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MONTHLY NEWS

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

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FEATURES FROM THIS ISSUE

- **SLOVNAFT ETHYLENE UPGRADE UNDERWAY IN ORDER TO SUPPORT NEW LDPE PLANT**
- **CENTRAL EUROPEAN REFINERS REPORT GOOD RESULTS ON Q3, HELPED BY CHEAP OIL**
- **SYNTHOS TO PROCEED WITH BRAZIL POLYBUTADIENE PROJECT DESPITE FEEDSTOCK UNCERTAINTY**
- **BORSODCHEM CONSTRUCTING CITRIC ACID PLANT IN HUNGARY**
- **ETHANOL PROJECTS PLANNED FOR SLOVAKIA AND MACEDONIA**
- **ETHYLENE CAPACITY IN RUSSIA COULD RISE FOUR FOLD BY 2025 IF GOV'T PROVIDES SUPPORT**
- **RUSSIAN ETHYLENE PRODUCTION AFFECTED IN JAN-SEP 2014 BY STAVROLEN'S EXTENDED OUTAGE**
- **GAZPROM NEFTEKHIM SALAVAT SELECTS CONTRACTOR FOR PROPANE-PROPYLENE UNIT**
- **UFAORGSINTEZ EXPANDS ETHYLENE CAPACITY BY 25%, AGREES FEEDSTOCK SUPPLY**
- **UNITED PETROCHEMICAL COMPANY MAY ADD MEG TO PTA-PET PROJECT AT UFA**
- **RUSSIAN POLYPROPYLENE PRODUCTION RISES IN JAN-SEP 2014 DESPITE STAVROLEN OUTAGE**
- **RUSSIAN METHANOL PRODUCTION INCREASED 2% IN JAN-SEP 2014 TO 2.6 MILLION TONS**
- **RUSSIAN POLYCARBONATE CONSUMPTION RISES IN JAN-SEP 2014**
- **NHC DECIDES ON SITE FOR NEW METHANOL PLANT AT NAKHODKA**
- **RUSSIAN PET IMPORTS RISE 22% IN JANUARY TO SEPTEMBER**
- **UNITED PETROCHEMICAL COMPANY SELECTS BADGER FOR CUMENE UPGRADE AT UFA**
- **BASHNEFT SIGNS 25 YEAR PARAXYLENE SUPPLY AGREEMENT WITH RUSPETF**
- **RUSSIAN BUTANOL SALES ON DOMESTIC MARKET UP 8% IN JAN-JUN TO 33,000 TONS**
- **TURKMENKHIMIYA OPENS NEW AMMONIA AND UREA PLANTS AT MARY**
- **UZBEKISTAN RECEIVES ZL300 MILLION FROM CHINA TO FUND PVC AND CAUSTIC SODA PROJECTS**
- **ATYRAU AROMATICS COMPLEX STARTS COMMISSIONING IN OCTOBER**
- **CNPC TO BECOME PARTNER IN UZINDORAMAGASCHEMICAL THIS YEAR**

CENTRAL & SOUTH EAST EUROPE

Petrochemicals

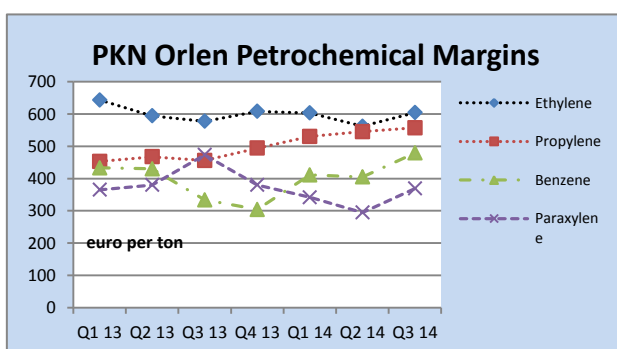
PKN Orlen Petrochemical Production (unit-kilo tons)

Product	Jan-Sep 14	Jan-Sep 13
Ethylene	335.2	376.5
Propylene	247.3	267.3
Butadiene	41.7	41.8
Phenol	23.4	25.2
Polyethylene	238.4	265.6
Polypropylene	172.2	201.6

PKN Orlen, Q3 2014

PKN Orlen generated LIFO-based EBITDA in the third quarter of zł 2.1 billion, supported by better market conditions, higher downstream margins and falling crude oil prices. For Q3 2014, PKN Orlen reported a higher EBITDA of zł 1.4 billion than in the third quarter last year, combined with an aggregate rise in revenues of 3% across the three main divisions. Ethylene and propylene production both declined at Plock in the first three quarters this year, mainly due a 20 day shutdown in September 2014 and other minor stoppages which did not occur last year.

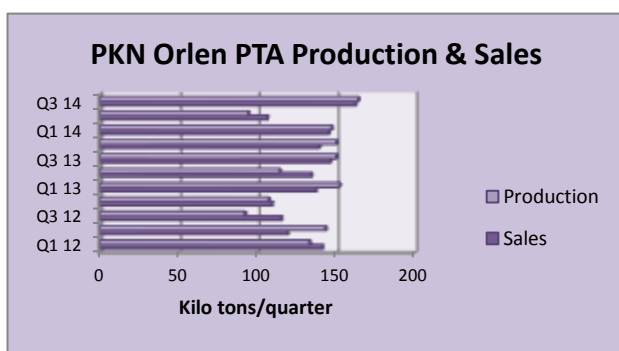
Petrochemical margins were slightly up in the third quarter, but the main gains were recorded in the refining sector.



The group's performance in Q3 2014 benefited in particular from a \$3.4/barrel rise in downstream margins from the previous quarter, rising to \$12.9/barrel. The latter part of the third quarter saw the refining margin for September rising to zł5.50 per barrel, 10% more than in August and nearly five times more than in September 2013. The margin compares against zł1.20 in September 2013 and zł5.70 per barrel in April 2013.

Overall the average refining margin for the third quarter 2014 amounted to zł4.80. This was almost four times higher than in the first quarter and almost twice higher

than in the second quarter (zł1.30 per barrel and zł2.50 per barrel respectively),



The group reported a 15% growth in sales of petrochemical products, with a slight decrease in sales of refining products (down 1%). Orlen increased PTA sales by 9% against the third quarter last year, with the shutdown at Wloclawek being brought forward in 2014 to the second quarter. Poland accounted for 6% of Orlen's increase in chemical sales and the Czech Republic 33%.

Orlen reported an increase of fertiliser sales by 50% in the third quarter as a result of uninterrupted production at Anwil and Spolana, the latter which reduced production in 2013 due to floods in the Czech Republic. Despite the fall in production at Plock, polyolefin sales for the Orlen group increased by 28% due to the improvement of the market situation in the Czech Republic and uninterrupted production at Litvinov.

A small explosion took place at Plock on 1 October resulting from the ignition of hydrocarbons during the relaunch of the olefin plant after maintenance. The explosion did not prevent the restart although one of

the lines has required repairs affecting production volumes.

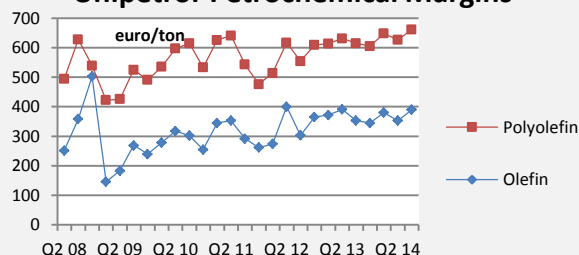
PKN Orlen-power projects

PKN Orlen pursued its investments in the power project at Wloclawek in the third quarter this year, including the gas turbine, steam turbine, the generator and the boiler. The concept for construction of a similar project at Plock is also being considered.

Unipetrol, Q3 2014

Revenues for Unipetrol increased by 37% in the third quarter this year to Kč 34.041 billion. Due to low oil prices refining margins were the highest since the beginning of 2013, and there was also an increase in petrochemical margins. Unipetrol increased crude oil throughput by 52% against the third quarter last year to 1.372 million tons, and achieved a refining utilisation ratio of 93%.

Unipetrol-Petrochemical Margins



Unipetrol's Petrochemical Sales (unit-kilo tons)

Product	Jan-Sep 14	Jan-Sep 13
Ethylene	120	98
Propylene	33	26
Benzene	170	134
Urea	0	5
Ammonia	159	133
Butadiene	48	42
HDPE	234	211
PP	204	173
C4	65	58

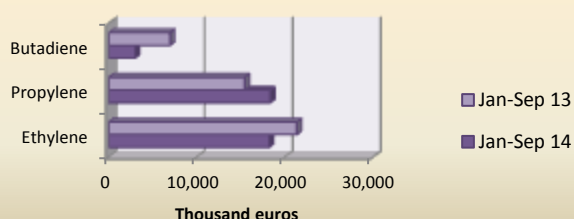
Steam-cracker utilisation at Litvinov amounted to 89% in the third quarter. In the downstream division, which consists of refinery and petrochemical sub-sectors, the results were influenced by better margins (both refining and petrochemical) and higher sales volumes. The refinery division recorded a higher EBITDA of Kc 798 million in the third quarter, mainly due to better refining margins and higher Brent-Ural differential. Group sales of refinery products increased to 1.174 million tons, 41% up in Q3, driven by both diesel and gasoline sales.

Unipetrol's operational profit for the petrochemical sub-sector in the downstream division amounted to Kc 1.336 billion in the third quarter. The company recorded a sales increase of 23% in petrochemical products to 449,000 tons. Higher sales were driven by better market demand and constant production. Sales of polyethylene increased by 25% and polypropylene by 32%. At the same time renewable energy charges (OZE) continue to burden Unipetrol's results from the petrochemical business.

In terms of export trade in monomers propylene shipments were up in value in the first three quarters, whilst ethylene was down, but butadiene fell more noticeably due to increased

captive consumption. In the polymer business most products have gained in values this year.

Unipetrol Monomer Exports



Unipetrol-investment programmed revised

Partly due to lower oil prices Unipetrol may need to revise its investment plan for 2013-17, whilst other factors affecting the strategy might also include a weak crown and a decline in investment from the holding company Orlen. Some pressure may be placed on the Czech government to find a new investor for Unipetrol. This year Unipetrol has expanded its control over the refining sector in the Czech Republic after acquiring 32.445% of shares in Ceska Rafinerska from Eni. Unipetrol thus became the sole shareholder of Ceska Rafinerska with 100.00% shareholding interest of the

share capital.

Czech Polymer Exports to Germany (€ thousand)

Product	Jan-Aug 14	Jan-Aug 13
Polypropylene	45,814	33,938
Propylene Copolymers	19,507	19,450
HDPE	73,823	66,995
EPS	16,545	7,695
GPPS	6,204	4,310
PVC	18,349	9,441

Slovnaft-ethylene upgrade

Slovnaft's ethylene modernisation project at Bratislava started in full in September 2014. Reconstruction will run until mid-November, requiring investments of around €30 million. Total investment in the modernisation project exceeds €40 million. The ethylene unit is effectively the most important production unit in Slovnaft, linking the refinery division with the plastics division.

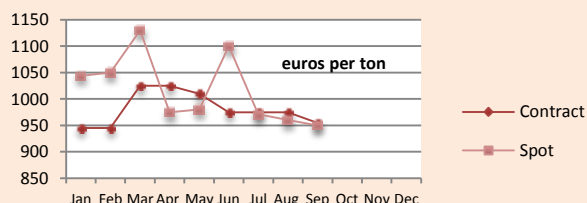
Reconstruction should contribute to ensuring operational reliability, increased security in terms of protecting the environment and reducing energy intensity of the ethylene plant. Part of the project includes the reconstruction of compressor for pyrogas and a new technology to produce hydrogen. Linde is participating in the reconstruction process.

The upgraded ethylene plant will provide the raw materials for the new LDPE-4 facility which is currently under construction and should be launched late next year. The modernisation of the cracker at Bratislava will lead to by-products that Slovnaft's partner company TVK can use in the production of butadiene in Hungary.

Synthos, S-SBR plant

The S-SBR project at Oswiecim is progressing to schedule, with current work involving installation of steel supports for apparatuses, equipment and the network of technological pipes. For the purpose of the new plant new butadiene tanks and a pump room have to be constructed. On 18 July the European Commission granted Synthos Dwory funding from the European Regional Development Fund of approximately zł 589 million to create 162 jobs in the Malopolska region. The funds are being used to support the S-SBR project at Oswiecim and to help create an R&D centre.

European Butadiene Prices 2014



In June 2012 Synthos Dwory signed a licencing agreement with Goodyear Tire & Rubber Company in order to use manufacturing technologies for advanced S-SBR rubbers available to Goodyear (purchase of licence and know-how). The 90,000 tpa production unit is expected to be launched in 2015. In addition to S-SBR rubbers, the plant will be also capable of manufacturing lithium polybutadiene Li BR.

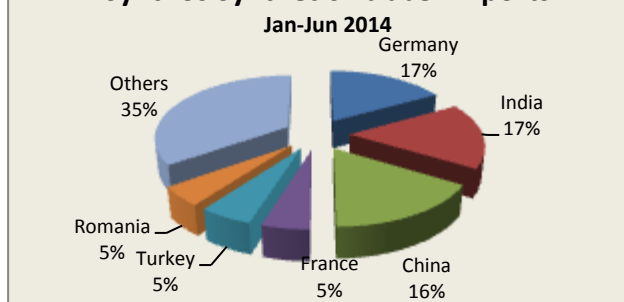
Synthos-Brazilian rubber project

Although uncertainty between Petrobras and Braskem remains over naphtha supply, a temporary agreement has been reached enabling continued production at the Triunfo Petrochemical Complex and also helping the Synthos project at the same site. Synthos is now pursuing the investment plans with the aim of starting the synthetic rubber plant in the third quarter in 2017. Synthos reports it has already contracted provisional sales of 40-45% of proposed production from the new plant. Synthos has signed a conditional agreement with tyre manufacturers Michelin and Pirelli rubber NdBR supply to their plants located in Brazil.

The company plans to a plant for polybutadiene rubber neodymium catalyst at a cost of zł170 million.

Production of rubber is to be conducted under the license granted by Michelin.

Synthos Synthetic Rubber Exports



HIP Petrohemija-Gazprom

Serbia has proposed to Gazprom to transfer a share in HIP Petrohemija in repayment of debt for gas. In addition, Serbia has offered to return the tolling scheme to reduce gas prices. HIP Petrohemija owns petrochemical complexes located in Pancevo, Elemir, and Crepaja, but these are the type of businesses that are not consistent with Gazprom's structure. Probably the only reason why Gazprom would take petrochemical assets in exchange for debts would be political, and hope that this might provide some advantage elsewhere. Production capacity of HIP Petrohemija is 700,000 tpa, including 200,000 tpa of ethylene and 90,000 tpa of HDPE. Synthetic rubber production takes place at Elemir whilst plastics processing takes place at Crepaja.

Viru Keemia-oil shale refinery

The EBRD has granted a loan to Estonian shale oil producer Viru Keemia Grupp (VKG), in order to contribute to the increase of oil shale industry energy efficiency and environmental sustainability in Estonia. The work financed with the loan takes place in 2014–2016, the loan amounts to €35 million. The Estonian oil shale processing industry generates around 3% of Estonia's GDP.

Chemicals

PGNiG Gas Supply (billion cubic metres)

	Jan-Sep 14	Jan-Sep 13
Production	3.4	3.4
Imports from Russia	6.4	6.9
Other Imports	1.0	1.3
Total Sales on Polish Market	11.8	11.7

ZA Pulawy-ammonia storage

ZA Pulawy opened a new ammonia storage facility in October, the capacity of which is 15,000 tons which represents a five-fold increase for the Azoty group member. The new facility has significantly improved the safety in the supply of raw materials, allowing ZA Pulawy to buy ammonia in the external market when the price is low. The Pulawy plant is much more vulnerable to fluctuations in gas supply than other Azoty members, and thus the new facility has been constructed to help feedstock security.

Polish Chemical Production (unit-kilo tons)

Product	Jan-Sep 14	Jan-Sep 13
Caustic Soda Liquid	217.2	235.9
Caustic Soda Solid	60.8	59.5
Soda Ash	797.0	778.0
Ethylene	335.2	376.5
Propylene	247.3	267.3
Butadiene	41.7	41.8
Toluene	10.1	13.6
Phenol	23.4	25.2
Caprolactam	125.7	118.1
Acetic Acid	7.3	6.0
Polyethylene	238.4	265.6
Polystyrene	48.4	42.4
EPS	51.1	58.7
PVC	210.8	238.4
Polypropylene	172.2	201.6
Synthetic Rubber	147.0	146.6
Ammonia (Gaseous)	974.9	948.8
Ammonia (Liquid)	953.6	903.6
Pesticides	26.6	16.0
Nitric Acid	1744.0	1683.0
Nitrogen Fertilisers	1425.0	1345.0
Phosphate Fertilisers	306.2	278.4
Potassium Fertilisers	231.1	230.9

Azoty-Kronospan

Grupa Azoty Pulawy and Police have concluded contracts with Kronospan for melamine and urea. The contracts run until the end of 2018, and amount to a total estimated amount of zł 900 million. Products from Pulawy and Police will be delivered to the world's largest manufacturer of wood based panels Kronospan, directly to the Polish subsidiaries in Mielec and Szczecinek, Strazske in Slovakia and Ostrava in the Czech Republic. Grupa Azoty Pulawy possesses a melamine capacity of 96,000 tpa and urea of 1.2 million tpa. Grupa Azoty Police possesses a urea capacity of 0.5 million tpa.

Azoty ZAK-new turbine

Rafako signed with the Czech branch of Siemens a contract to supply a turbine set for the construction of a new plant at Kedzierzyn. The new power plant is to be equipped with a turbine set extraction-condensing power of approximately 25 MWe and the following parameters of the inlet steam temperature and pressure 490°C 7.0 MPa. On 23 May this year Rafako signed a contract with Grupa Azoty ZA Kedzierzyn to build a new power plant at Kedzierzyn to replace outdated and low-efficient power plant.

BorsodChem-citric acid plant

The RZBC group from China plans to invest Ft 30 billion in the construction of a citric acid plant at Kazincbarcika at the BorsodChem site. BorsodChem is owned by the Chinese Wanhua Group, which announced in July that the new plant will create hydrochloric acid condensation of government support.

Ethanol project Straszke

Biochemtex and Beta Renewables have agreed with Energochemica to build an ethanol plant at Straszke in the Slovak Republic. The plant capacity of 55,000 tpa will be based on non-food biomass as its feedstock and be based on Beta's PROESATM technology. Biochemtex will provide basic engineering, key equipment and technical field services.

Ethanol project Macedonia

Macedonia has agreed an MOU to facilitate the development of the cellulosic ethanol market in the Pelagonia region between Ethanol Europe and DuPont. According to DuPont, this collaboration agreement brings together three critical components for the preparation of detailed feasibility studies for a commercial scale 2G ethanol plant to supply the European market. The project includes a construction of modern biorefinery with a capacity of 100 million litres.

The Macedonian government will facilitate the project in establishing a viable supply chain using energy crops, increasing local production of cereals and oilseeds, and offering incentives for renewable biomass electricity for the nation's power grid. In turn, Ethanol Europe will create an investment plan with the intent to develop the sustainable agricultural supply chain, project design, project financing, and construction of a 100 million litre biorefinery.

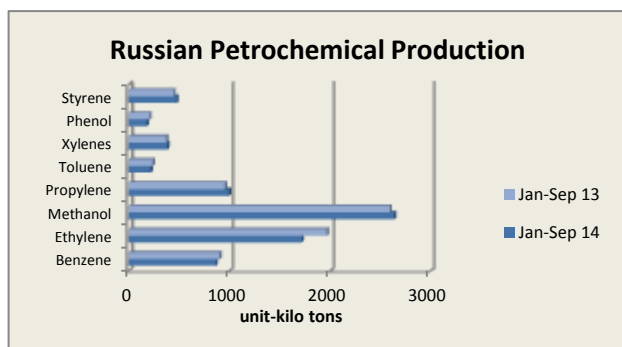
The project has started without delays and the start-up of the plant is expected in the first half of 2017. The Straszke plant will be the third in the world based on PROESATM technology, following Crescentino, Italy, and Alagoas, Brazil. The new ethanol plant will use enzymes from Novozymes and yeast from Leaf Technologies. The Proesatm process is a second-generation cellulosic biomass technology. It takes non-food biomass, such as energy crops or agricultural waste, and turns it into high-quality, fermentable C5 and C6 sugars. These sugars can then be used to produce biofuels and other petrochemical replacements with a smaller environmental footprint than fuels and chemicals made from oil or natural gas.

Czech company Energochemica has also stated that it intends to invest several hundred million dollars in chemical production facilities at Straszke, partly replacing the Novaky plant.

Organika-Sarzyna, polyester resin expansion

Ciech subsidiary Organika-Sarzyna has invested zł 12 million into expansion of its plant for the production of saturated polyester resins. With this investment, the company has gained new customers in Russia, Turkey and France. The new line will increase the production of unsaturated polyester resins by 100% up to 12,000 tpa. Earlier in 2014 Synthos was interested in buying Organika-Sarzyna, but under new ownership Ciech is does not want to sell the resin and plant protection agent producer.

RUSSIA



Russian chemical production, Jan-Sep 2014

Aggregate Russian chemical production for the period January-September rose 0.5% compared to 2013. Declines were recorded in petrochemicals resulting from the Stavrolen extended outage, culminating in lower olefin and benzene production, and the accident at Omsk Kaucuk which resulted in lower phenol and acetone production. In the polymer sector, HDPE production was affected by the downtime at Stavrolen whilst rises were recorded for polypropylene and polystyrene following the introduction of new capacity at Tobolsk and Nizhnekamsk.

Fertiliser production in Russia rose in the first three quarters, helped by the devalued rouble, but synthetic rubber production fell mainly due to the weak global market. Significantly the rouble fell by more than 20% against both

the euro and US dollar in the period between January and October. In 1998, the last time the rouble fell by such a magnitude, the fall acted as an economic stimulus lasting for several years and many chemical plants were able to revive production based on a cheaper currency. As most plants are now running close to capacity the results are less tangible, in many cases benefits from export activity is counter-balanced by import costs for raw materials and equipment not available domestically. The winners from the devaluation are mostly fertiliser producers and other products where there is a strong amount of export activity such as methanol.

Russian Petrochemical Exports (unit-kilo tons)

Product	Jan-Sep 14	Jan-Sep 13
Propylene	8.5	19.0
Orthoxylene	42.2	35.6
Paraxylene	69.2	85.9
Methanol	1146.0	1115.2
Butanols	40.0	49.8
Isobutanols	34.7	48.3
Styrene	70.7	94.5
Phthalic Anhydride	54.2	79.2
Phenol	4.6	14.6
Caprolactam	44.9	53.7
Vinyl Acetate	7.1	17.4

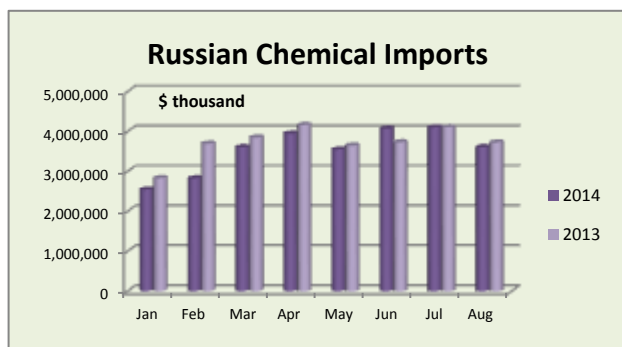
Russian foreign trade, Jan-Sep 2014

Aside methanol most petrochemical products recorded a decline in export activity in the first three quarters this year. Lower production was reflected in lower export shipments. Phenol and vinyl acetate exports were affected by outages, whilst for some products such as paraxylene and butanols increases in domestic usage were recorded.

Russian Chemical Commodity Exports

Product	Jan-Aug 14 Kilo tons	Jan-Aug 13 USD Mil	Jan-Aug 14 Kilo tons	Jan-Aug 13 USD Mil
Ammonia	2,436	1,002	2,215	1,118
Methanol	1,077	428	985	345
Nitrogen Fertilisers	8,086	2,169	7,920	2,399
Potash	6,502	1,677	3,971	1,429
Mixed Fertilisers	5,683	2,041	6,168	2,311
Synthetic Rubber	559	1,239	618	1,623

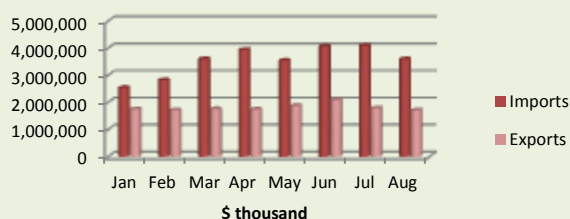
Shipments of chemicals in January-August 2014 comprised 4.9% of total exports against 5.2% in 2013. In comparison with last year, the value of exports of chemicals declined by 5.5% whilst the physical volume increased by 12.0%. Export volumes of methanol increased by 8.8%, nitrogen fertilisers by 3.7%, potash fertilisers by 63.6%, and plastics by 28.2%. Volumes of mixed fertilisers fell by 6.8%, whilst rubber and rubber products fell by 5.4%.



Shipments of chemicals in January-August 2014 constituted 16.6% of total imports against 16.7% in 2013. The value and volume of import of chemical products decreased compared with January-August 2013 by 5.0% and 8.1%, respectively. Import volumes of organic chemical compounds decreased by 4.6%, pharmaceutical products by 4.7%, and plastics by 4.2%.

The total value imports of chemical products into Russia totalled 28.251 billion roubles in January to August 2014 against 29.761 billion in the same period last year.

Russian Chemical Trade 2014



Regarding exports, total values in January to August this year amounted to 114.463 billion roubles against 115.269 billion in 2013. Effectively imports of chemical products are around double the value of exports although the product categories vary considerably.

Russian petrochemical projects

Kovytko-Sayamsk gas pipeline

In October Gazprom presented a project feasibility study for the gasification of the southern districts of the Irkutsk Oblast, which would include Sayanskkhimplast. In 2015 the company hopes to complete a gas pipeline between the Kovytko gas condensate field and Zhigalovo in the central part of Irkutsk. However to extend pipelines to the southern part of the Oblast where the chemical plants are located, requires a substantial amount of funds which is not feasible without government support.

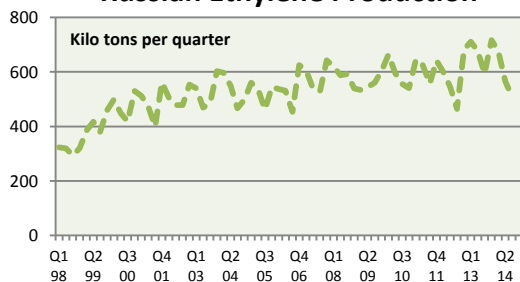
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Gas Consumption by Chemical Plants in Irkutsk Oblast	
Company	Million m ³ per annum
Sayanskkhimplast	973
Angarsk Petrochemical Company	600-1000
Angarsk Fertiliser Plant	700

Demand for gas from chemical plants in the Irkutsk Oblast has been estimated at 2.3-2.9 billion cubic metres per annum, including Sayanskkhimplast 973 million, Angarsk Petrochemical Company 600 million to 1 billion, and the Angarsk Fertiliser Plant 700 million. Gazprom has also studied

projects to supply gas in liquefied form in the Republic of Buryatia and the Trans-Baikal region where demand (0.2-1 billion). Gazprom has concluded from the feasibility study that the cost of creating a complex for gas production, processing and transportation has been estimated to be extremely high that it would not be possible to fund the project independently.

Russian Ethylene Production



Russian ethylene project outlook

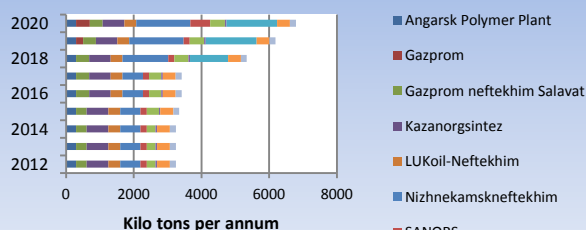
Ethylene projects in Russia remain central to stimulating the petrochemical industry and the economy at large, but some projects remain unviable without large-scale investment in the infrastructure.

Since the late 1990s Russian ethylene production has risen gradually due to increased utilisation and debottlenecking, combined with the modernisation and expansion of existing crackers built in the Soviet era. Companies such as Technip, ABB Lummus, CB&I, etc. have played a key role in the modernisation process.

Despite the increase in volumes Russian per capita production of petrochemicals lags vastly behind levels in the US, Europe or Japan, and no new plant has been launched since the 1980s when Tomsk was started. Grassroots' projects have been difficult to implement due to a range of factors including feedstocks, finance, pipelines, etc.

Production of ethylene totalled 2.697 million tons in 2013, which is the record for Russia. Due to the Stavrolen outage is likely to fall to around 2.4 million tons for 2014. Some of the recently completed ethylene modernisation projects include SIBUR-Kstovo where capacity was increased to 360,000 tpa mainly to support the new RusVinyl PVC complex. Ongoing improvements are also taking place at Salavat which has resulted in a steady increase in ethylene production, whilst Ufaorgsintez reports a 25% increase in capacity following a maintenance shutdown that started in August lasting until September.

Russian Ethylene Capacity



Much depends on when Stavrolen returns to operation next year, if it is possible in the first quarter Russian ethylene production could achieve 2.8-2.9 million tons in 2015. The significant trend in the past year has been the growing attraction of the Russian Far East and East Siberia for petrochemical investments. The Russian-Chinese Power of Siberia gas pipeline, which started construction in September 2014, has galvanised interest in

Russian Chemical Production (unit-kilo tons)		
Product	Jan-Sep 14	Jan-Sep 13
Caustic Soda	786.8	768.7
Soda Ash	1,854.6	1,857.0
Ethylene	1,749.8	1,981.0
Propylene	998.2	1090.2
Benzene	846.2	877.5
Xylenes	393.2	373.8
Styrene	457.6	495.7
Phenol	180.3	206.2
Ammonia	11,051.7	10,554.0
Nitrogen Fertilisers	6,188.8	6,031.0
Phosphate Fertilisers	2,377.3	2,369.0
Potash Fertilisers	6,334.5	5,168.0
Plastics in Bulk	4,643.2	4,460.0
Polyethylene	1,176.2	1,360.0
Polystyrene	401.1	333.8
PVC	464.8	471.7
Polypropylene	724.1	605.4
Polyamide	108.4	101.1
Synthetic Rubber	954.7	1,112.0
Synthetic Fibres	88.2	135.2

project ideas in the Amur and Irkutsk regions. SIBUR is considering the development of the Amur gas-chemical complex, but importantly would need a partner such as Sinopec to participate. The main part of the project involves ethane, and agreeing a price and volume with Gazprom which initially will build a gas processing plant.

At present only SIBUR at Tobolsk and Nizhnekamskneftekhim appear to have specific plans outlined and possess the experience to be capable of completing new large-scale crackers before 2020. In 2012 the Russian Ministry of Energy drew up a document entitled Development Plan for Gas and Petrochemical industries in Russia until 2030, which was initially seen in some quarters to indicate wholesale support for the industry. However, it has transpired to be of principally academic value as it only indicates a set of preferences rather than providing active support for petrochemical projects.

A number of projects for large-scale crackers are under examination in the Volga-Urals region, including Nizhnekamsk, Salavat, Ufa and Novokuibyshevsk but until markets are more developed there is the possibility of building too much capacity. A more viable option to implementing three or four million ton projects in the Volga-Urals region could be to invest in expanding the ethylene pipeline in Tatarstan and Bashkortostan to include Novokuibyshevsk and even Kstovo. However, such investment could take place with the support of the government. A full list of current capacities and production for ethylene, updated regularly, is available on the Statistical Database at www.cirec.net.

Mainly based around the Nizhnekamsk and Tobolsk projects, total ethylene capacity in Russia could rise to 6.8 million tpa by 2020 against 3.3 million tpa in 2013. After 2020 the scope for expansion is considerable and based on projects at various stages of planning, conceptual design, etc., Russian capacity could increase to over 14 million tpa. However at the same time it becomes much harder to predict timing.

Russian petrochemical producers & markets

Bashneft-Ufaorgsintez feedstock supply & ethylene expansion

Bashneft has extended the contract of supply of petrochemical products with Ufaorgsintez (part of United Petrochemical Company) until March 2015. United Petrochemical Company has recently increased its stake in Ufaorgsintez from 68.3% to 76.01%. The recent agreement with Bashneft stipulates that the supply of

Russian Ethylene Production (unit-kilo tons)		
Producer	Jan-Sep 14	Jan-Sep 13
Angarsk Polymer Plant	157.6	152.1
Kazanorgsintez	384.0	389.3
Stavrolen	53.6	248.9
Nizhnekamskneftekhim	455.0	444.5
SANORS	55.0	60.0
Gazprom N Salavat	205.0	200.6
SIBUR-Neftekhim	115.8	171.9
SIBUR-Khimprom	35.7	33.7
Tomskneftekhim	198.9	187.7
Ufaorgsintez	88.4	93.1
Total	1749.1	1981.7

petrochemical products to Ufaorgsintez should comprise around 1.1 million tons, and the cost of services 14.15 billion roubles. Deliveries are to be made based on 100% prepayment. Ufaorgsintez uses raw materials sourced from the three Ufa refineries, including benzene, hydrocarbon gases and naphtha. Ufaorgsintez increased its capacity of ethylene by 25% following a maintenance programme that started in August. This raises capacity to 150,000 tpa. The company is considering options for the extra ethylene, possibly involving HDPE.

Gazprom neftekhim Salavat, propane-propylene fraction unit

Gazprom neftekhim Salavat has identified a contractor to develop data for the design of the unit fractionation of propane-propylene fraction (PPF) as part of a catalytic cracking process. Petrokhim Engineering in Moscow has been selected which will develop baseline data for the design, conduct and detail data integration

unit in the complex catalytic cracking. The nominal capacity of the unit is 85,000 tpa, depending on a final evaluation by Shell Global Solutions.

Russian olefins, Jan-Sep 2014

Russian ethylene production declined 10% in September against August to 162,800 tons. Downtime at Nizhnekamskneftekhim resulting in production of 24,000 tons which was 2.3 times lower than August was the main factor, whilst Kazanorgsintez also reduced production by 45% to 26,700 tons. To compensate for the maintenance in Tatarstan, Gazprom neftekhim Salavat increased production after maintenance to 28,200 tons which was 2.6 times higher than August. Regarding prices the contract value of the Russian ethylene increased in October, primarily due to the devaluation of the rouble and a significant increase in the export duty on LPG.

Russian Propylene Production (unit-kilo tons)		
Producer	Jan-Sep 14	Jan-Sep 13
Angarsk Polymer Plant	86.4	71.5
Kazanorgsintez	32.9	29.2
LUKoil-NNOS	120.1	117.5
Stavrolen	21.9	97.4
Nizhnekamskneftekhim	199.7	219.2
Omsk Kaucuk	16.3	37.4
Polyom	113.1	78.4
Gazprom Neftekhim Salavat	71.5	80.9
SIBUR Kstovo	59.3	84.5
SIBUR-Khimprom	59.3	43.6
Tomskneftekhim	107.7	95.4
Ufaorgsintez	110.1	117.1
Total	998.2	1072.0

22 October 3,000 tons of propylene was delivered to Budyennovsk tightening up the domestic market. Nevertheless the domestic price has not altered, holding at around 39,000-41,000 roubles per ton for the Volga region. Propylene supply in Russia is expected to remain tight until the cracker at Budyennovsk restarts, which may not be until March or April 2015.

Russian ethylene production dropped 11.2% in the first three quarters in 2014 to 1.749 million tons. The main cause of the decline is the extended outage at Stavrolen at Budyennovsk where production could restart in the first half of 2015.

In contrast to ethylene, Russian propylene production increased in September versus August by 5% to 102,900 tons. Gazprom neftekhim Salavat increased production by 2.7 times to 10,000 tons, whilst Titan at Omsk increased production 2.6 times to 16,300 tons. Nizhnekamskneftekhim reduced monomer production by 2.4 times to 11,700 and Lukoil-NNOS by almost 20% to 10,600 tons. For the period January to September 2014 Russian propylene production totalled 998,200 tons, 5% down on 2013.

Angarsk Polymer Plant and SIBUR-Kstovo started supplying propylene to Stavrolen in September in order to restart polypropylene production at Budyennovsk. From 1 October to

Russian Propylene Domestic Sales (unit-kilo tons)		
Consumer	Jan-Sep 14	Jan-Sep 13
Saratovorgsintez	133.8	116.6
Volzhskiy Orgsintez	9.4	7.7
Akrlit	27.6	15.3
SIBUR-Khimprom	44.3	38.7
Omsk-Kaucuk	36.0	7.4
Tomskneftekhim	0.0	6.0
Tobolsk-Polymer	0.0	22.1
Nizhnekamskneftekhim	0.5	5.9
Ufaorgsintez	15.6	13.0
Gazprom n Salavat	0.0	1.9
Stavrolen	1.8	0.0
Kazanorgsintez	5.3	3.7
Samaraorgsintez	6.1	2.0
Khimprom Kemerovo	1.4	0.5
Plant of Synthetic Alcohol	4.8	0.0
Total	286.5	240.7

respectively. At the same time after repair work Angarsk Polymer Plant increased production by 48% over August to 3,300 tons and Gazprom neftekhim Salavat by 43% to 14,700 tons. For the first nine months of 2014 Russian styrene production totalled 478,000 tons. Styrene sales on the domestic market dropped 2.6 times in September to 2,600 tons due largely to a planned shutdown by Penoplex at Kirishi. For the period January to September 2014 sales on the domestic market totalled 57,200 tons, 19% less than in 2013. The main reason for the decline has been the termination of deliveries to Plastik at Uzlovaya.

Lukoil-NNOS undertook maintenance at the Kstovo refinery in September, reducing propylene production, whilst acrylonitrile producer Saratovorgsintez undertook a shutdown at the same time. Propylene sales to the domestic market were thus lower in September, after 98,200 tons were shipped in August.

Russian propylene sales on the domestic market remained unchanged in September at 25,300 tons. Angarsk Polymer Plant increased shipments of product by 26% to 4,500 tons, and SIBUR-Kstovo by 18% to 8,700 tons. Due to maintenance Lukoil-NNOS reduced sales by 17% to 10,600 tons. Domestic sales for the period January to September 2014 totalled 276,700 tons which was 15% up on last year. Sales of propane-propylene fractions dropped 23% to 110,600 tons due to increased downtime. Russian propylene exports restarted in August, but still overall for January to September 2014 shipments totalled 8,500 tons which was down 3.4 times against 2013.

Russian styrene, Jan-Sep 2014

Styrene production declined 9% in September to 50,200 tons. Nizhnekamskneftekhim and SIBUR-Khimprom reduced monomer production by 25%, to 20,300 tons and 8,100 tons

Bulk Polymers

Russian HDPE Imports
(unit-kilo tons)

Category	Jan-Sep 14	Jan-Sep 13
Extrusion	43.6	54.5
Pipe	65.9	56.2
Film	29.6	35.8
Blow	36.1	36.8
Injection	40.1	33.4
Others	8.6	11.578
Total	223.9	228.4

Russian polyethylene, Jan-Sep 2014

HDPE production in January to September dropped by 18% to 623,500 tons, the decline resulting from the Stavrolen outage. The fall was offset to some extent by increases recorded by Gazprom neftekhim Salavat which increased production by 31% to 67,600 tons and Kazanorgsintez which increased production by 9% 378,200 tons. Nizhnekamskneftekhim reduced production in the first three quarters by 6% to 130,000 tons.

In the first nine months of 2014 Russian HDPE imports declined by 2% to 223,900 tons. LLDPE imports rose 5% in the period January to September 2014 from 147,100 tons to 154,300 tons, helped by the demand for film grade. Imports of LLDPE film totalled 135,400 tons in 2014 against 129,100 tons in 2013, with SABIC acting as a main supplier.

Russian Polypropylene Imports
(unit-kilo tons)

Category	Jan-Sep 14	Jan-Sep 13
Homopolymers	45.0	58.5
Block	35.0	41.9
Random	21.7	28.8
Other	32.4	30.0
Total	134.1	159.2

Kazanorgsintez resumed production of LDPE on 6 October after a maintenance which started on 19 September. Kazanorgsintez produced 133,000 tons of LDPE in January to September 2014, 5% down on 2013. For the first nine months in 2014, Russian LDPE consumption totalled 405,000 tons which was 7% down on 2013. Production was marginally down by 2,500 tons to 480,600 tons, whilst imports fell by about 30% and exports rose by 14%.

Russian polypropylene, Jan-Sep 2014

Russian polypropylene production totalled 724,100 tons in the first three quarters in 2014 against 605,400 tons in 2013.

Russian Polypropylene Production (unit-kilo tons)		
Producer	Jan-Sep 14	Jan-Sep 13
Ufaorgsintez	89.6	86.0
Stavrolen	18.0	95.0
Moscow NPZ	87.4	91.9
Nizhnekamskneftekhim	160.2	156.0
Polyom	125.3	86.3
Tomskneftekhim	92.9	90.2
Tobolsk-Polymer	150.7	0.0
Total	724.1	605.4

Despite the Stavrolen outage affecting production, production was driven by the introduction of Tobolsk-Polymer and the increase recorded by Polyom at Omsk. Imports of polypropylene into Russia declined by 16% in the first nine months in 2014 to 134,100 tons, but still play a part in the market. Stavrolen resumed polypropylene production in October, based on merchant propylene, after being idle since the end of February. The rest of the petrochemical facilities are expected to restart in early 2015.

Russian PVC, Jan-Sep 2014

PVC sales from domestic production and imports totalled 691,700 tons in January to September 2014 against 754,500 tons in 2013, demand being affected by the weaker economy. PVC production increased 2% in the period January to September 2014, to 464,600 tons against 454,400 tons in 2013. Bashkir Soda Company (BSC) increased capacity from 210,000 tpa to 230,000 tpa this year, and production was up by around 20,000 tons in the first nine months. In 2015 the company plans to increase its capacity to 240,000 tpa.

The introduction of the RusVinyl complex is likely to have a major effect on the Russian PVC market next year, displacing imports from China and other regions. Regarding emulsion grade PVC, Khimprom at Volgograd is winding down operations due to bankruptcy and talks are already underway on using the site for alternative chemical industry activity. Khimprom produced 13,800 tons of emulsion grade PVC in the first nine months in 2014, which was surprisingly higher than last year.

Russian PVC Imports
(unit-kilo tons)

Source	Jan-Sep 14	Jan-Sep 13
US	50.5	150.3
China	145.0	118.7
Europe	28.6	27.9
Others	12.5	4.8
Total	236.6	301.8

Russian imports of PVC dropped 24% in the period January to September 2014 to 236,600 tons. China supplied 145,000 tons in the first nine months in 2014, 25% higher than in 2013. By contrast imports from the US dropped 67% to 50,500 tons. The relatively high level of export prices and the devaluation of the Russian rouble have made US imports of PVC unprofitable for Russian processors.

Kaustik at Volgograd stopped production for maintenance from 5 October for three weeks. Bashkir Soda Company at Sterlitamak also stopped production

for maintenance from 3 October for three weeks. Despite the simultaneous stoppage of two producers, the PVC market in Russia is not facing a deficit due to high inventory.

**Russian Polycarbonate Market
(unit-kilo tons)**

	Jan-Sep 14	Jan-Sep 13
Production	49.0	49.1
Exports	4.8	14.9
Imports	32.5	36.3
Market Balance	76.7	70.6

Russian polycarbonate, Jan-Sep 2014

In the first nine months of 2014 imports of polycarbonate to the Russian market declined by 10% and amounted to 32,500 tons. Aside the devaluation of the rouble many processors are experiencing a shortage of working capital available for prepayment.

Partly due to increased domestic sales by the sole producer Kazanorgsintez and partly due to the devaluation of the rouble this year consumers have been gradually reducing purchases of imported polycarbonate. Consumption has risen slightly this year mainly due to growth in the extrusion sector, which is the most dynamic and promising of the market and accounts for around 80% of total consumption. One of the main applications for extrusion grade polycarbonate is for the production of cellular polycarbonate sheets for the construction of greenhouses. Kazanorgsintez is operating at 100% capacity and producing 6,000 tons per month.

**Russian Imports of PET
(unit-kilo tons)**

Country	Jan-Sep 14	Jan-Sep 13
China	126.0	77.3
South Korea	19.5	33.0
Others	20.5	25.8
Total	166.0	136.1

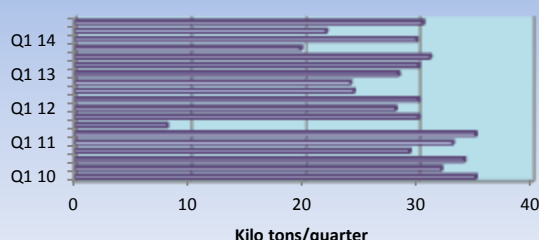
2013. Despite the rise in imports this year, the final quarter is expected to see a slowdown due to weakness of the rouble combined with seasonal factors. After peaking in April, imports fell for the fifth month in a row in September. Demand rose 7% in the first three quarters this year to 495,000 tons. Production has remained unchanged.

PTA/PET Chain

Russian PET consumption, Jan-Sep 2014

Imports of PET in the Russian market increased by 22% in the first nine months compared to 2013. China supplied 126,000 tons, 63% up on

**Ufaneftekhim-Paraxylene
Production**



In addition to the supply contract, additional paraxylene supplies would be required by United Petrochemical Company to meet the demands of the proposed PTA plant. The options for supplementary paraxylene include Gazprom Neft at the Omsk refinery and KazMunaiGaz at the Atyrau refinery where the new aromatics complex has started the process of commissioning.

Bashneft-RusPETF paraxylene contract

Bashneft signed a contract for paraxylene supply with the jv RusPETF on 15 October, the total cost of which will amount to around 4.4 billion roubles. The contract with RusPETF (jv between United Petrochemical Company and Alpek) has been agreed where Bashneft will supply around 240,000 tpa of paraxylene for a PTA/PET complex in Bashkortostan.

Paraxylene has been agreed to be delivered from Ufaneftekhim, where capacity currently stands at 155,000 tpa but can be raised to 260,000 tpa after modernisation.

The jv RusPETF project is estimated to be worth around \$700 million, divided by 51% of responsibility for United Petrochemical Company and 49% the Mexican partner Alpek. Part of the funds will be drawn from export credit agencies and banks. Tecnimont is undertaking the FEED documentation which is expected to be completed in the first quarter of 2015. The technology being used in the project is IntegRex.

**RusPETF Paraxylene Requirements
for PTA Complex**



Annual maximum consumption (tons) of paraxylene to feed the 600,000 tpa PTA complex at Ufa

The contract between Bashneft and RusPETF has been concluded up to 31 December 2043, or alternatively 25 years from the date of delivery depending on project start-up. The cost of paraxylene is to be based on the average quotation of spot price FOB Rotterdam (according to ICIS pricing). The supplier reserves the right to require a penalty if payment has not been made on time. Payment

for paraxylene is expected to be made not later than the day of the calendar month following the month of delivery.

United Petrochemical Company Sales 2013

Product	kilo tons
Polypropylene	120
Polyethylene	92
Phenol	49
Liquid pyrolysis products	69
Bisphenol A	26
Acetone	38
Ethylene	15
C4s	28
Other	27
Total	464

United Petrochemical-Alpek PTA/PET project

United Petrochemical Company (UPC) has indicated that it may seek to add MEG to the configuration of the PTA-PET project, depending on the FEED documentation when completed by Tecnimont in early 2015. MEG domestic supply in Russia is insufficient to cover the demands of the PET plant and imports would be necessary to meet the demands of the PET plant.

Financing issues are expected to be clarified in late 2015, and whilst there are some concerns that funds may be impeded indirectly by sanctions both UPC and Alpek are continuing to work on the project. In September 2013, UPC and Alpek signed an agreement to establish a JV for PTA and PET at Ufa. Total investment in the plant is estimated at about \$700 million, 51% of which is to be provided by UPC and Alpek 49%.

PTA prospects between Bashkortostan and Kazakhstan

Bashkortostan has proposed a PTA joint project with Kazakhstan to utilise paraxylene from the new Atyrau plant, which could start production in 2015. SIBUR has also been linked as a possible JV partner with Kazakhstan to develop a PTA/PET complex. If the RusPETF project at Ufa progresses it has been suggested that

Bashkortostan would only be interested in buying paraxylene from Atyrau. However, SIBUR may be a more attractive option to the Kazakh side with greater involvement in PTA and PET.

Russian Paraxylene Domestic Sales (unit-kilo tons)

Producer	Jan-Sep 14	Jan-Sep 13
Gazprom Neft	50.8	36.8
Ufaneftkhim	81.5	87.7
Kinef, Kirishi	0.2	0.0
Total	132.3	124.5

Polief-paraxylene supply

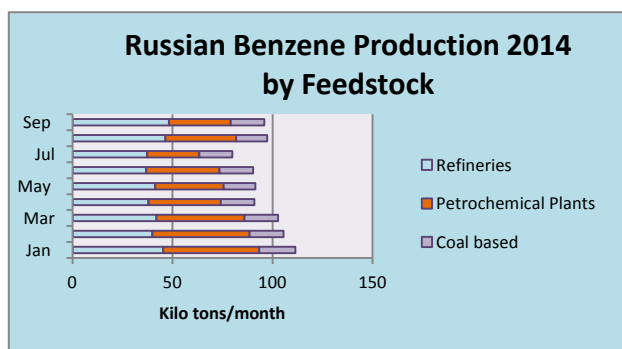
Polief is currently the sole domestic producer of paraxylene in Russia, which it buys from Ufaneftkhim and Gazprom Neft at the Omsk refinery. Should the RusPETF project undergo construction, Ufaneftkhim will be required by the Bashneft contract to seek alternative sources of supply.

In the first three quarters in 2014 Polief purchased 132,300 tons of paraxylene against 124,500 tons in 2013.

Aromatics & derivatives

Russian benzene, Jan-Sep 2014

Russian benzene production dropped 5% in the first nine months in 2014 to 865,100 tons. Sales on the domestic market in this period, including imports from Kazakhstan and Ukraine, were down 2.8% to 556,900 tons.



Russian refineries produced 87,000 tons of benzene for synthesis and nitration in September, 5% less than in August. Maintenance at Rosneft's Ryazan Refinery meant that production dropped 1.9 times to 991 tons whilst Nizhnekamskneftekhim reduced volumes by 2.6 times to 7,100 tons. After maintenance Angarsk Polymer Plant increased benzene production 37% to 7,600 tons and Gazprom neftekhim Salavat 1.7 times to 11,300 tons. Over the first three quarters of 2014

domestic benzene production totalled 816,500 tons which is 3% less than in 2013.

In September, Russia imported 714 tons of benzene from ArcelorMittal in Kazakhstan, or 6.1 times more than in August. Kuibyshevazot boosted purchases of Kazakh products 11.2 times, up to 663 tons, whilst Kazanorgsintez imported 51 tons. Over three quarters of 2014 domestic processors purchased 3,300 tons of benzene from ArcelorMittal, that is by 19% more than the same period of 2013. Imports from Ukraine are intermittent, significant declines were seen in August due to reduced supply from Yasinovsky Coke and no supplies have been shipped since. Imports dropped 4.7 times in the first nine months in 2014 to 6,100 tons, affected to a large degree by Russian-Ukrainian relations.

Russian Benzene Sales (unit-kilo tons)		
	Jan-Sep 14	Jan-Sep 13
Synthesis Total	435.0	437.3
Angarsk Polymer Plant	44.6	36.9
SIBUR-Neftekhim	22.1	56.5
Severstal	27.1	26.8
Uralorgsintez	63.7	45.8
Kirishinefteorgsintez	47.4	40.7
West Siberian MC	44.9	42.7
Ryazan NPZ	18.6	19.4
Slavneft-Yanos	43.8	37.2
Gazprom Neft (Omsk)	76.0	74.4
Gazprom Neftekhim Salavat	11.8	3.3
Stavrolen	14.3	19.2
Ufaneftekhim	14.6	6.7
Zaporozhkoks	0.0	5.4
Ukrtafta	0.0	10.3
Yasinovsky Coke	3.2	9.3
ArcelorMittal	3.1	2.4
Nitration Total	24.9	28.4
Novolipetsk MK	15.7	17.5
Chelyabinsk MK	9.2	11.0
Crude	97.0	117.5
Altay-Koks	20.9	26.6
Koks	22.5	23.4
Magnitogorsk MK	34.2	38.9
Nizhny Tagil MK	9.1	12.5
Novokuznetsk MK	1.9	5.4
Moskoks	5.9	6.2
Ural Steel	2.4	4.6
Full Total	556.9	572.3

Domestic shipments of benzene for synthesis and nitration amounted to 55,600 tons in September, 3% more than in August. Ufaneftekhim increased deliveries by previously accumulated reserves five times to 5,500 tons. It should be noted that after the repair work on the Angarsk polymer plant sales volumes of aromatic raw materials subsidiary of Rosneft increased 1.5 times, up to 5,000 tons. At the same time, because of idle capacity at the Ryazan refinery shipments of benzene were reduced 2.3 times to 802 tons in September. In the first nine months in 2014 domestic sales totalled 457,100 tons, unchanged from last year. The remainder came from coal based plants, the largest of which was Magnitogorsk MK followed by Koks and Altay-Koks.

Russian toluene, Jan-Sep 2014

Toluene production in Russia amounted to 27,900 tons in September, 4% lower than in August. From January to September 2014 production of toluene in Russia totalled 224,800 tons, 8% less than in 2013.

Domestic shipments of toluene by rail to Russian consumers in September amounted to 12,800 tons, 1% up on August and 12% higher than in September 2013. In September, manufacturers of industrial explosives increased purchases of toluene by 1.5 times to 2,440 tons or 19% of Russia's consumption.

At the same time, the paint sector reduced purchased raw materials by 14% to 2,340 tons, or 18% of consumption, whilst manufacturers of lubricants and additives for motor fuels increased purchases of toluene by 28% to 2,170 tons. Other applications included 740 tons sold to consumers that use it as a solvent for rubber. For the first nine months of 2014 domestic shipments of toluene to the Russian market by rail totalled 108,300 tons, 5% more than the same period in 2013.

Russian orthoxylene, Jan-Sep 2014

Total Russian xylene production in the period January to September 2014 increased by 4.8% compared to 2013 to 393,200 tons. Orthoxylene accounted for roughly 35% of total production. Russian producers sold 13,030 tons of orthoxylene on the domestic market in September, 1% more than in August and 2.7 times higher than in September 2013.

Russian Orthoxylene Domestic Sales (unit-kilo tons)		
Producer	Jan-Sep 14	Jan-Sep 13
Gazprom Neft	51.0	46.6
Ufaneftekhim	26.7	23.1
Kinef, Kirishi	35.5	27.1
Total	113.2	96.9

Kamteks-Khimprom accounted for 5,930 tons of orthoxylene shipments in September, 45% of total consumption. Other sectors included paints which accounted for 15% of shipments, or 1,890 tons and agrochemical, pharmaceutical and other products which took 28% or 3,660 tons. Of the producers Gazprom Neft shipped 41% of deliveries in September, or 5,280 tons, Ufaneftekhim 31% or 4,060 tons and Kirishinefteorgsintez 28% or 3,700 tons. For the first nine months of 2014 domestic sales of orthoxylene amounted to 114,700 tons, 19% more than in 2013.

Orthoxylene exports in September amounted to 3,480 tons, up from 250 tons in August. Gazprom Neft has been the sole exporter this year, shipping all products to Finland. For the first nine months of 2014 the volume of domestic supply of orthoxylene to foreign markets totalled 42,000 tons, 26% up on 2013.

Russian phenol, Jan-Sep 2014

Russian phenol production amounted to 15,600 tons in September, 3% less than in August. Despite maintenance Ufaorgsintez still produced 2,000 tons, 50% down on August. Samaraorgsintez produced 7,800 tons, 2% less whilst Kazanorgsintez increased production by 50% to 5,600 tons. In the first nine months of 2014 Russian phenol production totalled 180,000 tons, 15% less than in the comparable period of 2013. The decline is due to the outage at Omsk Kaucuk which started in March following an accident at the plant. At the same time

**Russian Phenol Sales by Producer
(unit-kilo tons)**

Producer	Jan-Sep 14	Jan-Sep 13
Omsk Kaucuk	10.9	40.1
Samaraorgsintez	38.1	29.4
Kazanorgsintez	8.0	7.1
Ufaorgsintez	26.3	17.2
Neftekhimya	0.0	0.2
Sterlitamak NPZ	0.0	0.1
LUKoil-VNPZ	0.1	0.1
Total	83.4	85.8

Samaraorgsintez increased production by 15% in the period January to September 2014, whilst Kazanorgsintez increased by 3% and Ufaorgsintez reduced by 10%.

Phenol supplies to the domestic market dropped due to a shutdown by Ufaorgsintez, and fell 30% to 6,900 tons. Samaraorgsintez accounted for 60% of sales in September, or 3,900 tons. Regarding purchases, Nizhnekamskneftekhim did not resume shipments and the largest share of phenol sales went to phenol-formaldehyde producers who took 5,500 tons. Over the month, Borealis sold 565 tons on the Russian market against 700 tons in August. The average cost of delivered phenol in September compared to August decreased by 7% to \$1,545 per ton DAF Russian border, against \$1,655 per ton in August.

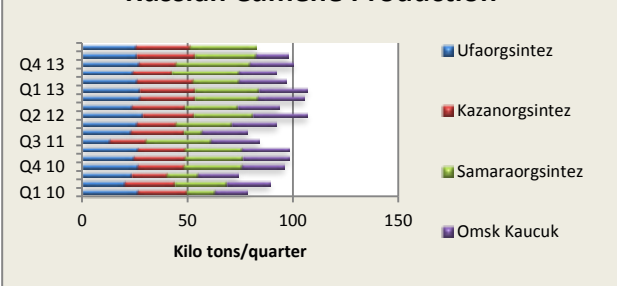
Kazanorgsintez has completed reconstruction of the phenol-acetone plant, in order to bring it to the standards of industrial safety, as well as stabilization of the production facilities. Due to physical deterioration in equipment it has been necessary to replace underground utilities, tracer process piping with insulation, etc.

Phenol exports from Russia amounted to 700 tons in September, 4% up on August. This was due mainly to the restart of Ufaorgsintez after maintenance in August. Ufaorgsintez exported 230 tons in September, but the largest exporter was Samaraorgsintez which exported 470 tons. The major consumers of Russian phenol include phenol-formaldehyde resin producers in Latvia and Poland, accounting for 85% of shipments in September. The remaining share of Russian exports went to Slovakia. Regarding imports, Pigment at Tambov restarted purchases of phenol from Finland in August. SPC Astatine in August acquired 415 tons of Finnish phenol (60% of Russia's imports), or 25% less than the previous month.

United Petrochemical Company, cumene upgrade Badger

United Petrochemical Company plans to reconstruct the production of cumene at Ufaorgsintez and has selected Badger Licensing to undertake the project. The current plant's technology has become less efficient and the main aim of the new licence is to eliminate aluminium chloride from the process. In addition, the company intends to eliminate the use of expensive equipment particularly that made of stainless steel. The capacity for cumene production at Ufaorgsintez is 120,000 tpa.

Russian Cumene Production



SDS Azot-adipic acid

SDS Azot at Kemerovo and St. Petersburg ETMA plans to launch production of adipic acid at Kemerovo, involving investments of 300-400 million roubles. The plant is intended to be located at the caprolactam unit, comprising a capacity of 3,000 tpa and a start-up date of

less than two years.

**Russian Caprolactam Production
(unit-kilo tons)**

Producer	Jan-Sep 14	Jan-Sep 13
Kuibyshevazot	135.4	139.0
Shchekinoazot	28.5	57.0
SDS Azot	60.4	53.7
Total	224.3	249.6

Russian polyamide production, Jan-Sep 2014

Russian exports of polyamide-6 totalled 76,700 tons in the period January to September 2014, 17% up on last year. China accounted for 40% of exports in 2014, India (20%), Turkey (15%) and Germany (10%). India saw the largest rise of 52% over January to September 2013 to 14,300 tons. Exports to China amounted to 33,600 tons, 16% up on 2013. Supplies to Turkey increased by 20% and reached 11,000 tons.

Synthetic Rubber

Pirelli in Russian market

Pirelli intends to increase investment in the Russian market in spite of the sanctions. To date, the Italian concern owns 65% of Pirelli Tyre Russia, a joint venture with the State Corporation Rostec. This includes the Voronezh Tyre Plant and Kirov Tyre Plant, which were bought in 2011 from SIBUR. In May 2014 Pirelli and Rosneft signed

Russian Tyre Production (unit-mil pieces)		
Product	Jan-Sep 14	Jan-Sep 13
Car Tyres	25.7	23.6
Motorcycle Tyres	0.0	0.0
Lorry tyres	4.9	5.4
Agricultural tyres	2.1	1.9
Total	32.7	30.9

increased shipments by 48% to 6,200 tons. SIBUR-Kstovo increased shipments by 4% to 6,500 tons, whilst Ufaorgsintez reduced deliveries 2.8 times to 569 tons. Sales for January to September totalled 275,400 tons, marginally up on 2013.

Russian C4 Supplies (unit-kilo tons)		
Supplier	Jan-Sep 14	Jan-Sep 13
Angarsk Polymer	54.1	42.5
Krasnoyarsk Synthetic Rubber	0.3	0.4
Kazanorgsintez	22.5	22.4
Stavrolen	12.7	52.4
SIBUR-Kstovo	28.5	39.5
Gazprom neftekhim Salavat	6.4	0.0
Tomskneftekhim	55.4	51.6
Ufaorgsintez	19.1	19.6
Naftan (Belarus)	38.8	35.2
SANORS	0.3	0.0
Azerkhiyma	17.0	6.8
Efremov Synthetic Rubber	0.2	0.2
Iran	4.4	3.1
France	2.0	0.0
Slovakia	2.2	0.0
Turkey	11.4	0.0
Total	275.4	272.4

decade. Consumption for 2015 is forecast to rise to around 130,000 tons.

Russian C4 Sales by Consumer (unit-kilo tons)		
Consumer	Jan-Sep 14	Jan-Sep 13
Omsk Kaucuk	58.4	54.5
Nizhnekamskneftekhim	112.0	101.0
Togliattikaucuk	96.9	112.7
Sterlitamak Petrochemical Plant	8.1	4.2
Total	275.4	272.4

raw materials. Nizhnekamskneftekhim uses about 100,000 tpa of specialised chemical raw materials, about 20% of which is imported. The most difficult category is catalysts. In future the company hopes to develop catalysts for the polymerization of ethylene and propylene, heterogeneous catalysts, refining and petrochemical processes. In 2015 the production of microsphere catalysts for the dehydrogenation of isobutane could be started, which is expected to be used to produce isobutylene.

a memorandum of understanding for the production and supply of synthetic rubber at Nakhodka in the framework of the project Eastern Petrochemical Company (VNHK). In addition, the contract involves carrying out joint research work and search options for deliveries of products on their own enterprise Pirelli tire in the Asia-Pacific region in order to further processing.

Russian C4s, Jan-Sep 2014

Russian producers sold 22,000 tons of C4s in September, which is 5% up on August. After maintenance, Angarsk Polymer Plant increased shipments by 48% to 6,200 tons. SIBUR-Kstovo increased shipments by 4% to 6,500 tons, whilst Ufaorgsintez reduced deliveries 2.8 times to 569 tons. Sales for January to September totalled 275,400 tons, marginally up on 2013.

Gazprom Neft-PBB plant Moscow

Gazprom Neft has completed the construction of a unit for the production of polymer-modified bitumen (PBBS) at the Moscow Refinery. The project was undertaken in collaboration with Total in the framework of JV Total, Gazprom Neft-MBP. Capacity of the production line is 60,000 tpa of polymer-modified bitumen and 7,000 tpa of bituminous emulsions. The raw materials will be supplied by bitumen plant at the Moscow Oil Refinery, which was completely renovated in 2012 and has a capacity of 1.7 million tpa. A number of important road programmes in Russia have incorporated PBBs as a vital constituent and significant growth is expected in this sector over the next

Nizhnekamskneftekhim-catalyst plant launch

Nizhnekamskneftekhim plans to launch production of isoparaffin dehydrogenation catalysts at the end of October. Construction of the dehydrogenation catalyst line was created by joint efforts through Nizhnekamskneftekhim, Kazan Federal University and OOO Catalysis-Prom. The capacity of the plant is around 2,000 tpa. Nizhnekamskneftekhim plans to use the catalysts for the production of synthetic rubber monomers, allowing the company to reduce dependence on foreign

Methanol

Russian methanol, Jan-Sep 2014

Russian methanol production amounted to 231,300 tons in September, 2% less than in August. Although Metafrax returned to production after maintenance the restart coincided with scheduled outage commencing at Sibmetakhim. Metafrax produced 67,000 tons of methanol in September against 5,000 tons in August. Azot at

Russian Methanol Production (unit-kilo tons)		
Producer	Jan-Sep 14	Jan-Sep 13
Shchekinoazot	360.9	306.0
Sibmetakhim	613.6	608.9
Metafrax	690.0	756.0
Akron	63.0	62.3
Azot, Novomoskovsk	247.1	216.9
Angarsk Petrochemical	2.8	1.8
Azot, Nevinnomyssk	93.6	91.1
Togliattiazot	565.4	551.6
Totals	2636.4	2594.5

purchases in September came from producers of oils and additives, which too 6,200 tons or 45% more than in August.

Russian Methanol Consumption (unit-kilo tons)		
Consumer	Jan-Sep 14	Jan-Sep 13
Nizhnekamskneftekhim	179.3	189.5
Togliattikaucuk	76.0	87.0
Uralorgsintez	49.5	55.8
SIBUR-Khimprom	9.1	9.1
Tobolsk-Neftekhim	37.0	33.4
Ektos-Volga	35.2	36.9
Omsk Kaucuk	51.1	64.6
Novokuibyshevsk NPZ	37.2	49.6
Uralkhimplast	19.6	22.0
Slavneft-Yanos	7.2	0.0
Others	513.5	488.4
Total	1019.9	1042.6

Nevinnomyssk produced 11,200 tons, Sibmetakhim reduced production by 60% to 31,000 tons whilst Shchekinoazot reduced production by 3% to 39,000 tons. Azot at Novomoskovsk reduced production 15% to 23,300 tons, whilst Akron and Tomet produced 6,400 tons and 53,600 tons respectively. In the first nine months of 2014 Russian methanol production increased 2% to 2.6 million tons.

Methanol sales on the domestic market amounted to 112,300 tons in September, 3% more than in August. Metafrax, Sibmetakhim and Tomet accounted for 88% of the total sales in September. MTBE and gas companies accounted for 55% of total sales, followed by rubber and formaldehyde which accounted for about 30% of shipments. The largest increase in methanol

Tomet at Togliatti remains the largest supplier to the domestic market, selling mainly through trading companies, while other manufacturers are selling mainly on a contract basis to end-users. Methanol shipments via Odessa were expected to comprise 7,600 tons in October, 20% less than September which was 9,420 tons. Tomet is the sole supplier through Odessa at present, with sales divided between Turkey and Romania. An accident occurred in September with a ship delivering 4,200 tons of methanol from Odessa became stranded. It was eventually freed and allowed to complete its delivery to Turkey.

The first nine months of 2014 the sales of merchant methanol on the domestic market amounted to 1.019 million tons, 2% below the same period in 2013. The largest volumes of methanol processing still take place in the production of formaldehyde and its derivatives. The second largest division of methanol consumption is MTBE.

Russian Methanol Domestic Sales (unit-kilo tons)		
Producer	Jan-Sep 14	Jan-Sep 13
Azot Nevinnomyssk	18.6	27.4
Azot Novomoskovsk	86.2	69.0
Metafrax	278.1	295.5
Sibmetakhim	282.5	307.7
Togliattiazot	318.6	286.1
Shchekinoazot	14.7	39.6
Others	16.1	13.1
Total	1014.8	1038.4

The export component of the Russian methanol market in 2014 regained its position priority implementation. In the first nine months of this year, the share of exports in production amounted to about 47% (vs. 41% in 2013). From January to September, Russian companies shipped abroad about 1.2 million tons of methanol. Finland accounted for 49% of shipments. The largest domestic exporters of methanol are still Sibmetakhim and Shchekinoazot, together accounting for 55% of shipments in the first nine months.

National Holding Company-Nakhodka project

The National Holding Company (NHC) project in the Primorsk region of the Russian Far East has identified the plant site, which is to be located in the village of Kozmino near Vostochny port. The project involves capacities of 2.1 million tpa of ammonia, 2 million tpa of urea and 1 million tpa of methanol. Most of the products are intended to be exported to India and other Asian countries. Negotiations are underway with the Russian and international lenders and potential investors of the project.

Baltic Gas Chemical-Ust Luga methanol project

Instead of one methanol plant of 1.65 million tpa capacity at Ust Luga, Baltic Gas Chemical (BGC) has now decided is planning two methanol plants at Ust-Luga, totalling 1.65 million tpa in capacity.

Previously BGC had planned on a joint project with another organisation NSCC. Questions remain over funding, as around 70-80% of the estimated \$1.3 billion will be sought through export financing. Marubeni has agreed to take part in the marketing of methanol, with around 90% of production intended for export.

Organic Chemicals

Russian Butanol Production (unit-kilo tons)

N-Butanol		
Producer	Jan-Sep 14	Jan-Sep 13
Angarsk Petrochemical	23.3	23.7
Evrokhim	13.6	13.2
Gazprom Neftekhim Salavat	42.6	59.8
SIBUR-Khimprom	22.6	22.1
Total	102.0	118.7
Isobutanol		
Producer	Jan-Sep 14	Jan-Sep 13
Angarsk Petrochemical	11.8	12.5
Gazprom neftekhim Salavat	22.3	26.4
SIBUR-Khimprom	34.1	34.3
Total	68.2	73.1

(50% of Russia's total supply), Gazprom neftekhim Salavat 3,440 tons (45%), and Azot at Nevinnomyssk 320 tons (4%). SIBUR has invested in the upgrade of the infrastructure for SIBUR-Khimprom at Perm, including a new energy complex, as well as water filtration unit and the railway overpass.

SIBUR-Neftekhim (Akrilat) at Dzerzhinsk reduced purchases of n-butanol in September by 28%, but still accounted for 28% of Russian shipments or 2,130 tons of n-butanol (28% of Russia's total consumption of butanol). Dmitrievsky Chemical Plant, which uses butanols for the production of butyl acetate, purchased 42% of Russian shipments in September or 3,190 tons which was 4% up on August. Other consumers included Volzhskiy Orgsintez which bought 500 tons, Sredneuralsky copper smelter 190 tons, and Kamenskvolokno 230 tons.

Russian Butanol Domestic Sales (unit-kilo tons)

Producer	Jan-Sep 14	Jan-Sep 13
Gazprom neftekhim Salavat	20.5	16.0
SIBUR-Khimprom	26.6	14.9
Angarsk Polymer Plant	1.9	5.4
Azot Nevinnomyssk	2.1	8.4
Others	1.8	0.0
Total	52.9	44.7

8,090 tons all of which went to China. Gazprom neftekhim Salavat exported 2,730 tons in September, whilst SIBUR-Khimprom shipped 600 tons and Azot at Nevinnomyssk 180 tons. For the first nine months of 2014, exports of butanols from Russia totalled 80,400 tons, 24% less than in 2013. The share of n-butanol amounted to 57%, and isobutanol 43%.

SIBUR-Neftekhim-acrylate ester maintenance

SIBUR-Neftekhim has conducted repairs at the acrylic acid and acrylate plants at Dzerzhinsk between 6 October to 16 October. The plant requires two short shutdowns per annum; the previous shutdown took place between 13 May to 25 May. Production of acrylic acid and esters at Dzerzhinsk was commissioned in 2004 under Akrilat,

Russian Acetone Production (unit-kilo tons)		
Producer	Jan-Sep 14	Jan-Sep 13
Ufaorgsintez	32.2	34.1
Kazanorgsintez	32.6	31.8
Samaraorgsintez	41.2	36.0
Omsk Kaucuk	6.7	27.3
Total	112.8	129.2

Shutdowns have helped to improve market balance in the plasticizers market, although prices remain stable.

Russian butanols, Jan-Sep 2014

Butanol production increased in September by 42% over August to 29,000 tons. The increase was due to the resumption of the second line for the production of butanol by Gazprom neftekhim Salavat. The proportion of n-butanol was 65%, and isobutanol 35%. Production at Salavat increased two fold to 14,260 tons, whilst SIBUR-Khimprom produced 7,630 tons and Angarsk Petrochemical Company 5,300 tons. Azot at Nevinnomyssk in September reduced production by 4% to 1,840 tons. From January to September 2014 Russian butanol production totalled 169,400 tons, 8% down against 2013. The share of n-butanol was 61% and isobutanol 39%.

Butanol sales on the domestic market amounted to 7,600 tons in September, 16% less than in August but 56% higher than in September 2013. The share of n-butanol was 83% and isobutanol 17%. SIBUR-Khimprom supplied 3,800 tons

For the period January to September 2014 Russian domestic sales of butanols totalled 54,500 tons which is 19% up on 2013. N-butanols accounted for 79% of shipments. Demand for butanols tends to slow down in Russia in the fourth quarter.

Regarding trade, butanol exports amounted to 11,610 tons in September against 1,270 tons in August. N-butanol accounted for 68% of exports. The largest exporter in September was Angarsk Petrochemical Company, shipping

which was purchased by SIBUR in 2011. Propylene feedstock is supplied by SIBUR Kstovo, and butanol by SIBUR-Khimprom. The plant capacities at Dzerzhinsk consist of 31,000 tpa of acrylic acid, 40,200 tpa of butyl acrylate and 10,000 tpa of light acrylic esters (methyl and ethyl acrylate).

Russian plasticizer market

Maintenance stops by Gazprom neftekhim Salavat and Ural Plant of Plasticizers in August helped to reduce inventories of phthalates.

DOP exports from Russia rose 22% in September over August to 105 tons. Exports of DOP totalled 1,205 tons in the first nine months in 2014, twice more than in 2013. The rise in exports was due mainly to increased production of DOP in Russia in 2014.

Ural Plant of Plasticizers is building workshop for the production of cable compounds, which to date is around 60% complete. The first production line based on PVC will be commissioned in early 2015. Eventually the company hopes to produce up to 40,000 tpa. The total investment of the project is estimated at about 500 million roubles, of which 330 million roubles has already been spent.

Russian Phthalic Anhydride Production (unit-kilo tons)		
Producer	Jan-Sep 14	Jan-Sep 13
Gazprom n Salavat	6.6	6.4
Kamteks-Khimprom,	71.6	74.8
Total	78.1	81.2

Russian phthalic anhydride, Jan-Sep 2014

In September exports of phthalic anhydride from Russia amounted to 3,970 tons, 5% less than in August of this year. China took 33% of Russian exports, followed by Pakistan with 12%, Poland 11% and Finland 10%. Exports totalled 52,360 tons in the period January to September, 3% down on 2013.

Phthalic anhydride production amounted to 4,100 tons in September, 47% less than August. The decline is due to the stoppage in production at Kamteks-Khimprom for scheduled maintenance, thus reducing production by 56% to 3,470 tons. In the period January to September 2014 Russian phthalic anhydride production totalled 78,150 tons, 4% lower than in 2013.

Belarus

Belarussian petrochemicals, Jan-Sep 2014

Naftan produced 8,800 tons of benzene in September, 8% less than in August. For the first nine months 2014, Naftan produced 98,100 tons of benzene almost the same as last year. Naftan is currently running a tender for the purchase of propylene in the period from November 2014 to March 2015. The quantity required is 2,900 tons, consisting of 3 lots of 500 tons and 2 lots of 700 tons, with the tender deadline of 6 November,

Azot Grodno Production (unit-kilo tons)		
Product	Jan-Sep 14	Jan-Sep 13
Methanol	59.5	53.9
Caprolactam	93.5	96.8
Polyamide primary	66.8	57.7
Polyamide filled	8.0	7.8
Ammonia	800.5	745.6
Urea	760.4	686.9
Fertilisers	583.2	551.4
Fibres	30.2	26.0

Caprolactam production at Grodno totalled 93,500 tons in January to September, 4% less than in 2013. Polymir produced 82,100 tons of polyethylene in the period January to September 2014. The company shut down its second LDPE reactor for a scheduled turnaround on 5 October and production restarted on 27 October. Maintenance at the first reactor was carried out in May 2014. Polymir was founded in 1968 based on Western technologies, including Courtaulds, Asahi Chemical, SNIA, etc. Total capacity stands at 130,000 tpa.

Belarus has requested compensation from Russia of more than €1 billion in losses due to tax reform in the Russian oil industry. Changes in the Russian tax system mean that Belarusian refiners could lose around \$50 per ton. Belarusian refineries have to bear the burden of cross-subsidization, which have so far not succeeded in eliminating the petrochemical industry but cause problems. Due to concerns about further losses resulting from tax reform in Russia and thus Belarus is seeking some return from Moscow before it concludes agreements on the Customs Union before 2015.

Belarussian PTA Imports (unit-kilo tons)		
Country	Jan-Aug 14	Jan-Aug 13
Russia	12.269	5.622
Thailand	0.144	2.328
Poland	11.1	13.988
UK	0	1.007
Portugal	0	2.008
South Korea	5.532	3.056
Others	2.1	5.679
Total	31.179	33.688

Mogilevkhimvolokno-new PET facilities

Mogilevkhimvolokno is reconsidering investment options into PET and PTA, which it has previously examined with other potential partners without success. The company wants to construct a new PET plant with a capacity of 220,000 tpa.

Without large-scale investments the company has little prospect for economic survival, according to the Belarussian government. Mogilevkhimvolokno reports that it has reviewed proposals for a PET project European and Asian companies whilst SIBUR is also interested

although earlier efforts to create a JV did not materialise.

Kronospan-Mogilev

Kronospan subsidiary Kronochem has opened its new line for oriented strand boards in the Mogilev free economic zone (FEZ). The new production line is the second investment project of Kronospan at Mogilev. The new venture is established on a plot №4 (district Mogilevkhimvolokno) to organize production of urea-formaldehyde, phenol-formaldehyde and melamine-formaldehyde resins, which are used for the production of particleboard and OSB panels to the furniture industry. Consumers of these products will include Kronospan, as well as IOOO VMG Industrie. Investments in the project have totalled €29 million, including fixed assets of €23 million.

Ukraine

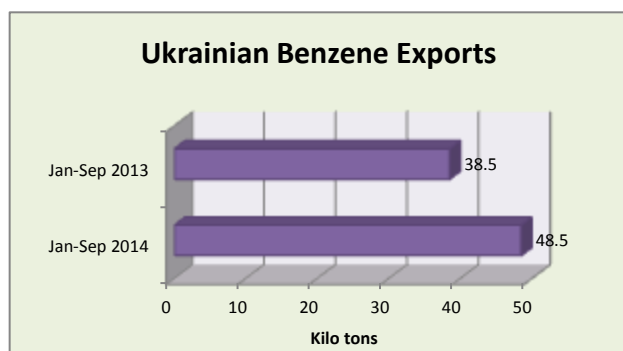
Ukrainian HDPE Imports (unit-kilo tons)

Category	Jan-Sep 14	Jan-Sep 13
Film	29.2	39.128
Blow	13.8	19.4
Pipe	14.2	21.8
Injection	13.4	14.472
Other	2.6	7

Ukrainian polymer consumption, Jan-Sep 2014

HDPE imports into Ukraine declined 31% in the first nine months to 73,700 tons, with most application sectors down. Reduced consumption was due to a range of factors such as difficulties of Ukrainian processors to pay, the problems with logistics due fighting in the east of the country, inflation, and a lack of lending programmes. LDPE has been slightly less affected than HDPE but is still down against 2013. This year Ukrainian consumers have increased imports from Polymir in Belarus, which provided 23% of LDPE imports in January to September 2014.

In the first nine months of this year, imports of suspension PVC in Ukraine decreased by 18% and amounted to 88,800 tons. Polycarbonate imports rose in the same period by 9% to 3,300 tons. Growing demand for Ukrainian products in the country is associated with a decrease in consumption of polycarbonate products imported from Russia. Imports of polystyrene HIPS and GPPS declined 10% in the first three quarters to 19,400 tons.



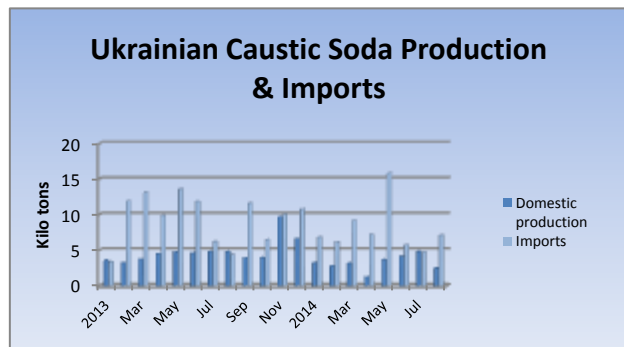
Ukrainian benzene market, Jan-Sep 2014

Ukrainian exports of benzene dropped 15.1 times in September against August to 469 tons. The only domestic exporter was Zaporozhkoks, which reduced the supply to the world market by 3.9 times. Despite the fall in September for the three quarters in 2014 Ukrainian plants shipped 48,500 tons, 26% more than in the same period in 2013. Benzene volumes to Russia have been small this year due to numerous factors, including the political situation. Other destinations such as Italy have become more important than before. For the first nine months of 2014 in Ukraine were sold 65.800 tons of

domestic production, 4% higher than in 2013.

Ukrainian caustic soda market 2014

Karpatneftekhim stopped production of caustic soda in 2012 due to unfavourable market conditions, and there is no sign of a restart in the near future. The halt in production left Dniproazot the sole producer of caustic soda in Ukraine, resulting in an increase in import activity but at the same time reduced consumption. Imports last year were sourced mostly from Russia and US. Dniproazot produced 37,890 tons in the first three quarters in 2013, 8% up on 2012. US imports had not been seen in Ukraine until last year.



In mid-September 2014 Dniproazot applied to the Ministry of Economic Development and Trade of Ukraine to conduct anti-dumping investigation on the market of caustic soda. The reason for this decision was the replacement of the domestic product by imports.

Despite the fact that Ukraine caustic soda and chlorine are only currently produced by Dniproazot, selling in the domestic market in 2014 has become difficult due to a significant reduction in purchases by domestic consumers and the conflict in the east of the country. As a result, the

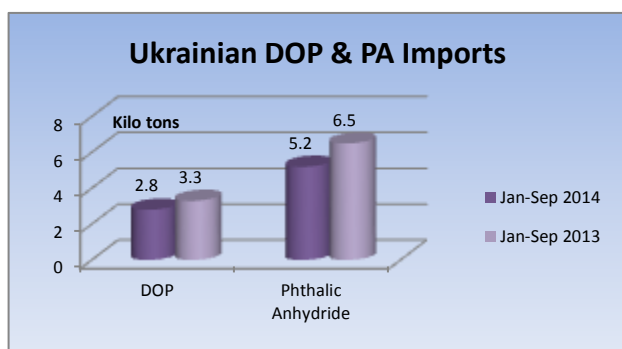
company has been forced to operate at around 60% of capacity.

From January to August 2014 Ukrainian consumers bought 63,000 tons of imported caustic soda, 15% less than in 2013. The share of imports in total Ukrainian consumption in this period expanded from 72% to 75%. Caustic soda was imported, mainly from Russia, as well as a small part of -from Romania, Poland, the US and other European countries.

The major consumer for caustic soda in Ukraine is Nikolayev Alumina Plant, accounting for 92% of imports in the first eight months in 2014. Dniproazot would not be able to satisfy this company's needs and thus the import duty would rule out the need for imports. Other consumers include Crimean Titan which bought 2,920 tons of caustic soda from Karpatneftekhim and 1,940 tons of Russian imports. Small consumers buy abroad about 300-400 tons of caustic soda per month. If the application by Dniproazot is rejected and the current trends do not change, the management of the company will consider stopping the chlor-alkali lines.

Ukrainian phthalic anhydride, Jan-Sep 2014

Ukrainian imports amounted to 590 tons in September, 11% down on August. Polikem bought 320 tons and Impulse 100 tons. Bulgaria provided 340 tons to Ukraine in September. Lakokraska from Belarus supplied 80



tons and another 80 tons came from ZAK in Poland. Purchases were made by phthalate plasticizer producers Polikem and Lizinvest. Imports of phthalic anhydride totalled 5,200 tons in January to September, 25% less than in 2013.

Ukrainian DOP imports, Jan-Sep 2014

DOP imports into Ukraine amounted to 105 tons in September, 42% less than in August. The significant decline in supplies took place due to lower purchases from Padana Chemical Compounds, reducing purchases from 161 tons to 46 tons. Galich-cable

imported 37 tons, 1.7 times more than in August. Overall due to the depreciation of the hryvnia against the dollar and euro, imported plasticizers have become uncompetitive against domestic products. For the period January to September 2014 Ukraine imported 2,760 tons of DOP, 20% less than the same period last year.

Ukrainian plasticizer market, DOP vs DINP

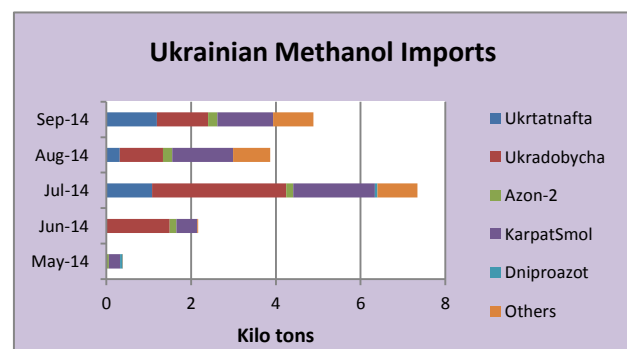
DOP consumption in Ukraine continues to decline, compensated by the rise in demand for DINP. In the first seven months in 2014 DOP consumption declined by 18% to 9,000 tons whilst in the same period DINP consumption rose 18% to 8,700 tons. The Ukrainian DOP market has witnessed a rapid rise in pricing in 2014 due partly to the depreciation of the hryvnia and partly due to preferences for DINP. DOP sales have fallen this year forcing domestic producers Polikem and Lizinvest to discontinue production on numerous occasions. Lizinvest is based at Rubezhnoye which has suffered from hostilities in the east of Ukraine, and the plant was shut for at least two months.

Ukrainian Plasticizer Consumption (unit-kilo tons)		
Product	Jan-Jul 14	Jan-Jul 13
DOP	9.0	10.6
DINP	8.7	7.4

In 2013 production of DOP in Ukraine reached 14,000 tons, exceeding of 2012 by 23%. After the introduction of a 6.5% import duty from the start of January 2013 on European DOP many Ukrainian processors found it unprofitable to import plasticizer Polish and Czech production. As a result, imports of DOP into Ukraine decreased by 62% in 2013 to 4,200 tons. The

introduction of import duty on DOP contributed to the increase of its production at the Ukrainian plants on the one hand and encouraged processors to use plasticizers not affected by the import duty on the other. Subsequently

consumers started to use more DINP, with imports rising 11% in 2013 to 13,500 tons. At the same time the consumption of DOP in Ukraine decreased by 14%, to 17,900 tons.



Ukrainian methanol market, Jan-Sept 2014

In September, Ukrainian consumers imported 5,000 tons of methanol which was 27% more than in August. Russian imports comprised 60% of total imports in September, the remaining deliveries were sourced from the Netherlands (24%) and Belarus (15%). Over the month, the average price of imported products in the

country was \$432 dollars, while in August it was \$420 dollars per ton DAF border Ukraine respectively.

Gas companies in Ukraine accounted for 49% of imports, or 2,400 tons. KarpatSmol bought 1,300 tons, which was 27% of consumption, whilst Azo-2 bought 217 tons or 4%. The Russian suppliers included Azot at Novomoskovsk which shipped 2,000 tons and Shchekinoazot which shipped 840 tons.

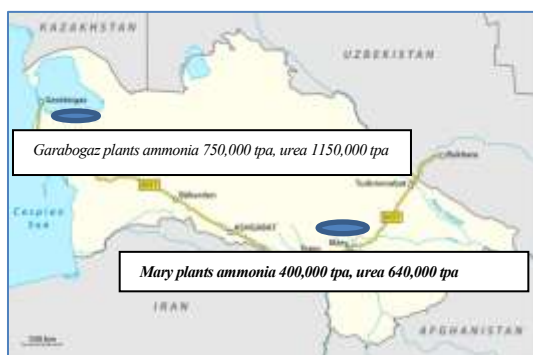
Odessa Port Plant reduces losses in first three quarters

Odessa Port Plant (HMO) reduced the net loss 2.5 times in January-September 2014. The net loss of the company for three quarters of the current year amounted to 243.4 million hryvnia against 606.2 million hryvnia in 2013. Proceeds from the sale of the HMO product increased by 7.4% compared to the same period a year earlier, reaching 4,179,000,000 hryvnia. The improved financial performance of the company will promote the sale of its shares. The State Property Fund of Ukraine intends shortly to privatize the company, received from the sale of securities of approximately \$600 million.

Central Asia

Turkmenkhimiya-Mary ammonia & urea plants start

Turkmenistan has launched chemical complex for the production of ammonia and urea at Mary. Turkmenkhimiya has opened new plants at Mary for 400,000 tpa of ammonia and 640,000 tpa of urea. The project has been designed by Japanese companies Kawasaki Plant Systems, and Sojitz Corporation, whilst construction has been carried out by the Turkish company Ronessans.



About 80% of urea production is intended to be exported, and the European region may represent a market target. Whereas Turkmenistan has to rely solely on the Russian pipeline system for exporting gas, it is able to export products such as ammonia and urea with more options.

Gas consumption requirements for the Mary plant are estimated at 500 million cubic metres per annum. The technologies have been provided by Kellogg Brown and Root, Honeywell, Stamicarbon, Uhde Fertilizer Technology and

BASF. The project investment cost amounts to more than \$1 billion, most of which was provided in the form of a loan by the Japan Bank for International Cooperation.

Turkmenkhimiya together with a consortium of Mitsubishi Corporation and Instaat Yatirim ve Dis Ticaret is currently working on a new project for the production of nitrogen fertilisers at Garabogaz. This involves projects of urea with a capacity of 1.155 million tpa and ammonia with a capacity of 750,000 tpa.

China provides credit for PVC project in Uzbekistan

Chinese Eximbank has agreed to provide Uzbekistan with funds of \$300 million for the construction of the PVC plant at Navoiyazot. In August, China CAMC Engineering signed a contract with Uzkhimprom worth \$439.8 million. Under the contract, the Chinese company is required to construct a turnkey unit of 190,000 tpa of ethylene, 150,000 tpa of PVC, 90,000 tpa of caustic soda and 500,000 tpa of methanol. Construction is scheduled to take around 36 months.

Aktau polymer bitumen binder plant

Kazakhstan) has launched a new line for the production of polymer bitumen (PBB) at Aktau. The project was undertaken by the Kazakh-Chinese JV CASPI BITUM, which was supported by SIBUR. Production is located at the former Aktau Plastics Plant in the Mangistau region.

The design capacity of the new line is 200,000 tpa. Voronezhsintezkaucuk took part in the project set-up, involving thermoplastic elastomer produced at the new plant TEP-50 located at Voronezh. For the production of 200,000 tpa of polymer bitumen binders, around 10,000 tpa of thermoplastic elastomers would be required. The JV CASPI BITUM was created on a parity basis between Kazakhstan Petrochemical Industries (a subsidiary of KazMunaiGaz) and CITIC KAZAKHSTAN (a subsidiary CITICORP Group, China).

As part of the agreements Uzbekistan will reduce gas supplies to Russia and will increase deliveries to China. China National Petroleum Corp (CNPC) intends to establish a JV with Uzbekneftegaz to build and operate Line D of the Central Asia-China Gas Pipeline in Uzbekistan. Upon completion of Line D, the Central Asia-China Gas Pipeline will have an annual capacity of 85 billion cubic metres, the largest gas transmission system in Central Asia.

China has also reached agreement for building a natural gas chemical plant at Mubarek. The project at Mubarek Gas Processing Plant includes plans to produce polyethylene and liquefied gas, some of the production

intended for the Central Asian and Chinese markets.

Atyrau aromatics complex starts commissioning

The Atyrau Refinery (owned by KazMunaiGaz) began the process of commissioning its aromatic complex in October. Previous schedules had aimed for a start in the second half of 2014, but this may now be late 2015. After completion, the company will produce 133,000 tpa of benzene and 496,000 tpa of paraxylene with 99.9% purity. The general contractor for the project is Sinopec Engineering, which has also been responsible for modernising the whole Atyrau refinery. Total investment in the modernisation of the refinery is estimated at \$2.956 billion. Kazakhstan operates three refineries at Atyrau, Pavlodar and Chimkent which can process a total of 14.5 million tpa. By 2017, refining capacity is forecast to rise to 18 million tpa.

Relevant Currencies

Czech crown. Kc. \$1= 20.852. €1 = 27.444: Hungarian Forint. Ft. \$1 = 229.253. €1 = 310.141: Polish zloty. zl. \$1=3.016. €1 =4.14
Ukrainian hryvnia. \$1 = 12.95 €1 = 16.45: Rus rouble. \$1 = 38.56. €1= 49.74

Contents Issue No 287

CENTRAL & SOUTH EAST EUROPE	2
PETROCHEMICALS	2
PKN Orlen, Q3 2014	2
PKN Orlen-power projects	2
Unipetrol, Q3 2014	2
Unipetrol-investment programmed revised	3
Slovnaft-ethylene upgrade	3
Synthos, S-SBR plant	4
Synthos-Brazilian rubber project	4
Viru Keemia-oil shale refinery	4
HIP Petrohemija-Gazprom	4
CHEMICALS	4
ZA Pulawy-ammonia storage	4
Azoty-Kronospan	5
Azoty ZAK-new turbine	5
BorsodChem-citric acid plant	5
Ethanol project Macedonia	5
Ethanol project Straszke	5
Organika-Sarzyna, polyester resin expansion	5
RUSSIA	6
Russian chemical production, Jan-Sep 2014	6
Russian foreign trade, Jan-Sep 2014	6
RUSSIAN PETROCHEMICAL PROJECTS	7
Kovykta-Sayamsk gas pipeline	7
Russian ethylene project outlook	7
RUSSIAN PETROCHEMICAL PRODUCERS & MARKETS	8
Bashneft-Ufaorgsintez feedstock supply & ethylene expansion	8
Gazprom neftekhim Salavat, propane-propylene fraction unit	8
Russian olefins, Jan-Sep 2014	9
Russian styrene, Jan-Sep 2014	9
BULK POLYMERS	10
Russian polyethylene, Jan-Sep 2014	10
Russian polypropylene, Jan-Sep 2014	10
Russian PVC, Jan-Sep 2014	10
Russian polycarbonate, Jan-Sep 2014	11
PTA/PET CHAIN	11
Russian PET consumption, Jan-Sep 2014	11
Bashneft-RusPETf paraxylene contract	11
United Petrochemical-Alpek PTA/PET project	12
PTA prospects between Bashkortostan and Kazakhstan	12
Polief-paraxylene supply	12
AROMATICS & DERIVATIVES	12
Russian benzene, Jan-Sep 2014	12
Russian toluene, Jan-Sep 2014	13
Russian orthoxylene, Jan-Sep 2014	13
Russian phenol, Jan-Sep 2014	13
United Petrochemical Company, cumene upgrade Badger	14
SDS Azot-adipic acid	14

Russian polyamide production, Jan-Sep 2014	14
SYNTHETIC RUBBER	14
Pirelli in Russian market	14
Russian C4s, Jan-Sep 2014.....	15
Gazprom Neft-PBB plant Moscow	15
Nizhnekamskneftekhim-catalyst plant launch	15
METHANOL	15
Russian methanol, Jan-Sep 2014.....	15
National Holding Company-Nakhodka project.....	16
Baltic Gas Chemical-Ust Luga methanol project.....	16
ORGANIC CHEMICALS	17
Russian butanols, Jan-Sep 2014	17
SIBUR-Neftekhim-acrylate ester maintenance	17
Russian plasticizer market	17
Russian phthalic anhydride, Jan-Sep 2014	18
BELARUS.....	18
Belarussian petrochemicals, Jan-Sep 2014	18
Mogilevkhimvolokno-new PET facilities.....	18
Kronospan-Mogilev.....	19
UKRAINE.....	19
Ukrainian polymer consumption, Jan-Sep 2014.....	19
Ukrainian benzene market, Jan-Sep 2014	19
Ukrainian caustic soda market 2014	19
Ukrainian phthalic anhydride, Jan-Sep 2014.....	20
Ukrainian DOP imports, Jan-Sep 2014	20
Ukrainian plasticizer market, DOP vs DINP	20
Ukrainian methanol market, Jan-Sept 2014	20
Odessa Port Plant reduces losses in first three quarters	21
CENTRAL ASIA	21
Turkmenkhimya-Mary ammonia & urea plants start	21
China provides credit for PVC project in Uzbekistan.....	21
Aktau polymer bitumen binder plant.....	21
Atyrau aromatics complex starts commissioning	22