CIS Chemical Industry News

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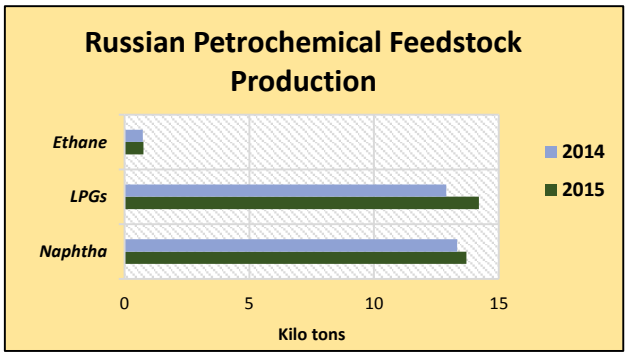
RUSSIA

Russian petrochemical raw materials

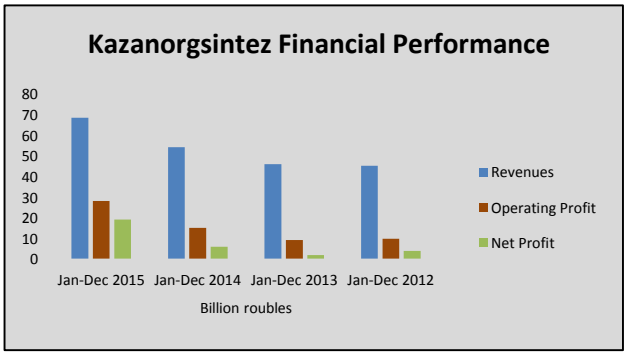


Russian petrochemical industry 2015

Raw materials for petrochemical production in Russia increased by 8.6% in 2015 according to the Ministry of Energy, whilst the production of bulk polymers increased by 14.6% over 2014. In 2015 Russian petrochemical feedstocks production totalled 44.1 million tons, including ethane, naphtha, and LPGs. Annual naphtha and LPG production in Russia has increased steadily recent years, whilst ethane remains in the range of 0.7-0.8 million tpa based on production at Orenburg and Minnibayevo. Despite the increase of 14.7% in processing petrochemical raw materials in 2015, the interest in export activity provides the dominant target for naphtha and LPG producers. The bulk of naphtha and LPG production is exported, primarily through the Baltic ports.

Production of bulk polymers increased to 4.7 million tons in 2015 whilst imports decreased by 77.8%, partly due to the higher production which led to large-scale displacement of foreign material, and partly due to the fall in economic activity. Due to falls in feedstock prices and improved margins all of the main Russian petrochemical producers reported higher revenues, operating and net profits for 2015, largely attributable to the fall in the domestic currency valuation.

Russian petrochemical producers 2015



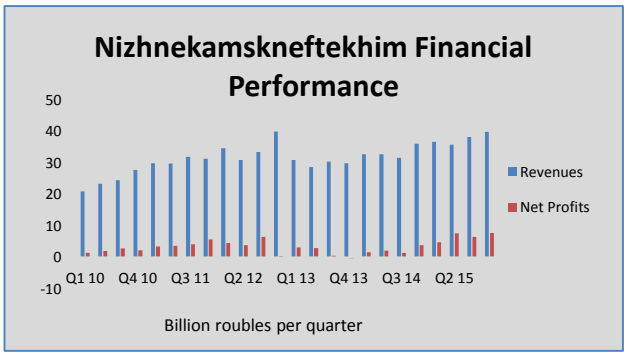
Kazanorgsintez Jan-Dec 2015

Kazanorgsintez increased its net profit in 2015 by 3.2 times over 2014, rising to 19.3 billion roubles. Revenues increased by 26% to 68.6 billion roubles. Exports rose 34.3% in 2015 to 12.1 billion roubles, whilst sales on the domestic market rose 24.2% to 56.5 billion roubles. Production costs increased by 2.6% to 40.2 billion roubles. Gross profits rose 1.9 times to 28.4 billion roubles.

The size of long-term loans for Kazanorgsintez declined by 46.2% in 2015 to 5.9 billion roubles, and short-term loans by 25.9% to 6.6 billion roubles. The company aims to increase annual revenues to around 100 billion roubles by 2020.

Nizhnekamskneftekhim Jan-Dec 2015

Nizhnekamskneftekhim increased its net profit by 2.9 times in 2015 to 26.480 billion roubles, whilst revenues rose 13.3% to 150.6 billion roubles. Gross profit increased by 67% to 38.52 billion roubles, whilst the operating profit rose from 13.27 billion roubles in 2014 to 27.28 billion roubles in 2015. Exports accounted for 48% of total sales in 2015.



Revenues from exports grew by 15.1% in 2015 to 72.4 billion roubles, whilst domestic sales increased by 11.7% to 78.2 billion roubles. At the end of the year the company was able to report no

outstanding long-term borrowings whilst short-term loans decreased by 2.8 times to 1.7 billion roubles. Nizhnekamskneftekhim has recently received income from the sale of shares in local chemical plant Karpov, which specialises in the production of chemical products, medicines and building materials.

SIBUR-Tobolsk

SIBUR has decided to combine its assets in the Tobolsk area into a separate business unit, incorporating Tobolsk-Neftekhim, Tobolsk-Polymer and Zapsibneftekhim under the same structure. This process of amalgamation will be completed in 2016. The construction of the ZapSibNeftekhim complex means that SIBUR will have developed the full chain of production from gas liquids through to petrochemicals and by merging the three main production complexes, in addition to the energy units, will provide the opportunity to optimise efficiencies.

Russian Chemical Production (unit-kilo tons)

Product	*Jan-Dec 15*	*Jan-Dec 14*
Caustic Soda	1,115.0	1,070.0
Soda Ash	3,084.0	2,548.0
Ethylene	2,787.0	2,395.2
Propylene	1,814.1	1,645.2
Benzene	1,215.0	1,150.0
Xylenes	548.0	500.0
Styrene	657.5	645.0
Phenol	244.2	241.0
Ammonia	15,200.0	14,600.0
Nitrogen Fertilisers	8,648.0	8,200.0
Phosphate Fertilisers	3,219.0	3,000.0
Potash Fertilisers	8,056.0	8,400.0
Plastics in Bulk	7,222.0	6,386.9
Polyethylene	1,786.0	1,591.0
Polystyrene	536.0	537.0
PVC	847.0	712.0
Polypropylene	1,331.0	1,080.0
Polyamide	145.0	145.0
Synthetic Rubber	1,442.0	1,319.0
Synthetic Fibres	128.1	128.0

The new business unit will manage the operation of all industries, including gas fractionation capacity, production of monomers, MTBE, propylene, polypropylene, and electricity and heat. Apart from existing operations the unified structure is being created for the ZapSibNeftekhim olefin complex when complete.

SIBUR is currently trying to buy the third-generation capacity station Tobolsk CHP from Fortum, for an estimated 9 billion roubles. The Federal Antimonopoly Commission (FAS) has already approved the transaction.

Bashneft 2015

Bashneft reduced the production of oil products by 11.2% in 2015 whilst the output of petrochemicals increased by 3.7 times from 229,000 tons to 851,000 tons. This significant rise in volume petrochemical production was attributable to Bashneft's acquisition of AFK Sistem which previously held ownership of Ufaorgsintez in addition to other assets in Bashkortostan.

The Bashneft refineries, including Ufaneftekhim and the two Ufimsky refineries processed a total of 17.710 million tons of crude in 2015, 11% down on 2014. Naphtha production dropped 1% to 4.95 million tons and diesel fuel by 0.8% to 7.3 million tons. The volume of oil production declined by 17.6% to 2.52 million tons. The fall in oil refining was attributed to the changes in Russian excise tax legislation in 2015.

Ufaorgsintez Jan-Dec 2015

Ufaorgsintez increased its net profit in 2015 by 2.6 times over 2014, rising from 2.38 billion roubles to 6.22 billion roubles. Revenue increased by 15.7% to 32.3 billion roubles.

Ufaorgsintez Production (unit-kilo tons)

Product	*Jan-Dec 2015*	*Jan-Dec 2014*
Acetone	48.4	44.5
Ethylene	137.1	121.1
Phenol	76.9	73.0
Polyethylene	96.3	87.0
Polypropylene	126.6	121.1
Propylene	180.0	158.3

Exports for Ufaorgsintez rose 9% in 2015 to 7.8 billion roubles, whilst sales on the domestic market rose 23.3% to 20.48 billion roubles. The cost of sales grew by 4.6% to 25.29 billion roubles. Gross profits rose from 3.72 billion roubles to 7.0 billion roubles, whilst the operating profit grew by 2.3 times to 5.89 billion roubles.

Russian petrochemical markets

Russian petrochemical feedstocks, Jan-Feb 2016

Sales of natural gas liquids on the Russian market amounted to 328,440 tons in February, 13% down against January. The reduction of NGL sales was mainly due to a reduced supply from the Surgut and Yuzhniy Balyk gas processing plants. Deliveries to the petrochemical sector dropped 2% in February to 130,880 tons. For the first two months in 2016 sales of gas liquids on the domestic market totalled 704,240 tons, including petrochemicals and other applications, 16% up on the same period in 2015.

Russian Isobutane Consumers (unit-kilo tons)

Consumer	*Jan-Feb 16*	*Jan-Feb 15*
Nizhnekamskneftekhim	36.1	19.1
Ektos Volga	18.5	16.6
Omsk Kaucuk	19.5	16.0
Togliattikaucuk	31.6	25.4
Uralorgsintez	3.8	9.6
SIBUR-Khimprom	8.1	5.6
Others	9.3	2.1
Total	126.9	94.4

Isobutane sales on the domestic market amounted to 61,960 tons in February, 5% down on January but 47% up on the corresponding period in 2015. Sales on the domestic market totalled 126,920 tons in the first two months in 2016, 35% up on 2015. The vast proportion of isobutane shipments is delivered to MTBE plants.

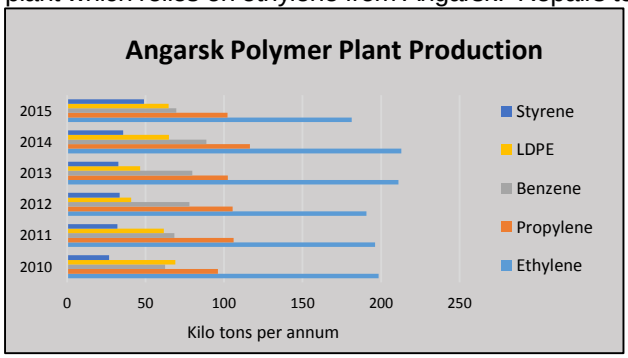
Naphtha domestic sales totalled 257,200 tons in February, 8% up on January. From February sales, the petrochemical sector purchased 91,600 tons which was 18% down on January. Domestic naphtha sales have been rived this year by the restart of the Stavrolen cracker, which itself consumed 141,000 tons in the first two months in 2016.

The Taneko refinery is planning to launch a unit at Nizhnekamsk this year for hydrotreating of naphtha and naphtha splitter, which will provide additional quantities for Nizhnekamskneftekhim's ethylene cracker. Last year Taneko increased volume of oil refining by 1.8% to 8.6 million tons.

Propane sales on the Russian domestic market amounted to 54,310 tons in February, 18% down on January and 6% lower than February 2015. Petrochemical producers accounted for 8,550 tons, twice down on January. Kazanorgsintez purchased 8,000 tons of propane, whilst SIBUR-Kstovo increased purchases by 2.9 times to 305 tons. In January and February 2016 Russian consumers purchased 120,870 tons of propane, 4% more than in 2015.

Angarsk cracker outage creates problems for Irkutsk petrochemical industry

The accident at the ethylene plant belonging to Angarsk Polymer Plant in the first half of February has impacted not only on polyethylene, propylene, and benzene production the Irkutsk region but also the Sayanskkhimplast plant which relies on ethylene from Angarsk. Repairs to the cracker are expected to take around three months to complete, whilst during the period of downtime Angarsk Polymer will undertake maintenance which had previously been scheduled for later in the year.



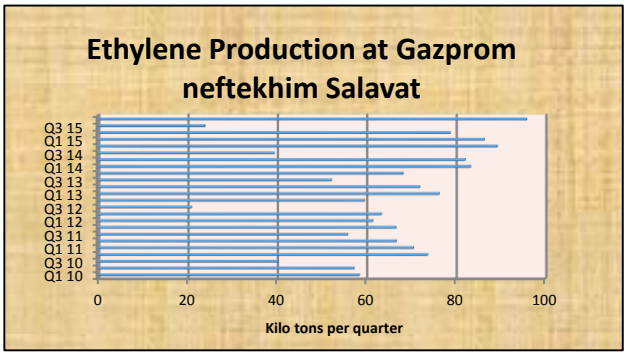
The cause of the accident in February was due to the failure of the turbocharger. Part of the equipment needed to be sent to the Czech Republic for repairs. Production of ethylene is expected to restart at the end of May, according to Rosneft, although local views suggest that this may be too optimistic.

The downtime at Angarsk has brought the question of ethylene supply to Sayanskkhimplast to greater attention of the Irkutsk Administration, particularly ass the town of Sayansk relies heavily on the PVC producer for local employment. Angarsk Polymer and Sayanskkhimplast are connected by a 230 km ethylene pipeline, constructed in the Soviet era, but the two companies are now reluctant partners. Until the Kovykta-Sayansk-Irkutsk gas pipeline is constructed there is little scope for change.

Angarsk Polymer Plant is focusing on the expansion of its cracker facilities which will increase ethylene production up to 454,000 tpa and the production of propylene up to 210,000 tpa. This year around 4.4 billion roubles will be invested in the project to be completed by 2019. The additional ethylene is intended for a new polyethylene plant at Angarsk rather than for the merchant market and thus the expansion will not benefit Sayanskkhimplast in its intended increase for PVC production.

Gazprom neftekhim Salavat-ethylene expansion

Gazprom neftekhim Salavat expanded its ethylene capacity by 40,000 tpa in January this year, changing the status of the cracker to EP-340. The latest project in the company has involved completion of the modernisation of the reactor for block acetylene hydrogenation in ethane-ethylene fraction. The company is also implementing a project for the supply of steam for the production of ethylene. Gazprom neftekhim Salavat is the first Russian petrochemical producer to build such a pipeline to supply steam. The full length of the pipeline from the power plants to the petrochemical complex should comprise 4 km.



In other product areas, Gazprom neftekhim Salavat is planning to expand production capacity for polystyrene and polyethylene. Gazprom neftekhim has issued a tender for an MTBE project, comprising 20,000 tpa. The potential contractor will also have to develop basic projects for the production of MTBE unit and isobutane alkylation unit. The initial purchase cost is of this project was set at 97.6 million roubles.

Russian Propylene Domestic Sales (unit-kilo tons)

Producer	*Jan-Feb 16*	*Jan-Feb 15*
Angarsk Polymer Plant	6.4	15.4
Omsk Kaucuk	0.0	3.0
SIBUR-Kstovo	19.3	15.3
Akrilat	0.0	1.7
LUKoil-NNOS	38.3	28.3
Tomskneftekhim	0.0	0.0
Gazprom neftekhim Salavat	0.2	0.8
Nizhnekamskneftekhim	0.0	2.0
Tobolsk-Polymer	0.0	4.7
Ufaorgsintez	0.0	2.8
Total	64.2	73.8

Russian propylene market, Jan-Feb 2016

Merchant propylene sales on the Russian market fell 6% in February to 31,900 tons. The decline was largely due to inventories built up in January. Domestic sales in January were undertaken by Lukoil-NNOS, which shipped 19,600 tons, and SIBUR-Kstovo which shipped 10,200 tons.

At the same time, due to cracker outage Angarsk Polymer Plant reduced shipments by 3.4 times, to 1,900 tons. Sales of propylene monomer on the Russian domestic market totalled 64,200 tons in the first two months in 2016, 9% down on 2015.

Saratovorgsintez purchased 31,578 tons of propylene in the first two months in 2016 against 30,513 tons in the same period in 2015, all of which was supplied by Lukoil-NNOS at Kstovo. The second largest Russian consumer of propylene was SIBUR-Khimprom, which purchased 13,497 tons in the first two months in 2016 against 12,834 tons in the same period in 2015. SIBUR-Khimprom purchases propylene mostly from SIBUR-Kstovo and Lukoil-NNOS.

Russian Propylene Exports (unit-kilo tons)

Producer	*Jan-Feb 16*	*Jan-Feb 15*
Lukoil-NNOS	11.2	0.0
SIBUR-Kstovo	8.5	1.0
Omsk Kaucuk	0.0	0.0
Angarsk Polymer Plant	0.4	0.0
Stavrolen	2.1	0.0
Total	22.2	1.0

Saratovorgsintez remained the largest buyer for propylene monomer in 2015, followed by SIBUR-Khimprom. Other buyers of merchant propylene include Akrilat at Dzerzhinsk, for the production of acrylates, Samaraorgsintez for cumene, and the Plant of Synthetic Alcohol which uses propylene for the production of isopropanol.

Regarding propane-propylene fractions, sales on the merchant market halved in February to 7,200 tons. The main reason for the fall was due to the reduced shipments from the Ryazan refinery, falling by 2.5 times to 3,600 tons, as greater focus was placed on more profitable exports. Slavneft-Yanos also reduced shipments to the domestic market by 21% to 3,000 tons. Sales of propylene monomer totalled 21,700 tons in the first two months in 2016, 25% down on 2015.

Propylene production rose 3% in January over December to 154,500 tons, mainly due to increased production by Stavrolen which increased output by 33%. At the same time, Gazprom neftekhim Salavat reduced the production of propylene by 11%, to 10,400 tons, whilst SIBUR-Khimprom reduced monomer production volumes by 11% to 3,900 tons.

Exports of Russian propylene increased by 13% in February over January to 12,300 tons. Exports totalled 23,200 tons in the first two months in 2016, 3.4 times more than in the first two months of 2015. Stavrolen exported 2,100

tons in February, Omsk Kaucuk 68 tons, whilst Lukoil-NNOS increased exports by 1.8 times to 6,600 tons. At the same time, SIBUR-Kstovo reduced exports by half against January to 3,500 tons. Exports totalled 23,200 tons in the first two months in 2016, 3% up on the same period in 2015.

Exports of propane-propylene fractions amounted to 11,000 tons in February, 1.5 times more than in January. The Ryazan refinery exported 10,000 tons in February, 1.8 times up on January, whilst Slavneft-Yanos reduced exports by 43% to 1,000 tons. In the first two months this year Russian exports of propane-propylene fractions amounted to 18,400 tons, 1.9 times more than during the same period in 2015.

Russian Styrene Domestic Sales (unit-kilo tons)

Producer	*Jan-Feb 16*	*Jan-Feb 15*
Angarsk Polymer Plant	2.0	1.1
Plastik	2.0	5.3
Gazprom n Salavat	6.5	3.5
SIBUR-Khimprom	5.1	1.0
Nizhnekamskneftekhim	0.0	12.8
Total	15.6	23.8

Russian styrene, Jan-Feb 2016

Russian styrene sales on the domestic market rose 16% in February over January to 7,100 tons. SIBUR-Khimprom increased product shipments to domestic customers by 29% to 2,700 tons and Angarsk Polymer Plant doubled shipments to 1,300 tons. Supplies from Gazprom neftekhim Salavat reduced sales by 7% to 3,100 tons. For the first two months in 2016 Russian sales of styrene on the domestic merchant market totalled 13,300 tons which was 34% up on 2015. Styrene exports from Russia increased by 27% in the first two months in 2015 to 26,600 tons.

Bulk Polymers

Russian LDPE production, Jan-Feb 2016

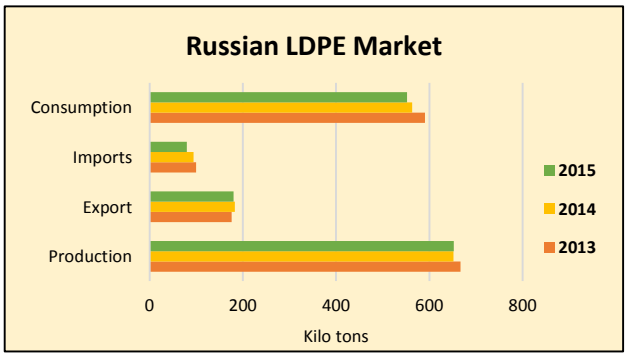
In the first two months this year, Russian LDPE production decreased by 6% against the same period in 2015 and amounted to 107,300 tons. Production dropped from 58,000 tons in January to 49,200 tons in February due to the accident at Angarsk Polymer Plant on 11 February, resulting in the production outage which is expected to continue until the end of May or early June. On a lesser scale there were technical problems at Tomskneftekhim LDPE plant in February which led to a reduction in production.

Russian LDPE Production (unit-kilo tons)

Producer	*Jan-Feb 16*	*Jan-Feb 15*
Angarsk Polymer Plant	6.4	13.6
Kazanorgsintez	34.9	37.8
Gazprom neftekhim Salavat	7.0	7.6
SIBUR-Holding	42.0	41
Ufaorgsintez	17.1	16.2
Total	107.4	116.2

Russian LDPE market 2015

LDPE production in Russia totalled 652,400 tons in 2015, whilst consumption amounted to 551,900 tons. Consumption has declined in the each of the past three years whilst production has remained largely unchanged. The cost of imported polymer increased last year due to a significant reduction in value of the national currency. In 2016 the supply/demand balance is expected to be similar to 2015, although there is a risk from the potential decline in retail and industrial packaging. LDPE consumption for 2015 was broken down into general purpose film (61%), shrink films (27%), and cable coating and extrusion casting (6%).



Imports of LDPE into Russia fell by 15.5% in 2015 to 79,470 tons. The decline was due to the low solvency of end users and the high cost of the polymer, which in turn was the result of rouble devaluation. The largest supplier of LDPE to the Russian market in 2015 was the Belarussian company Polymir, accounting for 62% of shipments. The demand for Belarusian raw materials due primarily to the fact that the qualitative characteristics of the products conform to Russian standards. From West Europe, Ineos was the main supplier of LDPE to the Russian market, accounting for 18,150 tons, followed by LyondellBasell with 2,770 tons.

Tomskneftekhim-expansion

A new line is under construction at Tomskneftekhim, which is targeted for completion by August 2016 with the focus on new brands. This will increase LDPE capacity to 271,000 tpa and in addition polypropylene to 140,000 tpa.

After the upgrade, the company will expand the range of branded LDPE products whilst adapting the polypropylene plant to produce raw materials the new BOPP film which opened in 2015. In 2015 Tomskneftekhim produced 244,920 tons, 6% down on 2014, whilst Kazanorgsintez increased production by 2% to 207,260 tons. Other producers included Ufaorgsintez which produced 100,200 tons, 15% up on 2014.

Russian HDPE Imports (unit-kilo tons)

Category	*Jan-Feb 16*	*Jan-Feb 15*
Extrusion	3.1	9.6
Pipe	2.4	3.5
Blow	2.6	3.0
Injection	6.1	6.9
Others	2.5	2.9
Total	16.7	25.9

Russian HDPE imports, Jan-Feb 2016

HDPE imports into Russia fell by 41% to 16,700 tons in the first two months in 2016. The largest reduction was seen in extrusion coating of steel pipes of large diameter, declining from 9,600 tons in the first two months in 2015 to 3,100 tons in 2016.

Markets were affected both low demand for finished products and a weak rouble. Imports of HDPE for pipe production dropped from 3,500 tons in January to February 2015 to 2,400 tons in 2016 due largely to weak demand. Demand for HDPE imports is expected to remain affected this year by the weakness of the rouble and a serious decline in demand for finished products. In addition, problems with customs clearance of polyethylene is impacting on volumes.

Russian Polypropylene Imports (unit-kilo tons)

Category	*Jan-Feb 16*	*Jan-Feb 15*
Homopolymers	9.9	8.4
Block	4.4	4.5
Random	3.9	4.7
Other	4.6	4.1
Total	22.8	21.7

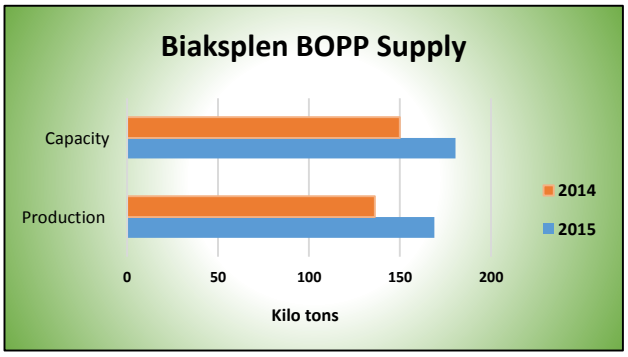
Russian polypropylene, Jan-Feb 2016

Russian polypropylene imports amounted to 22,400 tons in the first two months in 2016, 3% up on the same period in 2015. February imports amounted to 11,400 tons, of which 4,800 tons comprised homopolymer, block polymer 2,400 tons and random polymer 2,200 tons.

The dependence of Russian producers in the sector of BOPP film is still strong on external supplies, while the PP-random purchases for the production of pipes was virtually nullified by Russian producers (due to the growth of its own production).

Biaksplen 2015

Biaksplen increased BOPP production in 2015 to 169,000 tons from 136,200 tons in the same period in 2014. Capacity rose from 150,000 tpa to 180,500 tpa. The production structure of the company consists of five factories located at Novokuibyshevsk, Kursk, Balachna in the Nizhny Novgorod region, in the Moscow region and at Tomsk.



Russian PVC market, Jan-Feb 2016

Russian PVC production totalled 139,100 tons in the first two months in 2016, 2% down on 2015. Production fell in February to 67,300 tons against 71,700 tons in January following the production problems at Sayanskkhimplast. RusVinyl produced 45,800 tons of PVC in January-February 2016, against 36,000 tons in the same period in 2015. In February the company produced 26,400 tons of PVC, of which emulsion grade comprised 2,400 tons.

Russian PVC Production (unit-kilo tons)

Producer	*Jan-Feb 16*	*Jan-Feb 15*
Bashkir Soda	42.2	42.3
Kaustik	15.8	15.8
RusVinyl	49.9	37.6
Khimprom	0.0	0
Sayanskkhimplast	35.3	44.1
Total	143.2	139.8

Bashkir Soda Company at Sterlitamak produced 42,200 tons of PVC in the first two months in 2016, 9% down on 2015. Kaustik at Volgograd produced 15,800 tons of PVC, unchanged from last year. Sayanskkhimplast produced 35,300 tons of PVC, which is 20% lower than in 2015. In January, the company produced 21,700 tons against 13,500 tons in February after ethylene supply from Angarsk was disrupted by the cracker outage.

Ethylene production on Angarsk polymer plant was stopped due to the failure of the process equipment at the beginning of February. Production is not expected to restart until May or possibly June. From 10 February Sayanskkhimplast transferred some staff to a four-day work week whilst a maintenance shutdown is taking place now rather than in August as originally scheduled. Full production was stopped on 13 March after inventories were used up. The company has signed an order and a detailed timetable agreed works to be undertake. One slight problem of bring forward the planned outage is the

time for some of spare parts to arrive after ordering. As a result of the situation at Sayanskkhimplast the Russian PVC market saw a rise in prices in March of 2,500 roubles per ton.

Imports of PVC suspension grade fell sharply in the first two months in 2016 due to in part to low demand from local processors combined with the effects of rouble devaluation. Imports amounted to 2,000 tons in January and only 300 tons were imported in February. Currency fluctuations and excess supply from local manufacturers contributed to a drop in imports. Imports from the US amounted to 1,100 tons in the first two months in 2016, whilst another thousand tons was imported from China. The remaining volumes of PVC have been imported from European companies. Imports into Russia may rise whilst Sayanskkhimplast is out of the market.

Paraxylene-PTA-PET Chain

Russian Paraxylene Domestic Sales (unit-kilo tons)

Producer	*Jan-Feb 16*	*Jan-Feb 15*
Gazprom Neft	10.5	14.4
Ufaneftekhim	20.0	21.9
Kirishinefteorgsintez	0.2	0.0
Total	30.7	36.3

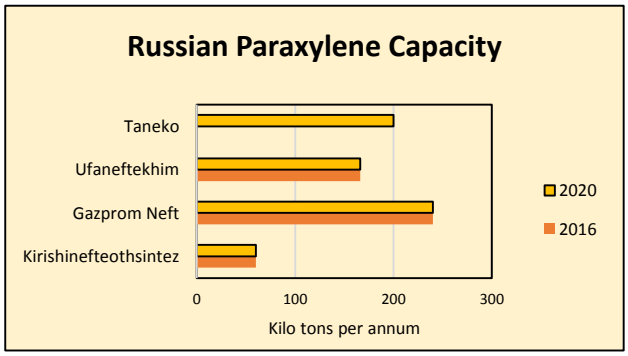
Russian paraxylene-PTA

Russian paraxylene sales to Polief dropped from 36,300 tons in the first two months in 2015 to 30,700 tons in the same period this year. Gazprom Neft reduced sales on the domestic market from 14,400 tons to 10,500 tons, whilst export activity increased taking advantage of the much weakened rouble. Due to reduced PTA production in February Ufaneftekhim was able to enter the export market, shipping 3,044 tons. Paraxylene exports in the first two months in 2016 totalled 22,000 tons against 12,400 tons in the same period in 2015.

Russian Paraxylene Exports (unit-kilo tons)

Producer	*Jan-Feb 16*	*Jan-Feb 15*
Gazprom Neft	12.9	2.7
Ufaneftekhim	3.0	1.0
Kirishinefteorgsintez	6.1	8.7
Total	22.0	12.4

The zero rate of import duty on PTA for Russia is to be extended for a period up to 31 December 2017, as decided by the Eurasian Customs Union. PTA duties will continue at 0% from the start of January 2016 until 31 December 2017, aimed at meeting the growing needs of the domestic market. The import duty of 0% for PTA was established for the period from 2 September 2014 to 31 December 2015 inclusive, coming down from 5%.



Russian MEG, Jan-Feb 2016

MEG sales on the domestic market amounted to 11,800 tons in February, 11% up on January. SIBUR-Neftekhim supplied 10,600 tons or 90% of shipments, 1,200 tons up on January. Polief purchased 6,920 tons in February, or 59% of the total purchases.

MEG exports amounted to 11,740 tons in February, 70% up on January. SIBUR-Neftekhim exported 7,200 tons (61% of total exports), or 70% more than a month ago. The remaining 39% belonged to Nizhnekamskneftekhim, which in February exported 4,540 tons (70% more than in January). Belarus purchased 4,300 tons in February from Russia against 1,710 tons in January, whilst Indorama in Lithuania increased purchases from 1,290 tons to 3,490 tons. The remaining volumes were shipped from Russia to Poland, 824 tons, Belgium 648 tons, the Netherlands 624 tons (58% less than in January), Latvia 494 tons (three times), Finland 432 tons, Kazakhstan 307 tons (+ 96%), other countries 614 tons.

Tatneft-Taneko's paraxylene project

As part of Tatneft's investment and expansion of the Taneko refinery at Nizhnekamsk, progression has been made over the aromatics extraction installation which is to provide the paraxylene for the PTA and PET projects planned by Safpet.

SafPet's complex is targeted for a start-up in 2019, including 210,000 tpa of PTA and 250,000 tpa of PET. A distinctive feature of the project is the raw material supply proximity at Nizhnekamskneftekhim and Taneko, ensuring the minimum cost of logistics for PTA and MEG. Taneko's extractive distillation column for aromatic hydrocarbons was manufactured by NATEK-Neftehimmash (Taganrog) under contract with Tatneft. The Taneko complex represents probably the only new paraxylene capacity for the Russian market in the next few years unless Bashneft decides to revive plans of expanding Ufaneftekhim to 260,000 tpa.

SIBUR-PETF converts partly to film grade

SIBUR-PETF launched a unit for PET film production at Tver, having made the necessary adjustments of the equipment from producing bottle grade resin. SIBUR-PETF plans to produce granules and films for food and technical purposes. Russian consumption of films is currently estimated at 30,000 tpa, two thirds of which is imported. SIBUR has embarked on this strategy ass the production of PET preforms used in the production of

bottles continues to decline. In 2015, the Russian PET market fell by 8% to 547,000 tons. SIBUR-PETF operates a plant for PET with a capacity of 75,250 tpa and a production line of recycled PET with a capacity of 1,500 tpa.

Russian PET market, Jan 2016

In January the estimated consumption of PET fell by 3.6% in Russia to 40,000 tons, compared to December of the previous year and 10% by January 2015. Senezh produced 4,500 tons in January against 5,800 tons in December. Alko-Naphtha produced 7,500 tons against 6,800 tons in December.

PET imports fell in January by 53% to 2,630 tons, of which 1,700 tons from China. Import quotations of PET in Russia began to increase in March as a result of rising prices of raw materials for PET in Korea and China. Rising costs for MEG and PTA helped increase PET import prices by around 5%.

Aromatics

Russian benzene market, Jan-Feb 2016

Benzene sales on the Russian domestic market totalled 125,900 tons in the first two months in 2016 against 130,300 tons in the same period last year. The largest suppliers to the domestic market include Gazprom Neft at the Omsk refinery followed by SIBUR-Kstovo, Uralorgsintez, and Kirishinefteorgsintez. Falls in deliveries were noted in February at Stavrolen and Angarsk Polymer due to maintenance repairs, planned and unplanned respectively.

Leading Russian Benzene Consumers (unit-kilo tons)

Consumer	Jan-Feb 16	Jan-Feb 15
Kuibyshevazot	20.8	29.7
Azot Kemerovo	20.1	17.5
Kazanorgsintez	14.8	11.3
SIBUR-Khimprom	16.2	12.8
Uralorgsintez	13.2	11.9

Benzene supplies from refineries and petrochemical plants totalled 106,800 tons in the first two months in 2016, unchanged from last year. The largest crude suppliers consist mostly of Magnitogorsk Metallurgical Combine and Altai-Koks. Exports of crude benzene totalled 11,848 tons in the first two months in 2016 against 8,032 tons in the same period in 2015.

Regarding consumers, Kuibyshevazot reduced purchases from 29,705 tons in the first two months in 2015 against 20,792 tons in the same period in 2016. This was due to increased purchases of toluene as an alternative feedstock for caprolactam production. Nizhnekamskneftekhim also reduced merchant benzene purchases from 14,067 tons in January-February 2015 to 4,093 tons in 2016. Increases for the first two months this year were noted for Azot at Kemerovo, which bought 20,051 tons against 17,511 tons in 2015, Shchekinoazot which purchased 9,328 tons against 6,551 tons, Kazanorgsintez which increased from 11,296 tons to 14,816 tons, and SIBUR-Khimprom which increased from 12,812 tons to 16,205 tons.

Benzene production increased in 2015 due to the restart of the Stavrolen cracker, but the market remains unpredictable particularly as the Angarsk plant will be idle until at least the middle of 2016.

Russian benzene production increased by 5% to 1.1 million tons in 2015, including an increase of 2.8 times by Stavrolen to 37.2 million tons. In addition, SIBUR-Kstovo increased production 1.8 times up to 68,000 tons. On the other hand, Angarsk Polymer Plant reduced production by 23% to 54,900 tons. At the Chelyabinsk Metallurgical Combine the owning company Mechel stopped processing crude benzene.

Russian consumption of benzene increased by 5% in 2015, including increased purchases by Nizhnekamskneftekhim of 32% due to the need to increase production of styrene. Russia's largest consumer of the commodity benzene Kuibyshevazot also increased purchases by 14% compared to 2014. Caprolactam accounts for around 40% of Russian benzene merchant market purchases.

Russian Orthoxylene Domestic Sales (unit-kilo tons)

Producer	*Jan-Feb 16*	*Jan-Feb 15*
Gazprom Neft	9.5	5.3
Ufaneftekhim	5.9	5.7
Kirishinefteorgsintez	6.6	4.5
Total	22.0	15.4

Russian orthoxylene , Jan-Feb 2016

Russian refiners shipped 8,750 tons of orthoxylene in February, 34% less than in January and 29% lower than in February 2015. The Omsk refinery shipped 3,350 tons, Kirishinefteorgsintez 3,180 tons and Ufaneftekhim 2,220 tons. Kamteks-Khimprom reduced the volume of purchases of orthoxylene in February by 2.1 times compared to January, to 4,220 tons (48% of Russian consumption).

Gazprom neftekhim Salavat resumed purchases in February, buying 990 tons (11% of consumption). Paint manufacturers increased purchases by 27% in February to 2,110 tons (24%), whilst fuel manufacturers, agrochemical, pharmaceutical and other products bought 830. tons (10%). Another 600 tons was purchased by trading companies. In the first two months of 2016 orthoxylene sales on the domestic market totalled 22,020 tons which is 43% more than the same period in 2015.

Russian Orthoxylene Exports (unit-kilo tons)

Producer	*Jan-Feb 16*	*Jan-Feb 15*
Gazprom Neft	13.3	0.0
Kirishinefteorgsintez	1.0	3.0
Ufaneftekhim	2.5	3.7
Total	16.8	6.7

Orthoxylene exports from Russia amounted to 10,540 tons in February against 6,400 tons in January, and 2,670 tons in January 2015. Gazprom Neft exported 8,380 tons in February, 80% of shipments whilst both Kirishinefteorgsintez and Ufaneftekhim dropped shipments of 10% to 1,000 tons each. Finland was the main destination for Russian exports in February, accounting for 98% or 10,340 tons. For the first two months in 2016 Russian exports of orthoxylene totalled 16,800 tons which is 2.5 times more than the same period last year.

Russian Caprolactam Production (unit-kilo tons)

Producer	*Jan-Dec 15*	*Jan-Dec 14*
Kuibyshevazot	176.3	181.1
Shchekinoazot	54.8	42.1
SDS Azot	95.9	85.1
Total	327.0	308.3

Russian caprolactam production 2015

Russian caprolactam production increased from 308,300 tons in 2014 to 327,000 tons in 2015. Despite a fall by Kuibyshevazot from 181,100 tons to 176,300 tons in 2014, increases were noted by Azot Kemerovo and Shchekinoazot. Last year Shchekinoazot stated a significant reconstruction of the caprolactam unit which when completed will significantly further reduce the consumption of benzene, thermal energy whilst increasing the availability of commodity cyclohexanone to 2,200 tpa, i.e. by 73% over current levels. Production of caprolactam for Shchekinoazot totalled 54,800 tons, a 30% rise over 2014. The increase in production of caprolactam and led to a 9% increase in production of sulphuric acid at the Efremov branch of Shchekinoazot to 386,000 tons.

Russian Market Phenol Sales by Supplier (unit-kilo tons)

Producer	*Jan-Feb 16*	*Jan-Feb 15*
Novokuibyshevsk PC	7.8	5.3
Kazanorgsintez	2.5	1.6
Ufaorgsintez	10.7	5.7
LUKoil-VNPZ	0.2	0.0
Borealis	0.1	0.2
Total	21.3	12.9

Russian phenol, Jan-Feb 2016

Phenol sales on the Russian domestic market amounted to 21,300 tons in the first two months in 2016, against 12,900 tons in the same period last year. The increase was due largely to the purchase of 6,500 tons by Kuibyshevazot for caprolactam production, against zero tons in the same period last year.

Also Uralkhimplast, which uses phenol for phenol-formaldehyde resin production, increased purchases from 1,900 tons to 2,400 tons. The main supplier of phenol to the domestic market in January to February this year was Ufaorgsintez which shipped 10,700 tons against 5,700 tons in the same period in 2015. Novokuibyshevsk Petrochemical Company was the second largest supplier, shipping 7,800 tons against 5,300 tons in 2015.

Regarding export activity, Ufaorgsintez has been the sole Russian producer to ship abroad this year, exporting 340 tons in February against 680 tons in January. Ufaorgsintez shipped 195 tons of phenol to the Czech Republic in February, followed by 95 tons to Latvia and 50 tons to Slovakia. The average cost of phenol exported from Russia in February declined below the level recorded in January, almost 10% and amounted to $635 per ton DAF border of Russia. Czech consumers were paying $595 whilst Latvian consumers were paying $740.

Russian Toluene Domestic Sales (unit-kilo tons)

Producer	*Jan-Feb 16*	*Jan-Feb 15*
Novopiletsk MK	0.0	0.0
Slavneft-Yanos	6.6	7.0
Severstal	1.0	1.4
LUKoil-Perm	2.6	4.1
Gazprom Neft	9.6	3.1
Zapsib	0.4	0.9
Kinef, Kirishi	3.7	2.3
Gazprom Neftekhim Salavat	0.0	0.0
Others	0.0	0.1
Total	23.9	18.8

Borealis shipped 610 tons of phenol to the Russian market in February, more than double than in January due to increased demand by resin manufacturer MetaDynea. At the same time Astat remains the main Russian consumer of phenol bought from Borealis, taking 515 tons in February.

Russian toluene sales, Jan-Feb 2016

Toluene sales on the domestic market amounted to 12,800 tons in February, 15% more than in January and 31% higher than in February 2015. Gazprom Neft at the Omsk refinery

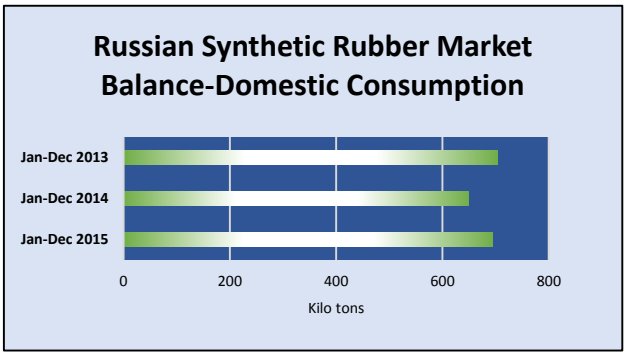
accounted for 36% of shipments (4,600 tons.), Slavneft-Yanos 25% (3,270 tons). Kirishinefteorgsintez 21% (2,680 tons), Lukoil-Permnefteorgsintez 12% (1,540 tons), Severstal 3% up (360 tons)., and West Siberian MK 3% (340 tons.).

Manufacturers of explosives in February 2016 increased purchases of toluene compared to January by 56%, to 2,510 tons (20% of Russian consumption). Companies producing paints, increased purchases of raw materials by 28%, to 3,980 tons. Producers of lubricants and additives for motor fuels increased their purchase of toluene by 27%, to 2,260 tons (18%). Toluene sales on the domestic market amounted to 23,880 tons in the first two months in 2016, 27% up on the same period in 2015. The largest toluene producers in Russia comprise Gazprom Neft at Omsk, Slavneft at Yaroslavl and Ufaneftekhim at Ufa. Production is either consumed internally or sold domestically, with no export activity.

Synthetic Rubber

Russian C4 Supplies (unit-kilo tons)

Supplier	*Jan-Feb 16*	*Jan-Feb 15*
Angarsk Polymer	3.2	13.2
Krasnoyarsk Synthetic Rubber	0.0	0.1
Kazanorgsintez	7.5	5.9
Stavrolen	12.4	12.2
SIBUR-Kstovo	14.8	5.7
Gazprom neftekhim Salavat	0.0	0.0
Tomskneftekhim	12.1	13.3
Ufaorgsintez	3.8	4.9
Naftan (Belarus)	9.7	10.2
SANORS	0.0	0.0
Azerkhimya	0.7	2.2
Others	0.0	0.2
Total	64.2	67.9



Russian C4 sales, Jan-Feb 2016

C4 sales on the domestic market totalled 64,200 tons in the period January-February against 67,900 tons in the same two months in 2015. The main domestic suppliers this year have included SIBUR-Kstovo and Stavrolen, which supplied 39,300 tons in 2016 or 61.6% of sales. The Belarussian producer Naftan supplied 9,700 tons in the first two months this year against 10,200 tons in the same period last year.

Nizhnekamskneftekhim purchased 30,900 tons of C4s in January to February 2016 against 19,700 tons in 2015, and Togliattikaucuk bought 27,000 tons against 24,200 tons. Supplies from domestic plants have been tightened following the accident at Angarsk Polymer in February. Deliveries of C4 from Angarsk to the domestic market declined by 2.3 times in February against January to 957 tons. Angarsk Polymer Plant's cracker is expected to remain inoperative until April after repairs have been completed. Nizhnekamskneftekhim was the only Russian rubber producer to import C4s in February, importing 5,100 tons from Belarus. Imports totalled 10,500 tons in the first two months, 26% down on the same period in 2015.

Omsk Kaucuk was forced to switch suppliers of C4s in March from Angarsk Polymer Plant, which is down for repairs as part of the cracker renovation, to Tomskneftekhim, Kazanorgsintez and Ufaorgsintez. In addition, the company buys C4s from Azerkhimya in Azerbaijan. The Angarsk outage has impacted on C4 prices in March, Kazanorgsintez increased by 4% and Ufaorgsintez by 7%. Naftan in Belarus expects to increase prices in April.

Russian synthetic rubber production & trade

The Russian synthetic rubber market saw a volume improvement in 2015 over 2014, but was still slightly lower than in 2013. The much weaker rouble in 2015 helped domestic rubber product manufacturers to acquire business from vacated importers, besides the economic attractiveness of exports. Tyre manufacturers in Russia saw a direct benefit from the weak rouble, as numerous importers without production sites inside the country left the market, whilst at the same time export activity rose. Continental at its Kaluga plant, which opened in 2013, expects to double the export of tyres in 2016 due to the currency advantages of producing inside Russia.

Production of synthetic rubber totalled 1.442 million tons in 2015 against 1.319 million tons in 2014 and 1.482 million tons in 2013. Russian rubber producers started to raise capacity utilisation in the latter part of 2014, as the rouble declined in value making exports more profitable. International markets also made a small recovery in the first half of 2015, but that seems to have since weakened and Russian production has slowed over the past few months. Currently around 70% of synthetic rubber production in Russia is exported, with the main destinations

Russian Chemical Commodity Exports				
	Jan-16	*Jan-16*	*Jan-15*	*Jan-15*
Product	*Kilo tons*	*$ Mil*	*Kilo tons*	*$ Mil*
Ammonia	267	82	304	154
Methanol	117	23	135	39
Nitrogen Fertilisers	648	129	634	155
Potash Fertilisers	440	106	699	190
Mixed Fertilisers	509	173	548	199
Synthetic Rubber	77	93	67	114

including Central Europe, China and India. Exports totalled 936,600 tons in 2014 against 826,100 tons in 2014 and 943,600 tons in 2013.

Regarding investments in the synthetic rubber industry, the main flagship project involves Rosneft's proposed jv with Synthos and Pirelli at Nakhodka in the Russian Far East. At this stage the project concept remains in the early stages of assessment and depends on the time-scale for the construction of the refinery and petrochemical complex. As part of the petrochemical complex Eastern Petrochemical Company (VNKH), butadiene capacity is planned at 200,000 tpa.

Russian Synthetic Rubber Exports, Jan-Dec 15		
Country	*Vol (kilo tons)*	*$ million*
Belarus	37.8	51.5
Belgium	14.3	21.0
Brazil	57.9	91.5
Canada	19.8	29.9
China	94.6	131.0
Czech Republic	28.6	44.7
Germany	24.5	33.2
Hungary	74.8	132.0
India	86.7	123.0
Italy	10.6	13.1
Japan	33.7	57.6
Latvia	13.7	21.4
Lithuania	12.4	18.1
Poland	120.1	171.0
Romania	39.5	53.9
Serbia	14.4	20.1
Slovakia	31.2	49.7
South Korea	9.9	14.6
Spain	6.8	9.7
Taiwan	17.7	19.9
Turkey	40.2	58.1
Ukraine	17.3	22.6
USA	56.4	86.5
Thailand	5.9	8.1
Vietnam	8.1	10.4
Others	60.0	84.5
Total	937.0	1377.0

Krasnoyarsk Synthetic Rubber Plant

Krasnoyarsk Synthetic Rubber Plant is implementing an automated laboratory information management system (LIMS) to improve the quality control of products, will provide a more efficient management of laboratory processes. The programme will bring together central laboratory and offices into a single network, automates the work on integration of the research and analysis.

Commissioning is planned to complete the information system into operation by the fall of 2016. Krasnoyarsk Synthetic Rubber Plant KZSK) specializes in the production of high-quality NBR as a joint venture between SIBUR and Sinopec, entitled SIBUR-Sinopec Rubber Holding. Sinopec's share in the authorized capital of the jv is 25% plus one share against 75% would belong to SIBUR minus one share.

Omsk Kaucuk-latex modernisation

As part of the modernisation of the latex plant at Omsk Kaucuk, heat exchange equipment has been installed. The plant is expected to start in two months. Omsk Kaucuk may restart latex production after producing pilot batches of three brands. During 2014 Russia imported about 20,000 tons of latex, more than half of which would be accounted from Finland, followed by Germany and Belgium. The latexes used in the manufacture of paper and cardboard, carpet and other floor coverings, mattresses and textiles, paints and varnishes.

Kurskrezinoteknika 2015

Russian rubber hose and fittings manufacturer Kurskrezinotekhnika increased revenues by 41% in 2015 to 4.634 billion roubles. The rise was associated with a reduction in competition from foreign companies due to the fall in the rouble. In 2015, Kurskrezinotekhnika paid tax payments of 208.9 million roubles, 176% up on 2014. Major investments for Kurskrezinotekhnika will be directed to the production of technical fabrics, which are used for the manufacture of conveyor belts. The equipment has already been imported and commissioning started.

Methanol

Russian methanol domestic sales, Jan-Feb 2016

Domestic sales of methanol in February amounted to 128,000 tons, unchanged from January. Metafrax, Sibmetakhim and Tomet accounted for 80% of shipments, whilst the largest rise was recorded by Ammoni (Mendeleevskazot) which increased shipments by four-fold over January to 9,300 tons. Less significant sales

growth was noted for Metafrax and Sibmetakhim, rising 6% to 39,400 tons and 4% to 32,700 tons respectively. Tomet reduced sales by 20% in February to 30,000 tons, whilst Azot at Novomoskovsk reduced sales by 10% to 7,800 tons. Shchekinoazot shipped 6,200 tons in February, virtually unchanged from the previous month. MTBE consumers accounted for 37% of shipments in February, whilst gas consumers accounted for 25% and formaldehyde producers 12%.

Russian Methanol Domestic Sales by Producer (unit-kilo tons)

Supplier	*Jan-Feb 16*	*Jan-Feb 15*
Azot Nevinnomyssk	1.9	3.3
Azot Novomoskovsk	16.4	23.7
Metafrax	76.5	63.7
Sibmetakhim	64.3	86.7
Togliattiazot	66.8	68.0
Shchekinoazot	12.4	4.1
Ammoni	11.5	0.0
Others	6.9	7.7
Total	256.6	257.2

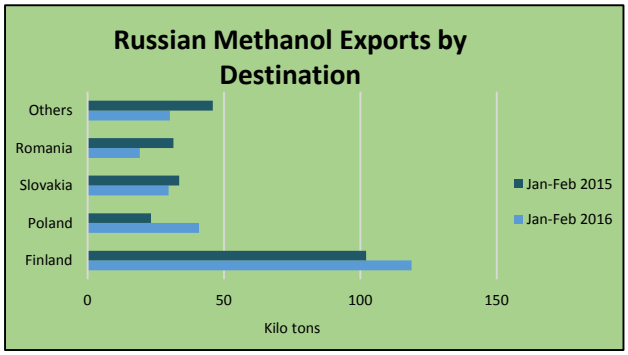
Russian Methanol Exports (unit-kilo tons)

Producer	*Jan-Feb 16*	*Jan-Feb 15*
Azot Nevinnomyssk	0.0	0.0
Azot Novomoskovsk	31.0	26.8
Akron	0.0	0.0
Metafrax	56.8	49.1
Sibmetakhim	64.3	58.3
Tomet	29.5	40.6
Shchekinoazot	58.8	61.6
Total	240.4	236.5

Russian methanol exports tended to slow in February due to seasonal patterns, dropping 15% against January to 111,000 tons. Sibmetakhim accounted for 25% of exports in February, or 28,100 tons, Metafrax (23% or 25,600 tons) and Shchekinoazot (25% or 27,800 tons). Azot and Tomet exported 15,700 tons and 14,000 tons respectively. Despite the drop in February Russian methanol exports increased in the first two months in 2016 to 240,400 tons against 236,500 tons in the same period in 2015.

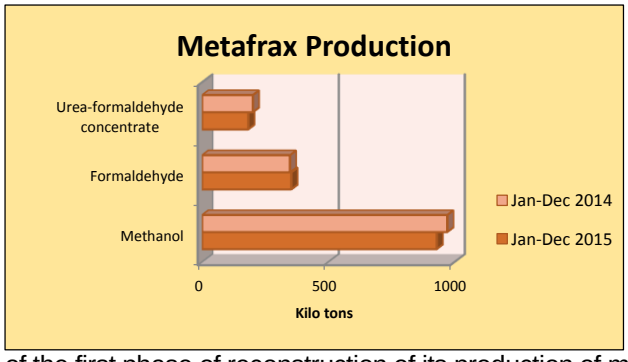
Finland purchased 54,000 tons of methanol from Russia in February, 20% down on January. Smaller shares went to Poland's share (17,700 tons), Romania (12,400 tons) and Slovakia (13,000 tons). Romanian consumers increased volumes of Russian methanol in comparison with January by almost 85%, while Slovakia and Poland, on the contrary, decreased by 28% and 31%, respectively.

Exports through the Odessa terminal amounted to 6,100 tons in February and similar volume was planned for March. Shchekinoazot is the only Russian producer using this route at present, shipping solely to Romania. Ukraine purchased 1,800 tons of Russian methanol in February, 2.3 times higher than January and the highest inward flow of product for some time. Russian export prices averaged $180 per ton DAF border in February against $190 per ton DAF border in January.



For the whole of 2015 Russian methanol exports were virtually reversed against the volume of domestic shipments. Total export shipments equated to almost the same as for domestic sales in 2014 and exports for 2014 almost the same as domestic sales in 2015. Shchekinoazot and Metafrax reduced exports to concentrate on internal processing in the formaldehyde sector, whilst Sibmetakhim and Tomet came close to maintaining export volumes.

Metafrax Jan-Dec 2015



Metafrax increased revenues in roubles by 23.8% in 2015 against 2014, whilst the net profit rose by 52% to 7.1 billion roubles, which was a record level for the company. Revenues amounted to 16.280 billion roubles against 13.140 billion roubles in 2014. The share of exports in total sales decreased by 5.5% to 38.7% as the company focused more on the domestic market.

Methanol production totalled 929,000 tons in 2015, 4.3% down on 2014. The decline was due to the outage which was conducted in August and September. With the end of the first phase of reconstruction of its production of methanol daily capacity increased from 3,000 to 3,060 tons per day. Urea-formaldehyde concentrate production fell by 9% to 182,400 tons whilst formaldehyde increased by

1.5% to 352,400 tons. Hexamine production totalled 28,500 tons, 4% up, whilst pentaerythritol totalled 22,300 tons (2% up) and block polyamide 700 tons (2% up).

The fall in methanol production by Metafrax in 2015 impacted on domestic sales, which fell from 418,900 tons to 361,000 tons, whilst captive consumption increased from 248,000 tons in 2014 to 270,900 tons in 2015. Exports declined slightly from 299,500 tons to 297,500 tons.

Russian methanol investments

The second fertiliser/methanol complex at Mendeleevsk has been brought to the table involving Tatneft and Mitsubishi Heavy Industries. The first Ammoni complex, which started production in the second half of 2015, is to be expanded through the construction of a second plant Ammoni 2. The success of the first complex and perceived demand possibilities has led to the second complex being promoted as an investment project. In addition to Mitsubishi Heavy Industries, Sojitz Corporation is also participating in Ammoni-2, as in the first Ammoni complex.

A company entitled Arakel has agreed with the local government at Novoulyanovsk on the Volga river to invest around five billion roubles into a wood processing plant. The industrial facility will include a plant for the production of oriented strand boards with a capacity of 120,000 cubic metres per annum and a line for logging and manufacturing pallets. The investor will begin work on preparing to enter the construction site in May 2016.

This plant will involve the use of formaldehyde and methanol in the production of resins and OSB plywood and plates, which has not been received well by the local population. The prospect of using Chinese equipment instead of European equipment has raised questions over safety.

Wood is available in the Ulyanovsk region at an average price of 500 roubles per cubic metre, and to achieve full capacity of 120 thousand cubic metres of OSB would require about 200-250,000 cubic metres of round logs. That would require around 250,000 pine trees to be cut down annually, or 600,000 birch or 1,000,000 limes, etc. The promise of jobs is not enough for the local population to compensate for the loss of forestry combined with the lack of safety of the Chinese equipment.

For 2016 Metafrax is expecting an increase of 8-10%. Over the past year the company has invested in the development of the capacities of 2.67 billion roubles, which is 2.5 times more than in 2014. In 2016 investments are planned in the amount of 5.7 billion roubles.

Metafrax updated rolling stock last year after acquiring railroad tank cars for methanol transportation, whilst completing the first stage of reconstruction of the methanol unit including the modernisation of the reformer furnace. The company has continued construction of a second production unit of low methanol concentrated formaldehyde.

During 2016 Metafrax intends to complete construction and installation work under the second phase of reconstruction of the methanol unit with bringing plant capacity to 3,375 tons per day. Other projects include the completion of construction and installation of the 55% formalin plant (capacity-90,000 tpa.)

Organic chemicals

Russian butanol sales, Jan-Feb 2016

Russian butanol producers shipped 12,000 tons to the domestic market in the first two months in 2016 against 10,100 tons in 2015. Exports of normal butanol were significantly down in the first two months this year, freeing up more product for the domestic market. SIBUR-Khimprom increased sales from 3,400 tons in January-February 2015 to 7,700 tons in 2016 due largely to increased purchases by SIBUR subsidiary Akrilat at Dzerzhinsk. The general trend for SIBUR in recent years for oxo alcohols in total has been lower export sales at the expense of domestic sales.

Russian Butanol Domestic Sales (unit-kilo tons)

Producer	*Jan-Feb 16*	*Jan-Feb 15*
Gazprom n Salavat	3.1	2.9
SIBUR-Khimprom	7.7	3.4
Angarsk Polymer Plant	0.5	0.1
Azot Nevinnomyssk	0.7	0.7
Others	0.0	3.0
Total	12.0	10.1

Domestic butanol sales amounted to 7,710 tons in February, 44% up on January and 75% up on February 2015. The proportion of n-butanol in gross sales in February 2016 was 69%, and the isobutanol 31%.

Regarding consumers Akrilat purchased 2,350 tons in February, comprising around 30% of total Russian purchases. Dmitrievsky Chemical Plant, which uses butanols for the production of butyl acetate, as well as exporting on behalf of Gazprom neftekhim Salavat increased butanol purchases in February by 2.7 times to 2,190 tons.

Other major consumers of butanols in February included the gas station network Nefttorgservis (the company purchased 1,490 tons of isobutanol, or 19% of Russia's consumption of butanols.), Volzhskiy Orgsintez (420 tons, or 5%), Plant of Synthetic Alcohol (390 tons, or 5%) and Roshalsky Plasticizers Plant (230 tons, or 3%). Market

prices for butanols went unchanged in March against February, with normal butanol priced at 50, 000-53,000 roubles per ton including VAT, and isobutanol 44,000-50,370 roubles per ton including VAT.

Russian N-butanol Exports (unit-kilo tons)		
Producer	***Jan-Feb 16***	***Jan-Feb 15***
Gazprom neftekhim Salavat	4.6	5.0
SIBUR-Khimprom	0.8	1.8
Angarsk Petrochemical	0.0	1.3
Azot Nevinomyssk	0.1	1.9
Dmitrievsky Chemical Plant	0.7	0.0
Total	6.1	19.3
Russian Isobutanol Exports (unit-kilo tons)		
Producer	***Jan-Feb 16***	***Jan-Feb 2015***
Gazprom n Salavat	0.7	0.0
SIBUR-Khimprom	5.7	0.0
Angarsk Petrochemical	0.0	2.0
Dmitrievsky Chemical Plant	0.0	0.4
Total	6.4	2.5

Russian pentaerythritol, Jan-Feb 2016

Metafrax produced 2,100 tons of pentaerythritol in January, followed by 1,700 tons in February. Production for the first two months in 2016 totalled 3,800 tons, which was 5% down on 2014. Metafrax produced 22,140 tons of pentaerythritol in 2015, 2% more than in 2014.

Russian DOP market-Sayanskkhimplast outage

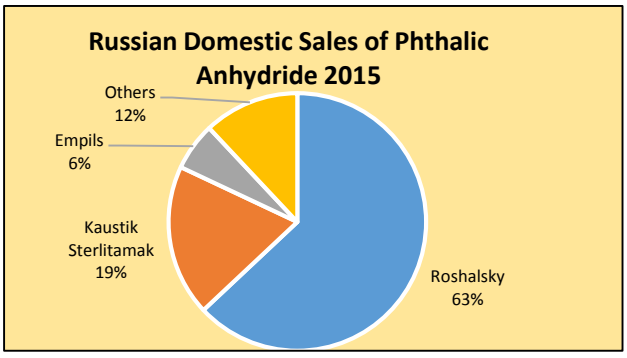
The forced stoppage at Sayanskkhimplast, due to the lack of ethylene, has resulted in a significant reduction in demand for plasticizers in Russia. DOP prices saw a fall in March of around 2%. Sayanskkhimplast's PVC plasticizer plant is expected not to restart until the end of May when repairs to the Angarsk cracker.

Russian phthalic anhydride market, 2015

The most significant feature of the phthalic anhydride market in Russia in 2015 involved the restoration of commercial activity between Kamteks-Khimprom and the Neftekhimprom Group. At the end of 2012 Kamteks-Khimprom and Neftekhimprom (which controls the Roshalsky and Ural Plasticizer Plants) could not agree on the supply of phthalic anhydride, mainly over a conflict of interest regarding DOP.

Russian Phthalic Anhydride Market		
	Jan-Dec 15	***Jan-Dec 14***
Production	93.8	95.4
Export	48.6	64.4
Import	6.5	15.3
Consumption	**51.7**	**46.2**

For 2013 and 2014 Neftekhimprom sourced phthalic anhydride from other sources and only restarted negotiations for resumed supply in 2015. This was due to a number of factors, partly down to devaluation which changed the economic climate and partly due to the fact that the Neftekhimprom Group does not produce DOP now and concentrates on the production of DINP and DOTP. Ural Plant of Plasticizers began to produce DOTP in 2013, as an analogue of traditional DOP. This product is based on PTA and not phthalic. As a result, the DOP produced by Kamteks-Khimprom does not face direct competition from the Neftekhimprom Group.



The Roshalsky Plant of Plasticizers was the major domestic buyer of phthalic anhydride in 2015, accounting for 63% of shipments followed by Kaustik at Sterlitamak with 19%, and paint manufacturer Empils with 5%.

In total, the Neftekhimprom Group purchased 3,600 tons of phthalic anhydride from Kamteks-Khimprom for usage at the Roshalsky Plant of Plasticizers. As an exception in January this year the group purchased 1,000 tons of phthalic from South Korea.

Other products

Gazprom Neft-catalyst plant

Russian Import Dependency of Catalysts		
Type	***2015***	***2020 target***
Hydrotreating	97%	55%
Catalytic cracking	65%	25%
Catalytic reforming	60%	25%
Ethylene oxide	45%	0%
PTA	45%	0%
Ethylene polymerization	100%	45%

This year Gazprom Neft plans to mount a catalytic cracking pilot plant at the Omsk refinery, where tests will be carried out on experimental batches of new grades of catalysts. In February, Gazprom Neft held the first Russian industrial tests hydrotreating catalyst, developed by the Institute of Boreskov. Over the period 2015-2025 Gazprom Neft has scheduled investments in catalysts up to 11 billion roubles.

Gazprom Neft aims to increase cracking catalysts from 3,000 tpa to 15,000 tpa and hydrotreating and hydrocracking catalysts up to 6,000 tpa. Despite the political calls for import substitution the Russian

Energy Ministry has received criticism for not helping enough to advance the development of catalyst production in Russia. Ambitious targets have been set by the Russian Energy Ministry for reducing the import dependency of catalysts by 2020 in both refining and petrochemicals. Hydrotreating catalysts are currently 97% dependent on imports which should fall to 55% by 2020, whilst catalytic cracking catalysts and catalytic reforming at 65% and 60%, respectively, have been set a reduction to 25%.

In the petrochemical division the targets are the most ambitious, reducing ethylene oxide and PTA from 45% to 0% and catalysts for ethylene polymerization, propylene and styrene to be reduced from 100% to around 45%. These targets are approximate goals, and almost inevitably may require longer time periods to achieve.

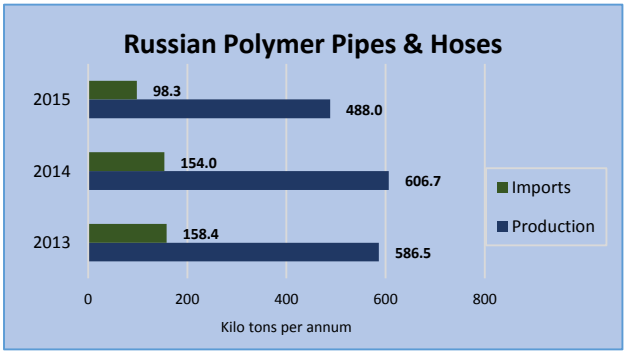
Egregor Biotech-bioethanol project for Komi

In the Komi Republic Russian company Egregor Biotech is undertaking investment into large-scale production of bioethanol, valued at €136 million. This would in effect represent Russia's largest investment project in the field of biotechnology. Capacity of the new plant is planned at 100,000 tpa of bioethanol, based on technology of enzymatic hydrolysis, which has already been tested in the US, China, Brazil, and the EU. The plant is being designed to produce bioethanol from non-food raw materials, including waste lumber. The raw material needs are estimated at up to 400,000 tpa. The Komi region produces more than 1 million tpa of wood waste that can be recycled.

Mitsui & Co Deutschland has already signed a five-year contract with Egregor Biotech to purchase the entire volume from the new plant. Egregor Biotech was established in 2013 in accordance with the state program of development of the biofuels market in Russia. The company specializes in projects of construction of new modern plant for the production of second generation bioethanol.

Polyplastic-pipe anti-corrosion coatings

Leading Russian plastics converter Polyplastik has set a target to take a 30-33% share in the domestic market for anti-corrosion coatings for large-diameter pipes (LDP) by 2018. More than 10 million tpa of steel pipes are produced in Russia, most of which is consumed by the Russian fuel and energy complex. The current market size of coatings for corrosion protection is estimated at 80-85,000 tpa. Production capacities of the company comprise 90,000 tpa, which exceeds the level of current consumption. Overall Russian polymer pipe production fell 21% in 2015, whilst imports dropped by more than third.



Under the production of polymer compositions for the LDP, the company is willing to allocate around 30% of its capacity, i.e., to produce about 27,000 tpa of production at the sites at Saratov and Togliatti. This year the company expects to produce about 7-9,000 tons of polymer compositions for the protection of large-diameter pipes.

Borealis had until recently accounted for around 80% of the Russian coatings market for corrosion protection, but started to lose market share in 2015 when Metaclay bought out the subsidiary company from Gazprom. Metaclay and Polyplastik are now domestic competitors in the Russian market.

Metaclay to develop anti-corrosion coatings

Metaclay is in the process of opening a new unit for the manufacture single-layer anti-corrosion coating of steel pipes used in the oil and gas industry. From its Bryansk site in western Russia Metaclay intends to provide around 80% of the needs of the Russian market of materials for pipe insulation by the start of 2017. Metaclay is a leading Russian producer of nanosilicates. The technology used in the company are provided through the development of Russian scientists from leading research organisations in the country.

Bor-Dalnegorsk

GCC Bor at Dalnegorsk in the Primorsky Krai increased boric acid production by value by more than 30% in February against January, in physical terms amounted to 7,845 tons against 5,972 tons. The company has set a production target of 80,000 tons of boric acid in 2016, around 11% up on 2015.

Kuibyshevazot-Praxair

Kuibyshevazot intends to buy a 25% stake in Praxair Samara from Praxair. In October 2014 Praxair Samara has started construction of a plant in the SEZ Togliatti for filling containers of industrial and special gases. Running an air separation plant with a capacity of 1,400 tons of

oxygen, nitrogen and argon per day was originally scheduled for 2016. According to the latest information, the project is in the active stage. The volume of investments is estimated at 4 billion roubles.

Belarus

Azot Grodno Production (unit-kilo tons)

Product	*Jan-Dec 15*	*Jan-Dec 14*
Methanol	12.9	15.3
Caprolactam	19.2	19.4
Polyamide primary	15.9	13.1
Polyamide filled	1.4	1.2
Ammonia	197.2	191.7
Urea	182.9	183.6
Fertilisers	137.4	136.2
Fibres	5.0	4.2

Belarussian chemical production, Jan-Feb 2016

Azot at Grodno recorded a decline in methanol production of 15% in the first two months in 2016 against the same period in 2015. Reduced production was due to lower demand according to the company.

LDPE production in Belarus amounted to 10,900 tons in January, 4% up on December, followed by 11,400 tons in February. Polymir at Novopolotsk produced 120,100 tons of LDPE against 124,000 tons in 2014. Naftan produced 128,100 tons of benzene in 2015, 5% more than in 2014. Production of benzene amounted to 11,500 tons in January followed by 11,100 tons in February.

Ukraine

Ukrainian polymer imports, Jan-Feb 2016

Polymer imports into Ukraine rose significantly in the first two months in 2016 against 2015. PVC imports into Ukraine increased by 31% in the first two months in 2016, totalling 18,700 tons against 14,300 tons in the same period in 2015. Imports amounted to 14,600 tons in February against 4,100 tons in January. The US supplied 12,500 tons in the first two months in 2016 compared to 6,600 tons in 2015. Imports from Europe amounted to 2,900 tons in February against 1,700 tons in January, although overall volumes were down against 5,300 tons in the first two months last year. Imports from Russia amounted to 340 tons in January and 1,200 tons in February, against 2,400 tons in those two months in 2015.

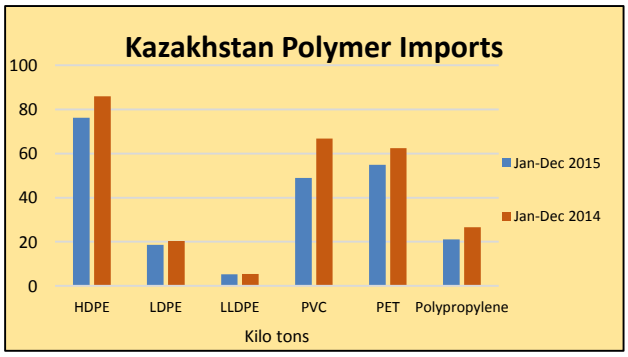
Ukrainian Polymer Imports (unit-kilo tons)

Product	*Jan-Feb 16*	*Jan-Feb 15*
PVC	18.7	14.3
LDPE	10.7	6.7
LLDPE	7.9	6.7
HDPE	18.7	12.1
PP	17.6	13.9

In January-February 2016 polyethylene imports into Ukraine rose by 36% over 2015 and amounted to 38,900 tons. Imports amounted to 21,500 tons against 17,100 tons in January. HDPE imports totalled 19,100 tons in the first two months in 2016 against 12,100 tons in 2015. LDPE imports amounted to 6,500 tons in February against 4,200 tons in January, whilst LLDPE rose from 3,100 tons to 4,800 tons.

Ukrainian polypropylene imports increased by 27% in the first two months in 2015, amounting to 17,600 tons. Imports amounted to 8,900 tons in February, against 8,700 tons in January. One reason for the significant growth in imports is due to low prices in foreign markets, and efforts by processors to form a low-cost raw material inventory in readiness for the seasonal increase in demand.

Central Asia



Kazakhstan-polymer imports Jan-Dec 2015

Imports of HDPE into Kazakhstan decreased by 11% in 2015 to 76,200 tons against 86,000 tons in 2014. The production of plastic pipes and fittings in Kazakhstan increased by 7% to 127,600 tons. The second largest consumer sector for polyethylene is the film sector accounting for around 10% of the market. In 2015 the Kazakh converters produced 37,600 tons of polymer films, 12% more than in 2014. As Kazakhstan is completely dependent on imports of polyethylene, Russia tends to be the main supplier accounting for 68% of shipments in 2015. The second and third place in terms of the supply of polyethylene fall to South Korea and Uzbekistan.

n 2015, imports of PVC in Kazakhstan decreased by 23% to 49,900 tons. The fall was due to the reduced volumes for re-exports to Russia. The manufacture of plastic windows and window sills fell 20.5% in Kazakhstan in 2015 to 26,000 tons. China accounted for around 98% of PVC imports into Kazakhstan in 2015.

SOCAR seeks new partners for OGPC project

Despite SOCAR announcing a freeze early in 2016 on work for its OGPC project, due to low oil prices, the group is undertaking talks with potential partners in Japan and China. Mitsui is already involved in the project, but is revising some of its cost calculations due to changes in the world oil market.

Azerkhimya-propylene production

Azerkhimya reduced propylene production by 30% in February against January to 3,400 tons, whilst isopropanol production dropped 3% to 1,500 tons. In total Azerbaijan produced 8,300 tons of propylene in the first two months in 2016, 5% down on last year.

SOCAR's OGPC project comprises two stages to be introduced by 2020 according its provisional schedule. The first stage includes the launch of a gas processing plant with a capacity of 12 billion cubic metres per annum for which raw materials will come from the Azeri-Chirag-Guneshli field, Umid, Babek, and Shah-Deniz field. The second stage involves the petrochemical complex, including large plants for the production of polyethylene and polypropylene with a total capacity of 860,000 tpa.

Navoiazot-Casale

Swiss company Casale has started the modernisation of the nitric acid plant for Navoiazot at a cost of $177 million. The reconstruction will help to increase production of non-concentrated nitric acid by 1.4 times to 500,000 tpa. The project will be financed from Navoiazot's own resources, a loan of Fund for Reconstruction and Development of Uzbekistan, loans of foreign banks, as well as loans of the contractor. The Reconstruction and Development Fund (RDF) has allocated Uzbekistan Uzkhimprom loans amounting to $392.7 million for the implementation of two projects at Navoiazot. In particular, the Fund has allocated $320 million for the construction of production of ammonia and urea.

Navoiazot is also working on projects for the production of polyvinyl alcohol, and ethylene vinyl acetate. Navoiazot is looking at options for using excess chlorine from the plant started chlorine and caustic soda plant, having been installed by Lurgi in 2001.

Ustyurt Gas Chemical Complex

Uzbekneftegaz intends to spend $295 million this year in the development of gas production for supply to the Ustyurt Gas Chemical Complex, which finished construction in 2016. It is expected that the project will facilitate an increase in production by 15% to 2 billion cubic metres per annum providing the raw material base for the gas chemical complex. This involves the construction of a booster compressor station at Surgil deposit, with agreement for equipment already reached with the Ukrainian company Sumy Machine Building Scientific Production Association. The project will be financed by a loan from the Fund for Reconstruction and Development of Uzbekistan and the own resources of Uzbekneftegaz.

Relevant Currencies

Ukrainian hryvnia. $1 = 16.98. €1 = 19.7: Rus rouble. $1 =74.2 €1= 80.5

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