

# CIREC

## MONTHLY NEWS

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

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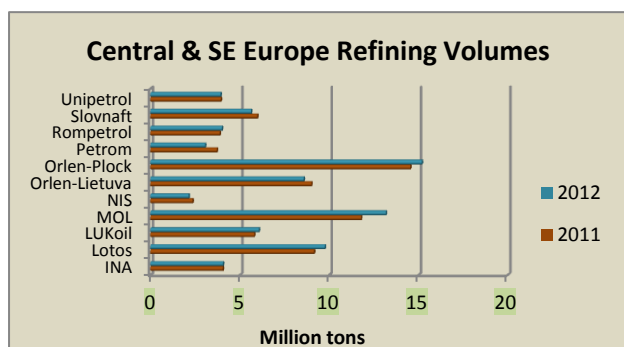
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# CENTRAL & SOUTH EAST EUROPE

## Petrochemicals

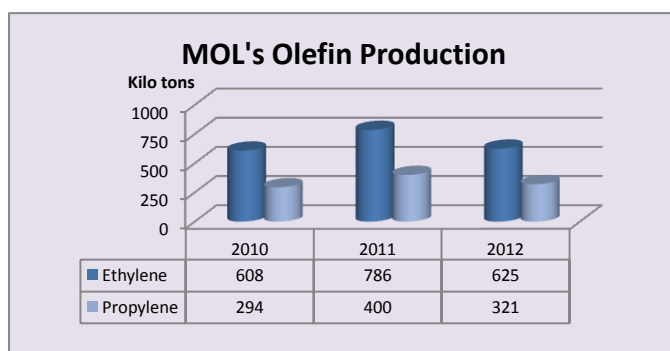


### Refinery news

Refineries in Central and South East Europe processed a total of 75.3 million tons in 2012 against 74.2 million tons in 2011. The largest refinery in the region is Plock which processed 15.2 million tons in 2012 against 14.6 million tons in 2011. PKN Orlen has recently signed a deal worth around \$15 billion with Rosneft for the delivery of 18 million tons of crude until the end of January 2016.

After Plock, MOL's refinery at Szazhalombatta is the second largest in the region processing 13.2 million tons in 2012 against 11.8 million tons in 2011. All the other refineries produced less than 10 million tons, with the smallest producer NIS in Serbia. At the two refineries Novy Sad and Pancevo NIS processed 2.1 million tons in 2012 against 2.4 million tons in 2011. NIS finished the upgrade of its Pancevo refinery late last year and plans further investments to develop refining capacity.

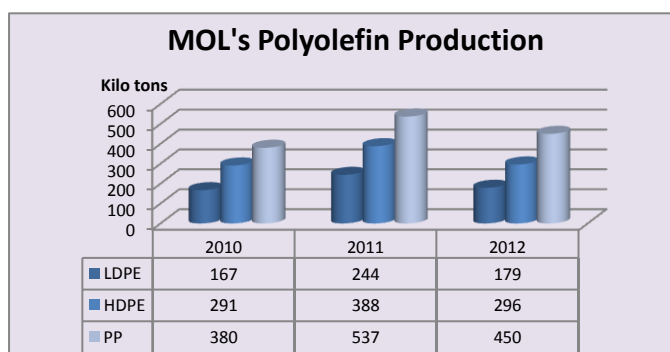
Poland's second largest refinery Lotos at Gdansk is undergoing a maintenance shutdown from 29 March to 10 May. Crude oil processing will be suspended for 23 days. The shutdown will decrease the refinery's processing capacity by 8% in 2013. In Romania, Rompetrol has completed a programme of modernisation at the Petromidia refinery near Constanta. Total investment in the project amounted to \$380 million, and involved an expansion in refining capacity from 3.8 million tpa to 5 million tpa. Last year Rompetrol processed 4 million tons of crude. The company has agreed to buy out a 44.69% stake in Rompetrol Rafinare (owner of Petromidia and Vega oil refineries in Romania), thus acquiring full control. The Romanian government will retain the status of a minority shareholder of Rompetrol Rafinare.



For Slovnaft refining volumes dropped from 6.0 million tons in 2011 to 5.6 million tons in 2012. Possible new crude supply connections are being considered between Bratislava and Schwechat, the length of the proposed new pipeline would be just over 80 km. The main stated objective is for Austria to have access to the Druzhba and supplies from the east. The final decision on the pipeline is expected at the end of the year.

### MOL Group 2012

MOL's petrochemical production dropped in 2012 due to a combination of lower demand and extended maintenance shutdowns. Olefin volumes for MOL achieved the highest level in the fourth quarter last year, but still overall capacity utilisation levels at TVK and Slovnaft remained lower than in previous years. While polymer product sales started to increase in the fourth quarter, the polymer market was still faced by low demand and volatile prices. TVK's LDPE-2 unit was stopped on 31 October due to a fire incident, and remained idle for the rest of the year.



Petrochemicals remain in the red, although the size of losses diminished greatly from a year ago. MOL reported a lower-than-expected fourth-quarter profit in 2012 due mostly to a weaker downstream environment and a loss on inventories. Profit fell in the fourth quarter to Ft 7.7 billion from Ft 67.5 billion in the third quarter.

Total refined product and petrochemical sales dropped 7% against the fourth quarter in 2011 due partly to weak market demand.

TVK recorded a loss of Ft 10.2 billion for the whole of 2012, and the company's operating profit fell by 42% compared to 2011. Factors influencing losses last year included increases in the cost of natural gas, electricity and steam power. Coupled with lower production and sales volumes higher costs caused significant losses for TVK. Despite the closure of the LDPE unit TVK's fourth quarter operating profit reached Ft 5.8 billion. This was up on the third quarter, primarily due to increases in the production and sales. It was also due partly to the impact of changes in exchange rates.

TVK's Sales' Revenues (Ft million)		
Exports	Jan-Dec 12	Jan-Dec 11
Olefin	17,979	15,191
LDPE	10,662	15,746
HDPE	101,618	114,862
PP	49,184	53,403
Domestic	Jan-Dec 12	Jan-Dec 11
Olefin	120,307	133,767
LDPE	10,303	11,774
HDPE	12,575	13,364
PP	43,189	44,164
Total Sales	Jan-Dec 12	Jan-Dec 11
Olefin	138,286	148,958
LDPE	20,965	27,520
HDPE	114,193	128,226
PP	92,373	97,567

TVK's average capacity utilisation rate achieved only 78.1% in 2012, 15% lower than in 2011. Lower utilisation for 2012 was attributed to longer maintenance at some plants, the fire at the LDPE-2 unit on 31 October and lower sales throughout the year. Overall, TVK's polymer production for 2012 fell by 15%, while sales was 17%. In value terms, revenues for LDPE, HDPE and polypropylene all dropped against 2011. Olefin revenues also dropped despite the increase in export activity.

Slovnaft, by contrast to TVK, achieved a net profit of €53 million for 2012 against a loss of €19 million in 2011. The result was influenced by income from export markets, and a number of actions taken on the cost side. The result looks impressive against Slovnaft's net sales in 2012 which declined by 2% to €4.63 billion due to lower demand for oil products and a decline in sales caused by maintenance outages.

Slovnaft, processed 5.6 million tons in of crude in 2012, which was 10% less than the previous year. The major project for Slovnaft involves the construction of a new, state-of-the-art LDPE unit at Bratislava. In addition a planned capacity increase of Druzhba-1 crude oil pipeline will increase the supply security of the refinery and Slovakia.

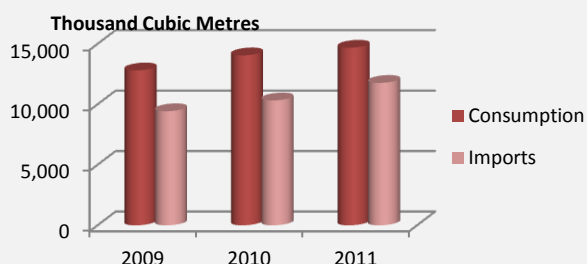
### Rompetrol Petrochemicals, 2012

Rompetrol Rafinare processed 119,000 tons of propylene and 103,000 tons in 2012, which was the same for propylene in 2011 but 44% down for ethylene. The company operated only the polypropylene and LDPE plants in 2012 whilst the HDPE plant remained idle due to ongoing modernisation. This process is almost complete and will result in an expansion of HDPE capacity and broadening the range of products offered, including thin film and pipe grade PE 100.

Rompetrol Rafinare's best performing division in 2012 was its refining business, where it increased turnover, turned an EBITDA loss into a \$58 million profit and shortened the overall losses. The distribution and petrochemical divisions did not perform as well.

## Chemicals

Polish Gas Consumption vs Imports



### Polish gas prices & agreements

Polish chemical groups have discovered they will avoid a new excise duty on gas purchases that could have added around zł 40 per ton of ammonia production. Grupa Azoty was able to argue that gas is not fuel, but a raw material. Rather than prices rising this year the opposite trend is taking place.

The Ministry responsible for industry believes that the consolidation of the chemical sector will lead to a further reduction in gas prices. A reduction of gas prices for the chemical industry was agreed at the end

of 2012, but possibly not as much as the chemical companies had hoped. PGNiG agreed to reduce prices by 3.31% on average, saving the chemical companies large sums, but other sectors in the Polish economy have received bigger falls. The largest recipient of gas in Poland is the Orlen Group which annually buys 1.3

billion cubic metres. This means that the savings for Orlen have been estimated in the range of zł 52 million for 2013.

ZA Pulawy is second place, buying about 950 million cubic metres of gas, and savings for 2013 could amount to zł 38 million. Also from Grupa Azoty Group ZCh Police could save around zł 22 million in 2013. This is followed by ZA Tarnow and Zakłady Azotowe Kędzierzyn at around zł 16 million each.

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

<b>Product</b>	<b>Jan-13</b>	<b>Jan-12</b>
Caustic Soda Liquid	26.9	19.1
Caustic Soda Solid	6.4	3.6
Soda Ash	88.5	97.9
Ethylene	44.6	49.5
Propylene	30.4	33.3
Butadiene	5.5	5.9
Toluene	0.9	3.1
Phenol	2.7	4.2
Caprolactam	14.7	14.5
Acetic Acid	0.8	0.5
Polyethylene	33.3	33.8
Polystyrene	4.6	4.8
EPS	2.6	2.1
PVC	21.8	21.4
Polypropylene	23.8	23.8
Synthetic Rubber	16.0	16.9
Ammonia (Gaseous)	113.0	122.0
Ammonia (Liquid)	122.0	124.2
Pesticides	2.2	1.9
Nitric Acid	218.0	235.0
Nitrogen Fertilisers	170.0	180.5
Phosphate Fertilisers	38.6	44.6
Potassium Fertilisers	27.0	28.9

**Solvay-silicia project at Wloclawek**

Solvay is investing €75 million in building an 85,000 tpa highly dispersible silica (HDS) plant at Wloclawek. Combined with further capacity expansion at its site in Qingdao (China), these two investments are designed to increase Solvay's global highly dispersible silica production capacity by 30%. The new plant at Wloclawek will offer logistical benefits to customers in East Europe and Russia. The site is a designated Special Economic Zone (SEZ) integrated within the industrial site of Anwil. The project's completion is expected in the third quarter of 2014.

Among other HDS products, the new plant will produce Zeosil Premium, the latest generation of highly dispersible silica, used by tyre manufacturers in the production of energy-saving products. Zeosil Premium is a uniquely engineered patented HDS which reportedly decreases fuel consumption by up to 7%, while enhancing other tyre performance properties. The new plant will be located close to major transport energy and new Warsaw-Gdansk highway.

**Spolchemie-hydrogen chloride expansion**

The Czech Ministry of the Environment has authorized Spolchemie to expand the production of hydrogen chloride by almost double. The investment of about Kc 50 million should be ready by 2016. The project depends on the construction of new electrolysis unit which is costing the company in the range of Kc 2 billion.

Spolchemie is currently operates two production units for hydrogen chloride, one which is very old and the other relatively new having been started in 2008. Replacing the older unit should increase capacity from 185,000 to 300,000 tpa. The new technology involves the replacement of old equipment with new and modern elements, and will also further enhance product security and reduce air pollution. The main difficulty with any investments planned by Spolchemie is the central position of the plant in the town Ust nab Labem.

Spolchemie is engaged in the construction of a new electrolysis unit, which should be one of the most important investments for the chemical plant. The first contract for technology with Uhde has already been signed.

**Zachem halts ECH production**

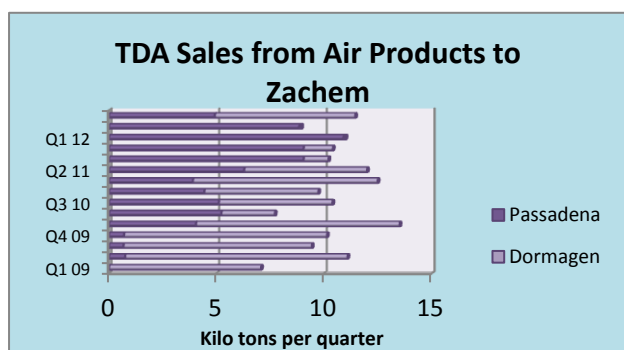
Zachem in December 2012 stopped its epichlorohydrin (ECH) production unit, after the TDI plant was closed in conjunction with BASF's acquisition of the assets from Ciech. The main recipient of ECH produced by Zachem until then was Zakłady Chemiczne Organika-Sarzyna, a member of the Ciech Group. After shutdown of the production in Zachem, the company will acquire ECH on the open market. The need to buy ECH is not expected to affect the operation of the company due to the high supply availability of the product and signing of long-term contracts, Organika-Sarzyna expects favourable prices and stability of ECH supply. Organika-Sarzyna uses ECH in the production of epoxy resins.

**Ciech-Air Products**

A dispute between Ciech and Air Products has emerged after the sale of Zachem's TDI plant to BASF. Air Products believes that the cooperation agreement has not been effectively terminated, whilst Ciech believes the opposite. In mid-October Ciech and BASF reached a conditional agreement for the sale and transfer of intangible assets related to Zachem's TDI plant to BASF Poland for €43 million (about zł 178.56 million).



In the past twenty years, Air Products has provided TDA to Zachem for the production of TDI, supplying both the company's plants at Pasadena and Dormagen. Receiving TDA from Dormagen enabled Zachem to make significant savings of several million dollars a year. As the current supply contract with Air Products was concluded with Zachem for the period 2012-2018, the termination by Ciech has caused a difficult position.



Ciech states that it has operated within the confines of the agreement and has terminated the contract lawfully. Air Products tried to transfer the contractual obligations to Bayer last year, but Zachem did not give permission for the transfer. Air Products feels that it has gone out its way to accommodate Zachem and is arguing against the swift termination of the contract. It remains unclear if the dispute will be settled without litigation.

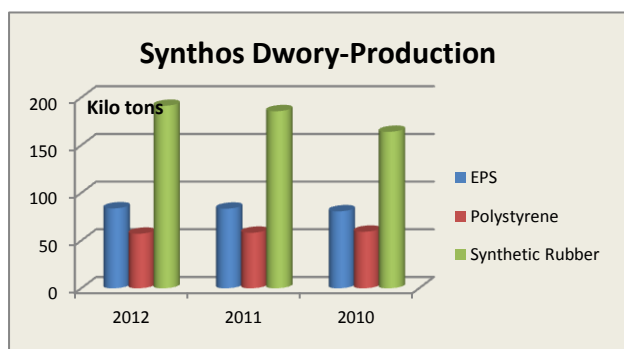
#### Ciech sells Alwernia

Ciech has agreed to sell 99.62% of its phosphorus and chromium compound producer Zakłady Chemiczne Alwernia to Kermas Group, one of the world's largest chrome compound producers, for \$13.4 million. The companies have already signed a preliminary agreement, but the acquisition is still subject to anti-monopoly approval. The sale of subsidiary is part of the Ciech capital group's restructuring strategy.

#### Rudniki plant put up for sale again

Ministry of Treasury has invited interested parties to negotiate the purchase of shares in ZCh Rudniki. Last year there was competition for ownership in ZCh Rudniki between Ciech and Tonaso, the latter which produces silicates in the Czech Republic. However, neither party wanted to buy the company, adding to the previous bidders that had aborted interest Dr.Woellner Holding and PCC.

The main products of ZCh Rudniki include sodium and potassium silicate. The export share in sales of the company amounts to approximately 54% most of which goes to Europe. Ciech wanted to buy ZCh Rudniki principally to extend its production chain from soda ash downwards. Current capacity is 45,000 tpa of silicates (sodium and potassium). ZCh Rudniki is currently facing financial difficulties after unsuccessful currency decisions. Last year the company recorded a loss of just over zł 3.3 million.



#### Synthos 2012

Estimated revenues for Synthos amounted to zł 6.2 billion in 2012. Operating profit exceeded zł 770 million, and net profit has been estimated at zł 585 million. The results for the Synthos Group for 2012 were achieved despite underutilisation of the unit for polybutadiene rubber (Nd BR). This was due largely to delays in obtaining approval of the product specifications from the largest customers. The group was affected last year by the volatility of commodity markets (mainly butadiene prices) and the slowdown in product markets, accompanied by a decline in prices. In terms of

production volumes, Synthos has achieved gradual increases for its main product groups in rubber, EPS and general polystyrene. Further expansions are in line for all product groups.

#### Polish Tyre Production (thousand pieces)

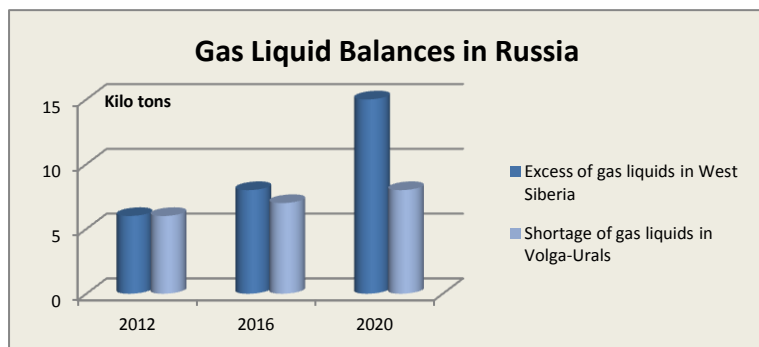
Category	2010	2011	2012
Cars	29,443	29,793	26,105
Lorries	3,455	4,595	3,875
Tractors	349	389	218

Synthos needs to maintain a position in export markets, particularly as tyre production in Poland has tended to stagnate and even decline in the past couple of years. Last year production was affected by reduced output by TC Debica. The company, which is majority owned by Goodyear, announced several reductions in 2012 for categories of tyres as a reaction to reduced orders from Goodyear.

The reduction in tyre output in Poland may transpire to be a short-term trend. Bridgestone stated last year that it was to invest 12.6 billion yen to boost its capacity to produce bus and truck tyres in Poland. The move will lift the capacity of its plant in Stargard, in northwest Poland, to 3,750 tyres per day by the second half of 2014 from 2,400 per day at present.

# RUSSIA

## Feedstock & Petrochemical Projects



### Yamal-Volga feedstock pipeline

Tatarstan, Bashkortostan and the Yamal-Nenets Autonomous District have created a company to build a feedstock pipeline connecting the Yamal region of West Siberia with the petrochemical industries in the Volga-Urals region. The company Yamal-Volga was founded 30 January 2013; one of the founders is Nizhnekamskneftekhim with 33.4% of equity.

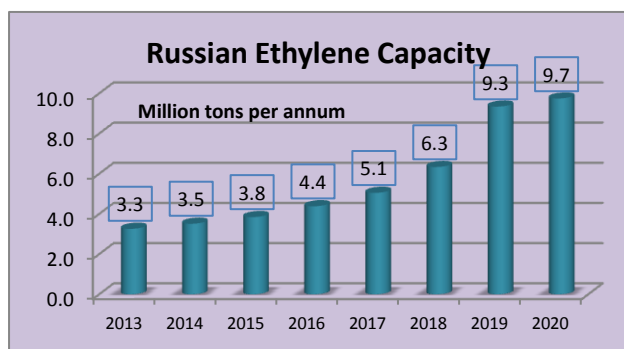
Yamal-Volga is developing a feasibility study for the pipeline, which should be prepared by May 2013. The pipeline for transporting natural gas liquids and condensate, using the route Yamal-Volga, will effectively utilise the hydrocarbon potential of the Yamal-Nenets Autonomous District. This will provide natural resources for companies operating in the Volga petrochemical cluster and help to provide additional feedstocks for ethylene production.



### Gazprom-petrochemical plans for Astrakhan

Gazprom intends to complete plans this year to invest in the construction of a complex for the production of polyethylene in the Astrakhan region. Previous references to a new polyethylene project have detailed 500,000 tpa of capacity. Other projects at Astrakhan under consideration include 120-160,000 tpa of isopropyl ether. The entire project includes the installation of a unit for ethylene based on ethane, a polyethylene, energy facilities, storage and other ancillary facilities. In 2012, Gazprom Promgaz won the tender to carry out pre-investment studies for the project.

The notion of constructing a polyethylene plant at Astrakhan is driven primarily by feedstock availability. At present, Russia relies on imports of HDPE and LLDPE, and to some extent LDPE, in order to balance market demand and so additional domestic capacity is required. Large-scale facilities are expected to come onstream in 2014 at Novy Urengoy, and in 2016-2017 at Nizhnekamsk and Tobolsk. The market balance may have started to transform from deficit to surplus by the time the Astrakhan project is ready. Much depends on the growth rates for polyethylene consumption in the domestic market: the difference between 3% and 5% growth for example could equate to around 500,000 tons by 2020.



### Russian ethylene capacity 2020

Ethylene projects in West Siberia at Novy Urengoy and Tobolsk continue to progress in line with their respective time-schedules. Together with the Nizhnekamsk and Nakhodka projects the plants at Novy Urengoy and Tobolsk will have a major impact on Russian ethylene capacity.

Other projects that are further back in the time schedule include Salavat, Budyennovsk and Astrakhan and these capacities are factored into the graphic opposite. This shows the progressive rise in capacity to 9.7 million tpa

by 2020. Effectively this transpires into almost a three-fold increase from 2013 to 2020. In addition to the projects in progress or underway there are other potential projects ranging from the modernisation of existing plants to the development of ethane-fed petrochemical plants in the Russian Far East and East Siberia. These projects still in the concept and discussion stages are not included in the graphic data above.

Russian Petrochemical Exports (unit-kilo tons)		
Product/Producer	Jan-13	Dec-12
<b>Propylene Total</b>	<b>2.9</b>	<b>5.0</b>
LUKoil-NNOS	1.9	3.0
SIBUR-Neftekhim	0.5	1.0
Omsk Kaucuk	0.4	1.0
<b>Orthoxylene Total</b>	<b>3.5</b>	<b>5.0</b>
Gazprom Neft	0.0	3.1
Ufaneftekhim	2.0	2.0
Kirishinefteorgsintez	1.5	0.0
<b>Paraxylene Total</b>	<b>5.5</b>	<b>11.9</b>
Gazprom Neft	0.0	8.2
Kirishinefteorgsintez	4.1	3.7
Ufaneftekhim	1.5	0.0
<b>Methanol Total</b>	<b>110.5</b>	<b>114.9</b>
Azot Novomoskovsk	12.6	20.9
Akron	1.1	1.0
Metafrax	26.8	15.9
Sibmetakhim	30.4	30.6
Togliattiazot	20.3	15.4
Shchekinoazot	19.4	31.0
<b>Normal Butanol Total</b>	<b>1.0</b>	<b>2.3</b>
Gazprom Neftekhim Salavat	0.9	1.6
SIBUR-Khimprom	0.1	0.6
Azot Nevinomyssk	0.0	0.1
<b>Isobutanol Total</b>	<b>5.5</b>	<b>5.3</b>
Gazprom Neftekhim Salavat	0.8	0.8
SIBUR-Khimprom	3.5	3.7
Angarsk Petrochemical Company	1.2	0.9
<b>Styrene Total</b>	<b>9.9</b>	<b>17.2</b>
Plastik	1.4	1.6
Gazprom Neftekhim Salavat	8.2	15.6

### West Siberian ethylene projects

The installation for heating furnaces at Novy Urengoy has been completed, representing an important part in the ethylene and polyethylene project. Construction of the chemical complex is located thirty miles from Novy Urengoy and design capacity comprises 400,000 tpa of LDPE. In addition to the main products produced by the company will produce a gas liquids and methane fractions. The raw material for the production of ethylene and polyethylene is to be supplied from the Urengoy gas field.

Regarding the Zapsibneftekhim petrochemical project at Tobolsk environmental assessments and public observations have been thus far positive. The use of technologies by such companies Linde Engineering, INEOS, LyondellBasell will ensure reliability and security of the complex. The project involves the capacities for LLDPE at 800,000 TPA and HDPE at 700,000 TPA, whilst polypropylene capacity is being designed to produce 500,000 tpa.

One of the features of the Zapsibneftekhim project is its feedstock source, associated gas, which will be part of the efforts to reduce flaring and the negative impact on the environment in the Tyumen region. Water for the project can be secured from the Irtysh River. The vertical integration of the complex will mean that the production of petrochemicals can be contained in a close cycle thereby avoiding negative effects on the Irtysh River.

### Eastern Petrochemical Company-receives regional support

The Ministry for the development of the Far East and Primorsk authorities have identified the construction of a petrochemical complex at Nakhodka as a regional priority and are to offer maximum support for the project. The start of construction of the complex at the port of Vostochny, located in Wrangel Bay on the Pacific coast, is planned for late 2014. According to the Ministry for the Development of the Far East the project will benefit from a reduced tax rate and reduced time of allotment of land plots for construction. This latter factor will significantly reduce the time of commissioning.

The regional government has been advised to take all measures to eliminate constraints regarding the creation and development of the petrochemical industry in the region. Besides the

construction of the complex itself, infrastructure investments are required such as the need to reconstruct water intake and treatment facilities. The petrochemical complex will produce propylene, polyethylene, MEG and other products from the raw materials, which will be supplied from Rosneft's refineries from Rosneft. These include the Achinsk refinery, Komsomolsk refinery and Angarsk Petrochemical Company. Regarding energy sources Rosneft has examined over 10 types of thermal stations to support the petrochemical complex, three of which are most preferred. A final decision on the choice of energy projects to be adopted in the near future.

### Volga ethylene projects

Nizhnekamskneftekhim intends to start laying the foundations for the construction of the new ethylene complex this year. Tasks this year will involve the extended basic design of new olefin and polyolefin plants. Nizhnekamskneftekhim has already selected Lummus Technology Heat Transfer to provide the license for the ethylene complex. A license agreement for the creation of another polypropylene unit was signed with Basell, and the license for the production of polyethylene with Ineos Technologies. The project will result in an increase in ethylene capacity at Nizhnekamsk to 1.6 million tpa from 600,000 tpa at present. It will also add 600,000 tpa of polyethylene and 400,000 tpa of polypropylene. The cost of construction is estimated in the range of \$3 billion.

SIBUR Kstovo has recently installed a new column for the primary gas separation at the EP-300 cracker. Although the modernisation process involves a relatively modest expansion compared to other ethylene projects in Russia, it is closest of all the projects to completion. The modernisation will raise capacity to 360,000 tpa before a further expansion to 430,000 tpa. This is part of the programme to increase the production of ethylene from 240,000 tpa to 360,000 tpa at Kstovo and provide raw material for RusVinyl. The column installed is for the primary separation of methane from pyrogas at low temperature gas separation.

### Feedstocks & Petrochemical Producers

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

Producer	Jan-Dec 12	Jan-Dec 11
Angarsk Polymer Plant	190.9	196.2
Kazanorgsintez	493.0	391.2
Stavrolen, Budyennovsk	77.7	331.9
Nizhnekamsk	605.5	601.4
Neftekhimya, Novokuibyshevsk	76.1	51.4
Gazprom Neftekhim Salavat	205.5	259.1
SIBUR-Neftekhim, Kstovo	231.0	248.5
SIBUR-Khimprom, Perm	48.4	35.8
Tomskneftekhim	260.9	250.8
Ufaorgsintez	97.9	102.0
Totals	2286.9	2468.3

#### Russian ethylene production 2012

Russian ethylene production totalled 2.286 million tons in 2012, against 2.468 million tons in 2011. The primary reason for the fall of 182,000 tons was the outage at Stavrolen which lasted from December 2011 to September 2012. Last year, Stavrolen reduced production to 77,700 tons from 331,900 tons in 2011. Gazprom Neftekhim Salavat also recorded a substantial fall in 2012 due to ongoing modernisation.

Nizhnekamskneftekhim remains the largest Russian producer, increasing output to 605,500 tons in 2012. There are still several small plants such as Novokuibyshevsk, Perm and Ufa which do not add very much to the overall balance. The most significant increase was recorded by Kazanorgsintez, producing 493,000 tons

in 2012 against 391,200 tons in 2011. This increase took place partly due to increased ethane supply from Orenburg. Gazprom supplied around 400,000 tons of ethane in 2012, which is about 100,000 tons higher than in recent years. Kazanorgsintez operates ethylene facilities with 640,000 tpa of capacity and its utilisation rate is restricted by the lack of competitive feedstock.

In theory, Kazanorgsintez could make up the difference by using propane-butane mixture but this is source of feedstock is not cost-competitive and Kazanorgsintez only uses LPGs when ethane supply is tight. Total Russian production for 2013 could exceed 2.5 million tons unless an extended interruption similar to Stavrolen's outage in 2012 takes place. SIBUR-Kstovo should be capable of producing larger volumes this year although the modernisation process is not yet completed.

#### Russian Propane-Butane Production (unit-kilo tons)

Producer	Jan-Dec 12	Jan-Dec 11
SIBUR	3,497	2,793
Gazprom	2,562	2,323
Nizhnekamskneftekhim	1,151	901
LUKoil	1,273	1,157
Bashneft	347	323
Gazprom-Neft	495	427
Surgutneftegaz	852	850
Tatneft	344	318
TNK-BP	247	264
Rosneft	214	251
Others	796	1,109
Total	11,778	10,717

#### Russian LPG production & exports 2012

Russian companies in 2012 increased the production of liquefied petroleum gas (propane and butane) by 9.9% compared to 2011 and totalled 11.778 million tons. SIBUR Holding increased output by 3.7% up to 3.497 million tons, of which 2,621 million tons was produced by Tobolsk-Neftekhim. Normal butane exports totalled 1.46 million tons in 2012, 25% up on 2011. Turkey bought 37% of shipments, Finland 26%, Ukraine 16%, Poland 8% and Hungary 6%.

#### Russian propane-butane, Jan 2013

Propane supplies to the domestic market totalled 69,100 tons in January, 1% up on the previous month. Growth was due to the seasonal increase in the supply of propane to fuel sector. Deliveries to the petrochemical sector amounted to 19,650 tons, 5% up on December. Surgut Gas Condensate Plant is the leader for propane supply to the domestic market and shipped 36,840 tons in January, a 2% increase over December.

Russian butane exports totalled 125,680 tons in January, 20% up on December. Growth in exports took place as a result of increased supplies from Tobolsk-Neftekhim which increased by 3.5 fold to 80,390 tons in January. Ukraine is still not buying Russian butane due to the extended downtime at Karpatneftekhim.



**Russian naphtha sales, Jan 2013**

Domestic sales of naphtha in Russia totalled 173,400 tons in January, almost the same as in December. Purchases of naphtha by petrochemical plants increased by 2% to 83,700 tons. Shipments of naphtha to SIBUR-Neftekhim rose from 4,600 tons to 11,500 tons at the expense of processing liquids. By contrast, Tomskneftekhim reduced the volume of purchases of naphtha from 32,400 tons to 28,100 tons due to increased supply of natural gas liquids.

Novatek has reached agreement to deliver naphtha from its complex at Ust-Luga to the South Korean petrochemical producer Yeochun Naphtha Cracker Centre. The contract covers 2013 and includes 300,000 tons of naphtha. The industrial complex belonging to Novatek at Ust-Luga includes transshipment capacity and the fractionation of stable gas condensate. The complex is able to process 6 million tpa of condensate and will produce light and heavy naphtha, diesel fuel, jet fuel and heating oil. The start-up operations in the first stage of the complex capacity comprise 3 million tpa. Construction of the second stage is in process.

**Russian C4s**

C4 shipments to the Russian domestic merchant market amounted to 31,200 tons in January, 1% down on December 2012. Ufaorgsintez reduced sales to the domestic market by 16%, down to 2,000 tons, and Angarsk Polymer Plant dropped sales by 13%, to 6,900 tons. Stavrolen increased sales by 21%, to 6,600 tons, and Kazanorgsintez by 6% up to 3,300 tons. Imports of C4s totalled 4,500 tons in January, 14% less than in December. Nizhnekamskneftekhim reduced purchases of C4 imports to 2,000 tons (22% less than December) whilst Omsk Kaucuk increased shipments by 6% to 2,500 tons. Belarus was the sole source of imports into Russia in January.

**Russian Propylene Domestic Purchases**

<b>Company</b>	<b>Jan-13</b>	<b>Dec-12</b>
Saratovorgsintez	14.4	15.9
Volzhskiy Orgsintez	0.8	1.1
Akriat	1.0	3.0
SIBUR-Khimprom	7.1	5.6
Tomskneftekhim	0.5	1.0
Ufaorgsintez	2.5	3.8
Gazprom Neftekhim Salavat	1.5	4.5
Kazanorgsintez	0.6	0.0
Samaraorgsintez	1.1	2.0
Khimprom Kemerovo	0.2	0.3
Plant of Synthetic Alcohol	0.0	0.3

**Russian propylene supply, Jan 2013**

Shipments of propylene on the domestic market decreased by 21% in January against December to 29,600 tons. The main cause for the decrease in sales was reduced supply from Omsk Kaucuk, down by 3.4 times to 1,800 tons. In addition, Angarsk Plant of Polymer lowered sales on the domestic market 1.8 times to 2,700 tons, or two times less than in December.

Exports of propylene rose 29% in January against December, totalling 6,400 tons. Angarsk Polymer Plant exported propylene for the first time in January since October 2011, shipping 2,400 tons. Additionally, Omsk Kaucuk increased exports by 1.5 times, to 1,500 tons, whilst SIBUR-Neftekhim reduced shipments by 49% to 503 tons. LUKoil-NNOS increased exports by 35% to 1,900 tons.

Supplies of propane-propylene fractions reduced in January by 35% against December to 11,100 tons. The main reason for the fall was the significant reduction in sales from the Ryazan refinery, which

shipped 67% less volume in December to 3,200 tons whilst at the same time exporting nearly 7,000 tons. Shipments of propane-propylene fractions from Gazprom Neft at Omsk declined by 14% to 3,500 tons.

**Russian styrene market, Jan 2013**

Styrene sales on the Russian domestic market totalled 8,400 tons in January, 2% less than in December 2012. SIBUR-Khimprom shipped 1,200 tons to consumers, which was 3.2 times down on December, whilst Plastik at Uzlovaya increased the delivery of the product 3.3 times to 2,000 tons. In addition, Angarsk Polymer Plant sold 2,700 tons in January which is 2.5 times more than the previous month.

Export shipments of styrene comprised 9,900 tons in January, 43% down on December. Gazprom Neftekhim Salavat reduced shipments by 47% to 8,200 tons, whilst Plastik at Uzlovaya increased loads by 15% to 1,400 tons. Angarsk Polymer Plant was the smallest exporter, shipping 307 tons of styrene.

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**Bulk Polymers**

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**Russian polymer production, Jan 2013**

Russian production of bulk polymers rose by 5.7% in January against the same month last year and totalled 466,000 tons. Factors that boosted production against January 2012 included the resumption of production at

Stavrolen and higher volumes of EPS production at SIBUR-Khimprom. Production of polyethylene increased by 1.6% to 140,000 tons, polystyrene by 23%, to 34,300 tons, and PVC by 1.2%, to 60,300 tons. Production of polypropylene was up slightly to 52,300 tons. In other product areas the production of polyesters, polycarbonates, alkyd and epoxy resins for January amounted to 44,200 tons (8.5%) and polyamides 10,700 tons (20%). Production of synthetic rubber rose by 12.5% and amounted to 143,000 tons.

#### **Russian HDPE imports, Jan 2013**

HDPE imports into Russia fell by 37% in January compared to December to 24,000 tons. The decline was due to the seasonal decline in demand for the material and stable operation of all Russian producers. Last year was a record year for the Russian market in terms of volume of imports of HDPE. For the full year Russia imported 410,000 tons of material.

#### **Neftekhimsevilen**

Shareholders of Neftekhimsevilen at Kazan held an extraordinary meeting in February to approve the voluntary liquidation of the company. The decision has been taken to merge Neftekhimsevilen with Kazanorgsintez. Neftekhimsevilen was formed in 1991; as in November 2012 Nizhnekamskneftekhim owned 50.99% of Neftekhimsevilen and the Ministry of Land and Property Relations of Tatarstan 49%. Neftekhimsevilen is the sole producer in Russia of ethylene vinyl acetate). In 2012, the company produced 26,100 tons, including 14,900 tons of sevilen and 11,300 tons of polyethylene.

#### **Russian polypropylene imports**

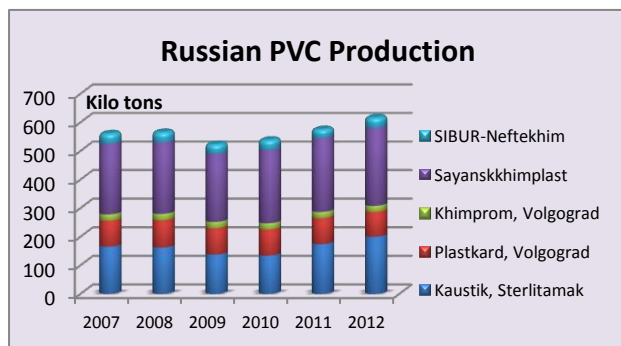
Imports of polypropylene into Russia amounted to 14,000 tons in January, a third less than in December. The decline in imports of polypropylene was due mostly to seasonal factors. For the whole of 2012 t year, the volume of imports of polypropylene totalled 276,500 tons which was 43% higher compared to 2011. The largest decline in imports occurred in homopolymer polypropylene, dropping from 8,500 tons in December to 5,000 tons in January. Copolymers of propylene imports fell to 8,600 tons, 27% lower than in December 2012.

The Russian Union of Chemists (RSKh) has put forward a case against the zero rates of import duties for polypropylene advocated by the government in compliance of the requirements of WTO accession, and also pressure from the other members of the Eurasian Economic Union namely Belarus and Kazakhstan. The RSKh believes that the imposition of a zero rate duty would be detrimental to domestic producers. At present a 10% duty applies to imports of polypropylene into Russia, Belarus and Kazakhstan which together comprise the Eurasian Customs Union.

Tariff commitments after Russia joins the WTO suggests a rate cut to 6.5% by 2014, which the RSKh believes is relatively acceptable. However, the longer term aim is to reduce rates to zero which the RSKh opposes as it undermines the activity of domestic producers such as Tomskneftekhim, Nizhnekamskneftekhim, Ufaorgsintez and the Moscow refinery. With new plants at Omsk and Tobolsk coming on stream, there are fears that imports could provide some challenging competition for producers.

#### **Polyom produces first 500 tons of polypropylene**

Polyom at Omsk produced its first 500 tons of polypropylene on 11 February. The start of the plant was overseen with the participation of Tecnimont and Basell. The 180,000 tpa plant began construction in 2008 and interruptions have been encountered due to both financial and technical issues. Consideration is now turning to the second stage of the investment, which entails raising polypropylene capacity to 265,000 tpa. In terms of ownership, Titan is the sole owner of Polyom but it is possible that Gazprom-Neft could take part of the equity. Last year the polypropylene plant for Polyom was connected to the Omsk refinery (owned by Gazprom-Neft) for the supply of propane-propylene fractions.



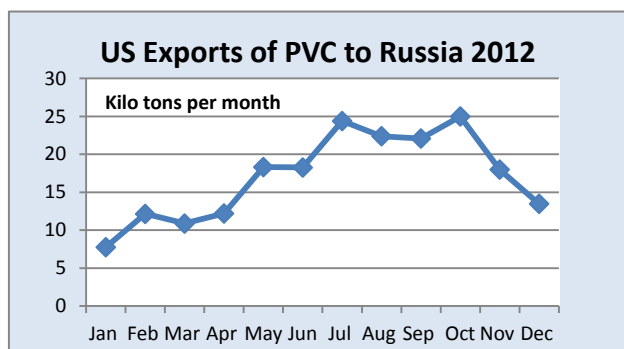
#### **Russian PVC production 2012**

Russian production of PVC increased by 6% in 2012 up to 612,000 tons. The volume of PVC suspension increased by 7% to 595,000 tons. The main increase in production stemmed from Sayanskkhimplast and Kaustik at Sterlitamak. Sayanskkhimplast increased its output by 5% up to 273,000 tons and plans to achieve around 280,000 tons in 2013. The company plans to increase the production of PVC up to 350-370,000 tpa in 2014, depending on ethylene, and to 600,000 tpa by 2020.

In 2012, Kaustik at Sterlitamak increased capacity to 220,000 tpa and subsequently produced 200,000 tons. In future, the company does not rule out the expansion of facilities for the production of PVC up to 600,000 tpa, but this is subject to an increase ethylene capacity by key Russian producers. Amongst other producers Kaustik at Volgograd last year reduced PVC production by 4% compared to 2011 to about 87,000 tons. The decline in

production was due to technical problems after a scheduled stop in April-May last year. The capacity of the plant is 90,000 tpa.

SIBUR-Neftekhim increased its PVC production by 17% to nearly 35,000 tons. In July 2012, SIBUR announced its intention to phase out all chlorine production of the former Kaprolaktam division belonging to SIBUR-Neftekhim in the spring of 2013. Khimprom at Volgograd is the sole producer of emulsion PVC in Russia at present, although RusVinyl will produce some emulsion grade at the new plant at Kstovo. Khimprom produced 21,000 tons last year which was 2,000 tons up on 2011.



### Russian PVC imports Jan 2013

Imports of suspension PVC into Russia in January fell by 4% compared to December 2012 and totalled 28,000 tons. A total of 86% of imports came from the US and China. Volumes continued to rise in February before expecting to drop back in March. The share of the US imports in total Russian imports in 2012 amounted to 46%.

Shipments from the US had been in decline in the first few months of 2012, but were then revived due to demand and particularly after the closure of the

Karpatneftekhim plant. Although this plant is still down due to issues over VAT in the main and profitability to a lesser extent, imports are continuing in small volumes from warehouse stocks. Supplies of acetylene PVC from China into Russia amounted to 6,500 tons in January 2013. Many buyers have been faced with supply disruptions of Chinese PVC, partly linked to questions of rolling stock in Kazakhstan.

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

Producer	Jan-Dec 12	Jan-Dec 11
Evroplast (Senezh)	7.7	4.7
SIBUR-PETF	6.5	6.7
Alko-Naphtha	8.8	7.9
Polief	12.0	12.3
Total	35.0	31.5

### Russian PET Imports, Jan 2013

Imports of PET into Russia totalled 9,100 tons in January, 50% up against January 2012. This is the first time for a while that inward flow of product has risen. Rises in domestic prices of Russian PET have pushed consumers towards imports, whilst a significant lack of stock has required consumers to make large purchases. Imports in January came largely from China, amounting to 6,100 tons. German imports also increased last month.

### Russian PET production & consumption 2012

PET bottle grade resin production in Russia increased by 14% in 2012 and totalled 452,000 tons. In addition to the rising volumes from Alko-Naphtha, Senezh Polymer Plant also increased production. Alko-Nafta produced 145,500 tons of PET granular in 2012, and the company is still not operating at full capacity. Polief produced 132,900 tons in 2012, putting it in second place. Senezh produced 98,900 tons and SIBUR-PETF 75,300 tons. The average capacity utilisation for Russian producers amounted to 87%.

The main areas of consumption of PET in Russia, such as the production of mineral water and carbonated soft drinks, saw increases in 2012. The only sector which recorded a negative trend was in beer packaging. Although the government attempted to ban the usage of PET in beer packaging, the decree received too much opposition and beer will continue to be sold using plastic. Signs are though that PET for beer packaging may have peaked. In 2012 Russian brewers processed 974 million dal of beer using PET which was 2.1% down on 2011 and this follows two previous years of small declines.

For mineral water and non-alcoholic carbonated beverages consumption rose 12.8% in 2012. Volumes of production of mineral water increased by 9.6% for the year and totalled 3.69 million half-litres. PET resin is also worth noting for application in the packaging of crude sunflower oil, milk and juices. At the end of last year, the volume of the production in these product areas increased by 42.7%, 7.6% and 7.2% respectively.

## Fibre Projects

### Ivanovo PET project, possible new investor found

An unnamed Russian investor has given prior consent of investing up to 2.2 billion roubles in the construction of a production plant for polyester fibre in the Ivanovo region. Overall, the project cost has been estimated at 10.260

billion roubles, of which the bulk of the project (85%) is ready to be financed by Vnesheconombank. However, there is still the need to find a basic investor who needs to take about 15% of costs. A preliminary agreement has been formed with the Russian investor is a serious positive step in building a synthetic fibre plant in the Ivanovo region.

#### Kotovskiy Nonwovens Plant

Kotovskiy Nonwovens Plant plans to build a plant in the Tambov region for the production of polyester fibre with a capacity of 210,000 tpa. The plan is to implement an investment project for the production of new generation multi-layer non-woven materials. The total investment required is estimated at more than 2 billion roubles. The plant potentially could meet domestic demand in Russia in full based on current and projected consumption levels. At present the market is estimated at 150,000 tpa and rising by several percent per annum.

The project is targeted for completion in 2015-2016. Kotovskiy Nonwovens Plant operates in the field of insulating and cushioning materials for clothing, furniture and other industries. The market volume of nonwovens in 2011 amounted to 2.1 billion square Russia while in the last three years, production has increased by 74%. This significant increase is due to the introduction of new technologies. At present there is no primary production of polyester fibre in Russia. Primary fibre in the CIS is produced only in Belarus by Mogilevkhimvolokno.

The authorities have already allocated a piece of land for the plant. The proposed plant at Ivanovo is intended to act as a basis for a cluster of textile processing companies. German company EPC Engineering has devised a design study for an 180,000 tpa plant for PET, followed by the production of textile filament yarn and staple fibre. The main idea of the project is to create conditions for replacement of imported raw materials for the domestic textile industry. If the project progresses to completion by 2016 the Ivanovo plant could replace large volumes from imported textile PET.

The domestic market for synthetic fibre consumption in Russia is estimated currently at 247 000 tons, the lion's share of which is nonwovens. The growth of the domestic market is mainly driven by imports, which account for 86% of woven fabrics. This is due primarily to the technological backwardness of production in Russia.

### Aromatics & derivatives

#### Russian benzene market, Jan 2013

domestic market in January, 7% up on December. Severstal and Kirishinefteorgsintez significantly increased the supply of aromatic raw materials to domestic consumers. Shipment from the Cherepovets plant, owned by Severstal, increased by 1.9 times up to 4,000 tons, and Kirishinefteorgsintez by 1.8 times up to 6,100 tons. At the same time product from the Ryazan refinery dropped by 25% to 2,400 tons and Uralorgsintez shipped 5,100 tons, 13% less than the previous month.

Russian producers of benzene sold 69,800 tons on the market in January, 7% up on December. Severstal and Kirishinefteorgsintez significantly increased the supply of aromatic raw materials to domestic consumers. Shipment from the Cherepovets plant, owned by Severstal, increased by 1.9 times up to 4,000 tons, and Kirishinefteorgsintez by 1.8 times up to 6,100 tons. At the same time product from the Ryazan refinery dropped by 25% to 2,400 tons and Uralorgsintez shipped 5,100 tons, 13% less than the previous month.

#### Russian Benzene Domestic Purchases (unit-kilo tons)

Company	Jan-13	Dec-12
Kuibyshevazot	10.8	8.9
Azot Kemerovo	10.0	10.5
Shchekinoazot	3.6	4.0
Kazanorgsintez	8.7	7.0
Uralorgsintez	5.1	4.8
Omsk Kaucuk	6.3	5.2
Chelyabinsk MK	0.0	0.2
Samaraorgsintez	6.0	5.5
West Siberian MK	3.6	3.9
SIBUR-Khimprom	7.0	7.9
Gazprom Neftekhim Salavat	2.8	2.4
Promsintez	1.8	1.6
Zavod im Ya M Sverdlov	2.0	1.9
Novolipetsk MK	1.7	1.0
Tumazi Carbon Black Plant	0.2	0.1
Others	0.1	0.1
Total	69.8	65.1

Imports of benzene into Russia amounted to 984 tons in January, 2.4 times lower than December. Lower demand from Samaraorgsintez was the main factor behind lower imports. Despite the reduction in imports in January Kuibyshevazot increased imports by 1.5 times up to 625 tons. ArcelorMittal from Temirtau in Kazakhstan supplied 180 tons to the Russian market in January, twice less than the volume in December. Deliveries were divided by 120 tons to Kuibyshevazot, and 60 tons to Kazanorgsintez.

The main merchant consumers of benzene in Russia include the three caprolactam producers (Kuibyshevazot, Azot at Kemerovo and Shchekinoazot) followed by three of the four operating phenol producers (Kazanorgsintez, Omsk Kaucuk and Samaraorgsintez). The other phenol producer Ufaorgsintez produces its own benzene. Besides caprolactam and phenol, smaller purchases are made by a range of consumers. Kuibyshevazot signed a contract in January with the Ukrainian company Ukratnafta for the supply of benzene. The agreement covers the period February to December 2013, involving shipments of 1,000 tons per month. The benzene will be supplied from the Kremenchug refinery.

Benzene production totalled 1.135 million tons in 2012, against 1.131 million tons in 2011. The lack of production at Budyennovsk (Stavrolen) was compensated by increases from several coal-based producers. The largest increase came from Zapsib, the West Siberian Metallurgical Combine which increased production to 58,100

tons from 9,000 tons in 2011.



Kuibyshevazot-Production (unit-kilo tons)		
Product	Jan-Dec 12	Jan-Dec 11
Polyamide-6	116.7	141.9
High Tenacity Tech Yarns	13.5	6.7
Tyre Cord Fabric	6.5	3.1
Caprolactam	184.6	95.3
Ammonia	569.0	318.7
Urea	308.3	176.4
Ammonium Nitrate	534.8	279.8
Ammonium Sulphate	469.0	234.4

### Kuibyshevazot 2012

Revenues for Kuibyshevazot dropped 9.2% in 2012 to 28.4 billion roubles, with next profit declining to 2.6 billion roubles. The company attributes the decline to the deteriorating situation in world market prices of caprolactam and polyamide, and the decrease in production volumes due to the planned overhauls.

In order to improve efficiency, increase production output and reduce the impact on the environment Kuibyshevazot introduced a number of technical measures in 2012. The company reduced emissions of nitrogen oxides in the atmosphere, whilst it commissioned a third table-mould melt soda, which significantly increase the production of commercial soda ash and reduced emissions of pollutants.

Efforts are underway to reconstruct subsidiary plants producing technical, textile yarn and cord fabric at Kursk and textiles at Balashov. This represents part of Kuibyshevazot's strategic programme for import substitution and increased recycling of caprolactam and polyamide in Russia. The company has completed the design and has already signed major contracts to supply equipment for a new energy-efficient production of cyclohexanone.

### Kuibyshevazot-Linde JV

Negotiations continue on the joint production of ammonia with the Linde Group. The Board of Directors of Kuibyshevazot has approved a new version of the company's participation in a JV with Commercium Immobilien und Beteiligung-GmbH (part of the Linde Group). The aim of the JV involves the construction and operation of new ammonia and hydrogen plants in the Samara region. The plant capacity is about 1,340 tons of ammonia per day (about 450,000 tpa) and 120,000 cubic metres of hydrogen per hour. Such investments are relatively small compared with projects of other companies, such as Fosagro and Metafrax.

### Russian toluene production, Jan 2013

Toluene production in Russia amounted to 316,400 tons in 2012 which was 7% higher than in 2011. In January the supply of Russian toluene by rail to domestic consumers amounted to 4,990 tons, 20% less than in December 2012 and 51% lower than in January 2012. In January Russia produced 24,600 tons of toluene which was 24% less than in December and 17% lower than in January 2012. Gazprom Neft produced 9,100 tons in January, the Ryazan refinery 4,500 tons, and Ufaneftkhim 2,800 tons.

Russian Orthoxylene Purchases Jan 13 (unit kilo tons)	
Buyer	Volume
Kamteks-Khimprom	6,590
Zagorsk Paint Plant	374
Uralprom	234
Yaroslavl Paint	184
Rainbow Synthesis	123
Empils	118
Others	900

### Russian orthoxylene, Jan 2013

Russian sales of orthoxylene on the domestic market amounted to 8,950 tons in January, 13% less than in December and 34% lower than in January 2012. Gazprom-Neft at Omsk accounted for 54% of sales (4,800 tons), Kirishinefteorgsintez 32% (2,900 tons), and Ufaneftkhim 14% (1,200 tons). The main focus of orthoxylene processing came from phthalic anhydride with Kamteks-Khimprom purchasing 6,590 tons (74% of shipments).

### Russian phenol market 2012

For the whole of 2012 Russian phenol producers sold 133,500 tons to the domestic market, which is 3% higher than in 2011. Exports totalled 10,200 tons, most of which went to Poland, Slovakia and Latvia. The main supplier of phenol

for exports is Samaraorgsintez. Production totalled 277,600 tons in 2012, 11% up against 2011. Samaraorgsintez and Ufaorgsintez both increased production last year.

Russian Phenol Production (unit-kilo tons)		
Producer	Jan-Dec 12	Jan-Dec 11
Ufaorgsintez	73.6	60.5
Kazanorgsintez	65.2	62.1
Samaraorgsintez	76.7	65.4
Omsk Kaucuk	62.2	62.5
Total	277.6	250.6

Demand for phenol has been slow in the first two months of 2013; domestic sales in January were down 10% against December to 10,600 tons. Omsk Kaucuk remains the main merchant seller, accounting for 40% of shipments in January. The remainder of the market is divided between Ufaorgsintez and Samaraorgsintez, whilst Kazanorgsintez consumes most of its phenol captively in BDO production. Ufaorgsintez sold 2,000 tons to the domestic market in January, and Samaraorgsintez 3,500 tons. Both those volumes were 18% up and 15% down respectively against December.

In January 2013, Russia produced 25,300 tons, which is the same as December 2012. Samaraorgsintez produced 7,500 tons in the first month of the year, 5% more than December. The main prerequisite for increasing the volume of phenol production at Samaraorgsintez is to launch its own production of benzene. Exports of phenol amounted to 1,500 tons in January, 25% below December. The largest share of exports was shipped to Poland, accounting for 50% of deliveries. Samaraorgsintez was the main exporter, shipping 1,200 tons, followed by Omsk Kaucuk with 270 tons.

### Synthetic Rubber

#### SIBUR-Reliance start construction of butyl rubber plant in India

SIBUR and Reliance Industries have laid the foundation stone of a JV for the production of butyl rubber at Jamnagar in India. The design capacity of the new plant is 100,000 tpa of butyl rubber. The new complex is expected to be the biggest in India and one of the largest in the world in production of butyl rubber. SIBUR and Reliance Industries agreed in early 2012 to establish a JV entitled Reliance SIBUR Elastomers to build a new complex in the industrial area of Reliance Industries at Jamnagar.

The parties also signed a license agreement, which involves the use of SIBUR technology developed at Togliattikaucuk. SIBUR has taken over the responsibility for the development of the basic design of the new complex, whilst Reliance Industries will provide the necessary infrastructure and raw materials. Basic design of the complex was developed in November 2012. Currently, the JV is proceeding to detailed design and placement of orders for equipment. Commissioning is tentatively scheduled for 2015.

Chinese Duties on Synthetic Rubber Imports from Russia	
Producer	%
Voronezhskintezkaucuk	4.02
Togliattikaucuk	6.81
Sintez-Kaucuk	14
Omsk Kaucuk	23
Nizhnekamskneftekhim	38
Efremov SR Plant	38

#### Chinese anti-dumping duties on Russian synthetic rubber

The Russian Chemists Union is arguing that as part of Russia's membership in the WTO for the annulment of several measures involving duties on polymers, resins and fertilisers. Synthetic rubber producers are particularly affected as the table opposite indicates. SIBUR plants are paying much less than the other producers after special arrangements were agreed in 2008. China maintains these rates to maintain stable raw material prices for its own tyre industry. The Russian Chemists Union is asking for a revision, or at least the Russian government to try and start negotiations. Nizhnekamskneftekhim and Efremov Synthetic

Rubber Plant are worst affected facing a duty of 38%.

Russian Chemical Production (unit-kilo tons)		
Product	Jan-13	Jan-12
Ammonia	1,300.0	1,167.4
Benzene	108.1	100.5
Butanols	19.5	24.7
Caustic Soda	94.5	91.9
Ethylene	220.4	205.4
Methanol	309.0	272.5
Phenol	25.3	23.3
Phthalic Anhydride	9.3	7.1
Polyethylene	140.0	137.6
Polypropylene	52.3	48.6
Polystyrene	34.3	28.3
Propylene	107.7	101.4
PVC	60.3	57.8
Soda Ash	227.0	252.0
Styrene	49.9	52.5
Synthetic Fibres	10.5	11.1
Synthetic Rubber	143.0	115.6

#### Russian tyre news

Continental plans in October 2013 to commission the first tyre plant at Kaluga. In the second half of 2014, the company is going to start their deliveries to the Russian market. The building process is a little ahead of schedule. Continental plans to build in Kaluga full cycle of tyres from raw domestic through to production.

Nokian Tyres increased sales of tyres in Russia by 1.5 times 2012 in comparison with 2011 up to €563 million. At the end of 2012, production capacity of Nokian Tyres in Russia amounted to about 14 million tyres per annum. In June 2012, the company launched the first line of an additional plant. The second plant will be launched in the first half of 2013. Nokian is aiming to increase the capacity of production of tyres for passenger cars and SUVs at 5-6 million units per annum.

Russian tyre group Kordiant has signed an agreement with the Czech Komerční Bank for a total amount of more than €4 million under the guarantee of the Slovak insurance agency EXIM Bank. Provision of funding will be used to finance the acquisition of machinery and equipment in the implementation of Kordiant's investment projects.

The credit facility will be used to purchase the newest technological

equipment for Omskshina and Kordiant-East. Kordiant also includes Yaroslavl Tyre Plant and Voltyre-Prom, and Kordiant-East. The company's share in the Russian market for aircraft tyres is 24% of unit shipments whilst the share of tyres for agricultural vehicles and lorries is over 20%.

## Methanol & related chemicals

Russian Methanol Purchases (unit-kilo tons)		
Company	Jan-13	Dec-12
Nizhnekamskneftekhim	24.9	23.7
Togliattikaucuk	13.8	7.4
Uralorgsintez	5.5	7.6
SIBUR-Khimprom	1.0	0.9
Tobolsk-Neftekhim	3.0	4.5
Ektos-Volga	4.3	4.8
Omsk Kaucuk	9.2	6.1
Novokuibyshevsk NPZ	6.0	4.6
Uralkhimplast	2.3	3.5
Others	58.4	65.7
Total	128.4	128.9

### Russian methanol market, Jan 2013

The amount of methanol production in Russia in January 2013 declined slightly compared to December 2012, down 1% to 309,000 tons. Shchekinoazot reduced production by 40% in January, whilst TOMET at Togliatti (part of Togliattiazot) increased production by almost 30%. Russian sales of methanol in the domestic market totalled 128,000 tons in January, the same as in December. Metafrax, Sibmetahim and Togliattiazot accounted for 87% of shipments. Sibmetakhim increased its share of the total market in January due to demand from the gas industry, which increases purchases in the heating season.

Export shipments from Russia totalled 110,500 tons in January, 51% of which were sent to Finland. Poland and Slovakia accounted for 10% and 14% respectively. Russian methanol producers are planning to reduce the amount of exports through the port of Odessa. In February shipments amounted to 10,000 tons, which is by 51% less than in January. Togliattiazot shipped 6,800 tons of methanol to Turkey via Odessa, against 17,300 tons in January. Shchekinoazot exported 3,300 tons to Romania via Odessa, the same as in January.

### Metafrax-2013 forecast

The Board of Metafrax has approved its budget for 2013, in which the company expects to increase revenue by 11% to 12.2 billion roubles. Net income is planned at 2.01 billion roubles, which is 4.6% lower than for 2012. In 2012 Metafrax increased net profit by 1.7 times over 2011 up to 2.108 billion roubles, whilst revenue increased by 20.5% to 11.01 billion roubles.

Metafrax has completed the reorganisation of its resin subsidiaries, involving a merger of Karbodin (Orehovo-Moscow region) and MetaDynea. The authorised capital of MetaDynea rose from 240 million to one billion roubles. One company for the production of synthetic resins has been created to increase the load capacity of up to 100%. In the future, it will focus on increasing the share of the domestic market. In the next three years to the development of the combined company, Metafrax plans to invest over a billion roubles in development.

Russian MTBE Domestic Sales		
Producer	Jan-13	Dec-12
SIBUR-Khimprom	0.4	0.8
Togliattikaucuk	5.5	3.4
Uralorgsintez	11.0	4.7
Tobolsk-Neftekhim	10.4	7.2
Ektos-Volga	7.8	9.2
Nizhnekamskneftekhim	9.9	7.9
Sterlitamak NPZ	1.3	2.6
Omsk Kaucuk	13.7	16.1
Total	60.2	52.3

### Russian MTBE

Domestic sales of MTBE totalled 60,200 tons in January against 52,300 tons in December. The largest supplier was Omsk Kaucuk, followed by the SIBUR plants Uralorgsintez and Tobolsk-Neftekhim.

In mid-March Ektos-Volga will stop production of MTBE for planned maintenance at the plant. The two week shutdown involves the dehydrogenation unit. Ektos-Volga is one of the larger producers in the production of MTBE in Russia. Production is purchased not only by Russian oil companies, but also in Ukraine, Lithuania and Finland. In the 2012 the share of the company in MTBE sold in Russia was about 17%, and its total exports 10%. The company produces around 120-140,000 tpa of MTBE, which is about 16% of total output.

### Metafrax, urea and ammonia project

Metafrax has approved plans to build a urea facility at Gubakha with a capacity of 400-600,000 tpa in order to significantly reduce the costs of producing resins. A project team has already been established which will review the available technology. The Board of Directors will propose the most feasible option to shareholders in the third quarter. Metafrax first announced plans to build its own urea plant almost five years ago. The necessity has arisen due to the company's rising purchases on the open market. The company intends to become the largest

producer of urea in the Upper Kama region. The estimated cost of urea plant installation stands at around €700-800 million. In late 2011 Metafrax tried to acquire SIBUR Perm Fertilisers, a producer of urea and ammonia, but this failed.

The obstacle to the construction of new production facilities rests with gas supply. Due to the aging pipeline Chusovaya-Berezniki-Solikamsk, Metafrax has been concerned whether it could receive sufficient gas. However, Gazprom is upgrading the pipeline now and has that this project could be completed in 2014. Metafrax signed a new five-year gas supply contract in 2012 with Gazprom Mezhhregiongaz Perm to increase the limit from 1 billion to 1.6 billion cubic metres per annum. The urea plant is needed in order to provide a vertically integrated production of resins, which will reduce costs.

### Sverdlov-investments

Sverdlov at Dzerzhinsk is investing more than \$1 billion to build a plant for the production of ammonia, nitric acid and fertilisers. Funding for the project will be carried out by government guarantees, and support from the bank VTB.

Sverdlov recently began the construction of facilities for production of formaldehyde and urea-formaldehyde concentrate. The company specialises in the production of phenol-formaldehyde resins and has demand for formaldehyde of roughly 2,500-3,000 tpa. New facilities for the production of formaldehyde and urea-formaldehyde concentrate will both comprise 15,000 tpa. The launch of formalin will provide feedstock for the current production of phenol-formaldehyde resins, as well as receive commercial products for the export market of urea-formaldehyde concentrate.

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## Organic Products

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

<i>N-Butanol Producer</i>	<i>Jan-Dec 12</i>	<i>Jan-Dec 11</i>
Angarsk Petrochemical	3.5	3.3
Evrokhim	1.4	1.6
Gazprom Neftekhim Salavat	10.6	8.0
SIBUR-Khimprom	4.0	2.8
Total	19.5	15.6
<i>Isobutanol Producer</i>	<i>Jan-Dec 12</i>	<i>Jan-Dec 11</i>
Angarsk Petrochemical	1.9	1.6
Gazprom Neftekhim Salavat	4.3	3.4
SIBUR-Khimprom	4.0	4.1
Total	10.3	16.2

### Russian butanol market, Jan 2013

Domestic sales volumes of butanols amounted to 5,990 tons in January, 8% more than in December but 3% lower than in January 2012. The proportion of normal butanol in the total sales volume comprised 97%.

The largest volume of butanols in January (2,810 tons) were shipped Dmitrievsky Chemical Plant, which uses butanols for the production of butyl acetate, as well as supplying butanols for export on behalf of the company Gazprom Neftekhim Salavat. Akrlat at Dzerzhinsk purchased 2,210 tons for its acrylate production. Other smaller consumers included Volzhskiy Orgsintez with 420 tons, Sredneuralskiy copper smelter 250 tons (used in flotation reagents) and 180 tons for Kamenskvolokno for the production of fibres.

Export volumes of butanols from Russia in January 2013 amounted to 6,540 tons which was 15% less than in December last year, and 37% lower than in January 2012. The proportion of normal butanols in gross shipments in January 2013 was 16%, and isobutanol 84%. The maximum volume of butanol was exported to China (64% of gross shipments abroad) and Finland (21%). The major exporter of butanols was SIBUR-Khimprom (56% of shipments). The share of Gazprom Neftekhim Salavat was 26% and Angarsk Petrochemical Company 18%.

### Russian Phthalic Anhydride Production (unit-kilo tons)

<i>Producer</i>	<i>Jan-Dec 12</i>	<i>Jan-Dec 11</i>
Gazprom Neftekhim Salavat	10.4	7.8
Kamteks-Khimprom	85.8	86.9
Total	96.3	94.6

### Russian DOP & phthalic production, Jan 2013

DOP production in Russia amounted to 4,700 tons in January, 21% down on December and this was due to low demand in the domestic market. In the second half of January DOP in Russia was produced at only two plants. Gazprom Neftekhim Salavat suspended production of DOP in the first half of January. In addition, the Ural Plant of

Plasticizers ceased production in December due to accumulated stocks.

By late February demand for DOP in Russia began to rise, with Gazprom Neftekhim Salavat ready to restart production. During February, DOP prices from Russian suppliers remained stable at about 63,000-65,000 roubles



per ton, including VAT. Market players expect a further increase in demand for DOP in the next month due in part to demand and in part due to higher prices for 2-EH. DOP prices could rise by around 2,000 roubles.

Russian production totalled 9,340 tons in January, 5% lower than in December 2012 but 7% up on January last year. Gazprom Neftekhim Salavat reduced production 3-fold in January to 330 tons. Kamteks-Khimprom increased production by 2% to 9,010 tons. Gazprom Neftekhim Salavat stopped phthalic production in January at the same time as the DOP plant; the company only uses phthalic for captive usage.

#### **Russian MEG sales, Jan 2013**

MEG sales on the Russian domestic market totalled 9,750 tons in January, 9% down on December. SIBUR-Neftekhim supplied 8,300 tons to the domestic market, which was 85% of total shipments. Nizhnekamskneftekhim increased its sales of MEG to 1,400 tons, almost double the volume in December. Amongst the consumers Alko-Naphtha did not import MEG in January, forcing import volumes into Russia downwards by 6% over December to 1,200 tons. Senezh Polymer Plant accounted for 88% of imports in January. The average price of imported MEG in January 2013 showed a downward trend and amounted to about \$1235 dollars per ton DAF Russian border. Prices previously stood at \$1310 per ton DAF border of the Russian Federation, respectively.

MEG exports rose 30% in January to 7,300 tons. Belarus is the main destination for Russian MEG exports, whilst SIBUR-Neftekhim and Nizhnekamskneftekhim were the main exporters. In January SIBUR-Neftekhim sold 4,800 tons on foreign markets and the remainder was sold by Nizhnekamskneftekhim. Mogilevkhimvolokno bought 95% of the total purchases in January. The remaining 395 tons was shipped from Russia to Kazakhstan.

#### **SIBUR sells antifreeze unit**

SIBUR and Antifreeze Synthesis (Dzerzhinsk) have signed an agreement for the sale of the production unit for cooling and brake fluids, located on the territory of the former Kaprolaktam plant. The design capacity is 46,000 tpa of coolants and 22,800 tpa of brake fluids. SIBUR has cooperated with Antifreeze Synthesis in the production of fluids from 2001 and supplies MEG. Last year SIBUR sold manufacturing facilities from the Kaprolaktam division for the production of ethylene chlorohydrin to Kazan synthetic rubber plant.

The sale of these assets by SIBUR has been conducted in coordination with the phased closure of the chlorine production chain at Dzerzhinsk, and conversion of the Kaprolaktam site into an industrial park, Oka Polymer. Antifreeze Synthesis will continue producing fluids, and will be the next resident of the industrial park. The industrial park Oka Polymer was launched in July 2012, and the aim is to reach about twenty companies as residents by the end of 2013.

#### **GNS-acrylic acid project-EPC contract**

Gazprom Neftekhim Salavat signed an EPC contract with Mitsubishi Heavy Industries, Sojitz Corporation and the Turkish company Renaissance Construction to build a complex for acrylic acid. The contract includes design criteria, integrated supply and construction of a new acrylic acid and acrylates. The new processing facility will be located at the Monomer division at Salavat, comprising 80,000 tpa of crude acrylic acid capacity and 80,000 tpa of butyl acrylate.

The plant is expected to be launched by the fourth quarter of 2015. The sole current producer of acrylic acid in Russia is Akrilat at Dzerzhinsk which has a capacity of 35,000 tpa of acrylates. In 2011, Akrilat produced 36,000 tons of butyl acrylate, three quarters of which were exported.

The GNS project could prove to be more cost-effective than Akrilat due to presence of all the necessary raw materials in-house. Prospects for the development of the Russian market for acrylic dispersions are extremely positive. Consumption of paints is growing strongly at around 10% per annum, and it is expected that by 2017 it could reach 150,000 tons compared to

81,000 tons in 2011. Global companies account for over 50% of consumption, and thus there is good opportunity for import substitution.

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### **Inorganics**

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#### **Russian caustic soda & chlorine market**

SIBUR-Neftekhim has started the closure of the chlorine plant at Dzerzhinsk, as part of the old Kaprolaktam division. Chlorine production staff were informed in advance of the termination of the activity. The closure of the plant will help to remove a source of pollution for the White Sea.

At the start of March a malfunction took place in the process for the production of liquid chlorine at Soda-Chlorate at Berezniki. There was a short-term release of the caustic substances and 27 employees of the plant were injured.

Russian production of caustic soda rose 5% in 2012 over 2011 up to 1.095 million tons. Kaustik at Volgograd accounted for 19% of total production, producing 221,310 tons. Sayanskkhimplast remained in second place, accounting for 18% and Kaustik followed at Sterlitamak 17%. Russian production still remains below pre-crisis levels; in 2007 1.3 million tons were produced but then fell in four consecutive years. During that period there was a decrease of export shipments to foreign markets and the increase in imports of the material in the domestic market.

Production of caustic soda totalled 94,500 tons in January. In the same month Russia imported 1,080 tons of Chinese solid caustic. Regarding market trends Galopolymer shipped 12,360 tons of caustic soda to the domestic market in January, 12% lower than in December. Of the domestic consumers Korund at Dzerzhinsk bought 1,770 tons from Galopolymer, GC Ilim bought 1,630 tons and Polyplast 1,450 tons. Other buyers included International Paper 778 tons, Azot at Berezniki 669 tons, and Metafrax 663 tons.

In October last year Kaustik at Pavlodar in Kazakhstan began supplying liquid caustic soda in Russia. In particular, the aluminium plant (part of Rusal) purchased 785 tons of Kazakh products before delivery to be implemented. It should be noted that the BAZ-SUAL in the II half of 2012 has increased the consumption of caustic soda, due to temporary changes in the process.

**Chinese Exports of Inorganic Products to Russia  
(unit-kilo tons)**

Product	2010	2011	2012
Caustic Soda	36.8	32.5	21.9
Chlorides	14.4	9.3	19.8
Corundum	25.5	65.5	19.2
Sulphides	15.2	17.7	18.5
Iron Oxide	10.3	11.2	15.2
Carbonates	7.1	9.1	13.9
Sulphates	7.0	10.9	13.6
Inorganic Acids	7.5	9.9	9.4
Cyanides	6.9	8.4	9.3
Phosphoric Acid	6.7	7.8	6.2
Sulphites	3.2	4.1	5.2
Silicates	1.6	2.2	4.2

The Federal Antimonopoly Service (FAS Russia) imposed total fines of 1.6 billion roubles in December last year on a cartel of companies for fixing the price of caustic soda liquid. The companies included United Trading Company, SIBUR-Neftekhim, SIBUR Holding, Galopolymer, Nikokhim, Kaustik at Sterlitamak, Sayanskkhimplast, and several others.

The case refers to December 2011, when the FAS found a group of chemical companies guilty of collusion in the market for caustic soda. The FAS found that an anticompetitive agreement was formed on price fixing and market-sharing for the wholesale supply of liquid caustic soda.

**LUKoil-second cyanide plant**

LUKoil has requested Glatt Ingenieurtechnik GmbH to construct a second sodium cyanide plant at Saratov. This represents the second plant, after the first started at Saratov in 2008 with a capacity of 18,000 tpa. Construction of a second identical line, using the license from DuPont, should be completed in 2014.

**Khimprom-hydrogen peroxide**

Khimprom at Novocheboksarsk (part of Renova Orgsintez) plans to invest 700 million roubles for the purchase of new equipment for hydrogen peroxide production. The equipment will allow an increase in the production of 50% hydrogen peroxide, from its current level of 30%, and increase the energy efficiency of the production process. The main consumers of hydrogen peroxide from Khimprom are the pulp and paper industry as well as domestic household product producers such as Procter & Gamble, Henkel, Reckitt Benckiser, etc.

refrigerant, fire retardants, stabilizers ozone decomposition, diluents for carrying out chemical reactions, reactant to produce fluorine-organic products.

**Galopolymer revamps Freon plant**

Galopolymer has started the reorganisation of production capacity of Freon-14 at Kirov-Chipetskiy; in February the company increased production up to 20 tons per month. The global market for Freon 14 is estimated at about 1,500 tpa, the share of which Galopolymer occupies around 8%.

Galopolymer is the sole producer in Russia. Freon-14 is used primarily for plasma etching of dielectrics in the manufacture of integrated circuits and as an inert gas in obtaining rare earth metals. Also, Freon-14 is designed for preparation breathing mixtures for deep-sea diving, as

**Boric acid production restarts**

After being idle for several years the company Bor in the Russian Far East restarted the production of boric acid in February. Up 5,020 tons was targeted for production in February. The restart of the plant at Primorsk was facilitated by an agreement regarding outstanding debts. The mining and chemical company Bor at Dalnegorsk was founded on the basis of Primorsk Mining and Chemical Combine, which was officially registered in 1958. Bor is third in the world in production of boron-containing products and is the only Russian producer of high quality products. The company has worked out a full production cycle from mining and enrichment to the synthesis of boron products, such as boric acid, various brands, calcium borate, boric anhydride, and datolite concentrate.

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Regional developments

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**Volgograd industrial parks**

The Volgograd region is to organise industrial parks to attract new investment to the territory. One of the aims is to create a chemical cluster, in part with cooperation with Khimprom. Projects being considered include titanium dioxide and acetylene.

In 2012, Nikokhim started developing a multidisciplinary chemical industrial park at Volgograd based on the industrial site of Kaustik (large-capacity production of liquid and solid caustic soda, chlorine, PVC, chlorinated paraffin, synthetic hydrochloric acid and other products). This industrial park is already working. It includes a number of producers such as NikoMag (together with RUSNANO production of magnesia products), Zirax for the production of granular calcium chloride; Praxair, USA for industrial gases (oxygen, nitrogen, helium, etc.)

**Bashkchim consolidates subsidiaries**

Bashkchim has taken steps to unite the Sterlitamak plants Kaustik and Soda at Sterlitamak, together with the Berezniki Soda Plant and shipping company Transneftekhim. The government of Bashkortostan is set to own 38% equity in the combined company, with Bashkchim holding a 60% majority stake and another 2% held by minority shareholders.

The advantages of combining the companies can be derived from the coordination of production and investment plans, and improving the supply chain. The group aims to reduce costs across the board for administration, energy, logistics, etc. The opportunities for funding are also improved, whilst if the holding company wanted to seek an IPO such a combined entity provides an attractive proposition for investors. The soda ash capacity of the combined company will comprise 2.3 million tpa, which is about 4% of the world total. Other products include PVC produced by Kaustik at Sterlitamak with 220,000 tpa at present, and prospects for expansion to 600,000 tpa by 2018-2019.

**SIBUR develops Dzerzhinsk logistics network**

SIBUR has started organising the sale of styrene produced at Perm and Uzhlovaya through a new logistics park established nearby SIBUR-Neftekhim at Dzerzhinsk. The park has been developed in part to handle products produced by Akritat, which is now a member of SIBUR. Styrene enters Dzerzhinsk by railway, and its packaging facility into small lots can meet the needs of small and medium-sized consumers located in the vicinity of Dzerzhinsk.

The emergence of a second site for styrene transportation has allowed SIBUR not only to reduce the costs of consumers, but also to complete deliveries of styrene and butyl acrylate. If necessary, SIBUR may consider delivery truck product to the consumer. The industrial park Oka-Polymer, established at the site of the former Kaprolaktam plant, is starting will create a centre for processing and marketing of plastics, including those products produced by SIBUR subsidiaries.

**Samara-SIBUR agreement**

The Samara Administration and SIBUR have signed an agreement regarding regional development and the combined efforts to create an industrial park based on the industrial site of Togliattisintez.

SIBUR plans to continue the implementation of investment projects for the reconstruction of existing and construction of new production facilities in the Samara region, and the development and introduction of new technologies to increase the share of innovative products in total production. In turn, the Samara Administration will assist in the supporting projects for the construction of new facilities and the modernisation of existing production units, etc.

The Togliatti production site for SIBUR includes Togliattikaucuk and the managing organisation Togliattisintez, which provides services Togliattikaucuk and is the basis for the industrial park. In the Samara region SIBUR also owns the Novokuibyshevsk branch of Biakspen.

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Ukraine

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**Karpatneftekhim-VAT and outstanding debts**

Karpatneftekhim's entire production chain has been idle since last September due primarily to a dispute over VAT repayments from the Ukrainian government. The Ukrainian Cabinet has now informed Karpatneftehim that can reclaim VAT if the company is ready to repay loan debts to the Bayerische Landesbank which remain outstanding. These debts relate to the construction of the HDPE plant at Kalush in the mid-1990s.

Under the proposal Karpatneftekhim will be reimbursed with 960 million hryvnia of VAT from the state budget if Karpatneftekhim is prepared to repay a debt of \$1.1 billion to Bayerische Vereinsbank. The loan was taken out under government guarantees.

In 1992, Bayerische Vereinsbank provided credit to the former company Oriana at Kalush for DM212.5 million for the construction of an HDPE plant. The credit was loaned under the guarantee of the Ukrainian government. Repayment and servicing of the loan began 31 July 1998. Prior to the establishment of Lukor in 2000, Oriana had

repaid the equivalent of about DM70 million. In the meantime Oriana is in the process of bankruptcy, the beginning of which was announced in January 2003.

Ukrainian Benzene & Methanol Production (unit-kilo tons)		
Benzene	Jan-13	Dec-12
Yasinovsky Coke	1.9	3.2
Zaporozhkoks	0.8	1.6
Zarya	0.3	0
Total	3.0	4.8
Methanol	Jan-13	Dec-12
Azot	13.769	13.456

#### Ukrainian benzene market, Jan 2013

Production of benzene in Ukraine dropped 23% in January to 3,000 tons; Yasinovsky Coke produced 1,900 and Zaporozhkoks to 821 tons. Zarya at Rubezhnoye produced 340 tons, the first time the plant had run since June 2012. Ukrainian exports of benzene increased by 21% to 2,300 tons in January. Last month, Zaporozhkoks shipped 1,000 tons after resuming production. At the same time, Yasinovsky Coke cut exports of benzene by 32% to 1,300 tons.

#### Ukrainian methanol market, Jan 2013

Azot produced 13,700 tons in January, 2% up on December. New rules for methanol sales in Ukraine were applied in December involving an excise tax. The company sold 4,300 tons of methanol in January, rising over December due to increased demand from the gas industry. However, the imposition of a duty on the purchase of methanol in Ukraine has caused a rapid decrease of purchases from both domestic and foreign sources.

Azot Severodonetsk-Production (unit-kilo tons)		
Product	Jan-Dec 12	Jan-Dec 11
Acetic Acid	144.7	141.7
Adipic Acid	0.3	32.4
Cyclohexanone	0	2.4
Formaldehyde	50.2	43.2
Methanol	168.9	159.5
Vinyl Acetate	31.1	17.0

In January 2013 import volumes of methanol in Ukraine amounted to only 469 tons and dropped 15% against December 2012. 50% of Russian imports of methanol into Ukraine go to gas companies and another 37% to manufacturer of lubricants and additives. Russia's only supplier of methanol to Ukraine in January, as well as in December, was Evrokhim. This is the only company that does not face anti-dumping duties for imports of Russian methanol.

#### Ukrainian plasticizer raw materials Jan 2013

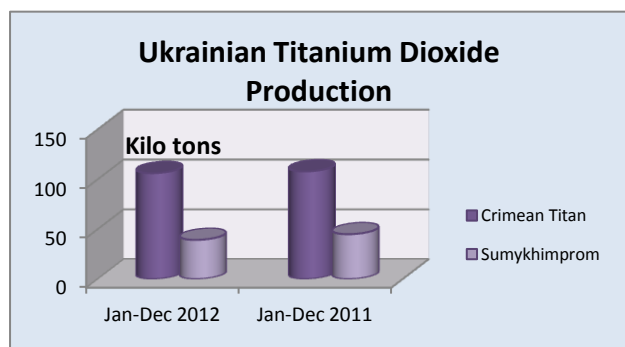
Ukrainian imports of phthalic anhydride amounted to 520 tons in January which was 48% lower than in December 2012 but 2.1 times higher than in January last year. The largest consumer of imported phthalic anhydride in January was Lizinvest (46%), followed by Impress (42%) and paint manufacturer Impulse (12%). The main suppliers of phthalic anhydride to Ukraine were Kamteks-Khimprom (58%) and Lakokraska (42%).

DOP imports into Ukraine dropped 85% in January against December 2012 down to 179 tons. The reduction in supply from abroad was due, on the one hand, the low demand for DOP in winter, and the other the imposition of duties on imported phthalate plasticizers. In December in apprehension of these new duties, trading companies and end-users acquired large DOP volumes from Czech and Polish origin.

Consumption of DOP in Ukraine in February remained low, but domestic producers reported higher demand for DOP produced in Ukraine due principally to the introduction of the import duty. Prices are expected to rise in March due to the tightening in availability of European DOP.

#### Ukrainian TiO<sub>2</sub> production 2012

Both Ukrainian titanium dioxide producers faced difficulties last year. Sumykhimprom, the smaller to the two producers, recorded a net loss of 210 million hryvnia in 2012 against a turnover of almost 2.1 billion hryvnia. The company needs to improve the efficiency of industrial activity in order to reduce losses. Sumykhimprom produced 39,300 tons of titanium dioxide in 2012, 12.8% down on 2011.



Crimean Titan reduced production of titanium dioxide by 2.2% in 2012 to 106,300 tons. Last year, the company produced 159,400 tons of rutile and 702,200 tons of ilmenite concentrate. The reduction in the volume of production and sales was attributed to much lower sales



to Russia in 2012. As a result Crimean Titan reduced net income four and a half times.

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**Central Asia**

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**Azerbaijan-chemical production 2012**

Azerbaijan increased chemical production in 2012 over 2011 by 18.5%. The volume of production of propylene increased by 24.1% to 35,000 tons, and paint products rose by 10.5% to 3,557 tons. Polyethylene production rose by 10.5% to 66,800 and isopropanol 33.2% up to 7,200 tons. C4 production totalled 20,300 tons, of which 75% was exported to Russia. Azerbaijan exported chemical products last year worth \$174.584 million, 45.34% up on 2011. Even so exports only accounted for .73% of Azerbaijan's total foreign earnings in 2012. In 2011, Azerbaijan exported chemical products worth \$120.123 million.

**Turkmenbashi 2012**

Turkmenbashi refinery produced 76,000 tons of polypropylene in 2012. The bulk polypropylene sent to the recipients in transit through the sea port city at Turkmenbashi. The plant increased production of jet fuel to nearly 415,000 tons.

**Uzbekistan GTL-Capacities**

<b>Gas</b>	3.5 billion cubic metres
<b>Diesel oil</b>	863,000 tpa
<b>Jet fuel</b>	304,000 tpa
<b>Naphtha</b>	395,000 tpa
<b>LPGs</b>	11.2 tpa

**Uzbek GTL project**

The Asian Development Bank (ADB) will provide the jv Uzbekistan GTL credit and guarantees for commercial risks for a total of \$500 million. This will be used for the construction of a plant for the production of synthetic fuels from natural gas in Uzbekistan. In November 2009, Uzbekneftegaz, Sasol and Petronas signed the founding documents to establish the jv for the construction of Uzbekistan GTL at the Shurtan Gas Chemical Complex in Kashkadarya region in the south.

Currently, Sasol and Uzbekneftegaz own 44.5% each in the jv, and Petronas 11%. Technip plans to complete the feasibility study in early 2013.

**Other Uzbek chemical projects**

Navoiazot started five modernisation projects in 2012, including cyanide salts and thiourea. Other projects in Uzbekistan include Ammophos-Max (Almalyk, Tashkent region) which is modernising its fertiliser facilities through investments of \$32.7 million. Ammophos-Max was put into operation in 1969 and includes capacity of 340,000 tpa of ammonium phosphate in bulk and 500,000 tpa of sulphuric acid. In January 2008, the Spanish company MAXAM Corp acquired a 49% stake in the company worth about \$18 million and investment commitments amounting to \$30 million, which will be used for the modernisation of production capacity. In 2009 the company was renamed Ammophos-Max. The remaining 51% of its shares belong to the state.

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*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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