

CIREC

MONTHLY NEWS

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

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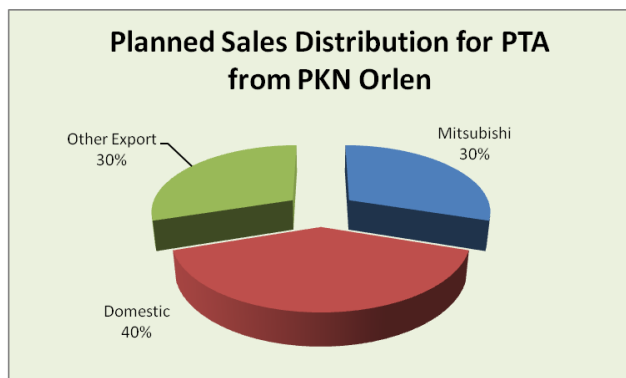
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CENTRAL & SOUTH EAST EUROPE

Chemicals & Polymers

PKN Orlen to start PTA in January

PKN Orlen expects to start the production of PTA at Wloclawek by the end of January, although slight delays could be incurred due to the severe weather experienced during December. PKN's 600,000 tpa unit will be fed by paraxylene from its new 400,000 tpa plant at Plock, which has been constructed by Technip. Paraxylene will be consumed in full in the production of PTA at Wloclawek.



The technology license for the PTA plant was supplied by Mitsubishi Heavy Industries. As a result of this investment, PKN Orlen aims to develop its value creation chain in the petrochemical division whilst improving the utilisation of the processing capacities at the Plock refinery. In 2006, PKN Orlen signed an offtake agreement with Mitsubishi Chemical Corporation to supply 150,000 tpa of PTA for the period 1 July 2010 to 31 December 2014. A contingency was included that allowed the possibility of changing the delivery schedule by plus or minus 10%. A provisional condition was agreed that allowed a change in the start-date by up to nine

months, and this criterion will have been complied with if the plant starts in January/February 2011. Aside the offtake agreement, PKN Orlen will sell PTA to domestic and export markets.

Polybutadiene-Synthos PBR

Synthos expects to complete construction of its polybutadiene unit at Kralupy in the middle of 2011. Polybutadiene rubber, to be produced using neodymium technology (PBR Nd) purchased from Michelin, belongs to the new generation of rubber used in the manufacturing of tyres. As part of the long-term contact, Michelin will receive part of the production under an offtake agreement. The remaining part of the production will be sold by Synthos PBR, under its own brand, to other manufacturers in Europe and further afield. The global market is expected to see an increase in demand for PBR Nd rubber, owing to a resolution adopted by the European Parliament. This requires that tyre manufacturers, starting in November 2012, to label tyres with tyre performance parameters such as rolling friction, noise, adhesion.

Major New & Expanded Chemical Plants in Central-South East Europe 2010-2011 (unit-kilo tons)

Company	Product	Status	Capacity
BorsodChem	TDI	New plant	200
Butadien Kralupy	Butadien	New plant	120
Dioki	VCM	New plant	90
PCC Rokita	Ethoxylates	New plant	30
PCC Rokita	Chlorine	New plant	120
PKN Orlen	Paraxylene	New plant	400
PKN Orlen	PTA	New plant	600
Rompetrol	HDPE	Expansion	40
Synthos PBR	Polybutadiene	New plant	120
ZA Pulawy	Urea	Expansion	270
Zachem	TDI	Expansion	15
ZAK	Nitric Acid	New plant	300

Synthos PBR was created by the Synthos Group at Kralupy, using feedstock supplied locally from Butadien Kralupy which started production in 2010. The JV Butadien Kralupy was established in 2007 when Synthos bought the rubber division. Butadiene production capacity is 120,000 tpa; using modern eco-friendly technology purchased from a Japanese company JSR, and replaced the former 90,000 tpa plant at Synthos Kralupy. Construction of the new butadiene plant gives the Synthos Group improved stabilisation of the raw material supply base, correlating with key investments aimed at increasing the competitiveness of Synthos in the market.

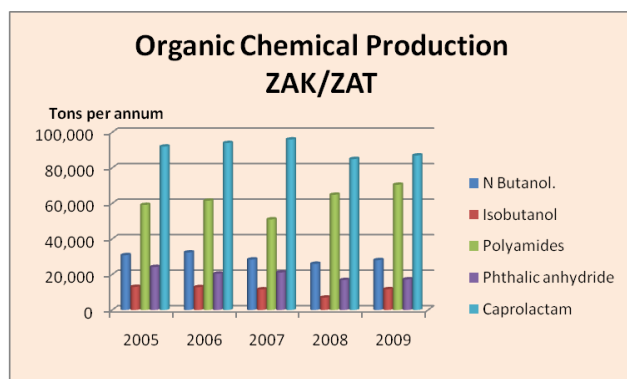
Styron-Schkopau

Styron has announced an expansion of its SSBR (solution styrene butadiene rubber) capacity with a new

production line at Schkopau in east Germany. The additional capacity of 50,000 tpa will allow Styron to help customers around the world meet the increasing demand for high performance tyres. Construction of the new production line will start in May 2011. The new train will be built alongside existing trains and is to focus on SSBR production, with the capability to produce all existing clear and oil extended Styron grades. Production is expected to start in Q4 2012. Styron is the former Dow business sold to Bain Capital Partners in March, which owns PS and PC assets, as well as synthetic rubber and other lines.

Polish chemical industry-challenges 2011

Despite the lack of success in the privatisation process last year, the Polish chemical industry is undergoing a process of reorganising itself leading to improved synergies and tackling issues of cost reduction. Furthermore, the government is seeking to ensure that companies have had a major say on what is happening in the industry. With the merger of ZAK and ZAT looking set to be completed in the first quarter this year, ZCh Police and ZA Pulawy could also follow the same principle of consolidation. Both companies share synergies and could function as an integrated group. Other mergers and acquisitions that are helping the industry include ZA Pulawy's recent purchase of Fosfory at Gdansk.



The ZAT-ZAK merger represents a major development in the industry, creating synergies and reducing costs across the board. Paradoxically, the merger option may not have been realistically considered had the privatisation process failed and in hindsight that failure might transpire at a later date to be viewed as an advantage. In one of the first group deals involving ZAK and ZAT, ZAK signed a contract in December for the supply of propylene at an estimated net worth of zł 184.5 million. This agreement is to take effect from 1 January 2011 and run to 31 December 2012 and provides for the purchase by ZAK of propylene which it uses for oxo alcohol production.

Large scale Polish chemical companies face pressures from the EU regarding CO₂ levels, and other emissions threaten to encumber significant costs. The EU countries have committed themselves to reduce CO₂ emissions by 20% by 2020, which may represent an unattainable target for the Polish chemical industry taking into account the capital costs that are required. The most ambitious effort to produce chemicals under low CO₂ emissions has been under detailed examination by ZAK for several years. This centres on a coal based project using captured carbon dioxide from Lodz and Czestochowa. The issue of external financing is yet to be resolved, but ZAK retains hope that funds will be made available through the European Investment Bank in addition to receiving support from the EU.

Polish Chemical Production (unit-kilo tons)		
Product	Jan-Nov 10	Jan-Nov 09
Caustic Soda Liquid	211.9	161.9
Caustic Soda Solid	50.0	68.5
Soda Ash	920.6	816.6
Ethylene	458.2	470.9
Propylene	306.6	326.3
Butadiene	56.6	49.3
Toluene	89.6	89.0
Phenol	31.3	30.3
Caprolactam	144.2	131.6
Polyethylene	331.6	306.4
Polystyrene	128.8	116.3
PVC	180.8	231.7
Polypropylene	222.3	235.0
Synthetic Rubber	149.6	121.9
Pesticides	19.1	18.8

Consolidation in the Polish chemical industry is considered in some circles to provide the only plausible approach towards the issue of modernisation and financing that process. The next few months in 2011 will witness the conclusion of some of the mergers and acquisitions that have been underway. This will help to provide a clearer picture of how the industry is structured and lay the basis for improving the profitability of those companies concerned.

ZAT-strong performance in 2010

ZA Tarnow recorded strong financial performance in 2010 from its product sales, which is expected to only be helped by the pending merger and acquisition of ZAK. Annual sales could surpass a total of zł 3 billion in the next few years as a result of the merger, with a total of eighteen teams from both companies currently in the process of analysing synergies on logistics, transport, electricity and coal, etc. Energy prices and raw material costs should be

lower than if each of the companies were signing separate contracts, whilst another aspect involves ZAT's purchases of surplus ammonia and nitric acid from ZAK.

ZAT has not yet made it clear whether it wants to support the coal gasification project under review by ZAK, and whether ZAT wants to support it. More detail about this project should become known in the early part of this year. Even though it is increasing its share value by another zł 150 million, ZAT itself could not fund such a huge undertaking and is focused on more modest targets. Last year, ZAT acquired polyamide producer Unylon in Germany, whilst in the past few months it has turned down the possibility of buying Fosfory at Gdansk from Ciech.

ZA Pulawy-acquisitions

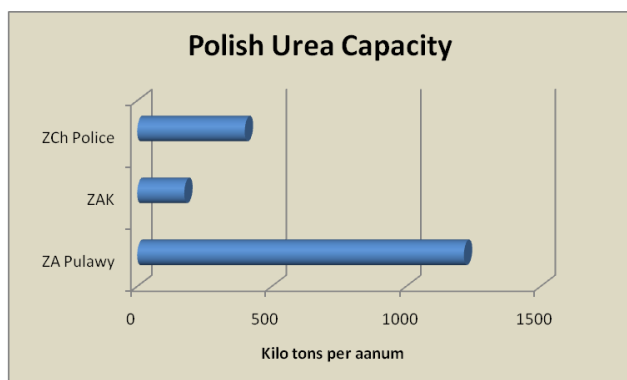
ZA Pulawy executed a share purchase agreement with Ciech in December to acquire 51,855 shares in Gdansk Fosfory, representing 89.46% of the company's share capital. A diversification of the product mix, expansion into new markets and stronger distribution capabilities are among the benefits that ZA Pulawy is set to derive from the transaction. Fosfory's bulk handling infrastructure will help ZA Pulawy strengthen distribution capabilities and enable to launch a new extended range of fertiliser products based on urea which is now in surplus at Pulawy following the revamp

A crucial component of the Gdansk-based assets is the wharf infrastructure. It opens opportunities for expanding the portfolio with services which so far could be provided to ZA Pulawy through Bałtycka Baza Masowa and even then only to a limited extent. Not only will the newly acquired infrastructure enable imports of raw materials and products, but it will also facilitate the marine handling of exports.

Late in 2010 ZA Pulawy presented a conditional offer to the State Treasury to acquire shares in ZCh Police. In the offer, ZA Pulawy proposed that, subject to the restructuring of ZCh Police's debt, the share capital would be increased through an issue of new shares to be acquired by ZA Pulawy. ZA Pulawy's ultimate goal is believed to be the acquisition of ZCh Police. Over the past few years, the two companies have made preparations for future cooperation as strategic partners, which helped them identify potential synergies.

ZA Pulawy-urea expansion

ZA Pulawy completed the modernisation of the urea facilities in late 2010, resulting in an expansion of total capacity by 270,000 tpa to 1215,000 tpa. The main urea plant at Pulawy was shut for the entire quarter in July-September to complete the project. A close connection exists between the completion of the investment into the oxygen generation plant at Pulawy and the urea unit. A larger quantity of available oxygen will make it possible to produce more ammonia, which in turn will translate into increased urea production.



Other projects completed in the past year have included an expansion of AdBlue capacity from 70,000 tpa to 100,000 tpa to meet the growing demand in the automotive and power industries. In line with the company's strategy providing for security of raw materials supplies, ZA Pulawy is introducing a coal gasification Project with a view to securing an alternative source of feedstock for ammonia production. ZA Pulawy is currently seeking an alternative licensor for the construction of a new power plant after the termination of a contract with Vattenfall. Previously plans were in place with Vattenfall to build a coal power plant that had a

capacity exceeding 1400 MW. ZA Pulawy has identified the significance of reducing costs from natural gas consumption, which are mostly based on imports from Russia, and is assessing all other options.

ZA Pulawy's targets in the next few years, aside developing the product portfolio, include diversifying raw material supplies and optimising the company's resources through changes and improvements inside the organisation. The company has divided its strategic plans into two phases. Phase 1 was completed in 2009-2010 and included work on the ammonia and urea plants, and the modernisation of the Melamine I unit. The company invested a total of zł 950 million in Phase I. Phase II is scheduled for the period 2010–2017 and involves building new product plants and the expansion of the existing production capacities. Phase II is planned to include certain initiatives such as a new product chain of methanol-urea-melamine-resins. Development of caprolactam processing towards high-value-added products is being considered in order to reduce dependency on exports.

Central European PVC plants

PKN Orlen is considering the possibility of increasing its share in Anwil to 100%, which would allow it the freedom to split the fertiliser and PVC divisions if necessary. At the end of December, the group purchased a stake of 5.56% from the Treasury raising Orlen's control in Anwil to 90.35%.

The Slovak PVC and chemical producer NCHZ has received a bid from the recent tender process, but objections seem likely to prevent the deal from going ahead or at least in the early part of 2011. It is

stressed by the government that NCHZ needs to be sold quickly in order to avoid bankruptcy. Fears have emerged that a delay in the privatisation of NCHZ could result in production units being stopped. The company employs about 1,700 people directly, and closures would inevitably lead to redundancies. The sole takeover bid from M-Energo is worth around €2 million against previous valuations of €127 million. Thus, whilst the creditors would not receive payment initially, should the company be allowed to continue production this may be possible at a later date.

Weiss Hungaria

A German/Hungarian JV Weiss Plastics has begun to construct a new injection moulded technical plastic parts plant at Gyor in north-west Hungary. Around €2.3 million is to be invested in Weiss Hungaria at Gyor Industrial Park. The plant, offering 3,500 square metres of production and office space, will include investment of €500,000 into new machinery and other equipment. Weiss Hungaria expects to expand production on the site in due course.

Weiss Hungaria is a partnership formed in 2007 by Weiss Plastics of Germany (60%) and the Hungarian company CBSZ (40%). The partners bought the 10,000 square metre site at the industrial park in 2008. The Gyor plant is due to start up by June 2011. Weiss Hungaria was aiming for annual sales of around €4 million in 2010 and this is expected to rise in 2011 to between €5 million and €6 million. The JV has been manufacturing components for the automotive and heating technology industries at a leased industrial unit in Gyor.

TiszaTextil

Hungarian plastics processor TiszaTextil has acquired OU Uritus, an Estonian producer of packaging materials. The transaction is expected to strengthen TiszaTextil's position in the European market for flexible intermediate bulk containers. Uritus will continue to manufacture products at its plant in Kohtla-Järve in the northeast of Estonia, under the TiszaTextil Eesti brand name.

TiszaTextil was founded in 1991 and specializes in manufacture of products made of polypropylene and polyethylene. In addition to FIBC, the company produces roofing sheets, bags, films for agriculture etc. Tisza's FIBC capacities are estimated at no less than 1.2 million bags a year.

Nypro

Nypro has sold its injection moulding plant in Nagyigmánd, Hungary, to Spanish plastics packaging company Plásticos Castella SA. However, Nypro will retain a minority stake in the company being formed to operate the plant. Nypro would work with Plásticos to maintain production of the Nypro packaging products made at that plant during the transition.

The new company, a unit of Plásticos, will be called PlastiCast Hungary. The 5,000-square-foot plant, built approximately ten years ago as a consumer electronics plant, was converted primarily to a plastic packaging plant as manufacturing of the plant's original products shifted almost exclusively to Asia. The Nagyigmánd manufacturing facility will be the first factory for Plásticos Castella outside of its headquarters country of Spain. Plásticos said that it intends to add injection moulding machines and increase production capacity at PlastiCast in the immediate future.

production in 2009, as a result of the gas crisis and the weaker demand for its products by farmers. Neochim was forced to start operating at minimum capacity in January 2009, asking part of its employees to use unpaid leave. Agropolychim at Devnya started producing fertilisers in August last year due to securing

BorsodChem's PVC division has continued to face difficulties as sales have not risen nearly as much as isocyanates in the past year. Besides slow moving sales, ethylene rose in price for all of 2010 causing margins to narrow to a level even lower than before the financial crisis. In contrast, BorsodChem has seen good margins for MDI and TDI in the past year. BorsodChem's TDI-2 plant will start operating in April 2011, which indicates good timing for the new plant.

Benzoic acid production at Kohtla-Järve

Eastman Chemical has announced that it is expanding Benzoflex plasticiser capacity at its Estonian plant at Kohtla-Järve. Eastman acquired the production line in 2010 when it bought Genovique Specialties Corporation, a global producer of specialty plasticisers, benzoic acid, and sodium benzoate. Current production capacities are expected to be increased by 11,000 tpa.

Genovique Specialties at Kohtla-Järve plant was founded in October 2008, after the previous owner Velsicol Corporation agreed to divide and restructure its business interests. The Kohtla-Järve chemical plant was constructed in 1985 and was bought by Velsicol in 1995. The main products of the plant include benzoic acid and sodium benzoate, with capacities comprising 36,000 tpa and 13,000 tpa respectively. The main feedstock to plant is toluene which is supplied largely from domestic sources and imports from West Europe. Benzoic acid was previously sold on the Estonian market, but is now exported in full.

Bulgarian chemical news

Solvay Sodi plans to invest 26 million leva in 2011 for the modernisation of its production facilities at Devnya. Further investments in 2012 are expected to total 52 million leva, with the ultimate aim over the next few years to increase soda ash capacity to 1.5 million tpa. One of Solvay Sodi's major environmental targets is to reduce the carbon emissions in relation to soda ash production.

Bulgarian fertiliser producer Neochim is running at full capacity after nearly terminating

cheaper gas supplies from domestic sources, which were purchased from the British company Melrose Resources.

Plastics

Indorama to buy SK Eurochem

Indorama signed an agreement in November with SK Chemicals to acquire the PET business of SK Eurochem in Poland. Indorama expects the transaction to close during the first quarter of 2011, subject to local regulatory approvals and conditional precedents in the agreement. SK Eurochem has capacity to produce 140,000 tpa of PET chips at Wloclawek. The acquisition will expand Indorama's global platform and reinforce its focus on the polyester value chain.

SKC-polyurethane plant

SKC (South Korea) completed the construction of a polyurethane plant in a special economic zone in south-west Poland in November. The plant, completed after seven months of construction, has the capacity for 20,000 tpa of polyurethane, raw materials used for car seats and insulation for housing and cold storage facilities. SKC said that it will provide polyurethane to South Korean manufacturers of auto parts and home appliances in Europe and Russia.

SKC will also use the plant as its base for exports of locally produced chemical products to Europe. Plans exist to build three additional polyurethane plants by 2013 in India and South East Asia with the aim of increasing its production capacity of polyurethane to 100,000 tpa. The completion of the plant in Poland has increased the number of SKC's overseas polyurethane plants to three.

Wolters Packaging-Pardubice project

Wolters Packaging, the daughter of a Dutch recycler of polymers Wolters Europe, has presented the plans to build a new plant in Pardubice region to control the environmental impacts of economic activities of enterprises. Wolters Packaging plans to produce this packaging from expanded polypropylene, foamed polyethylene and polystyrene. The capacity of the plant is 2,450 tpa with construction set to begin production this year.

PCC Rokita-polyols

After the completed acquisition of Prodex System in Warsaw, the PCC group has reinforced its position in Central and East Europe in the product area of polyurethanes. The business activities of Prodex focus primarily on rigid polyurethane and semi-rigid foams for thermal and acoustic insulation. PCC Rokita last year launched the regular operation of its new iPol polyols production facility at Brzeg Dolny. These speciality polyols allow for the application of innovative iPol-tec foam technology. iPol is a special polymeric polyol which enables polyurethane foam producers to substantially raise the cost efficiency and quality.

On its premises at Brzeg Dolny, PCC Rokita possesses an overall polyol production capacity of 70,000 tpa. The group has in the past two years applied a range of energy saving measures through large-scale investments. More than zł 100 million has been invested by the company for the partial conversion from mercury electrolysis to membrane. In addition to the environmental benefits, it should reduce the cost of chlorine production. The first part of the start-up of the membrane process took place in late 2010, with an initial chlorine capacity of 48,000 tpa rising eventually to 120,000 tpa.

RUSSIA

Russian chemical production rises 15% in Jan-Nov 2010

The index of chemical production for Russia for the period January-November 2010 showed a 15% increase against 2009, consisting largely of recovered operational activity particularly in some of the larger product areas. Production of mineral fertilisers in Russia rose by 22.5% to 15.94 million tons compared to the same period in 2009, whilst the production of plastics increased by 9% to 4.437 million tons. Aside the main polymer groups, the production of polyesters, polycarbonates, alkyd and epoxy resins increased by 21% to 456,000 tons. Polyamides rose 15% to 118,000 tons.

The most significant recovery in production volumes was recorded for the synthetic rubber division, which rose 26% in the period January-November 2010. Ethylene production increased by 5% up to 2.164 million tons,

propylene by 6% up to 1.085 million tons and benzene by 8% to 977,400 tons. Exports of petrochemical products from Russia in January-October 2010 totalled 1.92 million tons, up 17% over the same period in 2009. In value terms, exports totalled \$1.32 billion which was 45% higher than in the previous year. Imports of petrochemical products in Russia in the period January-October 2010 totalled 600,100 tons, a 44% increase over the same period last year. In revenue terms, imports increased by 1.7 times up to \$983 million.

Russian Chemical Production (unit-kilo tons)		
Product	Jan-Nov 10	Jan-Nov 09
Acetic Acid	145.0	156.5
Ammonia	11,700.0	11,810.3
Benzene	977.4	946.2
Butanols	246.4	234.2
C Black	605.7	483.0
Caustic Soda	986.9	1,015.0
Ethylene	2,164.0	2,033.2
Methanol	2,649.5	2,090.9
PET	274.8	223.1
Phenol	218.8	155.6
Phthalic Anhydride	94.2	87.6
Polyethylene	1,391.2	1,279.9
Polypropylene	591.8	542.4
Polystyrene	285.4	236.5
Propylene	1,085.0	881.9
PVC	542.5	476.2
Soda Ash	2,390.0	2,123.0
Styrene	438.6	448.0
Synthetic Fibres	96.6	95.1
Synthetic Rubber	1,121.5	874.8

Transport costs for methanol and other products

The Russian Federal Tariff Service (FTS) has approved discounts for rail transport costs in 2011 for a range of products, including sulphur, potassium chloride and methanol. The FTS has proposed a restoration in the 16.4% tariff for the transport of potassium chloride from the Sverdlovsk railway stations to China and Mongolia. Reduced discounts for the transportation of methanol were applied last year to shipments through the stations at Ugleursky in the Sverdlovsk region, the Maklets and Kaznacheevka stations in the Moscow region and the Buslovskaya station for deliveries to Finland. From the Ugleursky station, the FTS has proposed an 11% reduction in costs in 2011 based on minimum shipments of 300,000 tons for the year. For the Maklets and Kaznacheevka stations in the Moscow region, a discount of 22% has been agreed for a minimum shipment total of 100,000 tons.

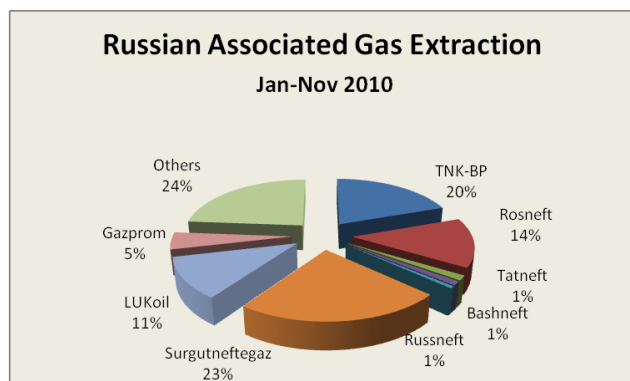
VAT removed on processing equipment imports

The Russian government has expanded the list of equipment not produced in the Russian Federation that is now exempt from VAT. The list now includes equipment used in the petrochemical industry for the production of monomers, such as the ethane pyrolysis furnace units (SRT-IV), as well as equipment for propane dehydrogenation. This measure will help a number of petrochemical projects already completed such as the expansion of the ethylene cracker at Nizhnekamskneftekhim to 600,000 tpa.

Other current projects impacted include the expansion of the Kstovo cracker and the construction of the polypropylene project at Tobolsk.

German exports of plastics processing equipment to Russia in the period from January to October 2010 totalled €76.6 million, up 20.7% than in the corresponding period last year. Russia ranks third after China and the USA in terms of significance for German suppliers. Global exports of machinery for processing plastics and rubbers into Russia for January-October 2010 was estimated at €321 million, up 49.2% over 2009. The share of German technology in total exports of machinery to Russia is 42.2%, followed by Italy with 15.6% and China with 7.9%.

Feedstocks & petrochemicals



Associated gas extraction & utilisation

Russia extracted 52.741 billion cubic metres of associated gas in the period January-November 2010, 2% higher than in 2009. Further efforts will be undertaken in 2011 to improve the processing of associated gas, which remains an under-utilised asset. The majority of companies involved in oil production and gas processing are embarking on investment strategies partly to meet stringent government targets and partly to add value to its production processes.

Surgutneftegaz currently holds the label of being the best Russian oil company in terms of associated gas utilisation and the company expects to be capable of recycling 95% of associated gas on all its 48 fields in 2012. In 2009, Surgutneftegaz produced 13.6 billion cubic metres of associated gas most of which was converted into dry residue gas and liquid hydrocarbons. The second most advanced oil company in relation to associated gas utilisation is LUKoil which plans to undertake investment into the modernisation of the Perm

Gas Processing Plant, including the production facilities and the pipeline infrastructure. Currently the plant processes about 430 million cubic metres of associated gas and 700,000 tons of NGLs per annum. By 2013, processing capacity of associated gas at Perm will be increased two-fold. The modernisation of the plant will also lead to the production of liquefied gases including propane and butane gas with a purity level above 99%.

TNK-BP intends to invest around \$1.8 billion in the period up to 2014 in the utilisation of associated gas, with the principal aim of using the gas for supplying two new power plants which are planned for construction. The target



for the company is to extract around 13 billion cubic metres of gas in 2011, reaching a level of about 85% utilisation. The company has developed an infrastructure for associated gas utilisation in mature fields in West Siberia and the Orenburg region. TNK-BP's jv with SIBUR Yugragazpererabotka is planning to process 9.6 million cubic metres of gas in 2011.

TNK-BP in discussions with Gazprom over the possibility of processing associated gas at the Orenburg Gas Processing Plant. Volumes being considered involve 300 million cubic metres per annum. The Orenburg plant possesses a capacity for

processing 1 million tpa of SHFLU (NGL). TNK-BP plans to increase refining capacity at the Zainsk Gas Processing Plant two-fold to 1.1 billion cubic metres.

SIBUR plans to attain close to full capacity utilisation at the Yuzhniy Balyk gas processing plant in 2011, by processing 2.8 billion cubic metres of gas and 900,000 tons of SHFLU (NGLs). The Yuzhniy Balyk gas processing plant is the most integrated of SIBUR's locations in West Siberia, comprising a booster compressor station, a processing plant and its own power system.

Russian naphtha production, Jan-Nov 2011

Russian oil companies in January-November 2010 increased the production of naphtha by 10.6% to 10.158 million tons. TAIF-NK in Tatarstan increased production 1.7 times to 1.45 million tons, and Salavatnefteorgsintez in 2.5 times to 583,000 tons. Rosneft, the largest producer of gasoline, reduced production by 7.4% to 2.834 million tons. Bashneft increased its output by 10% up to 844,000 tons, while the refinery LUKoil dropped more than double to 526,600 tons.

Rosneft-Primorsk refinery and petrochemical complex

The Board of Directors of Rosneft has approved a plan to create a petrochemical complex in the Primorsk Territory in the Russian Far East.

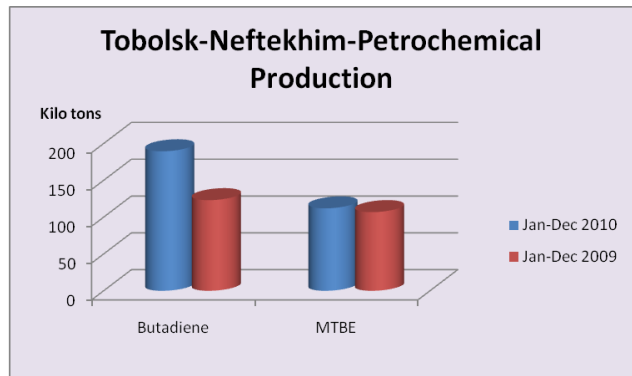


Previously the group had considered the construction of a 20 million tpa refinery at Primorsk, but plans have been adjusted to reduce the capacity of the refinery to 5 million tpa and to focus on petrochemicals. Plans to construct refining capacity at Kozmino at the end of the East Siberian-Pacific Ocean (ESPO) pipeline system were first considered in 2006. The goals have been altered from primary oil refining to petrochemical production both in olefins and aromatics. The proposed complex is to be designed to process 3.5 million tpa of naphtha and liquefied petroleum gas, and 1.5 million tpa of gas condensate. The group is in discussions with

partners for assistance in the project; the aim is that construction of the complex is scheduled to begin in 2012. Rosneft's only current petrochemical division is located at Angarsk Polymer Plant, but the group sees petrochemicals as more profitable than oil refining particularly export opportunities to China and other parts of Asia are so promising.

Gazprom Neft selects contractor for Priobskoe compressor station

Gazprom Neft and SIBUR-Holding chosen Iskra-Energy as contractor for design and construction of the turnkey compressor stations on the southern license area of Priobskoe in West Siberia. The subcontractor for the design of the compressor station has been selected as NIPIgaspererabotka. Part of the project involves the construction of a compressor station with a capacity of 500 million cubic metres per annum, in addition to designing transportation systems for associated gas at the Yuzhniy Balyk gas processing complex. The project will be completed in 2012.



Tobolsk-Neftekhim, 2010 production

Tobolsk-Neftekhim in January-December 2010 increased the amount of processing of SHFLU (NGL) by 9% over 2009, up to 3.5 million tons. Butadiene production for the period increased by 39% to 189,700 tons, whilst MTBE rose almost 4% to 112,000 tons.

SIBUR-Fluor JV

Fluor Corporation and SIBUR have signed a memorandum of understanding for the establishment of a JV based on NIPIgaspererabotka, the Russian company's Research and Design Institute for Gas Processing. Initially, Fluor will acquire a 10% stake in NIPIgaspererabotka. In the first stage, a working group consisting of representatives from Fluor and NIPIgaspererabotka will launch a pilot project for the design and construction of the Yuzhniy Balyk-Tobolsk pipeline. This will connect the Yuzhniy Balyk gas processing plant to the Tobolsk petrochemical complex.

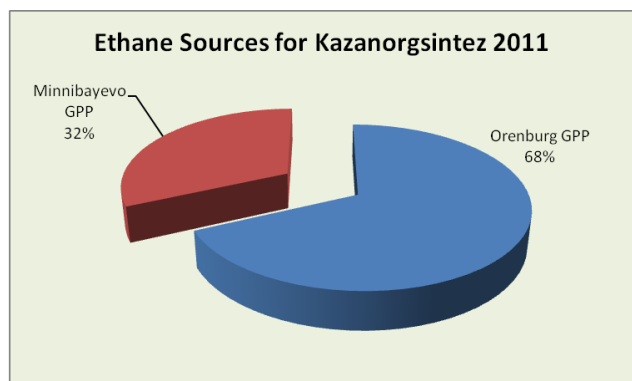
Tatarstan natural gas ne plans considered

Tatarstan has re-examined its plans to build an olefins plant using natural gas as feedstock and is currently seeking a site for the project. UOP presented Tatarstan with an investment feasibility study into the construction of the olefin complex in the middle of 2010, with project costs estimated at \$2.8 billion. Tatarstan has thus far identified the town of Arsk as a possible site for a petrochemical complex. Accordingly; plans consist of constructing a plant to produce 400,000 tpa of ethylene and 700,000 tpa of propylene. For these purposes, the plant will require about 2 billion cubic metres of natural gas.

TAIF has expressed confidence that the raw material for the plant will not present a problem, as the new site will be located next to the main Urengoy-Pomary-Uzhgorod gas pipeline. The main beneficiary of the new plant is expected to be Kazanorgsintez, whilst it will be connected to the Volga-Urals ethylene pipeline for sale to other consumers. In addition to ethylene, ethane could become available for usage by Kazanorgsintez which would lessen the dependency on ethane from Orenburg.

Tatneft-Minnibayev Gas Processing Plant

Tatneft has launched a cryogenic plant for deep processing of dry stripped gas at the Minnibayev GEA. The capacity of the new installation has been designed to process 395 million cubic metres of gas per annum, which will result in the expansion of ethane capacity from 90,000 tpa to 140,000 tpa. This will help to provide Kazanorgsintez with additional ethane to supplement the 320,000 tpa it expects to receive from Gazprom from the Orenburg Gas Processing Plant. The expansion raises the contribution of ethane from the Minnibayev gas processing plant from around 20% to around 32%. Cryogenic technology for processing of



dry stripped gas involves the separation of gaseous nitrogen from the hydrocarbon liquid at temperatures below minus 180°C, followed by separation of the hydrocarbon mixture into methane and ethane fractions.

Kazanorgsintez-ethylene expansion

Kazanorgsintez completed the expansion of the production capacity of ethylene by 1.5 times in December up to 640,000 tpa, from the previous level of 420,000 tpa. For 2011 the scheduled delivery is only expected to reach 440,000 tons based on expected shipments from Orenburg and Minnibayev set against

a required total of 716,000 tons based on ethane based ethylene capacity of 565,000 tpa. The remainder of pyrolysis cracking at Kazanorgsintez (i.e., 75,200 tpa) is carried out using naphtha. Due to the shortage of ethane, Kazanorgsintez is ready to use propane and butane as supplementary feedstocks, although these raw materials are more expensive.

Originally Ethylene-500 was designed under the premise that supply of ethane would be increased from the Orenburg Gas Processing Plant but this has not taken place yet and may not for several years. The recent completion of the expanded ethane capacity at the Minnibayevo GEA to 140,000 tpa helps marginally but is not enough to meet full demand.

Kazanorgsintez-additional ethylene plant

Having completed the expansion of ethylene capacity from 420,000 tpa to 640,000 tpa, Kazanorgsintez is now interested in the second stage of ethylene expansion through utilisation of naphtha from the Taneko refinery at Nizhnekamsk. The construction of a pipeline would be necessary to transport the naphtha from Taneko. It is assumed that Taneko will be capable of producing 1 million tpa of naphtha from the first refining plant started in 2010, which has a capacity of 7 million tpa. In addition to ethylene, Kazanorgsintez is considering producing other petrochemicals products such as propylene, benzene, divinyl and butane-isobutylene fractions.

The aim for Kazanorgsintez would be to produce 320,000 tpa of ethylene to support the existing facilities for 640,000 tpa at Kazan. In addition to meeting the shortfall for the current derivative capacities, Kazanorgsintez is also capable of undertaking a further increase in HDPE capacity from 510,000 tpa to 660,000 tpa. The company also uses propylene and benzene in the production of cumene, whilst divinyl and butane-isobutylene fractions could potentially be sold on the market.

Such a proposed petrochemical complex could be constructed on a jv basis between Kazanorgsintez and Tatneft. Alternatively, Tatneft could construct the ethylene complex at the Taneko site and sell the ethylene to Kazanorgsintez through the pipeline system. The advantage of this latter strategy is that ethylene could be also sold to Nizhnekamskneftekhim. Kazanorgsintez does not believe at this stage that the proposed natural gas based petrochemical project in Tatarstan would produce the necessary feedstocks to be capable of supplying a new cracker.

However, Tatneft is not likely to consider naphtha based petrochemical complex until a decision has been reached whether to proceed with the natural gas project. Moreover, Tatneft is currently examining plans to build a second phase of its Taneko refinery complex, with a projected capacity of 7 million tpa to add to the existing 7 million tpa unit. A decision over when construction will start is expected to be taken in 2011, with investments of around \$5-6 billion estimated as necessary to finance the project.

Russian olefin supply

Ethylene production increased 5% in the period January-November 2011 against 2009 to 2.166 million tons, although the total was identical to volumes achieved in 2008. Whilst Stavrolen worked steadily in 2010, and Nizhnekamskneftekhim achieved close to maximum capacity there is an apparent shortage of monomer necessary to meet the full demand of derivative plants. The expansion of polyethylene capacity in the past few years at Salavat, Kazan and Nizhnekamsk has placed extreme pressure on ethylene operating capacity in the Tatarstan-Bashkortostan region forcing some other units to be under-utilised or shut for the time being.



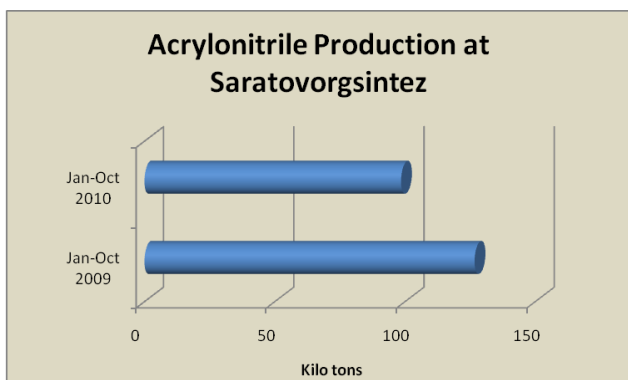
The conundrum is illustrated by the fact that polyethylene accounted for 58% of Russian ethylene consumption in 2008, but rose to 68% in 2010 mainly at the expense of ethylene oxide and other products. Ethylene production has been restricted from rising due to the lack of feedstocks, principally ethane which prevents Kazanorgsintez from running its olefin capacities at full utilisation. It also means that the ethylene bought from Nizhnekamskneftekhim and Salavatnefteorgsintez draws monomer away from other applications.

Propylene merchant sales on the Russian domestic market totalled 189,600 tons in the first ten months of 2010, 5% less than in the same period in 2009.

Reductions in merchant purchases resulted from lower production of acrylonitrile at Saratov, and also the termination of deliveries to Kaustik at Sterlitamak for the production of epichlorohydrin. The main suppliers of propylene on the Russian market are SIBUR-Kstovo and Angarsk Polymer Plant, accounting for 47% and 27% respectively.

Russian acrylonitrile production

Acrylonitrile production in Russia was affected in 2010 by the shortages of propylene, with volumes reduced by 12% against 2009 to 98,500 tons at Saratov in the first ten months of the year. As Saratovorgsintez depends on merchant purchases of propylene it is directly impacted when supply tightens as occurred in 2010. Last year the supply of propylene was affected by the shutdowns at SIBUR-Neftekhim, Stavrolen and Omsk Kaucuk resulting in lower acrylonitrile production at Saratovorgsintez.



Around 20% of acrylonitrile production in Russia is consumed in the domestic market, mostly in the production of butadiene-nitrile rubber followed by ABS applications. Consumption was higher for acrylonitrile in 2010 by 46% over 2009, but still only amounting to a total of 17,600 tons in the period January-November 2010. Saratovorgsintez exported 89,600 tons in this period, which is 22% less than in 2009.

Saratovorgsintez expects to run production without interruptions in 2011, assuming that there are no further problems in propylene supply. The addition of

extra propylene capacity (150,000 tpa) at the LUKoil Kstovo refinery alleviates much of the Russian supply side pressure that has been in evidence in recent years. This new plant, if run at high utilisation, is capable of meeting the full demand requirements for Saratovorgsintez.

Russian Styrene Production (unit-tons)		
Producer	Jan-Oct 10	Jan-Oct 09
Nizhnekamskneftekhim	167.664	171.616
Angarsk Polymer Plant	30.365	27.743
SIBUR-Khimprom	61.033	50.203
Salavatnefteorgsintez	119.188	109.062
Plastik, Uzlovaya	26.242	33.252

Salavatnefteorgsintez has filed a lawsuit in the Moscow Arbitration Court lawsuit against the Federal Antimonopoly Service, disputing the decision of the FAS over the requirement to conclude a five-year supply contract of ethylene with Kaustik. Deliveries of ethylene in December carried on from the previous few months, at 4,500 tons per month and at the same pricing formula as used in the September to November period. The Moscow Arbitration Court will consider the case on 17 January.

Salavatnefteorgsintez is expected to vote at the end of January on a name change to Gazprom Salavat Petrochemical. It remains the second largest producer of styrene in Russia after Nizhnekamskneftekhim, although may now be challenged by SIBUR-Khimprom which has recently expanded capacity.

Bulk Polymers

Russian polyethylene trade, Jan-Oct 2010

LDPE exports dropped by 28% in the period January-October 2010, down to 153,200 tons whilst revenues from the shipments rose 8% to \$197.2 million. HDPE exports rose by 5% in the first ten months of 2010 and totalled 108,200 tons, whilst revenues rose 36% to \$138 million. In contrast to rising HDPE exports, export shipments of polypropylene fell by 49% to 31,200 tons and in value terms dropped by 35% to \$36.1 million.

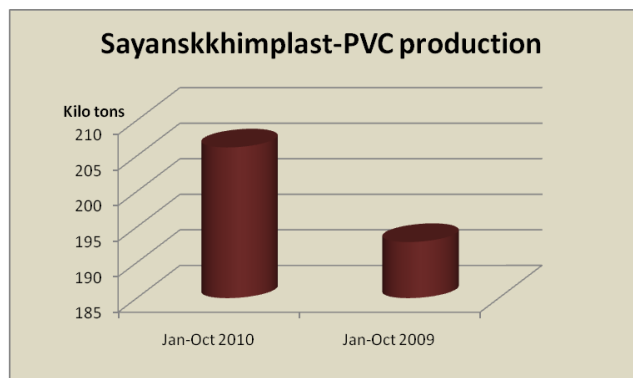


Regarding imports, HDPE shipments increased 1.6 times in the period January-October 2010 and totalled 199,300 tons. As the year progressed, import volumes increased whilst the value of HDPE imports rose by 1.8 times to \$320.8 million. Polypropylene imports grew

34% in the period January-October 2010 to 92,800 tons and in monetary terms by 1.7 times to \$142 million. LLDPE imports rose 23% to 81,800 tons and in value terms by 46% to \$140.6 million. LDPE import volumes rose 32% to 47,200 tons and in monetary terms by 49% to \$93.3 million.

Sayanskkhimplast increases PVC production by 6.9%

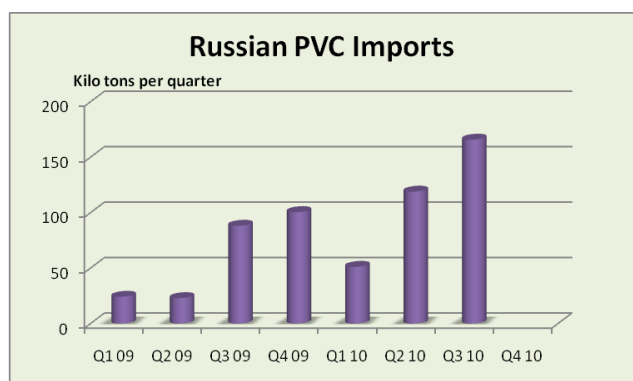
Sayanskkhimplast increased PVC production by 6.9% in the period January-October 2010 to 206,200 tons, compared to the same period in 2009. Sayanskkhimplast belongs to the group Renova-Orgsintez, and receives ethylene supply from Angarsk Polymer Plant. The company continues to consider the construction of its own ethylene plant, based initially on ethane from the Kovytko field in East Siberia but now more likely to be from the Chikanskoye gas condensate field in the north of the Irkutsk region.



The initial aim was to start producing its own ethylene by 2010, but Sayanskkhimplast was unable to progress beyond the planning stage due to complications regarding the Kovytko deposit. The Angarsk Polymer

Plant is considering expansion of its cracker but this is largely aimed at meeting the requirements of new polyethylene capacity. Pipeline construction from the Chikanskoye gas condensate field and other infrastructural investments are expected to reach Sayanskkhimplast no earlier than 2014, after which the company could start producing ethylene. This would be the key to expanding PVC capacity from 280,000 tpa to 400-600,000 tpa in the 2014-2016 timeframe, as planned, but other decisions need to be taken over the size of the cracker and whether there would be a surplus available. Potentially a marginal surplus could be sold to Angarsk to help with its derivative units, but a larger surplus could require that Sayanskkhimplast starts to develop other areas of derivative production.

Sayanskkhimplast commissioned a second launch complex storage of LPGs in December, and now owns seven storage tanks of 200 cubic metres to comprise a total of 19,000 tpa. In addition to storage of LPG, Sayanskkhimplast has started the construction of a fourth pyrolysis furnace for EDC. The new plant, in contrast to the existing furnaces at Sayansk will run on gas based on the latest technology.



RusVinyl selects contractor for PVC complex

Globalstroy Engineering has been selected as the general contractor for construction of the RusVinyl complex. The involvement of Russian engineering company is seen as profitable to the project. Financing for the complex should be completed in the second quarter this year. Deliveries of equipment for the project will be undertaken from Italy, Germany, China, Korea, France and Russia.

Russian PVC news

During 2010, the volume of consumption of PVC in the Russian market showed a strong recovery after the declines in early 2009, which resulted in a sharp increase in import activity. As widely known, volumes of domestic production are insufficient to meet the needs of the domestic market, and thus imports from China and the USA are prevalent in Russia. Outages in the middle part of 2010 at Sayanskkhimplast, for maintenance, and Kaustik at Sterlitamak due to a lack of ethylene increased the demand for imported PVC during the third quarter.

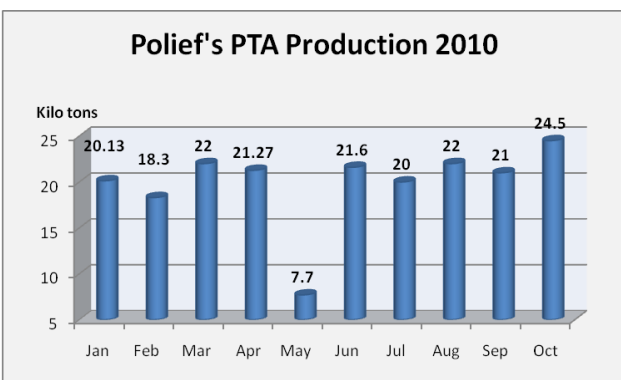
Russian plastics processors have requested the Russian government to reduce imports duties on PVC in order to reduce the impact on domestic producer prices. Imports of PVC are inevitable in relation to the supply/demand balance, and this trend continue easily continue for another three to four years. In September 2010, a government subcommittee on customs-tariff policy endorsed the proposal to increase the import duty on PVC from 10% to 15% to challenge Chinese imports. However, this does not help the consumer for the most part. PVC imports totalled 335,807 tons in the first three quarters in 2010 against 135,140 tons in the same period in 2009.

Aromatics & derivatives

Russian toluene market, Jan-Oct 2010

Toluene consumption in Russia totalled 81,200 tons in the first ten months of 2010, similar to the previous year. Refinery toluene production in Russia fell 18% in this period to 174,000 tons due to increases in the production of other high-octane additives such as MTBE. LUKoil-PNOS and Kirishinefteorgsintez, which account for around 60% supply to the Russian market, reduced their production and sales of toluene in the middle part of the year due to maintenance shutdowns. The scarcity and high cost of toluene has resulted in Russian paint and varnish manufacturers increasing their purchases of other aromatic solvents as a substitute. As a result, in the period from May to July 2010 the consumption of toluene in coatings fell by 15%, whilst orthoxylene purchases rose by 46%.

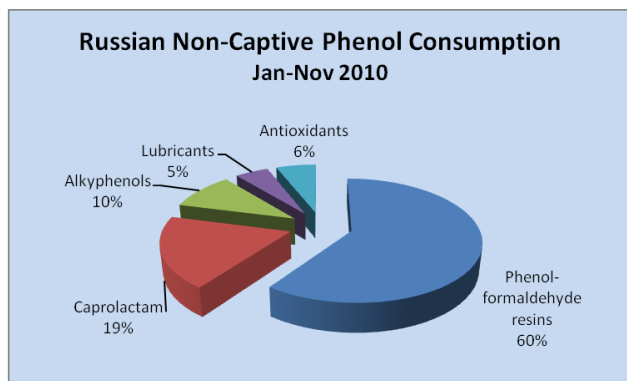
Other factors reducing toluene in coatings production have included a decline in demand for nitrocellulose lacquers and paints where toluene is used as a solvent. On the plus side, toluene sales to industrial explosive manufacturers rose 23% in the first ten months to 23,700 tons, whilst applications in synthetic rubber production rose 38% to 9,400 tons.



Polief-Bashneft transaction

Bashneft is in talks to buy a 17.5% stake in Polief from the government of Bashkortostan. Bashneft is interested in a larger package, but that does not seem possible. Other shareholders in Polief include the Russian bank VTB with 32.5% and Domestic Polymers with 50%. Bashneft is interested in Polief due to the realisation that it could add value to refined oil and may seek to buy shares from VTB. Domestic Polymers was created as a JV between SIBUR and LUKoil. SIBUR owns 50%, whilst LUKoil sold its stake last year to an unnamed investor.

Polief recorded its one millionth ton of PTA production in December since start-up of the plant in November 2005. In the first eleven months of 2011, Polief produced 220,000 tons of PTA, around half of which was consumed captively and the remainder sold to domestic consumers. Production in 2010 was roughly 2% higher than in 2009. In 2011, the company plans to increase capacity to 250,000 tpa from 230,000 tpa, to be followed in 2012 by an increase in PET to 220,000 tpa from 120,000 tpa at present.



2010, 5% higher than in 2009.

Russian phenol market 2011

Phenol supply in Russia is expected to remain very tight in 2011r as captive consumption puts pressure on merchant availability. Derivative areas likely to be affected include phenol-formaldehyde resins and caprolactam. In the period January-November 2011, phenol merchant sales in Russia totalled 110,000 tons which was 26% more than in 2009. Despite the increase in production volumes last year, consumers faced problems in supply particularly the smaller producers of phenol-formaldehyde resins. Phenol shipments to urea-formaldehyde resin producers totalled 66,000 tons in the period January-November

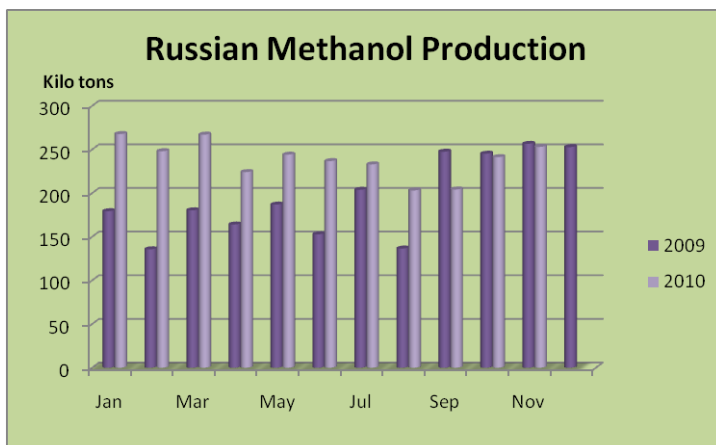
Methanol & Ammonia

UralMetanolGroup-project finance

Project finance has been agreed by UralMetanolGroup with Czech banks to support the construction of the methanol plant at Nizhny Tagil, which will start in April 2011. Funding for the project will be partly provided by the Czech Export Bank (CEB), which will provide a loan valued at \$196.5 million. In July 2010, UralMetanolGroup signed EPC contracts with the Italian company Techint and the Czech company Alta for the construction of the plant.

Shchekinoazot methanol project close to completion

Shchekinoazot has entered the final stages in the construction of its M-450 methanol unit. The installation of the metal structures was completed at the end of September and the pipelines are close to being finished. The installation of piping has been completed in addition to the instrumentation and electrical equipment. After successful completion of the entire project, the old compressor will be mothballed until commissioning of the new unit is started.



Gazprombank Leasing (a subsidiary of Gazprombank) has purchased the generating plant Pervomayskaya CHP in the Tula region, and then lease it to Shchekinoazot. This will allow Shchekinoazot significantly reduced costs of heat and electricity supply and improve the competitiveness of production.

Togliattiazot-melamine project

Togliattiazot has announced the intention to invest in a project for production of melamine with a capacity of 60 tons per day. The new product will develop a chain based on urea, and will make Togliattiazot the first Russian producer of melamine. The new plant, which has already been delivered, is expected to be installed by the second half of 2011 and connected to the existing on-site engineering infrastructure. Evrokhim at Nevinomyssk is also constructing a melamine plant.

Synthetic Rubber**Sintez-Kaucuk Rubber Production (unit-kilo tons)**

Product	2009	2008
SKI-3	57.589	42.723
SKI Cis	3.414	5.323
SKI-3D	0.331	0.423
SKI-3S	7.938	10.797
SKI-5PM	4.867	2.855
SKMS C-30APKM-15	11.944	33.6
SKMS C-30APK	2.849	6.886
SKMS C-30ARKPN	3.804	1.826
SKMS C-30APKM-27	2.145	13.324
Totals	94.881	117.757

Sintez-Kaucuk, Yokohama

The Japanese company Yokohama and Sintez-Kaucuk at Sterlitamak have been examining cooperation concerning isoprene rubber. Sintez-Kaucuk is ready to cover the full raw material needs of plants belonging to Yokohama in Japan for the production of tyres for passenger cars. Sintez-Kaucuk has the capacity to produce about 144,000 tpa of isoprene rubber, although production has been under-utilised in the past two years. Yokohama uses about 12,000 tpa of rubber.

Russian tyre market, Jan-Sept 2010

Russian tyre production has recovered from the low point incurred at the start of 2009, with gradual improvements throughout the year. Russian production of trucks increased 62.6% in the first three quarters in 2010 to 102,000. Accordingly, Russia produced about 1.1 million passenger cars in 2010, was 85% higher than in 2009 but still 25% lower than in 2008.

Russian tyre news

Italian tyre manufacturer Pirelli has confirmed plans to build two new plants in the Togliatti special economic zone. Pirelli has agreed to take over the assets of SIBUR Russian Tyres after signing a memorandum of understanding (MOU) with Russian Technologies and SIBUR-Holding in November. The cooperation will see the companies engage in a series of joint activities in the tyre and steel cord sectors. Pirelli will license its technology and production processes, participate in the technological upgrade of the plants, and provide its expertise in the areas of logistics, quality control, etc.



A new technological link between the two groups is expected to facilitate the introduction of new kinds

of synthetic rubber to improve tyre performance. In practical terms, this means SIBUR Holding will act as a long-term supplier to Pirelli and the two jvs, as well as for the joint development of new high-technology products. The deal is designed to help create synergies between the automobile, tyre and synthetic rubber sectors in Russia, and to enhance the international competitiveness of the Russian tyre industry.

Russian Synthetic Rubber Production (unit-kilo tons)		
Producer	Jan-Nov 10	Jan-Nov 09
Efremov SR Plant	26.8	31.3
Sintez-Kaucuk (Sterlitamak)	104.0	96.3
Krasnoyarsk SR Plant	34.0	30.0
Nizhnekamskneftekhim	476.6	397.5
Omsk Kaucuk	39.6	59.9
Kazan SR Plant	8.6	9.8
Togliattikaucuk	149.4	140.2
Voronezhsintezkaucuk	210.1	171.3
Sterlitamak PC	95.5	32.6
Ufaorgsintez	2.5	2.8
Totals	1147.0	971.8

Elsewhere in Russia the administration of the Ivanovo Region and Continental are in talks to build a plant for the production of tyres. Continental wants to construct a plant with a capacity of up to eight million pieces per annum. Nokian is considering building a new tyre plant, near its existing facility in St. Petersburg. The company faces a shortage of capacity, and needs to start building a new unit in 2011 or 2012. Investment costs have been estimated at around \$265 million with an initial capacity of 6 million tyres per annum. In addition, Nokian currently is expanding capacity at its existing Russian plant from eight million to 11 million tyres per annum.

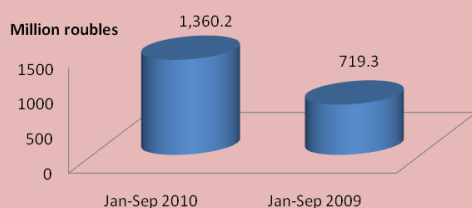
SIBUR-Reliance, butyl rubber jv

SIBUR-Holding and Reliance Industries have formed a jv for the production of butyl rubber in India. The jv facility will have an initial capacity of 100,000 tpa of butyl rubber at Reliance's integrated refining-petrochemical site located at Jamnagar, India and is expected to be commissioned by 2013. The estimated investment in the project will amount to \$450 million.

The plant will initially produce regular butyl rubber and is expected to manufacture other types of butyl rubber specialities in the future. Last year Reliance visited Togliattikaucuk to view the production of butyl rubber and the technology used. SIBUR will provide its proprietary technology for butyl rubber polymerisation and finishing, while Reliance will supply monomers and provide the jv with infrastructure and utilities. Reliance Industries will hold a majority stake in the jv.

Organic chemicals

Akrilat's Revenues from Acrylic Acid & Acrylate Esters



Akrilat-Tatarstan cooperation/higher domestic sales

Tatneftekhiminvest-Holding is interested in closer cooperation with Akrilat at Dzerzhinsk as a supplier of acrylic acid to Tatarstan. Currently, the main consumer of acrylic acid in Tatarstan is Nefis Cosmetics in detergent manufacturing whilst there are further plans to produce superabsorbents.

Akrilat's turnover from its acrylic acid and ester sales was significantly higher in the first three quarters in 2010 measured against 2009, and marginally higher than the same period in 2008. Sales of esters were badly affected in 2009 by the financial crisis, particularly in the

first six months of the year. The third quarter in 2010 witnessed a decline in turnover against the second quarter due mainly to outages undertaken at the Dzerzhinsk plant in September. Acrylic acid production was zero in September, whilst butyl acrylate production was half of its normal levels.

Despite the drop in Akrilat's activity in the third quarter net income was recorded at 49.1 million roubles, influenced heavily from a revaluation of investment credit which accounted for extra income of 46.4 million roubles. Overall though the company encountered a loss of 27.686 million roubles for the first three quarters in 2010, which was considerably better than the loss of 128.025 million roubles in 2009. The main loss in 2009 occurred in the second quarter, amounting to 105.3 million roubles, which was due mainly to exchange rate factors.

In terms of market shares, Akrilat used the financial crisis last year to increase sales domestically which

until 2007-2008 amounted to only a small amount of the company's shipments. In 2009, domestic sales accounted for 41.7% of shipments and 51.9% in revenues. An appreciable effect on domestic sales has resulted from the start of production in June 209 of acrylic emulsions by Dow at Ramenskoye. This plant has started to consume significant volumes of acrylates.



2009.

Russian acetone supply, Jan-Nov 2011

Acetone sales on the domestic market totalled 58,500 tons in January-November 2010, 18% up on the preceding year. The main factor behind the increase in domestic sales was the restart of MMA production at Dzerzhinsk and Dzerzhinsk Orgsteklo (DOS) was responsible for purchasing 13,700 tons over the eleven months of 2010. The main suppliers of acetone on the domestic market are Kazanorgsintez and Ufaorgsintez, which accounted for 34% and 25% respectively of shipments in 2010. Samaraorgsintez sold 13,200 ton on the domestic market, 3.4 times higher than in the same period in

Russian Petrochemical Exports (unit-kilo tons)		
Product	Jan-Oct 10	Jan-Oct 09
Ph anhydride	41.995	51.644
Acetone	15.195	25.113
N Butanol	110.786	82.29
Isobutanol	79.516	60.667
Caprolactam	138.984	163.693
PTA	3.6	21.429
Acetic acid	43.636	53.066
MEG	69.100	76,701
Orthoxylene	51.818	76.595
Paraxylene	88.007	131.439
Plasticizers	1.404	3.309
Propylene	28.795	0
Styrene	134.971	163.145
Toluene	0.006	0.004
Phenol	1.401	2.469
Ethyl acetate	2.579	3.303
Butyl acetate	29.000	31.900
MTBE	253.747	0

Russian organic chemical trade

Azot at Kemerovo accounted for 50% of caprolactam exports from Russia in the first ten months in 2010, with Kuibyshevazot and Shchekinoazot each accounting for 25%. China and Taiwan remain the main destination for Russian caprolactam, taking 73% and 17% respectively in the first ten months' shipments this year.

Russian exports of MEG totalled 69,100 tons in the first ten months of 2010, 11% less than in the same period last year. The decline in exports is due to increased consumption of MEG in the domestic market. The main direction of exports is Belarus, accounting for 85% of shipments. The main supplier of MEG to foreign markets is SIBUR-Neftekhim, accounting for 59% of shipments in 2010.

Russian exports of butyl acetate dropped 29% in the first ten months of 2010, down to 29,000 tons. Around 31% of exports were shipped to Turkey in 2010, followed by Finland. Lower exports have resulted from lower production due largely to the shortages of butanols on the domestic market as producers focused on export activity. In the first ten months of 2010, Russia exported 190,300 tons of butanols which was 33% higher than in the previous year. Most of the exports are shipped to China.

Azot exported 51,500 tons of acetic acid in the period January-October 2010, which was 12% down on the same period in the previous year. The decline in exports was due to increased demand for products in the domestic market.

Plastics

Russian Polymer Pipe Market (unit-kilo tons)		
	Jan-Oct 2010	Jan-Oct 2009
Production	290	250
Imports	39.15	33.03
Exports	7.48	16.9
Market Balance	321.67	266.13

Russian plastic pipes

Russian plastic pipe consumption recovered in 2010, with many plants returning to higher activity after the declines in 2009. Russia imported 6,890 tons of PVC pipes in the period January-October 2010, 13% up on 2009. Imports are sourced from Poland, Germany, Ukraine, etc. Around 100 producers of plastic pipes exist in Russia, most of which are small and focus on local markets. The main challenge

for pipe producers is finding sources of raw materials, which can prove difficult for some of the smaller processors. In the period January-October 2010, pipe consumption rose 21% over the same period in 2009.

Biakspen to increase capacity

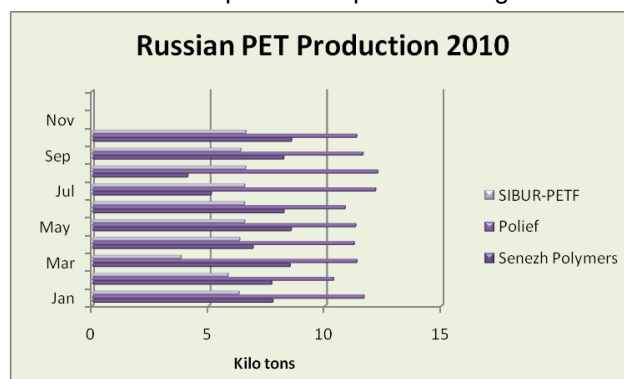
Biakspen-NK (formerly Novatek-Polymer) will launch three new lines in 2011 to produce BOPP film, stretch film and plastic blown film. The capacities of the three plants will comprise 6,000 tpa, 9,000 tpa and 5,000 tpa respectively. Trial operation of the new lines should start in the first part of the year, and the company believes that it could reach its full design capacity in the second half of 2011.

The market for flexible packaging is one of the fastest growing divisions in the chemical industry. In November 2010, Russia imported 12% more polypropylene films than in October. The country imported 27,740 tons in the period January-November 2010, 18% more than in the same period in 2009. Around 80% of polypropylene films are BOPP. Imports come mainly from Belgium (19%), Germany (16%) and Poland (16%).

Russian PET market, consumption rise puts pressure on supply

PET consumption in Russia rose significantly in the second half of 2010 resulting in a tight supply situation for buyers. Imports rose 19% in the period January-October 2010 against 2009 to 227,960 tons, and despite the three Russian plants operating at full capacity shortages were apparent in the market. Strong demand for PET resin continued beyond the normal traditional slowdown period in the autumn. Around half of the Russian PET market is served by domestic production, and producers have secured orders for several months in advance.

In the first half of 2011 the start-up of the Alko-Naphtha plant is expected to take place after being delayed from last year. If this plant materialises, domestic production should impact on imports although not all of



the production from the Kaliningrad plant is intended for sale in the Russian market. Most of PET imports into Russia come from China, South Korea and Belarus.

Chlorine/Soda

Russian chlorine plant news

Russian Caustic Soda Production (unit-kilo tons)		
Producer	Jan-Oct 10	Jan-Oct 09
SIBUR-Neftekhim, Dzerzhinsk	54.9	60.4
Khimprom, Novocheboksarsk	79.6	74.1
Kaustik, Volgograd	165.0	168.6
Khimprom, Volgograd	60.8	65.0
Kaustik, Sterlitamak	90.1	152.3
Usolyekhimprom	34.9	41.3
Sayanskkhimplast	125.1	121.5
Azot, Novomoskovsk	20.6	47.4
Bratsk TSKK	55.0	56.4
Kirov-Chipetskiy CC	71.6	70.3
Others	65.4	41.4
Total	823	898.7

Khimprom at Volgograd has managed to achieve a significant reduction in costs in the past year and at the same time has increased prices of finished products, thus improving the company's financial position. Khimprom has been in some degree of financial crisis for many years, but has managed to reduce its debts in 2010 thus enabling it to survive. Moreover, last year it constructed the second stage of its investment project into hydrogen chloride which will allow it to improve the VCM-PVC production process. Khimprom is planning to raise PVC emulsion capacity from 22,000 tpa to 34,500 tpa. Other projects under investment include the increase the capacity of ferric chloride production up to 3,500 tpa and preparatory work on the increase of caustic soda capacity to 120,000 tpa.

Chlorine and caustic soda production at Khimprom is based on the diaphragm method. The main shareholders of Khimprom include Russian Technologies with 51% and Renova-Orgsintez with 34%.

Despite the future uncertainty for Usolyekhimprom, at least for now the company has paid the outstanding debts accrued for energy consumption to Irkutskenergo. Usolyekhimprom expects to keep the production units for epichlorohydrin, chlorine and caustic soda and calcium hypochlorite closed until March this year. The company is owned by the Nitol group which aims to develop polycrystalline silicon in place of the traditional base of chemical production at Usolye-Sibirsk.



Russian soda ash market

Russian soda ash production rose 13% in the first ten months of 2010 against 2009, partly helped by higher production at the Pikalevo plant near St Petersburg. Export activity for soda ash was also higher in 2010. Despite the upward trend, production volumes still remain lower than prior to the global financial crisis.

The production of soda ash grade A (heavy soda) was planned to start at the Berezniki Soda Plant (BSZ) in late 2009, but due to lack of funding only started at the end of May 2010. The new unit at BSZ

has capacity of 500,000 tpa.

In June 2010, Bashkim bought a 97% stake in BSZ at Berezniki, after Solvay was expected to take control of the soda ash producer. The two plants at Sterlitamak and Berezniki, both owned by Bashkim, occupy around 70% of Russian production. The other two producers are the Achinsk Alumina Plant (part of Rusal), and the Pikalevo soda ash plant. The major consumers of domestic production in the Russian Federation comprise glass and steel plants, which account for around 69% of soda ash purchases.

Derivatives & other products

LUKoil-Nalco JV for chemical reagents

LUKoil and Nalco Holding signed an agreement in early December 2010 to create a JV based on the Kogalym Chemical Reagents Plant (KCRP), as part of the LUKoil-West Siberia complex. The JV will provide for LUKoil West-Siberia's needs as well as for the needs of several other oil and gas facilities in the region which use chemical reagents. The applications include improving the lift at oil fields, to condition downhole equipment and to prepare crude.

LUKoil West-Siberia will own 34% of the new venture while Nalco will own 66%. Production is to increase the facility's output from 5,900 tpa in 2011 to 27,830 tpa by 2015. Also central to the agreement, Nalco is to modernise the production, preparation and storage of chemical reagents. It will also introduce the latest technologies for production and service, while designing a new line of products based on data from tests and

Industrial chemical parks

Nizhniy Tagil-Chempark

Uralkhimplast is embarking on an innovative project entitled ChemPark Tagil, the aim of which is to create the basis for the deployment of chemical production in a single infrastructure sector. The residents of the industrial sector already include companies UralMetanolGroup, UHP-Cavenaghi, UHP-AMDOR, and Ural Plant of Plasticizers. Other companies have expressed interest in establishing a presence on the industrial park, some of which include Lanxess, Théoden, SI International and ARCL.

The total area of the park comprises 140 hectares, with Investors being offered industrial sites equipped with necessary communications. Some services are offered free on the industrial park, such as electricity, water, gas, compressed air, steam, and nitrogen. In addition, ChemPark Tagil provides advanced network of railways, roads, storage facilities, communication network.

Tomsk SEZ

The Tomsk Special Economic Zone of Technical Innovation Type (Tomsk SEZ) was established in 2005. Tomsk SEZ is located within the limits of Tomsk city and is composed of two territory sites: Northern and Southern. The northern site (14.6 hectares) is located in the northern part of Tomsk city and is adjacent to Tomskneftekhim. The southern site (192.4 hectares) is located in the eastern part of Tomsk, near the territory of Tomsk Scientific Centre of the Siberian Branch of the Russian Academy of Sciences (TSC SB RAS).

Bashkortostan Technopark

The Ministry of Industry and Innovation Policy of the Republic of Bashkortostan is considering possible ways and means of organising the activities of small and medium enterprises in the industrial park on the basis of Polief. Technopark PET Bashkortostan is planned to produce various kinds of chemical products (PET-film, blister films, PET bottles, preforms, packaging film, etc.).

laboratory studies

Polycrystalline silicon projects

Nitol produced its first batch of polycrystalline silicon at its Usolye-Sibirsk site on 20 December, from a design capacity of 5,000 tpa. This is the first production of polycrystalline silicon in Russia, providing raw materials for solar energy and microelectronics. By mid-2011, the company expects the plant to be running at 3,500 tpa.

Sberbank and Nitol signed an agreement in late 2010, whereby Sberbank has opened two credit lines totalling 9 billion roubles for up to seven years. Funding is provided to Usolye-Siberian Silicon, part of Nitol, for the production of polycrystalline silicon. The project is being undertaken with the participation of the Russian technology group Rosnano and is located at Usolye-Sibirsk in the Irkutsk region.

As a competitor to Nitol, Titan at Omsk claims to be able to produce the most inexpensive source of polycrystalline silicon in the world. Titan owns a plant for the production of silicon metal in Kazakhstan and its own deposits of vein quartz at Karaganda, both of which help to account for the low cost of final products at the new Omsk plant. The plant will comprise a capacity of 10,000 tpa, broken down into 7,500 tpa for solar energy and 2,500 tpa for the semiconductor industry. A full cycle of conversion of silicon-based high-tech production is intended to be created at Omsk. Already by 2012, new raw materials will be available for use in missile and aircraft construction, microelectronics and nanotechnology.

Ukrainian Chemical Production (unit-kilo tons)		
Product	Jan-Nov 10	Jan-Nov 09
Acetic Acid	75.4	76.3
Ammonia	3797.8	2785.1
Benzene (-95%)	190.5	169.9
Benzene (+95%)	110.7	66.2
Caustic Soda	65.5	41.7
Ethylene	44.5	0.0
Formaldehyde	25.8	20.2
Methanol	76.3	84.9
Polypropylene	73.9	91.4
Polystyrene	15.6	19.3
Polyvinyl Acetate	6.4	4.8
Propylene	19.8	0.0
Soda Ash	643.5	621.5
Titanium Dioxide	121.2	95.7
Toluene	4.9	4.3

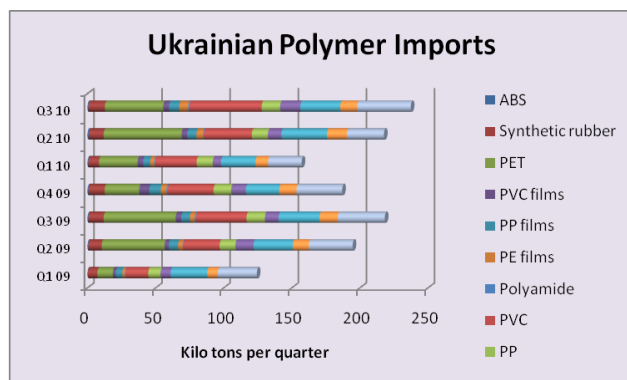
Ukraine

LUKoil-Ivano-Frankovsk cooperation

LUKoil and the administration of the Ivano-Frankovsk region have signed a cooperation agreement regarding increased production and sales of petrochemical products both in the region and further afield. The parties intend to adopt measures for the construction and operation of the membrane electrolysis plant for the production of PVC by Karpatneftehim. Other issues involve the acquisition of licenses and development of the Upper-Strutinsky rock salt deposits to provide raw materials the production of chlorine and caustic soda.

The administration of Ivano-Frankovsk region has agreed to provide to provide assistance to small enterprises for processing of polyethylene and PVC. The administration will also initiate the introduction of alterations in legislation regarding the cancellation charges of excise and import duties

on raw materials for pyrolysis (diesel and naphtha).

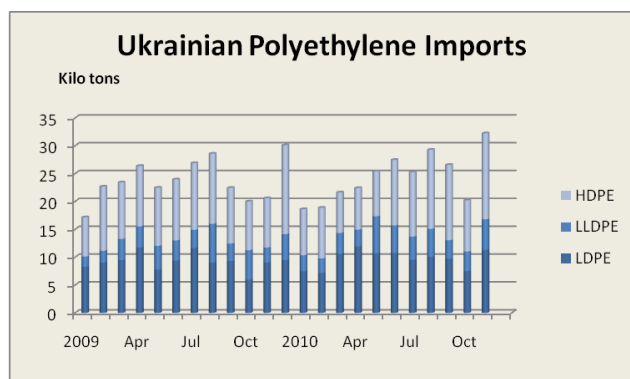


LUKoil-PVC from Kalush in Q1 2011

LUKoil plans to start PVC deliveries from Karpatneftehim in the latter part of the first quarter in 2011, with the full utilisation of the 300,000 tpa plant aimed for the latter part of the year. From the full production of 300,000 tpa, the company intends to supply roughly 150,000 tons in Russia, 100,000 tons to Ukraine, 20,000 tons to East Europe and 30,000 tons to Turkey. Karpatneftehim restarted petrochemical production in September after two years of inactivity at the cracker. Originally, the company hoped to start PVC production by the end of 2010, but has encountered delays.

PVC production at Kalush is expected to affect the flow of imports into Ukraine. In the period January-November 2010, Ukraine imported 152,400 tons of PVC which was 43% higher than in the same period in 2009 and 46%

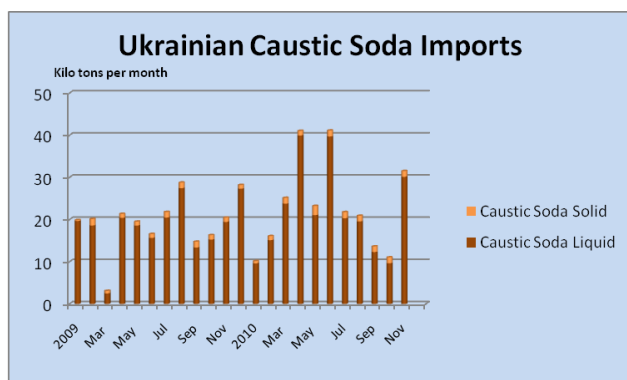
higher than in 2008. The main import sources in 2010 comprised the US with 39%, Germany with 18% and Poland 11%. Total polymer imports into Ukraine are illustrated in the graphic opposite.



Ukrainian polyethylene imports, Jan-Nov 2011

Karpatneftekhim produced 24,000 tons of HDPE in the three months from September to November following start-up, of which 86% was exported. The main volumes of exports were shipped to Russia (33%), Turkey (27%) and Hungary (22%). HDPE imports into Ukraine have not yet been discernibly affected by the restart of operations at Karpatneftekhim, and totalled 115,819 tons for the period January-November 2010 against 113,094 tons in 2009. However, the trend is slowing in favour of domestically sourced material.

For LDPE, imports into Ukraine amounted to 106,800 tons in January-November 2011, a 6% increase over the same period in 2009. Russia is the main supplier of LDPE to Ukraine, followed by Belarus although the cheapest source is from Azerbaijan. Regarding LLDPE, imports totalled 45,823 tons in January-November 2010 against 40,837 tons in 2009.



Ukrainian caustic soda market

Karpatneftekhim started the sale of caustic soda liquid in the latter part of 2010 and is preparing to start the sale of solid product. The only other producer of caustic soda liquid in Ukraine is Dneprozot, but its capacity is insufficient to meet domestic consumption resulting in imports. The capacity of the new caustic soda plant at Kalush is 200,000 tpa and imports are thus expected to fall in 2011. In the first eleven months of 2011 Ukraine imported 241,445 tons of caustic soda liquid and 14,456 tons of caustic soda solid. The main consumer of imported caustic soda in Ukraine is the

Nikolayev Alumina Plant (NGZ), which buys 70-100,000 tpa of liquid from Russia.

Ukrainian organic chemical markets

Exports of adipic acid totalled 47,600 tons in the period January-November 2011, almost 16-fold higher than in 2009 due to an increase in production at Rovnoazot. In the whole of 2009, Ukraine exported only 3,100 tons. Ukraine consumed 7,100 tons of phthalic anhydride in the first eleven months of 2010, 2.3 times higher than in the same period last year. The sole producer Lizinvest was out of action for large parts last year, and has been running rarely in 2010. Domestic consumption has been supplemented by imports from Kamteks-Khimprom in Russia and Lida in Belarus.

Imports of DOP into Ukraine doubled in the period January-November 2011 against 2009 to 12,300 tons. The increase in imports shipments was due to the higher production of PVC and PVC vinyl wallpaper. The main suppliers of DOP to Ukraine in 2010 were Poland and the Czech Republic which together accounted for 89% of imports.

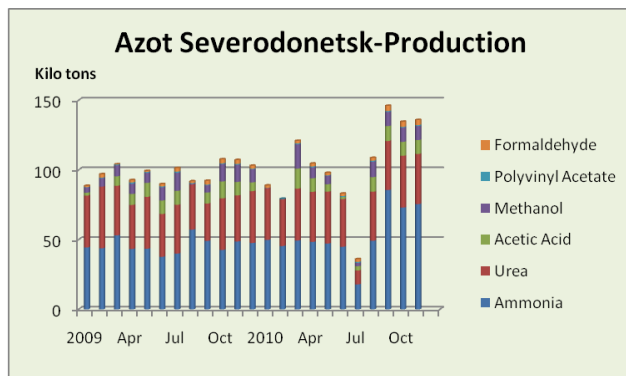
Ukraine produced a total of 16,800 tons of ethyl acetate in the first three quarters in 2010, 32% more than the same period than in previous year. The Perechinsky Wood Chemical Combine accounted for 80% of production and 20% by Kirovograd Raiagrosnab.

Rubezhnoye-benzene production started

Zarya at Rubezhnoye has completed the commissioning of its benzene unit, with the first batch of product coming out of the plant on 12 December. According to Zarya, the daily output of the plant comprises 30 tons of benzene which will be increased to 60 tons per day and eventually to 100 tons. Part of the benzene production will be shipped to the nearby Yuzhnyi plant for the production of nitrobenzene. Zarya specialises in processing crude benzene and receiving benzene and toluene synthesis. Zarya is capable of processing about 50,000 tpa of crude benzene and can produce about 34,000 tpa of benzene for synthesis.

Ukrainian methanol market

Russian imports of methanol increased into Ukraine last year to compensate for the declines and the inconsistency of production at Severodonetsk. Azot has been forced to reduce production marginally in the past year due to insufficient gas supplies from Russia. Consumption of methanol in Ukraine has moreover been increasing due to the needs for MTBE and urea-formaldehyde resins. Over the first three quarters of 2010, gross output of methanol in Ukraine fell by 21% against the same period in 2009.



Although Russian methanol is offered at lower prices to Azot's production, some consumers prefer to buy domestic material as it is more easily available. Thus, domestically produced methanol accounted for 35% of consumption in the first nine months of 2010. As a result of strong Russian competition, Azot recently requested an antidumping investigation on imports of Russian products into Ukraine. The outcome is not yet known, but if it is decided in Azot's favour Russian imports are expected to decline.

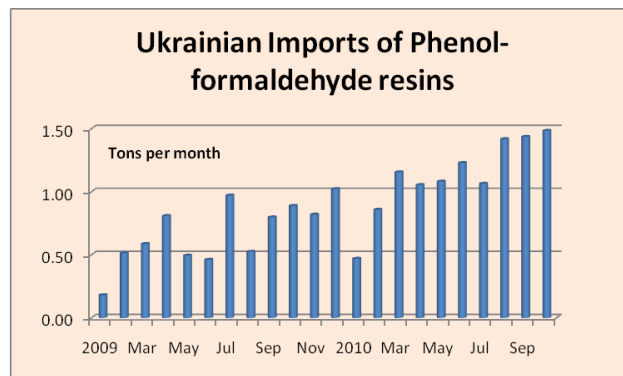
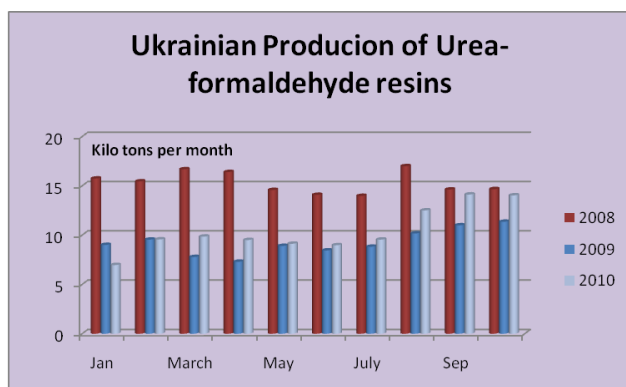
The optimal price of natural gas for producers of Azot fertilisers at current market prices has been estimated at \$205 per thousand cubic metres, excluding VAT and transportation costs. The present price of natural gas for industrial enterprises (including producers of Azot fertilisers) is \$275 per thousand cubic metres.

Azot Severodonetsk, IBE buys 40% stake

The State Property Fund of Ukraine has sold a 40% stake in Azot at Severodonetsk to IBE Trade, which already owned 60% in the company. Accordingly the deal has been concluded at a price 34.4% lower than set by the government. Azot is the fourth largest producer of fertilisers in Ukraine, and is the major producer of organic chemicals. The problem with gas prices has been the company's main weakness, which has reduced the attractiveness of the offer. However, in the latter months of 2010, Azot had managed to restore stability to its production volumes as shown in the graphic opposite.

Ukrainian urea-formaldehyde resins

The main trend in the urea-formaldehyde resin market in Ukraine witnessed last year was the reduction of exports and simultaneous rise in imports as demand recovered from the falls in 2009. The main application

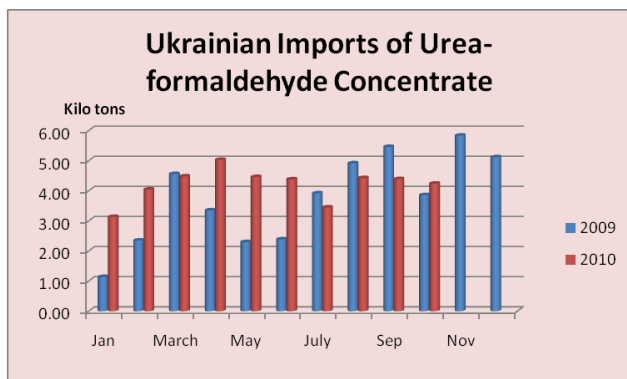


areas for urea-formaldehyde resins in Ukraine include the production of wood boards and plywood, production of which have been helped by preparations for the EURO 2012 football championships in Poland and Ukraine. Phenol-formaldehyde resins can sometimes prove more cost-effective, although Ukrainian plywood producers generally prefer urea-formaldehyde due to questions of quality and complications of using materials containing phenol. Consumption of urea-formaldehyde resins rose 20% in the period January-October 2010 over the same period in 2009, totalling 116,000 tons. At the same time, Ukraine increased production 13% in the period to 104,000 tons. The market is relatively well balanced between supply and demand, and imports only play a minor role in the marketplace.

Ukrainian phenol-formaldehyde resins

Production of phenol-formaldehyde resins fell in 2010 due mainly to instability in phenol supply. Phenol imports from Russia have almost stopped, due to product tightness in the Russian market, whilst phenol from European

suppliers is often too expensive for Ukrainian consumers. As a result of the reduced production of phenol-formaldehyde resins, imports into Ukraine rose 81% in the period January-October to 11,300 tons. The main foreign supplier of phenol-formaldehyde resins in Ukraine is Poland, accounting for 60% of shipments.



Ukrainian urea-formaldehyde concentrate

Consumption of urea formaldehyde concentrate in Ukraine rose the period January to October 2010 due to strong demand for resins for the wood-processing industry. Imports from Russia in this period increased to 42,040 tons to 34,420 tons in 2009. The main importers of urea-formaldehyde concentrate in Ukraine consist of Metafrax, Togliattiazot and Shchekinoazot. Domestic production is still insignificant.

Belarus

Belarusian Chemical Output (unit-kilo tons)

Fertilisers	Jan-Oct 10	Jan-Oct 09
Potassium Fertilisers	4456.3	2007.2
Nitrogen Fertilisers	624.8	610.6
Phosphate Fertilisers	158.2	149.4
Ammonia	840.8	835.3
Sulphuric Acid	743.5	693.6
Petrochemicals	Jan-Oct 10	Jan-Oct 09
Ethylene	112.2	117.3
Benzene	74.5	86.9
Caprolactam	104.3	97.7
Phthalic Anhydride	16.5	12.2
Polyethylene	110.8	113.8
PET	185.2	170.5

Belarusian export duties and gas prices

Russia and Belarus have agreed on the issue of export duty on crude oil and oil products, which may affect the price of paraxylene for Mogilevkhimvolokno. In terms of gas prices, the Russian price for Belarus in 2011 will remain as planned, at \$220 per thousand cubic metres compared with \$185 in 2010. Gazprom has stated that the figure assumes that the price of oil next year will remain at the level of the fourth quarter of this year.

Mogilevkhimvolokno-reconstruction plans up to 2015

Mogilevkhimvolokno has approved plans up to 2015 for large-scale reconstruction of existing facilities and construction of several new units to increase the production of polyester products and to increase its competitiveness. The company aims to increase

capacity for PET production to 200,000 tpa, and to modernise the DMT facilities. Around €120 million is expected to be invested in the modernisation programme.

Central Asia & Kazakhstan

STX-Azerbaijan methanol project

STX Heavy Industries has won an order worth \$210 million from AzMeCo to construct the methanol plant in Azerbaijan. STX Heavy Industries Co., a subdivision of South Korea's STX Group, will start construction in 2011 and aim to complete by March 2013. The Azerbaijan Methanol Company (AzMeCo) is now looking for investors for the second phase of its investment, which envisages the production of fertilisers.

The total cost of the project's first phase is estimated at \$324 million, \$85 million of which is provided from the company's own funds and \$120 million from the EBRD. The major buyers of the plant's methanol are expected to be multinational trading company Vitol and Mitsubishi Corporation.

The second phase of the project envisages the construction of a fertiliser plant, AzerGubre, to produce ammonia, urea and formaldehyde. The plant's capacity will comprise 1,100 tons of ammonia, 2,150 tons of urea and 115 tons of formaldehyde per day. The total cost of the second phase of the project is estimated at around \$700 million. A third phase of the project, which has yet to be fully decided, envisages the production of derivatives of methanol and urea including of acetic acid, DME and melamine. The total cost of investment in the third phase has been estimated in the range of \$300 million.

LUKoil-gas processing plant Uzbekistan

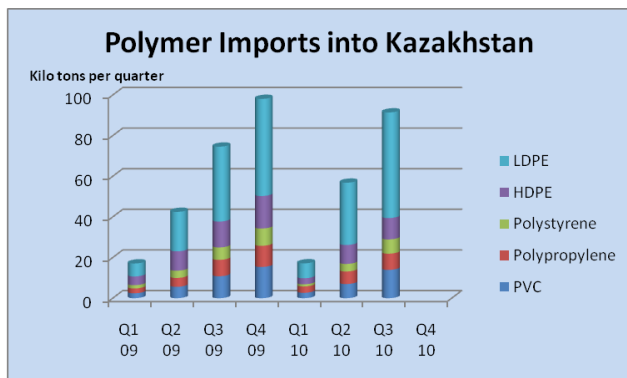
LUKoil has announced competitive bidding for a feasibility study for the construction of a gas processing plant at the Kandym group of fields in Uzbekistan. LUKoil plans to start construction prior to the end of 2011, to be followed by other projects in Uzbekistan at Kandy and Hissar. The Hissar project is expected to produce more feedstocks for petrochemical production.

Uzbek chemical projects

Uzkhimesanoat plans investments into new chemical projects in the period 2009-2011, with emphasis on new phosphate and other fertiliser products. In the first half of 2010, work has continued on such projects as the reconstruction of a sulphuric acid plant at Ammofos, the production of ammonium nitrate at Maxam Chirchiq and production of PVC, chlorine and caustic soda from acetylene at Navoiyazot together with the South Korean company ISU Engineering.

Navoiyazot is adjusting the production of methanol to grade A for consumption in motor fuels. Around \$1.2 million is to be invested in 2010 into the 12,000 tpa plant at Navoi. In addition, Navoiyazot plans to develop dimethyl ether with a capacity of 2,000 tpa. The company also plans to build a facility for production of 50,000 tpa of PVC and 32,000 tpa of caustic soda, as part of a jv. Navoiyazot has been selected as the site of for Uzbekistan's joint investment with International Investment Co (IPIEC) for building of a chemical complex worth \$1.34 billion. This will include 750,000 tpa of ammonia and 1 million tpa of urea, which are planned to be in operation by 2013. The general contractor for the project will be the German company MAN Ferrostaal AG.

Ferganaazot also plans to organise the production capacity of dimethyl ether (DME) in the 2011-2013 period, a project valued at \$90 million. The company is currently assessing ways of attracting foreign investment, whilst the project is under pre-feasibility study.

**Kazakh polymer imports**

Polymer imports into Kazakhstan have been rising since the start of 2010, with PVC accounting for the largest volume. Polystyrene has risen in the past eighteen months, particularly following the decision of Sat Operating Aktau to cease polystyrene production permanently in 2009. This was taken due to the problems of securing raw materials. Thus, only imported polystyrene is available on the Kazakh market, mostly from China, Russia and South Korea.

Atyrau aromatics complex

The Atyrau refinery (ANPZ) has signed an agreement of intent with a Chinese holding company Chanlyan-oil to purchase paraxylene when the new plant is completed. Details on the volumes are not yet known, but it is expected to account for a large share of production from the 496,000 tpa plant. Sinopec Engineering is responsible for constructing the aromatics complex. An agreement has also been signed for the sale of benzene with Kazakhstan Petrochemical Industries and United Chemical Company.

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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