

CIREC

MONTHLY NEWS

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

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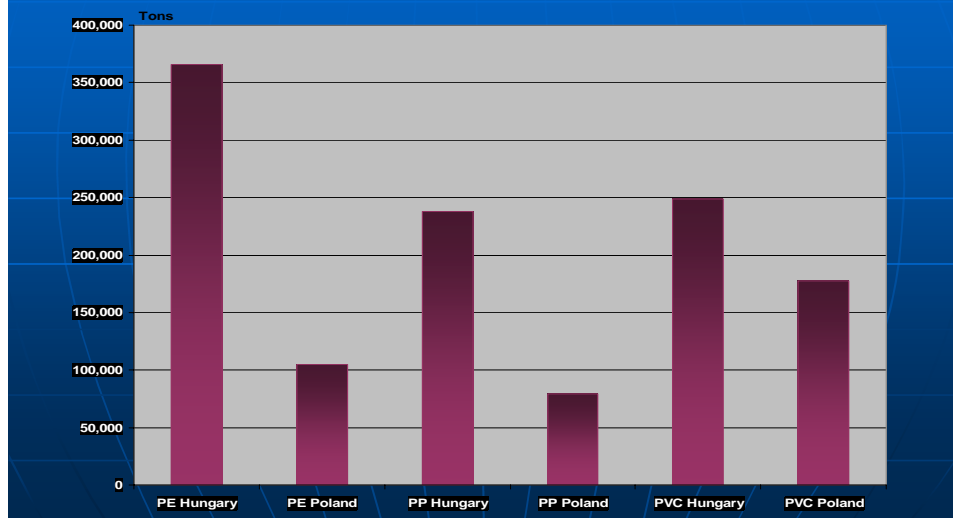
Czech Republic | Slovakia | Hungary | Poland | Bulgaria | Romania | Croatia | Slovenia | Yugoslavia | Baltic States | Russia | Belarus | Ukraine | Transcaucasus | Central Asia | Kazakhstan

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Features from this issue

- BorsodChem has begun commercial production at its new MDI plant, after successfully completing the trial run started in early October. A significant amount of production was released onto the market in December. BorsodChem's new plant, which cost €80 million to build, can produce 100,000 tpa of MDI and in 2006 the company hopes to reach a level of 80,000 tons production. At its old MDI plant, which has an annual capacity of 60,000 tons, BorsodChem uses technology from Mitsui Toatsu.
- An agreement was reached for the exclusive negotiating rights to Ciech for the purchase of an 80% stake in shares in Zachem to Ciech, which started on 15 December 2005 and is set to finish on 2 February 2006. The other company competing for a stake in Zachem was PCC AG, which owns the Rokita plant.
- Lonza, the Polish division of the Italian biotechnology-chemical company, is planning to construct a second plant in the outskirts of Niepolomice, while the construction of its first plant will begin in autumn. The company has submitted a motion for permission to start the construction. In the first phase, up to July 2006, it will invest zł.20 million and employ around 30 people. In the second phase these figures will be doubled.
- Oltchim estimates that it will achieve about \$15 million in profit for 2005 against a planned turnover of around \$500 million. Exports were expected to account for \$365 million. In 2004, the company doubled its turnover as against 2000. Oltchim is the third largest producer of PVC in Central and South East Europe, and holds leading positions on the market for the production of caustic soda, polyols for polyurethanes, propylene oxide and plasticizers.
- On 7 December 2005, it was decided by the SIBUR board that AKS Holding would revert to the name SIBUR Holding which will effectively consign the name AKS to history. It was decided to continue with the SIBUR brand, rather than move to AKS, due largely to the strength of the SIBUR name. Almost immediately after the board decision in December, 25% plus one share in SIBUR Holding was purchased by Gazprom whilst at the same time 75% less one share was acquired by Gazprombank.
- TNK-BP and TAIF signed a memorandum in December over a contract for long term ethane supply. TAIF's responsibility will be to develop an infrastructure for the transportation of ethane, which will be extracted by TNK-BP from associated gas from deposits in Orenburg and Saratov.
- SIBUR is competing with Selena over control of Polief after the Moscow court decided that the takeover in March 2005 was illegal. Selena has invested considerable sums to finalise the completion of the construction of the Polief PTA complex. Selena can appeal against the decision in Federal arbitration court. However, accordingly LUKoil and SIBUR are already ready for another privatisation process for Polief.
- Azot at Severodonetsk invested a total of \$24 million in 2005 on new equipment and its installation. The investment was made possible by the funds from the majority owners Worldwide Chemical LLC which so far has survived the political storm over its shares in Azot. Investments of up to \$60 million were outlaid in 2005 and 18.8 million hryvnia especially for the VAM plant.

Hungarian vs Polish Polyolefin/PVC Production Jan-Oct 2005



Hungarian Polymer Production

In the first eleven months of 2005, Hungarian polyolefin and PVC production showed gradual improvements after the expansions in capacity at TVK and BorsodChem. The expansion in Hungarian polyethylene production stems from the new HDPE plant, which was introduced in early 2005. Production from BorsodChem will continue to increase following the PVC expansion. Hungary's production of polyolefins and PVC outstrips that of Poland by some considerable difference, despite the fact that the Polish population is four times larger.

However, polyolefin production in Poland will increase sharply in the next few months as the BOP facilities at Plock start to achieve maximum occupancy rates. The new cracker at Plock is yet to show a real impact on ethylene supply, or at least up to November 2005, although propylene supply has been assisted by additional product from the FCC. Polyethylene output in Poland in October and November surpassed 19,000 tons for each month. Both polyethylene and polypropylene output volumes will be higher for 2005 over 2004, but it will only be this year when the full effects of the BOP plants start to take full effect.

CENTRAL EUROPE

Czech Republic

(Czech crown, Kc, Jan 3, \$1 = 24.441, €1 = 29.696)

Unipetrol

The Unipetrol case continues to provide controversy, with suggestions of corruption and reports suggest that the Czech and Polish governments had agreed in advance that Unipetrol would be bought by PKN Orlen. The advantages of taking control at Unipetrol are extensive for Orlen, including making use of the strong links between the Czech and east German petrochemical industries. Czech exports of monomers to Germany are illustrated below.

Czech Monomer Exports to Germany

Product	Jan-Sep 03	Jan-Sep 04	Jan-Sep 05
Ethylene	29.883	29.719	29.906
Butadiene	15.639	12.783	12.136
Propylene	19.224	4.76	11.401

investigation commission. The Kazakh company KazMunaiGaz allegedly offered several billion more crowns for Unipetrol. The Czech parliament is also examining the case closely.

Agrofert is now taking PKN Orlen to court over the issue of Unipetrol and the privatisation. Agrofert is demanding that PKN Orlen should sell five chemical sector companies at a price of €103 million settled in April 2004. The agreed prices are much lower than the current market value and hence Orlen has refused to sell the companies. Agrofert has demanded €77 (zł.306) million in compensation.

The Agrofert-Orlen contract did not contain any provision to determine the final price in connection with possible changes in value after Unipetrol privatisation.

Another case under legal examination is Unipetrol's demand for a transfer of shares in Agrobiochemie and Aliachem to Deza be invalidated. Deza is owned by Agrofert. Unipetrol argues that the relevant documents have serious legal shortcomings and run counter common business practice. Unipetrol and Deza each hold 50% in Unipetrol. Unipetrol holds some 39% in Aliachem and Deza has nearly 5%. Small shareholders have some 1.5% and the rest is in the hands of Agrobiochemie. Unipetrol argues that contracts signed in 2000 and 2001 are not formally in order. Therefore Unipetrol's board of directors has proposed that Deza adjusts the documents.

Hungary

BorsodChem

BorsodChem has begun commercial production at its new MDI plant, after successfully completing the trial run started in early October. A significant amount of production was released onto the market in December. BorsodChem's new plant, which cost €80 million to build, can produce 100,000 tpa of MDI and in 2006 the company hopes to reach a level of 80,000 tons production. At its old MDI plant, which has an annual capacity of 60,000 tons, BorsodChem uses technology from Mitsui Toatsu.

BorsodChem's natural gas costs may rise in the coming months which could impact on earnings. At the same time, the expansion of aniline facilities at Ostrava and the recent acquisition of Petrochemia Blachownia in southern Poland could signify important steps in improving the company's vertical integration and reduce its dependence on merchant feedstocks. BorsodChem acquired 100% of Petrochemia Blachownia from Ciech for an estimated price range of zł 60 million (€15 million).

Apart from the product integration, the company is now integrated on a Hungarian-Czech-Polish basis. Other possibilities for expansions include Oltchim in Romania, should the government make it available. The increases in capacity in 2005 at Kazincbarcika in PVC from 300 to 330 ktpa, and TDI from 60 to 80 ktpa, look set to sustain the expansion of income. Other developments involving BorsodChem include the sale of its 100% stake in BC-Handelsgesellschaft mbH, Vienna to CE Oil & Gas Trading AG.

Poland

(Polish zloty, zł, Jan 3, \$1 = 3.2919, €1 = 3.9991)

Zachem/Sarzyną

An agreement was reached for the exclusive negotiating rights to Ciech for the purchase of an 80% stake in shares in Zachem to Ciech, which started on 15 December 2005 and is set to finish on 2 February 2006. The other company competing for a stake in Zachem was PCC AG, which owns the Rokita plant. Several months ago BorsodChem announced that it had withdrawn from the tender the purchase Zachem due to concerns over the company's financial situation. Ciech is also interested in the purchase of Sarzyną, and will compete against PCC AG again for the right to secure the shares.

In mid-December four investors, Ciech, PCC, the Enterprise Investors private equity fund and Organika-Azot submitted their final offers in a bid to buy 80% of chemical firm Sarzyną.

Nafta Polska shortlisted eight companies allowed to carry out due diligence of the four chemical companies in late August and hopes the sale of 80% stakes in the firms will bring in several-hundred million Polish zloty.

ZA Pulawy/Z Ch Police

In the first half of 2006 a second public offering of chemical plants ZA Pulawy and ZCh Police will be made by Nafta Polska. Currently, the state controls 80% stake in the Police plant and a 71.15% stake in Pulawy. Nafta Polska would prepare a strategy that would allow the immediate sale through a floatation of all shares

held by the state in both companies. A draft project would be ready by the end of 2005, while plans for the disposal of shares would be ready by the end of January.

ZA Pulawy's IPO in October 2005 was expected to bring the company zł 298 million, but it seems that the share issue was not as successful as hoped due to a combination of the general stock market climate and expected sharp rises in gas prices. Around 70% of the issue went to institutional investors and the remaining 30% to individual investors. The IPO is important for the company's investment plans, particularly into melamine. ZA Pulawy launched its IPO at the same time as PGNiG, which may not have helped its cause.

ZA Kedzierzyn/ZA Tarnow

Nafta Polska decided in late December to grant Petro Carbo Chem (PCC) exclusive negotiation rights concerning the purchase of majority stakes in ZA Kedzierzyn and ZA Tarnow. The German company's main rival was Anwil, which also submitted a final offer. The decision was dictated by the price for the two companies offered by PCC. The funds acquired from the sale will strengthen the state budget, whilst for the chemical plants the most important criteria are plans concerning future investments. The rights to exclusive negotiations will last from 9 January until 17 February 2006 in the case of Kedzierzyn and from 30 January until 10 March 2006 for Tarnow.

Lonza

Lonza, the Polish division of the Italian biotechnology-chemical company, is planning to construct a second plant in the outskirts of Niepolomice, while the construction of its first plant will begin in autumn. The company has submitted a motion for permission to start the construction. In the first phase, up to July 2006, it will invest zł.20 million and employ around 30 people. In the second phase these figures will be doubled.

Bulgaria

(Bulgarian Lev, BGN, Jan 3 , \$1 = 29.292, €1 = 29.399)

Devnya

Solvay Sodi has outfitted its heavy and calcinated soda ash plant at Devnya, with a new 160-metre distiller which it claims is the world's largest. The 10.5 million leva equipment will cut down by 20% steam and ammonia consumption and will improve environmental and business performance.

Solvay Sodi plans to invest 15 million leva in the upgrade of its facilities in 2006. The company has already spent over \$20 million on the quality of its output and new technologies. Around \$5 million have gone to ensure the environmental protection of the Varna Lake into which the plant wastewater is discharged. Currently, the Devnya plant makes 900,000 to 1 million tons of soda ash.

Devnya Plast, the PVC pipes manufacturer based in the Varna area, has unveiled a new production line licensed by Wavin. The new facility, which operates waste-free, will increase the company's capacity to 1,500 tpa. Devnya Plast, a joint venture consisting of Wavin, the Dutch government agency Senter, the Bulgarian economy ministry and a couple of other local companies, intends to invest between 500,000 and 2 million euros in a third production line that will be purchased in mid-2006.

Romania

Oltchim

Oltchim estimates that it will achieve about \$15 million in profit for 2005 against a planned turnover of around \$500 million. Exports were expected to account for \$365 million. In 2004, the company doubled its turnover as against 2000. Oltchim is the third largest producer of PVC in Central and South East Europe, and holds leading positions on the market for the production of caustic soda, polyols for polyurethanes, propylene oxide and plasticizers.

Since 1990, major investments made by Oltchim have totalled \$205 million. For the period 2005-2007, the programme of modernisation will involve investments of more than \$220 million. The company also plans to invest \$260 million in environmental protection with a view to Romania's accession to the EU. The alignment to the provisions of the European legislation on the protection of the environment is the focus of the company's concerns.

LUKoil-Neftekhim has now apparently ruled out plans to participate in the privatisation of Oltchim which would leave BorsodChem as the most likely bidder for a majority stake. BorsodChem would be able to make use of Oltchim's chlorine.

Petrotel

In its first investment in the refining sector in East Europe, the IFC will provide an \$82 million loan package to S.C. Petrotel-LUKoil. With this financing, IFC is contributing to Petrotel's modernisation and revamping of its refinery.

This will allow the company to enhance environmental, health and safety performance; improve energy efficiency; and produce petroleum products compliant with the latest European Union motor fuel standards (Euro-3 and Euro-4). It will also help to increase the company's yield of lighter petroleum products.

BALTIC STATES

Mazeikiu Nafta

Lithuania's government has agreed to open negotiations with Kazakhstan's state-run oil company, KazMunaiGaz, on a possible purchase of the Mazeikiu Nafta oil refinery. The decision comes after YUKOS expressed interest in selling its 53.7% stake to the Kazakh company. Of the four companies that submitted bids, KazMunaiGaz reportedly bid the most at \$1.2 billion.

KazMunaiGaz, which has vast upstream potential, is eager to acquire downstream exposure in the Baltics, whilst the Lithuanian government is hoping to sell half of its stake in the refinery for a windfall in cash. As far as other potential investors, talks with TNK-BP are continuing. Bidders for the Mazeikiu stake should submit their final bids for the second stage of the auction by mid-January. The government holds the pre-emptive right to acquire the stake in Mazeikiu Nafta.

EURASIA, COMMONWEALTH OF INDEPENDENT STATES

Russia

(Rus rouble Jan 3 , \$1 = 28.440, €1= 34.521)

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

Product	Nov-05	Nov-04
Ethylene	175	178.4
Benzene	101	107.9
Styrene	48.6	46.8
Phenol	21.4	23.4
Polyethylene	88.4	93.3
Polypropylene	26.5	27.0
PVC	50.7	47.3
Polystyrene	20	13.2
Butanols	19.4	23.6
Methanol	258	232
SBR	101	102.1
Caustic Soda	104	104.5
Soda Ash	213	228.4
Ammonia	1142	1082.5

Russian petrochemical production continued to reflect stable performance in November 2005. Ethylene and benzene volumes were slightly down for the month on levels achieved in November 2004. Most of the production was accounted for, either through captive consumption or contract sales.

Of the bulk polymers, polystyrene's output continued to surpass volumes in 2004 due to the start-up of the second line at Nizhnekamsk. Production trends for polypropylene should rise in 2006 with the start-up of the new polypropylene plant at Nizhnekamsk, although there are some questions raised over the sufficiency of propylene supply. Methanol production increased by nearly 10% on November 2004, due mostly to additional volumes from the revamped Novomoskovsk plant.

The above table illustrates the major export products for the Russian Federation for the period January October 2005. The total of \$142,346 million for the products listed represent 72% of the total exports for the country, indicating the heavy dependence on raw material exports. Crude oil revenues still account for around a third of total export revenues, with natural gas accounting for about an eighth of total revenues. In the first quarter of 2006, Russia plans to produce 117.7 million tons of crude and non-stable gas condensate, of which 46 million tons is planned for export outside the CIS and 10 million tons within the CIS.

**Russian Commodity Exports
January-October 2005**

Product	ktons	\$ million
Crude Oil	192,716	64,317
Oil Products	79,671	27,233
Gasoline	4,989	2,052
Diesel Fuel	28,114	13,255
Mazut	37,579	8,096
Methanol	1,170	202.6
Natural Gas (billion cubic metres)	155	24,045
Ammonia	2,548	448
Nitrogen Fertilisers	8,167	1,132
Potassium Fertilisers	7,288	974
Synthetic Rubber	495	794

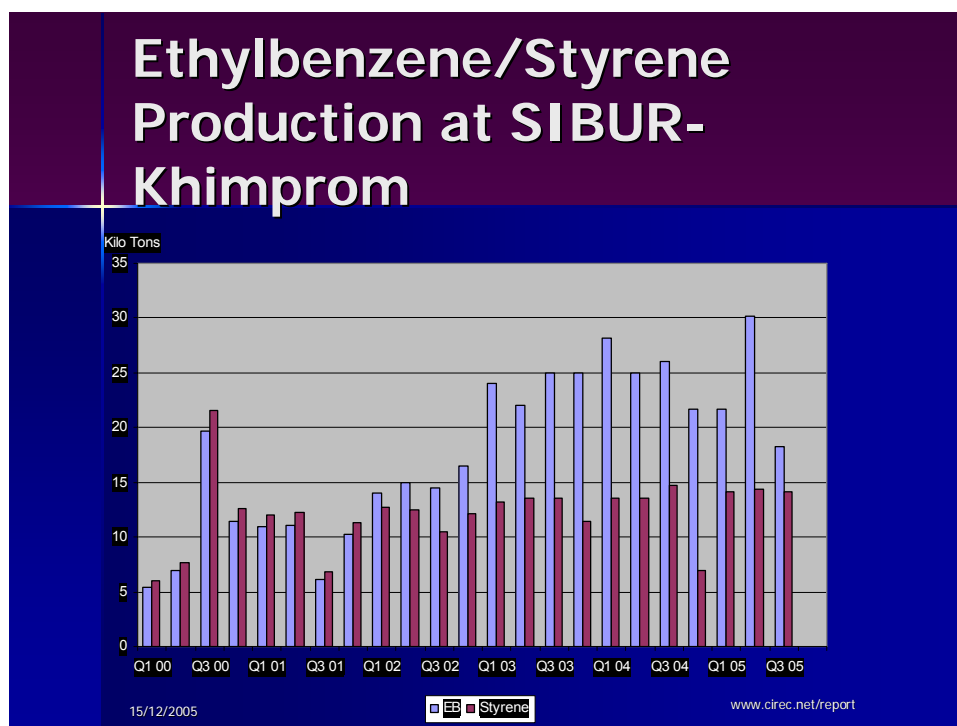
Gazprom has been settled. Implicitly, these changes will allow the SIBUR group to start formulating expansive development plans at its subsidiary plants.

The establishment of the new holding company (until recently was to be known as AKS Holding) was approved by Gazprom's Board of Directors on 4 February 2005. The aim was to restructure a debt of more than 67 billion roubles (approximately \$2.339 billion).

Under the new SIBUR Holding, the board has now approved the target for 2006 that involves a revenue level of 122 billion roubles and a gross profit of 23.8 billion roubles.

SIBUR Holding

On 7 December 2005, it was decided by the SIBUR board that AKS Holding would revert to the name SIBUR Holding which will effectively consign the name AKS to history. It was decided to continue with the SIBUR brand, rather than move to AKS, due largely to the strength of the SIBUR name. Almost immediately after the board decision in December, 25% plus one share in SIBUR Holding was purchased by Gazprom whilst at the same time 75% less one share was acquired by Gazprombank. As a result of these developments SIBUR's debt of 39.5 billion roubles (approximately \$1.379 billion) to



SIBUR-Khimprom

SIBUR-Khimprom officially completed the reconstruction of the styrene plant in December at a cost of \$30 million. The capacity has been increased from 40,000 tpa to 100,000 tpa. In the reconstruction period columns were replaced under the management of Koch-Glitsch, whilst also changes were made in the pump equipment and the cooling system. Reconstruction was carried out without incurring any stoppages of production.

Styrene production increased by 76% in November 2005 over November 2004 to reach 6,646 tons. As SIBUR-Khimprom already produces a surplus of ethylbenzene, which it has sold to other Russian styrene producers, there is no feedstock shortage at the plant. However, it does help to tighten the balance for ethylbenzene in Russia.

Tobolsk-Neftekhim

The construction of a polypropylene plant at Tobolsk-Neftekhim could start in the near future, under the plans of SIBUR-Holding. Before March this year the holding will select one of two options for the project; the cost is expected to be around \$700 million, and could rise to \$1.5 billion if polyethylene is also included in the project. Previous project ideas for polypropylene have been based on propylene on purpose, but there is now the possibility of a full petrochemical complex being constructed.

SIBUR-Neftekhim

On 2 December 2005, SIBUR-Neftekhim produced its three millionth ton of ethylene oxide since the plant was first brought on line 24 years ago. Under Kaprolaktam the ethylene oxide plant was started on 16 February 1982, with the technology provided by Scientific Design and construction undertaken by Salzgitter. Kaprolaktam became part of SIBUR-Neftekhim in December 1999, and the MEG capacity was increased from 120,000 tpa to 200,000 tpa in 2005.

Tatarstan

TNK ethane supplies

TNK-BP and TAIF signed a memorandum in December over a contract for long term ethane supply. TAIF's responsibility will be to develop an infrastructure for the transportation of ethane, which will be extracted by TNK-BP from associated gas from deposits in Orenburg and Saratov. This supply contract, if approved, will help to reduce associated gas flares for TNK-BP. At the same time it would supply to Tatarstan in the range of 450-500,000 tpa of ethane, after the construction of a second line by TNK-BP at its Zaikinsk Gas Processing Plant in the Orenburg region. Currently, the plant produces 1.9 billion cubic metres of gas per annum, and the second line would produce around 1.1-1.2 billion cubic metres of gas.

Supplies of up to 500,000 tpa of ethane would meet current ethane demands of Kazanorgsintez in full, but ethylene capacity is being expanded and so additional supply will be required. The most important aspect of the agreement for Kazanorgsintez is that it reduces the dependency on Orenburggazprom, which suffered a major explosion and reduction in output in August 2004.

At present, ethane is not produced at the Zaikinsk plant, and delivered as dry gas to Gazprom's pipelines. However, TNK-BP is looking to conclude a contract in the range of 20 years that would allow a reduction of risk on both sides. The ethane is expected to become available in two to three years, after formal documentation has been agreed in 2006. TNK-BP is also undertaking ethane based investment in the Kovytko gas condensate deposit which will supply ethane to the Sayanskkhimplast and Usolyekhimprom chemical plants in the Irkutsk region.

In July 2005, the Russian government made a decision to increase payment from oil companies for methane emissions by more than 1000 times, including chimney stack emissions. Companies are now required to pay 50 roubles per ton (from a previous level of 0.05 roubles), within the limits of the established limits of emissions, and 250 roubles per ton (0.2 roubles) over and above limits. These measures have been introduced in connection with Kyoto.

Kazanorgsintez

In December 2005, the Russian bank Sberbank has granted Kazanorgsintez credit of \$194 million over a period of seven years. The finance will be used to support the investments into HDPE and ethylene. Under the framework of the agreement \$60 million will be allocated through the Volga Vyatsky subsidiary of Sberbank for the expansion of the HDPE facilities. This finance comes from an agreement reached between Sberbank, Kazanorgsintez and TAIF in October 2004.

The first phase will be focused on the production of linear and bimodal polyethylene. Following reconstruction, total capacity for HDPE will reach a total of 510,000 tpa.

Kazanorgsintez announced the introduction of the new hydrogen plant for the HDPE plant at the end of November 2005, which was installed by the Russian company Metran from Chelyabinsk. It will help to control costs, temperature, pressure, etc. In November, Kazanorgsintez concluded contracts with Petrozavodskmash and Leninkhimash for the supply of additional equipment for the construction of the polycarbonate plant.

Under the terms of the contract, which was concluded on 16 November, will supply reaction columns to Kazanorgsintez in May 2006.

In the 2000-2005 period, Kazanorgsintez undertook a total of 14 important energy measures, investing a total of 5.92 billion roubles. In the 2006-2010 period, Kazanorgsintez plans to introduce further measures for energy savings which will reduce the cost of production by 3-4%.

Nizhnekamskneftekhim

Production Jan-Nov 2005

In the first eleven months of 2005 Nizhnekamskneftekhim produced 421,000 tons of ethylene, and for the full year it seems likely that the record of 450,000 tons in 2004 will be surpassed. Propylene production also seems set to beat last year's number, having reached 183,000 tons for the first eleven months. Other products that saw an increase in 2005 included polystyrene, for which output totalled 71,567 tons for the period January-November. On 22 December, Nizhnekamskneftekhim produced its 5-millionth ton of styrene since the plant was put into operation in October 1977. Since then, the capacity has increased by more than 20%, whilst waste has been reduced by around four times. Currently, a process of liquid phase dehydration of methyl-phenyl carbinol is being developed by the company which will facilitate a reduction of steam consumption by around 40%, and other advantages such as reducing waste water.

Other plants at Nizhnekamsk which are celebrating anniversaries include the oligomer division which was opened on 31 December 1985, following the production of its first product propylene trimer. In the intervening

period specialists from the plant and the scientific-technical centre have made more than 90 decisions regarding energy consumption, raw materials, etc. Both propylene trimer and propylene tetramer are heavily oriented towards exports, respectively at 85% and 92% of 2005 production levels.

In 2005, the oligomer division put into service a propane-propylene fraction separating column at propylene trimer unit. The first phase of tests aimed at reducing feed loss in technological process was implemented in late 2004-early 2005. The outcome not only contributed to reducing a propylene flow rate from 1.165 to 1.133 tons per propylene trimer ton, but also to revealing "bottlenecks", which upset stable operation of propylene unit.

Sasol

On 5 December Nizhnekamskneftekhim undertook further discussions with Sasol regarding plans for the joint production of LAB and fatty alcohols. This follows an agreement signed in March 2005 regarding co-operation.

Finance

Nizhnekamskneftekhim undertook a road show in December in London regarding the issue of bonds worth \$200 million, organised by the Moscow bank MDM. The credit will be used for the investment programme, which amounts up to \$630 million by 2010. The first projects to come on stream as a result of this new investment are polypropylene with a capacity of 180,000 tpa, and polyethylene with a capacity of 230,000 tpa.

The credit was approved by MDM bank in late December and will run at 8.5% over a 10 year period. The borrowed funds will be forwarded to finance the investment projects and optimise the borrowing structure of Nizhnekamskneftekhim.

Energy

As part of Nizhnekamskneftekhim's energy programme, a total of 404 measures were introduced in the 2000-2005 period, which according to the company translated into total savings of 607 million roubles. The energy programme has helped to reduce production costs; for example in the first nine months of 2005 energy accounted for 18.2% of total costs compared to 21.1% in the same period in 2004. In the timeframe 2006-2010, the company plans to introduce 111 new energy saving measures, with an economic saving of 757 million roubles. These measures include saving 2 million gcal, heat energy 94 million KWh and 32,000 tons of fuel.

The energy programme provides for the construction of four installations for the generation of energy on the basis of gas turbines, thus providing the production of two kinds of energy at burning of gas. Together with Tatenergo the project of reconstructing the Nizhnekamsk thermal power station-1 using gas turbine technologies is undergoing development.

In May 2004, a contract was signed with General Electric for the delivery of three turbogenerators with a capacity of 25 megawatts. Installation started in June 2005, and start-up of the block is planned for November, 2006. Also being undertaken is the second stage of modernisation of the Nizhnekamsk thermal power station, under a joint venture organised by TAIF.

Products such as halogenated butyl rubber, polystyrene, and polypropylene will see power costs amounting to no more than 2.5% of total costs. Moreover, productivity at the ethylene plant will increase without a significant increase in energy consumption.

Bashkortostan

PVC

Kaustik at Sterlitamak stopped EDC and caustic soda production on 27 November 2005 due to a reduction of ethylene supplies from Salavatnefteorgsintez. Supplies had fallen to 4.5 tons per hour which is too low for the production of EDC. The minimum level of supplies required is 10.5-10.6 tons per hour, and the closure has automatically brought the VCM and PVC plants to a standstill.

The deficit in ethylene supply became noticed through Nizhnekamskneftekhim which operates the ethylene pipeline in the Volga Urals region. Salavatnefteorgsintez reduced its production of ethylene after 15 November due to technical reasons.

Kaustik's owners Bashkiria Khimya (with 98% of the shares) is seeking compensation through the courts from Salavatnefteorgsintez. Bashkiria Khimya considers that the stoppage of the PVC plant at Sterlitamak will have a destabilising effect on the Russian market and will lead to price increases.

Sterlitamak

In late 2005, Kaustik at Sterlitamak took the decision to increase the charter capital of the company to 1.5 billion roubles with the aim of supporting investment. Higher charter capital will allow the company to secure loans more easily. The consensus is that only an increase in the authorised capital and face value of shares will help to raise the credit status of Kaustik. Apart from VCM/PVC, one of the new projects of the company includes the production of soda ash. Kaustik is 98% owned by Bashkiria Khimya, whilst Kaustik itself has 34.39% shares in the Sterlitamak company Soda.

The third chemical producer in Sterlitamak is Kautschuk, which is under external management by the Bashkirian authorities, after failing to pay all its debts to creditors. The future destiny of the company will be decided by assembly of creditors in the next 18 months.

Kautschuk produces 33% of isoprene and 40% of copolymers in Russia. Shareholders in Kautschuk include AKN Rosbank with 16.62%, and UralSib with 25% of shares. The Bashkortostan Ministry of Property owns 25% and Bashkiria Khimya acts as the managing holding company. Despite the bankruptcy, the involvement of Bashkiria Khimya has helped to ensure that raw materials through SIBUR will continue to be delivered. This consists of more than 20,000 tons of pentanes a month. Around 3-4,000 tons per month were about the maximum the plant could receive until Bashkiria Khimya took a place in Kautschuk's structure.

Polief

SIBUR is competing with Selena over control of Polief after the Moscow court decided that the takeover in March 2005 was illegal. Selena has invested considerable sums to finalise the completion of the construction of the Polief PTA complex. Selena can appeal against the decision in Federal arbitration court. However, accordingly LUKoil and SIBUR are already ready for another privatisation process for Polief.

As for Polief, the management believes that there is no foundation for the court decision against Selena. In Polief's opinion, the judge did not give reason for the decision, and so an appeal complaint will be made in the next two months. The decision seems to have been taken by the Moscow court after production at Blagoveshchensk was finally started, and seems to be more of political than legal decision.

If Selena wins the appeal, and anything is possible in Russia, the PTA plant will probably continue to operate unaffected at Blagoveshchensk. However, it is feared that a change of ownership could have a short term effect on production not only for the current plant but also the second PTA line which is planned for start-up in 2006. Selena has been a good investor for Blagoveshchensk, not only for finishing the construction of the plant, but also providing social support for the local region. Thus, locally the court decision taken in Moscow seems unpopular. The first two months of 2006 are expected to see a struggle for control of this plant.

Evrokhim

Evrokhim is making progress with the construction of a new terminal at Sillamae in Estonia for the transshipment of liquid chemicals. The terminal construction started in March 2005 and the capacity will be 1 million tpa when it is completed in July 2006. Apart from saving Evrokhim expenditure on shipments through other terminals, it will provide the possibility of exporting to North European and US markets.

Currently, Evrokhim ships methanol and other liquid chemicals through the Finnish ports of Hamina and Kotka. In the first phase of operations, the company plans to export methanol, toluene and MEG, the latter two products which it does not produce. Thus, it will use products from other chemical producers to ensure that the terminal runs at full capacity. Other products that might come under consideration include VAM, butyl acetate, acetic acid and phosphoric acid. In the south of Russia, at Tuapse, Evrokhim is starting a new project for constructing a modern fertiliser

In the first three quarters of 2005 Evrokhim's ammonia production increased by 18% over 2004, to reach 1.9 million tons. Novomoskovsk Azot, increased ammonia output to 1.11 million tons, up 26.3% compared to 2004. The growth in the company's core product volumes was due to the last year's large-scale modernisation of the ammonia units. Azot increased plastic and resin output by 5% year-on-year to 21,670 tons of end products. VCM volumes amounted to 24,560 tons (+5.7%), and acetylene 11,180 tons (+1.3%).

In the first three quarters, methanol output at Novomoskovsk reached 303,140 tons (+10.6%). A growth in production volumes was also recorded for argon (6,830 tons) and dimethyl ether (346 tons); the growth rates for these products were 24.9% and 262.1% respectively. Organic chemical production rose by 27% to a total of 327,000 tons. Azot at Novomoskovsk won the ninth all Russian competition for the "Best Russian Company of 2005" in the chemical and petrochemical sectors. In 2004-2005, the company completed numerous new projects including ammonia, methanol and urea.

Omsk

In 2006, the Omsk region expects growth in production in the chemical and petrochemical industry by 13-15%, and even higher growth in 2007. For the first ten months of 2005, chemical production in the region grew by 10% over 2004 levels, with plastics and resins increasing by 21%. Investment in the local petrochemical industry in the Omsk region amounted to 3.6 billion roubles for the first ten months of 2005, with a number of new projects underway. Around \$20 million was invested in the reforming installation at the Omsk refinery, which should help to produce more aromatics, whilst Omsk Kaucuk started its own power station.

Paraxylene

The Omsk refinery is examining possibilities for the modernisation of its aromatics unit in order to increase the quality of paraxylene production. UOP is being used for the project and the revamp of the refining unit. Measures planned should help not only to increase the volume of paraxylene production, but also the levels of product purity to 99.9%. The basis for the upgrade should be decided by April-May 2006, with construction expected to start in September 2006. The Italian company Eurotechnika will be used for the project.

Titan-Novatek

The Omsk Administration has signed a memorandum with Novatek regarding joint co-operation in the development of a new petrochemical complex in the region. The concept is based on the usage of hydrocarbon gases for the production of petrochemicals.

Titan (Omsk) Production Capacities

<i>Product</i>	<i>(ktpa)</i>
MTBE	180
SKMS	115
Phenol	50
Acetone	85

Novatek and local Omsk company Titan, which is currently building its own 180,000 tpa polypropylene project, have agreed to develop the necessary infrastructure and to examine project

ideas for polymers and monomers. Butadiene and synthetic rubber is being considered. The polypropylene project should be completed by 2007 and is aimed at promoting small and medium term plastics conversion businesses in the Omsk region. In addition, Titan is looking at building a polypropylene plant in China.

Titan was founded in 1989. It currently produces MTBE, butadiene-styrene rubber, phenol, acetone, propylene, etc. In April 2005, Titan signed a contract with Tecnimont for the construction of an 180,000 tpa polypropylene plant. The project is planned for completion for the first quarter of 2007 and is being supported by Novatek. Butadiene and SBR are expected to be the next product areas which will receive joint attention.

Product/Company News

Nitol

Nitol is planning to expand its interests in the chemical industry in Russia, with plans for an IPO both on Russian and foreign financial markets. Nitol has recently established a subsidiary in China to sell production from Usolyekhimprom, in addition to engineering and marketing. Nitol has also created a new subsidiary Nitol-Silikon which will focus on inorganics. Usolye-Siberian Silicon which became a full Nitol subsidiary in November 2005 will be the main producer in Nitol-Silikon. The company will start producing trichlorosilane in the second quarter of 2006. Trichlorosilane is used for the production of polysilicone, which is used widely by the electrical industry. The capacity of the plant will be 5,000 tpa initially, rising later in 2006 to 10,000 tpa and to 20,000 tpa by 2007. Currently, Nitol is seeking a strategic partner with which to work with on the project.

Nitol is vertically integrated company specialising in chlorine. Through its production facilities at Usolyekhimprom Nitol controls 51% of Russian capacity for trichloroethylene, 49% of epichlorohydrin and 34% of PVC paste. Nitol holds around a 35% share in the Chinese market for trichloroethylene and 15% of the epichlorohydrin market. In the period 2005-2008 Nitol plans to invest around 2 billion roubles with the main strategy focused on the reconstruction and modernisation of existing capacity. 500 million roubles will be invested in Usolyekhimprom, on equipment for the production of caustic soda and chlorine. The project for revamping the epichlorohydrin unit involves reducing expenditure on raw material consumption, and an increase in capacity from 30,000 tpa to 37,000 tpa. An ecological programme is already being launched for the company.

PVC

The slow expansion of ethylene production in Russia is seen as one of the main problems facing the producers of PVC. Sayanskkhimplast is the only company looking to develop its own source of ethylene, whilst the remainder of plants will be required to rely on merchant ethylene. With most ethylene producers heavily focused on captive consumption, PVC producers are reliant on declining merchant availability of ethylene for the production of EDC/VCM. PVC consumption is growing quickly, and it seems that there will be a deficit in 2006. The market rose from around 485,000 tons in 2004 to 560,000 tons in 2005, and imports are starting to take an important role in consumption. In 2004, imports accounted for around 13% of the market and will most probably accounted for a higher proportion in 2005. The major outlets for PVC in Russia include profile products, floorings and films.

Although there are some major expansion plans for PVC capacity in Russia, unless the problem of ethylene supply is resolved utilisation levels will be restricted. Under current expansion plans PVC capacity could reach 1.282 million tpa by 2010, which at an operating rate of 85%, would produce 960,670 tons. This may help to meet most of Russian domestic demand by this time, but the main question is whether there will be sufficient feedstocks to maintain production levels.

Ammonia

In late 2005, Berezniki-based Azot signed a framework agreement with BASF for ammonia supplies. The shipments started after the launch of Azot's 1a unit in November. Under the contract, Azot will provide BASF with 20,000 tons of ammonia per month. Mineralnye Udobrenia of Perm and Kirovo-Chepetsk Chemical Combine will also participate in the agreement. These three companies will ship to BASF 60,000 tons of ammonia per month. Framework agreements have been reached allowing the regulation of the availability of ships and railway cars required for the transport of ammonia.

Methanol

The Yamal-Nenets Autonomous Okrug has approved the construction of the new methanol plant at Labitnang, based on the gas processing plant using Yamal gas. The capacity of the new plant is 500,000 tpa,

construction of which is expected to start at the beginning of 2006 and should be completed by the start of 2008. The cost of the project is placed at €99 million.

Other methanol projects under consideration include Itera which is considering the construction of a 250,000 tpa methanol plant as a joint venture with Uralkhimplast at Nizhniy Tagil in the North Urals. Uralkhimplast is a major producer of formaldehyde and under the project concept would receive raw materials from Itera. Around half of the production would be intended for captive consumption and the remainder would be sold on the market. The project would take 2.5 years to complete.

*Footnote

In the last issue, it was stated that Manoir Petrochemicals was involved a new pipe project at Togliattiazot. This information was incorrect as Manoir was not involved in the project.

PET

Evroplast subsidiary Senezh expects to start up its first line for PET in the Moscow region at the end of January 2006. The capacity of the first line is 90,000 tpa with production being labelled ROSPET. Polief will supply the PTA to the Senezh plant, in addition to foreign PTA sources.

The project started construction in 2004 and is based on equipment from Inventa-Fisher and Bhuller AG. MDM Bank in Moscow provided the finance. The equipment has already been installed the start-up period will require around two months to complete. The Senezh project represents an important stage of vertical integration in the Evroplast group and its PET operations. Co-ordination from the delivery of raw materials through to the production of PET-granules will allow the company independence and stability of supply. The further plans of Senezh include undertaking a new tender for equipment for the second line which is planned for start-up in 2008. This will give the company a total capacity of 180,000 tpa.

Plastics

Selena has started its new line near Moscow for the production of plastic films. Monthly production will be 350 tons, including nine extrusion plants, with applications in the gas industry, and possibly also food and pharmaceutical packaging. The equipment was supplied by Macro Engineering and uses various polymers supplied by companies such as ExxonMobil, BASF, and DuPont, etc.

Kamenskvolokno in the Rostov region is entering into the production of polypropylene carpet fibres which will start from April 2006. The equipment has been supplied by German companies Neumaq/Saurer. The capacity of the new unit will be 2,500 tpa.

In late December Plastik-Tyumen started construction of a first line of a new polymer pipe plant, output of which will be used in hot and cold water supply systems. The investment into the project amounts to \$30 million, and the plant capacity will be 20,000 km of pipes. The plant is expected to be completed within several months.

Biakspen, the daughter company of Mosimpeks Service in Moscow, finally started its new BOPP plant in the Nizhny Novgorod region in the middle of November. It was previously hoped that the plant would start in July 2005, but delays were encountered in the final construction. The capacity of the new plant is 17,000 tpa and follows the start-up of the Novatek BOPP plant at Samara earlier this year. The amount of investment in the project amounted to €21.4 million, with an estimated pay back period of 3.5 years. As for the BOPP plant at Samara, production has been running well and in the first nine months of 2005, Novatek-Polymer's turnover grew 77% over 2004 to reach 32,240 billion roubles. For the third quarter of 2005, turnover reached 10.242 billion roubles, or an 89% increase over the previous year.

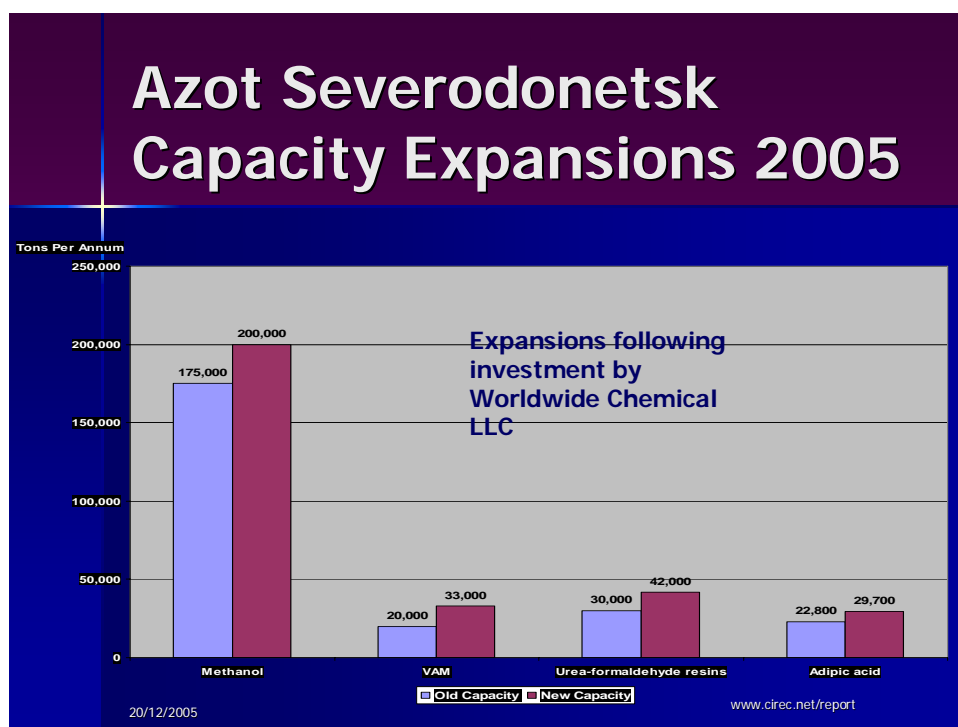
The production of Spanbond was launched in late 2005 at Ekaterinburg. The plant has a capacity of over 3,000 tpa and the product will be sold under a registered trademark, Spantex. The first line of production of packaging materials based on BOPS was started recently at Reutov in the Moscow region. The second stage of the project will start in February 2006 which will facilitate an expansion of finished products from BOPS.

Ukraine

(Ukrainian hryvnia, Nov 23, \$1 = 4.9955, €1 = 5.8964)

Azot

Azot at Severodonetsk invested a total of \$24 million in 2005 on new equipment and its installation. The investment was made possible by the funds from the majority owners Worldwide Chemical LLC which so far has survived the political storm over its shares in Azot. Investments of up to \$60 million were outlaid in 2005 and 18.8 million hryvnia especially for the VAM plant. The largest investment was directed towards the production of ammonia and the replacement of reforming furnace for the 1-B ammonia unit. The furnace cost \$3.7 million and was based on Japanese equipment. In addition, work was carried out on the acetic acid plant in 2005, and the reconstruction of the methanol and formaldehyde plants. The capacity increases for 2005 are shown in the graphic.



Azot undertook experiments on new VAM capacity in December, which increased production capacity by a third and up to 33,000 tpa. VAM is used by Azot for the production of polyvinyl acetate dispersions and polyvinyl alcohol. In the period January-September, the plant produced 17,153 tons of VAM at a value of \$12.1 million.

In late 2005, Azot introduced an automatic system for managing technology processes. The investment programme up to 2010, being planned by Worldwide Chemical, aims at an overall reduction in power consumption and production costs, the introduction of ecologically pure and safe technologies, and the increase in capacities for a number of products. Around \$120 million is planned for investment up to 2010.

Karpatneftekhim

Karpatneftekhim, which is owned by LUKoil-Neftekhim, has finished the modernisation of the ethylene unit at Kalush. Starting the unit for the hydrogenation of C4/C5 fractions will provide additional raw materials for ethylene production that will reduce the usage of diesel fuel. The effects of using C4/C5 fractions will help to reduce the cost price of ethylene production, and the amount of yield per ton of raw material. To achieve maximum utilisation of 250,000 tpa of ethylene, 157,000 tpa of raw materials will be required. Linde was responsible for the project, at a cost of \$30 million with a payback period of around two years.

In December, the Ukrainian government and LUKoil evaluated the prospects for developing the Ukrainian petrochemical industry, and in particular the Kalush complex. The meeting took place after the contract was signed between LUKoil-Neftekhim and Uhde for the construction of a new chlorine and caustic soda plant. The construction of the plant at Kalush will allow an increase in caustic soda capacity up to 200,000 tpa, with required investments of \$130 million. In addition, a memorandum was signed with Uhde over consideration of the construction of a new PVC plant at Karpatneftekhim. The cost of the project is placed at \$200 million. A contract is planned to be signed for the project in April 2006, with the aim of completion and start-up in 2008.

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