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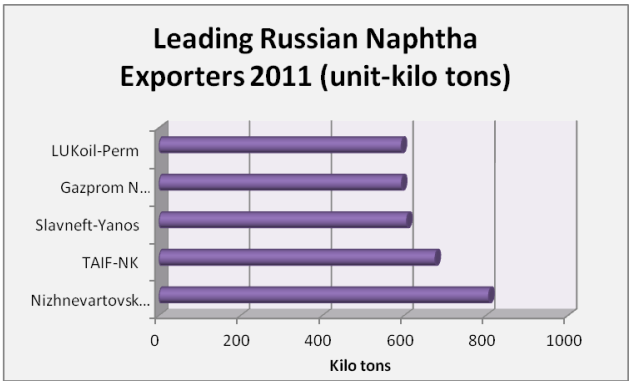
Feedstocks & Petrochemicals

Naphtha sales to Russian petrochemical plants drop

Since the start of 2012 naphtha export availability from Russia has increased as the domestic petrochemical industry has altered direction towards cheaper gas feedstocks. Volumes of supplies of naphtha to the Russian market totalled 99,900 tons in February which was 27% less than in January. The drop in sales to the domestic market is due mainly to reduced consumption at petrochemical plants. Shipments were down 44% in February against January amounting to only 33,600 tons. SIBUR's petrochemical plants, particularly Tomskneftekhim, reduced naphtha purchases in favour of processing of gas feedstocks. Since the beginning of the year gas feedstock costs have become far more cost-effective than naphtha.



Naphtha exports from Russia totalled 7.88 million tons in 2011, 8% up on 2010. The growth of export activity was due to increased production of naphtha, particularly by TAIF-NK at its new Nizhnekamsk refinery, and favourable market conditions in foreign markets. Despite the introduction of duties on naphtha exports on 1 October last year, exports rose 7% in the fourth quarter in 2011 against the third quarter.

LPGs for petrochemicals rise

Propane shipments to the Russian domestic market increased by 45% in February over January and amounted to 80,100 tons. This was due to increased processing as a pyrolysis feedstock. The delivery of propane to petrochemical companies in February rose 4.7 times to 35,500 tons directly replacing naphtha. Volumes of supplies of propane to the fuel sector dropped by 7% down to 44,600 tons, but the decline was offset by the rise in purchases from the petrochemical sector.

Tobolsk-Neftekhim has begun to supply isobutane to Tomskneftekhim as a feedstock for pyrolysis, shipping 10,500 tons in February. On the one hand, a surplus of isobutane exists on the Russian market whilst on the other hand Tomskneftekhim is striving towards an increase in the production of propylene. Pyrolysis of isobutane is distinguished by a low yield of ethylene whilst the yield of propylene is higher by 30-40%. Despite the new sales from Tobolsk, isobutane shipments to the domestic market fell in February by 2,800 tons against January to 35,300 tons. The decline was due to reduced purchases from MTBE producers. Total purchases in February by MTBE producers amounted to 23,200 tons, 14,000 tons lower than January.

Russian Ethylene Production (unit-kilo tons)

Producer	*Jan-Feb 12*	*Jan-Feb 11*
Angarsk Polymer Plant	34.4	36.3
Kazanorgsintez	88.8	60.3
Stavrolen, Budyennovsk	0.0	57.9
Nizhnekamsk	105.3	102.6
Neftekhimya	13.2	8.2
Gazprom Neftekhim Salavat	42.3	47.1
SIBUR-Neftekhim, Kstovo	43.6	43.7
SIBUR-Khimprom, Perm	8.7	6.9
Tomskneftekhim	43.1	42.9
Ufaorgsintez	16.3	17.5
Total	395.7	423.5

Tomskneftekhim purchased a total of 71,300 tons of hydrocarbons in February, 6% down on January. In February, Tomskneftekhim purchased 19,200 tons of naphtha, 62% less than in January, whilst purchases of propane and butane totalled 30,100 tons against only 1,100 tons in January. Market prices have fallen for LPGs in Russia making naphtha look expensive.

Nizhnekamskneftekhim aiming for 2017 for 1 million tpa cracker

Nizhnekamskneftekhim has set a target of 2017 to launch the installation of its EP-1000 ethylene cracker, which is expected to be based mainly on naphtha. The total feedstock requirements of such a plant, based on naphtha, would amount to roughly 3.5 million tpa, and this could be sourced from Taneko at the nearby refinery. Taneko is now running its 7 million tpa refinery at

Nizhnekamsk close to full capacity and is the process of adding its second 7 million tpa which will finalise the project.

The project has been a long term goal for Nizhnekamskneftekhim, but feedstock uncertainty has been a major factor delaying the design and construction stages. In principle, Nizhnekamskneftekhim may have preferred running its new cracker based on gas liquids but current availability in the region is insufficient to feed the proposed cracker. Access to gas liquids could only be enabled by the construction of the West-Siberian-Privolzhskiy gas liquid pipeline. Whilst the pipeline idea is supported by the Ministry of Energy, public funds have not been offered and Tatarstan and Bashkortostan would effectively have to finance the investment from their own resources. In the meantime, Nizhnekamskneftekhim has decided to press ahead with the cracker based on guaranteed feedstock availability, even if costs are more expensive than other feedstocks. The project has been revised on several occasions and may possibly be changed again, but the Taneko refinery does provide a stable supply of feedstocks.

On the basis of the new cracker Nizhnekamskneftekhim has drawn up plans to produce 380,000 tpa of polyethylene and 380,000 tpa of polypropylene. Around 50% of the ethylene produced will be transported through pipelines, mainly to Kazanorgsintez which is short of ethylene. The cost of a new complex in 2011 was estimated in the range of $3 billion. Nizhnekamskneftekhim is now in talks with an international bank to finalise the financial model of the new production facility, and this will provide the foundation to begin dialogue with financial institutions in order to finance the project.

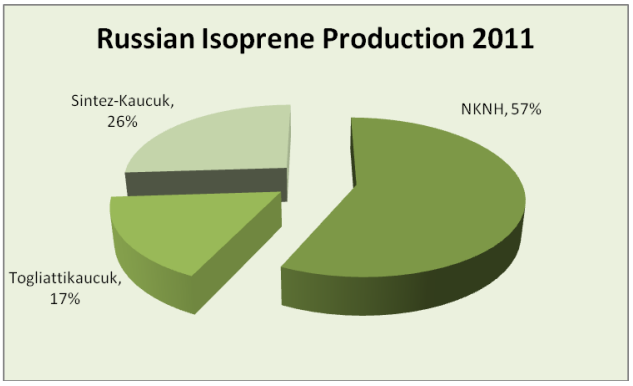
Russian isoprene market 2011

Russian isoprene monomer production and consumption both increased in 2011, driven by the rising dynamics of the domestic rubber market. A 7% increase in consumption of isoprene monomer was recorded last year, with nearly all consumption undertaken on a captive basis. The only consumer of commodity isoprene Sterlitamak Petrochemical Plant bought just 196 tons of isoprene from Togliattikaucuk. Production of isoprene in Russia amounted to 461,000 tons in 2011, which was 5% up on 2010. Nizhnekamskneftekhim increased volumes by 10%, and Sintez-Kaucuk at Sterlitamak increased by 2%, but Togliattikaucuk reduced volumes of isoprene by almost 4%.

Russian Isoprene Market (unit-kilo tons)

	2011	*2010*	*2009*
Production	461.0	440.3	411.5
Exports	17.9	25.9	33.2
S/D Balance	443.2	414.4	378.3

Nizhnekamskneftekhim is the only Russian producer to use the single-stage method, although Togliattikaucuk is in the throes of replacing its old two stage method. Prior to 2008 isoprene production was based in Russia solely on isopentane and isobutene, but isopentane as a feedstocks is being reduced due to cost.



The Russian market for isoprene involves only small amounts of trade, with exports accounting for 4% of total production in 2011. The main consumers of Russian isoprene exports are Latvia and Finland. Nizhnekamskneftekhim and Togliattikaucuk both export isoprene monomer but only in small volumes.

Regarding the domestic market, demand is expected to rise again in 2012, driven by the tyre and rubber sectors. Applications for isoprene are less varied than for butadiene and thus growth rates for isoprene rubber tend to be more modest.

Russian propylene, Jan-Feb 2012

Shipments of propylene to the Russian domestic market amounted to 29,000 tons in February, 5% less than January. Omsk Kaucuk reduced shipments by 2.1 times to 1,000 tons, whilst SIBUR-Neftekhim reduced supply by 21%, to 9,800 tons. At the same time, LUKoil-NNOS sold 13,000 tons which was the largest amount on the domestic market since start-up in December 2010, and was 21% more than in January. In the first two months of 2012 Russia sold a total of 59,500 tons of propylene on the domestic market which is 13% more than in the same period last year.

Stavrolen may not restart its cracker at Budyennovsk until July, but has started to buy merchant propylene in order to resume polypropylene production. The company bought around 3,000 tons in the first half of March, of

which part came from LUKoil NNOS at Kstovo. In addition, Stavrolen bought 755 tons of propylene from Nizhnekamskneftekhim, 673 tons from SIBUR-Neftekhim, and 410 tons from Angarsk Polymer Plant. Karpatneftekhim also started supplying propylene to Budyennovsk from its site at Kalush in west Ukraine.

Russian Propylene Production (unit-kilo tons)

Producer	*Jan-Feb 12*	*Jan-Feb 11*
Angarsk Polymer Plant	18.7	20.9
Kazanorgsintez	6.8	5.8
Stavrolen	0.0	26.9
Nizhnekamskneftekhim	52.6	54.5
Omsk Kaucuk	14.8	13.0
Gazprom Neftekhim Salavat	19.6	18.3
SIBUR Kstovo	23.4	26.0
SIBUR-Khimprom	12.6	19.0
Tomskneftekhim	23.1	22.1
Ufaorgsintez	25.2	21.8
Total	196.7	228.4

In March, Azerkhimya began supplying propylene to Russia due to the Stavrolen outage. Around a thousand tons was shipped to Saratovorgsintez, which is part of LUKoil and produces acrylonitrile. LUKoil normally sources propylene for Saratovorgsintez either from Kstovo or from Budyennovsk.

Russian propylene exports amounted to 5,050 tons in February, 4% less than in January. LUKoil-NNOS exported 1,490 tons in January, but nothing in February as sales were directed towards the domestic market and particularly subsidiaries of the holding. Amongst other producers Omsk Kaucuk increased exports in February by 28% to 3,570 tons, SIBUR-Neftekhim by 50% to 1,480 tons. Of the destinations for Russian propylene, Poland accounted for 61% of exports in the first two months in 2012. This was followed by Belarus with 24% and Romania with 15%. Further reductions in Russian propylene exports are expected in the next few months, particularly as Stavrolen has restarted polypropylene production based on merchant propylene.

Russian Styrene Production (unit-kilo tons)

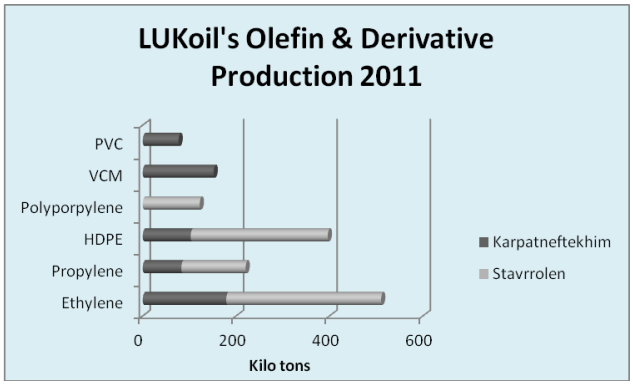
Producer	*Jan-Feb 12*	*Jan-Feb 11*
Nizhnekamsk	30.5	34.2
Angarsk Polymer Plant	5.7	5.5
SIBUR-Khimprom	18.2	17.4
Gazprom Neftekhim Salavat	26.8	23.8
Plastik, Uzlovaya	18.2	7.9
Total	99.3	88.9

Russian styrene, Jan-Feb 2012

Russian styrene producers reduced deliveries to the domestic market by 28% in February to 6,700 tons. The main reason for the decline was low consumer activity. The largest domestic merchant buyer Styrovit (Pizhi Prof) purchased 2,600 tons of product, 49% less than in January. For the first two months in 2012 Russia sold a total of 16,100 tons of styrene to the domestic merchant market, representing a 3% increase over the same period in 2011. Shipments of monomer from Gazprom Neftekhim Salavat and Plastik at Uzlovaya dropped by 42% to 1,000 tons and 1,400 tons respectively, whilst Angarsk Polymer Plant reduced the sales of styrene by half to 530 tons. Exports of styrene amounted to 14,070 tons in February, 2.8 times up on January, largely due to the reduction in domestic market sales.

Russian regional holding companies

Bashneft in Bashkortostan intends to consolidate its assets including Bashkirnefteproduct, Ufaneftekhim, Orenburgnefteproduct, Ufimsky refinery and Novo-Ufimsky refinery under the same structure. Ufaorgsintez falls outside this framework and is likely to enter the United Petrochemical Company. Approval was recently granted by the FAS for Ufaorgsintez to enter into the United Petrochemical Company, a jv created by Bashneft and ex-head of SIBUR Yakov Goldovsky. Shareholders of Bashneft will consider the reorganisation at an extraordinary meeting of 27 April.



LUKoil increased revenues from the sale of petrochemical products by 47% in 2011 to $2.009 billion. Revenues from exports increased by 1.7 times and amounted to $1.095 billion, and domestic sales rose by a quarter to $914 million.

In the fourth quarter of 2010, LUKoil resumed output at Karpatneftekhim in Ukraine after the reconstruction and construction of the line for the production of chlorine and caustic soda. This represented a key factor in higher sales in 2011, in addition to higher sales prices. Proceeds from the sale of gas and refined products increased by 22.5% to $2.879 billion. This included revenue from export sales which increased by 20% to $1.878 billion, and in the domestic market 27% to $1 billion.

Samara holding company SANORS (Samaranefteorgsintez), which combines Samaraorgsintez, Neftekhimya and Novokuibyshevsk Petrochemical Company, intends to upgrade the gas fractionating unit TSGFU-3 at Novokuibyshevsk in the next two years. The capacity of the TSGFU-3 on-site at Novokuibyshevsk could be increased by 100-150,000 tpa to a total capacity of 600,000 tpa. The TSGFU-3, which was idled in 2010 due to lack of raw material, restarted in the middle of 2011.

SANORS is in talks with Rosneft on the construction of an installation for pyrolysis naphtha at Novokuibyshevsk, with a capacity of 2 million tpa of naphtha. It depends whether Rosneft wishes to cooperate with SANORS, but it would represent an important step towards carrying out reconstruction of the pyrolysis unit. It could help with a gradual transition to using naphtha as a feedstock and at the same time increase the capacity of ethylene to 200,000 tpa. Longer term, SANORS states that it is preparing for an IPO in 2015.

Bulk Polymers

RusVinyl project, 66% of construction completed

RusVinyl confirmed in March that around 66% of construction has been completed for the new PVC and caustic soda plants at Kstovo. Construction contractors are currently in the process of erecting concrete columns, beams, and slabs, with 34,000 tons of structures already installed. Most of the VCM and PVC equipment has been installed, whilst construction of the ethylene pipeline to SIBUR-Neftekhim's cracker is 95% complete. After the start-up of the PVC plant, this pipeline will be used for ethylene supply from workshop 52 of Kstovo petrochemical plant to the VCM production unit. The total length of the ethylene pipeline amounts to 5,500 metres. Over 1,500 workers of contractors are involved in construction of the complex which is expected to increase up to 2,500 during the course of 2012.

Russian PVC Production (unit-kilo tons)

Producer	*Jan--Feb 12*	*Jan-Feb 11*
Kaustik	37.3	32.8
Plastkard	15.3	16.5
Khimprom	3.6	4.7
Sayanskkhimplast	49.9	48.6
SIBUR-Neftekhim	6.1	6.2
Total	112.1	108.8

Russian PVC market, Jan-Feb 2012

PVC production totalled 110,000 tons in January and February, 15% up on the same period last year. Production was helped by higher utilisation rates at Sterlitamak. Imports of suspension PVC grade into the Russian market in February totalled 27,000 tons, up from 24,000 tons in January.

More than 40% of total imports were sourced from the US. Despite the long haul logistics, good quality and low prices from North American producers provide good opportunities for sales on the Russian market. Moreover, the cost of logistics from Houston to St Petersburg is no worse than the cost of transporting PVC from Volgograd to Moscow.

In February deliveries from China rose to 5,500 tons due to lower prices of acetylene based product whilst imports from Ukraine amounted to 6,000 tons. Demand for PVC finished products in Russia has been slow since the start of the year in comparison to the first two months in 2011. Growth rates for PVC consumption this year have been forecast of rates 5-7%, which is considered relatively modest.

Tobolsk-Polymer, project update

Tobolsk-Polymer is scheduled to complete construction of the polypropylene plant by autumn 2012, with possible start-up in Q1 2013 if not earlier. Construction is being undertaken under close control of the Russian regulatory authorities and foreign companies. The total cost of the construction of the Tobolsk-Polymer polypropylene plant is estimated at about 64 billion roubles. The plant aims to create a wide range of polypropylene grades with a high added value for use in important industries such as car parts, utilities, consumer goods packaging, film, furniture, dishes, etc.

The capacity of the new plant is 500,000 tpa, consisting of two lines, which is to be based on SHFLU or NGLs being supplied to Tobolsk-Neftekhim from the oil fields in the northern parts of West Siberia. Engineering and construction is being performed by a team of international contractors (including Linde, Tecnimont, Fluor, and Uhde), whilst also involving Russian subcontractors. Tecnimont is responsible for dehydrogenation of propane from Tobolsk-Neftekhim, whilst Linde is responsible for transforming propylene into polypropylene.

Environmental criteria have been extremely rigid for this project, which has been important for the flow of international funds to support the purchase of technology and equipment. Several audits have been undertaken which have shown the project to meet the necessary standards established for such plants as required by the

IFC and EBRD. SIBUR is confident that the environmental situation will not alter when plant has been started, primarily as state of the art technology has been selected involving minimal emissions and complete recycling of industrial waste.

Russian polyethylene market, Jan-Feb 2012

In January and February, the total volume of production of polyethylene in Russia decreased by 9% to 246,200 tons. Imports of HDPE into Russia totalled 24,600 tons in February, the same as in January. The extended outage at Stavrolen has increased the opportunity for imports, and to some extent Karpatneftekhim has filled the void with deliveries of HDPE film. Since September 2011 SABIC been increasing its share in the Russian HDPE market, with volumes amounting to 3,100 tons in February.

In the LDPE market Tomskneftekhim has improved its logistics by outsourcing its packaging to InterBulk Terminal, a part of an international group InterBulk Group. InterBulk Terminal will provide packaging for polyethylene granulate, palletizing, and shipping. This plan to will make available to consumers the use of bulk containers, which will reduce the cost of delivering products to the entire supply chain. At the end of this year SIBUR will decide on the possible expansion of cooperation with InterBulk Group on the site of Tomsk, and possibly other companies of the holding. InterBulk Group was established in 2004 and has eight terminals around the world (including Tomsk).

Russian PET Production (unit-kilo tons)

Producer	*Jan-Feb 12*	*Jan-Feb 11*
Evroplast (Senezh)	10.0	15.7
SIBUR-PETF	12.9	12.5
Alko-Naphtha	16.1	0.0
Polief	22.8	23.0
Total	61.8	51.3

Russian PET market, Jan-Feb 2012

PET production in Russia amounted to 61,800 tons in the first two months in 2012, against 51,300 tons in the same period in 2011. The Senezh plant recorded lower production whilst Polief and SIBUR-PETF were at volumes. The main addition came from Alko-Naphtha's plant at Kaliningrad which started production in the middle of last year

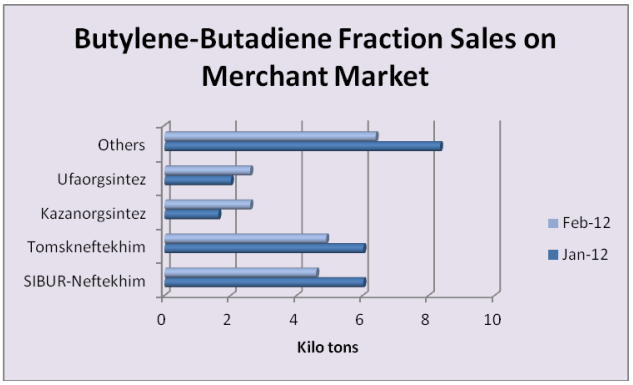
Russian Polypropylene Production (unit-kilo tons)

Producer	*Jan-Feb 12*	*Jan-Feb 11*
Ufaorgsintez	20.32	15.796
LUKoil-Neftekhim	0	19.329
Moscow NPZ	19.211	18.766
Nizhnekamskneftekhim	34.125	34.308
Tomskneftekhim	23.223	21.175
Total	96.9	109.4

Russian polypropylene shortages

Due to the enforced outage at Budyennovsk exports of polypropylene from Russia were down on the first two months of this year against the same period last year. Production totalled 96,800 tons in the first two months in 2012, 12% down on the same period in 2011. Exports were down 58% in January against December, partly due to lower production and partly due to lower demand. At the same due to the temporary supply shortages, imports into Russia increased. Stavrolen restarted production of polypropylene on 11 March, based on propylene supplies from Karpatneftekhim and several Russian sources. However, the market in Russia is in short supply due to tighter availability inside and outside Russia and prices have started to rise accordingly.

Synthetic Rubber



Butylene-butadiene fractions

In February, sales of butylene-butadiene fractions to the Russian domestic market fell 14% against January to 21,100 tons. SIBUR's petrochemical subsidiaries produced less fractions, with SIBUR-Neftekhim reducing sales by 31% to 4,600 tons and Tomskneftekhim reducing by 23%, to 4,900 tons.

Reduced shipments from these plants were due directly to changes in the structure of pyrolysis feedstock. Ufaorgsintez increased sales 56% to 2,600 tons and Kazanorgsintez 29% to 2,600 tons.

Sterlitamak Petrochemical Plant

Sterlitamak Petrochemical Plant increased turnover by 32% in 2011 over 2010 to 7.4 billion roubles. Production decreased, however, by 4.4% to a total of 126.200 tons. This includes a 1.1% drop in the production of antioxidants to 17.400 tons, MTBE by 2.3% to 28,600 tons, and rubber copolymers by 1.3%, to 43,500 tons.

Sterlitamak Petrochemical Plant has recently started the production of experimental batches of new products of emulsion styrene butadiene rubber SKS-1739. This grade is similar to SBR-1739, which is used in foreign markets. Samples of rubber have been transferred to the tyre companies in Russia, Ukraine, and Belarus for examination.

Russian Synthetic Rubber Production (unit-kilo tons)

Producer	*Jan-Feb 12*	*Jan-Feb 11*
Efremov SR Plant	7.0	9.2
Sintez-Kaucuk	21.8	21.4
Krasnoyarsk SR Plant	7.0	6.5
Nizhnekamskneftekhim	101.5	91.3
Omsk Kaucuk	11.2	10.4
Kazan Plant for SR	1.0	0.9
Togliattikaucuk	40.4	26.8
Voronezhsintezkaucuk	28.6	36.6
Sterlitamak Petrochemical Plant	20.3	8.6
Others	0.3	0.6
Total	239.1	212.1

Russian rubber technology improvements

Togliattikaucuk has improved its production technology for rubber copolymer. By using a synthetic reagent, it reduces the salt content in the wastewater by 30% and other harmful substances two-fold. Copolymer rubbers are used in tyre, rubber and other industries. The main consumers of Togliattikaucuk include Omskshina, Voltyre-Prom, Uralshina, Yaroslavl Tyre Plant, and SIBUR-Volzhskiy.

Omsk Kaucuk is examining possible developments using green technology for the production of synthetic rubber based on non-carcinogenic oils. The company is currently installing a renovated column for the processing using pure oils.

Gazprom Neft, polymer bitumen binders

Gazprom Neft intends to establish production of polymer-bitumen binders (PBB) at the Moscow Refinery, with the aim of producing the first batch of modified bituminous materials refinery in the second quarter of 2013. Gazprom Neft started production of PBBs in 2010 at the Omsk refinery, with a capacity of 10,000 tpa. Raw materials are provided by Voronezhsintezkaucuk, which will expand its capacity of thermoelastomers in 2012 by 50,000 tpa. According to Gazprom Neft and SIBUR, PBBs extend the life of asphalt pavement from 3-4 years, and based on conventional road bitumen life can be extended by 7-10 years. At the same time, the cost of road construction is only about 1% higher than at present.

PBB production in Russia totalled 48,000 tons in 2011, 2.5 times higher than in 2009. With new regulations being introduced the use of PBBs is expected to expand in the next few years as new roads undergo construction. Whilst thermoelastomer supply in Russia has until been tight until now, bitumen supply far outstrips demand. The production capacity for bitumen in Russia totals 11 million tpa with consumption standing currently at 4 million tpa. The Ministry of Energy does not envisage any problems in the quantitative production of bitumen, with reserve capacity of more than 60%. However, the actual quality of bitumen may lead to questions from consumers and for this reason it may be necessary to introduce new standards

SIBUR-Voronezhsintezkaucuk 100% ownership

The Federal Antimonopoly Service (FAS) has approved the request of SIBUR Holding to acquire 50.0125% of the voting shares of Voronezhsintezkaucuk. As a result, the transaction makes SIBUR the 100% owner of Voronezhsintezkaucuk. SIBUR believes that by owning 100% will increase control and management of Voronezhsintezkaucuk and will subsequently direct profits from the plant to modernise production and investment projects.

Aromatics & Derivatives

Russian toluene, Jan-Feb 2012

Toluene shipments to the Russian domestic market amounted to 13,620 tons in February, 32% more than in January and 47% higher than in February 2011. LUKoil-Permnefteorgsintez accounted for 4,580 tons of toluene, which was 33% of total deliveries, Slavneft-Yanos at Yaroslavl accounted for 4,330 tons (32%), West-Siberian MK 1,920 tons (14%), and Gazprom Neft at Omsk 1,610 tons (12%). Other suppliers included Kirishinefteorgsintez, Severstal and Novolipetsk MK.

The main consumer of toluene in Russia in February was a manufacturer of industrial explosives Biysk oleum plant. The company purchased 2,030 tons of the total shipments of 13,620 tons. This was followed by explosive manufacturer FSE Zavod Ya.M.Sverdlova which purchased 840 tons toluene. Around 30% of shipments was purchased by trading companies, 12% by manufacturers of paints and varnishes and 9% for the

production of fuels and lubricants. For the first two months of 2012 a total of 23,910 tons of toluene was sold on the domestic market, 37% up on the same period in 2011.

Russian Benzene Production (unit-kilo tons)

Producer	Jan-Feb 12	Jan-Feb 11
Altay-Koks	6.4	7.2
Angarsk Polymer Plant	15.2	15.4
Chelyabinsk MK	3.5	2.9
Gazprom Neft	17.1	20.9
Koks	4.7	4.3
LUKoil-Neftekhim	0.0	8.4
LUKoil-Permnefteorgsintez	7.8	7.6
Magnitogorsk MK	11.1	11.5
Nizhnekamskneftekhim	30.5	33.5
Novolipetsk MK	3.3	4.2
Gazprom Neftekhim Salavat	10.6	20.4
Severstal	6.2	6.1
SIBUR Kstovo	10.1	12.6
Slavneft-Yaroslavlorgsintez	11.8	9.8
Surgutneftegaz	10.9	8.9
TNK-BP	6.0	6.0
Ufaneftekhim	13.7	12.0
Ural Steel	2.0	1.8
Uralorgsintez	11.9	11.2
Total	182.6	204.7

Russian benzene market, Jan-Feb 2012

Benzene production was affected in the early part of 2012, as with other petrochemical monomers, by the Stavrolen outage. Other key factors in reduced availability included the lower production volumes at Gazprom Neftekhim Salavat. Essentially demand was quite low in February, with Russian merchant consumers reducing purchases by 25% against January. Imports from Kazakhstan were not carried out in February, after Kazanorgsintez and Kuibyshevazot purchased small volumes in January. Kazanorgsintez placed a tender at the end of March for the delivery of 6,300 tons of benzene for delivery in April.

At the end of February Kuibyshevazot reduced its procurement of benzene by 11%, to 10.690 tons. From the total 8,660 tons was sourced from domestic supply and 2,030 tons from Ukraine. The main suppliers of raw materials for caprolactam production in February were Gazprom Neft at Omsk (2,890 tons), Slavneft-YANOS (2,890 tons), Yasinovsky Coke (1,350 tons) and Kirishinefteorgsintez (1,120 tons). Samaraorgsintez restarted imports in February due to a lack of domestic availability, and purchased 776 tons for cumene production. The largest importers of benzene to Russia in the first two months 2012 were Ukrainian companies Yasinovsky Coke (accounting for 70% of gross imports) and Zaporozhkoks (accounting for 27%).

Russian OX & PA exports

Orthoxylene exports from Russia resumed in February after non-activity in January and amounted to 7,290 tons. Overall for the first two months in 2012, exports were down 45% against the same period last year. Ufaneftekhim accounted for 45% of exports in the period January-February, Kirishinefteorgsintez 28% and the Omsk Refinery 27%. Finland took 55% of Russian exports, followed by China with 25% and Ukraine 20%.

Phthalic anhydride exports amounted to 6,560 tons in February, 37% higher than in January and up 60% on the same month in 2011. The sole producer Kamteks-Khimprom at Perm exported 32% of phthalic anhydride to India, 28% to China, 12% to Turkey and Poland each. Exports totalled 11,340 tons in the first two months in 2012, 21% up on 2011.

Methanol & related chemicals

Russian Methanol Market Balance (unit-kilo tons)

	2011	*2010*	*2009*
Production	3070.18	2926.7	2341.3
Exports	1262.3	1193.1	811.7
Market Balance	1807.9	1733.5	1529.7

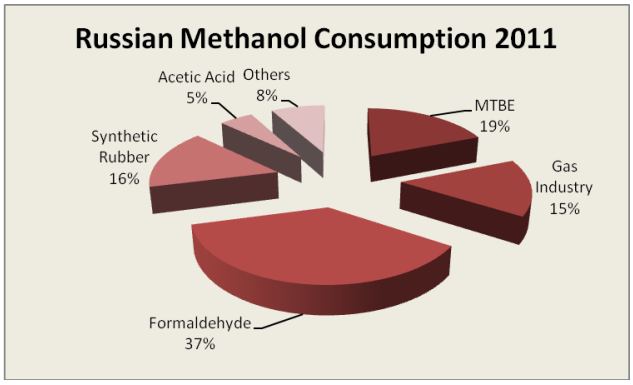
Russian methanol market 2011

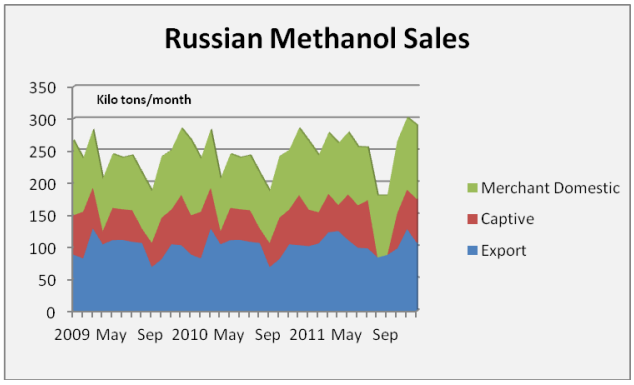
Russian methanol consumption rose 4% in 2011, which was slower than expected partly due to economic conditions and partly due to problems with rolling stock. Another important factor was the extended outage at Metafrax in the middle of the year.

Export volumes of methanol continued to show an upward trend in 2011 and exports remain the most cost-effective outlet for methanol sales, despite the emphasis on domestic market. The main direction of exports is Finland, accounting for 60% of Russian shipments in 2011, after which large volumes of product are re-exported

to West Europe and Asia. The geography of Russian exports is constantly expanding, and this means that the share of Finnish shipments is declining gradually on an annual basis.

Russia's largest exporters of methanol in 2011 were Metafrax and Sibmetakhim, which together accounted for 53% of shipments. Sibmetahim sold 52% of its total methanol production and Metafrax 34%. By share of production, Azot at Novomoskovsk exported 60% and Shchekinoazot 70% in 2011, but Akron sold only 3% due





to its captive processing into formaldehyde. Export prices for methanol on average were $282/ton in 2011, DAF Russian border, which is almost 22% higher than in 2010.

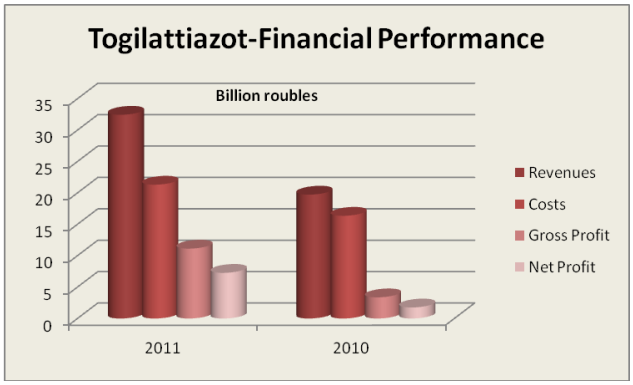
Formaldehyde and its derivatives continued to occupy the leading role in domestic methanol consumption, accounting for 37% in 2011. Sales of methanol to the domestic market increased almost 10% in 2011, but captive consumption amongst the producers fell by 3% which was unexpected. Exports returned to the position of priority marketing of domestic products. Shares of rubber manufacturers, MTBE and gas companies in the total amount processed in Russia in 2011 are less significant, and methanol are about the same: 16%, 19% and 15%, respectively. Domestic producers of MTBE increased methanol consumption =by 25% in 2011 over 2010.

Russian methanol market, Jan-Feb 2012

Russian methanol shipments to the domestic market totalled 104,700 tons in February, against 104,200 tons in January. In the first two months of 2011, the three largest producers Metafrax, Sibmetakhim and Togliattiazot accounted 90% of methanol shipments. Producers of MTBE in February reduced purchases due to low demand in the domestic market. Volumes of consumption of methanol by gas companies and manufacturers of formaldehyde and its derivatives remained unchanged from January.

Exports of methanol amounted to 103,000 tons in February which was 6% down on January. The decrease in exports was partly due to seasonal factors and partly due to better margins on the domestic market. Metafrax and Shchekinoazot reduced exports by 25% and 40% respectively in February against January, although Sibmetakhim increased volumes by 25%. The largest importer of methanol from Russia is still Finland, accounting for 55% of shipments in the first two months in 2011 with large volumes re-exported. Exports totalled 209,000 tons in the period January-February 20142, 7% up on the 2011.

Russian MTBE production totalled 49,000 tons in February, 11% up on January. Major sellers if MTBE in the domestic market were Uralorgsintez, Nizhnekamskneftekhim and Omsk Kaucuk which together accounted for 65% of shipments. Demand starts to rise at this time of the year and should remain strong in April and May.



Togliattiazot 2011

Togliattiazot increased its net profit in 2011 compared to 2010 by 4 times up to 7.3 billion roubles from its combined sales of ammonia, urea and methanol. Revenue rose 1.6 times and amounted to 32.5 billion roubles, although costs only rose by 1.3 fold leaving the company with a much higher net profit than in 2010. Profitability could have been higher had it not been for attacks on the company from minority shareholders and the need to perform audits and conduct various legal proceedings. Togliattiazot in 2012 plans

to implement a project to increase the productivity of urea up to 2.6 tons per day, and also intends to finish the port complex for transhipment of ammonia on the Taman Peninsula.

Ammonia production by Togliattiazot increased by 18% in 2011 over 2010 to 2.518 million tons. At the same time urea production fell 15% to 544,500 tons. Methanol production increased from 365,000 tons in 2010 to 640,000 tons in 2011. In other product areas urea-formaldehyde concentrate production increased by 3.3% to 134,031 and urea-formaldehyde resins 2.3 times up to 10,660 tons.

Togliattiazot exports around 70% its production. In 2011 the company exported 1.729 million tons of ammonia through Ukraine, 17,350 tons of methanol and 241,880 tons of urea. Although ammonia exports are now running smoothly the company fears the possible resumption of the Ukrainian ammonia pipeline blockade, as occurred in December and January. As a result, the completion of the Taman port is seen as a key priority and hopes are that the project will be either completed this year or at least be very close to completion.

Metafrax-Production (unit-kilo tons)

Product	*2011*	*2010*
Methanol	970.0	1022.0
Formaldehyde 55%	278.3	249.2
UFC	196.5	175.0
Pentaerythitol	22.0	18.9
Hexamine	23.0	14.6

Metafrax 2011

Metafrax produced 970,000 tons of methanol in 2011, which is 5% less than in 2010. Reduced production was due to scheduled repairs to methanol, which took place last summer. In 2011, revenues from sales of finished products increased by 18% to 9.121 billion roubles. The share of exports in total sales exceeded 40% (in 2010 this figure was 37%). Net profits increased 41% to 1.256 billion roubles. Formaldehyde production increased by more than a quarter over 2010 and amounted to 313,000 tons, urea-formaldehyde concentrate 197,000 tons (13% up), pentaerythritol 22,000 tons (21% up), and hexamine 23,000 tons (55% up).

Metafrax also produced more than 11,000 tons of sodium formate (22% up on 2010), 783 tons of polyamide block (18% up) and 374 tons of granulated polyamide (34% up). The company plans to invest around 570 million roubles in 2012 of which 60 million roubles will be used in the repair of rolling stock. About 90 million roubles will be directed to the modernisation of storage facilities for production of methanol and pentaerythritol. The company is currently considering a project to produce urea, and possibilities of purchasing the equipment from the US.

Russian Formaldehyde Market (unit-kilo tons)

	2011	*2010*
Production	618.3	527.3
Exports	15.2	14.3
Imports	0.0	0.1
Market Balance	603.2	513.1

Russian formaldehyde market

Formaldehyde consumption in Russia rose by around 90,000 tons in 2011 due to higher demand from existing and new consumers. Almost all formaldehyde applications in the Russian market showed an upward trend. In addition Russia has increased the number of businesses using formaldehyde.

Russian urea-formaldehyde market-2011

Urea formaldehyde concentrate production increased slightly in 2011 as low production costs from methanol. Rolling stock problems in the second half of the year although the situation has since improved. Increased interest in in-plant processing of methanol in the first half of 2011 is directly reflected in the higher volumes of urea-formaldehyde concentrate which is the most profitable of the formaldehyde based derivatives of methanol. However, in the third quarter of 2011 the market for urea-formaldehyde concentrate was interrupted by the shortage of rail cars. After the improvement in the rail car situation urea-formaldehyde concentrate production rose 10% in the fourth quarter over the third quarter.

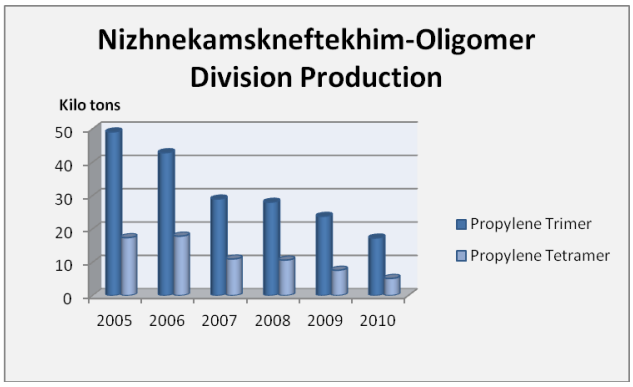
Russian Urea-Formaldehyde Concentrate Market (unit-kilo tons)

	2011	*2010*
Production	363.9	342.2
Exports	80.7	81.2
Imports	0.0	0.0
Market Balance	283.2	261.0

As a result of the supply reductions in the third quarter production rose only 6% in 2011 over 2010. The main domestic producers of commodity products remain Metafrax and Togliattiazot, accounting for 91% of production in 2011. Almost a quarter of urea-formaldehyde concentrate produced in Russia is shipped to foreign markets, mainly Ukraine and Belarus.

However, the share of exports in production is declining on an annual basis. For example, in 2010 exports amounted to about 24% of production but this declined in 2011 to 22%. Domestic usage remains the main direction for urea-formaldehyde concentrate produced in Russia and is expected to rise. The main application area for urea-formaldehyde concentrate is urea-formaldehyde resins, accounting for 96% of consumption in 2011.

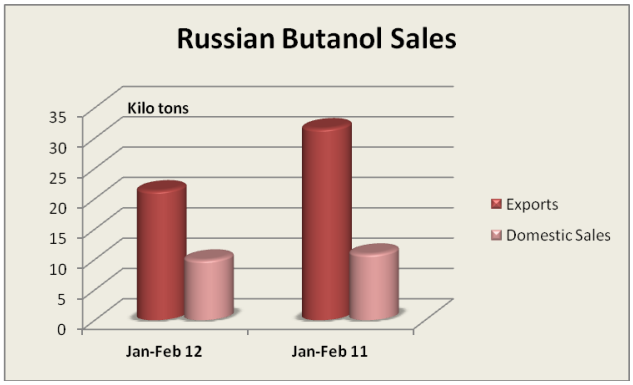
Organic Chemicals & Plastics



Propylene trimer duties reduced

The Russian government has reduced export duties for propylene trimers and tetramers to 6.5% from the start of April, being brought down dramatically from the current level of 90%. The decision has been taken after a review of feedstock prices and their impact on derivatives. In financial terms, it means that the export rate for trimers and tetramers in April will be $29.9/ton against $370.1/ton in March.

Nizhnekamskneftekhim is the sole Russian producer of trimers and tetramers and has sought zero duties on these products since 2009. Due to the lack of export viability and the small size of the domestic market, trimer and tetramer production at Nizhnekamsk has been scaled back considerably in recent years, particularly as propylene has been in short supply. This change in duties may influence Nizhnekamskneftekhim to revive production.



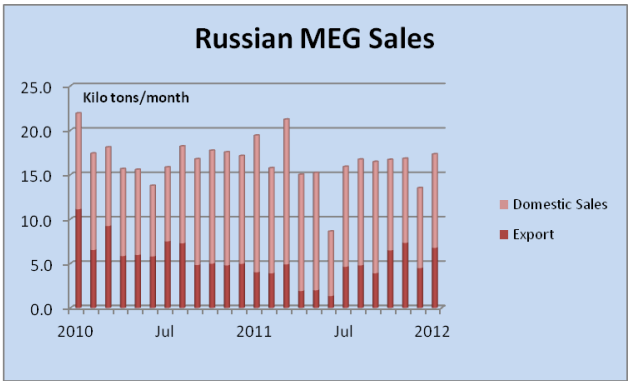
Russian butanol exports lower at start of 2012

Russian butanol exports amounted to 11,260 tons in February 12% up on January but 47% down on February 2011. The reduction against last year is due to low demand on the world market. Exports totalled 21,310 tons in the first two months in 2012, 48% down on the same period last year. The share of exports to China comprised 47% and Finland 43%. Gazprom Neftekhim Salavat accounted for 59% of exports, SIBUR-Khimprom 30%, Angarsk Petrochemical Plant 10%, and Azot Nevinomyssk 1%. Exports can be broken down into 45% n-butanol and 55% isobutanol.

The domestic market accounts for only a small share of butanol production in Russia, with most of the emphasis on exports. In February domestic sales amounted to 3,690 tons, 41% lower than January and 22% lower than the same period last year. Almost all domestic sales (89%) were n-butanol in February, the largest consumer being Akrilat at Dzerzhinsk in the production of butyl acrylate. In the first two months in 2012 a total of 9,900 tons of butanols was sold on the domestic market which is 10% lower than the same period in 2011.

Russian DOP production

DOP production in Russia declined in February, down 43% against January down to 2,860 tons. This equates to being 62% lower than in February last year. Gazprom Neftekhim Salavat and the Ural Plant of Plasticizers stopped production in February due to low demand in the domestic market. However, Gazprom Neftekhim Salavat and the Ural Plant of Plasticizers (located at Nizhniy Tagil) restarted production in March. This is only temporary in the case of Salavat, as the company will stop production of phthalic anhydride and DOP on 17 April to conduct routine maintenance. Gazprom Neftekhim Salavat intends to restart capacity on 10 May and shipment of products to consumers will resume on 14-15 May.



Russian MEG market

MEG exports from Russia have declined in the past couple of years due to higher domestic demand, which has been driven by the PET and anti-freeze chains. Although still small imports rose more than five times last year, whilst exports dropped by 40% against 2010. Sales volumes of domestic MEG in the domestic market in increased 12% over 2010. SIBUR-Neftekhim is the largest supplier to both domestic and export markets. The largest consumers of MEG in Russia include Polief and Senezh, which both produce PET, and Sintez which

produces ant-freeze. These three consumers account for around 75% of the domestic market. In terms of exports, Nizhnekamskneftekhim is the second largest supplier after SIBUR-Neftekhim with nearly all product being shipped to Belarus.

SANORS-ethanol capacity increase

Samaranefteorgsintez (SANORS) intends to increase in the production of synthetic ethanol in 2012 by 22% up to 90,000 tons. This will be possible due to restoration of hydration on the sixth production facility at Neftekhimya at Novokuibyshevsk. Investments required for complete replacement of technological equipment of the recovered amount to about 60 million roubles. In 2011, the plant produced 74,000 tons after achieving 62,000 tons in 2010.

SANORS was formed in the spring of 2011 through the merger of Novokuibyshevsk Petrochemical Company, Neftekhimya and Samaraorgsintez. Consolidated revenues for the Group's results in 2011 totalled 11.5 billion roubles, which is 82% higher than the total figure for 2010 for the combined results of the three companies. It shows the benefits and of merger of smaller companies and resulting synergies.

LUKoil-Saratovorgsintez acrylonitrile investments

LUKoil has announced aims to invest 10 billion roubles in the development of Saratovorgsintez, particularly in the development of acrylonitrile. Nearby the Saratovorgsintez acrylonitrile plant French company SNF is looking into organising the production of polyacrylamide and would use acrylonitrile as a raw material. It is not clear at this stage if a capacity expansion is being planned by LUKoil for acrylonitrile and other products such as phenol and acetone. LUKoil wishes to increase phenol and acetone capacity to 150,000 tpa and 93,000 tpa by 2015.

Other Products

Russian Caustic Soda Market (unit-kilo tons)

	2011	2010
Production	1023.8	1055.5
Exports	211.4	243.0
Imports	43.7	40.8
Market Balance	856.1	853.3

Russian caustic soda market 2011

Caustic soda production declined 3% in 2011 against 2010, partly related to the start of production by Karpatneftekhim in Ukraine and reduced export opportunity. Nonetheless, Ukraine acts as the main destination for Russian caustic soda exports, accounting for 48% of shipments in 2011. The import share in total Russian consumption is negligible. In the first two months in 2012 Russia imported 6,740 tons of caustic soda which was mainly solid and mainly from China but shipments from Ukraine are on the increase. Market consumption in Russia for 2011 totalled 856,100 tons which was slightly up on 2010.

Liquid caustic soda exports from Russia totalled 11,980 tons in February this year, 12% more than in January. Most of the shipments are being sent to Ukraine, followed by Belarus, Azerbaijan and Turkey. The most important exporter is Kaustik at Volgograd, having accounted for.59% of exports in February. The main buyer is Nikolayev Alumina Plant, which sources from Russia on long-term contracts. Shipments of liquid caustic soda from Russia to Ukraine for the whole of 2011 and amounted to 64,160 tons (100% NaOH), which was 31% less than in 2010. Belarus accounted for 18% of exports of liquid caustic soda, and Kazakhstan 16%.

Russian Caustic Soda Production (unit-kilo tons)

Producer	*2011*	*2010*	*2009*
SIBUR-Neftekhim	63	68.9	73.4
Khimprom, Novocheboksarsk	90.8	96.2	90.2
Kaustik, Volgograd	223.1	192.6	207.2
Khimprom, Volgograd	72.8	75.5	79.1
Kaustik, Sterlitamak	130.4	107.4	179.0
Usolyekhimprom	0	34.9	50.7
Sayanskkhimplast	179.9	146.7	153.6
Azot, Novomoskovsk	44.3	41.6	0.0
Bratsk TSKK	80.4	89.5	68.5
KCCC, Kirov	86.2	84.8	85.8
Others	52.8	117.4	124.2
Total	1023.5	1055.5	1111.7

Pressures to change Russian chlorine sector

Chlorine and caustic soda producers in Russia are asking the government to introduce state regulation of the industry, and to provide some support in technology upgrade. A series of important issues are affecting producers, part of which is attributed to a lack of guidance from the government. Out of 27 plants operating in the chlorine sector in 1992 just over 10 plants effectively remain in operation resulting in caustic soda capacity falling from over 3 million tpa to over 1 million tpa. Usolyekhimprom was the most recent company to stop caustic soda production, abandoning in 2010 as the holding company Nitol wished to pursue interests in silicon and solar technologies.

The first new chlorine and caustic soda plant for over

three decades, RusVinyl, is expected to come onstream in 2013. This will consist of 235,000 tpa, from which the company plans to export 25-30% of production and sell the rest in the European part of Russia. Sayanskkhimplast is the only existing producer in Russia with eco-friendly production of chlorine, but as a rule the industry is outdated both in terms of cost and environmental impact.

As a result of using old mercury plants producers are required to spend considerable sums maintaining plant equipment in addition to facing higher electricity consumption per ton of caustic soda. The only producer to be currently engaged in chlorine conversion is Galopolymer at its Kirovo-Chipetsky production site which is scheduled to be completed in 2014, and involves a capacity expansion from 90,000 tpa to 200,000 tpa.

The problem of commodity shipments of chlorine is particularly acute in terms of transportation safety and cost. For transporting chlorine wagons are in short supply, whilst in terms of production costs electricity prices are too high and technology is for the most part outdated. To indicate the inefficiency of the transport system in Russia the price of transporting per ton of PVC from Houston to St. Petersburg is equivalent to transportation from Volgograd to Moscow.

The growth in demand for caustic soda leads to higher profitability, but the decline in demand for chlorine leads to higher costs. Thus, the manufacturer is forced to look objectively by using the prices of these products are the equilibrium state of the profitability of production of caustic soda and chlorine. In December 2011, the FAS accused Russian caustic producers of participating in a cartel and that case remains under assessment.

The chlorine producers which are part of the Russian association RusChlor are requesting special measures from the Ministry of Industry and Economic Development for the development of industry and exploring the possibility of creating a special body responsible for coordinating the plants. As for the existing plants the technology pressures to switch to membrane, and such changes can only be financed from private capital, but the producers are hopeful that the government can help in relation to limiting rail costs, providing tax goals, etc.

Galopolymer 2011

The Galopolymer holding group, which produces range of inorganic chemicals at Perm and Kirov-Chipetskiy, increased physical production by 9.1% in 2011, with revenues rising by 4.784 billion roubles over 2010 to 14.950 billion roubles. Production included 7,998 tons of Freon and 86,200 tons of caustic soda. The holding company is currently focused on several projects, including the production of chloroform methane technology using natural gas instead of ethanol and a project to develop production of new types of fluoroelastomers. The holding has also provided investment funds for a number of activities in the field of ecology. The main project involves the conversion of chlorine technology to membrane and an expansion of caustic soda capacity to 200,000 tpa from 90,000 tpa at present. The investment in the chlorine conversion project amounts to around 5 billion roubles and the launch is expected to take place in the third quarter in 2014.

Khimprom-Volgograd Selected Investment Targets (unit-tons)

Product	*2011*	*2015*
Titanium Dioxide	-	50,000
Ferric Oxide	2,500	3,500
Liquid Calcium Chloride	-	187.800
Granular Calcium Chloride		60,000
Caustic Soda (Diaphragm)	80,000	120,000
PVC paste	22,0000	34,500

Khimprom-chlorinated paraffins

Khimprom at Volgograd started producing perchloroethylene on 20 March from a small plant. Khimprom at Volgograd is one of three Russian producers of chlorinated paraffins. The company is expanding its production from its normal 250 tons per month, and in February produced 298 tons. Chlorinated paraffins are used in the manufacture of PVC plastisols and pastes, as a plasticizer emulsion resin, a liquid filler for cheapening the cost of the product, etc.

Russian pigments 2011

Pigment demand in Russia followed a similar pattern to the paints industry in 2011, which was one of strong performance in the first half of the year and a slowdown in the second half of the year. Market consumption increased 14% in 2011 over 2010 due to rises in application areas such as coatings by 7%, rubber and plastic products by 13%, ceramic tiles and slabs 16%, and bricks and tiles by 17%.

Regarding individual pigments, imports tend to outstrip exports in terms of market share. Iron oxide pigments for instance were dependent last year on imports up to 87% of consumption, the largest supplier being China with 38%. Iron oxide pigments are produced in Russia solely by Yaroslavl Pigment and are sold to manufacturers of silica brick, coatings, and rubber and plastics (to a lesser degree). Yaroslavl Pigment produced 4.713 tons of

iron oxide pigments in 2011, 12% more than in 2010. The problem exists that domestic iron oxide pigment does not have the high quality characteristics for large parts of the industry.

Imports from Germany accounted for 24% of total inward shipments in 2011. Although German products are more expensive they are also higher in quality and meet the criteria for domestic consumers. Another source of imports is from the Czech Republic, which possess high enough quality characteristics comparable to German counterparts for the price. The main advantage of Ukrainian iron oxide pigments is their low cost; they are used primarily for production of fertilisers, paints, etc.

Chromium oxide pigments are produced at Novotroitsk in the Orenburg region. Although Russian product is almost one and a half times cheaper than imported, market demand for pigments to a large extent is sourced from foreign companies due to their high quality. Therefore, the domestic enterprises production of chrome oxide pigment is minimal (mostly technical).

Russian Market for Pigments

	Production (unit-ktons)	Exports (unit-ktons)	Imports (unit-ktons)	S/D Balance	% of Imports in Consumption	% of Exports in Production	2011 vs. 2010
Total	**28.4**	**0.9**	**45.6**	**73.1**	**62%**	**3%**	**114%**
Iron Oxide	4.7	0.1	30.1	**34.7**	87%	2%	120%
Chromium	0.0	0.0	1.5	**1.5**	99%	–	75%
Other Inorganic	21.6	0.2	6.3	**27.7**	23%	1%	109%
Organic	2.1	0.7	5.7	**7.0**	81%	34%	100%
Other	0.0	0.0	2.1	**2.1**	100%	–	–

Zinc oxide is used in large volumes in the manufacture of coatings, and in some cases can replace titanium dioxide. Mostly though, zinc oxide pigments are used as an additive in the production of tyres and rubber products, cosmetics and premixes. Domestic market demand for zinc oxide is fully satisfied by the products of domestic producers Empils-Zinc and the Chelyabinsk Oxide Plant. In 2011 Empils-Zinc increased production 1% over 2010 to 13,300 tons. The Chelyabinsk Oxide Plant increased production by 19% to 8,300 tons.

For organic pigments, consumption was unchanged in 2011 against 2010 at 7,000 tons. The largest domestic manufacturer of organic pigments is Tambov Pigment which produced 2,100 tons in 2011 and was 23% up over 2010. About one third of products are exported, in particular to the textile enterprises in Moldova and Ukraine. In 2011, Tambov Pigment expanded the product range by launching the production of blue pigment.

The share of imports in the consumption of organic pigments for 2011 was 81%. Most pigments are imported to Russia from India (30%), China (16%), and Germany (12%). Pigments made in Europe are much more expensive, but their characteristics are constant and vastly superior. Thus, despite the presence of domestic production capacity, the market will continue to depend on imports. Volumes from Asia are expected t rise in the next couple of years, but expensive European pigments are not expected to lose their market share in the Russian market.

Air Products-Krasny Sutin

Air Products announced plans to construct and operate a 200 ton per day oxygen, nitrogen and argon liquefier and cylinder gases depot at Krasny Sulin in the Rostov region. The company expects both the liquefier and packaged gases depot to be on-stream in early 2014. The new investments will allow Air Products to supply liquid and packaged gases to the metal, glass, food, chemical and refining industries in the Rostov and surrounding regions.

In September 2010, Air Products signed a deal with Voronezhsintezkaucuk for the construction and operation of an air separation unit (ASU) for supporting SIBUR's manufacturing processes. This ASU is expected to be on-stream by July 2012.

Praxair-Volzhskiy Azot

Praxair has entered into an agreement with SIBUR-Russian Tyres to purchase Volzhskiy Azot which specialises in the manufacture of industrial gases and gas cylinders. This represents the fourth major investment by Praxair

in Russia since 2008. Total production capacity implemented by the corporation in Russia includes more than 3.5 tons per day of gaseous and liquid oxygen, nitrogen, hydrogen and argon. The industrial base Volzhskiy Azot includes two air separation plants and occupies a leading position in the production of industrial gases in the Volgograd region.

Belarus

Belarussian Chemical Output (unit-kilo tons)

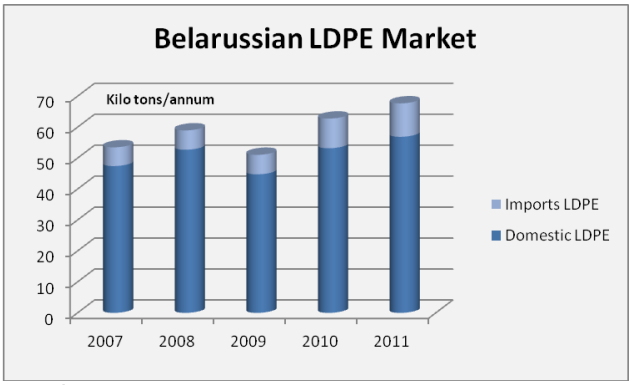
Fertilisers	***Jan-Feb 12***	***Jan-Feb 11***
Potassium Fertilisers	793.1	925.2
Nitrogen Fertilisers	141.4	135.1
Phosphate Fertilisers	38.7	34.1
Ammonia	180.1	176.8
Sulphuric Acid	165.6	166.3
Petrochemicals	***Jan-Feb 12***	***Jan-Feb 11***
Ethylene	23.5	23.3
Benzene	25.6	16.3
Caprolactam	23.0	22.5
Phthalic Anhydride	3.1	3.0
Polyethylene	24.1	22.9
PET	33.9	31.0

Belarussian refining targets 2012 & investment targets

Belarusian oil refineries are aiming to process 23 million tons of oil in 2012. With a package of agreements signed with Russia as part of the legal framework of the Common Economic Space, oil supplies have been arranged with Russian oil companies on a new price formula. This formula allows for transparent pricing, and reduces the risk of failure of delivery of oil.

Belneftekhim has identified the 14 best projects for Belarus in the next five years, ranging from refinery to chemical investments. The first goal of the plan provides for the construction of a delayed coking unit at Naftan at Novopolotsk, including the production of sulphur, hydrogen, and reconstruction of two hydrotreating units. Belneftekhim is also planning to increase refining capacity at Naftan by 1.2 million tpa to 12 million tpa, whilst building a complex for hydrocracking of heavy petroleum residues at the Mozyr refinery.

In the chemical sector Azot at Grodno intends to build a complex for production of nitrogen fertilisers and increase urea capacity, in addition to developing a new nitric acid plant. Belneftekhim holds special targets for Mogilevkhimvolokno and Polymir but these plans are yet to be fully clarified.



Belarussian LDPE market

Consumption of LDPE in Belarus recorded a rise in 2011 after several years of stagnation or even negative growth. Last year, the consumption of LDPE increased relative to 2010 by 8% due to higher rates of processing.

Polymir is the sole producer of polyethylene in Belarus, producing 137,000 tons in 2011 which was 2% up on 2010. Capacity utilisation ran at an average of 91% in 2011. Last year the share of exports in total production was 59%, dropping from 63% in 2010 and 69% in 2009.

Belarussian soda ash project

Geologists have completed the first phase of field development in the Gomel region for crude salt deposits for the proposed soda ash plant. The plant is planned to be located in the Mozyr region, which will have a capacity of 300,000 tpa. The project cost is approximately $800 million, which may receive some support from a Chinese investment bank. Belarus imported 137,500 tons of soda ash in 2011 and thus the new plant will be capable of meeting full demand in addition to a surplus available for export.

Ukraine

Lisichansk refinery halts production

The Lisichansk refinery (Linik) stopped production of petroleum products in March officially for maintenance. However, the holding company TNK-BP stopped supplying oil to the refinery due to losses resulting from the processing and delivery of petroleum products from Russia. Since the end of 2011 tolling arrangements have started to become less attractive due to the introduction of new tax rules Russia and changes in the Russian oil market. The Lisichansk refinery capacity is 7.2 million tpa.

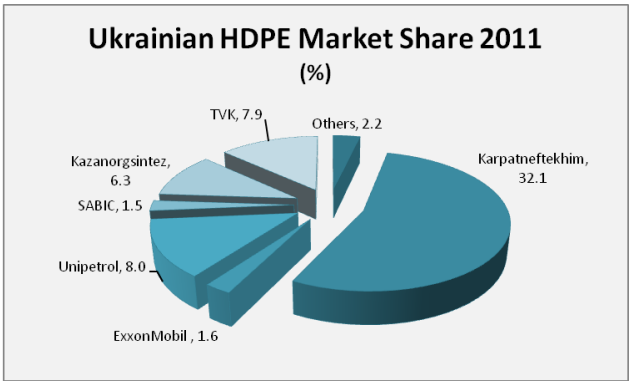
Linik has continued to produce polypropylene in March overrunning a planned maintenance shutdown at the start of the month. However, as TNK-BP is unable to make profits from refining at Lisichansk the refinery could suspend production indefinitely. This would leave Linik to source propane propylene fractions from Russia in volumes of up to 5,000 tons per month. TNK-BP's Ryazan refinery could provide the propane-propylene fractions, but this type of arrangement could be subject to availability and logistical complications. Propane-propylene fractions are in tight supply in Russia and there may not be enough available from other sources to export to Ukraine. At present therefore, there are real prospects that polypropylene production at Lisichansk could be at minimum reduced or even forced to stop completely.

Ukrainian HDPE Supply (unit-kilo tons)

	2007	2008	2009	2010	2011
Domestic Production	1.3	0.0	0.0	0.8	28.6
Imports	167.2	138.4	126.5	126.1	128.2

Ukarinian HDPE market 2011

HDPE consumption in Ukraine rose 24% in 2011 over 2010, reversing the declines recorded in 2008, 2009 and 2010. Although production of HDPE resumed at Kalush in September 2010, imports still were higher in 2011 than the previous year. Karpatneftekhim exported around 80% of its HDPE production in 2011, as imports continue to hold a strong position in the domestic market.



Polyethylene used in pipe manufacture increased 24% in 2011, influenced to a large degree by preparations for Euro 2012. However, this is a short term boost, and this year consumption of HDPE used in pipes will at best stabilise or might even fall. Aside the Euro 2012 project coming to an end, new regulations could be introduced for polyethylene film production which may affect investment into new lines. Last year, the Ukrainian market for HDPE film consumption rose by 34% compared to 2010, due mostly to rise in packaging.

HDPE consumption for the insulation of steel pipes saw a three-fold increase in Ukraine in 2011. Several pipe manufacturers had won large contracts to supply steel pipes abroad pushing demand. The main consumer of HDPE for metal piping was Khartsyzsk TK, accounting for 95% of total imports. Last year, the plant had contracts for the supply of pipe to Transneft and Turkmengaz (Turkmenistan). In addition, the tubes were shipped to Kazakhstan for the construction of gas pipeline Beineu-Shymkent. Another Ukrainian company the Novomoskovsk pipe plant exported to Azerbaijan, Russia and Kazakhstan. In total, the insulation of steel pipes accounted for 8% of total consumption in 2011 against 4% in 2010.

Karpateftekhim-raw material contracts

After several attempts Karpatneftekhim has received permission from the Ivano-Frankovsk regional council to carry out geological and geophysical exploration the Verhnestrutinskogo salt deposits. Five local villages have been in protest against exploration fearing that the extraction of salt could be harmful to the environment. At this stage Karpatneftekhim is concentrating on its geological survey and state that if scientific evidence is negative plans to produce will be scrapped.

Regarding petrochemical feedstocks, Karpatneftekhim received 38,800 tons of normal butane from Russia in February which was 45% up on January. The increase in deliveries was on the one hand due to the intentions of the company to increase the production of olefins, and the other hand making use of cheaper feedstocks than from domestic sources. Tobolsk-Neftekhim supplied 14,200 tons of normal butane to Karpatneftekhim in February whilst Uralorgsintez supplied 6,520 tons, Nizhnekamskneftekhim 5,470, and Korobkovsky GPP 4,690 tons.

Ukrainian benzene supply, Q1 2012

The demand for benzene in Ukraine has been growing since the start of March, partly due to adipic acid production being revived. Imports of benzene amounted to 4,230 tons in February, 2.6 times higher than in January. Azot at Cherkassy purchased 3,120 tons, for caprolactam production, and Rivneazot purchased 1,110 tons for adipic acid production. Poland accounted for 59% of imports in the first two months in 2012, followed by Turkey with 35%. Whilst imports have been rising domestic supply has dropped. Ukrainian benzene producers supplied 4,170 tons to the domestic market in February, 36% less than in January.

Karpatneftekhim reduced shipments to the domestic market by 31% to 3,440 tons, of which 1,230 tons was

bought by Rivneazot, and 2,210 tons by Azot at Cherkassy. Azot at Severodonetsk has restarted benzene purchases with the aim of restarting adipic acid production at the start of April. The rise in European benzene pricing has impacted on the price of coal based benzene produced in the eastern part of Ukraine. Large volumes of Ukrainian benzene were imported to Russia in February and March to cover the shortages associated with the Stavrolen outage. It is expected that in April prices of benzene in the Ukrainian market will continue to rise.

Ukrainian DOP & PA imports

Imports of DOP amounted to 753 tons in February, 39% less than in January. This was due largely to higher domestic production and lower domestic prices versus imports. The main foreign suppliers of DOP in February were Polish producers Boryszew (39%) and ZAK (34%), and the Czech producer Deza (27%). Due to the sharp increase in exports of butanols from Russia to China, less product has been shipped to the Ukrainian market since the start of the year. As the main selling season draws close Ukrainian consumers and traders may have to either look for alternative sources of procurement of butanols or attempt to offer a higher price to Russian suppliers. Either way the cost of butanol in the Ukrainian market is expected to increase significantly in the short-term.

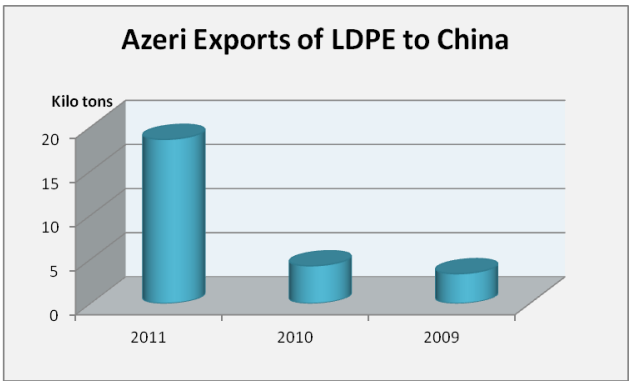
In February, Ukraine imported 410 tons of phthalic anhydride which was 63% more than January but 23% lower than in February 2011. The consumers in February of 2012 were Polikem which took 44% of total imports), a trading company entitled LKB with 41% and alkyd paints manufacturer Impulse with 15%. The largest supplier of phthalic anhydride to Ukraine was Kamteks-Khimprom with 59% total volume Lakokraska from Belarus with 41%. Imports totalled 661 tons in the first two months of the year, 26% lower than against the same period in 2011.

Central Asia & Kazakhstan

Kungrad Soda Plant-capacity expansion

CITIC Pacific from China is in talks with Uzkhimprom to expand capacity of the Kungrad Soda Plant at Karakalpakstan in Uzbekistan, raising capacity 1.5 times by 2015 to 150,100 tpa. Currently, Chinese companies together with the design institute Uzkhimpromproekt, part of Uzkhimprom, is developing the preliminary feasibility study at a cost of $50 million. Capacity expansion of the Kungrad Soda Plant will be carried out by increasing the production of limestone at the quarry and Dzhamansaysk salt deposit Barsakelmes in Karakalpakstan.

Raw materials for Kungrad soda plant are located in the Republic of Karakalpakstan at the Barsakelmes deposit of salt (proven reserves of 131 million tons of salt containing NaCl over 97%) and limestone deposits at Dzhamansaysk (proven reserves of 70 million tons). The Kungrad Soda Plant produced 95,000 tons of soda ash in 2011.



Azerbaijan chemical production 2011

The chemical industry in Azerbaijan increased production by 27.1% in 2011 over 2010. Sulphuric acid production increased by 64.5% to 15,300 tons in 2011, caustic soda by 63.7% to 10,200 tons, propylene by 13.5% to 22,100 tons, polyethylene-by 41.1% to 74,600 tons, and isopropanol by 3% to 10,800 tons. A fall was noted in paint and varnish production-by 20.7%. LDPE production has been helped by the takeover of Azerkimya by SOCAR. The capacity at Sumgait consists of two 60,000 lines for LDPE. Nearly all of the LDPE produced at Sumgait is exported to China and CIS countries (Ukraine, Kazakhstan and Georgia). Domestic consumption of LDPE totalled only 678 tons in 2011.

SOCAR-petrochemical feedstocks

SOCAR has begun to fill the naphtha pipeline from the refineries, designed to provide raw materials for the Azerkimya ethylene-polythene at Sumgait. Previously, the supply of raw materials to the plant was carried out in tanks and by the railway. The pipeline reduces delivery time and reduces the loss of raw materials. SOCAR also intends to deliver gas liquids to ethylene-propylene plant, supplying a total of 910,000 tpa of gas liquids and

naphtha. The gas liquid pipeline is 60 km, and can supply 92,000 tpa of dry gas from the Heydar Aliyev Refinery.

Uzkorgaschemical-Korea Gas

Korea Gas Corp has decided to buy a $323.04 million stake in UzKorGasChemical and to participate in the petrochemical project at Surgil in Uzbekistan. After the purchase, Korea Gas Corp will hold a 45% stake in UzKorGasChemical while Honam Petrochemical Corp will own a 45% stake and STX Energy 10%. Production of processed gas will be 4.5 billion cubic metres per annum, followed by 400,000 tpa of HDPE and 100,000 tpa of polypropylene.

In February 2008, Uzbekneftegaz and South Korean consortium created the jv UzKorGasChemical for construction of the Ustyurt Gas-Chemical Complex on the base of Surgil deposit. The consortium included Kogas, Lotte Daesan Petrochemical Corp. In 2009, it was replaced with Honam Petrochemical), LG International Corp., SK Gas and STX Energy.

UzKorGasChemical Polyolefin Grades

HDPE
- Film grade;
- Pipe grade
- PE-pipe grade;
- Yarn-monofilament grade
- Blow grade.

Polypropylene
- Homopolymer(
- Random copolymer
- Impact copolymer

The project with the cost of $4.1 billion, along with the loans for creditors, will be also financed due to own resources of Uzbekneftegaz for $200 million and loan of the Fund for reconstruction and development of Uzbekistan for $500 million.

Uzbekneftegaz is conducting gas-field construction of Surgil field with its own forces. The field will annually supply 3 billion cubic metres of gas to the Ustyurt Gas-Chemical Complex. Another 1.5 billion cubic metres of gas will be supplied to the complex from other fields in Ustyurt region. Surgil field was opened in March 2006 and now is being developed by Uzbekneftegaz.

Kazakh polypropylene exports

Polypropylene production by Neftekhim at Pavlodar totalled 27,980 tons in 2011, 39% up on 2010. Neftekhim has set a target of 35,950 tons for 2012 which is 28% higher than 2011. The company is now the reconstruction of existing production facilities, resulting in capacity expansion of polypropylene amount to 100,000 tpa. 73% of total exports in 2011 were shipped to China, 22% to Turkey, and 5% to Ukraine. Minor amounts of polypropylene were delivered to Kyrgyzstan (110 tons).

Relevant Currencies

Czech crown. Kc. $1= 18.0764 €1 = 24.8513: Hungarian Forint. Ft. $1 = 215.985. €1 = 296.927: Polish zloty. zl. $1=3.172 €1 =4.362: Bulgarian leva: $1 = 1.4222. €1= 1.9551: Romanian Lei. $1 = 3.152 €1= 4.340: Croatian Kuna HRK. $1 = 5.426. €1= 7.455: Ukrainian hryvnia. $1 = 8.006. €1 = 12.6227: Rus rouble. $1 = 30.914 €1= 42.578

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