Chemical Information Resources for East Europe and CIS

CIREC MONTHLY NEWS

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

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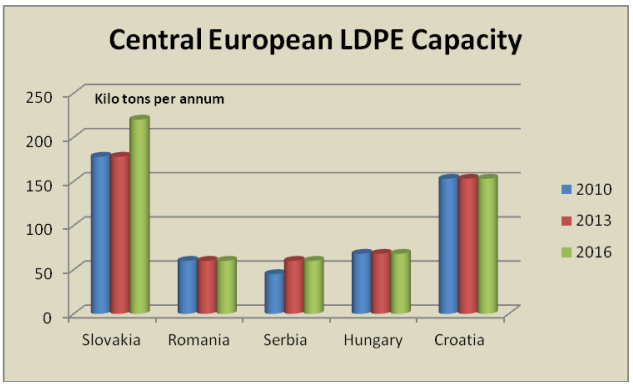
CENTRAL & SOUTH EAST EUROPE

Petrochemicals

Slovnaft-new LDPE plant

Slovnaft announced plans in December to replace seven production lines at Bratislava, and increase polyethylene capacity to 220,000 tpa. The project is intended by November 2015 and Slovnaft is planning to invest €300 million ($404 million) in replacing its plastics production unit at Bratislava. As a result of modern technologies the new production unit will not only replace seven lines for the production of polyethylene, but also increase capacity by 42,000 tpa to 220,000 tpa. Slovnaft is also investing €150 million in the modernisation and expansion of a heat plant at Bratislava and another €60 million in the reconstruction of the Adria oil pipeline.



The main aim of the projects is to enhance competitiveness of Slovnaft in the sale of plastics. The investment programme is currently the largest project in the chemical industry in Central Europe. The construction of the new LDPE-4 line will be preceded by the reconstruction of the ethylene unit. The reconstruction of the cracker could start in 2012 and the new line should be built by the end of 2015.

The new production unit will be able to produce nearly 30 types of polyethylene. Due to the extension of portfolio Slovnaft will be able to address new customers and expand to new markets within EU. It will open the possibility of the production of a miscellaneous assortment of polyethylene types for food applications, thick-walled foils and thin-walled foils, etc. Moreover, the contribution of new technology will also help towards environment protection, reducing emissions of harmful substances into the atmosphere. Energy consumption in polyethylene production will be reduced by nearly 5% through the application of LyondellBasell's technology.

TVK's Sales' Revenues (Ft million)		
Exports	***Jan-Sep 11***	***Jan-Sep 10***
Olefin	12,346	8,337
LDPE	12,186	10,801
HDPE	90,209	79,467
PP	40,317	32,108
Domestic	***Jan-Sep 11***	***Jan-Sep 10***
Olefin	100,969	79,417
LDPE	8,632	8,110
HDPE	9,950	8,362
PP	33,496	28,378
Total Sales	***Jan-Sep 11***	***Jan-Sep 10***
Olefin	113,315	87,754
LDPE	20,818	18,911
HDPE	100,159	87,829
PP	73,813	60,486
Total	308,105	254,980

Slovnaft & TVK, Q3 2011

A key reason for MOL authorising the Slovnaft investment has been the company's declining capability to compete in the export market. Slovnaft's polymer sales recorded a decline of 9% in Q3 2011 compared to the same period in 2010. Export sales fell by 8% compared to the previous quarter while domestic sales increased by 16%. Exports of refinery products were higher by 11% in comparison with the third quarter in 2010. In the petrochemical division, Slovnaft closed its phenol and acetone plants at Bratislava in 2011 which had respective capacities of 40,000 tpa and 25,000 tpa.

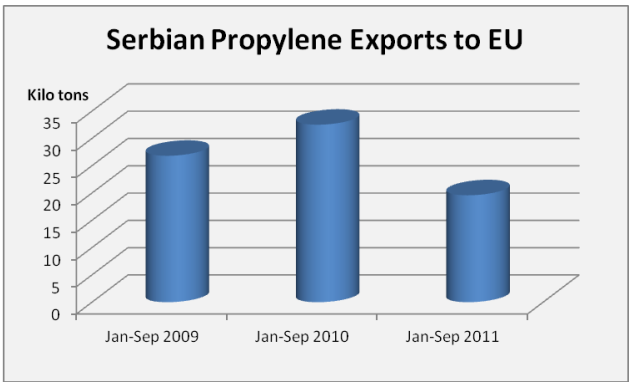
By contrast, MOL's main polymer TVK division remained slightly in the black for the third quarter last year, with the operating profit down Ft 4.5 billion against the previous quarter. The fall was due to a range of factors including the external economic environment, exchange rate factors and widening spread between naphtha and polymer prices. In addition, the company was faced by higher energy prices. Newer and better technology allows TVK to compete more successfully in export markets. Overall capacity utilisation in Q3 showed a downturn of almost 6% against Q2 2011 due in main to the deteriorating market circumstances and short term breakdowns. However, capacity utilisation in Q1-3 2011 showed an increase of over 3% mainly because a planned turnaround at several plants took place at TVK in Q2 2010. In the period July-September 2011 TVK's polymer production and sales were down 3% and 4% respectively, than in the previous quarter. Regarding the composition of the polymer sales, the share of polypropylene was up by 2% and HDPE was down by 2%.

Petrochemia-NIS

NIS and Serbia's Minister of Economy signed a strategic partnership agreement in November last year related to

higher production efficiency and the financial stability of HIP Petrohemija at Pancevo. The agreement also involves a restructuring of Petrohemija's debt towards NIS, Srbijagas and others, which will result in NIS becoming the largest shareholder in Petrohemija (33.6%), followed by the government and other institutions.

The agreements with NIS will allow Petrohemija to cover the losses accrued through feedstock purchases which will enable the plant to increase operations close to full capacity. The Serbian government has moreover pledged €62 million for 2012 and 2013 for increasing the capacity of the HDPE and LDPE plants at Pancevo.

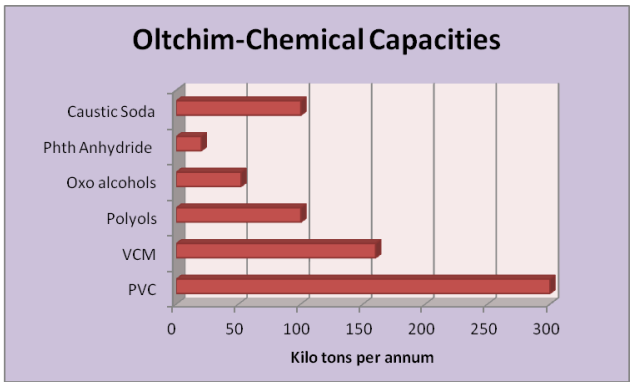


NIS is expanding its refining capacity to 4.8 million tpa, which will be enough for the Serbian market and export to the Balkans, and also will help in providing feedstocks for Petrohemija. Naphtha capacity will rise by a third to 638,000 tpa which will allow an increase in olefin production. Petrohemija is keen to develop polymer production in line with the plans detailed in 2010.

The main phase of the investment programme in the 2014-2015 period envisages €175 million being spent towards increasing of energy efficiency in the ethylene plant and monetisation of propylene produced by NIS and Petrohemija, including the construction of a new plant for production of polypropylene. In 2010, Petrohemija awarded SNC Lavalin the tender for the investment programme involving the reconstruction of the ethylene cracker at Pancevo. As Serbia is a non-EU member Petrohemija was required to preregister its chemicals for sale under REACH by 30 November 2010. These chemicals include ethylene and 1.3-butadiene, as well as propylene, MTBE, and C4 fraction. All products exported to the EU market in quantities over 1,000 tpa had to be pre-register. Polymers such as polyethylene and synthetic rubber were exempt from this procedure.

Oltchim could be sold in 2012?

The Romanian government will try to sell a majority stake in Oltchim by April or May next year. Oltchim's talks with OMV Petrom to buy its Arpechim refinery have not yielded results, leaving the company restructuring incomplete and forcing the government to take the decision to privatise. The government select PriceWaterhouseCooper to manage the sale in Oltchim.



Several options are possible for the sale of Oltchim, either from current minority shareholders or from complete outsiders. Romanian Commercial Banks BCR and BT could accept a debt-equity conversion with Oltchim. The two banks credited Oltchim with over 110 million lei in recent years, and have shown openness to support the company. According to the annual report at the end of 2010 Oltchim had current liabilities of €72.5 million to BCR and two months of funding of $100 million and $12.25 million to BT, who are by far the largest creditors of the plant. Oltchim has a long-term loan of €8.5 million from BT, repayable in seven years.

Other possible scenarios include PCC trying to buy Oltchim and the Russian company called TiSa which has showed interest. TiSa is reported to be a production and investment company involved in energy. It was founded in 2003 in Moscow and most probably has some state involvement indirect or otherwise. Among its shareholders are included companies Tehnopromexport, Zarubejneft and Zarubejneftegaz. The Oltchim privatisation schedule requires completion of the process on 30 April 2012, but it will require some clever negotiations for this to happen.

Oltchim, Jan-Sep 11

Oltchim deepened its losses in the third quarter of 2011, accounting for a net loss of 109 million lei (€25.6 million) compared with one million lei in the same period last year and 67 million lei in the second quarter of this year. Oltchim recorded the twelfth consecutive quarter in which the company has incurred losses, even though it has targeted a profit every time for the past two years. For this year, the management company expected to obtain a

profit of 2.1 million lei (about €0.5 million), but after the first nine months of the year had lost almost 180 million lei (€42.7 million). In 2010 the company recorded a loss of 223.3 million lei (€53 million).

Central-SE European refining

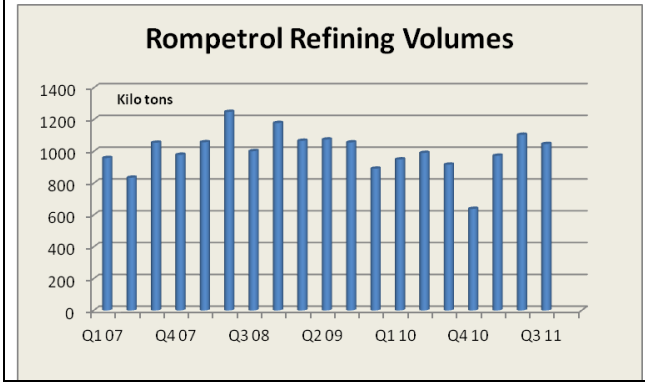
Unipetrol closed its Paramo refinery in December due to low refinery margins. The shutdown of the middle distillates unit is expected to last until March 2012. The atmospheric and vacuum distillation unit will also be suspended, although the production of bitumen and lubes is not affected by these shutdowns. The refinery, which has a capacity of 1 million tpa of crude, produces diesel, naphtha, lubes and bitumen.

LUKoil aims to revive output at the Bourgas refinery in the near future at levels of around 80% of capacity. By May the company aims to operate in full compliance with Bulgarian legislation. Earlier in 2011, LUKoil Bulgaria had been failing to pay its taxes leading to a retraction of operation licenses for LUKoil Neftochim.

As far as the Bourgas refinery is concerned, LUKoil's role is essential not only to current operating rates but also future modernisation. One of the main projects under consideration is the construction of a hydrocracking unit. Technology licences have been agreed with Axens, Technip, and Bourgasnefteproekt, but all depends on LUKoil's continued involvement at Bourgas. As far as petrochemicals are concerned there are no imminent signs of restarting the facilities which have been idle since 2009.

Rominserv, the general contractor of the Rompetrol Group, has successfully completed construction and assembly operations on two new units on the Petromidia platform and has began pre-commissioning and start-up activities.

The two new units are part of the capacity increase at the Petromidia refinery up to 5 million tpa, involving investments amounting to over $264 million. The mild hydrocracker unit has a capacity of 1.7 million tpa and will enable both the Euro 5 gasoline production increase and the supply of product with low sulphur content for the catalytic cracker unit. Another major project for the refinery capacity increase is the new hydrogen plant for the sulphur extraction from crude oil.



Oltchim is one of the largest companies in Romania, with turnover of 1.26 billion lei in January-September 2011 (€300 million) which is 38% higher than same period last year. Despite the increase for the first three quarters the company was faced in the third quarter with a decrease in sales by 7% to 342 million lei (€80.3 million). In the third quarter this year, Oltchim suffered operational losses of 62 million lei (€14.6 million).

One saving grace for Oltchim is that the state still owns a majority stake, and with elections in 2012 is sensitive to bankruptcy. Oltchim's leadership hoped that after restarting the Arpechim cracker that it would be able to regain profitability. However, only a small part of the petrochemical complex has been restarted due to a lack of funds and the only trend lately seems to have been one of lay-offs.

Chemicals

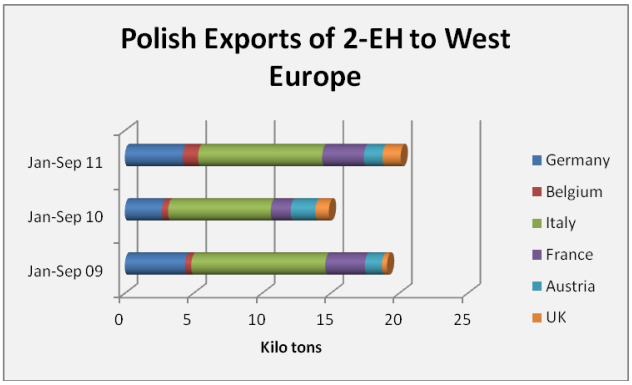
Polish gas contracts

PKN Orlen has targeted imports 7-8% of its natural gas consumption this year from Germany via the new pipeline connections. Orlen, which is also Poland's largest gas consumer, has agreed to buy 90 million cubic metres of gas from RWE Supply & Trading and Polish gas trader Entrade Grupa. The expansion of the transmission capacities in Lasów on the Polish-German border, has made it possible to diversify natural gas supplies for PKN Orlen. With the new transit capabilities, the group can start building trade relationships with new suppliers and take advantage of liberalisation in the Polish gas market.

ZA Pulawy signed an agreement with Entrade Group in December for gas deliveries in 2012. Until now the sole supplier of gas to ZA Pulawy has been PGNiG. ZA Pulawy is the third largest gas consumer in Poland and the contract with Entrade could cover around 5% of annual demand for gas. Tarnow group member ZAK will able to source gas from outside of PGNiG through spot deals and contracts. However, ZA Tarnow does not expect to diversify its gas sources and has already signed gas contracts with PGNiG for 2012 totalling zl 456.9 million. The highest amount purchased by ZA Tarnow is apportioned to the supply of high-methane gas.

ZCh Rudniki-sale yet to be decided

The struggle for the purchase of ZCh Rudniki now appears to be between Ciech and Tonaso, the latter which produces silicates in the Czech Republic. Previous bidders Dr.Woellner Holding and PCC have withdrawn from the tender. The main products of ZCh Rudniki include sodium and potassium silicate. The export share in sales of the company amounts to approximately 54% most of which goes to Europe. Ciech wants to buy ZCh Rudniki principally to extend its production chain from soda ash downwards. Current capacity is 45,000 tpa of silicates (sodium and potassium). For Ciech, ZCh Rudniki means diversification and extension of the production chain. It remains unclear when the privatisation will be completed.

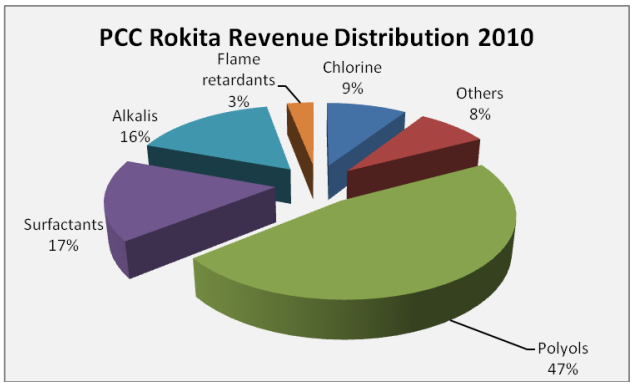


ZAK's results in 2011 exceed previous records

According to estimates ZAK's net profit in 2011 could reach zl 200 million against revenues in excess of zl 2 billion, in both cases beating previous records. Aside the improved performance as part of the Tarnow group ZAK benefited last year from high prices for both oxo alcohols and fertilisers. In the first three quarters in 2011 exports of 2-EH exceeded volumes from the same periods in 2010 and 2009. Exports account for around 30% of ZAK's total sales and there were lucrative gains last year from exchange rate fluctuations both in relation to the dollar and the euro. ZAK is one of four companies in the Tarnow group.

PCC Rokita-Air Products

Air Products has signed a long-term contract with PCC Rokita for the supply of nitrogen in gaseous form at Brzeg Dolny. As a result of the agreement, Air Products intends to build a modern gas generator plant near PCC Rokita, which will produce high-purity nitrogen gas to customer needs. The planned launch of the gas generator Air Products is scheduled for early 2012. The agreement signed between the companies represents a significant reduction in nitrogen acquisition costs for PCC Rokita. Air Products announced recently that it will invest more than zl 10 million in a modern plant for liquefying carbon dioxide at Tarnow.



PCC Rokita-continues restucturing

PCC Rokita has completed the process of separating the surfactants division and transferring it to a subsidiary of PCC Exol. The company wants to focus the facilities associated with the production of surfactants in one company. The new subsidiary will be more cost-effective to manage and the project investment programme easier to define. PCC Rokita has four facilities associated with the production of surfactants, which have now whole are concentrated in PCC Exol. Three of them are located at Brzeg Dolny and they were contributed in kind to the subsidiary. The fourth plant is located in Plock and was the first investment PCC Exol with the installation commissioned in the first quarter of 2011.

Polish Chemical Production (unit-kilo tons)

Product	*Jan-Nov 11*	*Jan-Nov 10*
Caustic Soda Liquid	269.8	211.9
Caustic Soda Solid	50.9	50.0
Soda Ash	962.3	920.6
Ethylene	510.5	458.2
Propylene	328.6	306.6
Butadiene	61.6	56.6
Toluene	53.5	89.6
Phenol	37.7	31.3
Caprolactam	149.9	144.2
Acetic Acid	7.2	8.4
Polyethylene	335.7	331.6
Polystyrene	121.1	128.8
PVC	265.9	180.8
Polypropylene	229.3	222.3
Synthetic Rubber	169.4	149.6
Pesticides	19.8	19.1

Surfactants only comprise a small share of total sales by PCC Rokita, but at the same time represent a product group of significant potential. PCC Rokita is preparing for a comprehensive investment programme aimed at a reduction in electricity consumption and CO2 emissions. The planned investment also concerns the modernisation of the membrane electrolysis plant which will bring further savings in the form of a reduction in final energy consumption by about 8% and CO2 emissions by about 14%. The aim of the company is also the elimination of mercury electrolysis plant.

Polish caprolactam technology to be exported to SE Asia

ZA Pulawy and ZA Tarnow have signed a joint agreement on the possible formation of a company located in south-east Asia aimed at technology transfer for caprolactam. The proposed installation is to be built in China or Taiwan and produce a minimum of 120,000 tpa. The location should provide a favourable opportunity to obtain raw materials and energy, thus ensuring competitive production costs. Other factors include the possibilities for selling ammonium sulphate on the local market. The choice of this region is dictated by growth rates of demand for caprolactam, for which in China is 8% against 3% on average for the rest of the world.

ZA Pulawy has been active in the Chinese market for many years in caprolactam exports. By building its own plant ZA Pulawy would be closer to local market outlets and will also bypass customs. ZA Tarnow sells caprolactam on the European market, but is less involved in Asia and this cooperation could lead to opening new markets.

Ciech-electricity agreements

Ciech signed agreements in late 2011 with ENEA-SA for the purchase of electricity in 2012 for subsidiaries Ciech Soda, Zachem, Organika-Sarzyna, Alwernia and Vitrosilicon. The agreements cover about 454,000 MWh which will be supplemented with its own electricity production of 450,000 MWh from power plants owned by Group companies Last year Zachem signed an annex to the agreement of 29 July 2010, entered into with Prochem for the construction of the epichlorohydrin unit from glycerine. Completion of the investment is planned for 2012, with part of the financing made through EU funds.

NCHZ & Spolchemie

Novacke chemical zavody (NCHZ) looks to have been taken over by Czech company Via Chem Slovakia. The Via Chem Group has had its controversies in the past and is some way from being finalised. However, if completed it would create indirect links with Spolchemie where Via Chem is a major shareholder. So far the regional court in Trenčín in Slovakia has approved the sale of NCHZ to Via Chem, after creditors of NCHZ could not agree whether it would be better to sell to businessman Miroslav Remeta, who offered €2 million. Neither potential purchaser promised to maintain the jobs of about 1,500 people who currently work for NCHZ.

Exports for Spolchemie increased in revenue by 40% in the first three quarters in 2011 over the same period in 2010. In the period January-September 2011 Spolchemie's exports were worth Kc 3.5 billion or a billion crowns more than in 2010. The company has also established itself in new markets.

The largest customer for Spolchemie is Germany, where products worth Kc 1.3 billion were shipped in the first three quarters in 2011. Spolchemie doubled exports to Poland last year and increased sales more than four-fold to the Netherlands for the same period. The main product driver of exports were epoxy resins, especially for customers in the construction industry, manufacturers of wind power plants and producers of protective and decorative coatings.

Deza-reduced emissions

Deza launched an investigation last year into its environmental performance after the Arnika group published very negative findings about the chemical plant in eastern Moravia. The company has pledged to reduce the emissions of naphthalene and benzene. In 2009 the plant produced 6,057 tons of benzene, but with production doubling in 2010 so did emissions of this substance increase two-fold to 9,200 tons. The company managed to reduce levels in the 1990s, and to a large extent had removed the problems inherited from the communist era. In the future, the management of Deza has pledged far greater restrictions on hazardous substances in the air due to last year's reconstruction of the naphthalene reservoir. As a result the chemical plant expects naphthalene emissions to be reduced in 2012 by up to 90%.

Chimcomplex receives support for energy

The Romanian Government has approved the funding request submitted by Chimcomplex for a project to improve energy efficiency in membrane electrolysis. The project will be financed from the European Regional Development Fund (ERDF), which is designed to support investments in energy savings. The entire project is worth about 55 million lei, of which financial grants account for 18.4 million lei and the applicant's contribution will be nearly 36.6 million lei. This will be provided from its own funds and bank loans, the latter of which will account for most of the project.

RUSSIA

Russian gas feedstock & petrochemical projects

Russian Chemical Production (unit-kilo tons)

Product	*Jan-Nov 11*	*Jan-Nov 10*
Acetic Acid	126.6	145.0
Ammonia	12,347.5	11,700.0
Benzene	1,017.7	977.4
Butanols	185.7	227.4
C Black	666.3	605.8
Caustic Soda	913.4	959.5
Ethylene	2,254.9	2,164.0
Methanol	2,709.3	2,649.5
PET	360.0	274.8
Phenol	206.9	215.2
Phthalic Anhydride	86.9	94.2
Polyethylene	1,412.1	1,421.4
Polypropylene	627.2	582.6
Polystyrene	284.8	257.3
Propylene	1,112.9	1,105.3
PVC	518.1	499.9
PVC plasticizers	18.3	84.2
Soda Ash	2,584.1	2,464.3
Styrene	442.9	438.6
Synthetic Fibres	0.0	96.6
Synthetic Rubber	1,170.5	1,096.2
Urea	5,266.5	5,181.4

SIBUR's integrated Yamal gas processing network

SIBUR completed and commissioned a key loading rack at Noyabrsk in the Yamal region in November for transporting natural gas liquids and completing the chain between the gas processing plants. This has helped create a fully integrated network in the Yamal region linking four gas processing plants, allowing the transportation of products from associated gas which ultimately end up at Tobolsk. The terminal capacity at Noyabrsk when fully operational will reach 1.5 million tpa of NGLs. The next step in SIBUR's programme for Yamal includes concluding the construction of the Vyngapur gas processing plant, increasing capacity to 2.4 billion cubic metres per annum of associated gas. Completion of construction and commissioning of the Vyngapur GPP is scheduled in summer 2012. The significance of the programme in Yamal is that it will allow SIBUR to increase the security of supply of raw materials produced in the region, whilst also supplying more feedstocks to other petrochemical plants.

The first phase of SIBUR's programme was undertaken in 2009, including the reconstruction of Vyngapur Gas Processing Plant which had previously operated as a compressor station. Another feature comprised the construction of a product pipeline length of about 90 km, connecting the Vyngapur GPP with the Urengoy-Surgut condensate pipeline. In 2010, the modernisation of the Gubkinsky Gas Processing Plant (GPP) was completed which allowed SIBUR to achieve 99% levels in associated gas processing for the first time. In 2011 a new pipeline was opened of 127 km linking the Gubkinsky GPP the Muravlenkovo GPZ 127 km, in addition to finishing the loading rack at Noyabrsk.

SIBUR considering further pipeline investment to provide feedstock base for Tobolsk cracker plans

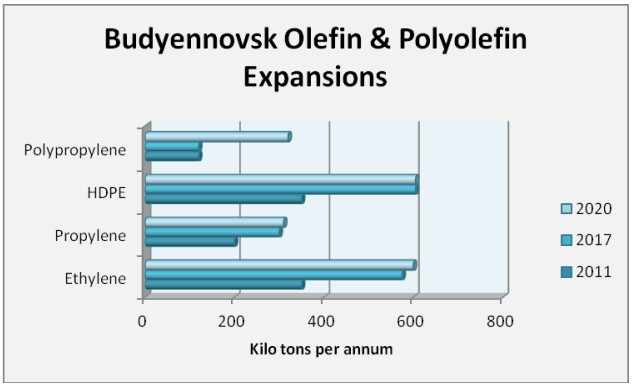
SIBUR is exploring the possibility of constructing a pipeline in the Yamal-Nenets region to transport natural gas liquids from the Purovsky condensate processing plant to the Yuzhniy Balyk Gas Processing Plant (GPP). The pipeline capacity could be designed to transport up to 4 million tpa. Novatek owns the Purovsky plant and would supply large volumes of the liquids intended for the pipeline. After transportation to Yuzhniy Balyk, the aim would be to transfer liquids to Tobolsk where SIBUR is considering the construction of a cracker with a capacity of 1.5 million tpa. The cracker would be connected to new polymer plants which would add to the polypropylene project at Tobolsk currently under construction).

The construction of the pipeline from Purovsky to Yuzhniy-Balyk has been enabled through Novatek's owner becoming the largest shareholder in SIBUR. Besides construction of new pipeline, the project involves the expansion of the existing product pipeline from the Yuzhniy-Balyk GPP to Tobolsk-Neftekhim. The total length of the product pipeline from Purovsky to Yuzhniy Balyk GPP, and then to Tobolsk-Neftekhim, covers more than a thousand miles. In addition to the intended 4 million tpa of liquids from Purovsky ZPK to the Yuzhniy-Balyk GPP, the pipeline between Yuzhniy-Balyk and Tobolsk would be capable of transporting 8 million tpa. It would mean that Yuzhniy Balyk will represent the key conduit for transporting gas liquids from SIBUR and Novatek's gas processing plants to Tobolsk. The earliest possible date by which the cracker at Tobolsk could be constructed is 2017, and this may well be extended, but the feedstock jigsaw is gradually coming together that would provide the liquids to undertake such projects.

LUKoil-North Caspian and Budyennovsk projects

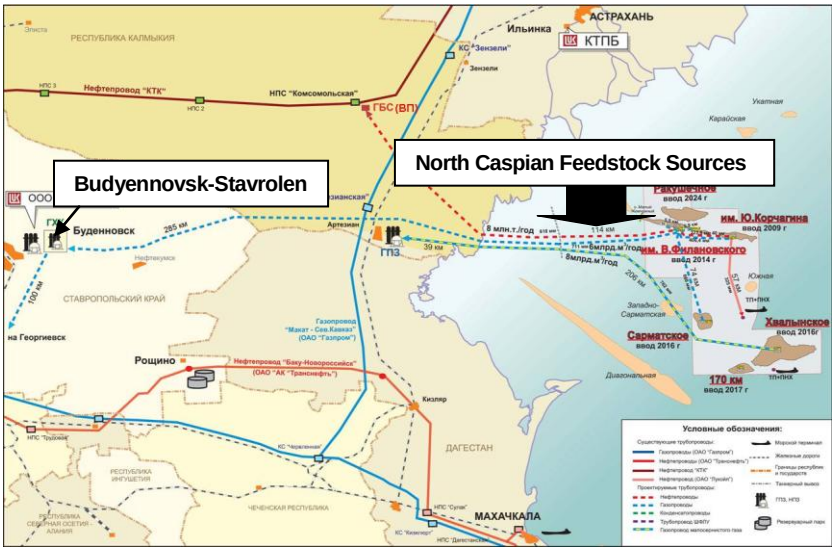
LUKoil laid the first stone in October for the new petrochemical complex at Budyennovsk in the Stavropol region, a project worth in the range of $3 billion. The complex is being designed to process gas from offshore fields in the North Caspian Sea, connected by pipeline. The complex is has been targeted by LUKoil to start production

in the 2015-2016 period and will comprise 600,000 tpa of ethylene. This is about a third lower than planned originally, but the existing cracker will be converted from a naphtha base to gas as part of the process.



LUKoil intends to construct three gas pipelines with a total length of 583 kilometres, to link the new gas-chemical complex at Budyennovsk with its feedstock source from the North Caspian. Construction of the gas processing complex will comprise the capacity to process of 5 billion cubic metres of gas per annum. Initial construction started from 20 October last year and is scheduled to start production in the period 2015-2016.

The first phase of the gas processing facility at Budyennovsk will require an estimated 32.3 billion roubles. The second phase is being targeted for 2017, and would require around 39.7 billion roubles. The third and final phase stretches up to 2020, and this will require in the range of 71.3 billion roubles. The first phase of the project includes the construction of a gas processing plant with a capacity of 2 million cubic metres per annum, coupled to the adaptation of the current Stavrolen cracker to ethane (naphtha is used at present.



The second stage of the project envisages the construction of a gas processing plant with a capacity of 4 billion cubic metres per annum, in addition to a year, construction of an ethane pyrolysis up to 225,000 tpa. Other units include 255,000 tpa of polyethylene. By 2020 and the end of the third phase, LUKoil aims to increase capacity of ethylene up to 600,000 tpa and for polyethylene up to 600,000 tpa.

An important part of the investment process is the construction of power facilities that will meet the demand from the petrochemical complex and for processors and small companies located in the Budyennovsk Technopark. LUKoil-Stavropolenergo is planning a project to build a combined cycle plant at Stavrolen based on dry stripped gas extracted from the North Caspian Sea. The cost of its implementation has been estimated at 7.7 billion roubles. The project will not only ensure a reliable supply of electricity and thermal energy to Stavrolen at present and in future based on expanded capacities. According to the schedule, the project will be introduced before the end of the 2013.

The third phase construction of the complex planned to build plants for the production of polypropylene capacity up to 200,000 tpa and construction of gas processing in the chemical products. The concept to create an industrial park in Budyennovsk involves new business projects for the production of finished products from raw materials produced by Stavrolen which will create by 2020 more than 6,000 jobs in the eastern zone of the Stavropol region. In terms of pipelines, the first 365 kilometres will start from the point of landfall, and link up with the Stavrolen site at Budyennovsk. The second pipeline will comprise Stavrolen-KS George, which will it stretch 18 kilometres and the third pipeline from Stavrolen to Nevinomyssk which will have a length of 200 kilometres.

Rosneft-Nadhodka

Angarskneftehimproekt, part of Rosneft, has been selected as the chief designer of the petrochemical complex at Nakhodka for Eastern Petrochemical Company which is owned by Rosneft. The project outline is expected to be completed by the end of 2012. Rosneft has been attempting to overcome local opposition to its refinery and petrochemical project in the Nakhodka region, and may have allayed some of the fears. Originally, Rosneft planned to build a refinery in the Partizansk district of Nakhodka with a capacity of 20 million tpa to be linked to the ESPO pipeline. However, the project was revised due to a number of factors. One of these included the

necessity of Rosneft to take into account the commercial component of the ESPO pipeline capacity in the new environment.

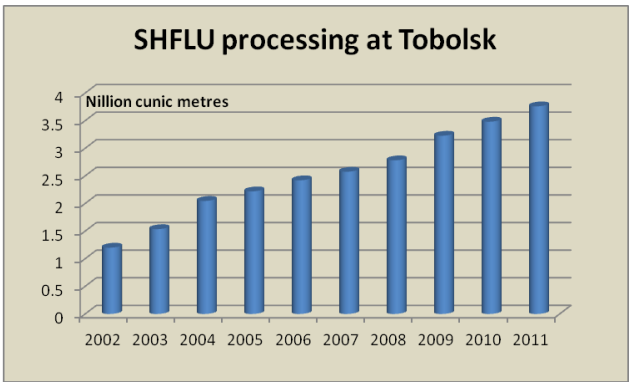
Nakhodka Complex
Ethylene
Propylene
Butadiene
Alpha Olefins
Butene-1
Hexene-1
MEG
Polyethylene
Polypropylene

The current project envisages processing naphtha in the first stage of operations, and oil and gas condensate in the second stage to be extracted from Sakhalin. As part of construction, the project management needs to take such factors into account of earthquake possibilities and to strengthen structures accordingly. If the project does not comply 100% with the safety standards, the authorities have warned that the permit to operate will not be granted. Rosneft's existing petrochemical complex Angarsk Polymer Plant in the Irkutsk region was constructed in the 1970s with a military purpose in mind and ecological concerns largely ignored. However, the Nakhodka project is completely different in that is being constructed purely for modern day consumer products in addition to awareness of environmental issues. The majority of the derivative production planned from the Nakhodka complex is intended for export.

Feedstock & Petrochemical Markets

Tobolsk-Neftekhim-NGLs increase

Processing of natural gas liquids at Tobolsk-Neftekhim totalled 3.76 million tons in 2011, 8% up on 2010 and consistent with the annual increases at the gas fractionating plant over the past decade. Ongoing project construction of units at Tobolsk-Polymer for propylene and propane dehydrogenation, coupled with a polypropylene unit of 500,000 tpa, is expected to be completed in 2013. Part of the propane produced at Tobolsk-Neftekhim will be sent to nearby Tobolsk-Polymer for the production of polypropylene.



The project for building a second gas fractionation plant at Tobolsk-Neftekhim has been approved by SIBUR. The new facility will be designed to be capable of processing 2.8 million tpa of gas liquids, raising total capacity to 6.6 million. The plant will be served by raw materials being made available from oil companies which are attempting to reach levels of 95% utilisation for associated gas. Completion of the project is scheduled for late 2014; the expansion of gas fractionation facilities is part of SIBUR's plan to develop the gas-chemical industry in West Siberia.

Russian Ethylene Production (unit-kilo tons)

Producer	*Jan-Nov 11*	*Jan-Nov 10*
Angarsk Polymer Plant	177.4	179.0
Kazanorgsintez	345.3	342.5
Stavrolen	317.9	289.3
Nizhnekamskneftekhim	546.9	539.4
Renova-Orgsintez	51.4	47.8
Gazprom NS	237.1	207.2
SIBUR-Kstovo	226.5	200.6
SIBUR-Khimprom	31.6	29.8
Tomskneftekhim	226.5	214.5
Ufaorgsintez	94.2	88.7
Total	2254.9	2138.7

Russian ethylene supply, Jan-Nov 2011

Russian ethylene production totalled 2.25 million tons in the period January-November 2011, which was 116,000 tons more than the same period in 2010. The largest increase was recorded at Gazprom Neftekhim Salavat. Overall, Kazanorgsintez is still struggling to increase capacity rates, but did receive more feedstocks in November allowing a slight hike in production. To supplement ethane the company is buying propane-butane fractions. Stavrolen at Budyennovsk increased production volumes in 2011, but was then forced to suspend olefin production in mid December due to an accident at the cracker. It could be several months before production restarts. Stavrolen is the second largest Russian producer of HDPE, after Kazanorgsintez, and the third largest producer of polypropylene after Nizhnekamskneftekhim and Tomskneftekhim.

Russian propylene domestic sales

Russian plants produced 102,600 tons of propylene in November, 4% more than in October. Omsk Kaucuk has launched the columns for the separation of propane-propylene fractions in relation to the new polypropylene plant, whilst Stavrolen increased production by 54% after a stoppage for maintenance in October. At the same time SIBUR-Khimprom reduced production and was forced to purchase monomer on the market. From January to November Russia produced 1.1 million tons of propylene which was about the same as in 2010.

For the period January-November 2011 Russia supplied 166,800 tons of propane-propylene fractions to domestic consumers, which is 35,900 tons less than the same period in 2010. Reduced demand was due to the launch of the propylene unit at LUKoil-NNOS at Kstovo in December 2010, which diverted some consumers of propane-propylene fractions. The main suppliers of fractions include Slavneft-Yanos, Omsk oil refinery and TNK-BP at Ryazan, whilst the main consumers include Samaranefteorgsintez and Moscow oil refinery for cumene and polypropylene respectively.

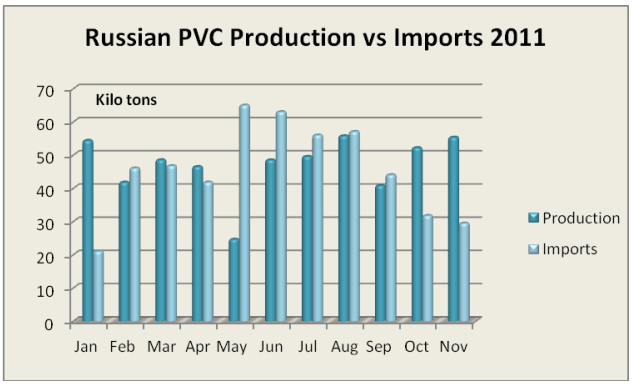
Russian exports of propylene totalled 41,200 tons in January-November 2011, 15% higher than the same period in 2010. During this period, Romania purchased 14,400 tons from Russia, Poland 13,300 tons, Belarus 12,000 tons, and Turkey 1.500 tons. Export availability has been helped by the start-up of the LUKoil propylene plant at Kstovo, producing 91,200 tons of propylene in the period January-October 2011.

Stavrolen ethylene outage

The accident at Budyennovsk in mid-December was the third of its kind in the past seven years, and on each occasion ethylene and propylene production was affected. This time the accident occurred at the facility for the production of ethylene, which affected other parts of the Stavrolen complex. Production has been temporarily halted and may not be fully resumed until April. Initially, it was thought that production could be resumed in a few weeks thus impacting slightly on polymer markets and may actually helping towards reducing over-stocked warehouses. However, the outage looks more significant now and looks likely to affect export activity in polymers and tighten up benzene and propylene markets inside Russia.

The cause of the fire at Budyennovsk has been attributed to leaking fuel mixture, which occurred in one of the shops for ethylene production. As a result of the incident nine people were injured. The total area of the fire covered about a thousand metres. LUKoil is covered for damage for full replacement value by Kapital Insurance and could cost in the range of $25 million to repair. In January 2008 n accident at Budyennovsk took place in the reactor for polypropylene, leading to three fatalities, and another major incident took place in December 2004 leading to several workers being hospitalised,

Bulk Polymers



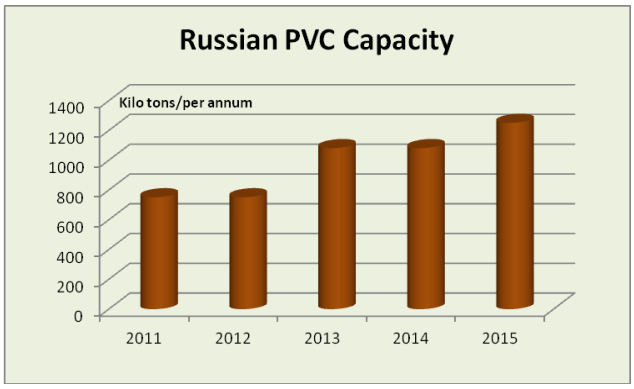
Russian PVC market

PVC consumption in Russia rose at a much slower rate in the second half of 2011 than in the first, a trend which has created supply side bottlenecks as traders attempt to reduce stocks in warehouses. In the first four months of 2011, PVC imports into Russia doubled against the same period in 2010, whilst domestic production was up slightly due to stable ethylene supply. The demand side changed started to change in May 2011 when processors started to incur problems with payments from consumers. This led to a reduction in purchases which resulted in trader bottlenecks, etc.

In 2010 the Russian PVC market increased 35% over 2009, but growth in 2011 has proved to be much slower. In the first three quarters of 2011 consumption rose 16% to 849,700 tons, but that includes a declining trend from May onwards. To compensate for the lack of domestic production Imports rose 37% in the period January-September 2011 to 441,300 tons of which 379,000 tons comprised suspension grade. Imports from the US increased 2.2 times and totalled 186,200 tons in the first three quarters in 2011. The major suppliers from the US included Oxy Vinyls with 68,790 tons against 10,000 tons in 2010, Shintech 52,960 tons against 24,280 tons in 2010, and Georgia Gulf with 23,180 tons against 10,200 tons.

Deliveries of PVC from South-East Asia to the Russian market for the first nine months of 2011 increased by 7% over 2010 and amounted to 129,000 tons. China supplied 98,000 tons of this total against 93,600 tons in 2010. Logistical difficulties in supplying product on time from South East Asia pushed traders towards buying more product from the USA. The major suppliers from China and South Korea included Tianye Foreign Trade which accounted for 45,700 tons of PVC against 48,400 tons in the same period in 2010; Xinjiang Zhongtai 38,500 against 31,000 tons in 2010) and LG Chem 13,000 tons against 21,000 tons.

Imports of PVC from West Europe dropped 2% to 99,000 tons in the period January-September 2011. The leading supplier was Vinnolit which provided 33,400 tons against 28,800 tons in the same period in 2010. This was followed by Ineos with 26,100 tons against 28,000 tons in 2010, whilst other suppliers included Solvin and Vestolit. The start of production at Kalush in west Ukraine in June 2011 added to the competition for PVC sales in the Russian market. Although well placed logistically, Karpatneftekhim at Kalush has developed its presence slower than anticipated in the Russian market primarily due to less activity from the traders in the second half of the year.



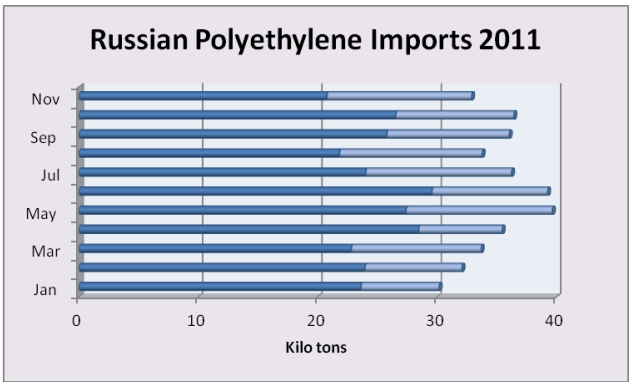
RusVinyl project update

The Nizhny Novgorod administration approved benefits worth more than 5 billion roubles to the RusVinyl project in late December, including the offset of interest on commercial loans amounting to 274 million roubles for five years. The agreement on granting of privileges must be approved by the legislative assembly of Nizhny Novgorod region. Other benefits include tax credits.

Towards the end of last year RusVinyl received the first batch of large-scale equipment for the construction of the PVC plant at Kstovo. Storage tanks for VCM were transported by water, keeping in line with the project schedule. The new PVC plant represents the most significant addition to Russian PVC capacity in the next three to four years.

Solvay is concerned over the infrastructure position for the RusVinyl project, and has had to incur additional costs for railway connections. Russian Railways has refused to pay for the rail link to the plant under construction even though it is to benefit from the transhipment of products for which the jv will have to pay normal transit rates. The infrastructure needs to be expanded as the current Zeletsino station is thought to incapable of coping with the additional flow of goods when the RusVinyl complex is completed. Russian Railways is unwilling to support the costs directly and has referred to similar scenarios involving other companies where investments were made on formula basis allowing repayment over a set period.

RusVinyl expects to see the emergence of a local cluster of processors after the PVC plant starts production in 2013, and could quite easily account for 45-50% of output. The cluster could conceivably comprise processors involved in mouldings, pipes, waterproofing membranes, stretch films, etc. One large window profiler could be capable of consuming in the range of 20-30,000 tpa of PVC, highlighting that the prospects for local consumption are quite considerable and there may not be much availability for other parts of Russia.



Russian HDPE market

The Russian market for HDPE rose strongly in 2011 with demand met from a combination of domestic production and imports. Consumption has been rising quicker than domestic production resulting in a continued inward flow of imports. In the first nine months of 2011 Russian production of HDPE increased by 5% versus the same period of 2010, whereas polymer consumption rose 18%. In 2010 production was helped by the introduction of a new producer Gazprom Neftekhim Salavat but in 2011 higher volumes were down to higher utilisation at existing facilities.

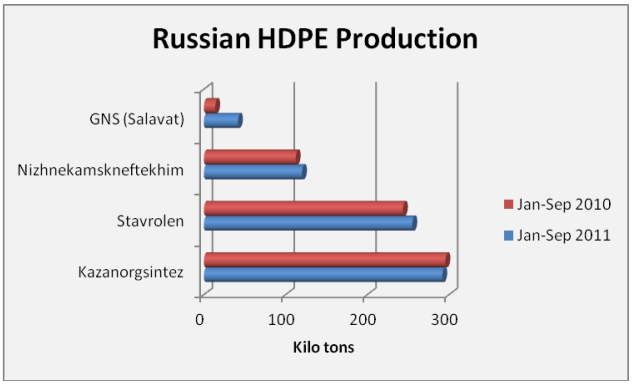
Kazanorgsintez remains the leader in the domestic production of HDPE, although its share in the country's total output decreased to 41% in 2011 against 45% in 2010. The lack of ethane and ethylene is the main restriction facing Kazanorgsintez, with the plant running at 67% last year. As a result, for the first nine months in 2011 Kazanorgsintez produced 10% less HDPE than during the same period of 2010.

Stavrolen, by contrast, achieved close to full utilisation in the first three quarters in 2011 before undergoing a shutdown in October. The outage in December, which will take several months to repair, will impact the HDPE market in Russia and prices have already started to rise. Nizhnekamskneftekhim ran at 80% from January to

September before taking a shutdown in October, but the plant alternates with LLDPE production. Gazprom Neftekhim Salavat faced a number of outages in 2011 which restricted utilisation and production volumes.

In the first three quarters in 2011 Russian consumption of HDPE increased against 2010 by 21%, whilst production rose only 5%. Exports declined in 2011 whilst imports increased 35%. The import share of total consumption rose to 29% against 26% in 2010. The geographical origins of imports changed slightly in 2011, with West Europe witnessing its share declining from 60% in 2010 to 47% whilst deliveries from Asia rose from 29% to 37%. Central and South East European sources rose from 9% to 10% whilst the Middle East (mainly SABIC) increased its share from 2% to 5%.

In terms of application HDPE usage in pipe production rose 1.6 times in 2011, whilst blow-moulding usage declined by 19%. Although the design capacity of Russian companies is sufficient to meet the full demand of domestic consumers, in practice this is much harder to achieve due to planned and unplanned outages and the lack of production of certain grades. Thus, imported HDPE is not expected to disappear from the domestic market in the near term whilst processors require special grades which do not have Russian equivalents.



The impact of the Stavrolen outage could become more noticeable if demand is strong in the early spring and could result in more imports flowing into the country. The Russian plastics converter Polyplastic Group is reviewing its strategy and has identified a pool of resources and suppliers that are able to compensate for the supply of raw materials from Stavrolen. The capacity of the HDPE plant at Budyennovsk is 300,000 tpa, and polypropylene 120,000 tpa. In January-November 2011 Stavrolen produced 268,000 tons of HDPE and 116,000 tons of polypropylene.

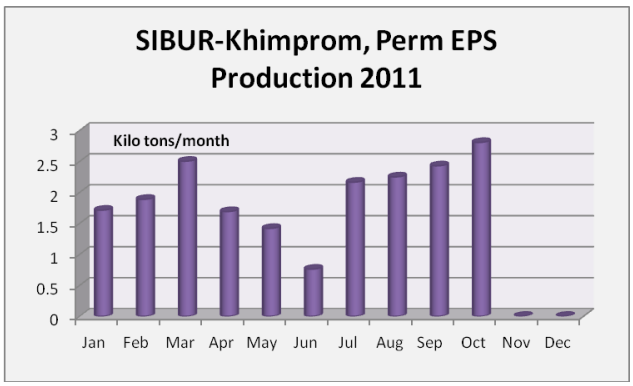
Novy Urengoy LDPE project

In the latter part of 2011 Novy Urengoy Gas Chemical Complex started talks to raise a five year club loan for $270 million in order to complete the final stages of the ethylene-polyethylene plant. The deal involves the Bank of America, Merrill Lynch, WestLB and HSBC. Funds have been sought to finance the remaining part of the capital expenditure under the guarantee of Gazprom. The decision to build the gas-chemical complex was adopted back in 1993, but has been disrupted on numerous occasions due to lack of funding.

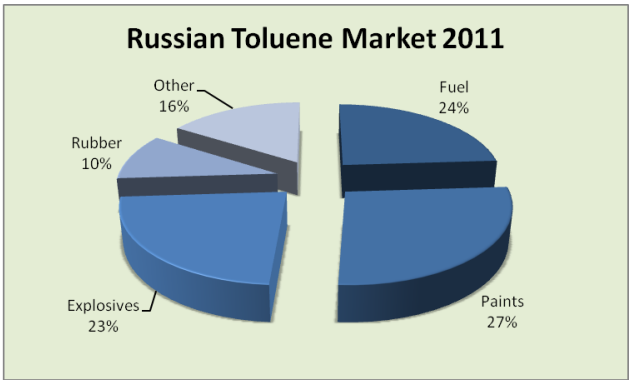
Kuznetsk Steel continues to supply steel structures for Novy Urengoy Gas Chemical Complex and construction is now well advanced. In part this is due to the loan obtained in September 2009 from the Russian bank VTB worth $400 million. This was followed by two loans worth about $750 million from JP Morgan and Deutsche Bank. The Novy Urengoy plant is expected to start production in 2013 with a capacity of 400,000 tpa of LDPE. The second and larger stage of the complex is under review, which could see polyethylene capacity rise to 1.2 million tpa.

SIBUR-Khimprom, 2nd EPS unit

Having been successful in its first EPS project SIBUR-Khimprom now aims to launch a second line for the production of expandable polystyrene in the second quarter in 2012. The capacity of the new plant is 50,000 tpa, adding to the first unit of 50,000 tpa introduced in 2011. The new plant gradually increased production throughout 2011, producing 19,620 tons in the period January-October.



Despite the significant increase in the production of domestic polymer, the import share in total Russian consumption of EPS remains at around 65%. The addition of the second line will, however, displace a significant share of imports from the market of which the largest source is provided from South Korea. In the first ten months of 2011 consumption of polystyrene in Russia amounted to 355,200 tons, an increase of 16% compared to the same period in 2010. With the seasonal declines felt in November and December overall consumption was 10% up on 2010.

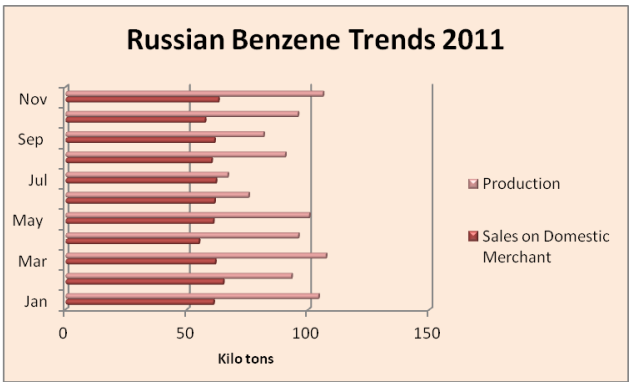


Russian toluene market 2011

Russian toluene shipments totalled 90,600 tons in January-November 2011, 12% more than in the same period in 2010. Production totalled 265,000 tons which was 12% up on January-November 2010. Volumes of consumption of toluene in Russia in 2011 increased significantly due to demand from the fuel sector. From June to October there was a significant shortage of toluene, mainly due to the fuel crisis in Russia which led to increased use of high-octane additives and demand for toluene. The consumption of toluene in the fuel sector increased by 43% in the period January-November 2011 against the same period in 2010..

Extra demand for fuels has impacted on supply elsewhere causing a deficit, and prices rose sharply last year. Toluene is produced in Russia at refineries and coking plants including Kirishinefteorgsintez, Ufaorgsintez, the Omsk oil refinery, Gazprom Neftekhim Salavat, LUKoil-Permnefteorgsintez Chelyabinsk MC, Severstal, etc. All of toluene produced in Russia is consumed in the country.

The main consumer of toluene in Russia is industrial explosive manufacturer Promsintez at Chapayevsk. The second largest consumer of toluene is Nizhnekamskneftekhim using this product as a solvent for rubber, followed by another manufacturer of explosives FSE Zavod Sverdlov and Zagorsk Paint Plant.



Russian benzene market, Jan-Nov 2011

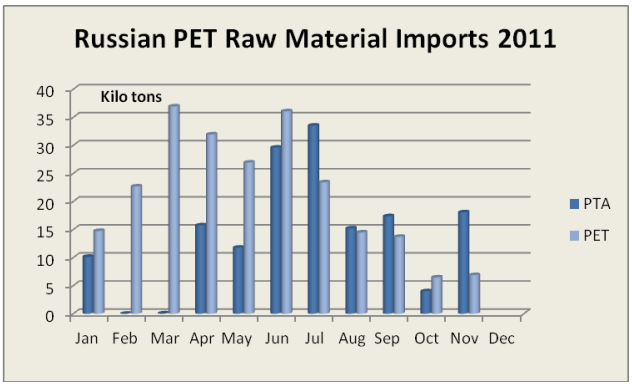
The restart of the West Siberian Metallurgical Plant has helped increase benzene availability on the domestic market. In November, Russian producers shipped 63,000 tons to the domestic market which is 5,600 tons more than in October. In addition, Koks at Kemerovo increased shipments of the product by 4.7 times to 2,800 tons due to the repairs having been finished on the benzene separation unit. Moreover, petrochemical producers Stavrolen and Nizhnekamskneftekhim restarted after October outages. Shipments from the Omsk oil refinery dropped slightly offsetting the additional production from other sources.

In the period January-November 2011 domestic merchant sales of benzene totalled 669,300 tons which was 3% less than in 2010. The largest buyers included Kuibyshevazot (18% of gross consumption), Azot Kemerovo (17%), Omsk Kaucuk (9%), Shchekinoazot (9%) and Samaraorgsintez (9%). In November, Kuibyshevazot reduced purchases of benzene by 11%, to 12,160 tons of which 2,390 tons were imported from Ukraine and Kazakhstan. The main suppliers of benzene to Kuibyshevazot were Stavrolen (4,510 tons), Yasinovsky Coke in Ukraine (2,200 tons), Omsk oil refinery (2,170 tons) and Slavneft-Yanos (1,330 tons).

The unplanned shutdown of the Stavrolen cracker from mid December onwards is expected to tighten benzene supply in January, February and March and maybe even later until the plant restarts production. After the accident the last batch of benzene from Stavrolen was shipped by rail to Kuibyshevazot and SIBUR-Khimprom. Given that the average monthly volume of shipments of benzene from Stavrolen on the Russian market amounts to 6,500-8,000 tons the non-activity of the plant bears a direct influence on the market in terms of availability and prices. The spot market showed signs at the end of December that prices were starting to climb upwards and this trend is expected to continue in January.

Russian PET raw materials

From 1 January 2012, PTA imports into Russia will operate at 0% as of the decision taken by the Customs Union Commission on 18.10.2011. This duty will remain in place for one year, but could be extended depending on market conditions. In 2011, Russian PET imports recorded gradual declines whilst at the same time PTA imports rose. These trends were due almost exclusively to the start-up of the Alko-Naphtha PET plant at Kaliningrad.



In the MEG sector Russia's orientation towards export activity has altered significantly in the past two years. Previously large volumes of MEG were exported from Russia to Belarus, but now only constitute a small share of sales which are focused primarily on the domestic PET market. Aside PET production in Russia increasing, some MEG producers such as Kazanorgsintez and Petrokam have stopped operations due to ethylene shortages. In the case of Kazanorgsintez, all ethylene is targeted on polyethylene production, whilst Petrokam at Nizhnekamsk is unable to secure ethylene from Nizhnekamskneftekhim.

Russian PET market-possible limits on usage in beer

The Russian Federal Antimonopoly Service (FAS) issued a negative response in December to the government's draft technical regulations which prohibit the sale of alcohol in PET containers. SIBUR has argued that to include restrictions on PET for beer packaging would limit competition in the packaging sector. SIBUR also fears that Russian consumers will be misled about the consumer properties of PET packaging which might affect applications in other areas such as milk, soft drinks, etc. The FAS has written to the government opposing the new law, and also supports SIBUR stating that to ban PET from beer would give those packaging companies using glass and aluminium a distinct advantage.

Efforts are being made within the Customs Union including Russia, Belarus and Kazakhstan to impose these measures against PET and the FAS does not have the authority to block the adoption of technical regulations. Currently beer manufacturers in Russia sell nearly half of total output through PET packaging, whilst beer accounts for around 30% of preform usage. Senezh estimates that the beer market is worth around $1.5 billion per annum to PET producers. Both Belarus and Kazakhstan are looking into the possibility of replacing PET with other forms of packaging.

The argument against PET packaging for beer seems to be borne out partly due to environmental reasons and partly to social reasons in that the government believes it could restrict consumption of alcohol amongst the younger elements of the population. PET recycling is in its infant stages in Russia, and will almost certainly grow in time and thus the environmental argument is not very strong. The notion that banning PET packaging will restrict beer consumption seems to lack conviction as Russia possessed problems in this sphere long before PET was used.

The beer manufacturers are strongly opposed to this ban on PET, partly as a switch in packaging could increase packaging costs by 30-50% over current levels. Studies conducted by the chemical faculty of the Moscow State University found no evidence of harm or danger to human health through using PET bottles. Not only is it an issue of preference for non-plastic packaging, but by banning PET for beer would represent a serious one-off reduction in PET consumption in Russia. At a time when Russia is trying to develop its petrochemical industry by creating full product chains, by imposing such a ban would affect PET and beer producers alike whilst even leading to increased imports in alternative sources of packaging.

Ethan- Kabardino-Balkaria

The proposed project for a PET plant in the North Caucasus being constructed by Ethan Polymers Plant has received a major boost through financial support from the local administration of Kabardino-Balkaria. The government of Kabardino-Balkaria has revised upwards government guarantees of $1.8 billion to Ethan for the construction of a PET plant in three stages, with a final capacity of 486 000 tpa.

According government estimates the total cost of the plant is 12.3 billion roubles, including VAT. Ethan will invest 2.7 billion roubles of its own funds, with 8.1 billion roubles being made available from loan funds. The project schedule covers the period 2011-2015, with the first phase of 162,000 tpa to start up in 2013. This will be followed by a second phase in 2014 with a capacity of 288,000 tpa and then lastly in 2015 a rise in capacity to 486,000 tpa. The plant will produce PET for the food and textile industries. Swiss company Buhler has agreed to supply the equipment and technology.

Ethan's plant may face raw material difficulties when the plant starts operations. At full capacity by 2015-2016, as planned, the plant would require around 400,000 tpa of PTA and 160,000 tpa of MEG. This logistically could provide challenges. It may be difficult to source raw materials domestically. The main producer is SIBUR which already has interests in PET and may prefer to avoid supplying competitors irrespective of the huge distances involved. However, Ethan may decide to concentrate on fibres and film from PET rather than bottles which would limit the degree of competition with existing producers.

Theoretically, it could be possible to source raw materials from imports, but the most likely port of use would be Novorossiysk on the Black Sea which is around 620 km from the proposed project site near Nalchik (capital of Kabardino-Balkaria).

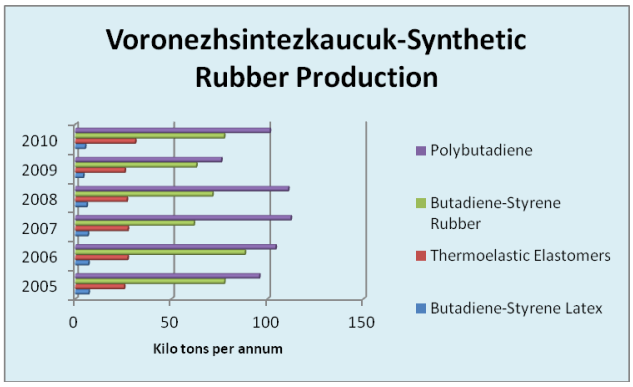
On the other hand, imported MEG is now appears to be cheaper than domestic product which may make this distance with Novorossiysk less of a problem. Overall though the project does seem dubious in terms of the location and the dependency on long haul raw

materials without direct access to ports.

Synthetic Rubber

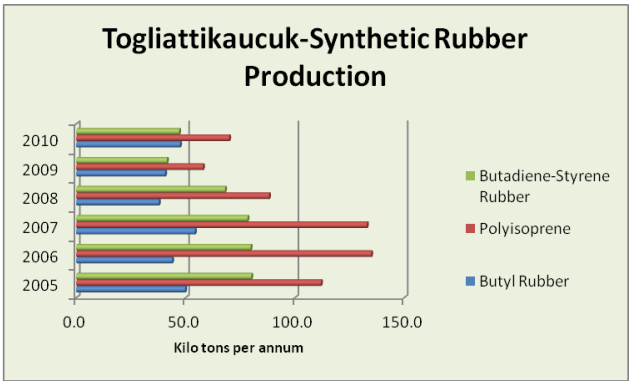
Voronezhsintezkaucuk-new thermoplastic elastomer plant

Voronezhsintezkaucuk has established a target date for the first quarter of 2013 to launch its new production unit for styrene-butadiene thermoplastic elastomer, a project worth in the range 4.7 billion roubles. The project construction is expected to be completed by the end of 2012 adding 50,000 tpa to the existing capacity of 35,000 tpa. Construction of the new thermoplastic elastomer unit began in the summer of 2011. Aside the big drop in 2009, production has been relatively stable in recent years at Voronezh, with the product categories illustrated in the graphic opposite. Other projects being undertaken by Voronezhsintezkaucuk this year include the completion of the construction of an air separation plant. The plant technology is being supplied by Air Products for the production of industrial gases.



Voronezhsintezkaucuk exported large volumes of output to other CIS countries in 2011, producing in the range of 223,000 tons for the whole year. An estimated amount of 52% of production was sold domestically whilst the rest was exported to West and East Europe, CIS, and partly Asia. Most of the production was focused on butadiene-based rubber whilst the production of thermoplastic elastomers amounted to 29,000 tons and latex 4,000 tons. The main consumers of Voronezhsintezkaucuk include the tyre industry (70% of rubber and latex 17%). Other important sectors include rubber industry (20% made of rubber), cable plants (10% of rubber produced) and materials industry (92% of thermoplastic elastomers and 18% of latex). Road-building organizations only accounted for 4% of thermoplastic elastomers produced but this is viewed as an area of significant potential.

The company is considering the establishment of a Technopark in which three areas will be developed. These could include scientific and technical activities, the supply of low-tonnage chemicals and the provision of specialised services. SIBUR is considering the possibility of entering the Technopark in some format as a consumer of products.



Toglattikaucuk-diversification options

Togliattikaucuk is looking into various options of how to expand business interests, including plans for a chemical park based around the experiences of West European chemical producers. By creating such a park could provide customers next to the plant with a number of possible synergies. Togliattikaucuk has recognised that its needs to improve the infrastructure of inward and outward shipments. Moreover, there are certain types of transport opportunity such as river transport of which the company has not made use before.

In terms of production, SIBUR Holding completed an optimisation control system last year at Togliattikaucuk. Restructuring has also taken place inside Togliattikaucuk in order to improve the efficiency and to incorporate the maintenance division Kaucukremstroy. In 2008, Togliattikaucuk closed two workshops for the production of isoprene rubber SKI-3, using isoprene monomer supplied by Novokuibyshevsk Petrochemical Company.

The monomer plant at Novokuibyshevsk has closed which has seen production volumes of SKI at Togliatti decline. The scheme of distribution of this rubber was unprofitable and significant losses were incurred. The production of isoprene rubber was transferred to another department, which now shows good economic results despite smaller volumes. At the same time, Togliattikaucuk has been able to create additional space from moving the rubber plants to allow the possibility of establishing new production units.

Omsk Kaucuk, new styrene-butadiene grades

Omsk Kaucuk produced about 2,000 tons of styrene butadiene rubber grades SKMS-30-15 ARKM in November under a new production process, designed for applications in oil-filled types of rubbers. This new type of rubber has required the purchase of stearic acid and potassium alkali; the process was started in September and October when Omsk Kaucuk underwent a shutdown. Aside new rubber production Omsk Kaucuk aims to expand its capacities for other products and improving energy consumption in production. In addition to synthetic rubber, Omsk Kaucuk has developed a process for producing isopropanol from acetone.

Russian tyre industry news

From January to November 2011 the volume of imports of car tyres into Russia increased 53% against the same period last year and amounted to 15.15 million units. The main suppliers of tyres for this period included Japan (21% of total imports), South Korea (15%), Finland (12%), Germany (9%), China (8%) and Poland (7%).

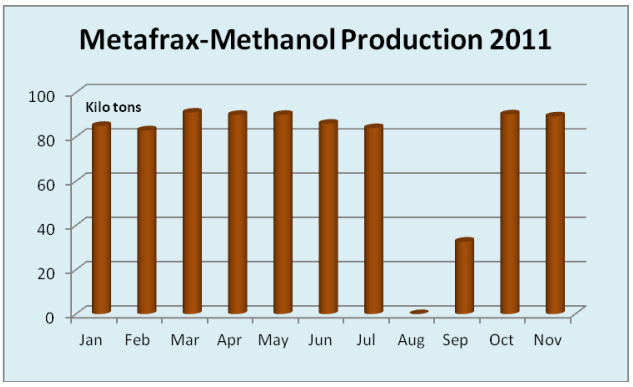
SIBUR-Russian Tyres has been granted authority to purchase Matador-Omskshina. The Omsk based tyre plant was established in 1995 between the Slovak company and Omskshina. Currently, SIBUR-Russian Tyres owns 50% in Matador-Omskshina and wants to increase its stake closer to 100%.

Continental has started the construction of a tyre factory at Kaluga. The location was selected as it is not too close or too far away from the main markets. Investment in plant construction in Kaluga is expected to amount to around €240 million. Launching the first stage of the plant is scheduled for October 2013, and the design capacity is expected to be 4 million tyres per annum.

Methanol & related chemicals

Russian methanol consumption rises in 2011

Supply of methanol to the domestic Russian market increased 21% in October over September and amounted to about 113,000 tons. According to market players, increasing shipments of methanol in the domestic market in October were due partly to the heating season and demand from gas companies. The largest domestic suppliers of methanol to the domestic Russian market remain Metafrax, Sibmetahim and Togliattiazot which accounted for 85% of total shipments in October. In the first ten months of 2011 shipments of methanol on the domestic Russian market totalled 961,000 tons, 8% up on the same period last year.



Metafrax-IPO preparations

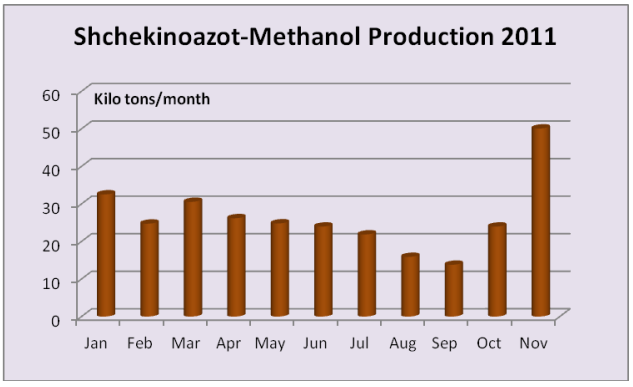
Following the announcement of plans for an IPO Metafrax has begun preparations for the restructuring of the company's assets in order to create one operating company. This may also help to increase the profitability of production, which will increase the attractiveness of holding on the eve of an IPO in 2013. This date conceivably could be pushed back depending on the financial climate. The Metafrax group of companies Metafrax brings together four chemical companies including Metafrax, Karbolit (Orekhovo-Zuyevo in the Moscow region), and the Russian-Finnish jv MetaDynea and Karbodin. It also includes several construction and transport companies.

Methanol production in January-November 2011 amounted to 879,000 tons, which was 5% lower in than the same period in 2010 due to the stoppage in August. Despite the reduction Metafrax increased its net profit by 40% over the same period in 2010 to 1.2 billion roubles. Revenues rose to 8 billion roubles which was 16% up on the previous year. Metafrax plans to initiate several major investment projects in 2012, and is considering the possibility of attracting a strategic investor for a project to build a new production unit for ammonia and urea. By

attracting a strategic investor the aim is to reduce the financial burden on Metafrax. Russian banks Sberbank and VTB have indicated interest in the project which could comprise a capacity of 600,000 tpa of urea and could take five years to construct.

Shchekinoazot-new methanol increasing utilisation

Shchekinoazot is gradually increasing production volumes at its new 450,000 tpa methanol plant. Production in October almost doubled against September, rising from 14,000 tons to 25,000 tons. Aside captive usage, Shchekinoazot shipped 4,600 tons of methanol to the domestic market which was seven times higher than in September. In November, Shchekinoazot increased production two-fold through operation of both new and old plants, although it is not clear whether the company intends to retain the latter.



Shchekinoazot has started the project of revamping the formaldehyde and hexamine units. After completion of the first stage modernisation, the company will begin production of concentrated formaldehyde with low methanol content to meet the needs of phenol resins in the jv with Hexion. The upgrade is being carried out in partnership with Industry & Project Engineering from Slovakia. Completion of construction and start-up is scheduled for late 2012.

Togliattiazot-attacks on onwership

Minority shareholders are trying to increase their stake in Togliattiazot, and not only from one source. Dublin based Eurotaz Limited is, owned by Uralkhim, is trying to secure control of Togliattiazot whilst IBE Trade Corp has also shown interest. The minorities aim to get access to participation in the management of the company. Uralkhim has applied to the investigative committee to institute criminal proceedings against the Director General of Togliattiazot. According to the statement, the manager has not provided Uralkhim documents for the extraordinary shareholders' meeting which took place at Togliattiazot on 13 September. Uralkhim believes that the cause of failure may be an attempt to hide information about Togliattiazot.

Togliattiazot has entered into several agreements with the Swiss company Nitrochem Distribution AG for the supply of urea at a price below market. This it is claimed causes material damage to Togliattiazot in addition to affecting the amount of dividends to minority shareholders. In October 2010, Togliattiazot delivered urea to Nitrochem at $200 per ton, while Uralchem delivered area for export at $270-355 per ton. According to Uralkhim the damage to Togliattiazot is calculated at 19 million roubles, and reduced shareholder dividends by 1.5 million roubles. Uralkhim owns 9.73% of shares in Togliattiazot. On the basis of 2010 data, Togliattiazot exported 67.8% of sales which amounted to 13.380 billion roubles from the total sales revenues of 19.735 billion roubles. Revenues rose 39% in 2010 over 2009.

Ammonium-Mendeleevsk

Vnesheconombank (VEB) has agreed to attract a loan worth around $1 billion for a period of 14.5 years with a number of foreign banks to finance the Ammonium project at Mendeleevsk. The Ammonium project includes a urea plant with a capacity of 717,500 tpa, in addition to ammonia and methanol and is forecast to start production by 2015. Foreign financial institutions will serve as a source of long-term funds to finance the complex. Terms of the credit agreement include the provision of financing from JBIC to VEB and the club of foreign banks led by Sumitomo Mitsui Banking Corporation and the Bank of Tokyo-Mitsubishi. These banks are providing finance under the cover of export insurance agency Nippon Export.

Uralmetanolgrup-construction to start in 2012

UralMetanolGroup plans to begin construction of the gas chemical complex at Nizhny Tagil in the second quarter of 2012. The project to build a methanol plant, worth around €300 million, will be undertaken over a three year period and is expected to start in 2015 rather than the earlier start-up target of 2013. The project documentation for the methanol plant is being developed by Haldor Topsoe.

UralMetanolGroup was created on a parity basis by Itera and UCP Chemicals AG (the main shareholder of Uralkhimplast). The project investors include the Czech Export Bank, which has already signed with a contract for almost €200 million for the construction of gas chemical complex. The methanol plant's capacity is being

designed at 600,000 tpa and is being constructed on the Uralkhimplast site. Itera will supply the plant with natural gas of around 600 million cubic metres per annum.

SIBUR sells SIBUR-Mineral Fertilisers

Siberian Business Union has acquired 100% shares in SIBUR-Mineral Fertilisers, which includes Azot at Kemerovo and Angarsk Nitrogen Fertiliser Plant. SIBUR stated that Perm Mineral Fertilisers has not been included in the deal. The transaction is subject to approval at the next board meeting of SIBUR Holding. Azot at Kemerovo provides about 80% of the supply of ammonium nitrate to agricultural and industrial consumers in Siberia and the Far East. Selling the assets is part of SIBUR's restructuring programme and concentration on main core petrochemicals. Siberian Business Union is Russia's third-largest producer of coal for power stations.

Uralchem, Russia's second-largest producer of nitrogen fertilisers is in talks with SIBUR to buy 51% of Perm Mineral Fertiliser from SIBUR to help double urea production. Uralchem values the Perm unit in the range of $550 million.

Organic chemicals & plastics

Russian DOP Market (unit-kilo tons)

	Jan-Sep 11	Jan-Sep 10	Jan-Dec 10	Jan-Dec 09
Production	47.3	56.3	78.7	72.2
Exports	0.3	1.4	1.5	5.8
Imports	7.6	9.6	14.7	0.0
Market Balance	54.6	64.5	91.9	66.4

Organic chemicals

Due to disruptions in supply of raw materials, Russian ethyl acetate producer Asha stopped production in December and aims to restart in after mid-January 2012. The plant, located in Bashkortostan, exports part of its ethyl acetate production to Finland. Domestic prices in Russia for ethyl acetate have risen due to the shortages in the Russian market.

From January to November 2011 butanol production in Russia totalled 258,000 tons, which is 1% less than the same period in 2010. The share of n-butanol in gross output in the first 11 months of the year was 64%, and isobutanol 36%. The largest producer of butanols is Gazprom Neftekhim Salavat which accounted for about 51% of gross output in the first eleven months in 2011. This was followed by SIBUR-Khimprom with 25%, Angarsk Petrochemical Company with 17%, and Azot at Nevinomyssk 7%.

Russia exported 17,200 tons of butanols in November, 48% more than in October. The share of normal butanols was 56% in November, whilst the largest amount of butanols were shipped to Finland (59% of gross exports), followed by China (37%). The main supplier of butanol to foreign markets in November was Gazprom Neftekhim Salavat with 57% of gross exports. This was followed by SIBUR-Khimprom with 26% and Angarsk Petrochemical Company with 17%. Azot at Nevinomyssk did not export in November. In the period January-November 2011 Russia exported 187,700 tons of butanols, 8% lower than for the same period in 2010. The main destination was China with 51% of shipments followed by Finland with 42%. Gazprom Salavat Neftekhim accounted for 53% of total exports.

Russian plasticizer market

The structure of the Russian plasticizer market has undergone changes in the last two years due largely to higher quality requirements and the substitution of DOP with DINP and DIDF. DOP remains the dominant plasticizer in Russia mainly due to a good position on 2-EH. For other plasticizers, however, there is a shortage of raw materials and it is easier to import DINP and other products. In the first nine months of 2011 DOP sales in Russia decreased by 16% against 2010 and amounted to 47,300 tons. Only Roshalsky Plant of Plasticizers increased production and was 18% higher than in 2010, but these figures were amplified by outages.

In the first three quarters in January-September 2011 Russia imported 7,500 tons of plasticizers, 21% lower than the same period last year. Deliveries of Russian DOP to foreign markets also fell five times and totalled only 279 tons. Whilst DOP imports have declined DINP imports increased by 55% in the period January-September 2011 and amounted to 32,400 tons. One main consumer Tarkett increased its purchase of DINP by 9,000 tons to 23,900 tons. The reduction in demand for DOP in Russia was due to the fact that one of the largest Russian consumers of plasticizers Tarkett stopped using DOP due to efforts to improve environmental performance in safety products. At the same time, the company is significantly boosting its usage of DINP.

The main suppliers of DINP to the Russian market include Evonik, ExxonMobil, and BASF. The Russian market for DINP is almost totally dependent on imports, with only a small amount of production taking place at Roshalskom Plasticizers Plant. Overall, in the period January-September 2011 DINP and DIDF consumption increased by 13,000 tons, whilst DOP dropped by 10,000 tons in the same period. The advantage of DOP is its accessibility and low cost which may preserve its position in the market. In the Russian market DOP is about 10-20% cheaper than DINP shipped from Europe.

SIBUR-Neftekhim to merge with Akrilat

SIBUR plans to merge the assets of SIBUR-Neftekhim and Akrilat, the latter which was acquired by the group last year. The decision to merge the assets, both located at Dzerzhinsk, follows the decision of the Russian Federal Antimonopoly Service to grant SIBUR-Neftekhim the right to obtain the use of fixed assets belonging to Akrilat. In July 2011 SIBUR announced that it had taken full control of 100% of Akrilat which is the sole Russian producer of acrylic acid and its esters.

Akrilat possesses capacities of 25,000 tpa for acrylic acid, 36,000 tpa of heavy ethers (butyl acrylate) and 10,000 tpa of light esters (methyl and ethyl acrylate). The production site is located in the East industrial area of Dzerzhinsk, and SIBUR provides propylene from the Kstovo complex. From July 2010, Akrilat switched to operate on a processing scheme involving the full chain of propylene, alcohols, and acrylic acid. SIBUR-Neftekhim aims to complete the full merger by the end of 2012. The production of acrylic acid and esters will become the third unit of the expanded SIBUR-Neftekhim, after the chlorine-caustic division and ethylene oxide-glycol divisions.

Inorganic & chlorine products

Russian Caustic Soda Market (unit-kilo tons)

	Jan-Sep 11	Jan-Sep 10	Jan-Dec 10	Jan-Dec 09
Production	748.0	795.7	1050.6	1094.4
Exports	146.0	192.1	242.8	240.4
Imports	33.3	33.0	49.2	15.3
Market Balance	635.3	636.6	857.0	869.3

Russian caustic soda market

Caustic soda consumption in Russia was almost the same in the first three quarters against the same period last year and amounted to 635,000 tons. Production was down, however, by 57,700 tons to 748,000 tons. Exports were affected by the start-up of production by Karpatneftekhim which reduced purchases from Ukraine by roughly half to 40,450 tons. Even so 46% of total exports from Russia were bought by Ukrainian consumers. Imports of caustic soda into Russia remained almost identical for the first nine months of 2011 against 2010, most of which was solid and almost exclusively imported from China.

Another cartel case for caustic soda in Russia has recently been opened in which the purpose was preventing competition and maintaining high prices for caustic soda. This follows the case in July 2011 when the Federal Antimonopoly Service (FAS) initiated a case against a number of traders and producers of liquid caustic. Amongst others the producers included Halopolymer Kirovo-Chipetsky, Kaustik (Volgograd), Kaustik (Sterlitamak), Khimprom (Cheboksary) and Khimprom (Volgograd). The FAS found that the companies entered into an agreement, and this in turn led to set prices for liquid caustic soda. The FAS has also reported to initiate proceedings against the producers of chlorine, chlorinated paraffin, and PVC cables.

Kaustik at Sterlitamak shipped 17,450 tons of liquid caustic soda to the domestic market in October, 37% more than in September. Major buyers included Volzhskiy Orgsintez which acquired 12% of shipments and Nizhnekamskneftekhim 10%. In the period January-October 2011 Kaustik sold 121,560 tons of liquid caustic soda on the Russian domestic market which was 37% more than in the same period last year.

Bashkhim seeks to combine assets at Sterlitamak and Berezniki

Bashkhim wants to combine Sterlitamak chemical companies Kaustik and Soda with Soda at Berezniki. It has also proposed an investment programme for the planned merger of assets covering the period 2012-2017 period**.** The main advantages of combining assets under Bashkhim include linking businesses, optimising feedstock logistics, etc, and creating a single energy source based on the Sterlitamak sites. Bashkhim aims to invest in the range of 25 billion to 35 billion roubles in the combined assets, including the expansion of PVC capacity at Kaustik up to 350,000 tpa. This expansion would require in the range of 10 billion roubles and be completed by 2017. An even larger expansion is planned for 2019 up to 670,000 tpa, but this seems slightly optimistic in view of unresolved ethylene issues.

Soda at Sterlitamak is scheduled to begin development of a new source of limestone, as well as build the station office filtering distilled liquid for 0.5 billion roubles. The company plans also to increase heavy soda ash capacity by 2014 to 1.3 million tpa. Bashkhim also intends to invest 5 billion roubles in 2017 to increase production capacity of soda ash grade B at Berezniki to 1.2 million tpa, in addition to the construction of its own energy source. Berezniki Soda Plant sold 349,300 tons to the domestic market from its total production in January-October 2011 of 422,700 tons. The main consumers of the plant include Saratovstroisteklo and BAZ Sual. Total production was expected to exceed 500,000 tons in 2011.

Belarus

Belarussian feedstock costs

Belarussian prices in the chemical industry rose sharply last year, squeezing margins and placing pressure on producers. Caprolactam and ammonia prices increased two-fold, paraxylene by 49.2%, fibres by 41.4%, and industrial gases by 39.5%. Belneftekhim increased prices for paraxylene by 95% in September 2011, the latter increase particularly harmful for Mogilevkhimvolokno.

Belarussian Chemical Output (unit-kilo tons)

Fertilisers	***Jan-Nov 11***	***Jan-Nov 10***
Potassium Fertilisers	4945.2	4821.3
Nitrogen Fertilisers	727.5	689.0
Phosphate Fertilisers	172.5	173.9
Ammonia	955.7	1205.8
Sulphuric Acid	869.6	826.9
Petrochemicals	***Jan-Nov 11***	***Jan-Nov 10***
Ethylene	131.5	124.7
Benzene	95.4	83.7
Caprolactam	120.0	115.7
Phthalic Anhydride	18.3	16.5
Polyethylene	125.7	122.5
PET	198.6	200.7

These higher prices follow measures in July by the government to impose a 31.4% increase on import duties on naphtha and aromatic hydrocarbons. These increases are the result of serious economic difficulties in the country and affect benzene, orthoxylene and paraxylene supplies. Mogilevkhimvolokno and Polymir expect to see costs rise in 2012 for polyester and ethylene production respectively.

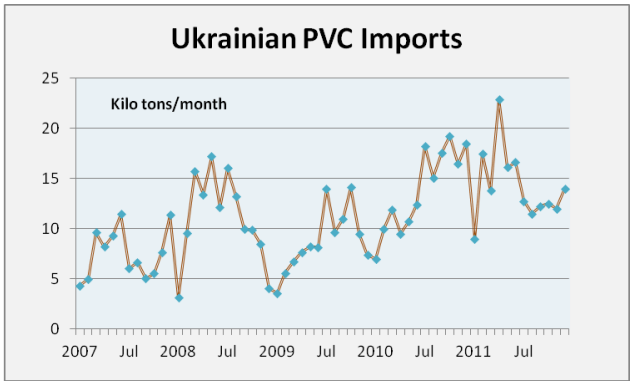
Other Belarussian chemical markets

PET production in Belarus was down slightly in 2011 despite aims of Mogilevkhimvolokno to exceed 2010 volumes. Raw material shortages have affected PET production at Mogilevkhimvolokno in the past twelve months, with PTA and MEG difficulties from Russia being the main cause. Belarus is now importing MEG from non-Russian sources.

Azot at Grodno increased exports 1.5 times in the period January-October 2011, with most of the company's units running at full capacity. Labour productivity increased by 1.8 times 2011. The company produced 65,600 tons of methanol in January-October 2011, 108,800 tons of caprolactam, and 16,900 tons of polyamide.

A total of 4,250 tons of phthalic anhydride was exported from Belarus to Russia in the period January-November 2011, 5% down on 2010. The main consumers included producers of paints and varnishes. From January to November 2011 Lakokraska produced 18,300 tons of phthalic anhydride, which is the same as 2010. Lakokraska at Lida is the largest foreign supplier of phthalic anhydride to the Russian market.

Ukraine



Ukrainian PVC market

The Ukrainian PVC market increased sharply in 2011 following the start-up of the new PVC plant at Kalush at Karpatneftekhim. In the period January-October 2011 consumption of PVC in Ukraine increased by 38% over the same period in 2010. From June to October Karpatneftekhim produced 65,430 tons of PVC of which there are six grades available. In order to support Karpatneftekhim, the Ukrainian government has decided to impose tariffs on imported PVC at a rate of 5% of customs value. The decree is designed to support the domestic producer of PVC: as Ukrainian production is more expensive than US imports and other sources.

Imports of PVC have declined since the start-up of the Karpatneftekhim as illustrated in the graphic above but still remain an important part of the Ukrainian market. In the long term, Karpatneftehim will be able to capture more of the domestic market at the expense of imported material. Imports of PVC resin from the US comprised 32% in the period January-October 2011. Apart from the US, Poland and Germany were also important sources of imports last year.

Ukrainian benzene market

The production of benzene in Ukraine amounted to 13,980 tons in November, 4,880 tons more than in October. The increase was due to revived production after maintenance at plants belonging to Ukrtatnafta

and Karpatneftehim. The Kremenchug plant increased output by 2,220 tons to 2,720 tons. In the period January-November 2011, Ukraine produced 131,098 tons of benzene with a purity of above 95%, nearly 21,000 tons more than during the same period in 2010. The increase in output was made possible by Karpatneftekhim's renewed production in September 2010.

Ukrainian Chemical Production (unit-kilo tons)

Product	*Jan-Nov 11*	*Jan-Nov 10*
Acetic Acid	131.9	75.4
Ammonia	4299.5	3785.9
Benzene (-95%)	165.8	190.5
Benzene (+95%)	131.098	110.7
Caprolactam	55.1	18.0
Caustic Soda	144.5	65.5
Ethylene	170.9	44.5
Formaldehyde	32.9	65.5
Methanol	129.5	76.3
Polypropylene	85.0	73.9
Polystyrene	19.5	15.6
Polyvinyl Acetate	5.3	6.4
PVC	76.3	0
Propylene (merchant)	76.9	81.0
Soda Ash	701.3	590.9
Titanium Dioxide	141.0	109.2
Toluene	5.3	4.9

In December, benzene availability in the Ukrainian market exceeded demand the main cause of which was the reduction in supply of products to Russian consumers. In the first half of December, Ukrainian producers did not export benzene to Russia but this trend may be reversed in January following the Stavrolen outage. It means that Yasinovsky Coke and Zaporozhkoks can resume the supply of product to Russian companies, located in the Samara region.

Karpatneftekhim-feedstock excise/import duties removed

The Cabinet of Ministers of Ukraine has approved a decree which sets quotas on imports of light and heavy distillates for the production of ethylene by Karpatneftehim in 2012. This means that excise and import duties have been abolished on petroleum products used in petrochemical production. In 2012 the company will import around 225,000 tons of light distillates without payment of customs taxes, and up to 170,000 tons of heavy distillates.

Crimean Titan aims to increase capacity for TiO2

The DF Group has stated that the Crimean government has approved its plan to construct a third plant for production of titanium dioxide. This will almost double capacity from 105,000 tpa at present up to 200,000 tpa. By the end of March 2012 Crimean Titan is scheduled to complete the construction of a new plant for sulphuric acid, which will have a capacity of 1 million tpa. Due to the construction of the plant and replacement of the former unit from the Soviet era the impact on the environment will be much reduced. Prior to Dmitry Firtash becoming the owner of Crimean Titan, the plant produced about 40,000 tpa of titanium dioxide.

Ukrainian Titanium Dioxide Market (unit-kilo tons)

	Jan-Oct 11	Jan-Oct 10	Jan-Dec 10	Jan-Dec 09
Production	129.3	109.6	134.9	105.4
Exports	118.5	103.0	127.2	102.6
Imports	6.4	5.2	6.7	5.7
Market Balance	17.2	11.7	14.4	8.5

Ukrainian titanium dioxide market

Growth in demand both in the domestic market and abroad has allowed the two Ukrainian producers of titanium dioxide in the past year. High demand in the global titanium dioxide market and the lack of raw materials for its production have contributed to the beginning of large-scale investments in titanium assets in Ukraine. Crimean Titan is expanding its capacity to 200,000 tpa, although Sumykhimprom is only investing in maintenance and overhauls. The domestic market remains small but rising. Exports will continue to play the important role for domestic producers of titanium dioxide due to shortages in the world market.

Kazakhstan-Azerbaijan

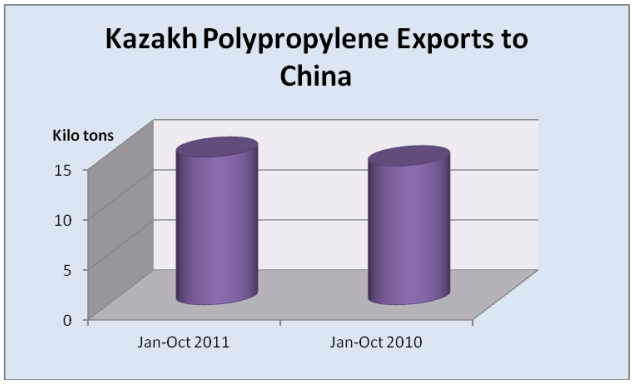
SOCAR-Azerkimya progress

SOCAR has restarted the isopropanol plant at Sumgait after renovation which was undertaken to bring the equipment and process up to modern day standards. The group is now concentrating on polyethylene and EP plants, involving the introduction of new equipment and raising production volumes. A 60 km pipeline was completed at the end of 2012 to transport dry gas to the ethylene and propylene facilities at Azerkimya. This pipeline is intended to supply up to 92,000 tpa of dry gas.

AzMeCo-methanol

Although it is not yet clear when the new methanol plant in Azerbaijan will commence production the company AzMeCo has stated aims to export about 90% of output from the plant whilst in the longer term to develop downstream activities such as formaldehyde. The total project cost of building the methanol plant at Garadag

has been estimated in the range of $360 million, but with bank interest exceeds $400 million. About 70% of these funds have been accounted for by bank loans, including the EBRD. The main creditor of the company is the International Bank of Azerbaijan, which also helped to attract loans from the Export-Import Banks of other countries. This methanol plant is being planned to be commissioned in 2012 and the target is that it should be running by the middle of the year at rates of roughly 560,000 tpa. The aim is to eventually achieve 720,000 tpa by 2013.



Neftekhim-Pavlodar polypropylene expansion

Kazakhstan launched new plants in 2009 for production of MTBE and polypropylene at Pavlodar. Both units are small-scale at 60,000 tpa and 40,000 tpa respectively but help to meet domestic demand in Kazakhstan. Polypropylene is sent for export to China and Turkey. Demand for MTBE is driven by modernisation in the Kazakh refining sector. Neftekhim at Pavlodar now aims to increase polypropylene capacity by 30% to 100,000 tpa by around 2013. The short term aim is to start processing polypropylene and a project is being prepared for manufacturing of bags made of polypropylene fabric. Longer term, Neftekhim is aiming and hoping to build a petrochemical complex to be linked by pipeline to Omsk in Russia, which would provide more feedstocks for potential production units.

Navoiazot-project plans

The PVC plant at Navoiazot in Uzbekistan is scheduled to start construction in 2012, based on a jv with South Korea and entitled ISU Navoi Chemical. Total investment in the PVC plant is estimated in the range of €138 million. The funds are to be provided by Uzbek Fund for Reconstruction and Development, as well as foreign investors. The original plan was to finish construction in 2012, but this has been delayed. The capacities of the plant are expected to comprise 50,000 tpa and 32,000 tpa of caustic soda.

Navoiazot also plans to build a plant to produce VAM in 2012-2014, of which investment will amount to around $30 million. Funding will be provided by loans from foreign banks ($12 million), loans from Uzbek banks ($10 million) and equity of Uzkhimprom ($8 million). The tender for the purchase of necessary equipment may be appointed in the first half of 2012.

Kungrad Soda Plant

From January to September 2011, the Kungrad soda ash plant produced 77,200 of soda ash, which was 11.7% more than the same period in 2010. In 2012 the company aims to run the plant at full capacity (100,000 tpa). Further ahead the Kungrad Soda Plant wants to increase capacity to 150,000 tpa, partly achieved by increasing the extraction of limestone in Dzhamansaysk salt deposits. Annual demand for the company for limestone is 153,000 tons, salt 160,000 tons and 1,000 tons of ammonia.

Relevant Currencies

Czech crown. Kc. $1= 20.85. €1 = 25.5671: Hungarian Forint. Ft. $1 = 223.5. €1 = 274.065: Polish zloty. zl. $1=3.1135. €1 =4.065: Bulgarian leva: $1 = 1.5956. €1= 1.9596: Romanian Lei. $1 = 3.4151. €1= 4.187: Croatian Kuna HRK. $1 = 5.9239. €1= 7.2641: Ukrainian hryvnia. $1 = 7.931. €1 = 9.7253: Rus rouble. $1 = 31.022. €1= 38.0405

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