as positive pricing dynamics for expandable polystyrene and acrylates. This was partially offset by deconsolidation of PVC cable compounds and ABS Plastics from SIBUR's product portfolio following the divestments of the respective production sites in April 2014 and December 2013. SIBUR also recorded lower sales due to the shutdowns at production sites in Kstovo and Dzerzhinsk. This included an unscheduled shutdown at our steam cracker in Kstovo in January 2014 followed by a lengthy scheduled shutdown for the expansion of the cracking capacity at Kstovo in the second quarter in 2014. A lengthy scheduled shutdown took place at SIBUR's production site at Dzerzhinsk as a part of the ethylene oxide upgrade.

SIBUR's Organic Chemical Sales (unit-kilo tons)		
Domestic	Jan-Sep 14	Jan-Sep 13
Acrylates	1.3	2.3
Oxo Alcohols	14.5	13.5
Export	Jan-Sep 14	Jan-Sep 13
Acrylates	7.2	8.9
Oxo Alcohols	19.4	20.5

#### Russian plasticizer markets, Jan-Nov 2014

A significant rise in 2-EH costs forced Kamteks-Khimprom and Roshalsky Plant of Plasticizers to suspend the production of DOP in November. According to the companies, rising prices of raw materials will not allow them to compete with the Gazprom neftekhim Salavat, used in the manufacture its own 2-ethylhexanol. Gazprom neftekhim Salavat ceased production of DOP due to low sales in the second half of November. The company's warehouses

have accumulated substantial reserves, which are currently being implemented at the same price, 78,000 roubles per ton including VAT. Gazprom neftekhim Salavat may resume production of plasticizer in January whilst it is not yet clear when Roshalsky Plant of Plasticizers and Kamteks-Khimprom plan to restart DOP production.

Phthalic anhydride exports rose 43% in November over October to 3,360 tons, although this figure was still down 30% against November 2013. The destinations for Russian exports included China (30% of Russia's supply), India (30%), Finland (12%) and Poland (7%). From January to November 2014 shipments of phthalic anhydride totalled 58,100 tons which is 6% lower than in the same period last year.

## Other Chemicals

### Altaikhimprom under new ownership

Following restructuring after bankruptcy in 2011 Altayhimprom plans investment of around 3 billion roubles in the next five years. The company employs 464 people, rising to 700 by 2018. In July 2014 the assets were purchased by Sirius SV which is controlled by FORES-Chemistry. In the autumn last year Sirius leased the plant for the production of benzoic acid.

The company has continued manufacturing silicon-organic liquids, halothane, iron dichloride, PES liquid disinfectants. In the near future is expected to start production of epoxy resins, polyhexene (reagent for oil), ethyl acetate (solvent for paints and varnishes). FORES-Chemistry produces chemicals used in oil and gas production to work on hydraulic fracturing. Products of focus include polyhexene, as a reagent for the transportation of oil, and ethyl acetate. The company has also launched the production of demulsifier with a capacity of 500 tons per month, whilst has developed a proprietary technology of production of solvents asphaltene and paraffin deposits with a capacity of 300 tons per month.

### Chemkor-cable compound expansion

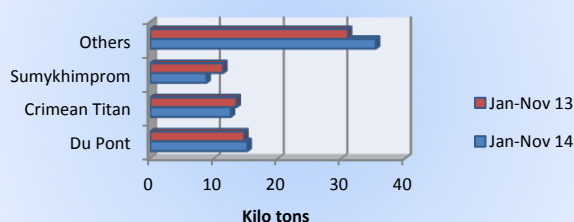
Chemkor at Dzerzhinsk plans to invest 352 million roubles in production expansion cable compounds. The company plans to increase the production of cable compounds up to 50,000 tpa. Chemkor is a manufacturer of UPVC pipes for water supply pressure of external networks, for external and internal sewage systems, as well as the casing threaded everything for intake and technological wells. In April 2014 Chemkor closed a deal to acquire cable compound plant at Dzerzhinsk from SIBUR.

### Air Products-SIBUR-Khimprom

Air Products and SIBUR-Khimprom signed an agreement in late 2014 to build a new air separation plant at the Perm site. Under the agreement, Air Products will supply SIBUR-Khimprom the necessary volumes of industrial gases in order to self-build installation and operation of air separation equipment at their own expense.

The design capacity of the plant is up to 3,000 cubic metres of nitrogen gas per hour and up to 6,500 cubic metres per hour of dry compressed air. The plant is targeted for operation in 2016. After starting the installation Air Products will act as a guaranteed supplier of industrial gases for SIBUR-Khimprom for a period of twenty years. SIBUR has concluded three other contracts for industrial gas supply for other group locations, including Voronezh (Air Products), Dzerzhinsk (with Linde Gas) and the Tomsk area (Cryogenmash-Gas).

### Russian Titanium Dioxide Imports



12,600 tons to Russia, 1,100 tons more than in January-November 2013 whilst Sumykhimprom reduced exports to Russia reduced by 2,600 tons to 8,800 tons.

### Russian titanium dioxide imports, Jan-Nov 2014

In January-November imports of titanium dioxide increased by 2% compared to 2013, totalling 72,600 tons. The largest supplier of titanium dioxide pigment for paints Russian producers, processors and producers of polymers paper is DuPont. In 2014 the company increased its imports by 500 tons to 15,200 tons. Crimean Titan shipped

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

Product	Jan-Nov 14	Jan-Nov 13
Potassium Fertilisers	5897.5	4835.8
Benzene	119.0	119.4
Caprolactam	112.6	109.6
Polyethylene	124.0	147.5

### Belarus

### Belarussian petrochemicals

Belarus has requested compensation from Russia of more than €1 billion in losses due to tax reform in the Russian oil industry. Changes in the Russian tax system mean that



Belarusian refiners could lose around \$50 per ton. Belarusian refineries have to bear the burden of cross-subsidization, which have so far not succeeded in eliminating the petrochemical industry but cause problems. Due to concerns about further losses resulting from tax reform in Russia. In November, Belarus produced 12,300 tons of benzene which was 43% more than in October. In the period January to November Naftan produced 119,000 tons of benzene against 119,400 tons in 2013. Azot at Grodno produced 112,600 tons of caprolactam which was 4% less than in 2013. Polymir at Novopolotsk produced 124,000 tons in January to November 2014 against 126,000 tons in 2013.

<b>Belarussian Polymer Imports (unit-kilo tons)</b>		
<b>Product</b>	<b>Jan-Oct 14</b>	<b>Jan-Oct 13</b>
PVC	35.0	38.1
Polypropylene	70.0	68.7
LDPE	43.5	37.6
HDPE	46.7	52.4
Polystyrene	59.1	69.7
Total	254.3	266.4

#### **Belarussian polymer imports, Jan-Oct 2014**

In the first ten months of 2014, Belarus imported 90,200 tons of polyethylene against 90,100 tons in the same period in 2013. The main suppliers of polyethylene on the local market in 2014 included Saudi Arabia for HDPE and Russia mostly for LDPE.

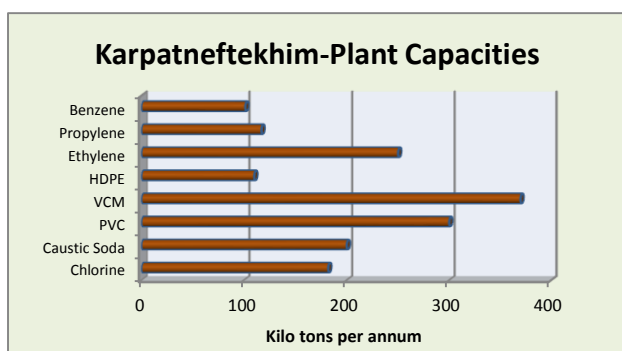
For PVC, imports declined 9.4% in the period January to October 2014 to 34,500 tons. Many local processors reduced demand for PVC due to the decline in sales of finished products. The key supplier of PVC for the Belarusian market include producers from Germany, accounting for 53%

of shipments in 2014. Other suppliers of significance included Anwil in Poland and BorsodChem in Hungary.

### **Ukraine**

#### **Karpatneftekhim could restart in 2015?**

Karpatneftekhim could resume production in March-April 2015, but it is dependent on a number of conditions being agreed to by the Ukrainian government. These include a reduction in railway tariffs for the transportation of the feedstock, abolition in the excise duty on petroleum products, and introduce protection from PVC imports.



The annual turnover of the plant when running fully is around \$7 billion and thus is too important to the Ukrainian economy to remain idle. Karpatneftekhim is owned by Lukoil, and thus a restart of the plant could be beneficial for Russian-Ukrainian relations.

The fall in oil prices provides an opportunity to make profits from refining and petrochemicals in Ukraine, but the government has provide support. The first action required

involves the reduction of railway tariffs, whilst other measures could be added quickly. A bill to impose tariffs of 6.5% on imported PVC is under consideration at present and could be approved in the near future. Karpatneftekhim stopped production of HDPE in November 2013 and PVC in December 2013 and has since been idle. In the first ten months in 2014 Ukrainian PVC imports totalled 101,000 tons which was 15% less than in the same period in 2013.

<b>Ukrainian Benzene Market (unit-kilo tons)</b>		
	<b>Jan-Nov 14</b>	<b>Jan-Nov 13</b>
Production	74.7	88.9
Exports	54.2	52.1

#### **Ukrainian benzene market**

Benzene production in Ukraine amounted to 2,500 tons in November 28% less than in October. Ukratnafta reduced production by 45% in November to 1,300 tons. In addition, Zaporozhkoks reduced production 21% to 928 tons. Zarya at Rubezhnoye resumed production of benzene in November after being idle in October and produced 334 tons. Ukraine produced

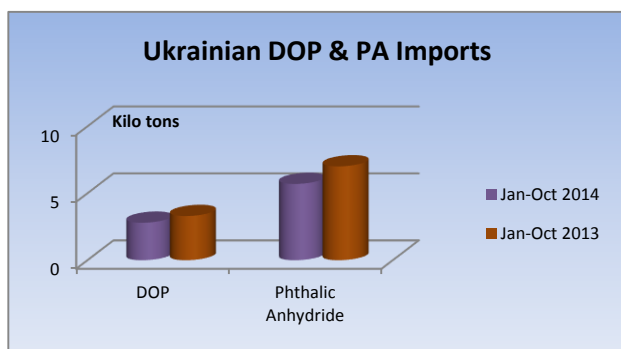
74,700 tons of benzene in January to November 2014, which was 19% down on 2013. Exports totalled 54,200 tons in eleven months in 2014, 4% up. The main exporters include Zaporozhkoks and Ukratnafta.

Zarya at Rubezhnoye stopped production of nitrobenzene in December due to raw material shortages but in particular to a lack of Russian supplies of concentrated nitric acid. Benzene demand in other parts of the Ukrainian market remain affected by the economic problems and only small quantities are being sold.

#### **Ukrainian organic chemicals**

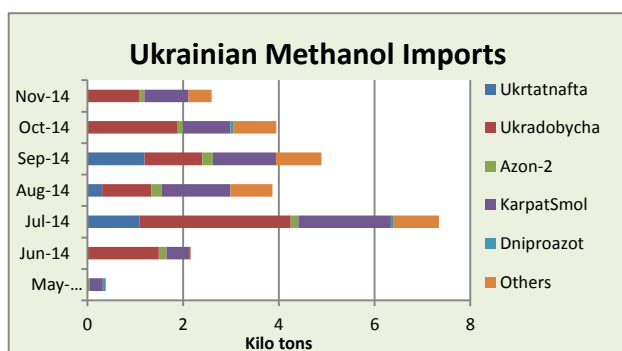
In December butanol prices in Ukraine rose again due to the ongoing devaluation of the hryvnia. Due to the high cost of sales of butanol in Ukraine demand is currently minimal. Phthalic anhydride prices have been stable, but

demand is small. Imports of phthalic anhydride totalled 506 tons in November against 498 tons in October. Domestic buyers included Polikem, Lizinvest, Impulse and Impress.



In October, the volume of imports of phthalic anhydride in Ukraine amounted to 500 tons which is 15% less than in September but 2% higher than in October 2013. Polikem bought 340 tons in October, Lizinvest 120 tons and another 42 tons was consumed by Lakhimprom at Dnepropetrovsk. Polikem bought 273 tons in October from Belarus and 63 tons from Bulgaria. Lizinvest imports solely from Russia and Lakhimprom from Bulgaria. From January to October 2014 the volume of imports of phthalic anhydride in Ukraine totalled 5,700 tons which is 23% less than in the same period in 2013.

Imports of phthalic anhydride in November amounted to 510 tons, 2% more than in October but 41% less than in 2013. From the total imports Lizinvest bought 180 tons and Polikem 170 tons. Ukraine imported 190 tons from Russia, 170 tons from Belarus, 130 tons from Bulgaria and 20 tons from Turkey. In the period January to November 2014, imports into Ukraine totalled 6,200 tons amounting to 25% less than in 2013.



Ukrainian imports of DOP amounted to 2,890 tons in January to October 2014, 17% down on 2013. The main suppliers of DOP in Ukraine are Czech company DEZA (38%) and Polish company Boryszew (62%).

#### Ukrainian methanol

In November, Azot at Severodonetsk shipped the last 50 tons of methanol inventory to Azot at Cherkassy. Production was being set up to restart, but due to gas shortages it is unlikely to happen before the spring this year. The major importers of methanol in recent months have been KarpatSmol and Ukrgazdobicha.

In the latter part of 2014 methanol demand weakened in Ukraine, resulting in lower imports in November of 2,600 tons which was 35% less than in October. It should be noted that Ukrainian consumers are still trying to reduce dependence on Russian supplies. In November, the volume of purchases of Russian methanol by Ukrainian customers fell 65% against October and amounted to 870 tons. Imports from Belarus dropped by only 12% and amounted to 1,700 tons.

The cost of domestic consumers purchased abroad methanol in November in dollar terms decreased compared to October by almost 4%. However, due to the growth of the dollar against the hryvnia imports actually rose by 10%. Over the month of November, the average cost of imported methanol was \$427 (nearly 6300 hryvnia) per ton DAF border Ukraine, against \$446 or 5780 hryvnia in October. Methanol was supplied at the lowest price to Ukraine in November from Azerbaijan and highest from Norway although volumes in both cases were small.

### Central Asia

#### UzKorGasChemical Plant Capacities

Product	Kilo tpa
Polyethylene	387
Polypropylene	83
C4s	105
Pyrolysis Resin	8.6

#### UzKorGasChemical to complete gas chemical complex in 2015

The UzKorGasChemical joint venture between Uzbekistan and South Korea expects to complete construction of the \$3.9 billion Ustyurt gas chemical complex by the autumn of 2015. August has been set as a month for completion. Most of the equipment is in place and communications are being installed.

Work on the plant began in 2011 where the project is being designed to process 4.5 billion cubic metres of gas per annum. Other capacities include 387,000 tpa of polyethylene, 83,000 tpa of polypropylene, in addition to C4s and pyrolysis resin. UzKorGasChemical selected 90 hectares for the construction of the complex near Akchalak Kyrkkyz and 115 km from Surgil field. The gas-chemical complex is

being designed to produce 3.2 billion cubic metres of gas per annum, of which 3 billion cubic metres will be used by UzKorGasChemical.

#### **Uzbek GTL project**

After Uzbekistan failing to attract loans for construction of the GTL plant at the Shurtan Gas Chemical Complex efforts are now underway to find a new investor. The amount of investments in new GTL unit is estimated at \$5.6 billion. The bulk of the money was supposed to attract project financing from a consortium of foreign banks, but this has fallen through.

#### **Atyrau aromatics complex starts commissioning**

KazMunaiGaz started commissioning of the new aromatics complex at Atyrau in later December, which will eventually lead to the production of paraxylene with a capacity of 496,000 tpa and benzene 133,000 tpa. The aromatics complex has been constructed by Sinopec Engineering and has been undertaken in conjunction with the intensive modernisation of the Atyrau refinery. It is not clear how long the commissioning will last for, but a tentative estimate indicates a start-up in the latter part of this year. The Atyrau refinery has had its capacity raised to 5 million tpa.

#### **SOCAR-Gazprombank**

SOCAR aims to draw \$420 million from Gazprombank for the construction of production of polyolefins in Azerbaijan. The project SOCAR-Polymer is based at the chemical and industrial park at Sumgait. Project capacity includes 200,000 tpa of polypropylene and 120,000 tpa of polyethylene. Start of production is scheduled for late 2016.

Azerkhimya produced 5,500 tons of propylene in November, 6% less than in October. In the first eleven months of 2014 the Azerbaijani company produced 50,900 tons of propylene, 43% more than in 2013. C4 production totalled 26.700 tons in January to November, 17% more than in 2013.

*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 = 15.89. €1 = 19.05: Rus rouble. \$1 = 60.8. €1= 73.2

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