Chemical Information Resources for East Europe and CIS

CIREC MONTHLY NEWS

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

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Issue 355, 19 June 2020

Key points from Issue 355

Central European petrochemical markets

- Unipetrol completed its two-month-long planned operational turnaround at Litvinov in June
- After completion of the maintenance and modernisation programme at Litvinov the Orlen Group switched attention to Plock and Wloclawek
- MOL completed delivery of chemical plant equipment for the polyol complex at Tiszaujvaros in May
- Grupa Azoty has secured the finance for up to zl 6 billion to construct the polypropylene and propylene projects under the project vehicle Polimery Police

Russian chemical production

- Russian chemical production rose 5.6% in the first four months in 2020, driven mostly by an increase in polymers
- Ethylene production exceeded 1.4 million tons compared to 1.1 million tons a year earlier.
- Benzene production reached 505,000 tons in the first four months, which is 1.7% more than the same in 2019
- The production of polymers amounted to 3.3 million tons, which is 17.4% more than in the same period last year.

Russian chemical trade

- Russian polypropylene exports rose to 193,000 tons in January to April 2020, up almost three-fold from 67,600 tons in 2019
- Russian TDI imports dropped to 14,500 tons in the first four months in 2020 against 18,800 tons in the same period last year whilst MDI imports dropped from 46,500 tons to 41,900 tons
- Russian exports of synthetic rubber amounted to 280,500 tons in the first four months in 2020, down from 356,800 tons
- PTA imports into Russia totalled 103,400 tons in the first four months in 2020 against 149,000 tons

Russian chemical projects

- The RPK-Vysotsk Lukoil-II terminal, which specializes in the transhipment of oil products, intends to convert part of its facilities for the export of 1 million tpa of methanol and 160,000 tpa of acrylonitrile
- Construction of the methanol and mineral fertiliser plant at Nakhodka in the Russian Far East is continuing, whilst Johnson Matthey has won a contract for the Skovorodino methanol project
- In the second half of May Nizhnekamskneftekhim received the first batch of bulky heavy equipment for the new 600,000 tpa ethylene cracker
- Maire Tecnimont has won the contract for the Amur Gas Chemical Complex

CENTRAL & SOUTH EAST EUROPE

MOL completes delivery of main equipment for polyol complex

MOL's €1.2 billion investment into a polyol production plant in Hungary received chemical plant equipment by river transport over April and May, transported mostly by cargo ships. Fully assembled modules arrived from Thailand, while other parts of the complex came from Spain to China. The sea cargo reached the Romanian port of Constanta in the Black Sea, from where it continued his journey through the Danube and Yew rivers to Tiszaujvaros.

MOL-Margins 2020					
Macro figures	***Jan***	***Feb***	***Mar***	***Apr***	***May***
Brent dated ($/bbl)	63.5	55.4	31.8	18.5	29.0
MOL Group refinery margin ($/bbl)	4.8	4.8	9.3	9.1	0.4
MOL + Slovnaft refinery margin ($/bbl)	5.6	5.4	9.8	9.8	0.7
MOL Group petrochemicals margin (€/ton	269.0	335.5	546.5	577.4	402.2

The complex under construction is being designed to process 200,000 tpa of propylene oxide for conversion into polyol. Producing polyols could help protect the profitability of petrochemicals for MOL providing a much higher value-added product. The production of polyols could result in higher margins per ton compared to the production of polypropylene. MOL estimates that mid-cycle margins could generate more than $170 million in annual EBITDA growth and $100 million in the most pessimistic estimates.

Central European crude supply and petrochemical margins

MOL's refinery profit margin shrank to a historic low in May due to oversupply, whilst the petrochemical margin dropped was less affected versus April. MOL operated its refineries at a margin of just 40 cents a barrel in May, although it had made a near-record profit of $9.1 in April and $9.3 in March. MOL's petrochemical segment was less affected by the rebalancing of oil prices and declining product demand, but still dropped to €402.2 per ton. MOL said its refineries were running at 70%-75% of capacity in May and its steam crackers at around 90%.

Central European Petrochemical Margins 2020 (€ per ton)			
Producer	***May 20***	***Apr 20***	***May 19***
PKN Orlen	843	944	898
MOL	402.2	577.4	414.7

PKN Orlen's downstream margin amounted to $4.7 per barrel in May 2020 against $14.3 in April and $11.5 in May 2019. The model refining margin amounted to $1.1 in May this year. compared to $9.6 a month earlier and $7 in May 2019. The model petrochemical margin for Orlen dropped from €944 per ton in April to €843 in May and against €898 per ton in May 2019.

PKN Orlen is close to receiving a final decision on the acquisition of Grupa Lotos, which is conditional on EU approval. At the beginning of May, Orlen sent proposals to make concessions to Brussels so that the Commission could possibly agree to its merger with Lotos. The EU has previously been concerned that the merger would lead to a monopoly position being held in the Polish fuel sector.

Unipetrol completes large-scale maintenance programme

Unipetrol completed its two-month-long planned operational turnaround at Litvinov in June. Starting on 9 April the four-year cycle maintenance shutdown covered the entire production complex including the preparation of the facilities for the next operational cycle. Olefin and polyolefin production were affected in May.

Czech Petrochemical Exports (unit-kilo tons)		
Product	***Jan-Apr 20***	***Jan-Apr 19***
Ethylene	5.1	34.4
Propylene	3.1	1.9
Butadiene	0.0	2.0
Benzene	6.2	24.2
Toluene	2.3	5.0
Ethylbenzene	29.4	53.5

Up to 6,000 maintenance tasks and a range of investment projects were implemented during the four-year cycle. The key projects included a repair of the furnace of the atmospheric crude oil distillation unit, as well as servicing of large compressors at the steam cracker. Foreign workers who arrived for the project were required to undergo a 14-day work quarantine period. These workers were subjected to a special regime when they were not allowed to move freely and use public transport.

Prior to the shutdown Unipetrol announced completion of the polyethylene 3 (PE3) installation at Litvinov. The production capacity of the new PE3 installation, which will replace the currently operating PE1 unit, has a capacity of 270,000 tpa. The plant could be introduced as soon as Unipetrol considers the market circumstances have improved.

Polish PTA Exports (unit-kilo tons)		
Country	***Jan-Mar 20***	***Jan-Mar 19***
Belarus	9.4	6.8
Russia	0.0	1.0
Switzerland	3.7	0.9
Lithuania	2.2	1.0
Germany	83.5	87.6
Italy	0.9	0.6
Others	4.0	1.1
Total	105.7	98.1

Paraxylene-PTA shutdown in Poland

After completion of the maintenance and modernisation programme at Litvinov the Orlen Group switched attention to starting shutdowns of several petrochemical installations at Płock and Wloclawek. The maintenance programme included PTA plant at Wloclawek which commenced on 10 June and is rescheduled to restart on 15 July. The paraxylene plant at Plock started a maintenance shutdown from 13 June and is expected to restart on 6 July.

PKN Orlen stated that the shutdowns will be carried out under the supervision of a qualified staff of technologists. In the first quarter this year PTA exports from the Wloclawek plant amounted to 105,700 tons against 98,100 tons in the same period in 2019. The paraxylene plant at Płock has a capacity of 400,000 tpa and the PTA plant at Wloclawek a capacity of 600,000 tpa.

Polish Propylene Imports (unit-kilo tons)		
Country	***Jan-Mar 20***	***Jan-Mar 19***
Austria	0.0	2.3
Czech Republic	3.1	0.9
Germany	0.0	5.0
Lithuania	4.8	0.0
Russia	5.6	13.0
Ukraine	18.5	12.8
Slovakia	0.0	0.0
Hungary	0.0	5.1
Others	1.0	0.0
Total	32.9	39.1

Polimery Police secures finance for polypropylene project

Grupa Azoty has secured the crucial finance worth up to zl 6 billion (€1.347 billion) in order to construct the polypropylene and propylene plants under the project vehicle Polimery Police. Without the agreements, Grupa Azoty itself would not be able to finance this investment.

This is a larger-scale project from the original concept drawn up in 2016 as it besides propylene will include the production of polypropylene, and also the entire infrastructure base. Around zl 7 billion had been assumed as necessary to finance the entire project framework, and thus financial agreements concluded by Grupa Azoty secures most of this target. The Polimery investment is already underway and will change the face of Police as a city and its position on the industrial map of Poland.

Serbian Chemical Exports (unit-kilo tons)		
Product	**Jan-Mar 20**	***Jan-Mar 19***
Polyethylene	26.1	24.0
Polypropylene	4.7	3.8
Styrene Butadiene Rubber	5.0	4.5
Methanol	30.3	25.3
Acetic Acid	25.6	18.4

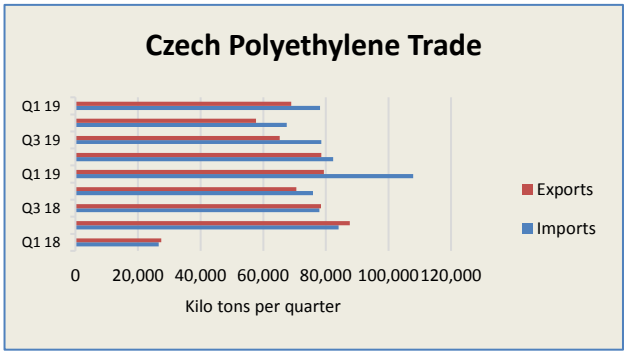
HIP Petrohemija restart

After a three-week standstill, HIP-Petrohemija at Pancevo restarted ethylene production on 23 May, in addition to restarting the HDPE plant at Pancevo and synthetic rubber plant at Elemir. The domestic and foreign markets were properly supplied with petrochemical products during the outage.

Czech Petrochemical Imports (unit-kilo tons)		
Product	***Jan-Apr 20***	***Jan-Apr 19***
Ethylene	2.2	0.0
Propylene	14.3	12.8
Butadiene	13.7	6.0
Benzene	27.0	31.0
Toluene	1.4	0.0
Styrene	11.4	9.2

Czech petrochemical trade, Jan-Apr 2020

Czech trade in chemical and petrochemicals encountered numerous difficulties in April due to the pandemic combined with the shutdown at Unipetrol, although exports and imports some products fared better than others. Ethylbenzene exports from the Czech Republic to Poland were not recorded in April although benzene and propylene imports were similar to other months in 2020. As a result of the disruption to trade, exports of ethylbenzene dropped in the first four months from 53,500 tons to 29,400 tons.



Propylene imports into Czech Republic amounted to 14,300 tons in the first four months in 2020 against 12,800 tons in the same period in 2019, whilst benzene imports dropped from 31,000 tons to 27,000 tons.

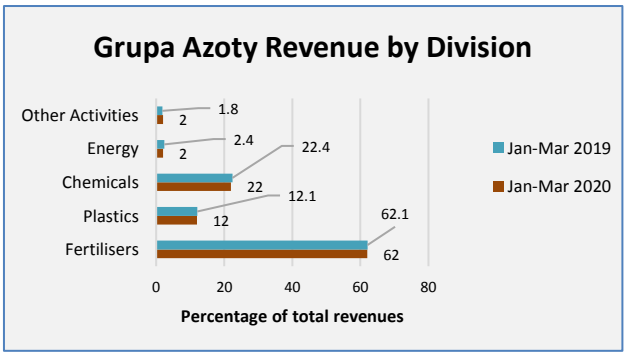
In other product areas imports of methanol dropped to 4,043 tons in April from the monthly average in the first quarter of around 9,000 tons. Russian deliveries were significantly reduced. A total of 30,500 tons of methanol was imported into the Czech Republic in the first four months. For isopropanol, imports rose from 1,156 tons in the first four months in 2019 to 1,714 tons in the same period in 2019. The two largest suppliers were Germany and the Netherlands.

Polish Chemical Production (unit-kilo tons)		
Product	***Jan-Apr 20***	***Jan-Apr 19***
Caustic Soda Liquid	124.4	111.8
Caustic Soda Solid	25.6	17.7
Ethylene	154.9	179.7
Propylene	141.6	142.6
Butadiene	20.5	22.2
Toluene	3.6	4.3
Phenol	17.2	16.8
Caprolactam	54.1	59.0
Acetic Acid	1.8	2.5
Polyethylene	115.9	133.1
Polystyrene	22.7	22.2
EPS	29.8	33.9
PVC	88.9	94.9
Polypropylene	116.6	116.3
Synthetic Rubber	94.5	95.3
Ammonia (Gaseous)	727.2	946.0
Ammonia (Liquid)	36.0	34.6
Pesticides	27.3	22.2
Nitric Acid	841.0	844.0
Nitrogen Fertilisers	749.0	758.0
Phosphate Fertilisers	142.7	168.7
Potassium Fertilisers	132.8	148.7

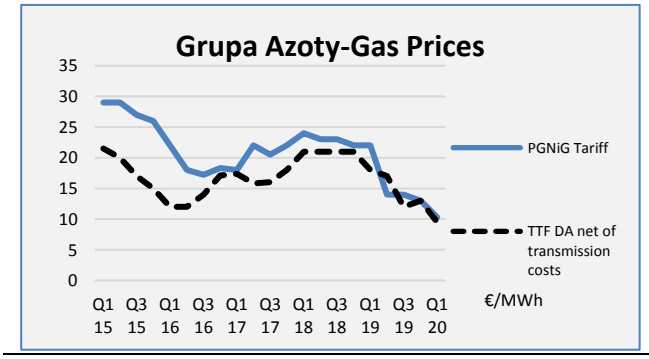
MDI imports into the Czech Republic dropped slightly in April but still rose from 8,200 tons in the first four months last year to 8,700 tons. TDI imports dropped from 636 tons in March to 330 tons in April. Regarding DINP plasticizers, imports into the Czech Republic dropped from 930 tons in March to 265 tons in April, whilst exports dropped to 3,047 tons from 4,218 tons.

Grupa Azoty Q1 2020 performance relatively good

The net profit of Grupa Azoty in the first quarter amounted to zl 180.7 million versus zl 294.8 million in the same period in 2019. The EBITDA result dropped to zl 475.7 million against zl 608.4 million. Grupa Azoty's operating profit in the first quarter amounted to zl 286 million, against zl 408.1 million. The pandemic situation appears not impacted badly on Grupa Azoty thus far, although market forecasts could be negative.



Export sales have taken place without major disturbances, although fees for logistics services have increased. Net profit in the first quarter of 2020 amounted to zl 196 million against zl 323 million in the same period last year. The group's revenues amounted to zl 3.104 billion against zl 3,365 billion in the same period in 2019. As a result of lower average product sales prices and low gas prices, the EBITDA margin remained relatively positive at 15.3%.



The average prices of gas for Grupa Azoty compared to the first quarter last year were about 40% lower. Spot quotes gas on TTF (the

largest hub in the EU) started the quarter at around €12/MWh and finished around 7 €/MWh. Initially, prices fell under a strong influence exceptionally warm weather, high inventory levels and regular pipeline and growing supplies LNG supply.

As for first quarter sales fertilisers continue to represent the main driver for Grupa Azoty with no significant drop in demand. In the plastics sector customers from different industries had started to reduce orders, the largest reductions seen in the automotive industry. In the chemical sector Grupa Azoty ZAK even in March started to encounter difficulties in supplying oxo alcohols and plasticisers. For melamine, the group has received notifications from customers about temporary production cuts, whilst the pigment market in Europe has suffered.

Grupa Azoty Product and Raw Material Prices (Average)		
Product	**Q1 20 *€/ton***	**Q1 19 *€/ton***
2-EH (FD NWE spot)	934	1,107
DOTP (FD NWE spot)	1,061	1,282
Propylene (FD NWE spot)	799	901
Benzene (CIF, NWE)	672	519
Phenol (FD, NW)	1,463	1,252
Caprolactam (Liq., DDP, WE)	1,763	1,942
Polyamide 6 (PA6) (DDP, WE)	1,828	2,007

In the chemicals segment, Grupa Azoty's revenues in the first quarter decreased from zl 752 million in January to March 2019 to zl 685 million, although there was an increase in the EBITDA margin (by 1.6%). Prices of 2-EH were 15.6% lower in the first quarter than in the same quarter in 2019. Lower prices were mainly caused by a fall in propylene prices, as well as the high availability.

DOTP price quotations in the first quarter of this year were 17.2% lower than in the same period of 2019. Similarly, to the oxo alcohol market, the plasticizer market started towards the end of March feel some problems with timely deliveries, associated with the introduction by the state European restrictions on movement.

Azoty subsidiaries Q1 2020

Grupa Azoty Zakłady Chemiczne Police reduced its net profit to zl 13.85 million in the first quarter versus zl 49.51 million in the same period in 2019, thus falling by 72%. ZCh Police's operating profit dropped to zl 9.16 million compared to zl 59.54 million a year earlier.

The decrease in the sale prices of products, primarily compound fertilizers, ammonia, and urea, which was partly balanced by a significant decrease in the purchase prices of natural gas. About 62% of revenues from the sale of titanium white were generated from sales on foreign markets. Overall, the company's sales revenue dropped to zl 648.22 million compared to zl 726.66 million a year earlier.

Grupa Azoty Zakłady Azotowe Puławy generated zl 111.71 million of net profit in the first quarter against zl 168.16 million, thus falling by 33.6%. Operating profit reached zl 147.19 million against zl 207.57 million a year earlier. Sales revenues for Grupa Azoty Pulawy amounted to zl 953.72 million against zl 1,068.69 million. Revenues from domestic sales decreased by 85.8 million zl (i.e. by 11.3%). Revenues from exports decreased by zl 29.2 million (i.e. by 9.3%).

Ciech Q1 2020

The first quarter was proved relatively successful for the Ciech Group in that the only a marginal impact was felt from the coronavirus pandemic. The Ciech Group's consolidated revenues for the first quarter of 2020 amounted to zl 854.4 million compared to zl 953 million in the same period last year. The decrease was mainly due to the plant stoppage in Romania due to steam supply issues. As a result, the net profit for the Ciech Group fell to zl 39.4 million against zl 61.4 million.

Ciech Financial Performance (zl million)		
	Q1 2020	***Q1 2019***
Revenues	854.4	952.7
EBITDA	144.9	160.3
EBIDTA margin	17.0%	16.8%
Net Profit	39.4	61.8

Soda ash accounted for around 70% of Ciech's revenues in the first quarter and 80% of EBITDA. The EBITDA margin for the soda division in first quarter rose 2% to 23%, although the overall group margin was lower at 17.0%. In Germany Ciech is continuing construction of a new salt works with a capacity of 450,000 tpa, following the start-up of the sodium bicarbonate plant at Stassfurt in June 2019. Other investments include modernising combined heat and power plants in soda plants at Janikowo and Inowrocław. Furthermore, Inowrocław Salt Mine Solino will build a salt pipeline connecting the manoeuvring tank at Inowrocław Mątwy with the production plant of Ciech Soda Polska at Janikowo.

RUSSIA

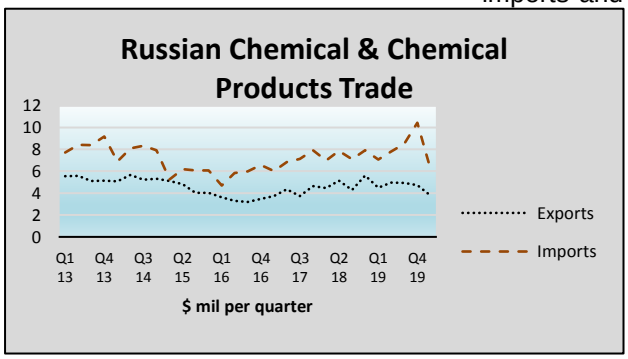
Russian Chemical Production (unit-kilo tons)		
Product	***Jan-Apr 20***	***Jan-Apr 19***
Caustic Soda	440.0	428.0
Soda Ash	1,182.0	1,135.0
Ethylene	1,435.3	1,055.8
Propylene	850.4	792.1
Benzene	502.0	486.4
Xylenes	170.3	106.0
Styrene	233.9	259.2
Phenol	90.2	77.8
Plastics in Bulk	3,295.0	2,784.0
Polyethylene	1,125.0	759.0
Polystyrene	183.6	179.4
PVC	372.5	356.9
Polypropylene	620.5	494.1
Polyamide	59.1	52.7
Synthetic Rubber	514.0	532.0

Russian chemical production, Jan-Apr 2020

Russian chemical production rose 5.6% in the first four months in 2020, driven mostly by an increase in polymers. Ethylene production exceeded 1.4 million tons compared to 1.1 million tons a year earlier. Benzene production reached 505,000 tons, which is 1.7% more than the same in 2019. The production of polymers amounted to 3.3 million tons, which is 17.4% more than in the same period last year.

Most chemical producers in Russia have felt the effects of COVID-19 on business operations even if it is only the adaptation in working practices. The decline in demand for polymers from the automotive and beverage sectors have been compensated to an extent from the demand for masks, PPE, etc. Organic solvent producers have witnessed a rise in demand for sanitizing and hygiene products such as isopropanol and acetone where prices have more than doubled in the past three months.

In terms of chemical trade April numbers were down for both imports and exports although perhaps not as significantly as expected. Exports of chemicals totalled 3.452 million tons in April for $1.24 billion against 4.571 million tons in April 2019 for $1.34 billion. Imports totalled 991,000 tons in April 2020 against 1.037 million tons, with values dropping from $2.9 billion to $2.5 billion.



Imports of chemical products continue to outstrip exports in value although by weight are usually about four-fold smaller. Since 2013 quarterly trade numbers have shown little change, apart from Q4 in 2019 when Russia bought more pharmaceuticals than normal before dipping in the first quarter.

Russian Chemical Exports		
Group product	***Apr-19***	***Apr-20***
Fertilisers	$745 M	$479 M
Organic chemicals	$384 M	$262 M
Inorganic chemicals	$322 M	$174 M
Other	$341 M	$321 M
Total:	**$1.79 B**	**$1.24 B**

Russian petrochemical projects

Amur Gas Chemical Complex-Maire Tecnimont & Linde

Although a final investment decision is yet to be made, SIBUR proceeded to a stage in May signing a contract with Maire Tecnimont SpA for designing the gas-chemical complex at Svobodny in the Amur Oblast. The €1.2 billion agreement covers the design and logistics of the Amur gas chemical complex. SIBUR granted a contract to Linde in February 2020 in order to provide technology for the cracker. As part of the contract awarded under a consortium with SIBUR subsidiary and project contractor NIPIgazopererabotka (NIPIGas), Linde will deliver engineering, procurement, and site services based on its proprietary technology for the cracker.

Thus, the project appears to be progressing even if market forecasts may have changed during the global lockdown. This is possibly down to supply-side economics and the government decision regarding a negative excise tax rate on ethane which gives a major advantage to petrochemical projects using this feedstock. In addition to SIBUR, the Irkutsk Oil Company, Rusgazdobycha and other companies are also interested in supporting multibillion-dollar investments through reverse excise taxes on gas raw materials. The Amur Gas Chemical Complex, if constructed, will receive LPG and ethane fraction feedstocks under a

long-term contract from Gazprom Pererabotka Blagoveshchensk's Amur Gas Processing plant (GPP). SIBUR expects a proposed increase in the overall amount of ethane fraction and LPG feedstock supplies of up to 3.5 million tpa over time to the Amur Gas Chemical Complex. This will allow the complex to expand design capacities at the site from an initial 1.5 million tpa of polyethylene to about 2.3 million tpa of polyethylene and 400,000 tpa of polypropylene.

Nizhnekamskneftekhim-cracker project equipment deliveries

In the second half of May Nizhnekamskneftekhim received the first batch of bulky heavy equipment for the new ethylene cracker, including six units of steam collectors for pyrolysis furnaces. The equipment was delivered by water using a cargo vessel as part of a project for the construction of a new ethylene plant with a capacity of 600,000 tpa. To date, 90% of units of equipment and materials have been ordered covering most of the project.

During the main water navigation period in Tatarstan, which lasts from June to September, a total of around 264 units of equipment are scheduled for delivery to Nizhnekamskneftekhim using the Kama River which links to the Volga. The contractor for the project Turkish company Gemont LLC was concluded in February this year. Gemont is mobilising staff and a shift camp is being constructed in parallel. In the near future work on the installation of the main foundations for the new cracker, including underground pipelines, steel structures, etc.

ZapSibNeftekhim-alpha olefins project

The Glavgosexpertiza examined the design documentation and the results of engineering surveys for the construction of a plant for linear alpha-olefins (hexene-1) at the ZapSibNeftekhim plant in the Tyumen region. The design documentation, which has received a positive conclusion, provides for the construction of a plant for the production of linear alpha-olefin-hexene-1 with a capacity of 50,000 tpa. Construction will take place in two stages, with the general designer NIPIgazopererabotka undertaking the design and managing the construction.

Russian Ethylene Production (unit-kilo tons)

Producer	*Jan-Apr 20*	*Jan-Apr 19*
Angarsk Polymer Plant	78.9	74.1
Kazanorgsintez	216.8	217.0
Stavrolen	116.4	109.6
Nizhnekamskneftekhim	218.5	216.2
Novokuibyshevsk Petrochemical	18.7	22.8
Gazprom n Salavat	128.9	126.3
SIBUR-Kstovo	145.9	136.8
SIBUR-Khimprom	19.2	18.2
Tomskneftekhim	94.9	91.6
Ufaorgsintez	44.5	41.5
ZapSibNeftekhim	352.6	0.0
Total	1435.4	1054.1

Russian petrochemical markets

Russian ethylene production, Jan-Apr 2020

Russian ethylene production totalled 1.435 million tons in the first four months in 2020 against 1.054 million tons in the same period in 2019. ZapSibNeftekhim produced 352,600 tons in January to April and is still running less than 80% of capacity. Full capacity at the 1.5 million tpa plant at Tobolsk is expected by the end of the year.

In the first four months Nizhnekamskneftekhim increased ethylene production from 216,200 tons to 218,500 tons whilst Kazanorgsintez dropped slightly from 217,000 tons to 216,800 tons.

ZapSibNeftekhim stopped production for its first scheduled maintenance outage at the end of May, aimed at ensuring stable and reliable operation of production facilities. The shutdown lasted for two weeks and was coordinated with the similar work at SIBUR's West Siberian gas processing plants located in the Tyumen region, Ugra and Yamal. The situation with coronavirus complicated this task, but together with contractors SIBUR developed a system in how to prevent the risks of the spread of infection. The configuration of the ZapSibNeftekhim project includes pyrolysis plants with a capacity of 1.5 million tpa of ethylene (technology of Linde AG, Germany) and 500,000 tpa of propylene, 240,000 tpa of high-margin products (butadiene, butene-1, MTBE, pyrobenzene).

Other important ethylene producers included SIBUR-Kstovo which produced 145,900 tons versus 136,800 tons and Gazprom neftekhim Salavat which produced 128,900 tons against 126,300 tons. Kazanorgsintez continues to purchase other hydrocarbons to support ethane-based olefin production. Propane supplies are purchased by Kazanorgsintez mostly from Uralorgsintez and SIBUR-Novatek at Tobolsk, usually in volumes of 8-10,000 tons per month. Angarsk Polymer Plant (part of Rosneft) started maintenance on 20 June which will last until 30 July. During this period, the company will not produce ethylene, propylene, C4s, benzene

and styrene. SIBUR-Kstovo will carry out scheduled repairs from 19 July to 15 August. At the time of repair, the production of ethylene, propylene, C4s and benzene will be stopped.

Russian Propylene Production (unit-kilo tons)		
Producer	***Jan-Apr 20***	***Jan-Apr 19***
Angarsk Polymer Plant	43.4	41.1
Kazanorgsintez	17.1	17.2
Lukoil-NNOS	83.9	98.1
Stavrolen	44.0	43.2
Nizhnekamskneftekhim	104.6	109.1
Novokuibyshevsk Petrochemical	14.7	16.5
Omsk Kaucuk	17.5	14.7
Polyom	61.2	61.5
Gazprom n Salavat	55.5	57.0
SIBUR Kstovo	63.4	60.0
SIBUR-Khimprom	20.8	22.6
Tomskneftekhim	53.4	49.1
SIBUR Tobolsk	105.9	137.7
Ufaorgsintez	65.0	64.2
ZapSibNeftekhim	138.0	0.0
Total	888.5	792.1

Russian Propylene Domestic Sales (unit-kilo tons)		
Company	***Jan-Apr 20***	***Jan-Apr 19***
Angarsk Polymer Plant	29.1	28.4
SIBUR-Kstovo	55.5	46.5
Kazanorgsintez	2.0	0.0
Lukoil-NNOS	73.7	70.0
Gazprom neftekhim Salavat	0.0	4.6
Tomskneftekhim	0.2	0.3
Total	160.6	149.8

Russian Styrene Production (unit-kilo tons)		
Producer	***Jan-Apr 20***	***Jan-Apr 19***
Nizhnekamskneftekhim	99.7	98.7
Angarsk Polymer Plant	13.5	13.7
SIBUR-Khimprom	47.8	49.4
Gazprom n Salavat	56.1	81.2
Plastik, Uzlovaya	17.8	16.2
Total	234.9	259.2

Russian propylene production, sales & exports, Jan-Apr 2020

Russian propylene production amounted to 888,500 tons in the first four months in 2020 against 792,100 tons in the same period in 2019. The increase was due largely to the start-up of the plant at ZapSibNeftekhim at Tobolsk where production amounted to 138,000 tons in the first four months. As with ethylene ZapSibNeftekhim undertook a shutdown from late May, lasting two weeks. The aim is for full capacity to be achieved by the end of 2020.

Due to maintenance this year SIBUR-Tobolsk reduced propylene production from 137,700 tons in the first four months in 2019 to 105,900 tons. Nizhnekamskneftekhim reduced propylene production slightly in the first four months from 109,100 tons to 104,600 tons, whilst Lukoil-NNOS at the Kstovo refinery reduced output from 93,100 tons to 83,900 tons. Gazprom neftekhim Salavat produced 55,500 tons against 57,000 tons.

Russian sales of propylene on the domestic merchant market amounted to 160,600 tons in the first four months in 2020 against 149,800 tons last year. Although production was started at ZapSibNeftekhim all volumes were consumed internally in the production of polypropylene.

The largest propylene supplier to the domestic market in the first four months was Lukoil-NNOS, shipping 73,700 tons against 70,000 tons followed by SIBUR-Kstovo which increased from 46,500 tons to 55,500 tons.

Changes in the market this year have included the sale of merchant propylene by Kazanorgsintez due to excess production. Kazanorgsintez has been using more propane feedstock which has led higher propylene output volumes, although amounting only to less than a thousand tons a month.

SIBUR-Tobolsk has increased domestic merchant purchases this year in order to cover the shutdown period for the production of polypropylene, whilst the Plant of Synthetic Alcohol at Orsk has bought more propylene in the past few months due to ramped up production of isopropanol. Saratovorgsintez remains the largest merchant consumer of propylene on the domestic market, buying around 15,000 tons per month.

Russian styrene production & sales, Jan-Apr 2020

Russia produced 234,900 tons of styrene in the first four months in 2020 versus 259,200 tons in the same period in 2019. The largest producer Nizhnekamskneftekhim increased production from 99,700 tons to 98,700 tons. Gazprom neftekhim Salavat reduced production from 81,200 tons to 56,100 tons due to maintenance in January, whilst SIBUR-Khimprom at Perm reduced from 49,400 tons to 47,800

tons. In terms of raw materials, four of the five producers are integrated back into ethylbenzene with the exception being Plastik at Uzlovaya.

Russian Styrene Domestic Sales (unit-kilo tons)		
Producer	***Jan-Apr 20***	***Jan-Apr 19***
Angarsk Polymer Plant	7.7	7.0
Plastik	0.8	0.1
Gazprom n Salavat	18.0	16.7
SIBUR-Khimprom	10.9	15.3
Nizhnekamskneftekhim	0.0	0.5
Total	37.5	39.6

Styrene sales on the Russian domestic merchant market totalled 37,500 tons in January to April 2020 against 39,600 tons in the same period in 2019, with Gazprom neftekhim Salavat increasing shipments from 16,700 tons to 18,000 tons and SIBUR-Khimprom reducing shipments from 15,300 tons to 10,900 tons.

Bulk Polymers

Russian HDPE Production (unit-kilo tons)		
Producer	***Jan-Apr 20***	***Jan-Apr 19***
Kazanorgsintez	178.0	179.0
Stavrolen	92.0	99.5
Gazprom neftekhim Salavat	44.0	40.7
ZapSibNeftekhim	257.1	0.0
Total	571.1	319.2

Russian polyethylene production Jan-Apr 2020

Russian polyethylene production increased by 62% in January-April 2020 due mainly to the start-up of ZapSibNeftekhim. LLDPE saw the largest rise. ZapSibNeftekhim produced a total of 343,200 tons of polyethylene in the first four months from a Russian total of 994,000 tons, including 259,400 tons in April. ZapSibNeftekhim increased by 6.3% in April over March to 151,300 tons. LLDPE polyethylene production amounted to 190,100 tons against 75,900 tons in the first four months in 2019. Russian production of HDPE increased by 79% to 571,900 tons. LDPE production amounted to 231,900 tons in January to April, 6% up on 2019.

Russian Polypropylene Production (unit-kilo tons)		
Producer	***Jan-Apr 20***	***Jan-Apr 19***
Ufaorgsintez	43.6	44.8
Stavrolen	41.3	33.8
Neftekhimya	49.5	48.7
Nizhnekamskneftekhim	73.1	68.8
Polyom	64.5	71.5
Tomskneftekhim	51.3	49.4
SIBUR-Tobolsk	130.1	157.1
ZapSibNeftekhim	149.0	0.0
Total	602.4	474.1

Russian polypropylene, Jan-Apr 2020

In the first four months of this year Russian polypropylene production increased by 27%, amounting to 602,400 tons against 474,100 tons in January to April 2020.

SIBUR Tobolsk in mid-March stopped its facilities for a little more than a month preventative repair, which meant that production dropped in April to 17,500 tons against 22,900 tons a month earlier. The SIBUR-Tobolsk plant produced 130,100 tons in the first four months in 2020 which was 17% down on 2019. ZapSibNeftekhim produced 149,000 tons in the first four months, whilst Polyom at Omsk dropped 10% to 64,500 tons.

Nizhnekamskneftekhim increased polypropylene production to 73,100 tons in January to April compared to 68,800 tons in the same period in 2019, whilst Tomskneftekhim increased output by 4% to 51,300 tons. Ufaorgsintez dropped 3% to 43,600 tons and Neftekhimya rose 2% to 49,500 tons. Stavrolen at Budyennovsk increased production to 41,300 tons against 33,500 tons in January to April 2019.

Russian Polypropylene Market (unit-kilo tons)		
Producer	***Jan-Apr 20***	***Jan-Apr 19***
Production	602.4	474.1
Exports	193.0	67.6
Imports	81.0	70.6
Supply/demand	490.4	477.1

Russian polypropylene exports amounted to 193,000 tons in January to April 2020, of which 38.1% of shipments went to China. Exports were up almost three-fold from the 67,600 tons which was shipped in the first four months in 2019. Of the 193,000 tons shipped in the first four months in 2020 up to 182,000 tons comprised homopolymer. Russian polypropylene imports totalled 81,000 tons in January to April 2020, up 23% over 2020. Imports of propylene homopolymers significantly increased by 54% to 29,100 tons whilst imports of block copolymers increased 24% to 20,100 tons. Import of propylene stat copolymers amounted to 10,800 tons

against 11,400 tons a year earlier. External deliveries of other propylene polymers amounted to about 11,000 tons against 11,500 tons a year earlier.

Russian PVC production & trade, Jan-Apr 2020

Russian production of PVC in January-April 2020 amounted to 351,000 tons against 343,400 tons. RusVinyl produced 118,700 tons compared to 116,100 tons whilst Sayanskkhimplast produced 110,300 tons against 108,000 tons a year earlier. The Bashkir Soda Company produced 92,900 tons against 91,100 tons a year earlier. Kaustik at Volgograd produced 7,200 tons of suspension PVC in April, taking the total for the first four months to 29,100 tons compared to 28,200 tons for the same period in 2019.

The export of suspension PVC from Russia grew by 2% in January-April this year, whilst imports fell by almost a quarter. Over four months, 74,600 tons of Russian PVC were shipped to foreign markets. The main importer of Russian resin this year remains India which took 37,400 tons in the first four months. This is followed by Belarus and Poland with procurement volumes of 11,000 and 8,000 thousand tons, respectively. Imports for January-April totalled 36,800 tons, the main source of which came from Germany.

Russian PVC Production (unit-kilo tons)		
Producer	***Jan-Apr 20***	***Jan-Apr 19***
Bashkir Soda	92.9	91.1
Kaustik	28.2	21.5
RusVinyl	110.3	115.9
Sayanskkhimplast	118.7	108.0
Total	350.1	336.5

Paraxylene-PTA-PET

Russian PTA imports, Jan-Apr 2020

PTA imports into Russia totalled 103,400 tons in the first four months in 2020 against 149,000 tons in the same period last year. Import activity was influenced by higher production at Polief.

China reduced PTA shipments from 106,000 tons to 85,500 tons whilst South Korea reduced shipments from 27,400 tons to 7,000 tons. Average prices for PTA imports amounted to $889 per ton in January to April 2019 against $666 per ton in the same period in 2020. Ekopet at Kaliningrad accounted for 45% of imports ($25.4 million in value) over the first four months in 2020. Ekopet's share of PTA imports dropped in the first part of 2020 due to plant maintenance in January and February.

Russian PTA Imports by Country (unit-kilo tons)		
Country	***Jan-Apr 20***	***Jan-Apr 19***
Belgium	8.0	10.0
India	0.0	1.0
China	85.5	106.0
South Korea	7.0	27.4
Poland	3.0	1.0
Thailand	0.0	3.0
Others	0.0	0.6
Total	103.4	149.0

Russian PTA Imports by Region (unit-kilo tons)		
Location	***Jan-Apr 20***	***Jan-Apr 19***
Kaliningrad	56.9	103
Moscow	42.6	25.8
Others	3.9	20.2
Total	103.4	149.0

Ekopet increases PET production

Ekopet at Kaliningrad increased the daily production of PET by 4.5% during the second quarter due to the extra demand driven by the coronavirus pandemic. The design capacity of the plant is 660 tons per day, and after consulting with ThyssenKrupp can now produce 690 tons of PET, which corresponds to an increase by 4.5%. Thus, the plant capacity of 220,000 tpa is now operating at 109%. PTA, MEG and acetic acid are delivered to the Kaliningrad plant by sea, rail and road from such countries as China, Saudi Arabia, Lithuania and a number of EU countries.

The increase in production is associated with an increase in demand for PET, from which plastic containers for food packaging and PET sheets which are now used in banks, gas stations, and other organisations where physical contacts between people are required, are produced. During the pandemic, work to expand sales markets was intensified. Currently, there are active negotiations with potential customers in the countries of the European Union, Africa, the US, Brazil and the Middle East.

Titan-Polymer PPE

The Titan-Polymer plant at Pskov continues to phase in production, in part helping to provide personal protective equipment. Titan Polymer states that had it had sufficient raw materials for more production

of PPE it may have helped save the lives of more than one thousand people who have died from COVID-19. PET nonwovens have more advantages than polypropylene nonwovens for PPE as even during heat treatment, the material does not lose its functionality and retains its protective properties.

Russian PET imports and market, Jan-Apr 2020

Imports of PET into dropped to 50,800 tons in January to April 2020 compared to 53,400 tons in the same period last year. China accounted for 42,600 tons in the first four months this year, measuring around 80% of imports, against 50,000 tons and 88% in 2019.

Russian PET Imports (unit-kilo tons)		
Country	***Jan-Apr 20***	***Jan-Apr 19***
China	42.6	50.0
Lithuania	4.9	1.6
Others	3.3	2.2
Total	50.8	53.8

The share of Lithuanian PET produced by Neo Group in January-April this year increased and to 9% (4,500, tons) compared to 3% (1,580, tons) in the same period in 2019. The top five Chinese suppliers this year comprised Yisheng 18,600 tons, Jiangsu 7,500, tons, Sinopec 8,000 tons, Indorama 3,400, tons and Wankai 1,760, tons.

A 15-20% increase in the demand for polymer packaging in March and April caused a revival in the Russian market for PET allowing price rises for Russian producers of raw materials. After that, many processing companies switched to more affordable Chinese raw materials. In the structure of consumption of the Russian market, bottled PET comprises about 94% of the volume of primary PET; fibre, sheet and film PET together account for the remaining 6%. The total capacity for the production of PET in Russia currently stands at 635,000 tpa from which 602,000 tons was produced in 2019.

Due to the effects of the pandemic the Russian PET market this year has seen a decline in consumption in the beverage sector whilst experiencing growth in the packaging segment. The most sought-after sectors for PET usage this year include pharmaceuticals and food wrap which have both been showing growth of about 20% due to the high demand for personal protective equipment and online delivery services. Also, during the pandemic period, Russian manufacturers increased the production of PET sheets, which are now used in stores, banks, gas stations, and other organisations where it is necessary to prevent physical contacts between people.

Russian Benzene Production (unit-kilo tons)		
Producer	***Jan-Apr 20***	***Jan-Apr 19***
Angarsk Polymer Plant	32.4	28.4
Gazprom Neft	51.5	29.2
LUKoil-Neftekhim	24.4	0.0
LUKoil-Permnefteorgsintez	19.9	19.6
Magnitogorsk MK	14.5	18.1
Nizhnekamskneftekhim	102.2	94.9
Novolipetsk MK	0.6	4.4
Gazprom n Salavat	74.6	61.8
Severstal	12.4	12.9
SIBUR-Holding	33.5	27.4
Slavneft-Yaroslavlorgsintez	22.3	20.5
Surgutneftegaz	19.1	28.5
Ryazan RN Holding	11.3	13.4
Ufaneftekhim	32.5	30.9
Ural Steel	4.0	3.1
Uralorgsintez	25.7	30.4
Zapsib	22.2	25.0
Novokuibyshevsk PC	6.5	9.4
Total	509.7	457.9

Aromatics

Russian benzene production Jan-Apr 2020

Despite difficult market conditions Russian benzene production rose in the first four months this year from 457,900 tons to 509,700 tons. Nizhnekamskneftekhim increased benzene production from 94,900 tons to 102,200 tons, whilst Gazprom neftekhim Salavat increased production from 61,800 tons to 74,600 tons. Rosneft's three benzene plants at Angarsk, Novokuibyshevsk, Ufa and Ryazan produced a combined total of 80,700 tons against 82,100 tons in January to April 2019, whilst Gazprom Neft at Omsk increased benzene production from 29,200 tons to 51,500 tons.

Supply of benzene exceeded demand in May, partly due to lower production of caprolactam and other factors such as the shutdown at the phenol plant at Omsk Kaucuk for maintenance. Due to low domestic demand, Gazprom neftekhim Salavat shipped the product for export including 2,700 tons of benzene delivered to the terminal at Liepaja in Latvia. Production of benzene at the Ryazan oil refinery was resumed in mid-May after a scheduled repair; the first shipments

of the product were shipped to the Novokuibyshevsk Petrochemical Company on 15 May. Benzene production at the Stavrolen plant is still idle and is expected to remain down at least until July. Severstal stopped production from 25 May to 5 June.

Several other plants will carry out scheduled repairs in the near future, including Lukoil-PNOS at Perm which will be idle from 21 June to 1 August. Repair work at the Angarsk Polymer Plant began on 22 June and will last until the end of July. Further ahead, repair work on the SIBUR-Kstovo plant is scheduled for 19 July lasting until 15 August.

Russian Benzene Consumers (unit-kilo tons)		
Consumer	***Jan-Apr 20***	***Jan-Apr 19***
Kuibyshevazot	66.4	64.2
Azot Kemerovo	40.3	43.9
Shchekinoazot	30.8	22.3
Kazanorgsintez	25.9	26.6
Khimprom	1.3	0.1
Omsk Kaucuk	19.4	3.5
Novolipetssk	0.0	0.6
Samarorgsintez	19.7	17.1
Zapsib	17.2	23.8
SIBUR-Khimprom	33.2	32.9
Promsintez	0.0	2.7
Ufaorgsintez	1.4	4.8
Uralorgsintez	23.8	24.8
Zavod im Ya M Sverdlova	0.0	0.8
Export	36.1	12.9
Total	315.4	281.0

On the demand side the Novokuibyshevsk Petrochemical Company started a maintenance shutdown on the phenol plant from 15 June to 15 July, whilst in June Kemerovo Azot has been forced to reduce capacity utilisation for the production of caprolactam due to low demand in Asia. Capacity utilisation at Kuibyshevazot is also expected to stay lower than normal rates. Although caprolactam and polyamide production increased by 9% and 16.3% respectively in the first quarter Kuibyshevazot's net profit decreased by almost 34 times against the same period in 2019.

Benzene prices in Russia rose in May slightly from the April lows. Spot prices in June have already reached 16,000 roubles per ton although contract numbers are still very low around 6,000 roubles per ton. Higher oil prices are putting upward pressure on benzene and third quarter contract levels are expected to rise.

Benzene sales on the Russian domestic merchant market amounted to 315,400 tons in the first four months in 2020 against 281,000 tons in January to April 2019. Kuibyshevazot remains the largest merchant buyer, purchasing 66,400 tons in against 64,200 tons in the first four months last year, whilst Azot at Kemerovo bought 40,300 tons versus 43,900 tons and Shchekinoazot purchased 22,300 tons against 30,800 tons.

For the production of cumene Kazanorgsintez purchased 25,900 tons of benzene in January to April 2020, up from 26,600 tons in 2019, whilst Omsk Kaucuk purchased 19,400 tons against 3,500 tons. The rise in demand from Omsk Kaucuk was due to the start-up of the modernised phenol facilities.

Russian Caprolactam Production (unit-kilo tons)		
Producer	***Jan-Apr 20***	***Jan-Apr 19***
Kuibyshevazot	67.9	66.5
Shchekinoazot	19.8	16.5
SDS Azot	38.5	40.4
Total	126.1	102.1

Russian caprolactam production, Jan-Apr 2020

Russian caprolactam production amounted to 126,100 tons in January to April 2020 against 102,000 tons in 2019. Kuibyshevazot increased production from 67,900 tons to 66,500 tons whilst SDS Azot at Kemerovo reduced to 38,500 tons from 40,400 tons.

Russian orthoxylene-toluene markets, Jan-Apr 2020

Orthoxylene prices in Russia fell in May due to low demand and excessive supply volumes. Against the backdrop of a difficult economic situation, purchases have been reduced by both producers of phthalic anhydride and consumers in the paint and varnish sector. Orthoxylene prices from Kirishinefteorgsintez enterprise fell by 7,000 roubles in May compared to the second half of April and was sold in the North-western Federal District of Russia at 33,000–33,650 roubles per ton, including VAT. Bashneft's products were sold at 36,500-36,900 roubles per ton which was 1,500 roubles cheaper

Russian Orthoxylene Domestic Sales (unit-kilo tons)		
Company	***Jan-Apr 20***	***Jan-Apr 19***
Gazprom Neft	32.8	33.0
Ufaneftekhim	26.2	12.7
Kinef, Kirishi	0.7	2.3
Total	59.7	48.0

than in April. In the Siberian Federal District, the cost of orthoxylene from the Omsk refinery decreased by 11,000 roubles to 38,000–38,500 roubles per ton. Despite a significant decrease, the price of products of the Omsk company is still the highest on the market. Orthoxylene production totalled 59,700 tons in January to April 2020 against 48,000 tons in the same period in 2019. With the market under such pressure production volumes are expected to decline over the summer months.

Russian Toluene Production (unit-kilo tons)		
Producer	***Jan-Apr 20***	***Jan-Apr 19***
Kinef	7.0	8.7
Gazprom N Salavat	5.3	7.7
Slavneft-Yanos	14.4	14.6
LUKoil-Perm	10.1	12.4
Gazprom Neft	33.4	34.0
RN Holding	14.1	14.9
Ufaneftekhim	13.6	23.8
Others	5.8	5.2
Total	103.7	121.4

Toluene production in Russia amounted to 103,700 tons in the first four months in 2020 against 121,400 tons in the same period in 2019, with most producers reducing volumes. Most of the toluene in the Russian market is used as an octane-increasing additive in the production of gasoline, and thus the toluene pricing largely depends on the cost of motor fuels. After difficult months in April and May there was an increase in prices in June following an increase in the cost of gasoline in Russia. Kirishinefteorgsintez increased prices in June by around 7,500 roubles per ton to 46,580-47,150 roubles per ton including VAT. The Omsk refinery raised the price by 1800 roubles to 39,000-40,300 roubles for the Siberian Federal District. Russia does not normally trade in toluene but is seeking export opportunities.

Russian Phenol Production (unit-kilo tons)		
Producer	***Jan-Apr 20***	***Jan-Apr 19***
Ufaorgsintez	21.3	25.3
Kazanorgsintez	26.7	25.7
Novokuibyshevsk Petrochemical	25.7	26.9
Omsk Kaucuk, Omsk	16.5	0.0
Total	90.1	77.8

Russian phenol market, Jan-Apr 2020

Russian phenol production rose from 77,800 tons in the first four months in 2019 to 90,100 tons in the same period in 2020. Novokuibyshevsk Petrochemical produced 25,700 tons against 26,900 tons whilst Ufaorgsintez reduced production from 25,300 tons to 21,300 tons. Kazanorgsintez increased slightly from 25,700 tons to 26,700 tons, whilst the most significant also produced 12,900 tons versus 12,500 tons. The significant change came from Omsk Kaucuk which produced 16,500 tons against no activity in 2019.

Russian Market Phenol Sales by Supplier (unit-kilo tons)		
Producer	***Jan-Apr 20***	***Jan-Apr 19***
Omsk Kaucuk	10.0	0.0
Novokuibyshevsk Petrochemical	20.2	19.6
Kazanorgsintez	0.1	1.6
Ufaorgsintez	12.0	20.2
Total	42.3	41.4

Sales of phenol on the Russian domestic market amounted to 42,300 tons in the first four months in 2020, up from 19,500 tons. Omsk Kaucuk supplied 10,000 tons of phenol to the domestic market, compensating for lower sales from Ufaorgsintez and Kazanorgsintez. Ufaorgsintez reduced sales from 20,200 tons in January to April 2019 to 12,000 tons whilst Novokuibyshevsk Petrochemical Company increased shipments from 19,600 tons to 20,200 tons.

Russian Phenol Exports (unit-kilo tons)		
Producer	***Jan-Apr 20***	***Jan-Apr 19***
Omsk Kaucuk	4.8	0.0
Kazanorgsintez	0.0	3.1
Ufaorgsintez	10.4	5.2
Novokuibyshevsk Petrochemical	0.7	1.3
Total	15.8	9.6

Prices of phenol on the Russian market rose in June over May, with demand relatively stable and supply affected by shutdowns. In mid-May, Omsk Kaucuk stopped for a scheduled repair, whilst Novokuibyshevsk Petrochemical started a shutdown on the phenol and acetone plants on 15 June with a resumption tentatively planned for 15 July 2020. Russian phenol exports rose to 15,800 tons in the first four months in 2020 against 9,800 tons in the same period in 2019. Ufaorgsintez exported 10,400 tons, but Kazanorgsintez did not ship either to the domestic or export market. The Novokuibyshevsk Petrochemical Plant exported only 700 tons of phenol in the first four months against 1,300 tons last year. Omsk Kaucuk sold 4,800 tons in the first four months, comprising around a quarter of production.

Synthetic rubber

Russian Synthetic & Natural Rubber Market (unit-kilo tons)		
	Jan-Apr 20	*Jan-Apr 19*
Production	514.0	522.0
Exports	280.1	358.8
Imports	65.4	72.1
Supply/Demand Balance	299.3	235.3

Russian rubber production and market balance 2020

Synthetic rubber production in Russia dropped marginally in the first four months in 2020 to 514,000 tons against 522,000 tons, whilst domestic consumption rose by much greater volumes amounting to 299,300 tons against 235,300 tons. The higher performance in the first four months is largely accounted to the redirection of production from Togliattikaucuk away from exports to the new owners Tatneft's tyre plants in Tatarstan. The domestic rubber market has performed relatively well over the main lockdown period in Russia. Although most tyre manufacturers forecast a large drop in tyre sales this year the Russian market has benefited from rubber demand from other application sectors.

Krasnoyarsk Synthetic Rubber Plant (SIBUR) stopped production on 26 May for maintenance on the plant for nitrile butadiene rubber. The outage, lasting for around three weeks, covered modernisation and revamping of equipment. Obligatory requirements for contractors included the provision to employees of masks and gloves, to arrange transportation to enterprises with special vehicles with subsequent sanitization.

Russian Synthetic Rubber Exports (unit-kilo tons)		
Product	***Jan-Apr 20***	***Jan-Apr 19***
E-SBR	15.3	14.8
Block	15.8	13.8
SSBR	1.9	5.0
SBR	24.2	30.3
Polybutadiene	66.0	82.2
Butyl rubber	36.0	45.0
Halogenated butyl	38.2	47.5
NBR	8.9	12.7
Isoprene	61.3	94.6
Others	12.6	12.0
Total	280.1	358.0

Russian synthetic rubber exports, Jan-Apr 2020

Russian exports of synthetic rubber amounted to 280,500 tons in the first four months in 2020, down from 356,800 tons in the same period in 2019. Average prices dropped from $1610 per ton to $1418. As a result of lower volumes and prices revenues from synthetic rubber exports dropped from $576 million to $397 million in January to April 2020.

Regarding shipment destinations China represented the largest market for Russian exporters in the first four months in 2020, accounting for 15.9% of sales. This was followed by Poland with 11.4%, after which came India with 10.7% and Hungary with 21.2%. Sales to China dropped in the first four months to 54,900 tons against 76,000 tons in the same period in January to April 2019.

Togliattikaucuk Rubber Exports (unit-kilo tons)		
Product	***Jan-Apr 20***	***Jan-Apr 19***
Isoprene Rubber	3.6	8.8
Butyl Rubber	11.8	22.0
SBR	8.2	19.3
Others	0.2	0.5
Total	23.7	50.5

Togliattikaucuk-rubber exports Jan-Apr 2020

Togliattikaucuk exported 23,700 tons of synthetic rubber in the first four months in 2020 against 23,700 tons in the same period in 2019. Isoprene rubber exports dropped from 8,800 tons to 3,600 tons, whilst butyl rubber fell from 22,000 tons to 11,800 tons and SBR exports dropped from 19,300 tons to 8,200 tons. The switch of ownership of the Togliatti rubber assets from SIBUR to Tatneft has impacted heavily on sales distribution. The transfer has largely amounted to replacing exports with domestic shipments.

Nizhnekamskneftekhim rubber exports Jan-Apr 2020

Nizhnekamskneftekhim's exports of synthetic rubbers fell in the first four months to 156,700 tons against 208,700 tons in the same period in 2019. Isoprene rubber exports amounted to 49,800 tons against 76,000 tons last year whilst exports of halogenated butyl rubber fell from 48,100 tons to 38,200 tons. Nizhnekamskneftekhim has recently completed modernisation of individual sections and production units of the isoprene rubber plant in order to improve the quality of products. This has involved improvements in the

purification of isopentane-isoprene fractions, butadiene, styrene, and the preparation of the charge and catalyst.

Nizhnekamskneftekhim rubber exports (unit-kilo tons)		
Category	***Jan-Apr 20***	***Jan-Apr 19***
Isoprene Rubber	49.8	76.0
Butyl Rubber	24.4	23.9
HBR	38.2	48.1
Polybutadiene	44.3	60.7
Others	3.5	0.1
Total	156.7	208.7

Nizhnekamskneftekhim maintains plans to launch production of divinyl styrene synthetic rubber (DSSK) in 2020. Construction of the facility started in 2019 using environmentally friendly modern technologies. The production capacity will involve 60,000 tpa of DSSK, whilst the new installation will also produce thermoplastic elastomers (TEP, SBS) with a capacity of up to 10,000 tpa.

Methanol

Russian methanol production Jan-Apr 2020

Russia produced 1.591 million tons of methanol in the first four months in 2020 against 1.568 million tons against the same period in 2019. Metafrax produced 416,000 tons against 407,100 tons in January-April 2019 whilst Sibmetakhim at Tomsk reduced production from 321,100 tons to 331,100 tons. Tomet at Togliatti increased production to 302,200 tons from 282,400 tons. Shchekinoazot increased volumes from 315,400 tons to 316,000 tons. In order to try and cope with the lack of demand for most of this year producers may seek to undertake extended shutdowns where possible.

Russian Methanol Production (unit-kilo tons)		
Producer	***Jan-Apr 20***	***Jan-Apr 19***
Shchekinoazot	316.0	315.4
Sibmetakhim	331.1	321.1
Metafrax	416.0	407.1
Akron	30.5	36.2
Azot, Novomoskovsk	90.1	98.7
Angarsk Petrochemical	23.3	14.5
Azot, Nevinnomyssk	43.2	36.1
Tomet	302.2	282.4
Ammoni	38.6	56.2
Totals	1590.9	1567.6

Russian methanol export sales, Jan-Apr 2020

Export shipments of Russian methanol totalled 779,000 tons in the period January to April 2020 against 745,400 tons last year. The average ratio of exports as a share of production achieved 49% so far this year, which is the highest level for a decade.

Russian Methanol Exports (unit-kilo tons)		
Producer	***Jan-Apr 20***	***Jan-Apr 19***
Azot Novomoskovsk	30.7	21.4
Akron	4.8	2.4
Metafrax	192.5	166.4
Sibmetakhim	182.0	145.2
Tomet	123.0	130.4
Shchekinoazot	245.9	266.3
Ammoni	0.0	13.5
Total	779.0	745.4

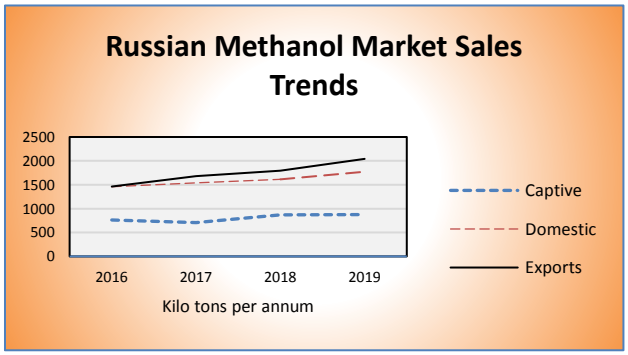
The main destination for Russian methanol exports remains Finland where volumes totalled 349,700 tons in the first four months against 317,600 tons in the same period in 2019. Poland reduced purchases from Russia to 122,600 tons in January to April 2020 against 136,600 tons in the same period in 2019, whilst Slovakia increased volumes from 11,400 tons to 52,200 tons.

Currently domestic gas prices in Russia are higher than Gazprom's international prices and fertiliser producers are asking the government to freeze these prices by the end of the year. Methanol producers support the calls made from the fertiliser industry. Spot gas prices in the US and Europe are now lower than for some Russian companies.

Russian Methanol Domestic Sales (unit-kilo tons)		
Producer	***Jan-Apr 20***	***Jan-Apr 19***
Azot Nevinnomyssk	7.0	10.0
Azot Novomoskovsk	54.0	60.7
Metafrax	109.2	81.3
Sibmetakhim	123.5	131.9
Tomet	146.9	140.4
Shchekinoazot	41.9	39.1
Ammoni (Mendeleevsk)	14.0	27.0
Total	496.4	490.4

For 2019 estimates suggest that Russia paid around $65 per ton of gas for methanol production whereby only Saudi Arabia was cheaper at $48. In the US, methanol producers incurred an average price of $113, and for Trinidad and Tobago $93. The cost advantages this year are less apparent as international gas prices have dropped below domestic prices, but this may turn out to be a short-term trend and the consensus is that Russia will re-establish its raw material cost advantage.

Russian Methanol Consumption (unit-kilo tons)		
Consumer	***Jan-Apr 20***	***Jan-Apr 19***
Nizhnekamskneftekhim	63.0	76.8
Togliattikaucuk	50.8	59.7
Uralorgsintez	21.4	24.3
SIBUR-Khimprom	5.7	10.7
SIBUR Tobolsk	13.7	10.1
Ektos-Volga	20.9	19.1
Omsk Kaucuk	30.2	27.6
Novokuibyshevsk NPZ	15.6	15.3
Uralkhimplast	6.4	10.5
Slavneft-Yanos	2.5	5.1
Metadynea	24.0	24.9
Kronospan	26.2	33.3
Gazprom	47.5	28.3
Khimsintez	4.0	7.2
Volzhsky Orgsintez	3.8	4.3
Others	160.8	133.2
Total	496.4	490.4



Russian methanol domestic sales, Jan-Apr 2020

Russian methanol producers reduced domestic and export sales by 22% in April to 270,200 tons. Deliveries to the domestic market decreased by 36% to 84,377 tons, and to foreign markets by 14% to 184,400 tons. Overall domestic sales were still up for the period January to April 2020 to 496,400 tons against 490,400 tons in the same period in 2019. Tomet was the largest supplier, shipping 146,900 tons in the first four months versus 140,400 tons, followed by Sibmetakhim with 123,500 tons against 131,900 tons.

Methanol purchases were reduced by formaldehyde resin and MTBE producers in April by more than 40% against March. MTBE producers in Russia were affected by lower export opportunities in April, although were able to achieve some support from the domestic market, where the additive is sold at a premium. Manufacturers of formaldehyde resins also faced problems in marketing their own products, as the woodworking industry reduced consumption. Nizhnekamskneftekhim reduced methanol purchases from 76,800 tons in the first four months in 2019 to 63,000 tons whilst Togliattikaucuk reduced purchases from 59,700 tons to 50,800 tons.

Formaldehyde resin producers Kronospan, Metadynea and Uralkhimplast all reduced purchases in the first four months. Gazprom increased purchases from 28,300 tons to 47,500 tons due to increased usage for gas hydration, whilst Omsk Kaucuk increased methanol volumes from 27,600 tons to 30,200 tons in order to support higher rubber production.

Nizhnekamskneftekhim and Shchekinoazot methanol project updates

The two methanol projects, both of 500,000 tpa, at Shchekinoazot and Nizhnekamskneftekhim, are progressing to schedule with a view towards completion in 2021 and 2022. Nizhnekamskneftekhim recently received approval from the State environmental service for the design documentation.

Haldor Topsoe has licensed the technology for both the projects at Nizhnekamskneftekhim and Shchekinoazot. Progress at Shchekino is more advanced whereby buildings have been dismantled and the general contractor GSI from Volgograd is already an active phase of construction. 100% of contracts for the supply of basic technological equipment have been signed of which 40% of the equipment was delivered to the construction site. Excavation and foundation works are underway.

Nakhodka methanol and fertiliser project

The methanol and mineral fertiliser plant at Nakhodka has started the initial process of construction and has not faced delays from COVID-19. The project capacity includes 1.8 million tpa of methanol (stage 1) and 1.8 million tpa of ammonia (stage 2). Achieving full design capacity is planned for the end of 2023. The construction is being carried out under the turnkey EPC contract with China Chengda Engineering. The project of the Nakhodka Mineral Fertilizer and Methanol Plant is being constructed near the large seaport of Nakhodka, based on the marketing view of selling into the markets in the Asia-Pacific region.

Natural gas for the project will be sourced from the Sakhalin fields. Currently, the contractor is completing survey work and is starting to equip temporary roads and sites for storing the fertile layer. Plant flow diagrams from Haldor Topsoe should be made available in the near future. The main contractor is ready to purchase primary equipment, and specialists are preparing a project for wastewater at the main site. The coronavirus has made adjustments to the mode of operation but does not affect the plans and schedules of work. On 15 June, commissioning started at a three-megawatt 35/10 kV

substation, which will provide the construction site with electricity for the construction period. Employees arriving at a construction site from other regions are obligatory placed on self-isolation. The project has received huge criticism from the local populace and environmental groups, with one of which claimed that the pending complex could be extremely damaging in multiple ways.

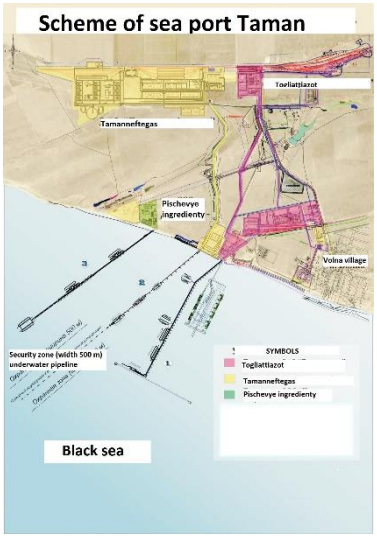
Vysotsk terminal to be used for methanol and acrylonitrile shipments from 2023

The RPK-Vysotsk Lukoil-II terminal, which specializes in the transshipment of oil products, intends to convert part of its facilities for the export of 1 million tpa of methanol and 160,000 tpa of acrylonitrile. Modernisation of the terminal, located in the Gulf of Finland, is scheduled for 2021-2022 and transshipment of petrochemical products is intended to start in 2023. The terminal is being revamped so it should be able to receive tankers for the transport of methanol with a deadweight of 5,000 and 30,000 tons and for acrylonitrile up to 6,000 tons. The existing Vysotsk terminal has already created environmental problems for the Primorsk coastline and fish-stocks in the Gulf of Finland.

The emergence of transshipment facilities for methanol and acrylonitrile at Vysotsk may lead to a fall in shipments of these products from Kotka in Finland and Ventspils in Latvia. In 2019 Saratovorgsintez shipped 143,700 tons of acrylonitrile through the Ventspils terminal from the total sales of 152,200 tons. Lukoil does not have its own methanol production facilities but the new plant of 1.6 million tpa is expected to be constructed by 2023. The investor in the methanol project is Gas Synthesis.

Skovorodino methanol project-Johnson Matthey

Johnson Matthey announced on 17 June that its combined reforming methanol technology has been selected by Technolizing for the new Amur Oblast facility to be built at Skovorodino. Johnson Matthey has been contracted to provide a license for the plant and will include their new Advanced Series Loop technology. This utilises an innovative synthesis loop arrangement together with existing reactor technology to achieve a significant improvement in natural gas efficiency. The contract also includes the associated engineering, proprietary equipment and catalyst supply. Pending a final investment decision by Technolizing, this will be the first Johnson Matthey licensed methanol plant in Russia using the combined reforming and Advanced Series Loop technology. The capacity of the plant is being designed to produce 1 million tpa.



OTEKO-Taman methanol project

One of the prospective methanol projects in Russia involves the OTEKO group which wants to construct a new complex at the Taman port on the Black Sea, as part of a large strategic programme for oil and petrochemical products. At the end of May 2020, the investment commission of the Krasnodar Territory not only approved the project but also assigned it a “special status”. OTEKO plans to construct an ammonia plant with a capacity of 2.5 million tpa, followed by a urea plant with a capacity of 2 million tpa and finally a methanol plant with a capacity of 3.5 million tpa. Technology licenses have yet to be agreed for the methanol project and natural gas supply clarified. The port location is the driving rationale behind the project.

Flotmethanol-floating methanol ships to drive Russian methanol production

The first of the floating plants of the Flotmetanol flotilla is expected to start a production shift for methanol later this year off the coast of the Yamal Peninsula, The relatively new Russian company Flotmetanol has devised ambitious plans to develop a flotilla which could eventually be capable of producing up to 10 million tpa of methanol, with the aim of processing 15 billion cubic metres of

natural gas. If fully developed it should become one of the main drivers of loading the Northern Sea Route where there is a direct road to China and other Asian countries for methanol deliveries. In addition, the Flotmetanol plants will serve as bunkering stations gas stations, thus creating the infrastructure necessary for new type of ships whose engines operate on methanol.

Organic chemicals

Russian N-Butanol Production (unit-kilo tons)		
Producer	***Jan-Apr 20***	***Jan-Apr 19***
Angarsk Petrochemical Company	10.4	9.7
Azot Nevinnomyssk	6.7	4.0
Gazprom neftekhim Salavat	22.5	22.6
SIBUR-Khimprom, Perm	10.5	14.8
Total	50.2	51.1
Russian Isobutanols Production (unit-kilo tons)		
Producer	***Jan-Apr 20***	***Jan-Apr 19***
Angarsk Petrochemical Company	4.7	5.7
Gazprom neftekhim Salavat	12.2	16.4
SIBUR-Khimprom, Perm	18.1	20.0
Total	35.0	37.8

Russian butanol production Jan-Apr 2020

Russian normal butanol production totalled 50,200 tons in January to April 2020, against 51,100 tons in the same period in 2019. Gazprom neftekhim Salavat was the largest Russian producer, producing 22,500 tons against 22,600 tons in January to April 2019. Isobutanol production in Russia dropped from 37,800 tons to 35,000 tons in the first four months this year during which Gazprom neftekhim Salavat reduced production to 12,200 tons from 16,400 tons, and SIBUR-Khimprom reduced from 20,000 tons from 18,100 tons.

Russian Butanol Domestic Sales (unit-kilo tons)		
Producer	***Jan-Apr 20***	***Jan-Apr 19***
Gazprom n Salavat	1.5	1.6
SIBUR-Khimprom	9.1	8.6
Angarsk Polymer Plant	10.2	6.7
Azot Nevinnomyssk	0.6	0.3
Totals	21.4	17.2

Russian domestic butanol sales, Jan-Apr 2020

Whilst merchant butanol sales on the domestic market rose in the first four months to 21,400 tons from 17,200 tons, demand underwent a significant fall in April. Normal butanol prices for the Siberian region from Angarsk Petrochemical fell by 18% in April or by 9,000 roubles per ton from 41,000 roubles in March. For the Volga region, Gazprom neftekhim Salavat continued to offer normal butanol in April at 73,500 roubles and isobutanol at 72,500 roubles, mainly as the plant does not need to sell product in order to maintain production levels. Most of the company's normal butanol is used in the production of butyl acrylate and is also shipped under contracts to the Dmitrievsky Chemical Plant.

SIBUR's Organic Chemical Production (unit-kilo tons)		
Product	***Q1 2020***	***Q1 2019***
DOTP	24.0	3.0
Oxo Alcohols	41.0	41.9
Acrylates	11.9	13.4
SIBUR's Organic Chemical Domestic Sales (unit-kilo tons)		
Product	***Q1 2020***	***Q1 2020***
DOTP	17.8	1.2
Oxo Alcohols	12.7	21.0
Acrylates	8.2	4.2
SIBUR's Organic Chemical Exports (unit-kilo tons)		
Product	Q1 2020	Q1 2020
DOTP	6.4	0.1
Oxo Alcohols	7.7	10.0
Acrylates	5.8	9.8

Low consumer activity continued in May with producers under price pressure. The production of SIBUR-Khimprom oxo alcohols was resumed after a short-scheduled repair from 12 to 19 May. A shift camp was deployed at the plant, which housed workers of contracting organisations. Gazprom neftekhim Salavat completed its shutdown at the end of May which had started on 20 April. The acrylate complex includes the production of acrylic acid with a capacity of 80,000 tpa, butyl acrylate (ether of acrylic acid and butanol) with a capacity of 80,000 tpa and glacial acrylic acid with a capacity of 35,000 tpa.

SIBUR-oxo alcohol and plasticizer production Q1 2020

In the first quarter in 2020 SIBUR's production of oxo alcohols totalled 41.000 tons against 41,900 tons in the same period in 2019. Domestic merchant sales of oxo alcohols from SIBUR dropped from 21,000 tons to 12,700 tons whilst

exports fell from 10,000 tons to 7,700 tons. Merchant and export sales were affected by the increase in internal processing in the production of the plasticizer DOTP at Perm.

SIBUR's Acrylate Sales (unit-kilo tons)		
Product	***Jan-Mar 20***	***Jan-Mar 19***
Production	11.9	13.4
Domestic Sales	8.2	4.2
Exports	5.8	9.8

DOTP production for SIBUR amounted to 24,000 tons in the first quarter in 2020 against 3,000 tons in the same period last year. Sales of DOTP on the domestic market rose from 1,200 tons to 17,800 tons and exports from 100 tons to 6,400 tons. Although the production of acrylates at Dzerzhinsk dropped from 13,400 tons to 11,900 tons in the first quarter in 2020 SIBUR was able to increase domestic sales to 8,200 tons from 4,200 tons. This was achieved as exports were reduced from 9,800 tons to 5,800 tons.

SIBUR-DOTP REACH approval for medical usage

SIBUR has received a declaration of conformity from REACH for DOTP plasticizer to adhere to European quality standards and the requirements of the medical and pharmacological industries. The company will be able to export DOTP produced at the Perm site to foreign companies engaged in the production of medical devices. In the context of the COVID-19 pandemic the certificate of approval offers enormous growth in demand for disposable protective medical devices and equipment. Numerous companies have already in East Europe reoriented to the production of medical compounds using DOTP provided by SIBUR.

Russian Acrylonitrile Exports Jan-Apr 2020		
Country	**Kilo tons**	**$ mil**
Hungary	2.5	2.2
Turkey	54.3	49.6
Others	0.9	2.5
Total	57.7	54.3

Acrylonitrile stoppage for maintenance 2020

Saratovorgsintez expects to undertake construction and repair work at its production facilities in the third quarter. Preparatory measures for work should begin in July, whilst the repair itself is planned to be completed in October. Saratovorgsintez operates the acrylonitrile plant with a capacity of 170,000 tpa and a sodium cyanide plant with a capacity of 30,000 tpa.

Russian Acetone Production (unit-kilo tons)		
Producer	***Jan-Apr 20***	***Jan-Apr 19***
Ufaorgsintez	13.4	15.9
Kazanorgsintez	16.9	16.4
Novokuibyshevsk Petrochemical	16.0	16.9
Omsk Kaucuk	9.4	0.0
Total	55.7	49.2

Russian acetone production & exports, Jan-Apr 2020

Russian acetone production increased in the first four months in 2020 to 55,700 tons against 49,200 tons in the same period in 2019. Omsk Kaucuk produced 9,400 tons of acetone from the modernised plant which started up in late 2019 and has been the main difference this year.

Acetone has been in high demand since the outbreak of COVID-19, with prices rising accordingly. In May sales on the domestic market amounted to 6,500 tons which was 9% more than in April, and 19% higher than in May 2019. However, even this volume is not enough to meet the needs of the market due to the changes in usage in the first half of the year. Acetone's close link with isopropanol in the use as a sanitizer meant that demand has risen sharply. Maintenance shutdowns at Omsk Kaucuk and Novokuibyshevsk Petrochemical have also exacerbated the supply situation.

SIBUR-ethylene oxide contract with Sintez and NORKEM

SIBUR has concluded long-term contracts with GC Sintez OKA and GK NORKEM at Dzerzhinsk for the ethylene oxide sales. Guaranteed supplies of raw materials will enable the two Dzerzhinsk plants to implement new investment projects.

SIBUR Ethylene Oxide Production & Sales (unit-kilo tons)		
Product	***Q1 2020***	***Q1 2019***
Production	85.9	86.6
Domestic Sales	22.7	19.7
Exports	4.1	5.5

The largest contract includes SIBUR and Sintez OKA Group of Companies involving the supply of 600,000 tpa of ethylene oxide over a period of ten years. In the past two years SIBUR has shipped around 30,000 tons per annum to Sintez and thus the new long-term

contract doubles supply. The investment programme of the Sintez OKA Group of Companies provides for a 50% increase in production and an increase in the number of manufactured products and brands.

SIBUR has also agreed to act as a supplier of ethylene oxide to the Dzerzhinsk site of Sintanol Plant LLC (NORKEM). The contract signed by the parties involves the shipment of products from 2020 to 2024 inclusive comprising the supply of up to 150,000 tpa of ethylene oxide to the NORKEM Dzerzhinsk site. In 2019 the first stage of a large-scale reconstruction of hydroxyethylation and oxypropylation capacities was completed, as a result of which the production of alkoxylated products increased by 30%. At the same time, the need for raw materials increased.

Ethanolamines project Dzerzhinsk

The construction of plants for production of methyl diethanolamine (MDEA) and dimethylethanolamine (DMEA) will start in 2021 at Dzerzhinsk, as part of a jv between Rusnano and Sintez OKA. Rusnano and Sintez OKA established a jv at the end of 2018, whereby the first project includes the MDEA and DMEA projects at Dzerzhinsk. RUSNANO noted that the coronavirus pandemic does not significantly affect the project's implementation schedule and preparations for the launch of production continue as usual.

The installation planned for construction is capable of alternating production of 17,000 tpa of DMEA or 14,000 tpa of MDEA. The production will be located in Dzerzhinsk on the industrial site of Sintez OKA where production takes place of ethanolamines, ethoxylated products, herbicides, as well as polyurethanes.

By 2024 NORKEM will be able to process up to 70,000 tpa of ethylene and propylene oxide. This will make it possible to efficiently load the reconstructed production facilities, fully to meet the growing needs of the Russian market for targeted petrochemical products and ensure export sales of products.

The Sintez OKA group of companies is a leader in the market of ethanolamines and alkyl ethanolamines in Russia. The NORKEM Group of Companies is the largest producer of surfactants in Russia with the installed capacity of 200,000 tpa for the production of non-ionic, anionic and amphoteric surfactants, as well as water-soluble polymers.

SIBUR-ethylene oxide expansion

SIBUR has started the procedure for evaluating the environmental impact assessment (EIA) on the project of reconstructing the production of ethylene oxide and glycol. This is to increase capacity up to 1,067 tons per day of equivalent ethylene oxide. The aim of the project is to increase the production capacity for equivalent ethylene oxide by installing a new water-cooled reactor block and eliminate bottlenecks that limit the maximization of productivity for equivalent ethylene oxide. ThyssenKrupp Industrial Solutions is responsible for conducting an environmental impact assessment between June and October 2020.

Russian isoproponal production at the Plant of Synthetic Alcohol

The Plant of Synthetic Alcohol at Orsk has increased production of isopropanol in the past few months due to the demand for antiseptics. At the end of March, Moscow-based Impexneftekhim resumed production of isopropanol at the bankrupt Synthetic Alcohol Plant at Orsk. The decision to resume work was made after a meeting in the government despite having been declared bankrupt last year. Propylene purchases for the plant rose sharply in March and April. The Synthetic Alcohol Plant has also entered into a processing agreement with the Novocherkassk Lubricants Plant to supply isopropanol.

Russian Isopropanol Imports

Month	*Value $*	*Kilo tons*	*Price Per Ton $*
April 2019	1.6	1.35	1185.2
May 2019	1.6	1.38	1159.4
June 2019	1.4	1.27	1102.4
July 2019	2.6	2.68	970.1
August 2019	3.5	3.76	930.9
September 2019	3.2	3.57	896.4
October, 2019	3.5	4.04	866.3
November 2019	2.4	2.64	909.1
December 2019	2.5	2.85	877.2
January 2020	1.5	1.68	892.9
February 2020	1.3	1.32	984.8
March 2020	1.6	1.49	1073.8
April 2020	2.4	1.75	1371.4

Although market conditions should help the company to pay off its two-billion-dollar debt and resolve the issue of bankruptcy, the complexities surrounding administration mean that this not so easy in practice.

Since September 2019, the Synthetic Alcohol Plant has been operating under a processing agreement which means that the company

processes raw materials and gives finished products, all of which is coordinated through Impexneftekhim. The plant works at full load without interruption employing 459 workers. However, starting independent work that would help pay off creditors is being prevented mainly by the banks, whilst at the same time some propylene suppliers do not want to work with the plant because of its bankruptcy status.

Other products

Galopolymer-new freon products

Russian state-run group Industrial Development Fund (FRP) has approved the provision of a soft loan for Galopolymer at Perm to start production of freon products such as octafluorocyclobutane (HFC-318) and diiodoperfluorobutane. These products will be fully exported to Japan and the US. Annual sales are estimated at 13 and 1.2 tons respectively. Freon-318 is an ozone-friendly freon used as a coolant and a coolant in air conditioners, aerosol containers, etc. Diiodoperfluorobutane is used as a reagent in the synthesis of fluorine-containing polymers and rubbers, as well as various organofluorine compounds. The reagent is in demand in the manufacture of high-tech products. These products are currently not available in Russia.

Russian Imports of MDI (unit-kilo tons)

Country	*Jan-Apr 20*	*Jan-Apr 19*
Belgium	3.0	5.6
China	11.1	9.7
Germany	5.5	4.6
Hungary	1.4	2.6
Japan	0.5	0.9
Netherlands	8.3	10.0
Saudi Arabia	11.8	12.3
South Korea	0.3	0.8
Others	1.1	0.1
Total	41.9	46.5

Russian TDI-MDI imports, Jan-Apr 2020

Russian TDI imports dropped to 14,500 tons in the first four months in 2020 against 18,800 tons in the same period last year whilst MDI imports dropped from 46,500 tons to 41,900 tons. Production of polyurethanes in Russia was normal until mid-March but has fallen since then. The lifting of the lockdown in Russia from early June, despite the continued threat from COVID-19, has seen some polyurethane processors already increase operating levels. Around 40% of TDI imports were sold into the Moscow region followed by Tatarstan with 17%. MDI imports into Russia amounted to 11,600 tons in April against 14,300 tons in March and 16,100 tons in April 2019, and thus the impact has thus far been limited. The largest region for Russian MDI imports this year has been the Vladimir Oblast accounting for 12,417 tons followed by the Moscow Oblast with 12,100 tons.

Metafrax oil reagent research

Metafrax is looking to develop new technologies for the production of oilfield reagents in Russia, which be achieved by the condensation of formaldehyde and bases containing a nitrogen atom. Metafrax is currently constructing a new formaldehyde plant at Gubakha with a capacity of 1/80,000 tpa.

Voskresensk Mineral Fertilisers-phosphoric acid expansion

Voskresensk Mineral Fertilisers (part of the Uralkhim company structure) is expanding phosphoric acid capacity from 180,000 tpa to 190,000 tpa. Work is scheduled to begin in July and be completed in October 2020. The plant was initially added in 1973 and has been gradually increased from 125,000 tpa to 180,000 tpa.

Metafrax-flame retardants at Krems, Austria

Metafrax is investing in the expansion of the production of halogen-free flame retardants at the Metadynea production site at Krems in Austria. In 2019, high-tech capacities for the production of carboxylic acids and aldehydes were introduced at the Metadynea-Austria production site, building a facility with a capacity of 7,500 tpa was built for around €10 million. Metadynea Austria has recently arranged production of ethanol-based disinfectants.

Kuibyshevazot-urea project

Construction work continues at the urea production site with a capacity of 1,500 tons per day for Kuibyshevazot and Tecnimont. The design institute NIIK informs that at the moment almost 70% of the work in its area of responsibility has already been completed. The plant's capacity will be 525,000 tpa or 1,500 tons per day of urea.

Russian production of plant protection agents

Syngenta is implementing a project to build a plant for the production of plant protection products in the Lipetsk Special Economic Zone. Investments in the project will amount to 1.6 billion roubles with launch planned for 2021. In the first stage, a range of selective and continuous herbicides will be produced. The production of plant protection agents in Russia rose 2.1 times in the period 2015 to 2019 and rose from 88,400 tons in 2018 to 96,400 tons in 2019.

Ukraine

Ukrainian polymer imports & production, Jan-Apr 2020

In the first four months in 2020 polyethylene imports into the Ukrainian market rose by 1% over 2019 and amounted to about 90,900 tons. HDPE imports amounted to 38,600 tons compared to 33,300 for the same period in 2019 whilst LDPE imports dropped to 25,500 tons against 26,500 tons. LLDPE imports dropped from 25,900 tons to 22,800 tons. Import of other types of polyethylene, including ethylene vinyl acetate (EVA) amounted to about 4,000 tons against 4,500 tons a year earlier.

Ukrainian Polymer Imports (unit-kilo tons)		
Product	***Jan-Apr 20***	***Jan-Apr 19***
PET	51.5	47.8
Polystyrene	6.7	7.0
LDPE	25.5	26.5
LLDPE	22.8	25.9
HDPE	38.6	33.3
Ethylene Vinyl Acetate	4.0	4.5
PP	39.1	43.1

Imports of polypropylene on the Ukrainian market amounted to 39,100 tons in the first four months which is 13% less than in 2019. Due to the partial shutdown of capacities, local companies have seriously reduced purchases of all types of propylene polymers. Only supplies of stat propylene copolymers (PP-random) increased in the first four months, while the demand for propylene polymers decreased.

Import deliveries of general-purpose polystyrene (GPPS) and high-impact polystyrene (HIPS) to Ukraine decreased by 5% in the first four months and amounted to 6,700 tons against 7,000 tons. The import of Russian polystyrene from Nizhnekamskneftekhim was unchanged at 3,500 tons. Nizhnekamskneftekhim may be unable to sell polystyrene product in the Ukrainian market after the President of Ukraine signed a decree imposing sanctions on certain organisations. The sanctions list included Nizhnekamskneftekhim. Among the chemical and petrochemical companies, the Bashkir Soda Company (BSK) was also sanctioned by Ukraine.

PET imports into Ukraine increased by 8% in the first four months in 2020 to 51,500 tons compared to 47,800 tons in the same period in 2019. The volume of deliveries from China fell from 36,400 tons in January-April 2019 to 12,200 tons whilst at the same time, imports from Lithuania tripled to 30,900 tons. The main supplier of Lithuanian material is the manufacturer Neo Group (30,800 tons). The key buyers of bottled PET from Lithuania are Coca-Cola Beverages Ukraine Limited and Retal.

Karpatneftekhim, Jan-Apr 2020

Karpatneftekhim increased exports of propylene in the first four months in 2020, rising from 20,900 tons to 31,500 tons, whilst benzene exports dropped from 12,300 tons to 6,600 tons. The largest share of propylene shipments was exported to Poland. Karpatneftekhim has encountered several stoppages this year due the high cost of raw materials combined with low prices for polyethylene. It is not clear yet if the economic effects of COVID-19 will force another stoppage at Karpatneftekhim. Based on feedstocks alone production should be able to continue but polyethylene prices may fall to levels that render output unprofitable.

Karpatneftekhim Petrochemical Exports (unit-kilo tons)		
Product	***Jan-Apr 20***	***Jan-Apr 19***
Propylene	31.5	20.9
Benzene	6.6	12.3

Ukraine imposed a duty of 18% on imports of polyethylene and PVC in May regardless of the country of origin and export. Whilst the decision favours Karpatneftekhim, which had requested the introduction of protective duties, some processing companies in Ukraine are disadvantaged in that purchasing polymers is now more expensive. Karpatneftekhim occupies around 50% of the Ukrainian markets for polyethylene and PVC, but processors state it is important to keep markets open.

The investigation found damage from imports on the capability of Karpatneftekhim to generate profits. Karpatneftekhim was forced to increase PVC export sales due to falling demand from the domestic market. In the first four months of 2020, 72,300 tons of PVC were shipped for export against 50,100 tons in the same period in 2019. Ukrainian producers of polymeric materials have reported disastrous consequences for the industry if barrage duties are imposed on imports of polyethylene and PVC. The only polymer producer in Ukraine wants to close the market with draconian duties, making it impossible for domestic producers to import similar polymers.

Belarus

Belarussian Chemical Production (unit-kilo tons)		
Product	***Jan-Apr 20***	***Jan-Apr 19***
Ethylene	25.2	29.8
Propylene	14.5	18.3
Benzene	27.7	37.9
Caprolactam	23.5	43.0
Orthoxylene	15.3	5.3
Paraxylene	9.7	8.0
Methanol	22.1	31.3

Belarussian petrochemicals 2020

Ethylene production in Belarus amounted to 25,200 tons in the first four months in 2020 against 29,800 tons in the same period last year. Most other petrochemicals recorded lower volumes this year. Polymir restarted acrylonitrile production at Novopolotsk in June after a scheduled shutdown. The plant capacity at Novopolotsk is 86,000 tpa. Two workshops stopped at the Polymir plant on 16 June due to a decrease in the supply voltage which affected ethylene and propylene production, in addition to the production of polyacrylonitrile fibre. In May, it was reported that Polymir was considering options to attract investment from Chinese CITIC Construction for the construction of a new ethylene-propylene plant.

The low level of utilisation of caprolactam production facilities at Grodno Azot is forcing Belarusian refineries to increase export supplies of benzene. Moreover, the corona crisis in the main sales markets has forced Grodno Azot to switch to a 4-day working week. In May the Mozyr oil refinery exported 4,000 tons of benzene of which 2,000 tons was delivered to the Russian caprolactam producer Shchekinoazot. The remaining volume was shipped to the terminal at Liepaja for export to Europe. Another Belarusian producer of benzene, Naftan, exported 3,400 tons of benzene in May through Liepaja.

Belarussian Aromatic Imports (unit-kilo tons)		
Product	***Jan-Apr 20***	***Jan-Apr 19***
Orthoxylene	2.5	4.9
Paraxylene	3.8	8.1

Belarussian chemical trade Jan-Apr 2020

At the end of May, shipments of propylene fraction to the Russian market were started from the Polymir plant. Around 1,000 tons were delivered to the Synthetic Alcohol Plant at Orsk, and NPP Neftekhimiya at Moscow.

Benzene imports into Belarus were not required in the first four months in 2020 against 3,044 tons in the same period last year. The absence of benzene imports was due to lower caprolactam production at Grodno. Toluene imports amounted to 2,229 tons against 2,332 tons. Orthoxylene imports dropped from 4,900 tons to 2,500 tons whilst paraxylene imports from 8,100 tons to 3,800 tons. Paraxylene prices dropped from $1025 per ton to $735 per ton.

Belarussian Organic Chemical Exports (unit-kilo tons)		
Product	***Jan-Apr 20***	***Jan-Apr 19***
Acrylonitrile	5.2	14.2
Melamine	1.1	1.7
Caprolactam	2.4	5.3
Phthalic anhydride	7.2	13.9
Methanol	8.2	7.1

Methanol imports into Belarus amounted to 21,214 tons in the first four months from 21,977 tons in January to April 2019. Average prices dropped from $305 per ton last year to $122 per ton this year. Isopropanol imports into Belarus jumped from 675 tons to 1472 tons in the first four months with prices rising from $1,317 per ton to $1,778 in 2020.

Belarussian PTA Imports (kilo tons)		
Country	***Jan-Apr 20***	***Jan-Apr 19***
South Korea	9.5	6.2
Poland	13.1	8.5
Portugal	3.2	3.0
Total	25.8	17.8

PTA imports into Belarus rose from 17,950 tons in the first four months last year to 25,760 tons in January to April 2020, with average prices dropping from $943 to $729 per ton. Imports were divided between Poland, which shipped 13,100 tons in January to April 2020 at a price of $723 per ton, and South Korea which shipped 9,500 tons at $738 per ton. MDI imports into Belarus dropped to 5,392 tons in the first four months in 2020 against 6,403 tons with average prices dropping from $1578 to $1380 per ton.

Belarussian polymer imports, Jan-Apr 2020

In the first four months of 2020, polypropylene imports into Belarus increased by 6.1% against the same period in 2019 and amounted to 39,000 tons against 34,100 tons. An increase in demand was recorded for

all types of propylene polymers. Homopolymer imports rose 6.6% to 25,600 tons, whilst imports of propylene copolymers rose 10,600 tons.

Belarussian Polymer Imports (unit-kilo tons)		
Product	***Jan-Apr 20***	***Jan-Apr 19***
PVC	22.6	22.3
Polypropylene	39.0	34.1
LDPE	15.7	15.8
HDPE	21.4	18.4

PVC imports into Belarus were unchanged in the first four months at 22,615 tons against 22,300 tons in the same period last year. In April local processors went to reduce the volume of PVC purchases under the pressure of a decrease in demand for finished products due to the coronavirus pandemic. Russia supplied 16,117 tons of various grades of PVC to the Belarussian market in January to April 2020.

Central Asia/Caucasus

Azerbaijan petrochemical exports Jan-Apr 2020

Azerbaijan exported 123,700 tons of methanol worth a total of $12.4 million in the period January-April 2020, accounting for 2.25% of the country's non-oil exports. Also, in the first four months Azerbaijan exported 80,553 tons of polymer products worth to $60.482 million, increasing by 18.9% in volume against 2019 whilst values dropped by 2.5%. Polyethylene exports comprised 45,581 tons for $29.827 million and polypropylene 31,695 tons for $26.454 million. In Azerbaijan, polypropylene is produced at the SOCAR Polymer plant, commissioned in July 2018. The design capacity of the plant is 184,000 tpa of polypropylene.

Pavlodar Petrochemical Plant-hydrogen

Pavlodar Petrochemical Plant is undertaking a preliminary environmental impact assessment (EIA) of a new hydrogen production unit with a capacity of 12,500 normal cubic metres per hour. Completion of the installation is expected before the end of 2021. Hydrogen is used in the hydrotreatment of diesel fuel and gasoline to reduce sulphur content. The Pavlodar Petrochemical Plant is the largest oil refining and oil product manufacturing company in the north-east of Kazakhstan and one of the three oil refineries in the republic, 100% of which are owned by KazMunayGaz. Pavlodar Petrochemical Plant has also held public hearings on new treatment plant of liquefied petroleum gas (LPG). In order to improve the quality of oil products produced by the refinery and reduce the environmental burden, a new alkaline treatment plant for LPG is planned at the Petrochemical Plant. UOP's Merox technology has been selected.

In January-April SOCAR Polymer exported products worth $41.5 million, which is 37% more than the same period in 2019. The launch of the production of HDPE with a capacity of 120,000 tpa on the Sumgait chemical industrial park took place in February 2019, which followed the start-up of the polypropylene plant in July 2018 with a capacity of 184,000 tpa.

SOCAR Polymer (has mastered the production of a new brand of polypropylene, which can be used in the manufacture of medical devices, including medical masks. According to the company, the first batch of a new brand of propylene homopolymer has already passed all the necessary laboratory tests. At the initial stage, SOCAR Polymer intends to produce about 600 tons of this polypropylene; in the future, production volumes can be increased. The new brand of polypropylene is applicable for processing in the production of non-woven materials, subsequently used for the manufacture of protective masks, as well as respirators, disposable medical clothing, hygiene products, furniture fabrics, building textiles and even some types of geotextiles.