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

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WANHUA INDUSTRIAL GROUP HAS ACQUIRED FULL CONTROL OVER BORSODCHEM

MOL'S PETROCHEMICAL DIVISION RECORDED AN OPERATING PROFIT OF Ft 1.5 BILLION IN 2010

TVK RECORDED A NET LOSS IN 2010 OF Ft 1,134 MILLION AGAINST Ft 9,192 MILLION IN 2009

PKN ORLEN SIGNS NEW AGREEMENT WITH SK EUROCHEM FOR PTA SUPPLIES

ROMPETROL PETROCHEMICALS' REVENUES REACHED \$265.7 MILLION IN 2010, 11% HIGHER THAN IN 2009

RUSSIA INCREASED THE PRODUCTION OF PLASTICS BY 8.5% TO 4.888 MILLION TONS IN 2010

RUSSIA PRODUCED 2.382 MILLION TONS OF ETHYLENE IN 2010, 5% UP ON 2009

RUSSIAN STYRENE EXPORTS TOTALLED 158,700 TONS IN 2010, 20% DOWN ON 2009

RUSSIAN IMPORTS OF CHEMICAL PRODUCTS IN 2010 INCREASED IN VALUE BY 33.4% COMPARED TO 2009

THE OMSK POLYPROPYLENE PROJECT IS EXPECTED TO START IN THE THIRD QUARTER IN 2011

SIBUR-KHIMPROM STARTS SUPPLYING CUSTOMERS FIRST BATCHES OF EPS IN JANUARY

BIAKSPLEN INCREASED BOPP PRODUCTION IN 2010 BY 7%, OR FROM 65,986 TONS TO 70,559 TONS

ALKO-NAPHTHA STARTS PET PRODUCTION AT KALININGRAD ON THE NEW 220,000 TPA PLANT

SIBUR AND GAZPROM-NEFT CONSIDER PTA PROJECT AT OMSK

RUSSIAN TYRE MARKET STARTED TO APPROACH PRE-CRISIS INDICATORS IN 2010

RUSSIAN METHANOL PRODUCTION INCREASED BY 20% IN 2010 OVER 2009

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INDORAMA AND KOGAS EXAMINE PETROCHEMICAL PROJECTS IN UZBEKISTAN

CENTRAL & SOUTH EAST EUROPE

Chemicals & Polymers

MOL-2010

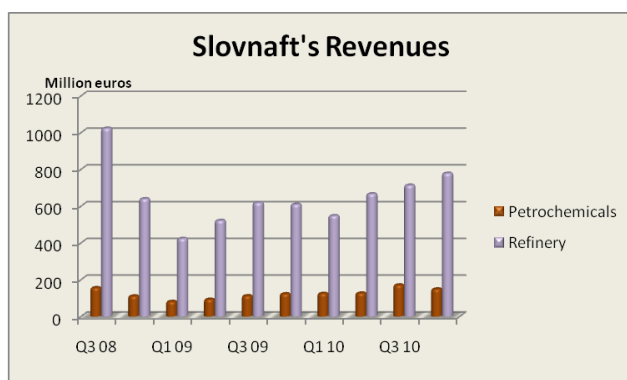
MOL's petrochemical division recorded an operating profit of Ft 1.5 billion in 2010 against losses of Ft 15.2 billion in 2009. The overall profit for the year was driven largely from the profit contribution from the second and third quarters. For the group as a whole, MOL increased its EBITDA by 58% to Ft 599.3 billion in 2010, while the operating profit amounted to Ft 331.7 billion. However, in the fourth quarter, MOL group's EBITDA fell by 17% to Ft 149.4 billion while operating profit fell by 26% to Ft 84.1 billion. The decline in the fourth quarter performance was due to mixed divisional performances.

MOL's Olefin & Polyolefin Production TVK & Slovnaft, (unit-kilo tons)		
Product	2010	2009
Ethylene	794	790
Propylene	398	394
LDPE	216	231
HDPE	417	387
PP	510	511

Slovnaft-2010

Slovnaft's polymer sales in Q4 2010 were 8% below the Q4 2009 level, totalling 102,900 tons whilst monomer production fell by 25% in the fourth quarter. The Slovnaft group, including refining and petrochemicals, recorded an operating profit of €68 million in 2010 against a loss of €62 million in 2009. The improvement of the operating profit in 2010 was assisted strongly by better petrochemical margins, positive changes in olefin by-product prices, and efforts made to improve efficiency. Petrochemical margins fell in the fourth quarter which contributed towards reducing the operating profit from €49 million in the third quarter to €26 million in the

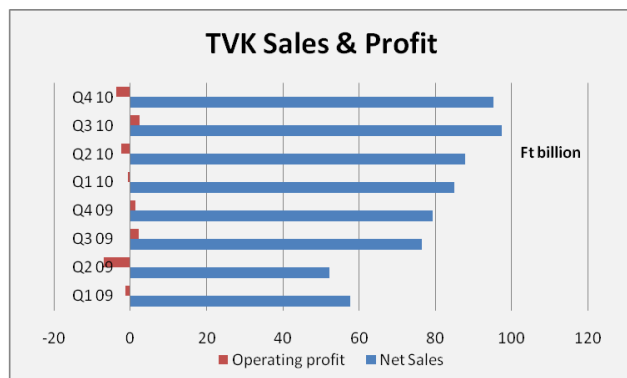
fourth quarter.



The deterioration of operating results was primarily caused by falls in petrochemical margins due to hike in feedstock prices. In addition, the change in the olefin by-product prices, rising energy prices, and lower production also incurred negative effects, which was only partially offset by foreign exchange fluctuations.

In October 2010, Slovnaft shut down its ethylene oxide and glycols plants permanently at Bratislava. The company stopped production at the units on 1 October as the result of the effectiveness of the old units. The plant capacities comprised 48,000 tpa of MEG,

including DEG and TEG, and 14,000 tpa of EO. The company has no plans to replace the closed units.



TVK-2010

The TVK Group recorded a net loss in 2010 of Ft 1,134 billion against a loss of Ft 9,192 billion in 2009, thus reflecting a major improvement for the year but still amounting to a loss. Petrochemical margins were dented in the fourth quarter, offsetting some of the gains earlier in the year. Naphtha is the main feedstock for petrochemical production, sourced largely from MOL but at normal market prices which rose 22% in the fourth quarter against the third quarter.

TVK's capacity utilisation in 2010 showed an upturn of 4% compared to 2009, due to the lack of extended or unplanned outages during the year. In 2009 a periodic turnaround took place at one of the olefin plants and in several polymer plants, whilst the outages involved much less time in 2010. As a result, polymer production and sales were higher by 4% and 2%, respectively in 2010, whilst TVK's HDPE-2 plant reached a record production level of 223,000 tons. Due to the final shutdown of the LDPE-1 plant at Tiszaujvaros in March 2009 the share of LDPE dropped to 9% of TVK's polymer sales in 2010, compared against 56% for HDPE and 35% for polypropylene.

PKN Orlen-2010

PKN Orlen's profit from chemicals in the fourth quarter in 2010 amounted to zł 117 million, compared to an operating loss of zł 17 million in the same period in 2009. Improved economic conditions combined with higher petrochemical margins and favourable exchange factors contributed towards the results. The changes in prices of petrochemical products helped to increase the inventory value in the fourth quarter by zł 27 million.

PKN Orlen's Chemical Sales (unit-kilo tons)		
Product	2010	2009
Ethylene	299	261
Propylene	213	214
Polyethylene	469	457
Polypropylene	402	382
Ethylene Oxide	18	18
Ethylene Glycol	65	70
Butadiene	93	57
Phenol	35	34
Acetone	23	21
Benzene	282	263
Toluene	37	74
Orthoxylene	6	20
PVC	283	337

The chemical division reported increased sales of ethylene, polyolefins and fertilisers in the fourth quarter, whilst PVC sales recovered after the restart of the Wloclawek plant in the fourth quarter. Overall for 2010 polyolefin sales from Basell Orlen Polyolefins increased by 32,000 tons to 871,000 tons. Although the chlorine plant at Wloclawek suffered a breakdown in the middle part of the year, the group received compensation to offset the costs of renovation. As the paraxylene and PTA plants were well advanced in construction by the start of the fourth quarter, capital expenditures by the group in chemical projects were lower compared to previous quarters.

PKN Orlen, refinery division Q4 2010

PKN Orlen's profit from refinery operations amounted to zł 610 million in the fourth quarter in 2010, increasing by zł 277 million compared to the same period in 2009. Higher oil prices, affecting both margins and inventory, contributed to results. Shutdowns in Poland and the Czech Republic resulted in a fall in the share of gasoline and increase of share of heavy heating oil in the group's sales structure. The operating result of the refining division was lower by zł 50 million due mostly to one-off non-monetary effects involving the valuation of property, plant and equipment.

Orlen Lietuva's result from operations was lower by zł 24 million and amounted to zł 88 million. This is despite the fact that Orlen's Lithuanian refinery achieved the highest quarterly processing volume in the last decade totalling 2.6 million tons. The refinery was operating at its full capacity by 102% and company's throughput increased by 31% in comparison with Q4 of 2009. The losses were largely caused by one-off expenditures and performance is expected to be better in 2011.

PKN Orlen Group Shutdowns 2011					
Location	Unit	Q1	Q2	Q3	Q4
Plock	HDS V	✓			
Plock	Hydrogen unit	✓	✓		
Plock	Hydrocracker	✓			
Plock	H-Oil		✓		
Plock	FCC				✓
Mazeikiu	Refinery		✓		✓
Litvinov	Refinery			✓	✓
Litvinov	Petrochem			✓	✓
Kralupy	HDS	✓			
Paramo	Refinery	✓			

PKN Orlen's Indebtedness and cash flows

PKN Orlen group's net indebtedness dropped by zł 2.416 billion in 2010, down to zł 7.847 billion. The drop in net indebtedness is largely the result of repayment of loans and the change in the balance of cash and cash equivalents. Net expenses on the acquisition of shares amounted to zł 76 million and related mainly to the increase of capital commitments of the Group in Rafineria Trzebinia and Anwil by the buyout of minority interest, as well as the disposal of shares in SK Eurochem through Anwil.

Orlen group shutdowns 2011

This year the Orlen group plans a wider range of shutdowns compared to 2010. The key shutdowns at Plock in 2011 include the hydrocracker, hydrogen unit and FCC unit. A two-week shutdown is planned in April for the Lithuanian refinery, whilst a major shutdown is planned for Litvinov in September 2011.

Ceska Rafinerska at Litvinov will shut down for 30 days in the autumn for maintenance. The shutdown is planned to start in September and end in October, and will affect the crude oil refining facilities in addition to the petrochemical facilities. This periodic shutdown takes place every four years for maintenance and upgrades.

Last year the major shutdown in the third and fourth quarter in 2010 took place at Anwil, where the chlorine and lye plant was disabled for 74 days due to a breakdown of the installation in June 2010. Other

shutdowns in the fourth quarter took place at the Plock refinery including the hydrocracking and hydrogen plant, and Litvinov where there was a 15 day shutdown of the hydrocracking Installation. There was also a 9-day shutdown of the olefins installation, and 11-day shutdown of the polypropylene Installation.

PKN Orlen, SK Eurochem-PTA agreement

PKN Orlen and SK Eurochem signed an agreement on 23 February for PTA supplies over the next five years. This replaces the agreement signed in 2006 covering the period 1 July 2010 to 31 December 2014. The first year was to consist of 25,000-50,000 tpa of PTA delivered to SK Eurochem at Wloclawek, to be followed by 100,000-120,000 tpa of PTA in the following years of the contractual period. The new agreement does not specify quantities but is based on volumes valued at approximately zł 1,802 million, against the previous agreement valued at zł 2,100 million.

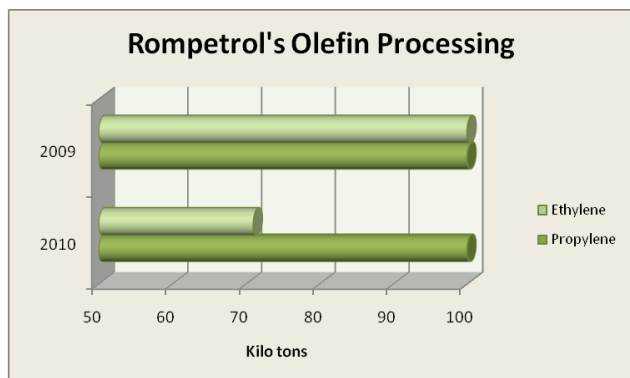
Unipetrol's Petrochemical Sales Revenues (Kc thousand)		
Product	2010	2009
Ethylene	3,677,893	2,576,475
Benzene	3,738,697	2,162,073
Urea	976,596	868,296
Ammonia	904,098	1,332,043
C4 fractions	1,581,889	1,336,845
HDPE	7,108,208	5,946,023
Polypropylene	6,697,248	4,112,521
Other products	4,919,496	3,952,291
Services	1,374,183	1,089,491
Other	100,048	76,417
Totals	31,078,356	23,452,475

Unipetrol Q4 2010

Unipetrol posted a fourth-quarter net loss of Kc 68 million (\$3.84 million in 2010, although revenues rose 20% to Kc 22.01 billion. The operating profit was Kc 122 million in the fourth quarter, down from Kc 238 million in the previous quarter due to lower sales in the refinery division. Other factors included a drop in petrochemical margins and a series of shutdowns. The refinery plant in Litvinov incurred lower capacity utilisation for two weeks in December following the effects of a fire. Despite the weak fourth quarter results, Unipetrol made a Kc 937 million net profit last year after recording a Kc 840 million loss in 2009. The results of the petrochemical division were higher due to an increase in sales and better petrochemical margins, in addition to the impact of prices on petrochemical inventory valuation.

Unipetrol-cracker savings from APC technologies

Unipetrol started the application of APC technology at the steam cracker at Litvinov, and has since achieved a return on its investment by saving around €2 million a year. At the heart of the AspenTech solution chosen by Unipetrol is DMCplus, a linear controller engine used to maintain the process at optimal set points. Unipetrol has deployed 18 DMCplus controllers from AspenTech, all of which remain online more than 95% of the time. In addition to achieving better control of the process, Unipetrol is now using the AspenTech APC solutions on a daily basis to compare actual data from its plant to targets created using a model. This allows the company to pinpoint precisely how the plant is performing and adjust the set points for APC so that they can run the facility closer to constraints.



Rompotrol Petrochemicals-2010

Rompotrol Petrochemicals achieved revenues of \$265.7 million in 2010, 11% higher than in 2009. The increase in gross revenues is mainly the result of higher prices for petrochemical products, with volumes down on the previous year. The company's financial results improved significantly due to positive margins from petrochemical sales, the diversification of product portfolio and streamlining of the company's activity. The EBITDA of Rompotrol's petrochemical division reached \$2.1 million in Q4 2010 and \$13.7 million in 2010.

The fall in raw material processing compared with 2009 is the result of the shutdown of HDPE unit from November 2009. Rompotrol Petrochemicals restarted the HDPE plant in November 2010 after increasing the capacity, in addition to technical improvements consisting of reduced processing costs, a diversification of the range of products provided, in addition to an increase in the operational safety.

Other projects carried out in the past few years include the modernisation of the LDPE plant and the construction of an LPG terminal for the supply of ethylene. In 2010 Rompotrol Petrochemicals successfully completed the automation of plants and the integration of operations into the Command and Control Centre of the Petromidia platform (CCR). The integration of the automated control of petrochemical plants into the

Command Centre supports the company's objective to become one of the main polymer suppliers and producers in the region.

Rompetro Petrochemicals is the sole polypropylene producer in Romania; in 2009 and 2010 the company was also the sole producer of polyethylene following the stoppage at Arpechim. At this stage, there are serious doubts that the Arpechim cracker and polyethylene facilities will restart whilst the Bourgas cracker and polyethylene plant in Bulgaria also has been idle since late 2009. Rompetro Petrochemicals is entirely owned by Rompetro Rafinare, which in turn is owned by KazMunaiGaz.

Dioki's Exports to EU (unit-kilo tons)			
Product	2010	2009	2008
LDPE	89.84	78.20	90.30
Polystyrene	37.87	35.34	37.88
VCM	7.21	0.00	0.00

Dioki 2010

The Dioki group in Croatia recorded a loss of 239.15 million Kuna in 2010, which represents an increase of 25% against 2009 where losses totalled 159.01 million Kuna. In the fourth quarter last year Dioki recorded a loss of 96.7 million Kuna, which represented an increase of 45.67% against the same period in 2010. Although Dioki's total group revenues last year totalled 2.04 billion Kuna,

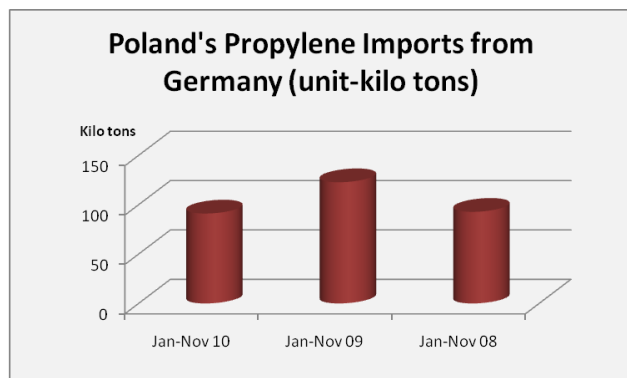
representing an increase of 25%, total expenditures amounted to zl 2.28 billion representing an increase of 27.37%. The rise in expenditures was largely due to investments in increasing LDPE capacity and the VCM renovation both at the Dina petrochemical complex at Omisalj. Both of these investments have been completed which is likely to impact positively on financial results in 2011.

Polish Chemical Production (unit-kilo tons)		
Product	Jan-11	Jan-10
Caustic Soda Liquid	21.0	29.4
Caustic Soda Solid	3.9	8.2
Soda Ash	80.2	74.4
Ethylene	50.4	48.8
Propylene	33.4	32.9
Butadiene	6.4	5.8
Toluene	11.7	11.5
Phenol	3.5	2.8
Caprolactam	14.7	14.6
Polyethylene	36.4	32.7
Polystyrene	11.0	9.7
PVC	20.8	21.7
Polypropylene	20.2	23.8
Synthetic Rubber	15.8	13.9
Pesticides	2.0	2.4

In terms of operating performance, Dioki witnessed much better margins in 2010 although this was largely offset by increased energy prices and the reduced supply of strategic raw materials. In 2010, the Dina petrochemical complex produced 106,105 tons of plastics, whilst total revenues amounted to 1005.6 million Kuna against total expenditures of 1119.9 million Kuna. The petrochemical subsidiary recorded a loss amounting to 114.3 million Kuna in 2010 (accounting for 48% of the group loss), against a loss of 42.8 million Kuna in 2009. Compared to 2009, the cost of energy, including electricity and natural gas, increased whilst raw material prices were significantly higher than in 2009. A large share of Dioki's petrochemical production is exported to the EU, and at the end of last year the group successfully executed registration for ethylene and VCM in accordance with the requirements of REACH.

Polish chemical industry-challenges 2011

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

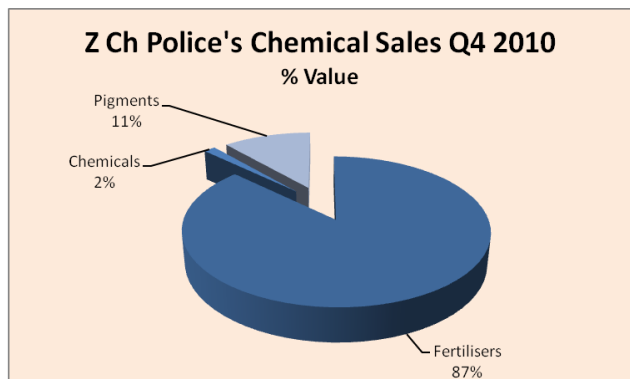


The ZAT-ZAK merger represents a major development in the industry, creating synergies and reducing costs across the board. The merger/acquisition option may not have been realistically considered had the privatisation process succeeded and in hindsight that failure might transpire to be viewed as an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

uses for oxo alcohol production.

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

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



ZCh Police-Q4 2010

ZCh Police achieved a small operating profit in 2010 of zł 4.3 million, whilst the net profit totalled zł 25.7 million against a loss of zł 424 million in 2009. Revenues rose in 2010 along with cash flow, whilst long term debts were reduced. Whilst the company still faces major challenges the outlook has improved in the past year. Total sales in the fourth quarter in 2010 amounted to 408,500 tons, representing a 15% rise over the same period in 2009. Sales both on the domestic and export

markets rose in the latter part of 2010.

In relation to the fourth quarter 2009 sales of titanium dioxide rose 7.2% to 8,900 tons. The share of titanium white in total revenues was 11% in the fourth quarter of 2010, which in total amounted to zł 570.9 million. This represented an increase of 41% compared with the fourth quarter of 2009. ZCh Police expects results in the first quarter in 2011 to be no worse than the fourth quarter in 2010. The company will seek to increase capacity from 80% to 90% mainly to increases in fertiliser sales. Any raw material price increases in 2010 were covered mostly by increases in sales prices of products, resulting in improved margins.

BorsodChem-Wanhua full takeover

Wanhua Industrial Group has now acquired full control over BorsodChem, by exercising a call option granted as part of BorsodChem's financial restructuring in June 2010. Wanhua acquired all shares held by funds advised by Permira and Vienna Capital Partners, which were BorsodChem's previous majority owners. The integration of BorsodChem into the Wanhua Group creates the third largest global isocyanate producer, by turning two regional players into one global company. As part of last year's restructuring, Wanhua provided BorsodChem with new funds of €140 million, in exchange for a 38% ownership stake. BorsodChem is currently using the funds to complete construction of its new TDI-2 (toluene diisocyanate) plant and a new nitric acid plant.

BorsodChem has stated that the acquisition by Wanhua, which is financially backed by a syndicate led by the Bank of China, is securing the company's jobs and long-term development, while also creating access to Asian markets. Wanhua is the largest isocyanate producer in the Asia Pacific region.

The acquisition gives Wanhua access to the European chemicals market. Acquired in 2006 for €1.6 billion by the UK buy-out fund Permira, the heavily indebted BorsodChem ran into severe financial difficulties two years later when financial markets seized up. Wanhua's original plan had been to construct a chemical facility in the Netherlands, but it appears that it switched strategy when BorsodChem ran into trouble. The deal leaves Permira incurring an 80% loss on its initial equity investment of about €400 million in the company.

Achema 2010 & gas prices

In 2010 the Achema Group in Lithuania recorded a four-fold increase in profit to 87.5 million litas (€25.3 million) against 2009 despite a fall in revenue. The group's revenue declined from 3.07 billion litas (€889 million) in 2009 to 2.72 billion litas (€788) last year. Gas prices represent the major problem for the group. Achema decided to suspend production of methanol in November 2010 for an indefinite period until significant changes take place in the market. For a thousand cubic of gas on the Lithuanian-Belarus border, Achema

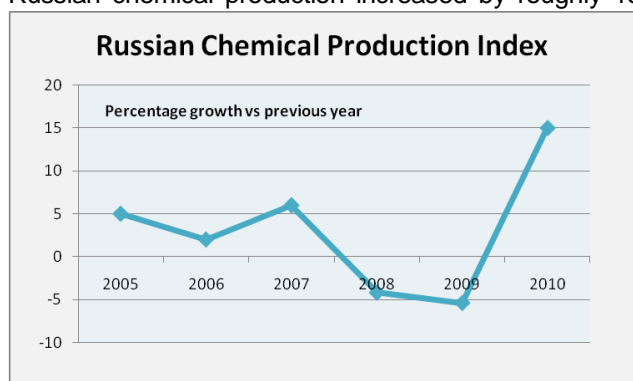
currently pays \$361 which is expected to rise in 2011 to around \$400 in the second quarter and \$432 by the end of the year. This is considerably more than consumers in West Europe and poses serious challenges to the production of fertilisers in Lithuania.

The price of gas accounts for around 78% of Achema's raw material costs and improvements to the supply system are vital for the group's future. Together with Qatari investors, Achema is interested in constructing a new LNG terminal that could facilitate the delivery of up to 2 billion cubic metres of gas per annum. This project would be undertaken without EU funding and could serve not only Achema but other business interests in Lithuania. Although the gas price is not expected to be substantially different from the current price structure but it would provide more flexibility in supply. Other areas of interest to Achema include the construction of a new power plant to relieve the dependence on electricity from Orlen Lietuva and imports from Russia. However, as electricity prices tend to fluctuate it is not clear if it will be viable to complete the investment project.

RUSSIA

Russian chemical production trends

Russian chemical production increased by roughly 15% in 2010 for all products against 2009, although this



follows two consecutive years of recorded falls in 2008 and 2009 and relatively modest growth rates during the 2005-2007 period. In the petrochemical sector, synthetic rubber and methanol saw the largest production increases in 2010, whilst Russian plastics increased by 8.5% in 2010 to 4.9 million tons.

The main feature of the market last year was higher import activity due to the improvement in demand. Imports increased for the main polymer commodities, whilst at the same time polyolefin exports from Russia dropped in favour of domestic demand. Exports to China were lower across the board in 2010 against the

previous year; traditionally lower Russian export activity correlates closely with upward movement in Russian domestic demand.

Russian plastics production 2010

Russia increased the production of plastics by 8.5% to 4.888 million tons in 2010, whilst rubber products increased by 25.6% and plastic products by 18.6%. Production of polyethylene in Russia in 2010 increased by 8.2% in 2010 to 1.535 million tons. The increase was due less plant downtime combined with the effects of new capacity at Salavat. PVC production increased 6.1% to 595,000 tons and polystyrene by 13.6% to 308,000 tons. A recovery of 24.2% was recorded for synthetic rubber production to 1.379 million tons. Polypropylene production increased by 8% and amounted to 643,000 tons. The production of polyesters, polycarbonates, epoxy and alkyd resins increased by 19.3% in 2010 and totalled 503,000 tons, whilst the production of polyamides by 15% to 122,000 tons.

Russian chemical trade

Imports of chemical products in 2010 increased in value terms by 33.4% compared to 2009. The share of chemical products in the commodity structure of Russian imports in 2010 amounted to 17.3% against 17.6% in 2009. China increased exports in 2010 to Russia in PVC, PET and polystyrene although volumes for all three products remained lower than in 2008.

<i>Russian Imports of Chemicals (\$ mil)</i>	<i>Jan 2010</i>	<i>Jan 2011</i>
Organic and inorganic chemicals	194,9	233,7
Pharmaceutical products	477,0	476,5
Polymers & rubber	438,1	597,2
Chemical threads	20,7	24,4
Synthetic Fibres	28,1	39,6

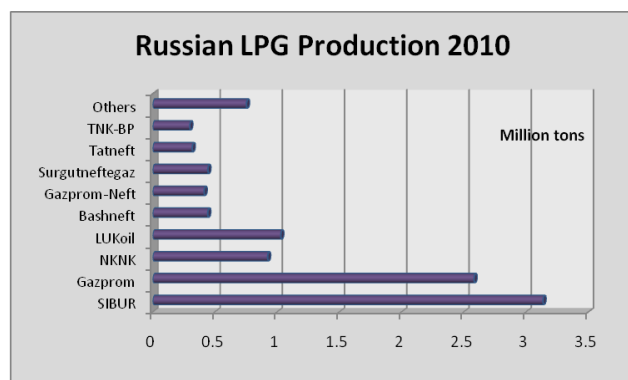
Physical volumes of inorganic chemical imports into Russia increased by 21.1% in 2010, whilst organic chemicals rose by 41.2%. Imports of plastics and related products increased by 36.2%, and rubber and rubber products by 48.5%. Import trends started

strongly in 2011, with most products seeing increases in January measured against the same month last year. Other signs of the economy improving included rail shipments of chemicals and fertilisers for which Russian Railways achieved an 11.1% increase in January 2011 against January 2010.

Russia increased its exports of petrochemical products in 2010 by 20.5% in volume and in value terms by 36%. The share of chemical products in the total volume of Russian exports amounted to 5.8% against 5.7% in 2009. Exports of mineral fertilisers rose by 18.8% to 7.878 million tons, synthetic rubber by 17% to 742,900 tons and methanol 51% to 1.196 million tons. Exports of ammonia totalled 2.631 million tons. The share of chemical products in the commodity structure of exports to CIS countries amounted to 8.9% against 10.9% in 2009.

Main Polymer & Chemical Imports into Russia (unit-kilo tons)								
Product	Q1 09	Q2 09	Q3 09	Q4 09	Q1 10	Q2 10	Q3 10	Q4 10
ABS	3.5	4.9	7.6	8.4	7.1	9.1	9.7	11.4
Acetic Acid	2.7	1.1	2.0	1.4	1.5	3.5	3.6	3.0
BOPE	12.3	18.5	20.1	34.1	20.0	24.0	20.8	27.6
BOPP	6.0	6.1	6.3	14.1	5.3	7.0	8.1	8.1
Caustic Soda Liquid	1.8	0.3	3.4	5.0	2.6	2.9	3.0	6.0
Caustic Soda Solid	0.2	3.0	10.2	7.4	5.2	9.0	10.4	13.3
HDPE	30.4	43.0	46.0	52.5	44.4	57.9	69.6	96.9
LDPE	14.7	20.6	15.5	13.7	17.6	23.9	26.0	27.6
LLDPE	14.7	26.5	27.2	22.4	17.0	28.9	28.5	27.6
PET	40.7	72.6	66.8	40.3	53.3	89.5	62.3	61.3
Phenol	0.2	0.6	0.6	1.6	0.4	0.0	0.0	0.5
Phosphoric Acid	3.0	4.4	4.8	3.9	2.9	4.4	2.3	2.4
Phthalic Anhydride	3.3	4.6	3.0	1.9	1.3	1.6	1.2	0.1
Plasticizers	1.3	1.0	1.2	1.4	1.8	3.8	9.6	8.1
Polypropylene	14.1	23.5	25.2	23.6	17.2	32.0	37.0	50.1
Polystyrene	15.3	27.5	36.5	35.9	21.6	35.7	56.7	49.8
PTA	0.0	11.1	8.1	5.0	12.1	14.1	0.0	12.1
PVC	24.1	22.9	88.1	100.5	51.1	118.9	165.8	123.8
PVC films	8.7	13.0	16.1	23.5	15.5	18.3	18.6	21.8
Synthetic Rubber	8.9	10.7	12.8	13.5	11.0	17.7	16.9	16.5
Titanium Dioxide	9.5	19.5	22.8	19.1	15.4	22.7	25.5	22.8
Totals	215.3	335.4	424.3	429.2	324.4	525.0	575.4	590.5

Feedstocks & petrochemicals



Russian LPGs production & exports

Russia increased the production of propane and butane in 2010 by 7.4% in comparison with 2009 to 10.336 million tons. SIBUR Holding produced 3.136 million tons, of which Tobolsk-Neftekhim produced 2.433 million tons (an increase of 3.4% over 2009). Gazprom enterprises produced 2.582 million tons of propane and butane, of which the Orenburg Gas processing Plant produced 1.039 million tons (an increase of 16.1%).

Nizhnekamskneftekhim increased production of propane and butane by 19.7% up to 923,000 tons.

LUKoil produced 1.029 million tons of this production, Bashneft 441,800 tons, Gazprom Neft 413,900 tons, Surgutneftegaz 443,200 tons, Tatneft 317,200 tons, TNK-BP 297,800 tons. Russian exports of LPG in 2010 increased compared against 2009 almost 28% and amounted to 2.272 million tons. Revenues from exports of LPG increased by nearly 2-fold and reached \$1.241 billion. Propane exports totalled 1.501 million tons, of which Poland was the largest customer with 588,200 tons of shipments. Turkey received 301,925 tons of propane from Russia last year, Ukraine 132,800 tons and Finland just over 100,000 tons. Butane exports rose 1.6 fold to 161,300 tons in 2010.

SIBUR-TNK JV on associated gas

SIBUR and TNK-BP have entered into an agreement to expand its JV Yugragazpererabotka to include Nyagangazpererabotka located in the Yamal-Nenets region in its structure. Nyagangazpererabotka is

currently included SIBUR's subsidiary SIBUR-Tyumen, and the aim transferring it to the jv is to expand the processing volumes at Yugragazpererabotka. The capacity of Nyagangazpererabotka is designed to accept up to 2.14 billion cubic metres per annum of associated gas. The plant processed 1.3 billion cubic metres in 2010, including 1.18 billion cubic metres of dry lean gas. TNK-BP will invest up to \$75 million in gas supply network to increase the supply of associated gas from Nyagangazpererabotka.

The jv Yugragazpererabotka was founded SIBUR and TNK-BP in 2007. TNK-BP owns 49% of the jv, SIBUR 51%. It includes the Nizhnevartovsk and Belozern gas processing plants where processing has increased from 7.3 billion cubic metres in 2007 to 9.7 billion cubic metres in 2010. During the period 2007-2009, Yugragazpererabotka produced more than 29.9 billion cubic metres of dry lean gas and 9.7 million tons of NGLs.

Yugragazpererabotka is planning to increase associated gas processing in 2011 by around 15% from 9.7 billion cubic metres in 2010 to 11.2 billion cubic metres. In 2012, the jv expects associated gas processing to rise by around 3% to 11.5 billion cubic metres. The extraction of dry stripped gas (SOG) in 2011 will rise from 8.3 billion cubic metres in 2010 to 9.5 billion cubic metres in 2011 and in 2012 to almost 10 billion cubic metres. Regarding SHFLU or NGLs, production will rise from 2.7 million tons in 2010 to 3 million tons in 2011, and in 2012 up 3.1 million tons.

SIBUR-new gas processing plants under review

SIBUR plans to complete a feasibility study in the third quarter this year for the construction of a gas processing plant in Central Siberia entitled the Baraba project. SIBUR is considering two options for the location of the Baraba GPP, either at Barabinsk near Novosibirsk or at Tomsk close to Tomskneftekhim. The project involves the collection of associated gas fields in Central Siberia based on a single compressor station. Oil companies expected to supply oil to the plant include Gazprom Neft, TNK-BP, Rosneft and Vostokgazprom. The capacity of the plant is being considered to process anywhere between 2-5 billion cubic metres of associated gas per annum.

SIBUR-Holding Petrochemical Production 2010			
Product Type (unit-kilo tons)	2009	2010	2011 Est.
NGLs	3565	3935	4260
Stable natural gasoline	806	761	800
LPG	3353	3400	3545
Monomers	1 891	2121	3542
Rubbers	339	434	487
Polymers	595	592	747
Organic chemicals	969	1054	1370
Mineral fertilisers	2 777	2955	3050
Fuels and lubricants	729	690	627
Other	497	519	405
Total:	15 521	16,461	18 833
Dry stripped gas (million cu m)	14,822	15,325	15,740

SIBUR is also considering possibilities for a new gas processing plant inside the Article circle, tentatively entitled the Polar GPP. The aim of the plant is to process associated gas produced in the eastern part of Yamal and in the north of the Krasnoyarsk region. The intention is to locate the plant next to the Zapolyarnoye field; about 300 km north of Gubkinsky Gas Processing Plant which is part of SIBUR-Tyumen. The major oil companies in this region include Rosneft, Gazprom, TNK-BP and LUKoil. However, none of them have enough raw materials to justify building a gas processing plant on their own. The capacity of the proposed Polar GPP could amount to about 5 billion cubic metres per annum of dry stripped gas. However, the gas in this region is known not to be very fat, and might only produce around 1 million tons of NGL per annum.

SIBUR-Holding, performance improves in 2010

SIBUR significantly increased its petrochemical investments in 2010 and is planning further capital investments in 2011. Most of the investment was focused on gas processing, in addition to the polypropylene project at Tobolsk, and ethylene

expansion at Kstovo. The completed projects in 2010 included a new low-temperature condensation facility at the Gubkinsky gas processing plant; a third line for the separation of isoprene rubber in Togliatti, and the opening of new large-scale unit for ethylbenzene, styrene and the expandable polystyrene at Perm.

In addition, industrial production started of improved butadiene-styrene synthetic rubber at Voronezh; Orton at Kemerovo started the production of the nonwoven geotextiles whilst Novatek Polymer was acquired. SIBUR produced a total of 16.5 million tons of petrochemicals in 2010, which is 6% than in 2009 (15.5

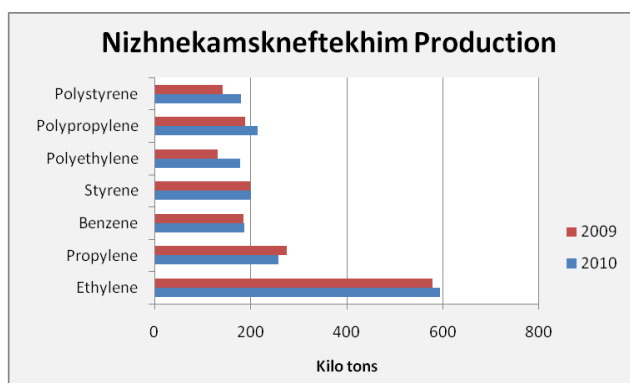
million tons). The output of dry stripped gas (DSG) in 2010 amounted to 15.3 billion cubic metres compared with 14.8 billion in 2009. Production of automobile tyres increased to 8.7 million units, compared with 7.6 million units in 2009 (+14.4%). The largest growth in the petrochemical division was recorded in the production of monomers (+12.2%) and synthetic rubber (+27.7%). A slight fall in the production of polymers was due to the extent of repair stoppages, which were part of the transition of the plants to a biennial overhaul cycle.

In 2011, SIBUR expects to achieve a 14.4% increase in production of petrochemicals over 2010 to 18.8 million tons. Total investments in the development and expansion of business in 2010 increased to 58.5 billion roubles (in 2009 it was 29 billion roubles). The investment programme for 2011 has been approved to a value of 73.4 billion roubles.

Last year active construction began on major investments in the Leningrad, Nizhny Novgorod and Tyumen regions. In 2011, SIBUR will reach a peak within the existing investment cycle, which will enable the years 2012-2013 to see a significant increase in the proportion of polymers in the overall production structure. Gazprombank plans to sell an additional 25% stake in SIBUR Holding in March to the head of Novatek Leonid Michelson, who purchased a first 25% stake at the end of 2010. Gazprombank acquired 75% stake in SIBUR Holding in late 2005.

Russian ethylene supply 2010

A total of 2.382 million tons of ethylene was produced by Russian companies in 2010, 5% more than in 2009. Stavrolen ran smoothly in 2010, thus it was able to increase the output of the monomer by 21% to 320,800 tons. SIBUR-Neftekhim increased production by 14% to 244,000 tons, and Nizhnekamskneftekhim by 6% to 594,700 tons. Kazanorgsintez reduced the volumes of the monomer by 11% to 367,800 tons. In the fourth quarter of last year, Kazanorgsintez was forced to stop production as part of the modernisation of the ethylene complex.



Having completed the expansion of its ethylene facilities, Kazanorgsintez is now considering construction of another ethylene complex using naphtha from the Taneko refinery at Nizhnekamsk. An alternative to this plan comes from the consideration of a gas chemical complex in Tatarstan, converting methanol to olefins. It is possible that TAIF, which owns both Kazanorgsintez and Nizhnekamskneftekhim, would prefer Kazanorgsintez to secure more ethylene through the methanol to olefins route and allow Nizhnekamskneftekhim to utilise the naphtha from the Taneko refinery for its additional ethylene production.

Nizhnekamskneftekhim needs to build more ethylene capacity, and has spoken recently about reinstating its original idea for a one million tpa cracker but without clarification over the feedstock issue. The economics of a new naphtha cracker may be hard to justify, whilst the complex does not have the infrastructure links that could bring in sufficient ethane to run a large plant.

Production from other ethylene plants in Russia in 2010 is expected to remain similar in 2011. Gazprom Salavat Neftekhim and Tomskneftekhim both undertook modernisation in 2009-2010, which will allow one of their respective furnaces to utilise ethane. Gazprom Salavat Neftekhim aims to expand ethylene capacity to 380,000 tpa in the next couple of years, and has started using ethane in its two chamber furnace. The new F-03AB two chamber furnace is capable of using around 100,000 tons of ethane per annum. Feedstocks are supplied to Salavat from Orenburg. For Tomskneftekhim, SIBUR plans to allocate up to 90,000 tons of ethane from the Yuzhny-Balyk plant to be delivered to Tomsk by 2012. In the second half of 2010, Tomskneftekhim installed new equipment on one of the ethylene columns, provided by Sulzer-Chemtech, to allow the usage of ethane.

In 2012-2013, Gazprom expects to start up its new ethylene-LDPE complex at Novy Urengoy which will add to the growing importance of ethane as a petrochemical feedstock in Russia. Gazprom and the Novy Urengoy Gas Processing Complex are considering further projects beyond the completion of the ethylene-LDPE plant in 2012-2013. The next project at Novy Urengoy envisages construction of the second plant to produce polyolefins, raising capacity to 1 million tpa. However, naphtha retains its significance as the

dominant feedstock, with most of the crackers dependent on refinery shipments. SIBUR-Neftekhim is expanding its capacity for ethylene production to 430,000 tpa over the next two years based particularly on naphtha. As stressed before, this will provide the necessary ethylene for the RusVinyl project which is aimed for completion by 2013.

Ethylene production in Russia is expected to record an increase in 2011 due largely to the expansion of ethylene capacity at Kazanorgsintez to 640,000 tpa from 430,000 tpa. It is not clear if Kazanorgsintez will be capable of operating its new capacity to its maximum level due to feedstock shortages. Gazprom is unable to supply more ethane from Orenburg, although Kazanorgsintez will benefit from the completed expansion of the Minnibayevo Gas Processing Plant, which should facilitate around an extra 45,000 tpa of ethane. However, from the combined ethane deliveries from Orenburg and Minnibayevo, Kazanorgsintez can only receive 440,000 tons of ethane in 2011. As an alternative, Kazanorgsintez is ready to use propane and butane as supplementary feedstocks, although these raw materials are more expensive.

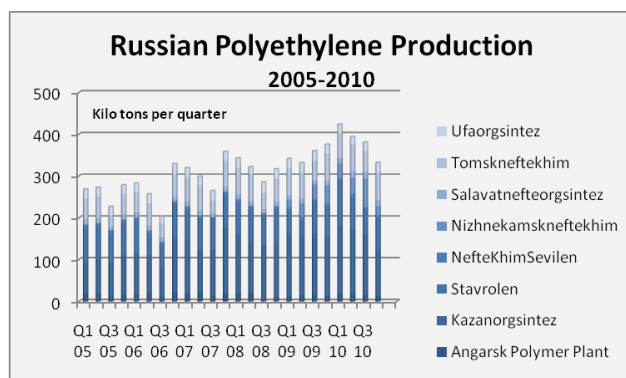
Russian Ethylene Production (unit-kilo tons)							
Producer		Location	Q4 09	Q1 10	Q2 10	Q3 10	Q4 10
Angarsk Polymer Plant		Angarsk	59.443	51.714	55.149	46.564	45.047
Kazanorgsintez		Kazan	91.513	111.401	99.182	100.798	56.419
Stavrolen		Budyennovsk	78.408	85.578	81.498	66.551	87.173
Nizhnekamskneftekhim		Nizhnekamsk	143.793	182.838	157.522	139.461	114.879
Neftekhimya		Novokuibyshevsk	0	13.87	14.422	8.084	16.441
Salavatnefteorgsintez		Salavat	61.487	58.499	57.318	40.357	73.746
SIBUR-Neftekhim		Kstovo	55.95	62.371	49.569	62.296	49.961
SIBUR-Khimprom		Perm	9.42	8.013	3.962	18.558	3.064
Tomskneftekhim		Tomsk	76.837	66.271	53.35	49.511	67.515
Ufaorgsintez		Ufa	27.5	23.362	23.386	23.943	26.213
Total			604.351	663.917	595.358	556.123	540.448

Russian propylene market sees first signs of product from Kstovo FCC

Merchant sales of propylene amounted to 28,200 tons in January, 7% more than December 2010. The increase has resulted from the start of LUKoil's catalytic cracking unit at Kstovo at the end of 2010 in December last year. The refinery exported 6,200 tons in January and when full capacity is reached in March this could rise to a maximum of 12,500 tpa. The growth in production in Russia will help to reduce propylene imports, which in recent months have been sourced from Kalush in Ukraine to Saratovorgsintez.

Russian styrene exports decline

Russian styrene exports totalled 158,700 tons in 2010, 20% down on 2009, due partly to lower production and higher consumption in polystyrene and styrene-butadiene rubber. Due to repairs at SIBUR-Khimprom and Gazprom Salavat Neftekhim which lasted about two months, production was down on the previous year. In July and August 2010, the volume of exports was down to 1,700 tons and 1,200 tons respectively. The main direction of styrene exports in 2010 included Finland: with 59% of total shipments, followed by Turkey 21%, Ukraine 10% and China 9%.



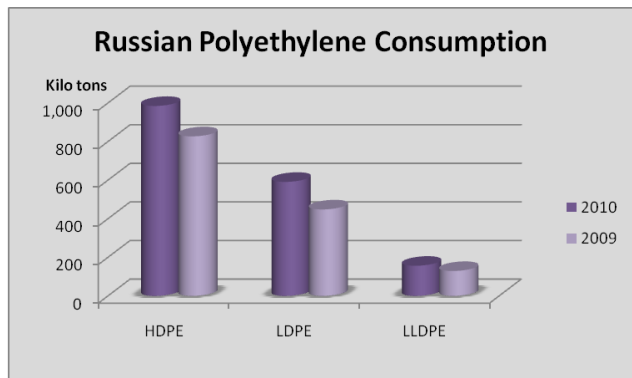
Bulk Polymers

Russian polyethylene supply 2010

Russian polyethylene production increased by 140,000 tons in 2010 over 2009 totalling 1.55 million tons. HDPE accounted for 55% of total production and LDPE 42%, with LLDPE accounting for 3%. In terms of quarterly production trends, production declined as 2010 progressed due largely to feedstock restrictions and outages. However, this pattern is expected to

be reversed in the first half of 2011.

Stavrolen at Budyennovsk increased HDPE production last year by 73,000 tons over 2009 to 321,000 tons, which represented more than half of the total increase for Russia. Another part of the increase was due to the start-up of the new HDPE plant at Salavat in the middle of the year. This new plant produced 31,500 tons of this product from the new plant, in addition to 39,497 tons of LDPE from the old unit. Nizhnekamskneftekhim produced predominantly HDPE in 2010 aside occasional short periods for LLDPE. The company resumed HDPE production in mid January after converting to LLDPE production in December. Currently Nizhnekamskneftekhim is producing HDPE grades of PE and PE 6948S 6148S.

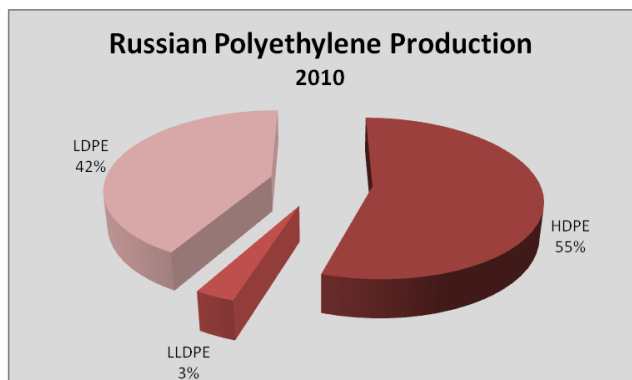


Polyethylene production in Russia is expected to rise in 2011 marginally, assuming no major outages. Gazprom Salavat Neftekhim should be capable of producing more HDPE from its 120,000 tpa plant. Kazanorgsintez possesses the capacity to increase production substantially, particularly now the ethylene expansion has been completed but constrictions on ethane supply may be a factor preventing full utilisation.

In terms of market consumption, HDPE and LLDPE have already exceeded pre-crisis levels whilst LDPE has been slower to reach previous peaks. Overall, around 340,000 tons of polyethylene was exported in 2010 and 448,000 tons imported. As a result, domestic consumption in apparent terms was recorded at 1.631 million tons.

Capacity utilisation for LDPE production in Russia attained 99% in 2010, consumption totalled 545,300 tons. Russia produced 659,000 tons of LDPE exporting 187,000 tons and importing 95,100 tons. Exports of LDPE rose sharply in 2009 rising from 120,000 tons to 250,000 tons, but in 2010 fell back to 187,000 tons. The main importers into Russia include the Belarusian producer Polymir (which accounted for about 58% of total exports). Polymir produces identical LDPE grades to other Russian producers and is sometimes preferred by consumers due to logistical advantages in the western parts of Russia.

Capacity utilisation for HDPE was 74.6% in 2010, with production totalling 810,100 tons and consumption 921,600 tons. Imports totalled 268,800 tons and exports totalled 151,700 tons. Under utilisation was attributed to gradual introduction of new capacity at Salavat and Nizhnekamsk, and the feedstock constraints at Kazanorgsintez. LLDPE consumption totalled 164,900 tons in 2010, while production-only 55,700 tons. Imports amounted to nearly 112,000 tons, whilst exports totalled 2,700 tons. Full production data for Russian polyethylene is available through the Statistical Database at www.cirec.net.



Russian HDPE market

The HDPE plant at Salavat was running at 80% in January and the first half of February, but is expected to reach full capacity by early March. The new plant can produce a total of thirty three grades of polyethylene, including nine grades for injection moulding and blow moulding, eight grades for the production of films by extrusion, four for the production of pipes by extrusion, two for the production of monofilaments, and one for cable insulation. By 2014, production capacity of HDPE will be increased from existing 120,000 tpa to 200,000 tpa following the expansion of 300,000 tpa to 380,000 tpa. After

increasing the capacity of the installation company will be able to produce PE100 grade for the manufacture of pipes. Pipe and film grade HDPE produced Gazprom Salavat Neftekhim is considered superior to the existing range of other Russian manufacturers.

Russian polypropylene supply 2010

Although no new capacity was added in 2010, Russian polypropylene increased by 49,000 tons to 643,000 tons. The increase was largely attributable reduced downtime, particularly at Budyennovsk where there

was an extended plant outage in 2009. Consumption increased 22% in 2010 to 783,000 tons, with per capita consumption rated at 5.5 kg. Imports increased by almost 1.5 times in 2010 close to 200,000 tons. At the same time export activity declined as domestic producers concentrated on the domestic market. More than half of imports into Russia came last year from Borealis (23%), and LyondellBasell (40%). The market is expected to see increased imports in the first half of the year, but this trend may start to be affected in the second half should the Omsk polypropylene start up as expected.

Tomskneftekhim Production (unit-kilo tons)			
Product	2010	2009	2008
Ethylene	236.6	250.5	234.2
Propylene	110.7	119.6	111.7
Polyethylene	239.1	241.8	224.5
Polypropylene	119.6	117	114.2

Tomskneftekhim-new PP grades

Tomskneftekhim started the production of new grades of polypropylene in 2010, including GP N180 and H250 GP designed for moulding and production of composite materials. These products are generated without the use of organic peroxides, which means that they are theoretically better protected from environmental influences. Polypropylene production at Tomsk is expected to increase this year due to the application of the new titanium magnesium catalyst.

Omsk polypropylene project to start Q3 2011

The Omsk polypropylene project is expected to start in the third quarter in 2011, according to Titan. The so-called Polyom project is well advanced with the installation of the unit for propane-propylene fractions already completed. The propane-propylene fractions unit has a capacity of 250,000 tpa, whilst the capacity of the polypropylene plant is designed at 180,000 tpa. The Polyom project will form the centre of a cluster in the Omsk region for plastics conversion and more than half of the 180,000 tpa of polypropylene production is intended to be processed at the newly created industrial park. The Titan Group was founded in 1989, and produces acetone, latex, rubber, propylene oxide, phenol, MTBE, etc. The group occupies around 26% of the Russian synthetic rubber market and 25% of the phenol market.

Russian polystyrene consumption 2010

The consumption of polystyrene in Russia in 2010 is estimated to have totalled 405,157 tons, up 24% over 2009. After two years of recession the market recovered last year with a marked revival in the construction and automotive industries. Growth in consumption of polystyrene in the Russian car industry by the development and production of electrical appliances, as well as an increase in the processing sector insulating materials.

The share of imports in total consumption of polystyrene in 2010 comprised around 40%, or 163.801 tons. Imports accounted for 47% of expandable polystyrene consumption and 22% of ABS plastics. About 40% of the total consumption of polystyrene comprises EPS and XPS.

South Korean Exports to Russia (unit-kilo tons)				
Product	2010	2009	2008	2007
PET	112.859	108.091	127.878	87.899
PVC	35.809	34.739	44.213	46.614
Polystyrene Exp	35.261	24.45	39.218	38.513
Polystyrene GP	8.035	4.346	4.765	8.055
HDPE	51.703	39.994	101.155	84.749
LDPE	12.255	6.974	15.452	10.781
ABS	25.202	15.796	18.067	15.804
Total	168.265	126.299	222.87	204.516

Consumption of ABS-plastics in Russia in 2010 amounted to 51,000 tons, a 70% increase compared to 2009. The previous historical high in Russian consumption of ABS-plastics was achieved in 2007 at 47,000 tons. Only around 25% of consumption stems from domestic production, with more than 50% of imports being sourced through Samsung and LG Chem. In 2010, ABS supplied by these producers increased 2-fold, reaching 20,000 tons. The main volumes of supplies were delivered to the manufacturing sector including electrical household appliances and automotive components.

SIBUR-Khimprom starts EPS sales

SIBUR-Khimprom started supplying customers first batches of expandable polystyrene Alphapor in late January, and initial feedback proved positive according to the company. Russian consumers initially need to adapt moulding machines to Alphapor, which is a European product, after using South Korean imports for many years. SIBUR-Khimprom is the largest petrochemical complex in the Western Urals. It was founded in 2000 on the basis of three major industries; gas processing, production of styrene and butyl alcohols.

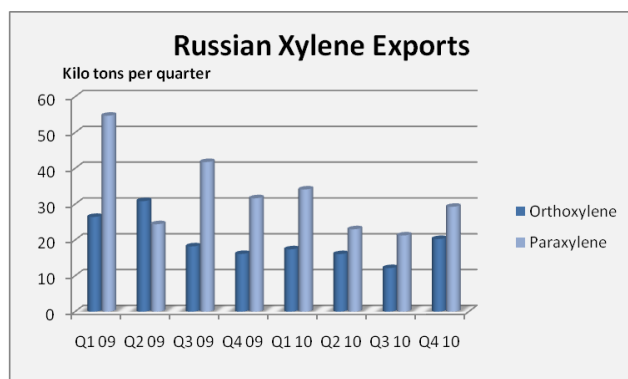
SIBUR-Khimprom has started to build the second stage of the production of expandable polystyrene (EPS) based on Sunpor technology. Construction and installation is scheduled for completion by the end of 2011, and pre-commissioning is expected to begin in early 2012.

The capacity of the new plant under construction is 50,000 tpa, the same as the first line. In the first stage production at SIBUR-Khimprom will produce EPS of four types including insulation boards and packaging materials; insulation; food packaging) and solid construction boards with a high thermal conductivity. After starting the second 50,000 tpa line, the company will aim to produce EPS colour and fillers.

Aromatics & derivatives

Russian xylene exports 2010

Orthoxylene exports from Russia fell 28% in 2010 to 66,000 tons. This was partly due to increased demand in the domestic market and reduced production at the Omsk refinery due to a stop for repairs. Last year

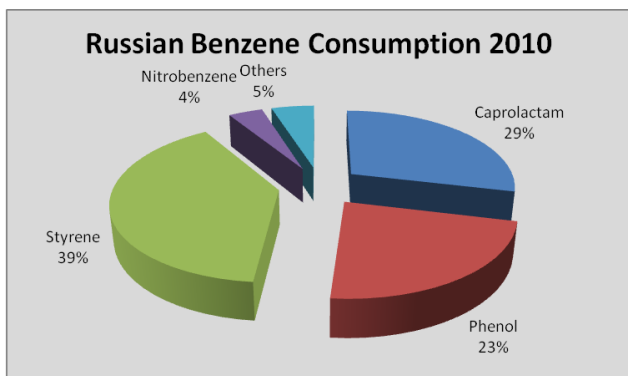


Ufaneftekhimi exported only 2,000 tons which was 78% less than in 2009, whilst the Omsk refinery reduced exports by 35% by 17,900 tons to 33,900 tons. Kirishinefteorgsintez reduced exports by 2% to 29,700 tons.

In terms of domestic demand, the combination of increased phthalic anhydride and solvent production in 2010 helped shipments of orthoxylene rise by 23% to 133,800 tons. Gazprom Neft shipped 58,300 tons of orthoxylene to domestic customers in 2010, accounting for 44% of the total market. Ufaneftekhimi accounted for 33% of the domestic

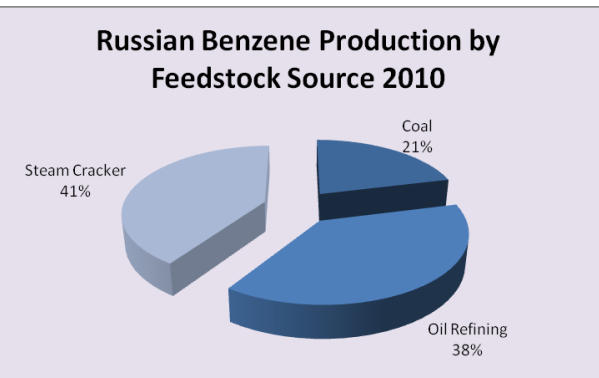
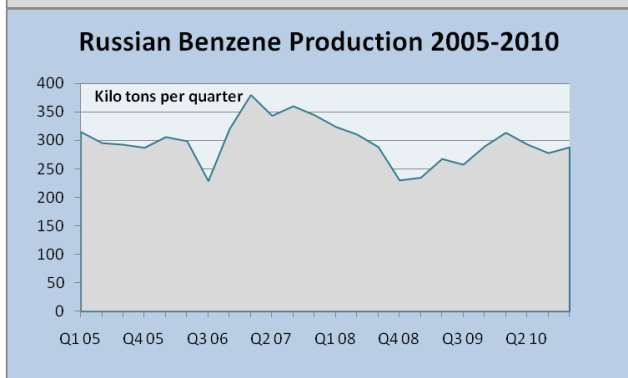
market with 44,200 tons of sales whilst Kirishinefteorgsintez shipped 31,000 tons.

Paraxylene exports from Russia totalled 107,704 tons in 2010, which was 30% down on 2009 (152,581 tons). Polief consumed around 160,000 tons of paraxylene in 2010, 9% more than in 2009. Ufaneftekhimi supplied 77% of paraxylene supplies to Polief in 2010, with the Omsk refinery providing the remainder. PTA production by Polief totalled 243,000 tons in 2010, 3% more than in 2009.



Russian benzene demand increases in 2010

Russian benzene production totalled 1.171 million tons in 2010 against 1.048 million tons in 2009. Despite achieving a marginal increase last year, the overall trend in recent years has been slightly downward. Steam crackers provide the largest source of benzene in Russia, accounting for 41% of production in 2010. Little expansion has taken place in recent years either from steam cracker benzene, or from refineries and coal based sources. Demand was much improved for benzene in 2010, particularly from caprolactam and phenol. Styrene production remained the same as in



2009. Russian producers of benzene exported 33,400 tons, all of which went to Belarus, with Kinef at Kirishi and Slavneft-YANOS at Yaroslavl accounting for around 90% of shipments. Kinef is located in an advantageous geographical position to ship products abroad, whilst being less well placed to deliver it to the domestic market. Taking into account the transportation costs, the cost of benzene from Kinef is 3-4,000

roubles per ton higher than from other producers located in the Volga and Ural regions. Only Kuibyshevazot and Kazanorgsintez can afford to buy from Kinef as they are producing products with a high added value (such as caprolactam and bisphenol-A). In Belarus, the only company that buys benzene is Azot at Grodno for caprolactam. Full production data for benzene is available through the Statistical Database at www.cirec.net.



Russian caprolactam exports 2010

Russian exports of caprolactam fell 17% in 2010 against 2009, down to 168,300 tons. The largest Russian producer of caprolactam Kuibyshevazot reduced exports by 27% to 51,300 tons, due partly to the introduction of the fourth polyamide line. At the same time, caprolactam production was affected in 2010 by benzene shortages caused by shutdowns at the Budyennovsk and Omsk plants.

Azot at Kemerovo exported 73,400 tons of caprolactam in 2010, 20% less than in 2009. The decline was attributed partly to the shutdown of the plant in August and September. Russia's only producer which managed to increase caprolactam exports to foreign markets in 2010 was Shchekinoazot, which increased exports by 4% over 2009 to 43,600 tons.

Russian Phenol Production (unit-kilo tons)			
Producer	2010	2009	2008
Ufaorgsintez	67.0	60.1	63.1
Kazanorgsintez	60.7	52.0	54.1
LUKoil-Neftekhim	0.0	0.0	24.6
Samaraorgsintez	56.5	24.3	38.8
Titan	53.7	40.9	36.9
Total	237.9	177.3	217.5

Russian phenol production 2010

The deficit in the phenol market has allowed Russian producers to dictate the market to some extent in terms of pricing and increasing capacity utilisation to levels of around 85-95%. Samaraorgsintez is in the process of expanding its plant capacity from 60,000 tpa to 90,000 tpa, which may help alleviate some pressure on the supply side. However, the main development in the market could result from a new plant with a capacity of 150,000 tpa which is being considered by Saratovorgsintez.

In response to strong demand, Russian phenol production rose 30% in 2010 against 2009. The main increases were seen in captive consumption by Ufaorgsintez and Kazanorgsintez which together increased usage by 22% in 2010 against 2009. Despite tightness in the market imports are minimal and normally are taken by producers of phenol-formaldehyde resins.

SIBUR, Gazprom Neft-PTA project

SIBUR and Gazprom Neft signed a memorandum in December 2010 to assess the prospects for development of production of PTA facilities based at the Omsk oil refinery. The aim is to consider paraxylene conversion into PTA, rather than ship it to Polief or send it for export. PTA demand in Russia is rising due the introduction of new PET capacity, and the question remains whether to sell PTA to Polief and SIBUR-PETF as a raw material or to integrate it with the production of PET at Omsk. If the memorandum translates into a feasible project, it is expected to be post-2015 before new facilities could be constructed.

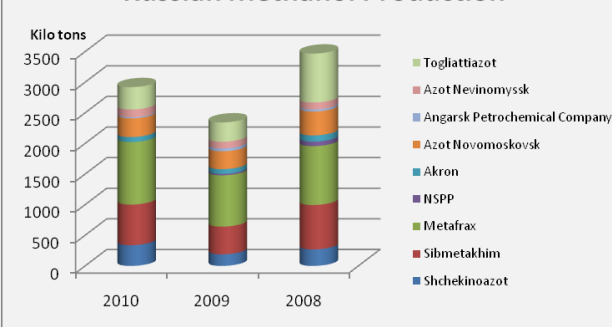
Alko-Naphtha starts PET production

Alko-Naphtha started production of the new PET plant at Kaliningrad in February. The capacity of the new plant has been designed to produce 220,000 tpa, with raw material deliveries starting to arrive at the site at the end of last year. PTA has been supplied from BP in Belgium in the first phase and PKN Orlen from its new plant at Wloclawek. SABIC is expected to supply the initial deliveries of MEG, to be followed by contracts with other suppliers.

Alko-Naphtha is part of the Mari refinery group of companies in Russia and is a resident of special economic zone in Kaliningrad region. The plant uses the latest technology developed by Uhde Inventa-Fischer GmbH of Germany. Production of the Kaliningrad plant will be supplied to the Russian market (30%) and the markets of the EU and CIS countries (70%). Although not located in mainland Russia, Alko-Naphtha is set to become the largest Russian producer of PET. IT will surpass Polief, which has a capacity of 120,000 tpa, Senezh with 100,000 tpa and SIBUR-PETF with 70,000 tpa.

Methanol & related chemicals

Russian Methanol Production



Russian methanol production 2010

Methanol production increased by around 20% in 2010 over 2009 to a total of 2.935 million tons. Methanol exports from Russia increased from 814,400 tons in 2009 to 1.193 million tons in 2010. Exports surpassed domestic merchant sales in 2010, although captive processing meant that total domestic commotion was higher. The share of products shipped abroad accounted for 41% of Russia's total production, while the domestic merchant market accounted for about 37%. Full production data for methanol is available through the Statistical Database at www.cirec.net.

Russian Methanol Sales
(unit-kilo tons)

Year	Domestic	Exports	Captive
2009	937.4	814.4	592.2
2010	1083.9	1193.1	658.7

The main consumers of merchant methanol in Russia include the gas companies, as well as producers of MTBE and synthetic rubber. These sectors account for around three quarters of total merchant purchases. The main suppliers of commercial methanol for the domestic market are its largest of its producers: Metafrax, Sibmetahim and TOAZ.

Metafrax 2010

Metafrax produced 1,022,000 million tons of methanol in 2010, a 22% increase compared to 2009.

Metafrax Production Volumes (unit-kilo tons)

Product	2010	2009
Methanol	1022.0	838.0
Formaldehyde 55%	133.0	119.4
Formaldehyde 37%	116.0	102.5
UFC	175.0	154.3
Pentaerythritol	18.9	13.9
Hexamine	14.6	12.5

Formaldehyde production rose 14% to 249,200 tons and urea-formaldehyde concentrate rose to 175,000 tons up 13%.

In other product areas, Metafrax produced 18,900 tons of pentaerythritol (an increase of 27.7%), hexamine 14,800 tons (an increase of 17.6%), sodium formate 9.1 tons (an increase of 17.6%), polyamide block 661 tons (an increase of 1.7 times), and polyamide pellets 280 tons (an increase of 2.9 times).

Metafrax benefited in January from the shutdown of the plant in Egypt, helping to increase net profits threefold. The recently

opened methanol plant in Egypt was closed due to unrest, which led to some increase in prices for these products in the global market. Metafrax increased net profits 1.8 fold in 2010 up to 900 million roubles against 507.5 million roubles in 2009. Revenues increased 46% in 2010 from 5.479 billion roubles to 7.990 billion roubles. This year the company anticipates that net profit could fall by 30% to around 620 million roubles even though revenues should stay the same at around 8 billion roubles. This year Metafrax plans a 40 day shutdown which should reduce methanol production to around 925,000 tons, in addition to a reduction in sales volumes of formaldehyde and urea-formaldehyde concentrate. The company plans to invest 700 million roubles this year in maintenance and other tasks against 870 million roubles in 2010. Part of the investment this year will be focused on the installation of emergency capacity storage for methanol production.

Yakutsk methanol project

The Yakutia methanol project in the Sakha Republic in the Russian Far East has come under further review, with Rosnano pledging \$150 million towards the project in support of the East-Siberian Gas and Chemical Company (VSGHK). The original project concept comprised 450,000 tpa of methanol in the first phase, to be followed by two same size plants in subsequent years. This will lead to a total capacity of 1.35 million tpa and 610,000 tpa of synthetic liquid fuels. The main challenge to the project is securing the finance and reaching agreement with a contractor. The start-up date of the first phase of the chemical complex is no earlier than 2013-2014. VSGHK has for several years unsuccessfully been trying to find investors for the project to build GCC in the Yakutia region. SIBUR has noted that due to the complete lack of infrastructure in the region it would make the equipment deliveries very difficult, even before considering product sales.

Despite the negative aspects regarding the project VSGHK does not seem disheartened and at the end of 2010 even announced that the US Ex-Im Bank is ready to provide financing for the project. Under the proposed plan, construction of the complex is to begin in 2012 and should be completed in full by 2016. A large part of the

production is intended for sale to markets in Japan and Asia, but specific infrastructure investments need to be completed before such trade is possible.

SIBUR-Mineral Fertilisers 2010

SIBUR-Mineral Fertilisers produced 1.6 million tons of ammonia in 2010, over 2.5 million tons of fertilisers and over 97,000 tons of caprolactam. In annual terms, growth was recorded for these products at 7%, 4% and 6% respectively. Labour productivity in the whole company grew by 15%. The group completed projects last year on the modernisation of ammonia, nitric acid and caprolactam units. The most extensive reconstruction project was undertaken on ammonia production at Kemerovo, where investment resulted in reduction of natural gas consumption by 6 million cubic metres per annum, in addition to reduced usage of thermal energy. Total investment in the modernisation of production facilities during the year amounted to about 730 million roubles.

According to SIBUR-Mineral Fertilisers, scheduled investments for 2011 include the increase of capacity for ammonia and ammonium nitrate at Kemerovo by 16,000 tpa and 45,000 tpa respectively. The Perm division is undertaking a project to expand the capacity of urea up to 2,400 tons per day. The group is also considering options for new facilities, including a division for industrial explosives based on ammonium nitrate. In 2011, SIBUR-Mineral Fertilisers intends to increase ammonia production by 2% to 1.6 million tons in 2011, mineral fertilisers by 5% to 2.7 million tons and caprolactam by 23% to 120,000 tons.

Formaldehyde Market in Russia (unit-kilo tons)

	2010	2009	2008	2007
Production	527.27	442.96	656.9	763.8
Imports	0.03	0.03	0	0
Exports	14.0	15.3	16.2	30
Marker Balance	513.34	427.65	640.7	733.8

Russian formaldehyde market 2010

Formaldehyde demand improved in 2010 in Russia mainly from applications in phenol-formaldehyde resins and to a lesser extent urea-formaldehyde resins. High demand for formaldehyde increased production levels by 20% over 2009 to 527,000 tons. However, this was still lower than in 2008 where production totalled 656,900 tons. The major domestic producers remain Akron and Metafrax

which accounted for 72% of Russian production, and around 75% of consumption is captive.

The main sector of formaldehyde consumption in Russia is the production of formaldehyde resins, accounting for around 95% of the market. The remaining 5% is used in the agricultural, medical and leather industries. Captive consumption of formaldehyde totalled 390,000 tons in 2010; rising 23% over 2009, with phenol-formaldehyde resins the main derivative. Merchant sales totalled 121,000 tons in 2010, 8% up on 2009, with most of the purchases made by non-integrated producers of phenol-formaldehyde resins. The structure of Russian exports of formaldehyde in 2010 changed; insofar Novochoerkassk Synthetic Products Plant ceased production and exports to Ukraine. Latvia became the main destination for Russian formaldehyde.

Synthetic Rubber

Togliattikaucuk 2010

Togliattikaucuk produced 164,945 tons of synthetic rubber in 2010, which was 18% up on 2009. Isoprene rubber increased 20% to 70,000 tons and butyl rubber by 18% to 48,000 tons. The company produced 81,000 tons of isoprene monomer in 2010 which was 16% up on 2009, whilst MTBE rose 15% to 58,000 tons. The costs of technical upgrading for Togliattikaucuk increased more than two fold in 2010, amounting to around one billion roubles. One of the major investment projects last year involved the start of the third line of separation of isoprene rubber (capacity of 4 tons per hour). As a result, capacity has increased to 82,000 tpa at a cost of around 116 million roubles. The company has also sought to increase energy efficiency by investing 186 million roubles in the modernisation of heat-generating capacity. The completion of this project is planned for 2011.

Russian tyre market 2010

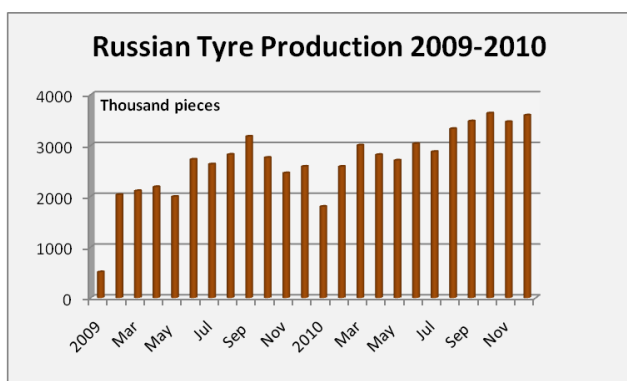
The Russian tyre market started to approach pre-crisis indicators in 2010 after a recovery was seen in the car industry and general economy. This trend is expected to continue in 2011, although the structure of consumption and production of tyres is expected to undergo changes. Consumption fell 12% in 2008, followed by a 26% fall in 2009, which affected both imports and domestic supply. In 2010, the production of tyres increased by 30% to 37 million units.

Demand for car tyres rose by 20-25% in 2010, while trucks rose by 40%. Demand was driven by higher consumption in the auto industry, which was actively supported the state programme for recycling of old cars combined with car loans, etc. Exports accounted for 27% of production, whilst imports accounted for around 45% of the market. The main sources of tyre imports included China with 35% of total shipments, Japan 13% and South Korea 11%.

The main challenge for domestic producers is to compete with foreign suppliers, which is becoming more difficult in terms of price. Much depends on the raw suppliers for synthetic rubber and carbon black. The cost of raw materials for tyre production increased by 40-50% in 2010 affecting profitability. In 2010, carbon black purchases increased by 53% (about 340,000 tons), and synthetic rubber by 50% (up to 565,000 tons).

Russian tyre news

The Altay Tyre Plant increased tyre production in 2010 by 10% compared with 2009, with truck sector rising by 17% followed by the agricultural sector with 16%. In 2010 the company began upgrading of rubber mixing, in addition to a long-term project to improve truck radial tyres. Due to the modernisation of equipment in 2011, the company plans to develop the production of 14 new types of tyres, including four for the agricultural sector and ten for cars. The Altay Tyre Plant produces tyres for both domestic and imported cars, and agricultural machinery.



The expected rise in production by foreign companies in Russia will reduce the share of Russian production in the domestic market. Whilst it is difficult to compete against European standards, the rise in quality at Russian plants has allowed producers to compete more successfully against lower priced tyres from Chinese and Korean companies.

Nokian Tyres increased consolidated sales in Russia and CIS countries in 2010 by almost 35% to €231.8 million, including Russia by 78%, to €207.7 million. In 2011, Nokian expects to significantly increase

investment including the opening of two new production lines at Vsevolozhsk. Nokian's Russian plant was launched initially in September 2005. The plant consists of eight production lines, the capacity each of which is one million tyres per annum.

Regarding other foreign producers, Michelin's Russian plant intends to boost capacity by 2012 to produce passenger tyres up to 4 million units per annum. In March 2010, the Japanese producer Yokohama began the construction of a new plant at Lipetsk, which is expected to produce around 1.5 million tyres per annum by 2013. Pirelli has entered a JV partnership with Rostekhnology and SIBUR for the production of tyres at Togliatti.

Organic chemicals

Russian solvents market 2010

Domestic sales of acetone in Russia totalled 64,200 tons in 2010, 18% more than in 2009. Increased consumption was helped by the production of MMA by Dzerzhinsk Orgsteklo, which purchased 15,300 tons. Another large consumer of acetone is Sintez-Acetone which purchased 19,400 tons in 2010, similar to volumes in 2009. Samaraorgsintez increased domestic sales by 3,900 tons to 14,200 tons in 2010; Kazanorgsintez increased sales by 12% to 20,700 tons and Ufaorgsintez by 1% to only 18 tons. Omsk Kaucuk reduced domestic sales by 21% to 10,500 tons.

Russian Butanol Production (unit-kilo tons)		
Producer	2010	2009
Angarsk Petrochemical	38.0	45.3
Evrokhim	19.5	17.2
Gazprom Salavat Neftekhim	123.4	121.6
SIBUR-Khimprom	72.8	73.6
Totals	253.8	257.7

Russia produced 253,800 tons of butanols in 2010, slightly less than in 2009. Production levels were sustained by strong export activity, with the share of exports divided between normal butanol 65% and isobutanol 35%. Gazprom Salavat Neftekhim accounted for 48% of butanol production in Russia, followed by SIBUR-Khimprom with 27%.

Russia produced 37,500 tons of butyl acetate in 2010, 7% less than in 2009. The reduction in output was due to lack of butanols which focused more on exports. The

largest amount of butyl acetate produced in Russia takes place at Nevinomyssk where Azot accounts for 50% of domestic production. Ethyl acetate exports totalled 2,800 tons in 2010, 19% less than in 2009.

Acetic acid sales rose 42% in January against December to reach 5,200 tons, which was due to increased demand from acetate solvent producers. Volumes of supplies to solvent consumers rose from 1,200 tons in December to 3,100 tons in January. Stavrolen reduced acetic acid purchases for VAM production from 1,100 tons in December to 67 tons in January.

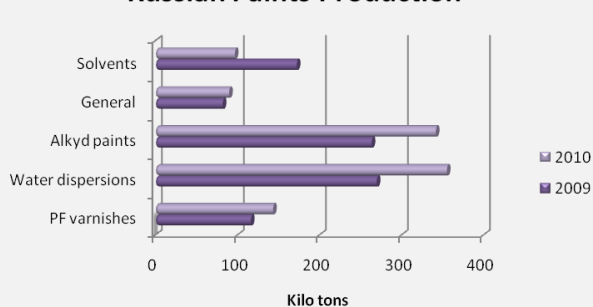
Russian plasticizer alcohols 2010

Russia produced 96,800 tons of phthalic anhydride in 2010, 1% more than in 2009. The share of Kamteks-Khimprom in gross output last year comprised 86% and Salavatnefteorgsintez 14%. Production at Salavat is consumed in full for captive applications.

Russia increased DOP production by 9% in 2010 to 78,700 tons, although production could have been higher had it not been for the outage at the Roshalsky plasticizer plant. Compared with 2009, the production of DOP at the Roshalsky plant decreased by 44% and amounted to 11,000 tons. Also in April and May 2010 repairs at Gazprom Salavat Neftekhim resulted in a halt to production, although this did not prevent an overall increase by 24% to 32,300 tons. Other producers have also increased the production of plasticizers. In 2010, Kamteks-Khimprom and Uralkhimplast produced 22,400 tons and 14,100 tons

respectively, an increase of 30% and 35%. Russian imports of DOP totalled 14,700 tons last year, most of which was of Czech, Turkish, Polish and Ukrainian origin.

Russian Paints Production



Russian paints market 2010

Nearly all Russian paint producers increased production in 2010 against 2009, with total volumes increasing 14%. The volumes produced in 2010 were still lower than in 2008 although this level is expected to be surpassed in 2011. The largest increase in 2010 stemmed from water dispersions which increased 32% against 2009, whilst solvents saw a 48% decline due

largely to raw material shortages. Alkyd paints production rose 30% in 2010 to 342,000 tons, whilst semi-finished varnishes rose 23% to 143,500 tons.

Plastics

Freudenberg Politex-third spunbond line

Freudenberg Politex plans to install a third spunbond line at its Russian facility, located at its Zavolzhie plant in the Nizhniy Novgorod region. The new line will be concentrated on the production of polyester nonwovens. The overall investment is above €20 million and is part of long term project started in late 2004. The start up of the first nonwovens line took place in 2006. The new spunbond line, planned to be on stream in the first half of 2012, could enable Freudenberg Politex to become the largest Russian producer of nonwovens for both spunbond and staple technology, either standard or reinforced. This investment comprises 7,000 tpa of polyester spunbond nonwovens, to be sold as backings for bituminous roofing membranes and for other speciality applications in the construction industry. The third spunbonded line is to be based on state of the art proprietary technology. Freudenberg Politex launched its second geotextile nonwovens line in July 2010 with a capacity of 3,000 tpa.

Polyplastik-expansion plans

Russian plastics converter Polyplastik has approved its development strategy up till 2014 based on its main production facilities at the Saratov Pipe Plant. In 2011, the capacity of the Saratov Pipe Plant will be expanded from 30,000 tpa to 60,000 tpa; with the product range is based on main polymers including polypropylene, polyethylene and PVC. Polyplastik has decided to sell its stake in PP Volgaplast (a jv with Kuibyshevazot) due to rising costs of raw materials and the difficulties in making profits.

Biakspen BOPP production 2010

Biakspen increased BOPP production in 2010 by 7%, or from 65,986 tons to 70,559 tons. Capacity utilisation increased from 73% in 2009 to 76.8% in 2010. The group sold 55,500 tons on the domestic market, 27% up on 2009 which reduced export activity by 32%. In December 2009, SIBUR acquired 50% of

the share capital of OOO Biaksplen creating a direct chain between polypropylene production and processing.

Russian Chemical Exports to China (unit-kilo tons)		
Product	Jan-Dec 2010	Jan-Dec 2009
HDPE	39.9	49.3
LDPE	114.3	191.7
n-butanol	113.6	94.0
iso-butanols	80.9	68.8
PVC	0.1	2.3
Phthalic Anhydride	18.8	38.0
2-EH	9.2	17.2
PP	14.9	44.5
Acrylonitrile	10.7	17.0
DOP	3.5	2.5
Caprolactam	123.4	115.5
Polycarbonate	21.2	0.0
Styrene	14.2	10.0
Orthoxylene	4.9	40.1
Paraxylene	5.2	19.9
Trichloroethylene	0.0	6.5
Perchloroethylene	0.0	0.2
MEG	0.0	10.0
Phenol	0.0	0.6
Acetone	7.7	9.5
Epichlorohydrin	10.5	11.2
Bisphenol A	40.8	27.3
Polyamide	44.3	54.7
Polystyrene	0.1	3.2

SIBUR has been expanding its interests in downstream processing in the past two years, with the latest acquisition of Novatek-Polymer from Novatek in September 2010. In addition to new kinds of films, the company brings 25,500 tpa of capacity for BOPP film production. In 2010, Novatek-Polymer produced 21,500 tons of BOPP film. SIBUR now owns four Russian plants producing BOPP films, including Biaksplen (Nizhny Novgorod region), Biaksplen K (Kursk region), RosEvroplast (Moscow), and Biaksplen-NK (Novokuibyshevsk). The production capacity of these plants is 35,500 tpa, 34,500 tpa, 17,200 tpa and 25,500 tpa respectively. In addition to SIBUR's BOPP plants, the other Russian producer is Evrometfilms which produced 21,000 tons in 2010 from its 25,000 tpa capacity.

SIBUR plans to launch a new BOPP plant at Tomsneftekhim in 2012 with a capacity of 38,000 tpa. By this time, Biaksplen-NK at Novokuibyshevsk will have installed new equipment for the production of BOPP with a capacity of 35,000 tpa. After these projects have been completed, SIBUR's capacity for BOPP will total 186,000 tpa.

Biaksplen-NK has recently opened three new production lines at Novokuibyshevsk, including stretch film and plastic blown film, which increases output at Novokuibyshevsk from 26,000 tpa to 42,000 tpa. Until now Biaksplen NK produced only BOPP, but new types of films offer a different set of consumer characteristics. This includes five layer

polyethylene films which are designed for packaging of products on pallets without the use of special equipment, etc.

Derivatives & other products

Russian Caustic Soda Production (unit-kilo tons)		
Producer	2010	2009
SIBUR-Neftekhim	68.9	73.4
Khimprom, Novocheboksarsk	96.2	90.2
Kaustik, Volgograd	192.6	207.2
Khimprom, Volgograd	75.5	79.1
Kaustik, Sterlitamak	107.4	179.0
Usolyekhimprom	34.9	50.7
Sayanskkhimplast	146.7	153.6
Azot, Novomoskovsk	41.6	0.0
Bratsk TSKK	89.5	68.5
KCCC, Kirov	84.8	85.8
Others	118.6	124.2
Totals	1056.7	1111.7

FAS investigates chlorine price collusion

The Federal Antimonopoly Service (FAS) has identified anti-competitive agreements between producers and consumers of caustic soda in 2010. The FAS has found Kaustik at Volgograd together with a number of traders guilty of price-fixing and price collusion. The cost of chlorine in the past year has increased by threefold, which is seen as largely groundless based on economic criteria. Major producers of chlorine in Russia include Sayanskkhimplast, Kaustik at Sterlitamak, and Kaustik at Volgograd. The principal amounts of chlorine are produced by companies in the production of VCM. The last case of price collusion in the chlorine industry took place in 2004, which resulted in intervention by the FAS.

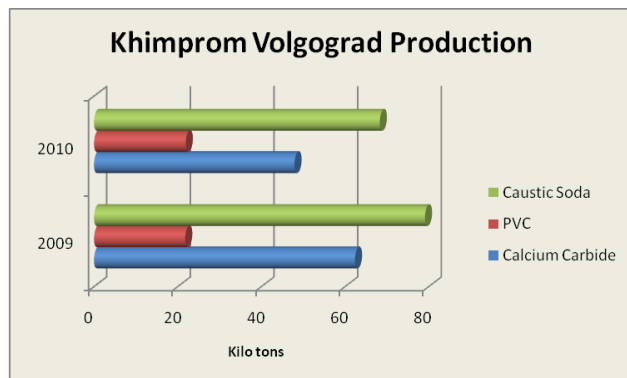
Nikokhim-structural changes

The Russian bank Revival has granted Nikokhim a credit of 1.5 billion roubles at the end of 2010, which is intended to be used for its subsidiaries at Volgograd. Nikokhim plans for co-financing with Rosnano at the Kaustik site at Volgograd to begin production of nanostructured magnesium hydroxide (used for registration of medicines). The total project cost is estimated at 2.8 billion roubles. Kaustik reduced its stake in NikoMag at Volgograd, a producer of technical magnesium chloride. Rosnano has already gained the approval of the Federal Antimonopoly Service to acquire 25.0001% of the voting shares in NikoMag.

Nikokhim ranks first in Russia for production of solid caustic soda, chlorinated paraffin, synthetic hydrochloric acid and merchant chlorine. It ranks second place for the production of liquid caustic soda and sodium hypochlorite, and third place for the production of PVC. Currently, the group includes six chemical plants. The main production assets are located at the industrial site in Volgograd on the basis of the Kaustik and Plastkard.

Khimprom Volgograd

Khimprom at Volgograd invested in 2010 in improving efficiency, with the long term aim to develop competitiveness and to expand the range and quality of products offered. Last year, the company conducted the overhaul of the equipment for chlorine and caustic soda production and the raw material system.



Modernisation has also been undertaken at the calcium carbide plant, which is the main Russian plant following the stoppage of the Usolyekhimprom plant in 2009. Russia currently needs to import calcium carbide to supplement domestic production at Khimprom.

Khimprom has decided to expand and modernise an existing PVC plant which produces emulsion grade. In 2010, PVC sales brought in revenues of 897.5 million roubles, which was 18% of the company's total turnover. The company bought spare parts and equipment for production of acetylene, VCM and PVC

from Usolyekhimprom in 2010. Usolyekhimprom was until recently one of the few companies in Russia that produced PVC emulsion grade, but with its holding group deciding to close production this has given the opportunity to Khimprom to buy industrial machinery and equipment which is now idle. Khimprom is the sole domestic producer of PVC emulsion grade.

Rosnano-Dow

Rosnano and Dow Chemical have signed a memorandum of understanding to evaluate potential cooperation in areas such as energy efficiency, infrastructure, light-weight materials, and life sciences. Through this agreement, both companies will evaluate and define potential joint venture projects to pursue collaborative investments in Russia.

The parties have also agreed to exchange technical and commercial information on up-and-coming activities. The partners have already set priorities for joint potential projects. The emphasis will be on large-scale projects based on nanotechnologies with the aim of attracting cooperation from major corporations and regions in Russia and developing intellectual property.

Ukrainian Chemical Production (unit-kilo tons)		
Product	Jan-11	Jan-10
Acetic Acid	14.0	6.3
Ammonia	458.1	293.8
Benzene (-95%)	15.4	16.6
Benzene (+95%)	14.1	8.3
Caustic Soda	7.7	3.7
Ethylene	16.6	0.0
Formaldehyde	2.4	3.7
Methanol	14.3	0.0
Polypropylene	9.0	7.8
Polystyrene	1.5	0.6
Polyvinyl Acetate	0.2	0.2
Propylene (merchant)	7.6	0.0
Soda Ash	61.5	51.6
Titanium Dioxide	12.8	8.7
Toluene	0.6	0.4

Ukraine

LUKoil-Ivano-Frankovsk regional cooperation

Karpatneftekhim completed the construction of its new PVC plant at the end of January and the plant is close to starting production. The company expects to produce around 12,000 tons of PVC before the end of the first quarter. Construction of the 300,000 tpa plant was started in 2008 with a total project cost of \$210 million. The technology was supplied by Vinnolit and the plant was built by the Ukrainian Institute for the Design of refineries and Petrochemical Enterprises Ukrneftehimproekt. The direct project design and equipment was supplied by Uhde.

Karpatneftekhim was established in October 2004 following the restructuring of the former company Oriana and the involvement of LUKoil. LUKoil owns 76% of Karpatneftekhim and the remainder is owned by LUKOR, which is a jv between LUKoil and the Ukrainian government. The Ukrainian

government allowed Karpatneftekhim to import 395,000 tons of distillate in 2011 at a discounted scheme for their

further use as feedstock in the production of ethylene. According to the government decision of 16 February, Karpatneftekhim may import 225,000 tons of light distillates and 170,000 tons of heavy distillates in 2011.

Ukrainian Polymer Imports from China/South Korea (unit-kilo tons)

		China				
Product	2005	2006	2007	2008	2009	2010
PET	111.7	104.8	163.6	96.6	58.3	87.8
PVC	0.1	8.6	1.1	1.3	2.3	0.3
Polystyrene, Exp	0.1	2.9	8.6	1.5	7.2	1.2
		South Korea				
Product	2005	2006	2007	2008	2009	2010
PET	56.9	65.7	59.4	28.5	34.5	27.4
UPRs	2.5	7.6	4.2	2.2	2.4	0.5
HDPE	8.1	1.2	2.3	2.0	2.4	2.4
LDPE	3.3	5.5	15.1	14.5	16.2	1.0

Ukrainian polystyrene market

Ukraine imported 2,640 tons of polystyrene in January 2011, 19% lower than in December of 2010 but 2.5 times higher than the corresponding period last year. For the whole of 2010 Ukraine imported 44,410 tons which was 7% more than in 2009. Most of the imports originated from Poland and China. Ukraine imported 246 tons of polycarbonate in January 2011, 11% up on December 2010. Total imports of polycarbonate comprised 2,890 tons in 2010, 29% up on 2009. The main sources from polycarbonate stemmed from Germany (36%), Netherlands (20%) and Spain (10%).

Ukrainian PET market 2011

PET consumption in Ukraine increased 24% in 2010 to 168,000 tons, against 2009 although was still lower than volumes achieved in 2008. Due to the absence of domestic production, most of the PET is imported from China (45%) and Korea (16%). Indian product started to become more prominent in 2011 accounting for another 16%, followed by Lithuania 10% and UAE 8%.

Ukrainian acetic acid market 2010

Exports of acetic acid from Ukraine increased in 2010 by 13,100 tons against 2009 to 76,200 tons, with the rise being due mainly to a contracting domestic market. The main volumes of acetic acid in Ukraine are consumed by producers of acetate solvents. The sole producer of acetic acid in Ukraine is Azot at Severodonetsk which is faced by much higher gas costs than its Russian counterparts. In 2010, the share of exports as part of total production was 86% compared to 76% in 2009. Imports of acetic acid totalled 11,700 tons in 2010, which was higher than 2009 but lower than 2008. The main supplier of imports is the Russian producer Azot at Nevinomyssk.

**Ukrainian Acetic Acid Market
(unit-kilo tons)**

	2010	2009	2008
Production	88.7	82.6	126.4
Exports	76.2	63.1	97.8
Imports	11.7	9.4	16.6
Market Balance	24.2	28.9	45.2

Given the rise in prices of natural gas, it seems inevitable that acetic acid produced in Ukraine will increase in the first part of 2011. However, this is not expected to adversely impact on export activity whilst at the same time domestic demand is expected to be better this year. The main problem for Azot is that it cannot compete effectively in the domestic market against imports from Russia unless higher tariffs are introduced by the Ukrainian government.

Central Asia & Kazakhstan

Uzbek polyethylene projects

Indorama has stated that it intends to invest around in excess of €400 million in a project for building a polyethylene plant in Uzbekistan, with a capacity of 400,000 tpa. The project forms part of the Uzbek government's plan for development of the Mubarek gas processing complex up to 2015. If the project proceeds it would be jointly executed by Indorama and Uzbekneftegaz. Uzbekneftegaz has indicated that it would invest up to €110 million, while the remaining funds would flow from the Central Asian state's Fund for Reconstruction and Development in the form of loan.

The existing Mubarak gas complex was introduced in 1971 and possesses the capacity to process up to 30 billion cubic metres of gas per annum. Indorama has already invested €40 million in a state project to establish textile manufacturing facility, Indorama Kokand Textiles at the incomplete Kokand Textile Combine. The new facility is expected to manufacture 20,000 tpa of cotton yarn by 2013.

The polyethylene scheme forms a part of the Uzbek government's key project formulated to boost and upgrade production of polymers in the country. The Uzbek government last year inked a mutual deal with South Korea for a joint project of setting up a petrochemicals and polyolefins complex in Uzbekistan. The Ustyurt Gas Chemical Complex is to be based on the Surgil deposit, where there is a high content of ethane. The capacity of the plant will comprise 4 billion cubic metres per annum of natural gas, 362,000 tpa of polyethylene, 83,000 tpa of polypropylene and 3.7 billion cubic metres. The project is being undertaken by Samsung Engineering and UzLITneftgaz.

The other international projects that the Uzbek government is pursuing include a proposed project for setting up two polyethylene and polypropylene pipe extruding plants in Navoi region, while the other being a JV project already going on between the Uzbek and South Korean government for car component moulding business for producing automotive cables.

New sulphuric acid plant-Uzbekistan

Almalyk Steel Works in Uzbekistan plans to construct a new sulphuric acid plant worth \$80.3 million. The capacity of the unit will be 500,000 tpa of sulphuric acid. Another 500,000 tpa plant is to be constructed by Navoi Mining and Metallurgical Combine by 2016.

Kazakhstan-soda ash project

Kazakhstan plans to construct a new soda ash plant in the Atyrau oblast, in conjunction with the Turkish company Enkim. The planned capacity of the new plant is 400,000 tpa. A similar size project was planned for the Pavlodar region in 2008, but the plan failed to materialise. Currently Kazakhstan does not produce soda ash and imported as total of 382,000 tons in 2010, of which 98% was supplied by Russia.

Relevant Currencies

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

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