

# CIREC

## MONTHLY NEWS

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

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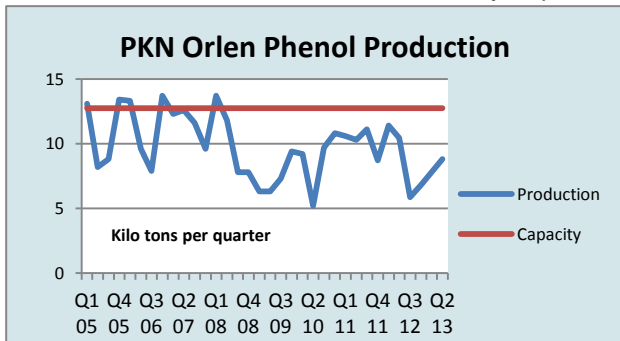
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## CENTRAL & SOUTH EAST EUROPE

### PKN Orlen-phenol expansion

PKN Orlen completed research studies in August into the expansion of phenol capacity at Plock and the project is now in the preparatory phase. Orlen intends to increase its share in the Polish market of phenols, where 70% of the demand is satisfied by imports, mainly from Germany, Belgium, and Finland. The project is scheduled to commence construction in 2014 and the production launch is expected sometime in 2017. Capacity is intended to rise to 200,000 tpa from the 35,000 tpa that operates at present. In recent years production has struggled to achieve full utilisation due to the age of the equipment.

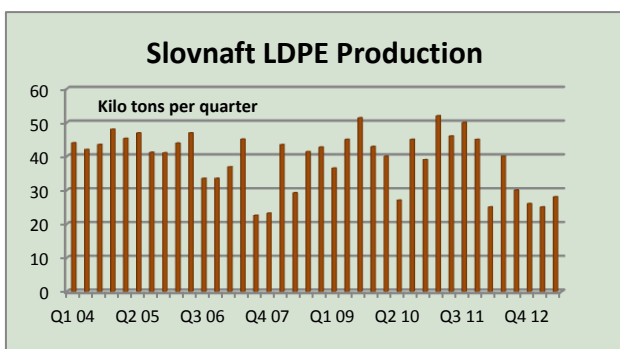


years. Currently, the largest consumers of phenol in Poland include producers of caprolactam, phenol-formaldehyde resins, etc. Accordingly, the conceptual design provides for the production of larger quantities of product with improved energy consumption and lower raw material consumption ratios in phenol production.

### Unipetrol stops ethylene production due to technical difficulties

Unipetrol announced on 17 September that due to unexpected technical difficulties, it was necessary to shut down operation of its steam cracker unit at Chempark Záluží at Litvinov. Due to the steam cracker shutdown polymer production will also be limited. Operation of refinery units, which provide feedstock to the steam cracker, could be affected. Unipetrol estimates that the steam cracker unit operation will be restarted in approximately 14 days after all maintenance activities have been performed. The estimated cost of the unscheduled shutdown is Kc 60 million.

Prior to the cracker shutdown Unipetrol had indicated an operating loss in the third quarter, counterbalancing the profits from the early part of the year. In the second quarter the group benefited from a one-off payment of Kc 230 million as returned fine from the European Commission. This was for a former subsidiary Kaucuk Kralupy on charges of alleged cartel for an alleged cartel for emulsion styrene butadiene rubber. This allegation was later overturned.



### Slovnaft-LDPE project starts

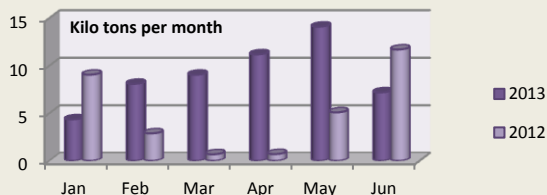
Slovnaft has begun construction of the new LDPE plant at Bratislava. The cost of construction is estimated at €200 million and an additional €100 million will be needed to revamp the ethylene plant. Funds will be also spent on associated logistics infrastructure. Slovnaft is financing investment through a combination of its own funds, loans from the EBRD and commercial bank loans. The new facility will replace seven older plants and produce polyethylene for a wide range of applications. The new plant will have a capacity of 220,000 tpa replacing the existing

plant of 180,000 tpa.

### HIP Petrohemija-possible sale

HIP Petrohemija may seek a strategic investor in 2014, although Gazprom Neft which owns NIS) has made it clear that it does not intend to participate. Whilst Gazprom Neft does not want to become a major shareholder in Petrohemija, at the same time is interested in the petrochemical facilities as part of the interface of refining facilities owned by NIS. Negotiations are reported to be ongoing, although no further details have been granted. The largest shareholder in Petrohemija is the Republic of Serbia with 68.52%, followed by Srbijagas with 13.38% and NIS 12.72%. NIS is also exploring the possibility of increasing the share of Petrohemija for its debts, as a result of the share of NIS may increase to about 34%.

### HIP Petrohemija-Polyethylene Exports



In 2012 Petrohemija undertook the first phase of the modernisation programme, increasing HDPE capacity, and the now the second phase is close to starting. The government of Serbia has approved the guarantee by the Export Credit and Insurance Agency to HIP-Petrohemija, for an investment programme financing loan worth €11 million. According to HIP-Petrohemija these resources shall be used primarily for the energy efficiency increase projects and for the processing and packaging capacity increase project within the HDPE plant.

### Rompotrol-Monomer Processing (unit-kilo tons)

	Jan-Jun 13	Jan-Jun 12
Ethylene	19	34
Propylene	46	59

### Rompotrol Rafinare, Jan-Jun 2013

Rompotrol Rafinare's consolidated net loss went down 40% in the first half of 2013 to \$78.4 million against \$131.8 million last year. In the petrochemical division, Rompotrol Rafinare recorded a gross turnover of \$103 million in the first six months of 2013, a decrease of 22%. The quantity of raw material processed in the first half of this year has been

31% lower than in the same period of 2012. Rompotrol Petrochemicals has a production capacity of 200,000 tpa of polymers.

### Spolana restarts production, chlorine licence extended

Following the flooding Spolana resumed production of PVC on 14 August and caprolactam on 18 August. Production at the chemical plants resumed with the support of the plant personnel from Anwil and PKN Orlen.

Spolana has stated that it wants to stop producing chlorine using mercury by mid 2017. Spolana had wanted to extend the license to 2020 whilst environmental groups had been insisting on the original deadline of 2014 to be enforced. Eventually a compromise has been agreed, allowing Spolana to continue operating beyond 2014. Even if modernisation was started now the process would last longer than 2014 so this extension does allow Spolana the opportunity to agree technical terms with equipment suppliers and contractors.

Spolana has proposed that the mercury process will closed no later than 30 June 2017 and replaced by a new membrane method of chlorine production. According to Spolana the new membrane technology will begin no later than 31 March 2017. In 2014 Spolana intends to undertake analysis and studies to determine the levels of mercury and persistent organic pollutants in fish from the river Elbe.

The Central Bohemia Regional Office granted approval to Spolana to extend the integrated permit allowing operation of existing electrolysis installations until 30 June 2017. At the same time the company will be required to prepare the technological changes in production for 31 March 2017. The decision will come into force by the end of September.

### PCC Exol. Jan-Jun 2013

The Polish surfactant producer PCC Exol increased revenues in the first half of the year by 6.7% over 2012 to zł 228.6 million. The net profit amounted to zł 3.9 million in the first half of 2012 and zł 3.1 million in the first half of 2013. Net profits were affected by tightening margins for household chemicals and personal care products. Only 17.1% of sales in 2013 were achieved in the Polish market, with export sales focused on West and Central Europe, Middle East and Africa, and North America.

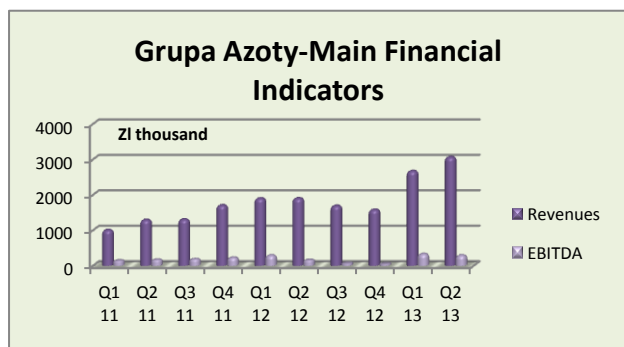
Almost 80% of PCC Exol's revenues were sourced from the sale of non-ionic and anionic surfactants. The remainder of the revenue came from the sale of specialty and amphoteric surfactants. At the beginning of 2013 PCC Exol bought US company PCC Chemax, through which the Group intends to increase its presence in the North American market.

### Grupa Azoty. Jan-Jun 2013

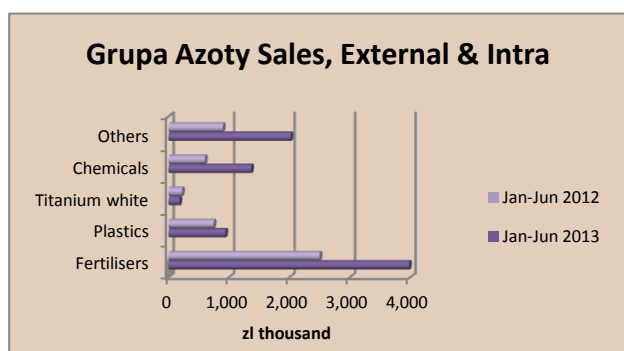
Grupa Azoty achieved zł 5.2 billion in revenues in the first half of 2013 against zł 3.8 billion in 2012. The EBIT increased from zł 353 million to zł 788 million, whilst the net profit rose from zł 273 million to zł 771 million in 2013. Group Azoty ZAK achieved zł 1.1 billion in sales revenue and a net profit of zł 84 million in the first half of 2013.

The consolidation of ZA Pulawy into Grupa Azoty on 18 January 2013 has been the major contributory factor behind the increase in revenues this year. Fertiliser revenues for the group increased 35% in the first half of the year, mainly due to consolidating the revenue of ZA Pulawy. As part of the consolidation and incorporation of ZA Pulawy the oxo alcohol division at Kedzierzyn has been merged into the new chemical division of Grupa Azoty.

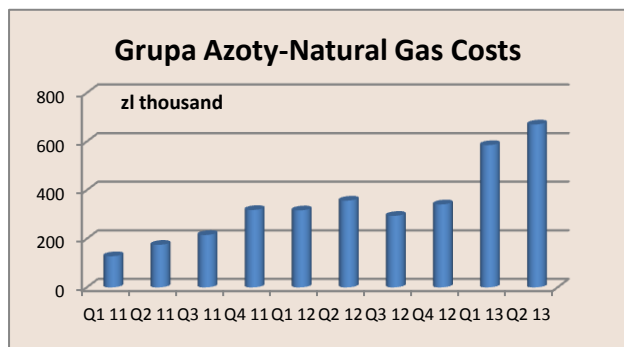
Other products included in the chemical division include plasticizers, melamine, high-purity urea solution (AdBlue), maleic anhydride, urea, and other technical chemicals. Revenues from the chemical division accounted for 208% of total revenues of Grupa Azoty in the first half of 2013 at zł 1.093 billion. A positive operating result was reported largely due to a very good market situation for melamine on both the demand side and prices.



out major investment projects relating to energy and to further increase of plant efficiency.



significant drop in demand in the automotive and construction industries. In the second quarter the expected increase in demand did not materialise and the price of titanium dioxide in Europe has not subsequently as hoped. Compared to last year the average price of the first half was about 20-30% lower whilst high prices have been encountered for raw materials such as ilmenite.



be 2014 before any meaningful comparisons can be made.

Group Azoty Police has acquired 55% of the Senegalese African Investment Group, allowing access to the Senegalese phosphate deposits. The Senegalese African Investment Group (AIG) company has a license to access the ilmenite sand deposits of Sud Saint Louis and allows the exploration of deposits of calcium phosphate in the areas of Lam and Kebemer (about 100 km north of Dakar). Not only does the agreement provide access to raw materials but it also will allow Grupa Azoty to expand into other markets in Africa.

#### BorsodChemTDI

BorsodChem announced a force majeure on 27 August for TDI from the main plant at Kazincbarcika. The affected plant was shut down in late July for a four week maintenance cycle. When trying to move off again, it came to sources familiar with the situation to a technical failure, the cause is not known.

include the production of phosphoric acid.

Chemical revenues rose 81%, heavily influenced by addition of melamine at Pulawy. Increases in melamine prices helped offset losses elsewhere in the chemical division where sales for oxo alcohols declined by 40% against 2012.

In the first half of 2013 Grupa Azoty has achieved made some achievements in the field of guaranteeing sources of raw materials and expanding the product range. A number of key investment projects were also completed in the first half of the year such as the plant of flue gas desulphurisation at Pulawy. The group is also carrying

Grupa Azoty ZAK faced adverse conditions in the n-butanol market due to weakness in demand from customers in the paints and varnishes sector. From April onwards however, the Kedzierzyn plant has seen a degree of market recovery in acrylates, and subsequently acetates and glycol ethers. Isobutanol was affected in the first half of the year by oversupply. In the plasticizer market the most difficult conditions were seen for dioctyl phthalate (DEHP).

Grupa Azoty Police saw low demand for titanium white in the first half of 2013. The market was affected by the

#### Grupa Azoty-raw materials

Natural gas accounted for 40.3% of total costs in the first half of 2013 for Grupa Azoty, amounting to zł 1.343 billion. The amount of gas used and costs have risen significantly in the past two years due primarily to the acquisition and integration of ZAK, ZCh Police and more recently ZA Pulawy.

Total costs for Grupa Azoty amounted to zł 3.331 billion in the first half of 2013 against zł 2.599 billion in 2012. The large rise in costs is due to the incorporation of ZA Pulawy. Taking the major changes into account, it will

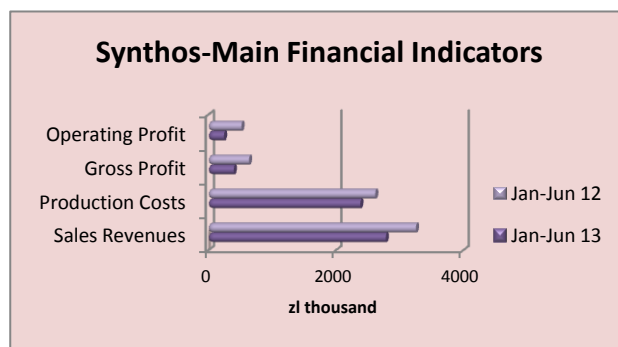
AIG holds licenses for access to deposits of phosphates and ilmenite in Senegal. Following this transaction, the Group Azoty Police is the first Polish chemical company to possess their own resources which could save around zł 30 million per annum. The estimated reserves stand around 56 million tons of phosphate rock and a half million tons of ilmenite sands. Plans for the next phase of the project could



### Synthos, Jan-Jun 2013

Synthos experienced a difficult first half of 2013, with the group's operating profit falling from zł 520.467 million in same period in 2012 to zł 246.469 million. Market factors included several days of stoppage at Synthos Kralupy caused by the June floods in the Czech Republic. No material losses were noted but damages to railroad, road and transport infrastructure in Central Europe had a knock-on effect at Kralupy.

The group net profit for Synthos declined in the second quarter to zł 89.1 million against zł 235 million from in the same period in 2012. Operating profit fell significantly in Q2 2013 by 61% to zł 93.1 million. Overall for the first half of 2013 poor conditions in the automotive industry affected the demand for tyres and the synthetic rubber market. Moreover, in the first half of 2013, sales of replacement tyres in Europe dropped by 6% from 91.2 million tyres compared with 96.7 million tyres in 2012. Low butadiene and synthetic rubber prices (especially in the second quarter of 2013) had a negative impact on the margins.



Synthos-Main Product Revenues (zł thousand)		
	Jan-Jun 13	Jan-Jun 12
Synthetic Rubber	1647.9	2150.1
Polystyrene	919.6	901.5
Dispersions	55.7	56.1
Energy	141.1	122.6

Conditions in the construction industry were also restricted and this had an impact on sales of dispersion and styrene plastics (mainly EPS) in the Synthos Group. High prices of other styrene plastics, (GPPS and HIPS) contributed to better margins. The main factor which limited the decline of the group's results for synthetic rubber was the diversification into markets in Asia and finding new customers. Another positive was the growing use of Nd BR rubber production capacity.

The main challenges for the Synthos Group relate to the lack of vertical integration, particularly at Oswiecim and to a lesser extent at Kralupy. Raw materials procurement by the Synthos Group from third parties is based chiefly on long-term contracts with suppliers. The lack of full integration in raw materials tends to make the Synthos Group more vulnerable to fluctuations in prices and to the risk of securing appropriate quantities of deliveries. When markets are running in balanced conditions the Synthos Group can operate quite successfully, but it is weaker placed when supply interruptions from third parties occur.

Polish Chemical Production (unit-kilo tons)		
Product	Jan-Aug 13	Jan-Aug 12
Caustic Soda Liquid	214.4	166.7
Caustic Soda Solid	53.9	36.3
Soda Ash	675.4	640.2
Ethylene	343.2	259.2
Propylene	239.0	179.4
Butadiene	37.3	31.3
Toluene	12.7	9.9
Phenol	23.5	22.6
Caprolactam	106.3	98.7
Acetic Acid	5.5	5.1
Polyethylene	245.7	180.6
Polystyrene	35.1	28.0
EPS	52.1	42.1
PVC	204.4	147.0
Polypropylene	180.5	132.4
Synthetic Rubber	129.9	110.3
Ammonia (Gaseous)	871.4	744.0
Ammonia (Liquid)	867.4	775.5
Pesticides	15.4	13.1
Nitric Acid	1521.0	1340.0
Nitrogen Fertilisers	1230.0	1088.4
Phosphate Fertilisers	261.9	250.0
Potassium Fertilisers	216.4	200.4

In the first half of 2013 Synthos increased the production of Nd BR polybutadiene, directly related to completion of the process of gaining product specification approval from tyre manufacturers in 2012. This trend is particularly evident in West Europe where demand is rising for polybutadiene rubber, particularly produced by neodymium technology.

In the first half of 2013 Synthos continued work on the new SSBR rubber plant, consisting of 90,000 tpa capacity. In February this year a building permit was obtained and currently construction and design work are being conducted. The licence was agreed in June 2012 with Goodyear Tyre & Rubber Company and the new plant is expected to be launched in 2015. The plant will also be capable of manufacturing lithium polybutadiene Li BR, used to modify plastics such as ABS and polystyrene.

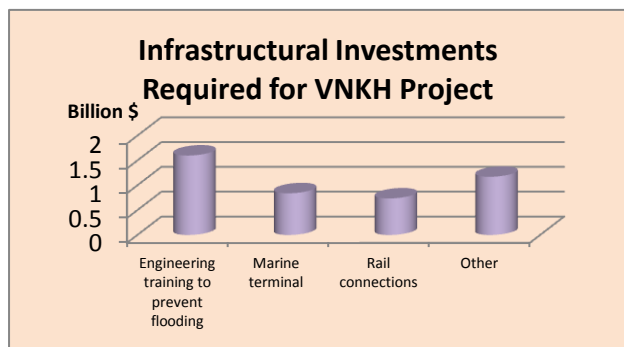
After a three-year break for nitrile rubber production Synthos Dwory restarted production in the first half of the year. The production covers the kinds of products well-known on the market (KER-N29, KER N-2960, KER N-30 and KER N-18). Synthos also intends to try to obtain certificates which would allow the use of the rubbers in rubber blends which have contact with food.

## RUSSIA

### Russian petrochemical projects

#### Eastern Petrochemical Company-challenges faced in completion of refinery & cracker

Of the three one million ton crackers under construction in Russia, Rosneft's Eastern Petrochemical Company (VNKH) appears to face the greatest challenges. The question of sufficient oil supply and investments in the infrastructure pose issues for Rosneft which may affect the project schedule and the project itself. Nakhodka differs from the other two projects in Russia at Nizhnekamsk and Tobolsk in that a large degree of infrastructure is already in place at these locations.



The total amount of investments required into the construction of the VNKH's petrochemical project at Nakhodka is estimated at 1.3 trillion roubles. The cost of the first phase of the project is estimated at 380 billion roubles; the second stage 310 billion roubles; and third 630 billion roubles. Rosneft has stated that all production at VNKH will be oriented to the domestic market, and petrochemicals for export.

In June this year Rosneft revised its original project for VNKH, increasing refining capacity to two blocks of 12 million tpa which could produce 6 million tpa of naphtha.

The first phase of the master-project is intended to involve construction of refining capacity of up to 12 million tpa, and the second phase will comprise the launch of a petrochemical unit of 3.4 million tpa. The third phase includes an increase of oil for an additional refining capacity of 12 million tpa and petrochemical capacity to 2.6 million tpa.

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

Product	Jan-Aug 13	Jan-Aug 12
Caustic Soda	686	712
Soda Ash	1,671	1,888
Ethylene	1,780	1,581
Propylene	864	761
Benzene	793	729
Xylenes	353	323
Styrene	457	355
Phenol	188	185
Ammonia	9,506	10,270
Nitrogen Fertilisers	5,505	5,484
Phosphate Fertilisers	2,138	2,060
Potash Fertilisers	4,533	4,437
Plastics in Bulk	3,999	3,700
Polyethylene	1,230	1,075
Polystyrene	297	260
PVC	426	429
Polypropylene	555	486
Polyamide	90	87
Synthetic Rubber	990	934
Synthetic Fibres	94	92

Transneft has expressed uncertainty about the viability of the project by Eastern Petrochemical Company (VNKH), stating that it would not be able to supply 24 million of crude. Achieving 12 million tpa of crude via the East Siberian Pacific Ocean pipeline (ESPO), operated by Transneft, remains within target, but Rosneft is seeking higher volumes. The possibility of importing crude has come into the equation using the marine terminal which is to be located 800 metres from the complex.

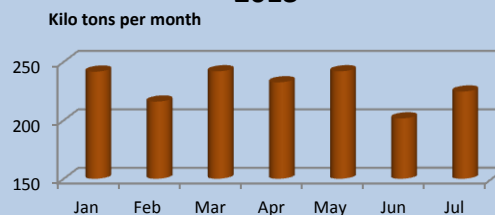
Rosneft wants to increase the internal rate of return of the first stage of VNKH from 14.9% to 22.4% through the construction of infrastructure at the expense of the state budget and giving it the benefit of income tax and the property. Rosneft has requested the Ministry of Energy, Ministry of Economic Development, Ministry of Finance and other departments to support investment in the project of building VNKH. It is not clear how far the government will support the project, but Rosneft is advocating that the support is provided in the investments in the infrastructure: oil and gas pipelines, railways, power lines, ports, etc.

#### Nizhnekamskneftekhim-FEED for new cracker

Nizhnekamskneftekhim (NKNH) expects to receive extended basic design (FEED) for the 1 million tpa cracker in November. The FEED for the ethylene complex is being prepared by engineering company Chicago Bridge & Iron Company (CB & I, USA), and is reported already to all but completed. Nizhnekamskneftekhim expects to proceed to selecting funding options the last few months of the year. The intention is to attract support from export-credit agencies, including Hermes, (Germany), Atradius (Netherlands) and SACE (Italy).

According to preliminary estimates, equipment will comprise about 40% of the total project cost. The company has already arranged favourable terms with the Russian government on VAT, helping to reduce the overall cost. The remaining costs will be targeted on design, survey, construction and installation. To finance the remainder of the company is planning to raise funds through public loans or loan syndications. Last year NKNH signed agreements for licenses with Lummus for 1 million tpa of ethylene, Ineos with polyethylene for 600,000 tpa and with Basell for 400,000 tpa of polypropylene.

### Tobolsk-Neftekhim LPG Production 2013



### Tobolsk-Neftekhim, gas fractionating plant

Around 70% of construction of the second gas fractionation plant (HFC-2) and processing of natural gas liquids at Tobolsk-Neftekhim has been completed thus far. To recap the project represents a key part in the feedstock configuration for the Zapsibneftekhim ethylene project at Tobolsk, in addition to the gas liquid pipeline linking Tobolsk with the Purovsky condensate plant.

### Tobolsk railway upgrade

The rail network in the Tyumen region is being upgraded to improve logistics for both Tobolsk-Neftekhim and Tobolsk-Polymer. The project expansion and modernisation of the station Denisovka includes the construction of three new tracks. It is also planned to lay 24 kilometres of the main routes to the system of centralized control and automatic turnouts, as well as to build a co-engineering structures and communications.

When completed the HFC-2 project will increase the total capacity of fractionation at Tobolsk to 6.6 million tpa from the current 3.8 million tpa. Completion of the HFC -2 is scheduled for 2014. The project includes the increase in capacity for storage tanks for products derived from the processing of natural gas liquids, as well as building a refrigeration unit that will store the goods at fixed temperatures below freezing. In addition, work is underway on the improvement

areas, in particular, paving, installation of curbs, landscaping. These technological solutions are being undertaken to minimize the impact of the complex on the environment.

## Russian petrochemical producers & markets

### SIBUR Main Financial Indicators



### SIBUR, Jan-Jun 2013

SIBUR revenues amounted to 130 billion roubles in the first six months in 2013, 5% down on the same period last year. The fall was largely attributable to three key factors; the weakness of the synthetic rubber business, the discontinuation of fertiliser sales and changes in the feedstock by Yugragazpererabotka. SIBUR's energy product group performed well on strong volume growth. Also an increase in revenue was recorded from sales of plastics and organic products following the consolidation of Biaksplen.

SIBUR's EBITDA for the first half of 2013 amounted to 38.117 billion roubles, a decline of 10.4% against 2012. A decrease in EBITDA was primarily attributable to tighter spreads between feedstock and end-product prices, particularly in the synthetic rubber product group.

### SIBUR's Main Financial Indicators (billion roubles)

	Jan-Jun 13	Jan-Jun 12
Total Revenue	130.030	136.926
Energy products	67.219	63.441
Petrochemicals	57.984	64.426
Other	4.827	9.059
EBITDA	38.117	42.562
EBITDA margin, %	29.3%	31.1%

the second quarter of 2012.

The net profit for the first half of 2013 totalled 25.4 billion roubles, 13.9% down on 2012. In the first half of 2013, SIBUR's capital expenditures increased by 11.8% to 36.044 billion roubles. The growth was attributable to the investments in the development of SIBUR's feedstock processing and transportation infrastructure, as well as in SIBUR's petrochemical projects. In the second quarter SIBUR's feedstock and materials costs increased by 10.3% to 15.979 billion roubles from 14.485 billion roubles in the second quarter of 2012. As a percentage of total revenue, feedstock and materials cost increased to 25.0% from 22.2% in

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

Product	Jan-Jun 13	Jan-Jun 12
Benzene	71.4	64.3
Styrene	87.0	79.5
PTA	129.2	133.2
Propylene	152.9	157.2
Ethylene Oxide	37.4	39.1
Butadiene	97.4	114.4
Isoprene	5.6	7.8
Isobutylene	16.6	16.4
Ethylene	271.1	269.4
Other Intermediates	396.0	446.8
Other Chemicals	346.0	381.1
Purchases from 3rd parties	2.9	6.9

**SIBUR-petrochemicals, Jan-Jun 2013**

In the second quarter of 2013, SIBUR's revenue from sales of petrochemical products declined by 5.3% to 29.7 billion roubles from 31.3 billion roubles in the second quarter of 2012. Mixed demand and pricing trends seen in the first quarter continued in the second quarter. The synthetic rubber business remained under significant pressure due to weak demand and persisting price correction for all grades, with the exception of butyl rubber.

In the first half of 2013, SIBUR's revenue from sales of petrochemical products decreased by 10.0% to 58.0 billion roubles from 64.4 billion roubles in the first half of 2012. SIBUR's revenues for the first six months in 2013 were helped through the consolidation of the Biaksplen group of companies from the second quarter of 2012. Domestic sales accounted for 65.1% of total petrochemical revenues.

**SIBUR-energy group, Jan-Jun 2013**

SIBUR increased sales volumes in majority of its energy products in the first half of 2013, primarily due to higher hydrocarbon feedstock processing. External sales of NGLs, (including LPGs, naphtha and raw NGL) rose 17.1% to 2.3 million tons. SIBUR's costs related to purchasing of NGLs declined by 7.4% in the second quarter to 5.9 billion roubles from 6.3 billion roubles in 2012. The average purchase price decreased on the back of lower international market prices for LPG and naphtha. Lower prices for raw NGL also reflected continuously growing supply of raw NGL in West Siberia.

In the first half of 2013, SIBUR's feedstock and materials costs increased by 17.7% to 33.3 billion roubles from 28.2 billion roubles last year. SIBUR's feedstock and materials costs increased to 25.6%

from total costs from 20.6% a year earlier. The growth was primarily attributable to higher hydrocarbon feedstock purchasing costs, in addition to other factors such as the reclassification of polypropylene purchases following the consolidation of Biaksplen.

SIBUR's transportation costs increased by 5.8% to 19.4 billion roubles from 18.3 billion roubles in 2012. Transportation costs totalled 14.9% of total costs in the first half of 2013 versus 13.4% in 2012. For the same time period SIBUR's energy and utilities costs declined by 10.3% to 13.012 billion roubles from 14.505 billion in 2012.

**Nizhnekamskneftekhim-Production (unit-kilo tons)**

Product	Jan-Jun 13	Jan-Jun 12
Synthetic Rubber	313,4	289,3
- Butyl & Halobutyl	90,9	79,2
- Polybutadiene	92,5	83,2
- Polyisoprene	130,0	126,1
Plastics	327,0	300,1
- Polyethylene	100,3	99,4
- Polypropylene	104,7	105,2
- Polystyrene/ABS	122,0	95,4

**Nizhnekamskneftekhim, Jan-Jun 2013**

Similarly to SIBUR Nizhnekamskneftekhim's results for the first half of this year were affected by the lower global pricing environment for rubbers. In physical terms, the production of synthetic rubber by Nizhnekamskneftekhim grew by 8.3% over 2012 to 313,000 tons; and plastics by 9% to 327,000 tons. Despite the increases in production overall revenues for Nizhnekamskneftekhim declined by 7.94% to 62.9 billion roubles and the EBITDA decreased by 17.01% to 10.2 billion roubles.

Nizhnekamskneftekhim has completed the ABS plant offering new revenue opportunities for the company. Nizhnekamskneftekhim is continuing the construction of the fourth stage of the polystyrene line, and to modernise the production of alpha-olefins. The major project emphasis involves the construction of the new one million tpa cracker and related polyolefin plants. At present the necessary licensing agreements are being prepared for the FEED project documentation and the structure of financial agreements.

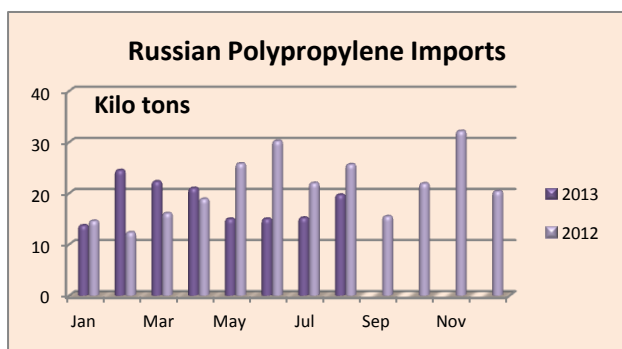


**Gazprom Neftekhim Salavat, Jan-Jun 2013**

Gazprom Neftekhim Salavat's net profit amounted to 19.453 million roubles in the first half of 2013, against 661.0 million in the same period in 2012. The fall in net income was due principally to the rapid growth of costs over revenues for both refinery and petrochemical divisions. The cost of production increased by 15.9%, whilst sales and distribution expenses rose by 39%. Despite the fall in net profit revenues for Gazprom Neftekhim Salavat increased by 19.9% in the first half of 2013 to 84.214 billion roubles and the operating profit increased by 31% to 24.583 billion roubles.

<b>Gazprom Neftekhim Salavat Production (unit-kilo tons)</b>		
<b>Product</b>	<b>Jan-Jun 13</b>	<b>Jan-Jun 12</b>
Benzene	63.6	44.3
Butanols	50.6	62.7
Ethylbenzene	88.9	68.3
Ethylene	148.4	124.9
Polyethylene	83.5	50.5
2-Ethylhexanol	20.7	25.0
Phthalic Anhydride	3.2	3.4

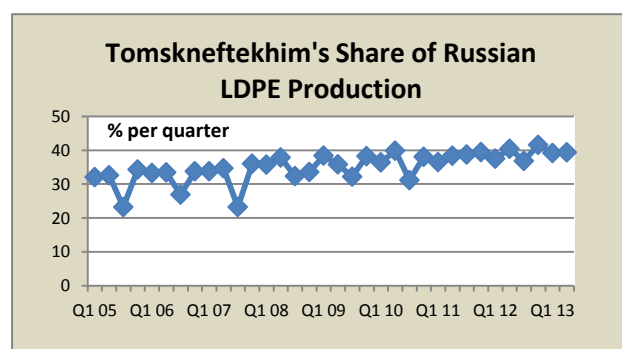
Russian Bank Intesa has provided Gazprom Neftekhim Salavat with credit funds in support of the investment programme in the petrochemical division. This follows a larger agreement made in June with Sberbank. Gazprom Neftekhim Salavat is undertaking two major projects, the first of which includes the modernisation of the EP-300 cracker leading to a capacity of 380,000 tpa. The purpose of the expansion is to meet the captive needs of the company. The second project involves the construction of an acrylates complex, based on Mitsubishi, which should be completed by 2015.

**Bulk Polymers****Russian polypropylene, Jan-Aug 2013**

Polypropylene imports into Russia in January-August dropped 23% against 2012 to 145,500 tons. Imports of polypropylene in August rose by 27% compared against July. After a serious decline in the period May-July, the volume of imports of polypropylene in Russia in August increased to 19,400 tons against 15,200 tons in July.

The main increase in the supply of polypropylene came from Turkmenistan. Russian consumers are still unable to completely abandon the import of polypropylene despite increased availability and the high level of prices

in foreign markets. Import of polypropylene homopolymer rose to 10,600 tons in August against 6,300 tons in July. Imports of propylene copolymers amounted to 8,300 tons, similar to the previous three months.

**Russian polyethylene market**

Tomskneftekhim restarted polyolefin production on 8 August after maintenance which started 19 July. Tomskneftekhim runs polyolefin capacities of 245,000 tpa for LDPE and 130,000 tpa of polypropylene. Kazanorgsintez stopped HDPE production at one of its three reactors in on 9 September for 30 days. The other two reactors followed a few days later as part of the annual maintenance. HDPE capacity for Kazanorgsintez totals 470,000 tpa. The company produced 284,000 tons in the first seven months in 2013.

Angarsk Polymer Plant resumed production of polyethylene after a long stop for maintenance. The plant began production of LDPE on 11 September after a 50-day stop. Plant capacities at Angarsk include 200,000 tpa of ethylene, 100,000 tpa of propylene, and 60,000 tpa of benzene. The plant's naphtha and hydrocarbon gases are provided mainly by the neighbouring Angarsk refinery. In addition to using ethylene for the production of LDPE and styrene, Angarsk Polymer Plant also supplies ethylene to Sayanskkhimplast for the production of PVC.

**SIBUR, polyolefins division, Jan-Jun 2013**

SIBUR increased revenue from sales of basic polymers by 1.6% to 5.551 billion roubles in the second quarter from 5.466 billion in the second quarter in 2012. The increase was attributable to higher revenue from polypropylene sales. Overall for the first half of 2013, revenue from sales of polymers fell by 9.4% to 10.555 billion

**SIBUR Polyolefins (unit-kilo tons)**

<b>Production</b>	<b>Jan-Jun 13</b>	<b>Jan-Jun 12</b>
LDPE	131.3	127.9
Polypropylene	69.7	68.3
Purchases from 3rd parties	88.6	59.0
Total	289.7	255.2
<b>Sales</b>	<b>Jan-Jun 13</b>	<b>Jan-Jun 12</b>
LDPE	121.3	132.9
Polypropylene	93.1	105.9
Total	214.5	238.8

roubles from 11.7 billion roubles in the same period in 2012. Domestic sales accounted for 66.9% of polymer revenue in the period January to June 2013.

Revenues from LDPE sales fell 7.0% in the second quarter in the second quarter to 3.0 billion roubles compared to 3.2 billion roubles in 2012. This was due to both lower sales volumes and a decline in prices. LDPE sales volumes decreased by 4.6% despite a 1.5% increase in production and lower internal use. The average price for LDPE decreased by 2.5%.

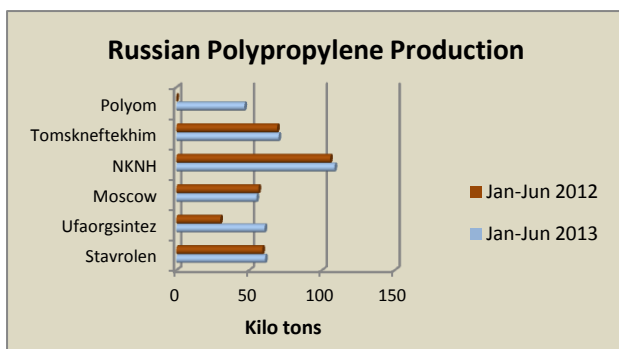
In the first half of 2013, SIBUR's LDPE revenues declined by 8.0% to 5.8 billion roubles compared to 6.3 billion roubles in 2012. The drop in sales volumes was largely attributable to inventory accumulation. In the first six months of 2013,

domestic sales accounted for 59.0% of total LDPE revenues.

**SIBUR Polypropylene Sales (billion roubles)**

	<b>Jan-Jun 13</b>	<b>Jan-Jun 12</b>
Domestic Sales	3.7	4.7
Exports	1.1	0.7
Total	4.8	5.4

In the second quarter of 2013, SIBUR's revenue from sales of polypropylene increased by 13.9% to 2.5 billion roubles from 2.2 billion roubles in the second quarter of 2012. Polypropylene sales increased by 33.5% on almost flat production due to an increase in SIBUR's trading. This was partially offset by higher internal use by Biaksplen group of companies, which use polypropylene as feedstock in the production of BOPP-films, and inventory accumulation in preparation for the biennial maintenance shutdown at Tomskneftekhim.



The average price for polypropylene fell by 14.7% in the second quarter, attributable to a continuing price correction on the domestic market. Overall for the first half of 2013, SIBUR's revenue from sales of polypropylene declined by 11.1% to 4.8 billion roubles from 5.4 billion roubles in 2012. The results are distorted to some extent following the reclassification of a large portion of SIBUR's polypropylene sales as part of the consolidation of Biaksplen. Moreover in 2012 SIBUR sold polypropylene stock to cover temporary polypropylene shortages in the market caused by unscheduled shutdowns of third-party production

facilities in Russia and CIS. In the first six months of 2013, domestic sales accounted for 76.4% of SIBUR's polypropylene revenues.

**SIBUR's PET Production & Sales (unit-kilo tons)**

	<b>Jan-Jun 13</b>	<b>Jan-Jun 12</b>
Production	106.914	107.677
Total Sales	124.907	105.322

**SIBUR's PET division, Jan-Jun 2013**

In the second quarter of 2013, SIBUR's revenue from PET sales fell by 12.5% to 2.9 billion roubles from 3.3 billion roubles in 2012. This was due mainly to lower sales volumes where PET decreased by 16.4% despite a 1.1% increase in production. SIBUR produces PET at Tver (SIBUR-PETF) and Blagoveshchensk (Polief). In the first half of 2013, SIBUR's overall revenue from PET sales amounted to 5.4 billion roubles from 6.5 billion

roubles in 2012. Sales fell 15.7%, due largely to inventory accumulation, whilst average prices remained broadly unchanged. Domestic sales of PET accounted for 99.5% of total PET revenue in the first half of the year.

**SIBUR's EPS Production & Sales (unit-kilo tons)**

	<b>Jan-Jun 13</b>	<b>Jan-Jun 12</b>
Production	53.7	28.8
Domestic	28.7	19.8
Exports	8.3	8.4

**SIBUR EPS, Jan-Jun 2013**

One of the biggest product revenue increases for SIBUR has taken place for EPS. In the second quarter SIBUR's revenue from sales of EPS rose 87.7% to 1.8 billion roubles from 954 million roubles in the second quarter in 2012. This was due directly to the start-up of SIBUR-Khimprom's second 50,000 tpa unit in July 2012. Production rose 64.5% against the second quarter in 2012. In the first half of 2013, SIBUR's revenue from sales of EPS increased 84.9% to 2.7 billion roubles from 1.5 billion roubles in the first six

months of 2012 on a 57.4% increase in sales volumes and a 17.5% growth in the price. In the first half of 2013, domestic sales accounted for 65.3% of total revenues from EPS sales.

### Russian polystyrene imports, Jan-Aug 2013

Imports of polystyrene into Russia in January-August fell by 7.1 % against 2012 and amounted to 140,800 tons. EPS imports have started to fall since the start-up of the SIBUR-Khimprom plant, dropping 18% in the first eight months in 2012. SIBUR-Khimprom now operates 100,000 tpa of capacity following the start-up of the second line in 2012. The total volume of imports of polystyrene into Russia in August amounted to 18,400 tons.

## Aromatics & derivatives

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

Producer	Jan-Jul 13	Jan-Jul 12
Altay-Koks	7.2	16.4
Angarsk Polymer Plant	51.6	49.6
Chelyabinsk MK	8.4	11.3
Gazprom Neft	71.6	52.6
Koks	0.0	13.0
LUKoil-Neftekhim	18.7	0.0
LUKoil-Permnefteorgsintez	28.4	17.5
Magnitogorsk MK	36.1	38.5
Nizhnekamskneftekhim	118.6	113.3
Novolipetsk MK	21.6	11.6
Gazprom Neftekhim Salavat	81.2	50.4
Severstal	22.1	18.4
SIBUR Kstovo	44.2	34.7
Slavneft-Yaroslavlorgsintez	33.3	38.0
Surgutneftegaz	34.8	37.2
TNK-BP	19.8	21.6
Ufaneftekhim	50.5	48.3
Ural Steel	3.4	4.3
Uralorgsintez	38.8	40.3
Zapsib	34.2	34.5
Others	0.0	6.1
Total	724.3	657.8

### Russian benzene production, Jan-Jul 2013

Benzene production amounted to 103,000 tons in July, 3% up on June. After the completion of maintenance on its cracker SIBUR-Kstovo produced 6,700 tons in July, 32 times more than in June. Due to the start of respective overhauls Angarsk Polymer Plant and Gazprom Neftekhim Salavat reduced the production of benzene in July by 32% to 5,100 tons and by 26% to 8,700 tons respectively.

For the first seven months in 2013 Russian production of benzene totalled 718,400 tons, 13% up on last year. LUKoil-PNOS and GNS increased production of benzene by 1.6-fold to 28,400 tons and 94,500 tons respectively.

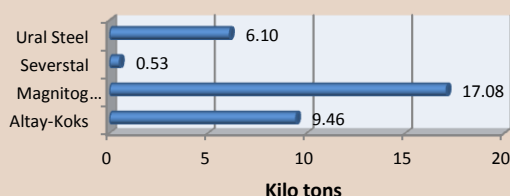
### Russian benzene sales, Jan-Aug 2013

Sales of benzene amounted to 64,300 tons in August, 4% up on July. Due to maintenance Angarsk Polymer Plant reduced shipments by 2.3 times to 1,400 tons. Uralorgsintez and coal producer Zapsib reduced shipments by 22% to 3,700 tons and 15% to 4,500 tons respectively. Stavrolen increased shipments by 15% to 7,400 tons. Domestic benzene shipments totalled 508,800 tons in the first eight months in 2013, 5% up on 2012.

Sales to the domestic market in August were dominated by the main consumers, including Kuibyshevazot, Azot at Kemerovo and Samaraorgsintez. The most noticeable feature of the market in August was that Nizhnekamskneftekhim was required to purchase from other producers to supplement its own production. The company purchased a total of 4,775 tons from combined sources including refineries Uralorgsintez and Ryazan NPZ and coal based producer Severstal.

Severstal also exported a small volume of benzene in August, although usually it only sells to the domestic market. The major coal based benzene exporters from Russia this year include Magnitogorsk Metallurgical Combine with 17,080 tons, Altay Koks with 9,460 tons and Ural Steel 6,100 tons. Benzene has not been exported

### Russian Coal Based Benzene Exports Jan-Aug 2013

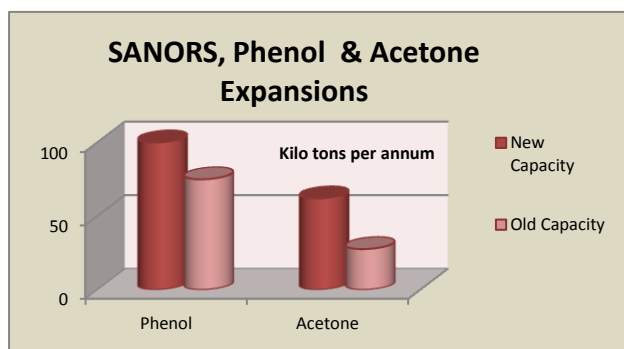


this year by the petrochemical plants and refineries.

### Russian benzene imports, Jul-Aug 2013

Russia imported 2,400 tons of benzene in July, 18% less than in June. Kuibyshevazot reduced the import of benzene by 3% to 1,500 tons and Samaraorgsintez by 1% to 889 tons. Kazanorgsintez did not purchase imports in July as maintenance was undertaken on the phenol plant. August imports were 2,400 tons, as in July, all of which came from Ukraine. Kuibyshevazot was the sole buyer of imported benzene in August. For the first eight

months in 2013 Russian benzene imports totalled 28,200 tons, which is unchanged from last year. The main sources of imports have been Ukratnafta with 34% and Yasinovsky Coke 33%.



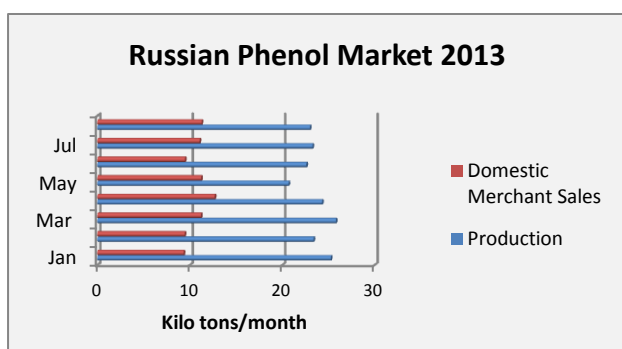
#### SANORS-phenol expansion completed

SANORS has completed the increase in production capacity at Samaraorgsintez of phenol, acetone and cumene. A total of 973 million roubles have been invested in the project between 2010 and 2013. As a result of the investments phenol capacity has been increased to 100,000 tpa, acetone to 62,000 tpa, and cumene to 9,000 tpa. The total capacity of the plant for by-products constitutes 220,700 tpa.

of the plant started prior to the takeover by the SANORS Group in 2011, but has largely been undertaken through funds provided from the holding. Phenol and acetone oxidation technology has been improved, whilst new facilities have been installed for the separation of propane-propylene fractions and the strengthening of propylene cation-exchanging purification of phenol. Improvements in technology also mean that the plant's turnaround is only required every two years rather than each year.

#### Russian phenol sales & production, Jan-Jul 2013

Domestic sales of phenol in Russia amounted to 11,700 tons in July, 20% higher than June. Samaraorgsintez shipped 3,500 tons in July against 1,700 tons in June. The share of Samaraorgsintez in July accounted for about 30% of total sales. Ufaorgsintez increased its sales of phenol compared with June by almost 80%, and shipped 2,600 tons to domestic customers (22% of total sales). Omsk Kaucuk sold 5,400 tons over the month, which is only 3% higher than in June. Omsk Kaucuk remains the main seller of phenol on the domestic market, accounting for about 46% of the total shipments



in July.

#### Russian phenol exports Jan-Aug 2013

Regarding exports Russia shipped 2,400 tons in August 6% higher than July. Samaraorgsintez is the main exporter accounting for 96% of shipments in foreign markets, or 2,300 tons. The remaining 4% or 106 tons was sold on Omsk Kaucuk. Poland was the main destination for Russian phenol exports in July or 2,100 tons. Consumers from Slovakia in July acquired the remaining 14% or 344 tons.

Total domestic production of phenol amounted to 23,300 tons in July, 3% above June. Samaraorgsintez produced 8,300 tons in July, which is 70% more than in June, whilst due to maintenance Kazanorgsintez reduced production by 45% to 3,400 tons. Ufaorgsintez slightly increased volumes of production of phenol, rising 10% over June to 6,500 tons. Omsk Kaucuk reduced the production of phenol by 6% and produced 5,200 tons.

recorded by Kazanorgsintez, rising 13% over 2012 to 40,300 tons. The only company to reduce the production of phenol in the first seven months of this year was Omsk Kaucuk, dropping 3% to 37,000 tons. In August Omsk Kaucuk undertook a shutdown.

In the first seven months of 2013 Russian production of phenol rose 4% against 2012 to 165,000 tons. The largest increase was

#### Russian Paraxylene Sales, Jan-Aug 2013 (unit-kilo tons)

Company	Domestic	Exports
Gazprom Neft	30.9	28.8
Ufaneftekhim	81.4	7.8
Kirishinefteorgsintez	0.0	36.4
Total	112.2	112.0

#### SIBUR, paraxylene costs

In the second quarter of 2013, SIBUR's paraxylene purchasing costs declined by 5.0% to 1.261 billion roubles from 1.328 billion roubles in the second quarter in 2012. Lower costs meant that the as a percentage of total feedstock and materials paraxylene comprised 7.9% against 9.2% in the second quarter in 2012.

The primary source of paraxylene was bought from Ufaneftekhim in order to supply nearby Polief. Additional volumes were bought from Gazprom Neft at the Omsk oil refinery. SIBUR and Gazprom Neft have considered constructing a PTA plant under a JV arrangement at Omsk, but no plans have been formulated to date.



#### Alko-Naphtha PTA Imports (unit-kilo tons)

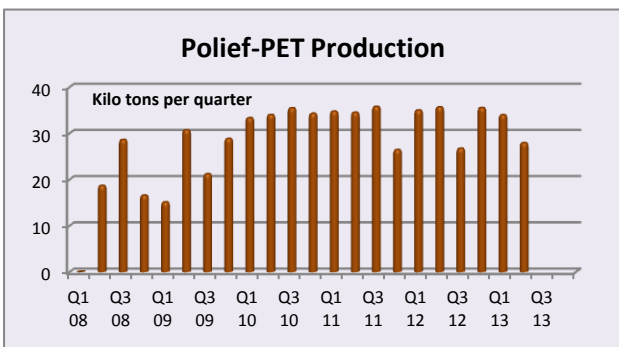
Supplier	Jan-Jul 13	Jan-Jul 12
PKN Orlen	64.3	50.0
Others	13.9	31.7
Total	78.2	81.7

Alko-Naphtha is the largest producer of PET in Russia and is located at Kaliningrad.

#### Alko-Naphtha-PTA

Alko-Naphtha imported 15,000 tons of PTA in July 2% less than in June. The main supplier of raw materials was PKN Orlen. In the first seven months this year PKN Orlen has provided a large proportion of PTA requirements for Alko-Naphtha. Other suppliers have included Lotte, BP Aromatics and Samsung. Alko-Naphtha is

### Fibres



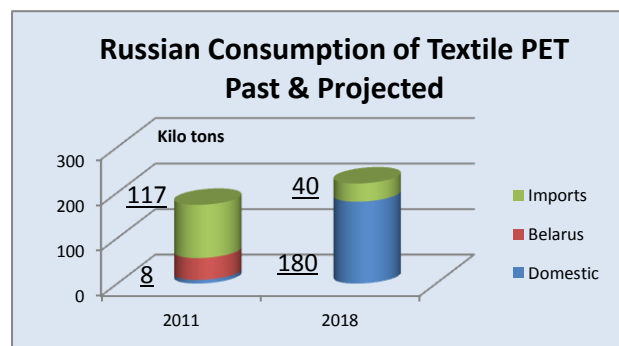
#### Polief-PET expansion

Polief's expansion of PET capacity at Blagoveshchensk has received approvals from the Republic of Bashkortostan. The project is around half completed at present and involves an expansion of capacity from 140,000 tpa to 210,000 tpa. The project was originally intended to be completed by the end of 2013, but the start-up date has been delayed at least until 2014.

#### United Petrochemical Company-PET project

United Petrochemical Company (now part of AFK System after being purchased from Bashneft) claims to

have identified a foreign partner for its proposed PET project. The project is in the study stage at present. United Petrochemical Company is considering a number of chemical projects, of which PET is one of the most important. The connection with Bashneft, including Ufaneftekhim, means that a vertical chain structure of production is possible. Ufaneftekhim already sells paraxylene to Polief under a long term agreement for PTA production and has only a small surplus. Expanding paraxylene capacity at Ufa represents one of the main options being considered for providing sufficient raw materials for the proposed PET plant. The capacity could potentially be expanded to 260,000 tpa.



#### Ivanovo polyester project granted to Uhde

A tender for the construction of the PET-polyester fibre plant in the Ivanovo region has been awarded to Uhde at Dzerzhinsk. Construction of the project for Ivregionsintez is 100% owned by the Ivanovo Administration. Includes a complete production cycle costing 10.5 billion roubles and is planned for start-up in 2016. Uhde constructed a similar type of facility for Alko-Naphtha at Kaliningrad.

The capacity of the Ivanovo plant is 180,000 tpa, with the project design having been developed by the

German company EPC Engineering. The main investor of the company is the Arbat Capital Management.

The PET plant is intended to form the basis of the textile cluster being developed in the Ivanovo region under the organisation Ivregionsintez, which itself is 100% owned by the Ivanovo Administration. Ivregionsintez has said that the tender with Uhde will be signed within two weeks.

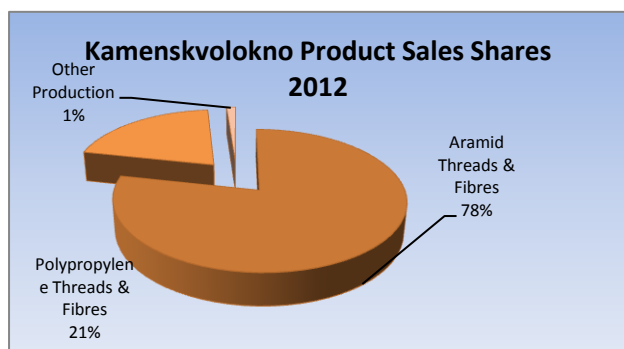
The development of the PET plant in the Ivanovo region is part of the strategy to develop light industry in Russia over the next few years. The main focus of the project is to create conditions for mass replacement of imported raw materials for the domestic textile industry. If the project progresses to completion by 2016 the Ivanovo plant could start to replace large volumes from imported textile PET. The Ivanovo Administration and the governments of Tatarstan and Khanty-Mansi Autonomous District signed an agreement for the Ivanovo textile

Estimated Investments in Ivanovo PET Textile Project	
Section	Estimated Cost (million roubles + VAT)
Engineering & Design	600
Equipment (Imports)	4,800
Domestic Equipment & Materials	740
Construction	3,700
Other	120
Commissioning/Start-Up	300
Total	10,260

industry through its integration with petrochemical enterprises of Tatarstan and Yugra. The production of medical and hygiene products, non-woven materials, such as spunbond, is being considered.

### **Kamenskvolochno-FAS**

Kamenskvolochno has been investigated by the Federal Antimonopoly Service under the pretext that it has been over-charging the Russian Military for aramid fibres supplied under defence contracts. Over recent years, consumers of aramid fibres, produced by Kamenskvolochno, have included companies from the Defense Ministry, the Federal Agency for Atomic Energy, Ministry of Emergency Situations.



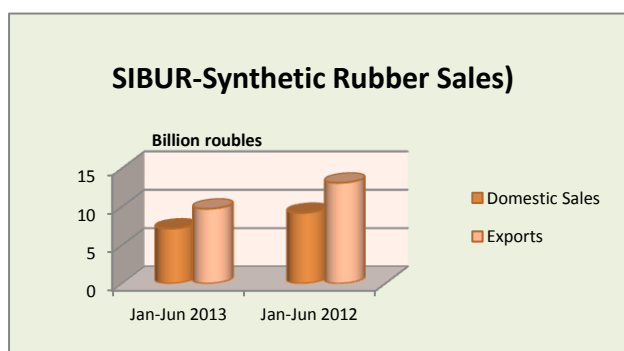
Previously domestic consumption of aramid fibres in body armour and army equipment was based solely on domestic production, but imports have risen in recent years. Other areas of growth include personal protective equipment clothing for fire fighters, energy, metallurgy, where the para-aramid material is used as an additive to meta aramid. Svetlogorsk Khimvolokno from Belarus is a main supplier of these materials to Russia.

Kamenskvolochno is developing its consumption of polypropylene for the production of fibres, in addition to its core area of aramid fibres. Kamenskvolochno depends on the polypropylene market which last year saw a rise in prices due to the deficit in supply. In 2013 the launch of the Polyom and Tobolsk-Polymer polypropylene plants should help to eliminate the domestic deficit and to create a surplus. Kamenskvolochno hopes that prices might fall and that the company can achieve full utilisation for yarns based on polyolefins.

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## **Synthetic Rubber**

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### **SIBUR-synthetic rubber division, Jan-Jun 2013**

Revenues from synthetic rubber sales declined by 14.7% in the second quarter against the same period in 2012 to 8.3 billion roubles from 9.7 billion roubles. The main cause was the decline in revenue from sales of commodity rubbers, which was partially compensated by higher revenues from sales of specialty rubbers.

Due to weak global demand revenues from synthetic rubber sales decreased by 24.3% to 16.878 billion roubles from 22.303 billion roubles in the first six months of 2012. The commodity groups were mostly affected.

Domestic sales accounted for 42.3% of total sales, with exports accounting for the 57.7% majority share of sales.

### **Commodity rubbers**

SIBUR's revenue from sales of commodity rubbers decreased in the second quarter by 22.3% to 5.5 billion roubles from 7.1 billion roubles in the second quarter of 2012. Despite an increase in sales volumes the average price and margins dropped significantly. The average price for commodity rubbers fell by 25.7%, largely following European and Asian market prices. The decline in price for commodity rubbers reflects a significant drop in demand for end-products, such as tyres, and high inventory levels across the industry.

In the second quarter of 2013, sales volumes of commodity rubbers rose by 4.5% despite a 1.3% drop in production and lower third-party purchases. SIBUR intentionally decreased production of certain premium rubber grades due to weak demand and partially compensated this with an increased production of regular grades. Product purchases under third-party manufacturing arrangements were also reduced, where SIBUR uses third-party capacity to produce rubbers from the group's own feedstock.

Overall for the first half of 2013, SIBUR's revenue from sales of commodity rubbers dropped by 28.1% to 11.7 billion roubles compared to 16.3 billion roubles in the first half of 2012. The average price fell by 23.2%. In the first six months of 2013, domestic sales accounted for 46.8% of total commodity rubber revenues.

**SIBUR-Synthetic Rubber Production  
(unit-kilo tons)**

	<b>Jan-Jun 13</b>	<b>Jan-Jun 12</b>
Commodity Rubber	156.9	155.2
Specialty Rubber	44.2	42.6
Thermoplastic elastomers	15.6	15.2
3rd part purchases	6.6	18.3
Total	223.2	231.2

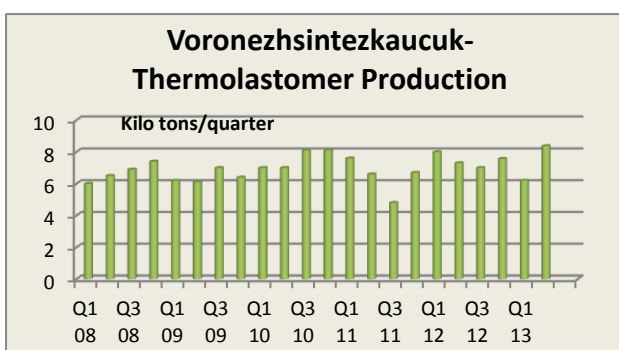
**SIBUR-Synthetic Rubber Production  
(unit-kilo tons)**

	<b>Jan-Jun 13</b>	<b>Jan-Jun 12</b>
Commodity Rubber	11746.0	16331.0
Specialty Rubber	3898.0	4302.0
Thermoplastic elastomers	1234.0	1591.0
Total	16878.0	22224.0

**SIBUR-Synthetic Rubber Production  
(unit-kilo tons)**

	<b>Jan-Jun 13</b>	<b>Jan-Jun 12</b>
Domestic Sales	7146.0	9189.0
Exports	9732.0	13114.0

accounted for 16.3% of total specialty rubber revenues, with exports still providing the lion's share of SIBUR's sales at 83.7%.



launched a new thermoplastic elastomer production facility (TEP-50) at Voronezh with a capacity of 50,000 tpa, thus increasing total SBS capacity to 85,000 tons. This addition did not have an effect on SIBUR's second quarter or first half of 2013 results, but has already started to positively impact synthetic rubber performance in the third quarter.

Overall for the first half of 2013, SIBUR's revenues from sales of thermoplastic elastomers decreased by 26.2% to 1.2 billion roubles compared to 1.7 billion roubles in 2012. This drop was caused by a 16.5% decline in the average price and an 11.5% decrease in sales volumes. In the first six months of 2013, domestic sales accounted for 82.5% of total thermoplastic elastomer revenues.

**Specialty rubbers**

Specialty rubbers were least affected by the market conditions in the first half of 2013 for SIBUR. In fact SIBUR's revenues from the sales of specialty rubbers increased in the second quarter over Q2 2012 by 18.9% to 2.150 billion roubles. The average price did fall, but volumes increased.

Specialty rubber sales volumes increased by 33.1% due to a 7.6% increase in production as well as inventory sales in the second quarter of 2013. Higher comparative production in the second quarter of 2013 was attributable to a 13-day unscheduled shutdown at Togliatti in April 2012. Inventory sales were primarily driven by butyl rubber on resilient demand coupled with temporary shutdowns of third-party facilities in Europe.

The price for specialty rubbers fell by 10.7%, largely following the decline in market prices for nitrile-butadiene rubber which fell by 30%. These falls were partially compensated by stronger market prices for butyl rubber, posting an 11% increase.

In the first half of 2013, revenue from sales of specialty rubbers amounted to 3.9 billion roubles compared to 4.3 billion roubles in 2012. The decline in SIBUR's selling prices reflects lower market prices for NBR, only partially compensated by resilience in butyl rubber. In the first six months of 2013 domestic sales

**Thermoplastic elastomers**

Revenue from sales of thermoplastic elastomers from Voronezhsintezkavuk fell by 22.0% in the second quarter to 664 million roubles from 851 million roubles in the same quarter in 2012. Lower revenues were due to lower prices although sales volumes remaining unchanged.

The average price for thermoplastic elastomers decreased by 21.9% following lower prices for butadiene coupled with weak demand from the construction industry. In the second quarter of 2013, SIBUR

**Methanol & Ammonia****Russian methanol exports, Aug 2013**

Methanol exports totalled 119,000 tons in August, 2% less than in July. The three main exporters in August comprised Sibmetakhim, Shchekinoazot and Tomet, accounting for 80% of the full total. Metafrax reduced exports in August by 47% against July to 9,600 tons. Finland accounted for 40% of shipments in August, slightly lower than the average for the preceding 8 months. Other destinations of significance include Poland, Slovakia and Poland.

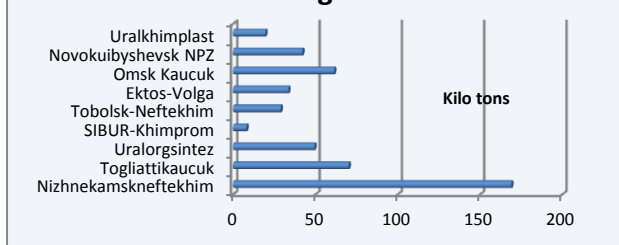
**Russian Methanol Market Totals, Jan-Jul 2013**  
 (unit-kilo tons)

Company	Production	Domestic	Exports
Azot Nevinomyssk	69.8	22.4	0.0
Azot Novomoskovsk	157.4	63.5	32.8
Metafrax	622.5	261.0	2.4
Sibmetakhim	509.3	271.3	153.3
Togliattiazot	436.6	250.9	152.2
Shchekinoazot	240.4	36.0	98.5
Akron	46.0	10.9	95.9
Angarsk PC	1.8	0.0	0.0
<b>Total</b>	<b>2083.8</b>	<b>915.9</b>	<b>535.1</b>

**Russian methanol market**

Sibmetakhim at Tomsk resumed output in September after stopping the planned repairs. Sibmetakhim plans to produce 753,000 tpa of methanol in 2013. Most of the maintenance was devoted to repairs on the catalyst for both reformer furnaces. The catalyst was supplied by the Novosibirsk Institute of Catalysis.

In July Metafrax and the Swiss company Casale Group signed a contract for the reconstruction of methanol plant. The reconstruction will increase the daily operating time of methanol by Metafrax by almost 60 tons, with no simultaneous increase in natural gas consumption. The cost of the project is estimated at 250 million roubles, and the payback period is estimated at five years.

**Russian Main Methanol Consumers**  
 Jan-Aug 2013


Russian producers were aiming to export around 12,400 tons of methanol through Odessa in September, against 26,000 tons in August. Tomet from Togliatti was the sole methanol producer exporting through Odessa, most of which to be distributed to Turkey, Romania and Israel.

**Metafrax, ammonia and urea projects**

Metafrax has outlined plans to direct \$1 billion towards investment by 2020, concentrating \$700-800 million on the construction of facilities for ammonia and urea. The company is considering two capacity options for urea ranging from 400,000 tpa to 600,000 tpa. If construction

can start in 2015 as planned, the new facility could be launched in 2017-2018. Metafrax also plans to renovate the production of pentaerythritol in 2014-2016. The cost of the project is estimated at €20 million; resulting in an increase in capacity of 6,000 tpa.

Metafrax may seek to attract a co-investor to support the construction of ammonia and urea plants at Gubakha. Urea consumption requirements for Metafrax stand currently at around 300,000 tpa, and could increase to 400,000 tpa after the full incorporation of the Dynea plant in Austria which was recently purchased by Metafrax. A final decision on the project is expected in December 2013. Construction could be started in 2015, with the launch planned for 2017-2018.

**Metafrax-Dynea Austria**

At the end of June Metafrax acquired Dynea Austria GmbH from Dynea Holding GmbH. The plant's capacity in Austria is 350,000 tpa of resin and 140,000 tpa of formaldehyde. The acquisition has helped Metafrax increase the total capacity for resin production to 700,000 tpa. The aim of the transaction is to improve the synergy of the group and provide more possibility for captive consumption. It raises capacity for processing methanol for Metafrax from 400,000 tpa to 500,000 tpa of methanol, thus reducing availability for merchant sales.

**Uralkhim Production (unit-kilo tons)**

Product	Jan-Jun 13	Jan-Jun 12
Ammonium nitrate	1422.7	1402.5
Ammonia	412.0	409.9
Urea	613.8	600.5
Complex fertilisers	293.2	290.2
Phosphate fertilisers	245.1	253.2
Other fertilisers	8.0	7.2
Other chemical	141.2	151.1
<b>Total</b>	<b>3136.0</b>	<b>3114.5</b>

Metafrax includes four main divisions including Metafrax, Karbolit, MetaDynea and Dynea Austria. Joint Russian-Finnish companies MetaDynea and Karbodin were established between Metafrax and Dynea Chemicals in 2004-2005 in order to develop the production of synthetic resins for the chemical industry, mechanical engineering, automotive, woodworking and other industries. MetaDynea is located in the industrial area of Metafrax at Perm, and Karbodin in the Orekhovo-Moscow area.

**Uralkhim, Jan-Jun 2013**

Revenues for the Uralkhim group totalled \$1.292 billion in the first half of 2013 against \$1.261 billion in the same period last year. However, operating profits dropped from \$410 million to \$394 million. The net profit dropped from \$444 million to \$253 million. Ammonia prices dropped in the first half of 2013 due to lower demand although urea prices rose.

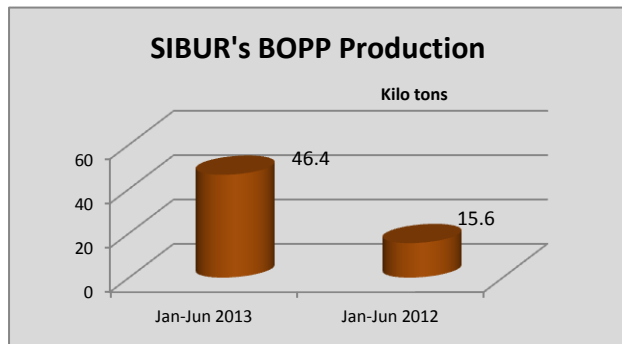


Uralkhim consists of four fertiliser plants in Russia and includes capacities of 2.5 million tpa for ammonium nitrate, 2.8 million tpa of ammonia, 1.2 million tpa of urea, etc. Plants include Azot at Berezniki, Mineralnie Udobreniya at Perm, Kirov-Chipetskiy Chemical Combine and Voskresensk Mineralnie Udobreniya at Voskresensk in the Moscow Oblast.

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## Plastics

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### SIBUR-BOPP-films, Jan-Jun 13

In the second quarter of 2013, SIBUR's revenue from BOPP-film sales increased by 7.0% to 2.133 billion roubles from 1.993 billion roubles in 2012 on higher sales volumes. BOPP sales increased by 9.5% primarily as a result of an 11.4% growth in production which was due to the absence of unscheduled shutdowns. These factors were partially offset by lower inventory sales in the second quarter of 2013 compared to 2012.

billion in the first six months of 2012. Domestic sales accounted for 82.9% of total BOPP-film revenues, while 17.1% was attributable to export sales.

In the first half of 2013, SIBUR's revenue from BOPP increased by 67.0% to 3.864 billion roubles from 2.314

### Tekhnonikol-XPS plant at Khabarovsk

Technonikol Corporation has opened a new plant for XPS production at Khabarovsk, with a capacity of 135 thousand cubic metres per annum. Commissioning of the new plant will meet the growing demand for high-quality building materials from consumers in East Siberia, the Far East, Yakutia, and also allow it to export to the Asia-Pacific region. The volume of investment in the project amounted to 230 million roubles. Technonikol controls 35 production sites in Russia and CIS countries, 140 sales offices in 33 countries. Technonikol produces a wide range of products for the building, such as roll roofing materials, polymeric membrane for flat roofs, insulation materials, and composite shingles, roofing felt.

### Tatkhimplast-polypropylene composites

Tatkhimplast is preparing to launch the production of polypropylene composites for automotive components. The capacity of the first stage will be 12,000 tpa with a projected annual turnover of 1.2 billion roubles. In 2015 Tatkhimplast plans to launch a second phase and to increase the capacity by around a half.

Tatkhimplast will supply the composites to the Russian and CIS market. Polypropylene composites will be used for the production of plastic parts imported cars: bumpers, instrument panels, etc, most of which are imported at present. Tatkhimplast is using equipment supplied by Krauss Maffei, whilst polypropylene will be purchased from Nizhnekamskneftekhim.

The plastic automotive components market is growing at around 20-30% per annum due to the localisation of the assembly of foreign cars in Russia. In 2012 the market demand in Russia for polyolefin composites was estimated at 127,000 tons for polypropylene and 53,000 tons for polyethylene.

remaining domestic producers increased production volumes in July 2013. Gazprom Neftekhim Salavat increased production by 44% to 6,400 tons (43% of Russian total) SIBUR-Khimprom by 11% to 5,700 tons (38%), and Azot at Nevinomyssk by 8%, to 1,800 tons (12%). Gazprom Neftekhim Salavat still has only one of the two

### BOPP plant-Novokuibyshevsk

Biaksplen is now reaching the final stages of installation for the new BOPP line at Novokuibyshevsk. The new plant has a capacity of 30,500 tpa based on equipment provided by Bruckner Maschinenbau. To date the installation of auxiliary equipment has been completed and the status of construction was estimated at around 80% in early September. The products from the new plant will be supplied to the Russian market as well as exported to the CIS countries. The new line is expected to start in 2014.

### BOPP plant-Tomsk

Biaksplen has ended commissioning and started production of test batches of BOPP film at the Tomskneftekhim site. The line of 38,000 tpa will represent the seventh unit in the Biaksplen group. Start-up is expected to take place in the fourth quarter this year with the goal of supplying customers in the Siberian and Ural federal districts. Biaksplen also plans to export to CIS countries including Ukraine, Belarus, Kazakhstan, Uzbekistan, and the EU. The advantage of the Tomsk plant over other Biaksplen BOPP plants is its location next to a polypropylene plant Tomskneftekhim.

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## Organic Products

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### Russian butanols, Jan-Jul 2013

Russian butanol production amounted to 14,830 tons in July, 10% less than in June and 15% lower than in July 2012. The ratio of production comprised 58% n-butanol and 42% isobutanol. The reduction in July was due to a maintenance stoppage at Angarsk Petrochemical Company, reducing volumes by 83% to 870 tons. The

production lines operating, with the other still under repair following the fire at the end of May. The date of resumption of the second production line is not yet known.

For the period January to July 2013 Russian production of butanols totalled 136,100 tons, 11% less than in 2012. N-butanol accounted for 60% of production. The reduced output is due mostly to the idle second line at Salavat since May. In early August production at SIBUR-Khimprom was stopped for maintenance and was only resumed in early September.

Export volumes of butanols from Russia in July 2013 amounted to 6,170 tons, almost twice higher than in June, but 63% less than in July 2012. The reduction of export shipments is the result of Gazprom Neftekhim Salavat's lower production.

The main exporter of butanols in July was SIBUR-Khimprom (48% of gross shipments). Gazprom Neftekhim Salavat accounted for 46% of exports, and Azot at Nevinomyssk 6%. From January to July 2013, exports of butanols from Russia totalled 93,600 tons, 7% less than in the same period of 2012.

#### Russian butanols, Jan-Aug 2013

After scheduled maintenance SIBUR-Khimprom resumed production at Perm in early September. The seasonal decline in consumer activity has offset the decline in the production, restoring the market balance. The cost of isobutanol decreased by an average of 1% in the first half of September, ranging from 47,000-49,870 roubles per ton including VAT.

Russian Butanol Production (unit-kilo tons)		
<b>N-Butanol</b>		
Producer	Jan-Jul 13	Jan-Jul 12
Angarsk Petrochemical	18.1	16.9
Evrokhim	9.0	11.6
Gazprom Neftekhim Salavat	39.6	52.0
SIBUR-Holding	15.1	16.1
Total	81.8	96.6
<b>Isobutanol</b>		
Producer	Jan-Jul 13	Jan-Jul 12
Angarsk Petrochemical	9.6	8.9
Gazprom Neftekhim Salavat	15.3	21.6
SIBUR-Holding	23.2	26.6
Total	48.0	57.1

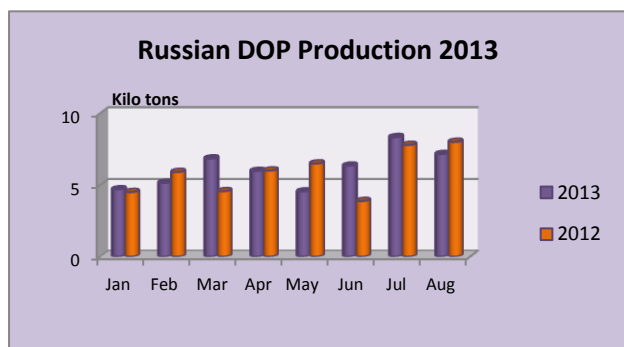
Russian Butanol Exports (unit-kilo tons)	
<b>N-Butanol</b>	
	<b>Jan-Jul 13</b>
Gazprom Neftekhim Salavat	15.4
SIBUR-Khimprom	0.0
Angarsk Petrochemical	6.9
Azot Nevinomyssk	0.4
Total	22.7
<b>Isobutanol</b>	
	<b>Jan-Jul 13</b>
Gazprom Neftekhim Salavat	8.6
SIBUR-Khimprom	15.9
Angarsk Petrochemical	4.0
Total	28.4

Domestic sales of butanols amounted to 4,730 tons in August, 15% less than in July and 28% lower than August 2012. The ratio of n-butanol sales comprised 87%. Gazprom Neftekhim Salavat regained its leading position in the market, accounting for 53% of shipments (2,500 tons), followed by Angarsk Petrochemical Company with 1,190 tons, SIBUR-Khimprom with 860 tons and Azot at Nevinomyssk with 180 tons.

Akrlat bought 1,760 tons in August, accounting for 37% of total shipments, followed by Dmitrievsky Chemical Plant with 1,540 tons or 33%. Other buyers included Kamenskvolokno, 340 tons, Sredneuralskiy copper smelter 250 tons, Volga Orgsintez 240 tons, and Molomsky wood-chemical plant 220 tons. Domestic sales of butanols in the period January to August totalled 40,800 tons, 23% down on 2012.

Exports totalled 10,000 tons in August, 62% up on July. The product composition for exports included 55% of n-butanol and 45% for isobutanol. 94% of shipments were sent to China, with Angarsk Petrochemical

Company the main exporter. For the period January to August 2013 Russian exports of butanols totalled 103,600 tons, 9% down on 2012.



#### Russian DOP market, Jan-Jul 2013

Production of DOP in Russia amounted to 7,150 tons in August, 14% less than in July. The Roshalsky Plasticizer Plant reduced production by 37% to 1,870 tons. Gazprom Neftekhim Salavat and Kamteks-Khimprom remained unchanged.

For the period January to August 2013 Russia produced 49,000 tons of DOP, 4% higher than in 2012. The increase is attributable to higher output by the plants Roshalsky Plasticizer and Kamteks-Khimprom.

**SIBUR, acrylates-Jan-Jun 2013**

In the second quarter of 2013, SIBUR's revenue from sales of acrylates declined by 3.7% to 720 million roubles from 748 million roubles in the second quarter in 2012. The average price weakened by 3.1%, following lower international market prices. Sales volumes of acrylates, which SIBUR produces at Dzerzhinsk, fell by 0.7% as a result of a 9.9% decrease in production and lower third-party purchases.

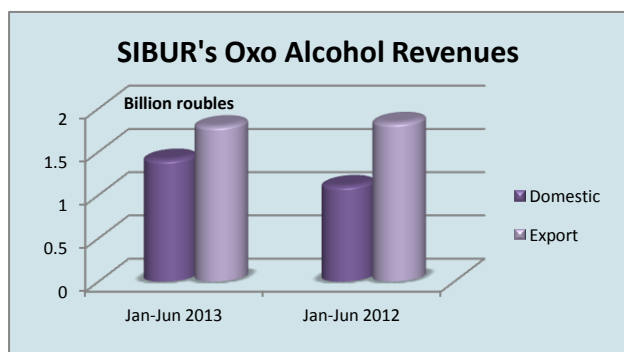
**SIBUR's Organic Chemical Production (unit-kilo tons)**

Product	Jan-Jun 13	Jan-Jun 12
Acrylates	21.1	21.0
Oxo Alcohols	78.0	79.4

In the first half of 2013, SIBUR's revenue from sales of acrylates dropped by 15.0% to 1.4 billion roubles from 1.6 billion in the first six months in 2012. Lower sales volumes were largely attributable to inventory changes. In the first half of 2013, domestic sales accounted for 30.6% of total acrylates revenues. The ratio of domestic sales is rising but exports still maintain the dominant part of revenues.

**SIBUR, oxo alcohols-Jan-Jun 2013**

In the second quarter of 2013, SIBUR's revenue from sales of alcohols increased by 10.3% to 1.7 billion roubles from 1.6 billion roubles in the second quarter of 2012. The average price for SIBUR's oxo alcohols increased by 0.8% despite lower international prices. Strong demand was seen from domestic manufacturers of plasticisers and diesel fuel additives.



In the first half of 2013, SIBUR's total revenue from sales of oxo alcohols increased by 8.7% to 3.198 billion roubles from 2.942 billion roubles in 2012. This resulted from a 4.5% increase in the average price and a 4.0% increase in sales volumes. Average prices largely followed international market prices for 2-ethylhexanol and butanols. Sales volumes increased on higher production and lower internal use. In the first half of 2013, domestic sales accounted for 44.1% of SIBUR's total oxo alcohols revenue.

**Other Products****SIBUR-BASF**

SIBUR and BASF signed a Long-Term Cooperation Memorandum to supply additives used for polymer production and processing at SIBUR's production facilities. The deal provides for supplies of additives used to produce polypropylene, polyethylene, synthetic rubbers, thermoplastic elastomers (TPE), and ABS plastics at SIBUR's production facilities, with BASF ensuring also technical support. Additives help to protect polymers from harmful temperature, mechanical or light exposure.

As part of its new strategy in the Russian and CIS markets, BASF is keen to step up its presence in the region. SIBUR and BASF are looking to develop new, advanced materials, including elastomers and thermoplastic elastomers. Additionally, there is a project in progress for SIBUR's production of a new polypropylene product for nonwoven fabrics.

well as the modernisation and expansion of existing facilities.

**Air Liquide-Kstovo**

Air Liquide plans to launch production of industrial gases at Kstovo by the end of 2013. The production capacity has been designed to exceed 300 tons of oxygen per day. The company will produce liquid air separation products including oxygen, nitrogen and argon for industrial consumers in the region. The total investment by Air Liquide in the Kstovo project is reported to worth around €50 million. In 2010 Air Liquide entered into a long-term contract with RusVinyl to supply gases to Kstovo mainly for the production of PVC.

Air Liquide believes that consumption of industrial gases in Russia could rise in the next few years by 8-9% for oxygen and 3-4% for hydrogen. Growth in demand for technical gases is associated with the development of six chemical clusters and large-scale project plans, as

Air Liquide has been present on the Russian market since 2005. The company operates nine manufacturing sites at present and 4 more are under construction. Air Liquide and Severstal set up a joint venture in 2005 which now manages two ASUs at the Cherepovets Steel Mill. Another important activity of Air Liquide in Russia in the future could be linked to projects to produce helium from the oil fields in Siberia.

**SIBUR-Cryogenmash Gas**

SIBUR and Cryogenmash-Gas have signed a long-term agreement to supply industrial gases to Tomskneftekhim. The agreement involves the reconstruction of existing and construction of new facilities for the production of

#### Kuibyshevazot approves deal with Praxair

The extraordinary shareholders' meeting of Kuibyshevazot has approved a major deal with Praxair for the joint venture Praxair Togliatti Azot. According to the agreement signed between the companies on 28 June 2013, Praxair Togliatti Azot will supply Kuibyshevazot oxygen, nitrogen in gaseous form and compressed dry air. Additional terms of the agreement provides for an increase in the supply of the contract from 17 to 20 years.

industrial gases for the needs of the petrochemical company. Current production of industrial gases at Tomskneftekhim will be transferred to the administration of Cryogenmash-Gas. Wider plans include the construction of a new air separation plant to ensure that Tomskneftekhim has sufficient nitrogen and dry compressed air. The design capacity of the new production should be capable of fully meeting the needs of the Tomsk area in industrial gases.

Cooperation with Cryogenmash-Gas represents the third project for SIBUR as part of the programme to transfer the supply of industrial gases to outsourcing. SIBUR opened a new air separation plant in the Voronezh area in 2012, built by Air Products. In June 2013 SIBUR and Linde Gas signed an agreement in the field of operation and construction of new facilities for air separation at the site at Dzerzhinsk.

### Belarus

#### Kazakhstan-PTA project in Belarus under question

The prospects for a joint Kazakh-Belarusian PTA project at Mogilev have probably been ended after the Kazakh side became unconvinced about the viability of the investment. After a detailed review by KazMunaiGaz of building a PTA plant at Mogilev the economics of the project have been shown not to work from the Kazakh. Notwithstanding, Kazakhstan will be able to supply paraxylene to Belarus from the new plant at Atyrau, if a PTA project is constructed at Mogilev. It seems unlikely though that Mogilevkhimvolokno could build a PTA plant without a joint partner. The new paraxylene plant at Atyrau, involving a capacity of 496,000 tpa, is expected to come onstream possibly next year if Sinopec Engineering can complete the project.

Azot Grodno Production (unit-kilo tons)		
Product	Jan-Aug 13	Jan-Aug 12
Methanol	49.7	47.7
Caprolactam	87.6	83.9
Polyamide primary	51.9	35.0
Polyamide filled	6.9	7.2
Ammonia	668.8	712.5
Urea	606.8	662.7
Fertilisers	494.6	520.0

#### Azot Grodno-nitric acid project

Rosneft has agreed to supply gas to Azot at Grodno; the company needs about 1.5 billion cubic metres of gas per annum. Azot plans to undertake a project to build a nitric acid plant with a capacity of 1,200 tons per day. The company has signed a contract with ThyssenKrupp Uhde GmbH to license, design, supply of equipment and services for the project.

#### Kronospan, urea-formaldehyde project Belarus

Kronospan Group has signed an agreement with the government of Belarus for the construction of a plant for the production urea-formaldehyde resin with a capacity of 200,000 tpa. Kronospan

owns eleven similar plants for urea-formaldehyde. Currently Belarus imports urea-formaldehyde resins from Russia, but logistics and quality present difficulties.

To undertake the project Kronospan is buying two unused production facilities from Mogilevkhimvolokno for around \$2 million. The total cost of the project is estimated at €25 million; sources of investment will be either own funds or partially credit resources from international financial institutions. Production is scheduled to start the first quarter of 2015. Around 50% of production is intended to be used domestically and the remainder exported.

#### Rosneft-Lisichansk

Rosneft plans in May 2014 to resume the Lisichansk refinery in the east of Ukraine which has been idle since March 2012. Rosneft has taken over the refinery from TNK-BP and is currently undertaking construction work which is intended to be finished by 1 May 2014. TNK-BP discontinued production at the Lisichansk refinery prior to the assets being acquired by Rosneft and this was due to unprofitability arising from changes in excise duties. The capacities of the refinery include 6.5 million tpa of crude and 100,000 tpa of polypropylene. Previously the complex produced ethylene, but the cracker was stopped in the 1990s.

### Ukraine

#### Karpatneftekhim restarts production

Karpatneftekhim restarted petrochemical and chlorine production at Kalush on 10 September after a 12 month break from operational activity. The capacities of the entire complex include 300,000 tpa of PVC, 200,000 tpa of caustic soda, 250,000 tpa of ethylene and 100,000 tpa of propylene. The PVC plant only started production in the spring of last year but was closed September with the rest of the complex.

LUKoil intends to invest \$81.5 million in the seven-investment projects at Karpatneftekhim. This year, in particular, the oil group



**Ukrainian Chemical Production  
(unit-kilo tons)**

Product	Jan-Aug 2013	Jan-Aug 2012
Acetic Acid	65.1	91.6
Ammonia	3257.5	3333.9
Caprolactam	22.8	25.2
Caustic Soda	33.3	111.8
Ethylene	0.0	128.2
Methanol	95.4	115.9
Polyethylene	0.0	54.7
Polypropylene	0.0	25.5
Polystyrene	10.6	8.4
PVC	0.0	110.8
Propylene	0.0	55.2
Soda Ash	398.8	434.3
Titanium Dioxide	98.06	101.2

is undertaking the reconstruction of heating systems at a cost of \$2.4 million. In 2014 LUKoil plans to implement projects to increase the processing of gas liquids to 35,000 tpa worth \$9.3 million, and the introduction of sprinkler system and fire alarm system for \$0.7 million.

For 2014-2015 plans are scheduled for the modernisation of the VCM plant worth \$8.7 million, the introduction of an integrated security system for \$8.4 million and projects and technical support worth around \$22 million.

**Ukrainian benzene, Jan-Jul 2013**

Domestic market sales of benzene totalled 2,300 tons in July, 2.3 times higher than June. The only consumer of benzene in Ukraine was Azot at Cherkassy for the production of caprolactam, whilst the entire product was supplied by Ukratnafta at the Kremenchug refinery. For the period January to July this year domestic benzene consumption totalled 5,400 tons which was 4.2 times

lower than in 2012. Azot at Cherkassy has accounted for 60% of consumption and Zarya at Rubezhnoye 40%.

**Ukrainian fertiliser producers stop production due to high gas prices**

The production of mineral fertilisers in Ukraine was substantially reduced at all plants in September due to the price of gas. Ukrainian consumers are paying almost four times the rate of the Russian fertiliser producers, making competition very difficult. The fertiliser plants include the Odessa Port Plant, Azot at Cherkassy and Severodonetsk, Stirol, Rivneazot and Dniproazot. Azot at Severodonetsk took the chance for a maintenance shutdown, whilst Stirol at Gorlovka aims to restart by the end of October.

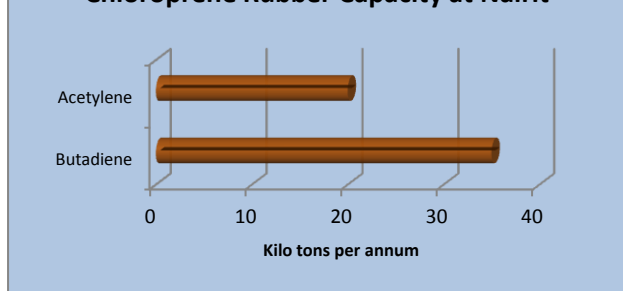
**Ukrainian methanol market**

Azot at Severodonetsk reduced the sales of methanol in the domestic market in August, dropping 6% against July to 2,300 tons. The main reason for the decline of sales was partly lower demand from the gas companies and partly due a seasonal increase in demand for methanol derivatives, thereby increasing captive consumption at Severodonetsk. Apart from the gas companies which account for the largest share of merchant purchases in the Ukrainian market other consumers include the formaldehyde resin producer Stirol at Gorlovka. Azot at Cherkassy also buys small volumes which uses it as an anti-caking additive to urea. Demand is expected to rise in the next couple of months due to an expected increase in purchases of products by domestic gas companies prior to production of the

heating season.

**Caucasus-Central Asia**

**Chloroprene Rubber Capacity at Nairit**



**Nairit-butadiene**

Armenia has reached agreement with Iran to import butadiene to Nairit butadiene to produce chloroprene rubber. In terms of current trade activity between the two countries Armenia imports natural gas from Iran and exports electricity in return. By importing butadiene Nairit could produce between 30-35,000 tpa of chloroprene rubber, as opposed to 15-20,000 tpa based on the old method of acetylene. Nairit states that it would aim to sell around 10,000 tpa of chloroprene rubber to Iran, in addition to exporting volumes to China.

The Nairit plant for the production of synthetic rubber was established in 1940. A company entitled Rhinoville Property Limited in 2006 acquired 90% stake in Nairit. The remaining 10% is owned by the Ministry of Energy and Natural Resources of Armenia. According to various estimates, Nairit owes \$120-130 million, of which \$20-25 million is owed to banks. Debts were caused by the hike in gas prices from Russia, rising from \$54 to \$180 per 1,000 cubic metres, by 2010. Armenia does not currently import gas from Russia.

Rosneft and Pirelli are considering potential joint investments in Nairit and the production of chloroprene rubber. In August 2013 Jacobs Consultancy conducted a technical and environmental audit of chloroprene rubber of

butadiene at the plant. Rosneft will decide whether to participate in this project according to final results of the audit, as well as the results of negotiations with the government of Armenia.

### **CNCEC wins contract for PVC project at Navoiazot**

China National Chemical Engineering Corporation (CNCEC) has won the tender for the construction of a PVC unit at Navoiazot in Uzbekistan. The project includes the construction of 100,000 tpa of PVC, 64,000 tpa of caustic soda and 300,000 tpa of methanol. The contract with CNCEC may be signed in October-November this year. Funding will be financed by Navoiazot's funds and credit of the Uzbek side of Export-Import Bank of China.

### **Kaustik Pavlodar-chlorine**

Kaustik at Pavlodar has achieved 100% on its chlorine based plant for the first time since operation. The plant is capable of producing 24,500 tpa of chlorine, 9,100 tpa of sodium hypochlorite, 45,000 tpa of hydrochloric acid and 30,000 tpa of caustic soda.

Kaustik was founded on the basis of the Pavlodar Chemical Plant in 2002. The chlorine plant was launched on 21 December 2010 based on the membrane method. The plant includes has a modern production plant for caustic soda and chlorine using the latest production technology. The plant aims to meet the needs of the domestic market for caustic soda and chlorine.

**Relevant Currencies**

Czech crown. Kc. \$1= 20.753. €1 = 25.833: Hungarian Forint. Ft. \$1 = 229.448. €1 = 288.154: Polish zloty. zl. \$1=3.414. €1 =4.280: Bulgarian leva: \$1 = 1.5956. €1= 1.557: Romanian Lei. \$1 = 3.555. €1= 4.463: Croatian Kuna HRK. \$1 = 5.998. €1= 7.530: Ukrainian hryvnia. \$1=8.07. €1 = 10.140: Rus rouble. \$1= 33.192. €1= 41.867

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