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Issue 293, 28 April 2015

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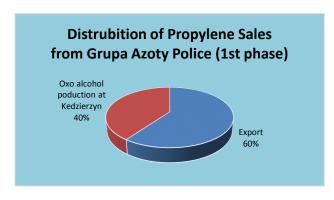
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# **CENTRAL & SOUTH EAST EUROPE**

### **Petrochemicals**

### **Grupa Azoty-propylene project announced**

Grupa Azoty has announced plans to invest zl 1.7 billion (\$450 million) to build a propylene plant at the Police division on the Baltic coast. The new 400,000 tpa facility, which is intended to begin production in 2019, is promoted to the largest of its kind in the EU. The plant is estimated by Grupa Azoty to increase annual revenues of the group by around 20% to zl 12 billion (\$3.2 billion).



In the first phase of operations the Police plant could export around 60% of its production whilst another 40% will be used for consumption in oxo alcohol production at Kedzierzyn. However, long term the group wishes to utilise propylene for further processing which could possibly go into polypropylene or higher margin propylene derivatives such as acrylic acid.

The project in Police is to be based on PDH technology. The idea for this installation came from ZAK around five years ago, where

imports propylene itself at around 850,000 tpa

and thus Germany could provide a target market for the new Police plant. The bulk of the group's purchases of propylene are made under annual

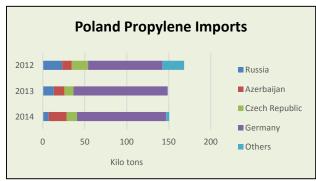
contracts, with supplementary purchases made

on the spot market.

propylene supply has traditionally been dependent on imports or domestic merchant purchases for the production of oxo alcohols.

### Polish propylene imports

Imports for propylene into Poland have been running at around 150,000 tpa in recent years. Germany is the major contributor, but at the same time



The cost of imports for ZAK is estimated at around zl 500 million per annum. However, the new plant is not being located at Kedzierzyn as Police is located near the coast and thus offers

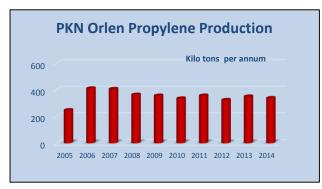
better possibilities for propane delivery.

The plant will be controlled as a subsidiary of Grupa Azoty, comprising shares belonging to both Police and ZAK division. An agreement on the new company formation and the chosen technology will be made in the near future. Funding is expected to come from international financial institutions. Construction should start in 2016 and be completed by the end of 2018.

The new plant, which is to increase the revenue of Grupa Azoty by approximately zl 2 billion per annum, would double the current revenues of Grupa Azoty Police. The profitability of the company through this investment is expected to increase by around 10%.

### Propylene plant construction at Grupa Azoty Police

The construction of the plant will require about a thousand people, and once completed the plant should employ around 200 people permanently. Of the total zl 1.7 billion investments estimated by Grupa Azoty, around zl 1.4 billion is targeted on the installation, and the remainder allocated for the construction of the power unit and the expansion of a liquid chemical terminal. Ultimately, the terminal will support Poland's largest LPG supply ships, increasing twice its operational capabilities.



supply in Poland, but provides a surplus for export.

### **Propylene production-Poland**

The sole producer of propylene is PKN Orlen which uses propylene for polypropylene and phenol, and sells another 120-140,000 tpa to Grupa Azoty ZAK at Kedzierzyn. (Propylene and other chemical production data for Poland is available from the CIREC database). PKN Orlen provides merchant deliveries from Plock, but this possibility may be stifled after the completion of the phenol expansion, raising capacity from 50,000 tpa to 200,000 tpa. Thus the Police project not only eliminates the deficit in propylene

| PKN Orlen Petrochemical Margins (€/ton) |     |     |  |  |  |
|---|-----|-----|--|--|--|
| Product Jan-Mar 15 Jan-Mar 14           |     |     |  |  |  |
| Ethylene                                | 505 | 603 |  |  |  |
| Propylene                               | 454 | 530 |  |  |  |
| Toluene                                 | 161 | 218 |  |  |  |
| Benzene                                 | 180 | 411 |  |  |  |
| Butadiene                               | 238 | 364 |  |  |  |
| Paraxylene                              | 336 | 342 |  |  |  |

Orlen Group, Q1 2015

PKN Orlen's first-quarter profit rose significantly against the same period in 2014. Net income rose to zl 756 million zloty (\$203 million) from zl 64 million in Q1 2014. The group's refining business benefited from falling crude prices. Even Orlen Lietuva, which Orlen considered closing last year due to deteriorating results, posted net income of zl 175 million in the first quarter. Orlen Lietuva Group achieved an EBITDA LIFO of zl 376 million and was higher by zl 440 million.

Paraxylene 336 342 The refining margin for the Orlen Group rose to \$7.5 a barrel in the first quarter compared with \$1.3 in 2014. The model downstream margin increased by \$3.1/barrel in the first quarter against Q1 2014, whilst the group's sales resulted in higher revenues of zl 314 million. An increase in refinery volume on the Polish market resulted from higher sales to key customers and

| Orlen Group Chemical Sales<br>(unit-kilo tons) |     |     |  |  |  |
|--|-----|-----|--|--|--|
| Product Jan-Mar 15 Jan-Mar 14                  |     |     |  |  |  |
| Monomers                                       | 232 | 218 |  |  |  |
| Polymers                                       | 160 | 141 |  |  |  |
| Aromatics                                      | 120 | 107 |  |  |  |
| Fertilisers                                    | 304 | 313 |  |  |  |
| Plastics                                       | 134 | 116 |  |  |  |
| PTA  | 167 | 145 |  |  |  |

increasing the customer base. Higher refinery volumes on the Czech market was due to higher production capacity after the acquisition of shares in Ceska Rafinerska from Shell in the first quarter in 2014. Furthermore, Orlen Lietuva achieved higher sales on the Latvian, Estonian and CIS markets.

The Orlen Group achieved a higher volume of polymer sales in the first quarter, mainly the result of an improvement of the market situation on the Czech market and influenced partially by production constraints of suppliers from West Europe. The decrease in fertilizers sales was driven mainly by the breakdown

of nitric acid and canwil installations at Anwil and consequently the limitation of volume on the Polish market. An increase in plastics sales resulted mainly from a limited supply of PVC due to production

| Orlen Group Utilisation Levels |       |       |       |
|--------------------------------|-------|-------|-------|
| Refineries                     | Q1 14 | Q4 14 | Q1 15 |
| Plock                          | 86%   | 89%   | 87%   |
| Unipetrol                      | 83%   | 88%   | 84%   |
| ORLEN Lietuva                  | 58%   | 87%   | 70%   |
|                                |       |       |       |
| Petrochemicals                 | Q1 14 | Q4 14 | Q1 15 |
| Olefiny (Plock)                | 84%   | 85%   | 84%   |
| Olefiny (Unipetrol             | 1)92% | 90%   | 95%   |
| ВОР                            | 83%   | 81%   | 89%   |

installation overhauls on the German market. The increase in PTA sales due to higher deliveries to the main customer and long-term stoppage of Portuguese producer.

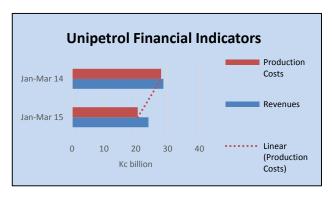
The negative impact of crude oil prices decrease on inventory valuation in the first quarter of 2015 decreased the EBITDA of the Orlen Group by zl 237 million. By national division PKN Orlen in Poland achieved a higher EBITDA of zl 294 million and amounted to zl 610 million. PKN Orlen's EBITDA for the downstream division totalled zl 281 million as a result of an improvement in the economic environment and higher sales volume. The EBITDA for the Lietuva Group was higher by zl 400 million from Q1 2014, whilst the Unipetrol Group increased its EBITDA by zl 176 million and amounted to zl 440 million.

### Unipetrol, Q1 2015

Unipetrol Group's EBITDA LIFO amounted to zl 472 million in the first quarter this year and was higher by zl 188 million from Q1 2014. Unipetrol recorded high utilisation of production capacities in the first

quarter in 2015, increasing sales in both refinery and petrochemical divisions in conjunction with higher margins. The company recorded an operational profit of Kc 3.111 billion and net profit of Kc 1.995 billion.

Higher profitability was achieved due to significantly higher refining margins coupled with high utilisation of production capacities. In the downstream division that combines refinery and petrochemical parts, the company recorded EBITDA LIFO of Kc 2.985 billion in the first quarter this year. The operational profit was influenced by better refinery and polyolefin margins, slightly higher Brent–Ural differential, lower energy costs thanks to significantly lower crude oil prices and higher sales volumes of refinery and petrochemical products.



In the refinery part of the downstream refinery, crude oil processing totalled Kc 1.243 million tons, 10% up on the same period last year. Utilisation of refining capacities reached 84%, despite winter seasonality and planned and executed maintenance turnaround of Kralupy refinery in the second half of March.

At the end of the first quarter this year Unipetrol's purchase of Eni's 32.445% stake in Česká Rafinerska was approved. After the transaction Unipetrol will become a sole shareholder of

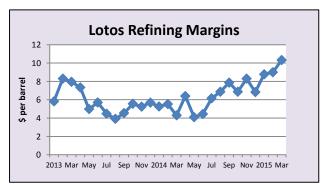
Česká Rafinérská. The acquisition opens up possibilities for further improvements of the operational management of the Czech refineries and will enable strategic control over these assets.

| Unipetrol Financial Performance (Kc million) |        |        |        |
|--|--------|--------|--------|
|  |        |        | 1Q15   |
| Revenues                                     | 28,691 | 28,939 | 23,975 |
| EBITDA LIFO                                  | 1,743  | 2,618  | 3,111  |
| EBITDA                                       | 1,612  | 1,105  | 2,897  |
| EBIT   | 985    | 593    | 2,426  |
| Net profit                                   | 937    | 598    | 1,995  |

Sales volumes of petrochemicals for Unipetrol amounted 446,000 tons in the first quarter, 1% up on the same period in 2014. Sales of polyethylene increased by 17% and polypropylene by 10%. An increase in market demand for polymers was driven by favourable GDP dynamics, limited imports into the EU and higher exports of some European producers on the markets outside Europe. The company achieved 95% in utilisation of the

steam cracker at Litvinov.

Unipetrol's net profit more than doubled in the first quarter to Kc 1.995 billion despite the reduction in revenues from Kc 28.691 billion to Kc 23.975 billion. Apart from better margins last year Unipetrol implemented changes in management of operating activities in order to improve effectiveness and integration.



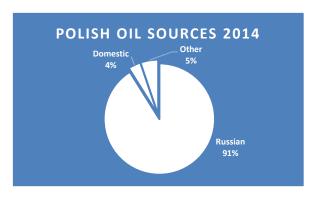
### Polish refining

Refining margins for Orlen rose to \$9.40 in March, the highest level since September 2012. Lotos achieved even higher margins of \$10.32 in March.

In 2014 refineries belonging to Grupa Lotos and PKN Orlen achieved higher average efficiency than other European refineries. Refining margins averaged Lotos and Orlen in 2014 were on average \$2.5-3.5 per barrel higher than the European

refining margin indicator (ERMI). The average refining margin model for Lotos in 2014 amounted to \$6.08 per barrel. PKN Orlen achieved the same rate as in 2013 at \$5.12 per barrel. The refinery at Gdansk is currently operating at full capacity, ensuring full use of the refining margins. In 2014, the Gdansk

refinery processed a total of 9.89 million tons, which is a historic result for this plant. In the fourth quarter in 2014, capacity utilisation stood at 93.9%.



Polish refineries processed 24.2 million tons of crude oil in 2014, against 24.3 million tons in 2013. Last year 9% of crude came from non-Russian sources. Of the refiners PKN Orlen processed 14.6 million tons, 7% down on 2013, whilst Lotos increased processing by 9% to 9.5 million tons. The increase in throughput at the Gdansk refinery is mainly due to the planned shutdown and modernisation of the plant in 2013.

From the start of the year PKN Orlen merged its southern refineries Trzebinia, Jedlicze and factory

Paraffin Naftowax into a single entity entitled Orlen Poludnie. The operating strategy is focused on the main divisions associated with the production and sale of biofuels and bio-components, paraffins and solvents.

The Orlen Group manages six refineries, three of which are located in Poland (Płock, Trzebinia, Jedlicze), two1) in the Czech Republic (Litvinov, Kralupy) and one in Lithuania (Mazeikiu). The total crude oil's capacity per year amounts to more than 32 million tons.

| Synthos SE | Synthos SBR Exports (unit-tons) |         |  |  |
|------------|---------------------------------|---------|--|--|
| Country    | 2014                            | 2013    |  |  |
| China      | 29,712                          | 16,878  |  |  |
| France     | 5,218                           | 4,263   |  |  |
| Germany    | 14,278                          | 12,394  |  |  |
| Brazil     | 17,978                          | 6,636   |  |  |
| India      | 28,859                          | 40,627  |  |  |
| Italy      | 5,096                           | 6,421   |  |  |
| Malaysia   | 3,341                           | 8,454   |  |  |
| Slovakia   | 24                              | 6,482   |  |  |
| Thailand   | 352                             | 4,375   |  |  |
| Turkey     | 2,387                           | 10,638  |  |  |
| UAE        | 9,117                           | 229     |  |  |
| Others     | 47,763                          | 38,663  |  |  |
| Total      | 164,125                         | 156,060 |  |  |

### Synthos-EBRD

The EBRD is supporting innovation in Poland's chemical sector by investing €50 million in bonds issued by Synthos. Proceeds from the EBRD's investment will be used to support Synthos' development and modernisation programmes including construction of a new, state-of-the-art specialty rubber production facility as well as research and development activities in connection with the EBRD investment. Synthos will undertake additional commitments including compliance with social and environmental standards and the adoption of an environmental and social action plan.

Through the investment, EBRD is helping to address one of the biggest challenges in the Polish economy, namely the low level of innovation and R&D investments among local companies. The financing will support the construction of a new production which will introduce the most modern synthetic rubber production technology in Poland. The financing will be also pivotal in closing the R&D gap between corporations and leading academic centres by supporting the recently established R&D centre at Synthos. Key

strategic areas of the centre include synthetic rubber, expandable polystyrene plastics and dispersions/adhesives.

# Synthos, Rosneft & Pirelli

Rosneft, Pirelli and Synthos are to undertake a joint feasibility study of a project to produce synthetic rubber at Nakhodka in the Russian Far East. The three companies have signed a letter of intent to implement a feasibility study for the research related to the ability to start production of synthetic rubber in the petrochemical cluster at Nakhodka by FEPCO (Far East Petrochemical Company). The feasibility study will include plant engineering projects and operational requirements of the project, market research, estimates of the necessary investment and operating costs. According to the agreement, the parties have expressed interest in using the cluster FEPCO for the production of synthetic rubber for the purposes of, inter alia, Pirelli tire manufacturing plants in the Asia-Pacific region.

# Chemicals

### **Grupa Azoty-credit facility**

Grupa Azoty has signed a revolving credit facility agreement with a bank syndicate for financing of the group's corporate needs, including investment projects. Under the agreement, Grupa Azoty will receive zl 1.5 billion, which will be used to finance the investment programme provided for the group's strategy until 2020. This marks the first step in establishing a financing

framework for new investment projects even as negotiations on the provision of financing for an entire

portfolio of projects are drawing to an end. The agreement was executed with PKO Bank Polski S.A., Bank Gospodarstwa Krajowego, Bank Zachodni WBK S.A., and ING Bank Śląski.



**Polish Chemical Production (unit-kilo tons)** 

83.8

21.2

247.3

138.3

Jan-Mar 15

Product

Soda Ash

An Ethylene

Nitric Acid

Nitrogen Fertilisers

Phosphate Fertilisers

Caustic Soda Liquid

Caustic Soda Solid

Jan-Mar 14

81.7

24.3

264.3

125.5

633.0

517.0

93.0

The revolving credit facility is part of a long-term financing package for an aggregate amount of zl 2.2 billion. Grupa Azoty is finalising negotiations of credit facility documentation with the European Investment Bank for a zl 550 million term facility and with the EBRD for a zl 150 million facility, both repayable in 10 years.

### **Grupa Azoty-plasticizer plant opens**

Grupa Azoty ZAK is starting its new plasticizer plant at the end of April, which will allow the

company to effectively compete in the market for plasticizers. Plasticizer from the new installation is the successor to DOP, previously produced by Grupa Azoty ZAK. EU regulations has forced ZAK to close the DOP facility and introduce a new plant. The installation of the new plasticizer comprises a capacity of 50,000 tpa. The new plasticizer called Oxoviflex is based on technology developed jointly by the Group Azoty ZAK SA and the Institute of Heavy Organic Synthesis Blachownia. Grupa Azoty is now looking for buyer for its phthalatebased installation for the production of plasticizers

> Towards the end of 2015 Grupa Azoty ZAK aims to launch a new unit for the installation for the production of liquid fertilisers comprising a capacity of over 100,000 tpa. Grupa Azoty ZAK is working on a project involving the construction of multi-purpose plant for specialty esters. The company has already completed the study, and according to the plan the installation is to be built next year.

### Propylene 99.6 89.0 Butadiene 14.2 15.1 Toluene 2.3 4.1 Phenol 8.4 7.0 Caprolactam 42.7 42.7 Acetic Acid 1.9 1.7 Polyethylene 97.9 86.3 Polystyrene 13.1 14.9 **EPS** 12.8 16.4 **PVC** 79.1 82.8 Polypropylene 63.3 61.6 Synthetic Rubber 45.8 49.6 Ammonia (Gaseous) 351.0 359.0 Ammonia (Liquid) 363.0 343.0 **Pesticides** 10.0 10.3

584.0

506.0

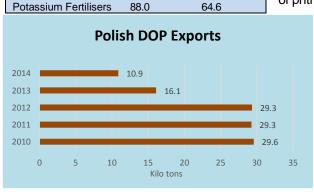
108.1

located at Kedzierzyn.

Boryszew-new plasticizer

ERG Borvszew at Sochaczew has registered a patent for a new method of obtaining terephthalate (2-ethylhexyl) phthalate (DEHT). The patent will allow the company to expand its range of products for the manufacture of toys and other products obtained from PVC. The new patent from Boryszew ERG is a response to the recall by REACH of phthalate, bis (2-ethylhexyl) phthalate (DEHP). DEHP is

subject to authorisation under REACH which means it can no longer be used in the EU after 21 February 2015. In contrast to DEHP, DEHT is a new generation plasticizer, non-toxic, with high quality parameters and performance properties. Its introduction eliminates the risks associated with the use of phthalate plasticisers.



### Chimcomplex 2014

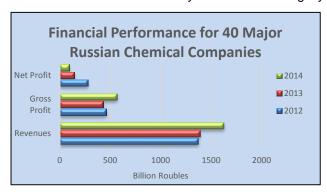
Chimcomplex increased its revenues by 7% last year to 187 million lei, and expects exports to the regional market to support its business growth by

a further 50%. The company, which produces caustic soda, hydrochloric acid and other substances used in chemical, energy and metallurgy, its budgeted 2015 an advance of nearly 10% of business, the figure of 205 million lei, while net profit is projected to 4.9 million lei, up 23% from last year. Chlorine capacity for Chimcomplex stands at 100,000 tpa.

# **RUSSIA**

### Russian chemical markets. Jan-Mar 2015

Russian chemical markets have been relatively stable in the first quarter this year, despite expectations of more adverse effects as a result of currency fluctuations combined with lower oil prices and sanctions. Demand in the chemical industry has been down slightly in some product areas, but equally there have been



increases in other sectors. Investments have been affected more than current production and consumption operations, with sanctions making projects more difficult to implement. Certain projects have been put on hold, whilst others have been pushed back either by months or even years.

Whilst some companies benefited from the fall in the value of the rouble in the fourth quarter last year, the overall pattern was for the industry for 2014 consisted of higher revenues against lower net profits. Producers benefited from the weaker

currency for both export and domestic revenues, and most producers reported substantial rises in nominal net profits. Converted into dollars and euros the rises appear less impressive.

| Russian Chemical Commodity Exports       |           |         |           |            |
|--|-----------|---------|-----------|------------|
| Jan-Feb 15 Jan-Feb 15 Jan-Feb 14 Jan-Feb |           |         |           | Jan-Feb 14 |
| Product                                  | Kilo tons | USD Mil | Kilo tons | USD Mil    |
| Ammonia                                  | 536       | 261     | 495       | 188        |
| Methanol                                 | 203       | 57      | 307       | 129        |
| Nitrogen Fertilisers                     | 1,622     | 422     | 1,671     | 429        |
| Potash Fertilisers                       | 1,747     | 470     | 1,262     | 352        |
| Mixed Fertilisers                        | 1,250     | 563     | 1,370     | 460        |
| Synthetic Rubber                         | 149       | 232     | 150       | 332        |

Chemical production in the first quarter was largely unchanged from the same period last year. Large-scale increases were reported for polypropylene and PVC due to the introduction of new capacity, whilst ethylene production was down slightly due to the outage at Stavrolen.

Regarding chemical trade, methanol exports were down in the first two

months in 2015 from 203,000 tons to 307,000 tons due to increases in domestic consumption whilst potash fertilisers saw the largest rise. Synthetic rubber exports were lower by only 1,000 tons in volume but due to weakness in the global market were down by \$100 million in revenues.

### Russian petrochemical projects



### Lukoil-gas processing plant Stavropol

Lukoil aims to launch a first gas processing plant in the Stavropol region in August 2015. Construction of the first line of GPP is in the final stage. At the end of last year the company completed work on laying a pipeline that will deliver associated gas to the gas processing capacity. The capacity of the pipeline is 8 billion cubic metres of associated gas and comprises a total length of 263.3 kilometres.

The second stage of the investment project comprises 6.5 billion cubic metres per annum, but

this will not be introduced until 2019. It is the second stage that will facilitate investments in the Stavrolen complex and the expansion of olefin and polyolefin capacity. The configuration of the gas processing plant will be determined after the analysis of raw materials, which will be delivered from the North Caspian fields.

| Russian Chemical F    | Russian Chemical Production (unit-kilo tons) |            |  |  |
|-----------------------|--|------------|--|--|
| Product               | Jan-Mar 15                                   | Jan-Mar 14 |  |  |
| Caustic Soda          | 297.2  | 258.2      |  |  |
| Soda Ash              | 790.0  | 658.0      |  |  |
| Ethylene              | 666.0  | 675.0      |  |  |
| Propylene             | 384.3  | 385.5      |  |  |
| Benzene               | 313.4  | 313.0      |  |  |
| Xylenes               | 153.9  | 137.2      |  |  |
| Styrene               | 175.2  | 173.1      |  |  |
| Phenol                | 60.2   | 69.5       |  |  |
| Ammonia               | 3,700.0                                      | 3,900.0    |  |  |
| Nitrogen Fertilisers  | 2,100.0                                      | 2,300.0    |  |  |
| Phosphate Fertilisers | 800.0  | 900.0      |  |  |
| Potash Fertilisers    | 1,800.0                                      | 2,100.0    |  |  |
| Plastics in Bulk      | 1,766.0                                      | 1,584.0    |  |  |
| Polyethylene          | 433.0  | 453.0      |  |  |
| Polystyrene           | 135.0  | 130.1      |  |  |
| PVC                   | 211.2  | 165.1      |  |  |
| Polypropylene         | 352.0  | 218.6      |  |  |
| Polyamide             | 34.4   | 36.7       |  |  |
| Synthetic Rubber      | 412.0  | 349.0      |  |  |
| Synthetic Fibres      | 31.3   | 33.1       |  |  |

### Amur gas processing project

The foundations for Gazprom's gas processing plant in the Amur region is set to begin in May-June 2015. According to the regional government, work is expected to start in the near future for the first phase of construction of the Amur GPP, involving the creation of temporary access roads, planning of the construction site, etc.

Gazprom and the Amur regional government plan to sign an agreement on gas supply network through the pipeline the Power of Siberia which is intended to link Russia with China from 2020. The pipeline will pass through the Irkutsk Region, the Republic of Sakha (Yakutia) and the Amur region. According to the project the facilities of the Amur GPP will be allocated about 2 million tpa of ethane and 1 million tpa of propane, about 500,000 tpa of butane and 260,000 tpa of pentane-hexane fractions.

### Sayanskkhimplast gas supplies

Sayanskkhimplast is in talks on gas supplies required for the expansion of production of PVC. The company is negotiating with Kada-Oil on gas supplies, required in volumes of around 1 billion cubic metres per annum. The negotiations for the supply of gas to Sayanskkhimplast are set to be completed by the end of 2015 and beginning of 2016

Sayanskkhimplast wants to expand its PVC capacity, but is solely dependent on gas supplies being delivered by pipeline either from the Kovytka field or alternative scenarios smaller gas fields in the Irkutsk region. The problem is that Gazprom has stated that building a gas supply pipeline from Zhigalovo to Sayansk, which could deliver Kovytka gas, is economically unviable and the project is side-lined if not completely shelved. The only alternative option has been proposed by a company called Petromir, to construct a 200 km pipeline of 700 mm and providing gas at 21 million roubles per km instead of 166 million roubles km in the case of the Zhigalovo-Sayansk pipeline.

### Nizhnekamskneftekhim-ethylene project

Nizhnekamskneftekhim intends this year to complete its re-evaluation of its large-scale olefin and polyolefin project. To date Nizhnekamskneftekhim has received necessary surveying, topographic and environmental statements for the construction of the complex.

Regarding feedstocks, Nizhnekamskneftekhim is faced with the prospect of rising naphtha costs in the next few years. Prices for naphtha in the domestic market until 2014 were previously almost twice lower

| Nizhnekamskneftekhim Revenues (Billion roubles) |         |         |  |
|---|---------|---------|--|
| Division  | 2014    | 2013    |  |
| Rubbers   | 52.328  | 53.762  |  |
| Plastics  | 45.393  | 36.559  |  |
| Olefins and derivatives                         | 26.926  | 25.376  |  |
| Other product                                   | 12.360  | 10.246  |  |
| TOTAL   | 137.007 | 126.043 |  |

than international markets due to high export duties imposed by the Russian government. This gave a significant advantage to Russian petrochemicals compared to global competitors.

However, the tax manoeuvre introduced by the government from the start of 2015 is expected to impact on costs for Nizhnekamskneftekhim and the wider petrochemical industry in Russia.

Under the new formula, a new process has been applied in the calculation of oil duties and coefficients for calculating export duties on naphtha. This will lead to faster growth in prices of raw materials in the domestic market and reduce the competitive advantage of the Russian petrochemical industry. Part of the negative effect could be offset by chemical companies using LPG where export duties are being increased with subsequent downward effects on prices.

However, naphtha remains the primary feedstock and changes in taxation on naphtha may affect the attractiveness of building projects such as the one million ton cracker project planned by Nizhnekamskneftekhim. The project has been repeatedly postponed, with the latest target date for completion revised possibly leading to two phases of development at 600,000 tpa.

| Nizhnekamskneftekhim Sales by Region (%) |      |      |  |  |
|--|------|------|--|--|
| Country/Region                           | 2014 | 2013 |  |  |
| Russia                                   | 51.1 | 47.2 |  |  |
| Europe                                   | 30.6 | 37.8 |  |  |
| CIS                                      | 6.4  | 6.0  |  |  |
| Asia                                     | 6.1  | 4.3  |  |  |
| North America                            | 3.0  | 3.0  |  |  |
| Others                                   | 2.3  | 1.7  |  |  |

For 2014 the EBITDA for Nizhnekamskneftekhim amounted to 16.187 billion roubles, a 22.5% increase from 2013. The EBITDA margin grew from 10.5% to 11.8%. The geographical structure of sales changed in 2014 with the share of Europe dropping by 7.2% and share of Russia growing by 3.9%.

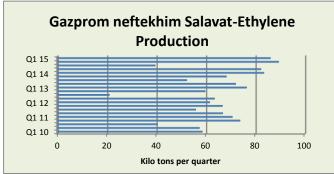
The cost of sales rose 10.8% in 2014 to 10.750 billion roubles, driven mostly by prices for raw materials and energy. The operational profit rose 36.6% over 2013 to

12.486 billion roubles, 36.6% up on 2013. Net profit rose 50.5% to 9.434 billion roubles.

Nizhnekamskneftekhim plans to launch a modernised production unit for linear alpha olefins in 2015, with Linde undertaking the modernisation. The aim of modernization is the introduction of technology alpha-Sablin based on C4-C6 fractions. Production of alpha-olefins, which was commissioned in 1990, is based on the oligomer division at Nizhnekamsk.

### **United Petrochemical Company 2014**

United Petrochemical Company (UPC), which was transferred to the control of Bashneft in 2014, recorded a net loss of 2.5 billion roubles in 2014, after achieving a net profit of 77.050 million roubles in 2013. The company's revenue amounted to 1.01 billion roubles, which is 37% higher than in 2013. The cost of sales increased by 46% to 978.94 million roubles, whilst the gross profit fell almost twice to 34.62 million roubles.



### markets Gazprom neftekhim Salavat, Q1 2015 neftekhim Salavat increased Gazprom processing of gas condensate in the first quarter this year by 48.5% to 1.080 million tons, whilst at the same time reducing refining

petrochemical production, propylene amounted to 34,000 tons in the first guarter which was

by 50.2% to 733,000 tons.

Russian petrochemical producers &

### 21.4% up and ethylene amounted to 86,000 tons or 3% (unit-kilo tons) up over the same period in 2014. In 2015, the company Jan-Mar 15 Jan-Mar 14 intends to increase the capacity of ethylene to 330,000 20.6 21.5 tpa. Plans to build facilities in excess of 1 million tpa of 3.9 0.0 ethylene have however been shelved. 31.0 24.4

### Russian olefins, Jan-Mar 2015

Russian ethylene production increased by 15% in March over February to 233,400 tons. Production totalled 666,800 tons in the first quarter in 2015 against 675,000 tons in the same period last year, (individual plant data available from Statistical Database at www.cirec.net). Lukoil has completed repair work on the olefin cracker and restarted production on 7 April after a fourteen month break. Propylene production amounted to 131,500 tons in March, 10% more than in February. After maintenance

### **Propylene Shipments by Russian Producers** Company Angarsk Polymer Plant Omsk Kaucuk SIBUR-Neftekhim Akrilat 7.9 1.7 LUKoil-NNOS 41.8 44.0 Tomskneftekhim 0.5 0.1 Gazprom n Salavat 14.8 7.6 SIBUR-Khimprom 2.0 0.0 0.5 Stavrolen 0.0 Nizhnekamskneftekhim 0.0 3.3 Tobolsk-Polymer 4.7 0.8 Ufaorgsintez 2.8 0 Total 109.2 124.6

Regarding

SIBUR-Kstovo increased monomer production in March by 1.6 times to 13,400 tons, and Tomskneftekhim by 16% to 12,800 tons. SIBUR-Khimprom reduced output by 10% to 4,000 tons. For the whole of the first quarter Russian propylene production totalled 384,300 tons which was down slightly from 2014.

Domestic merchant sales of propylene amounted to 28,500 tons in March, 9% less than in February. Sales in the first quarter totalled 100,600 tons, 7% down on 2014. Domestic sales of propane-propylene fractions amounted to 11,500 tons in March, unchanged from February. Sales dropped 14% in the first quarter to 37,600 tons. The decline is due primarily to higher exports from the Ryazan refinery, which is owned by Rosneft. Exports of propane-propylene fractions amounted to 7,600 tons in March, 41% more than in February. For the first quarter exports of propane-propylene factions totalled 17,400 tons.

| Russian Styrene Domestic Sales (unit-kilo tons) |            |            |  |
|---|------------|------------|--|
| Producer  | Jan-Mar 15 | Jan-Mar 14 |  |
| Angarsk Polymer Plant                           | 3.8        | 0.8        |  |
| Plastik   | 1.8        | 1.0        |  |
| Gazprom n Salavat                               | 5.4        | 6.4        |  |
| SIBUR-Khimprom                                  | 3.7        | 0.0        |  |
| Nizhnekamskneftekhim                            | 2.0        | 10.7       |  |
| Total   | 16.8       | 18.9       |  |

### Russian styrene, Jan-Mar 2015

Russian styrene production increased by 16% in March over February to 62,500 tons. SIBUR-Khimprom increased production by 26% to 11,800 tons and Nizhnekamskneftekhim by 17% to 27,200 tons. Last month, Gazprom neftekhim Salavat increased its sale of the product in the domestic market by 39%, to 5,300 tons and SIBUR-Khimprom by 25% to 3,200 tons. At the same time, the supply from Angarsk Polymer Plant dropped three times to

538 tons.

For the first quarter, styrene production totalled 175,200 tons, 5% up on 2014. The largest producer was Nizhnekamskneftekhim produced 74,900 tons in the first three months against 67,900 tons in the same period in 2014.

### **Bulk Polymers**

| Russian HDPE Imports (unit-kilo tons) |            |            |  |  |
|---------------------------------------|------------|------------|--|--|
| Category                              | Jan-Mar 15 | Jan-Mar 14 |  |  |
| Extrusion                             | 14.8       | 18.0       |  |  |
| Pipe                                  | 5.5        | 10.2       |  |  |
| Film                                  | 0.9        | 4.8        |  |  |
| Blow                                  | 7.8        | 6.5        |  |  |
| Injection                             | 11.1       | 10.8       |  |  |
| Others                                | 3          | 3.0        |  |  |
| Total                                 | 43.1       | 53.3       |  |  |

### Russian HDPE, Jan-Mar 2015

Russian HDPE imports amounted to 43,100 tons in the first quarter, 19% lower than in 2014. Higher domestic production combined with lower demand have led to a reduction in imports. Stavrolen resumed production of HDPE in April after being forced to suspend operations at the end of February 2014.

In the first three months Russian HDPE production declined by 13% against the same period last year and amounted to 213,300 tons. The absence of production by Stavrolen is the main cause of the decline. Other producers have maintained a high ratio of plant utilisation in 2015, in particular,

Kazanorgsintez and Nizhnekamskneftekhim. Kazanorgsintez produced 134,000 tons in the first quarter against 132,400 tons in the same period last year. Nizhnekamskneftekhim produced 54,700 tons in the first quarter against 38,300 tons in 2014, whilst Gazprom neftekhim Salavat reduced production by 8% to 24,600 tons. The key factor for the second quarter is the restart of the Stavrolen plant, from 7 April, which should add more product to the domestic market as utilisation rates gradually increase.

### Other Russian polyethylene, Jan-Mar 2015

Russian LLDPE imports declined by 6% in the first quarter decreased by 6% and amounted to 42,500 tons. Imports were affected in the first two months in 2015 primarily by the weakness of the rouble, although the currency has since regained some strength. In the first quarter film imports totalled 13,700 tons against 15,500 tons in the same period last year.

LDPE production in Russia totalled 173,600 tons in the first quarter this year against 175,500 tons in the same period in 2014. Russian producers produced 60,700 tons in March against 52,500 tons in February and 60,600 tons in January.

| Russian Polypropylene Production (unit-kilo tons) |       |       |  |  |
|---|-------|-------|--|--|
| Producer Jan-Mar 15 Jan-Mar 14                    |       |       |  |  |
| Ufaorgsintez                                      | 31.7  | 32.7  |  |  |
| Stavrolen   | 28.9  | 17.6  |  |  |
| Moscow NPZ  | 28.4  | 29.4  |  |  |
| Nizhnekamskneftekhim                              | 53.7  | 51.9  |  |  |
| Polyom  | 49.0  | 37.7  |  |  |
| Tomskneftekhim                                    | 37.5  | 32.3  |  |  |
| Tobolsk-Polymer                                   | 113.1 | 32.3  |  |  |
| Total   | 342.3 | 233.9 |  |  |

### Russian polypropylene, Jan-Mar 2015

Polypropylene imports mounted to 38,100 tons in the first quarter, which is 11% down on the same period last year. The largest decline in imports occurred in the block copolymers of propylene (PP-block), which is due to growth of its own production.

Polypropylene production totalled 342,300 tons in the first quarter in 2015, rising 45% over the same period in 2014. All producers increased production with the exception of Ufaorgsintez and the Moscow refinery. Tobolsk-Polymer produced 113,100 tons in the first quarter against 31,300 tons in the same period last year. Polyom at Omsk

produced 49,000 tons against 38,900 tons. Stavrolen has started to be more visible on the market as utilisation increases and produced 28,900 tons in the first quarter this year.



SIBUR has expanded its product range of Tomsk polypropylene at and Tobolsk. Tomskneftekhim has introduced a new brand in production of PP H263 FF, intended for a nonwoven fabric. manufacturing polypropylene does not contain phthalates. Another grade PP H350 FF has been made available at Tomsk and Tobolsk, intended for manufacturers of non-woven materials. In the near future SIBUR plans to start production of brand PP H081 CF, designed to for the cast film sector.

### Russian PVC, Jan-Mar 2015

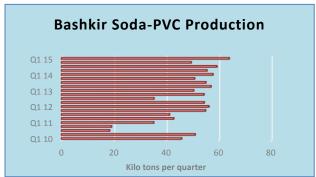
In the first three months of 2015 Russian PVC production increased by 26% against the same period in 2014 and totalled 198,500 tons. The introduction of RusVinyl to the market was the main factor behind the increase in Russian production, the plant producing 54,900 tons in the first quarter. Bashkir Soda at Sterlitamak increased production by 11% in January-March 2015 to 63,900 tons, following expansion last year. At the same time Sayanskkhimplast reduced production in the first quarter by 22% to 56,100 tons.

| Russian PVC Production (unit-kilo tons) |       |       |  |
|---|-------|-------|--|
| Producer Jan-Mar 15 Jan-Mar 14          |       |       |  |
| Bashkir Soda                            | 63.9  | 53.4  |  |
| Nikokhim                                | 23.6  | 23.7  |  |
| RusVinyl                                | 54.9  | 0     |  |
| Khimprom                                | 0.0   | 4.3   |  |
| Sayanskkhimplast                        | 56.1  | 72.1  |  |
| Total                                   | 198.5 | 153.5 |  |

Russian PVC imports fell by 25 times in the first quarter this year and amounted to 1,800 tons. Imports are divided between China and Europe, whilst shipments from the US have stopped. Russian PVC exports rose in the first quarter in 2015 to 12,600 tons against 1,400 tons in first quarter in 2014.

### Bashkir Soda-long term PVC expansion

Bashkir Soda has for some time envisaged plans to increase capacity at Sterlitamak for PVC from 210,000



tpa to 600,000 tpa in the period 2018-2020, but this may not be possible if Nizhnekamskneftekhim holds to its new plan for building its one million ton cracker after 2020. Economic problems facing Russia influenced Nizhnekamskneftekhim to delay its flagship project, but simultaneously this has affected other projects such as the PVC expansion by Bashkir Soda.

The company has estimated that investments for the expansion comprise about 41.5 billion roubles. In 2015, the company will launch a new project to

increase the production of granular calcium chloride to 100,000 tpa. The PVC project may be affected by

the availability of finance and availability of ethylene. Finance has become much harder to access since the introduction of sanctions on Russian companies, whilst the delay of the Nizhnekamskneftekhim cracker project means a delay for increased ethylene availability.

Bashkir Soda Company was formed by the merger of Kaustik and Soda at Sterlitamak in 2013, and includes the Berezniki soda ash plant. The holding company achieved revenues of 24.763 billion roubles in 2013, with a net income of 385 million roubles. A decision to remove the protective laws regarding the development of limestone deposits in the Tratau Mountain range in Bashkortostan would help Bashkir Soda immensely as regards to future raw material supply.

### Russian polycarbonate, Jan-Mar 2015

Production of polycarbonate in Russia decreased by 5% in the first quarter of this year to 17,400 tons. The production of extrusion grades for the first guarter increased 11% to 14,300 tons, whilst injection grades fell by 43% to 3,100 tons. Kazanorgsintez intends to delay its maintenance turnaround for May until July due to high demand in the domestic market.

### PTA/PET Chain

| Russian Paraxylene Domestic Sales (unit-kilo tons) |            |            |
|--|------------|------------|
| Producer   | Jan-Mar 15 | Jan-Mar 14 |
| Gazprom Neft                                       | 18.6       | 17.0       |
| Ufaneftekhim                                       | 32.0       | 25.8       |
| Kirishinefteorgsintez                              | 0.0        | 0.0        |
| Total  | 50.6       | 42.8       |

### Russian paraxylene market, Jan-Mar 2015

Paraxylene supplies on the domestic market increased in the first quarter to 50,600 tons from 42,800 tons in the same period last year. Exports remained unchanged at 29,100 tons. Ufaneftekhim increased paraxylene sales to Polief to 32,000 tons in the first quarter against 25,800 tons in January to March 2015.

Despite the withdrawal of Alpek from the RusPETF Bashneft has not dismissed plans of expanding the paraxylene capacity at Ufaneftekhim. Antipinsky Refinery in the Tyumen in West Siberia is considering the

| Russian Paraxylene Exports (unit-kilo tons) |            |            |
|---|------------|------------|
| Producer                                    | Jan-Mar 15 | Jan-Mar 14 |
| Gazprom Neft                                | 13.4       | 15.7       |
| Kirishinefteorgsintez                       | 13.7       | 12.4       |
| Ufaneftekhim                                | 2.0        | 1.0        |
| Total                                       | 29.1       | 29.1       |

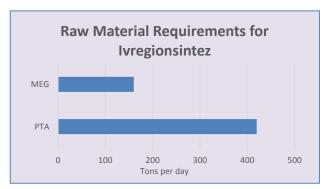
construction of facilities for the production of paraxylene, benzene and PET. The refinery has a capacity of 8 million

### Ivregionsintez PET project

The construction of the PET complex at Ivanovo, involving investments of 17.7 billion roubles (\$350 million), is scheduled to start in the third quarter in 2015. The plant is to be located in the Vichuga district of Ivanovo and represents

a major project in the region. Production capacity has been revised to 175,000 tpa, rather than 200,000 tpa initially.

Application for 80% of the cost of construction was made to the Russian bank VEB in February this year. Private investors in the shape of Arbat Capital Management intends to finance up to 20% of project cost. The main support for the project comes from the Russian government.



The environmental safety of constructing the plant in the Vichuga District was approved in the first quarter. To operate on a design capacity of 500 tons of fibre per day the plant would need 160 tons of ethylene glycol per day and 420 tons of PTA. Ethylene glycol is available in Russia from SIBUR-Neftekhim and Nizhnekamskneftekhim, but PTA would need to be imported and accordingly Ivregionsintez has already established provisional supply contracts from international companies.

Despite the financial approval questions have

been raised in the local administration whether it is still more cost-effective to import cotton or fibres rather

### Russian PET market, Jan-March 2015

In the first quarter this year Russian PET imports fell four times and amounted to 15,000 tons. From the total, granulate shipments amounted to 13,500 tons and flakes 1,400 tons. The total volume of imported injection PET preform amounted to 11,400 tons. The remaining volumes of granules comprised extrusion grade PET film. The overall decline in imports this year is due to devaluation of the rouble and the presence on the market the surplus capacity of local plants, offering cheaper PET. Alko-Naphtha resumed work in April after a two-week shutdown from 29 March to 12 April. In the first quarter Alko Naphtha produced 30,000 tons of PET.

In January-March, the consumption of PET in Russia decreased by 17% compared to the same period in 2014 and totalled 129,000 tons. In the first quarter PET production in Russia increased by 18% and amounted to 121,240 tons. Exports increased 2.4 times compared to the first quarter of 2014. The main exporter is still Alco-Naphtha which shipped 7,000 tons in the first quarter.

than produce synthetic fibres domestically. Import substitution in Russia has become a high-profile political slogan since last year, and the government has been keen to explain the motives for this project as part of this approach although it was under consideration long before the annexation of Crimea, sanctions, etc. The fundamental question being asked by some quarters of the Ivanovo administration is whether a Russian plant can compete successfully against Chinese imports.

### Russian MEG, Jan-Mar 2015

MEG sales on the domestic market amounted to 10,900 tons in March, 33% more than in February. Total deliveries to the domestic market amounted to 28,230 tons in the first quarter. The main supplier to the Russian market was SIBUR-Neftekhim accounting for 90% of deliveries and the main consumer was Polief accounting for 78% of purchases.

### **Aromatics & derivatives**

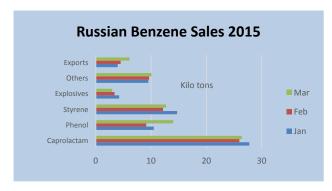
| Russian Benzene Pu     | rchases (uni | it-kilo tons) |
|------------------------|--------------|---------------|
| Consumer               | Jan-Mar 14   | •             |
| Kuibyshevazot          | 41.7         | 31.7          |
| Azot Kemerovo          | 26.7         | 26.7          |
| Shchekinoazot          | 11.8         | 16.7          |
| Kazanorgsintez         | 17.1         | 18.7          |
| Nizhnekamskneftekhim   | 17.7         | 5.4           |
| Samaraorgsintez        | 16.5         | 6.4           |
| Zapsib                 | 10.3         | 11.0          |
| SIBUR-Khimprom         | 21.9         | 29.3          |
| Promsintez             | 5.2          | 5.6           |
| Uralorgsintez          | 17.7         | 15.0          |
| Zavod im Ya M Sverdlov | 5.4          | 5.2           |
| Others                 | 1.3          | 17.2          |
| Sub-total              | 193.3        | 188.7         |
| Exports                | 14.6         | 26.9          |
| Total                  | 207.9        | 215.6         |

### Russian benzene market, Jan-Mar 2015

Benzene production increased by 8% in March over February to 102,900 tons. West Siberian Metallurgical Combine increased production by 32% in March to 6,100 tons, and Kirishinefteorgsintez by 22% to 6,200 tons. In addition, SIBUR-Kstovo increased production by 2.2 times to 6,400 tons. Slavneft-Yanos reduced the production of benzene by 18% to 4,600 tons and Angarsk Polymer Plant by 12% to 5,800 tons. For the first quarter this year domestic plants produced 302,100 tons, similar to 2014.

Benzene sales increased by 5% in March to 56,300 tons. SIBUR-Kstovo increased shipments by 2.2 times to 5,700 tons, whilst West Siberian MK increased by 30% to 6,200 tons, and Ryazan by 14% to 3,700 tons. At the same time, Gazprom neftekhim Salavat reduced benzene shipments by 2.7 times to 1,200 tons. In the first quarter sales of benzene on the domestic market totalled 166,700 tons, 4% up on 2014. Imports from ArcelorMittal amounted to 409 tons in March, 35% more

than in February. For the first quarter imports amounted to 1,100 tons, 39% up on the same period in 2014.



Benzene purchases in the domestic market totalled 207,903 tons in the first quarter, bought mainly from domestic sources, and down against 215,612 tons in the same period last year.

The major buyers included Kuibyshevazot, Azot at Kemerovo, SIBUR-Khimprom and Nizhnekamskneftekhim, together accounting for over half of all purchases. The main applications in the first quarter remained caprolactam, styrene and phenol.

### **Aromatic duties**

Russian export duties on aromatic hydrocarbons in April increased by 23.6% against March, rising to \$62.7 per ton from \$50.7 in March. At present the duty on aromatic hydrocarbons equivalent to the duty on diesel fuel and 48% of oil, while in 2014 it was calculated as 66% of the oil. Due to the fact that the export duty on crude oil from April increased by \$25 or 23.6% to \$130.8 per ton, the rate was increased to aromatics.

| Russian Orthoxylene Domestic Sales (unit-kilo tons) |            |            |
|---|------------|------------|
| Producer  | Jan-Mar 15 | Jan-Mar 14 |
| Gazprom Neft  | 10.5       | 16.2       |
| Ufaneftekhim  | 8.6        | 11.0       |
| Kirishinefteorgsintez                               | 8.5        | 7.1        |
| Total   | 27.6       | 34.2       |

same period in 2014.

### Russian orthoxylene, Jan-Mar 2015

Russian exports of orthoxylene amounted to 8,520 tons, 3.2 times more than in February 2015 and 2.1 times higher than in March 2014. Kirishinefteorgsintez accounted for 53% of exports (4,500 tons), Gazprom Neft 35% (2,960 tons) and Bashneft 12% (1,050 tons). Almost all products (99% of exports) were sent to Finland. For the first quarter exports totalled 15,180 tons which was 16% up on the

Russian producers sold 12,160 tons of orthoxylene on the domestic market in March, 1% less than in February this year, and 6% lower than in March 2014. Gazprom Neft shipped 5,180 tons in March, Kirishinefteorgsintez 4,020 tons and Ufaneftekhim 2,960 tons. Kamteks-Khimprom purchased 7,850 tons, 13% up on February, whilst Gazprom neftekhim Salavat purchased only 710 tons due to planned maintenance at its phthalic anhydride plant.

Russian manufacturers of paints increased their purchases of orthoxylene in March by 68% to 2,610 tons (21% of gross consumption in the Russian Federation). Manufacturers of fuel, agrochemical, pharmaceutical and other products purchased 1,150 tons (9%), whilst another 550 tons were taken by trading companies. For the first quarter orthoxylene sales on the Russian domestic market amounted to 27,580 tons, which was 26% down against 2014.

|                     | Russian Caprolactam Exports (unit-kilo tons) |            |      |
|---------------------|--|------------|------|
| Producer Jan-Mar 15 |  | Jan-Mar 14 |      |
|                     | Kuibyshevazot                                | 13.0       | 7.2  |
|                     | SDS Azot                                     | 28.9       | 46.5 |
|                     | Shchekinoazot                                | 15.0       | 14.1 |
|                     | Total  | 56.8       | 67.8 |

introduced.

| Shchekinoazot | t-caprola | ctam process |
|---------------|-----------|--------------|
|---------------|-----------|--------------|

Modernisation of production of caprolactam is one of the main stages of the strategic development of the Shchekinoazot involving a phased technical reequipment programme. In 2014, the company completed a radical reconstruction of the cyclohexane oxidation shop, whilst for all departments of production an automated production management system was

| Russian Toluene Sales (unit-kilo tons) |            |            |
|--|------------|------------|
| Producer                               | Jan-Mar 15 | Jan-Mar 14 |
| Novopiletsk MK                         | 0.6        | 0.4        |
| Slavneft-Yanos                         | 7.0        | 6.2        |
| Severstal                              | 1.7        | 1.6        |
| LUKoil-NNOS                            | 6.5        | 9.0        |
| Gazprom Neft                           | 10.5       | 4.3        |
| Zapsib                                 | 0.9        | 1.2        |
| Kinef, Kirishi                         | 4.8        | 6.8        |
| Gazprom n Salavat                      | 0.0        | 0.5        |
| Others                                 | 0.3        | 0.0        |
| Total                                  | 32.3       | 30.1       |

Production of caprolactam was originally started operations by Shchekinoazot in 1966 with an original design capacity of 22,000 tpa, in addition to producing ammonium sulphate as a by-product. The plant was reconstructed in the period 1975-1976, increasing capacity to 50,000 tpa.

### Russian toluene, Jan-Mar 2015

Toluene sales on the Russian domestic market amounted to 11,760 tons in March, 20% more than in February of this year, and 3% higher than in March 2014. Manufacturers of industrial explosives increased their purchases of toluene 2.2-fold in March compared with February, up to 1,050 tons. Manufacturers of fuel and lubricants and additives for motor

fuels reduced its purchases of toluene by 26% to 1,670 tons. In the first quarter in 2015 railway supplies of toluene to Russian consumers totalled 30.590 tons, 1% less than in the same period in 2014.

### Russian phenol, Jan-Mar 2015

Phenol production amounted to 19,300 tons in March, 1% up on February. Kazanorgsintez produced 4,700 tons in March, 25% less than in February whilst Samaraorgsintez (Novokuibyshevsk

Petrochemical Company) increased production by 14% to 7,900 tons. Ufaorgsintez increased its production of phenol by 11% in March to 6,600 tons.

| Russian Phenol Sales by Supplier (unit-kilo tons) |            |            |
|---|------------|------------|
| Producer  | Jan-Mar 15 | Jan-Mar 14 |
| Omsk Kaucuk                                       | 0.0        | 10.1       |
| Samaraorgsintez                                   | 10.2       | 5.7        |
| Kazanorgsintez                                    | 2.5        | 2.1        |
| Ufaorgsintez                                      | 9.6        | 3.2        |
| Neftekhimya                                       | 0.0        | 0.0        |
| Sterlitamak NPZ                                   | 0.0        | 0.0        |
| LUKoil-VNPZ                                       | 0.0        | 0.0        |
| Borealis  | 0.4        | 0.2        |
| Total   | 22.7       | 21.3       |

Omsk Kaucuk remains idle and under maintenance. Phenol demand was soft in the first quarter, even if sales did rise slightly over the same period in 2014. Samaraorgsintez increased domestic sales in the first quarter this year from 5,700 tons to 10,200 tons. Russian phenol exports amounted to 365 tons in March, 310 tons of which came from Samaraorgsintez and Ufaorgsintez 55 tons. Deliveries were sent to Latvia and Belarus. Phenol exports totalled 821 tons in the first quarter this year against 4,869 tons in the same period in 2014.

### **Synthetic Rubber**

### Russian C4s, Jan-Mar 2015

C4 sales on the domestic market increased 18% in March to 27,700 tons. SIBUR-Kstovo increased

| Russian C4 Purchases (unit-kilo tons) |            |            |
|---------------------------------------|------------|------------|
| Consumer                              | Jan-Mar 15 | Jan-Mar 14 |
| Omsk Kaucuk                           | 20.1       | 20.7       |
| Nizhnekamskneftekhim                  | 28.6       | 39.4       |
| Togliattikaucuk                       | 37.9       | 36.5       |
| Sterlitamak Petrochemical Plant       | 1.1        | 4.5        |
| Total                                 | 87.6       | 101.0      |

shipments by 44% over February to 6,500 tons, whilst Tomskneftekhim increased sales by 23% to 7,200 tons and Angarsk Polymer increased by 9% to 6,900 tons. For the first quarter sales totalled 78,400 tons, 4% down on 2014.

C4 imports amounted to 6,600 tons in March, 29% less than in February. Nizhnekamskneftekhim reduced purchases of C4s by 49% to 2,700 tons, whilst Omsk Kaucuk

boosted purchases by 4% to 3,900 tons. For the first three months in 2015 Russian companies reduced C4 imports by 3% to 20,900 tons.

### Russian synthetic rubber exports, 2015

Synthetic rubber exports from Russia totalled 149,000 tons in the first two months in 2015, down slightly from 150,000 tons in the same period last year. The major difference was the amount of revenues received

| Russian Synthetic Rubber Exports (unit-kilo tons) |          |          |  |  |
|---|----------|----------|--|--|
| Country Jan-15 Feb-15                             |          |          |  |  |
| Brazil  | 4,804.6  | 3,387.2  |  |  |
| Canada  | 2,362.7  | 2,736.4  |  |  |
| China   | 4,330.3  | 9,766.5  |  |  |
| Czech Republic                                    | 1,739.0  | 2,132.8  |  |  |
| Germany   | 1,908.3  | 2,226.3  |  |  |
| Hungary   | 6,282.9  | 4,902.1  |  |  |
| India   | 7,997.0  | 8,669.9  |  |  |
| Japan   | 4,490.1  | 2,988    |  |  |
| Poland  | 6,597.1  | 8,441.3  |  |  |
| Romania   | 2,237.8  | 2,473    |  |  |
| Slovakia  | 2,091.2  | 2,233.4  |  |  |
| Taiwan  | 1,887.7  | 3,353.8  |  |  |
| Turkey  | 3,415.7  | 4,178.9  |  |  |
| US  | 4,371.8  | 6,041.7  |  |  |
| Others  | 8898.2   | 14,351.2 |  |  |
| Total   | 63,414.3 | 77,882.5 |  |  |

for synthetic rubber sales, which dropped from \$332 million for the first two months in 2014 to \$232 million in the same period this year. Of the Russian export destinations India is marginally the largest importer, but may start to reduce the need for imports by 2017 when production is forecast triple to triple from current levels. Other important regions for export sales include Central and East Europe.

Last year the average price of natural rubber (TSR-20) in 2014 decreased by 36% from the same period of 2013, the average price of butadiene decreased by 14%. Due to unfavourable pricing conditions Russian producers reduced the production of butadiene and isoprene rubbers. As a result revenue for this division decreased by 2.7%.

### Rosneft, Pirelli & Synthos to cooperate

Rosneft, Pirelli and Synthos have signed a memorandum of understanding on scientific research and experimental development for production of synthetic rubber at Nakhodka as part of the Eastern Petrochemical Company (VNKH)) project. The companies will conduct a feasibility study which will include the development of the basic design to operational requirements, market research, an evaluation of investment and operating costs. Also, the parties have declared their

intention to consider the use of the VNHK petrochemical cluster at Nakhodka for the production of synthetic rubber, including deliveries to Pirelli's tyre plants in the Asia-Pacific region.

### Isoprene rubber & monomer technical improvements

Sintez-Kaucuk at Sterlitamak was granted a patent in 2014 for the method for producing cis-1,4polyisoprene, including grades SKI-5 and SKI-5PM. The plant at Sterlitamak has a capacity of 66,000 tpa.

SIBUR has undertaken a number of measures to improve the technology of isoprene monomer production at Togliattikaucuk. The project was designed to increase the efficiency of the production process due to changes in the catalyst system. Oxalic acid, which is a part of the catalyst system, has been replaced by a more active element resulting in a decrease in consumption rates of raw materials and energy resources.

| -  |          |
|--|----------|
| Togliattikaucuk Production Capacity (unit-kilo tons) |          |
| Product  | Capacity |
| Butadiene  | 80       |
| Butyl Rubber   | 53       |
| Butadiene-Styrene Rubber                             | 60       |
| Isoprene Rubber                                      | 82       |
| Isoprene Monomer                                     | 90       |
| MTBE   | 35       |
| Isobutylene-Isobutane Fractions                      | 105      |
| Isohutylene  | 40       |

In addition, for the production of butyl rubber Togliattikaucuk has switched to the use of additives that reduce unwanted polymerization of isoprene in the one stage process.

### **Togliattikaucuk**

Togliattikaucuk achieved a record production of 53,000 tons for butyl rubber in 2015. The plant also produced 72,600 tons of MTBE in 2014, 58,900 tons of isoprene and 31,600 tons of rubber copolymers. In total Togliattikaucuk produced 143,600 tons of synthetic rubber which was 16% below the level in 2013.

Togliattikaucuk has recently had isoprene rubber SKI-3C (IR SKI-3 NST) and butyl rubber BK-1675 (IIR-1675) approved for food

contact, meeting the regulatory requirements of the EU and the US.



### Nizhnekamksneftekhim halgonated butyl rubber expansion

Nizhnekamskneftekhim started its fourth line for halogenated butyl rubber on 22 April. The first line was introduced in 2004, a second unit in 2007 and the third in 2011. Robots are capable of producing briquettes stacking all types of containers including 450, 540, 900 and 1080 kg.

Nizhnekamskneftekhim is the world's third largest manufacturer and supplier of halobutyl rubber. In

2014, the company exported 98% of production. The main consumers of Nizhnekamsk halobutyl rubber are the major foreign manufacturers of tyres, accounting for 78% of total exports.

| Russian Tyre Production (unit-mil pieces) |            |            |
|---|------------|------------|
| Product                                   | Jan-Mar 15 | Jan-Mar 14 |
| Car Tyres                                 | 8.8        | 8.1        |
| Lorry tyres                               | 1.4        | 1.3        |
| Agricultural tyres                        | 1.2        | 1.6        |
| Total                                     | 11.4       | 11.1       |

The capacity to produce halobutyl rubbers has been increased by 40,000 tpa, which will allow the company to strengthen its position both in the domestic and international market rubbers. By the end of 2014 NKNK held 42% share in the world market for polyisoprene rubber and 16% for butyl rubber. The company also intends to complete the modernisation of the linear alphascheduled plant, for the third quarter. Nizhnekamskneftekhim has signed a new long-term five-year agreement in April with Michelin for the supply of synthetic rubber.

| Russian Carbon Black Market (unit-kilo tons) |       |       |       |
|--|-------|-------|-------|
| Jan-Dec 14 Jan-Dec 13 Jan-Dec 12             |       |       |       |
| Production                                   | 783   | 765.9 | 729.8 |
| Exports                                      | 545.9 | 517.3 | 449.8 |
| Imports                                      | 3.3   | 5.4   | 5.1   |
| Market Balance                               | 240.4 | 254   | 285.1 |

### Russian carbon black market 2014

Carbon black consumption in Russia declined by 5% in 2014 to 240,400 tons, although Russian producers were able to increase production due to demand for exports. Russia produced 783,000 tons in 2014, 2% more than in 2013.

Exports increased by 6% and totalled 545,900 tons. Imports into Russia are negligible, amounting to

3,300 tons in 2014. Nokian Tyres, the main consumer of imported carbon black, reduced purchases by 15% last year against 2013.

### **Methanol & fertilisers**

| Russian Methanol Production (unit-kilo tons) |            |            |
|--|------------|------------|
| Producer                                     | Jan-Mar 15 | Jan-Mar 14 |
| Shchekinoazot                                | 118.7      | 117.8      |
| Sibmetakhim                                  | 212.1      | 217.8      |
| Metafrax                                     | 266.0      | 265.5      |
| Akron  | 25.1       | 20.9       |
| Azot, Novomoskovsk                           | 83.9       | 84.9       |
| Angarsk Petrochemical                        | 3.2        | 1.6        |
| Azot, Nevinnomyssk                           | 28.6       | 29.9       |
| Tomet  | 189.4      | 199.0      |
| Totals                                       | 927.2      | 937.3      |

### Russian methanol, Jan-Mar 2015

Methanol production in March amounted to 328,200 tons, 21% more than in February. The main reason was that Tomet increased production to cover its planned stoppage for maintenance starting in April. The Togliatti plant produced 79,300 tons which was 90% up over February. Other producers showed similar performance to the previous month.

For the first quarter Russian production totalled 927,200 tons against 937,300 tons in the same period last year. The stoppage at Togliatti is expected to continue until the end of May, affecting production volumes and exports.

Russian methanol producers sold 137,500 tons on the domestic market in March, 9% higher than in February. Metafrax, Sibmetakhim and Tomet accounted for 85% of sales in March. Sibmetakhim supplied 47,200 tons, Metafrax 34,800 tons and Tomet 35,000 tons. Other producers included Shchekinoazot which supplied 3,600 tons, and Azot at Novomoskovsk 13,200 tons.

| Russian Methanol Consumption<br>(unit-kilo tons) |            |            |  |
|--|------------|------------|--|
| Consumer   | Jan-Mar 15 | Jan-Mar 14 |  |
| Nizhnekamskneftekhim                             | 62.7       | 58.1       |  |
| Togliattikaucuk                                  | 27.9       | 25.3       |  |
| Uralorgsintez                                    | 15.7       | 19.1       |  |
| SIBUR-Khimprom                                   | 3.3        | 2.5        |  |
| Tobolsk-Neftekhim                                | 10.3       | 12.6       |  |
| Ektos-Volga                                      | 12.4       | 10.7       |  |
| Omsk Kaucuk                                      | 23.1       | 17.6       |  |
| Novokuibyshevsk NPZ                              | 10.0       | 11.6       |  |
| Uralkhimplast                                    | 8.2        | 7.0        |  |
| Slavneft-Yanos                                   | 5.1        | 2.1        |  |
| Others   | 216.1      | 185.7      |  |
| Total  | 394.8      | 352.2      |  |

MTBE and domestic gas producers accounted for 62% of total purchases in March and 26% to Russian manufacturers of rubber and formaldehyde and its derivatives. Consumption on the domestic market amounted to 394,800 tons in the first quarter this year against 352,200 tons in the same period last year. Nizhnekamskneftekhim was the largest individual buyer as previously.

Aside Tomet's maintenance shutdown at Togliatti in April affecting supply, Shchekinoazot undertook a maintenance shutdown at its M-450 plant at the end of March, lasting into the first half of April. This was the longest shutdown made by the plant since its introduction in 2011. Aside general repairs on the boiler, etc., the company took the opportunity to repair the installation for urea formaldehyde concentrate production. In parallel

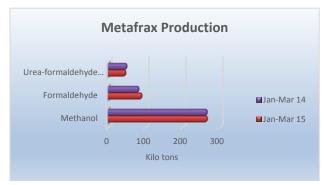
with the M-450, the company undertook repairs on the caprolactam unit.

| Russian Methanol Exports (unit-kilo tons) |            |            |  |
|---|------------|------------|--|
| Producer                                  | Jan-Mar 15 | Jan-Mar 14 |  |
| Azot Nevinnomyssk                         | 0.0        | 16.3       |  |
| Azot Novomoskovsk                         | 38.9       | 26.8       |  |
| Akron                                     | 0.0        | 2.7        |  |
| Metafrax                                  | 82.8       | 126.5      |  |
| Sibmetakhim                               | 88.8       | 111.5      |  |
| Tomet                                     | 61.4       | 73.7       |  |
| Shchekinoazot                             | 86.5       | 101.4      |  |
| Total                                     | 358.5      | 458.8      |  |

### Russian methanol exports, Q1 2015

Outages, planned or unplanned, seem to have been the main cause of lower Russian methanol exports in February and March. Exports amounted to 105,100 tons in February, 12% less than in January. Due to reduced production Tomet at Togliatti reduced exports by 35% in February to 16,000 tons, whilst Sibmetakhim reduced shipments by 10% to 27,500 tons. The largest rise in February was recorded by Azot at Novomoskovsk, which increased exports 15% to 14,300 tons. Finland accounted for 49,800 tons of exports in February, Poland 12,600 tons, Slovakia 14,500 tons, and Romania 19,100 tons.

Exports amounted to 117,000 tons in March, 11% up on February. Sibmetakhim accounted for 26% of exports, Shchekinoazot 23%, Tomet 18% and Metafrax 19%. Azot was the smallest of the exporters, accounting for 14% of shipments.



### Metafrax Q1 2015

Metafrax increased revenues by 1.16 billion roubles in the first quarter in 2014 to 4.66 billion roubles in the first quarter this year. Methanol production was unchanged for the first quarter at 266,000 tons, whilst formaldehyde production increased by 10.4% to 81,900 tons and ureaformaldehyde fell by 5.7% to 45,700 tons.

In the first quarter, the company operated at 100% capacity. The share of exports in total

sales decreased by 5% to 41%. The net profit, according to preliminary data, rose 37% and amounted to 1.593 billion roubles. The growth in net income and revenues associated with the increase of volume of production and sales, favourable market conditions, as well as slightly positive exchange rate differences at the beginning of the year.

| Ammonium Chemical Project,<br>Mendeleevsk (unit-kilo tons) |       |     |  |
|--|-------|-----|--|
| Product Option 1 Option 2                                  |       |     |  |
| Ammonia  | 717.5 | 455 |  |
| Methanol   | 0     | 238 |  |
| Urea   | 717.5 | 0   |  |

### Ammonium project costs rise due to devaluation

Ammonium at Mendeleevsk has started commissioning for the new complex for the production of ammonia, urea and methanol. Completion of the project is scheduled for the fourth quarter of 2015, after commissioning is completed in August. The project involves the launch complex combined production of ammonia, methanol and urea with a combined capacity of 2,050 tons per day of ammonia per day and 688 tons of methanol based on technology supplied by

Haldor Topsoe. Production of granular urea comprises a capacity 2,050 tons per day is based on

technologies provided by Saipem SpA and Uhde Fertilizer.

# National Petrochemical Holding project-Nakhodka Preparations have started for the construction of the fertiliser complex at Nakhodka in the Russian Far East, which will be located near the VNKH project. The design capacity of the first phase of capacity for the production of ammonia gross amount of 2.1 million tpa, urea 2 million tpa and 1 million tpa of methanol. The NHC project is to be located in the village near the port of Kozmino East. The main sales markets will export markets of South and North-East Asia and India, some of the products are planned to be sold in the domestic market.

The budget of the project in mid-2014 was \$1.413 billion. The main creditors on the Russian side - VEB and AK Bars bank. The total cost of foreign investors millions of dollars. Ammonium has experienced a sharp rise in project costs in the construction of facilities for ammonia, methanol and urea production. The size of long term liabilities increased from

34.430 billion roubles at the end of 2013 to 74.9 billion roubles in 2014. The volume of short-term loans also increased almost doubled from 12.23 to 23 billion roubles. Three lines of credit were opened in 2011 with Vnesheconombank in US dollars for 4.5 years. The maturity ranges from 12.5 to 14.5 years. The budget of the project in mid-2014 was valued at \$1.413 billion.

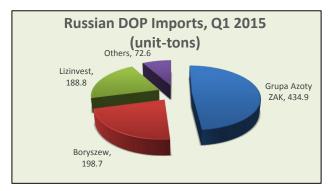
The project involves the launch complex combined production of ammonia, methanol and urea. This includes capacities of 2,050 tons 688 tons of methanol of ammonia per day and based on technology provided by Haldor Topsoe. Production of granular urea (capacity 2,050 tons per day) is to be conducted on technologies from Saipem and Uhde Fertilizer. The main shareholder of Ammonium is OOO Tatammony with a share of 46.44%, followed by 33.57% in the Investment Venture Fund of Tatarstan and another 19.99% owned VEB.

### **Organic Chemicals**

### Russian phthalic anhydride, Jan-Mar 2015

Exports of phthalic anhydride from Russia amounted to 5,230 tons in March, 17% more than in February 2015 and 11% higher than in March 2014. The major destinations for Russian exports in March included India (42% of Russia's supply), China (10%), Finland (8%) and the United Arab Emirates (8%). For the

first quarter phthalic anhydride exports from Russia amounted to 12,270 tons which is 35% lower than the same period in March 2014.



| Russian DOP    | Russian DOP Market (unit-kilo tons) |            |  |
|----------------|-------------------------------------|------------|--|
|                | Jan-Dec 14                          | Jan-Dec 13 |  |
| Production     | 66.7                                | 71.4       |  |
| Exports        | 1.7                                 | 0.8        |  |
| Imports        | 0.2                                 | 2.0        |  |
| Market Balance | 65.1                                | 72.5       |  |

### Russian DOP, Jan-Mar 2015

DOP imports into Russia amounted to 530 tons in March, 64% more than in February. Grupa Azoty supplied 49% of DOP imports in March, and Boryszew 29%. Other importers included Ukrainian company Lizinvest (16% of imports). For the first quarter imports totalled 895 tons against 20.6 tons in the same period last year.

DOP production was resumed by Kamteks-Khimprom in early March, although Gazprom neftekhim Salavat stopped in the same period for a

maintenance shutdown. The Salavat plant resumed production in early April. Roshalsky Plant of Plasticizers continues to produce and sells DINF, but is not planning to restart DOP production.

### Russian butanol exports, Jan-Mar 2015

Russian exports of butanols in March amounted to 18,090 tons, 3.7 times more than February and 2.6 times higher than in March 2014. The share of normal butanols in total Russian

exports in March 2015 amounted to 75%, and isobutanol 25%. Exports were sent mainly to China (70%) and Finland (8%). Gazprom neftekhim Salavat shipped 10,680 tons in March (59% of total

| Russian N-butanol Exports (unit-kilo tons)  |            |            |  |
|---|------------|------------|--|
| Producer                                    | Jan-Mar 15 | Jan-Mar 14 |  |
| Gazprom Neftekhim Salavat                   | 17.8       | 6.4        |  |
| SIBUR-Khimprom                              | 1.2        | 0.6        |  |
| Angarsk Petrochemical                       | 6.7        | 1.2        |  |
| Total                                       | 25.7       | 8.2        |  |
| Russian Isobutanol Exports (unit-kilo tons) |            |            |  |
| Producer                                    | Jan-Mar 15 | Jan-Mar 14 |  |
| Gazprom Neftekhim Salavat                   | 3.4        | 2.7        |  |
| SIBUR-Khimprom                              | 3.4        | 7.7        |  |
| Angarsk Petrochemical                       | 2.7        | 1.0        |  |
| Total                                       | 9.5        | 11.4       |  |



supply). Whilst Angarsk Petrochemical Company exported 4,360 tons (24%), and SIBUR-Khimprom 3,050 tons (17%). For the first quarter exports of butanols amounted to 35,200 tons, 80% more than the same period in 2014.

### Russian butanol production, Jan-Mar 2015

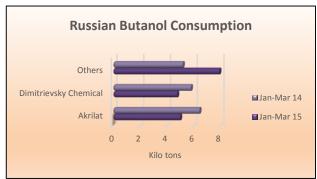
Butanol production amounted to 24,390 tons in March, 19% more than in February and 34% higher than in March 2014. The proportion of n-butanol in production of butanols was 62%, and isobutanol 38%. Gazprom neftekhim Salavat produced 11,970 tons in March (49% of total Russian production). SIBUR-Khimprom produced 6,930 tons (28%), Angarsk refinery 4,130 tons (17%), and

Azot Nevinnomyssk 1,370 tons. For the first quarter Russian butanol production totalled 65,240 tons, which is 22% more than in 2014. The proportion of n-butanol in gross production was 61%, and isobutanol 39%. Full data by plant is available on the Statistical Database.

### Russian butanol domestic sales, Q1 2015

Butanol sales on the domestic market increased 16% in March against February to 5,570 tons. The proportion of n-butanol in gross sales in March this year comprised 70%, and isobutanol

30%. Deliveries from SIBUR-Khimprom amounted to 2,900 tons (52% of Russia's total shipments), Gazprom neftekhim Salavat 2,340 tons (42%), Azot Nevinnomyssk 280 tons (5%), and Angarsk Petrochemical Company 6 tons (1%). Akrilat bought 1,240 tons in March, 31% down against February (22% of Russian shipments). Dmitrievsky Chemical Plant increased its purchases of butanol in March by 90% to 2,220 tons (40% of Russia procurement). Other buyers included Volzhskiy Orgsintez, 510



tons or 9% of total purchases. For the first quarter of 2015 sales of butanols on the domestic market totalled 17,720 tons which was 11% up on 2014.

### Russian Paints increases production 12.8%

Paint manufacturer Russian Paints increased production by 12.8% in the first quarter against the same period in 2014 and totalled 7,062 tons. The best results were shown in the divisions for waterborne paints, enamels and road marking.

The improvement in production was attributed to the launch of additional production lines for the production of small-scale production. In the decorative paints division for the first guarter, sales grew

### Other solvents

Metafrax produced 2,000 tons of pentaerythritol in March, 5% more than in February. Production totalled 6,000 tons in the first quarter, 19% up on the same period in 2014.

Discussions are underway with Naftan in Belarus for the supply of possible supply of 1500-1600 tons of acetone cyanohydrin per month, which would comprise the total amount of production. DOS halted production of methyl methacrylate due to expensive imported raw materials, but may be able to restart if a deal can be concluded with Naftan.

by 18%. Sales of coatings for auto repair increased by 5%, and industrial coatings by 15%.

### **Other Chemicals**

### Bor-2014

Bor produced 81,234 tons of boron products in 2014 and shipped 75,402 tons to customers both domestically and for export.

This measures against 76,199 tons and 76,240 tons in 2013 respectively. The plant was faced with a negative market conditions in 2014, when the price of boron products in the first half fell to a critically low level.

# Bor Dalnegorsk-Production Sales - 76.24 - 75.402 - 76.199 - 81.234 65 70 75 80 85 90 Kilo tons

### Polyplastik Q1 2015

NPP Polyplastik increased sales of composites by 6% in the first quarter this year to 15,940 tons against 14,980 tons in 2014. Growth was driven by a set of measures adopted in the middle of last year: including planning and cost optimization, and restructuring of production. The largest consumer of composites supplied by Polyplastik consists of

the automotive industry, accounting for 38% of sales in the first quarter. The low exchange rate at the beginning of the quarter led to automakers localising raw material purchases. Another 24% was consumed in the construction industry, and 18% in the production of household appliances. For the whole of 2015, Polyplastik hopes to sell around 80,000 tons of composites.

### Kurskhimvolokno-investments

Kurskkhimvolokno (a subsidiary of Kuibyshevazot) is ready to complete the expansion of capacities for

### Russian fibres 2014

Demand for synthetic fibres in Russia is still met to a large degree by imports, whilst domestic production capacity often does not exceed 50%. Russian capacity for polypropylene staple fibre operates around 30% despite the huge potential demand in road construction. Russian production of polypropylene staple fibre totalled 2,600 tons in 2014, 3.7% down on 2013, whilst consumption increased by 67.7% to 5,900 tons. Viscose staple consumption increased 25.3% to 11,700 tons, all of which came from imports. Polyester staple fibre production in 2014 increased by 11.5% to 58,600 tons. Imports fell by 3.5% to 115,900 tons most of which was from Asia and Belarus.

the production of technical yarns for cord fabrics under state support. The project involves increasing production volumes of high-strength industrial yarns by 7,900 tpa and reduce imports of polyamide cord fabric by around 5,000 tpa.

The capital cost is estimated at 850 million roubles. Other projects planned by Kurskkhimvolokno include the expansion of capacity for twisted multifilament yarns of 180 tons per annum. Investment in the project is estimated at 206 million roubles.

### **Evropolimer new production lines for 2015**

most of which was from Asia and Belarus. Evropolimer, a major producer of films and plastic pipes in the Rostov region, plans to launch two production lines in 2015 at a total cost of €3.7 million. The company

plans to launch a production line for a five-layer film, which can be used in agriculture and construction industry. The total investment in the project is €2.4 million. Also at this year scheduled for launch line for production of thin-film stretch, foam worth €1.3 million. The new production facility will also be focused on the production of packaging materials, polyethylene pipes and other types of film. Its total capacity will reach more than 5,000 tons of products per month. Evropolimer specializes in the production of multilayer films of polyethylene pipes and PVC packaging.

### Kaustik-magnesium hydroxide

Kaustik at Volgograd plans to start commercial production of magnesium hydroxide and magnesium oxide in 2015. The project involves the production of nanostructured oxide and magnesium hydroxide. Production of nanostructured oxide and magnesium hydroxide is a joint project of NIKOCHEM and RUSNANO. The project is implemented by C NikoMag, located in the industrial area of Kaustik at Volgograd. The capacities of the new facilities include 25,000 tpa of magnesium hydroxide and 30,000 tpa of magnesium oxide.

Most of the high-purity magnesium hydroxide is to be used as effective and environmentally-retardant filler in the production of polymeric compounds. However, high-purity magnesium oxide is widely used in various industries which are at present imported into Russia. Magnesium oxide production is expected to start in the fourth quarter.

### **Belarus**

| Azot Grodno Production (unit-kilo tons) |            |            |
|---|------------|------------|
| Product                                 | Jan-Mar 15 | Jan-Mar 14 |
| Methanol                                | 23.3       | 19.4       |
| Caprolactam                             | 31.8       | 34.9       |
| Polyamide primary                       | 21.0       | 20.0       |
| Polyamide filled                        | 1.9        | 2.5        |
| Ammonia                                 | 293.9      | 280.2      |
| Urea                                    | 283.5      | 268.2      |
| Fertilisers                             | 210.6      | 206.3      |
| Fibres                                  | 6.4        | 10.0       |

### Azot Grodno, Jan-Mar 2015

Azot produced 8,000 tons of methanol in March, 11% up on February. For the first quarter production totalled 23,300 tons which was 20% up on the same period in 2014. In other areas of production caprolactam declined from 34,900 tons in the first quarter last year to 31,800 tons in January to March 2015. Ammonia and urea production slightly surpassed last year's figures.

### Naftan-benzene production

Belarus produced 12,100 tons of benzene, 9% more than in February. Production totalled 34,700 tons in the first quarter, 6% less than in the same period in 2014.

| Belarussian Po | Belarussian Polymer Imports (unit-kilo tons) |            |  |
|----------------|--|------------|--|
| Product        | Jan-Mar 15                                   | Jan-Mar 14 |  |
| PVC            | 5.7  | 6.8        |  |
| Polypropylene  | 12.4   | 11.0       |  |
| LDPE           | 8.6  | 6.4        |  |
| HDPE           | 4.0  | 7.8        |  |
| Polystyrene    | 1.5  | 2.2        |  |
| Total          | 26.2   | 27.4       |  |

### Belarus polymer imports, Jan-Feb 2015

Polyethylene imports amounted to 12,600 tons in the first two months in 2015, 11.8% down on the same period in 2014. HDPE saw the largest fall in demand, dropping from 7,800 tons in the first two months in 2014 to 4,000 tons this year. LDPE imports rose, by contrast from 6,400 tons to 8,600 tons. Polypropylene imports rose by 13.5% in the first two months this year to 12,200 tons.

| Ukrainian Polypropylene Imports<br>(unit-kilo tons) |            |            |
|---|------------|------------|
| Category  | Jan-Mar 15 | Jan-Mar 14 |
| Homo  | 16.1       | 17.9       |
| Block   | 2.3        | 2.6        |
| Raffia  | 0.0        | 0.0        |
| Random  | 2.7        | 2.1        |
| Propylene copolymers                                | 0.4        | 0.5        |
| Other   | 0.2        | 0.4        |
| Total   | 21.7       | 23.5       |

### Ukraine

### Ukrainian polymer market, Jan-Mar 2015

HDPE imports into Ukraine amounted to 19,100 tons in the first quarter, 29% down on the same period last year. Polypropylene imports totalled 21,700 tons in the first quarter against 23,500 tons in the same period last year. The largest drop occurred in the supply polypropylene-block due to the reduction in demand in for usage in injection moulding and extrusion of pipes. By contrast to polyolefins, PVC imports into Ukraine increased 13% in the first quarter to 19,400 tons. The largest suppliers of PVC

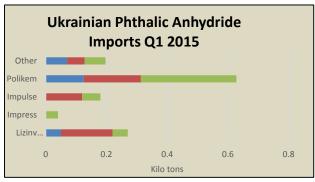
to the Ukrainian market in the first quarter came from Europe, particularly Poland, and totalled 8,700 tons. EPS imports rose 44% in the first quarter to 4,300 tons. The main source of EPS imports was SIBUR-Khimprom.

### Sumykhimprom-titanium dioxide exports increase

Sumyhimprom increased exports of TiO2 by 37% in the first two months in 2015 up to 4,300 tons. Despite the ongoing conflicts with Moscow, the Russian market accounted for around half of Sumykhimprom's exports.

### Ukrainian benzene, Jan-Mar 2015

Ukrainian companies exported only 703 tons in March after shipping 4,600 tons of benzene in February. Zaporozhkoks was the sole Ukrainian exporter. Ukrtatnafta resumed export of the product in February for the first time since October 2014 and shipped 3,800 tons. At the same time, Zaporozhkoks reduced exports by 13% to 814 tons. Exports totalled 5,500 tons in the first two months in 2015, 2.4 times lower than in the first two months of 2014.



### Ukrainian methanol, Jan-Mar 2015

Ukrainian consumers purchased 13,435 tons of methanol in the first quarter this year, with sources divided between Belarus and Russia. The main buyers included the gas companies and KarpatSmol, a resin producer at Kalush. The trend of currency depreciation has slowed recently allowing some fall in domestic methanol prices.

### Ukrainian phthalic anhydride, Jan-Mar 2015

Imports of phthalic anhydride in Ukraine amounted to 536 tons in February, 2.2 times more than in January of this year, and 3.6 times higher than in February 2014. Polikem bought 188 tons (35% of total imports) and Lizinvest 170 tons (32%). In addition, the coatings manufacturer Impulse bought 120 tons in February. Imports were divided mainly between Belarus 260 tons and Russia 240 tons.

Imports in March amounted to 534 tons and 1,315 tons for the first quarter, 41% down on 2014. Ukrainian imports of phthalic anhydride amounted to 534 tons in March, 76% more than in March 2014. Polikem bought 315 tons (59% of total imports), Lizinvest 5 tons (9%), and Impulse 6 tons (11%). From the imports, 445 tons came from Belarus followed by 6 tons from Russia, 2 tons from Bulgaria and South Korea 18 tons. Imports totalled 1,320 tons in the first quarter which was 19% down on 2014.

### Uzbek GTL project

Uzbekistan GTL has entered a jv with the Japanese Hitachi Zosen Corporation to construct a plant for the synthesis of fuels from natural gas. The project is part of building a GTL plant on the basis of Shurtan Gas Chemical Complex. The first batch of equipment for reactor LTFT (Low Temperature Fischer-Tropsch) is expected to be delivered by early June and construction starting soon after. Investments in new production facility is estimated at \$5.6 billion. The bulk of the funds are expected to attract project financing from a consortium of foreign banks. The project provides processing 3.5 billion cubic metres of gas, followed by the production of 864,000 tpa of diesel fuel, 304,000 tpa of jet fuel, 395,000 tpa of naphtha. The EPC-contract for the construction of the technological part of the plant was signed with South Korea's Hyundai Engineering & Construction. Completion is scheduled for August 2017.

Uzbekistan GTL joint venture was formed in November 2009 with the participation of Uzbekneftegaz, Sasol and Petronas. At the moment, Sasol and Uzbekneftegaz each hold an interest of 44.5% of the project, and Petronas 11%.

### Ukrainian DOP, Jan-Mar 2015

DOP imports into Ukraine amounted to 197 tons in March, three times higher than in February this year, but the two times less than in March 2014. Galich-Cable bought 64 tons, or 32% of total imports and Padana Chemical Compounds 46 tons, or 23%. Polish producer Boryszew accounted for 54% of imports and Czech producer Deza 23%. For first quarter DOP imports into Ukraine amounted to 312 tons, four times less than the same period in 2014.

### **Central Asia**

### **Uzbek PVC project**

Uzkimyosanoat (Uzkhimprom) intends to begin construction of the PVC plant at Navoiazot in late 2015 or early 2016. The aim is to start production in 2019. Uzkimyosanoat has been trying to build a PVC plants for several years, constantly postponing deadlines. Previously to the project involved the Korean company ISU Corp. and UAE company Mubadala Development.

The project is now based on a contract Uzkimyosanoat signed with the Chinese company China CAMC

Uzbek expansion of fertiliser capacity Uzbekistan aim to increase capacity of ammophos from 73,500 tpa in 2015 to 208,300 tpa in 2019. The increase is due to the modernisation of Ammophos-Maxam, which is one of key producers of ammophos in Uzbekistan. Uzbekistan will launch capacities on production of nitrogen-phosphorus-potassium fertilizer (NPK) on two chemical enterprises by 2017, including Ammophos-Maxam with the capacity of 160,000 tpa and Samarkandkimyo with a capacity of 240,000 tpa. Total cost of both projects amounts to \$37.1 million and both of them were included in the modernization and diversification of production for 2015-2019. Production of NPK-fertilizers at Samarkandkimyo will be created in cooperation with China's CITIC Construction. The plant will be commissioned by the end of 2015.

Engineering total cost of \$439.8 million. It involves the construction of turnkey complex for the production of 100,000 tpa of PVC, 75,000 tpa of caustic soda and 300,000 tpa of methanol. The project is being financed by a loan from the Fund for Reconstruction and Development of Uzbekistan worth \$65.970 million combined with preferential long-term foreign loans of \$373.830 million.

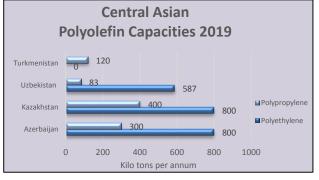
The production capacities of the project include 100,000 tpa of PVC, 70,000 tpa of caustic soda and 300,000 tpa of methanol. As a creditor, the country's authorities have drawn the Fund for Reconstruction and Development of Uzbekistan.

### Fluor-petrochemical complex for SOCAR

Fluor has won the tender for the management of the construction and design of the SOCAR petrochemical project in Azerbaijan. The value of the first phase of the project, together with interest on the loans, will reach

\$8.45 billion. Other participating companies included SNC-Lavalin, Tecnidas Reunidas and WorleyParsons.

Fluor will oversee the implementation stages of the design, procurement and construction of gas processing and petrochemical industries. The project will be built about 60 kilometres from Baku and will consist of three processing plants and power plants. Construction of the complex will last 4-5 years. 30% of the project will be carried out with public funds, the remaining money will come



from loans.

The capacity of the crude oil processing will comprise 8.5-9 million tpa, the gas processing plant 12 billion

### **SOCAR-Polymer selects Ineos for PE project**

SOCAR-Polymer has selected Innovene technology from Ineos for the production of HDPE at the new complex being located in the Sumgait Chemical Industrial Park (SKSP). SOCAR Polymer will produce a comprehensive range of polyethylene grades, including PE 100 pipe products. It is planned that the plant will be launched in 2018.

cubic metres per annum. The petrochemical production plant includes capacities of 800,000 tpa of polyethylene and 300,000 tpa of polypropylene.

### **Tecnimont-SOCAR**

SOCAR signed a contract on 14 April with Maire Tecnimont SpA for the construction of a

polypropylene plant for its subsidiary SOCAR Polymer. The total contract value amounts to €350 million. The new plant will be located in the Sumgait Chemical Industrial Park, about 30 km north of Baku (Azerbaijan).

The new petrochemical plant complex includes facilities of 800,000 tpa of polyethylene and 300,000 tpa of polypropylene. The complex is not scheduled for launch until 2023, with construction to begin in the first quarter of 2019.

### Relevant Currencies

Czech crown. Kc. \$1=20.852. €1=27.444: Hungarian Forint. Ft. \$1=229.253. €1=310.141: Polish zloty. zl. \$1=3.016. €1=4.14 Ukrainian hryvnia. \$1=22.9 €1=24.9: Rus rouble. \$1=50.8. €1=55.3

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