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Key points from Issue 357

Central European petrochemical markets

- Sales revenues for PKN Orlen dropped in the second quarter to zl 17.0 billion versus zl 29.2 billion in the same period in 2019
- Orlen's margins for olefins and polyolefins performed well in the second quarter, whilst in the aromatic sector a slight decline in paraxylene was recorded
- MOL recorded a second-quarter loss of Ft 41.5 billion as sales plummeted due to the pandemic
- Propylene imports into Czech Republic amounted to 26,400 tons in the first six months in 2020 against 19,100 tons in 2019, whilst benzene imports dropped from 47,400 tons to 43,400 tons.

Russian chemical production

- Russian chemical production rose 2.6% in the first six months in 2020, driven mostly by an increase in polymers
- Ethylene production in Russia exceeded 2.1 million tons in the first half year compared to 1.6 million tons in the same period in 2019
- Benzene production dropped from 738,400 tons to 714,000 tons
- Bulk plastics rose from 9.2 million tons in first half 2019 to 10.1 million tons in 2020
- Russia produced 2.282 million tons of methanol in the first six months in 2020 against 2.271 million tons in same period in 2019

Russian chemical trade

- Exports of chemicals, plastics and rubber totalled 25.294 million tons in the period in January to June 2020 for \$10.417 billion against 26.257 million tons in the same period in 2019 for \$12.213 billion. Average prices per ton of exports dropped from \$465 per ton to \$411
- Imports totalled 7.522 million tons in January to June 2020 to a total of \$20.050 billion against 7.719 million tons in January to June 2019 for \$21.3 billion. Average prices declined from \$2759 per ton to \$2666 per ton in the first six months this year
- Russian exports of synthetic rubber amounted to 437,400 tons in the first six months in 2020, down from 514,000 tons in the same period in 2019
- PTA imports into Russia totalled 155,800 tons in the first six months in 2020 against 221,200 tons in the same period last year

Russian chemical projects

- Kazanorgsintez aims to complete the modernisation of the polycarbonate plant by the end of 2020, which will increase capacity from 70,000 tpa to 100,000 tpa
- The coronavirus pandemic has not affected the timing of the design of the methanol complex at Volgograd based on the site of the former company Khimprom
- Gazprom neftekhim Salavat remains interested in launching using MTO technology plant

CENTRAL & SOUTH EAST EUROPE

PKN Orlen Jan-Jun 2020

Sales revenues for PKN Orlen dropped in the second quarter to zl 17.0 billion versus zl 29.2 billion in the

PKN Orlen Financial Performance (zl million)						
	Q1 19	Q2 19	Q3 19	Q4 19	Q1 20	Q2 20
Sales revenues	25,246	29,228	29,229	27,500	22,077	17,010
Operating Profit/(Loss)	2,014	2,732	3,167	1,259	1,607	5,693
Refining	499	851	1,167	267	(353)	614
Petrochemical	708	708	721	177	766	251
Energy	242	432	514	381	488	4,439
Retail	676	859	925	585	706	726
Upstream	94	83	85	33	219	10
Corporate functions ¹	(205)	(201)	(245)	(184)	(219)	(347)

same period in 2019. A decrease of sales revenues resulted from lower volume sales in all of the group's operating segments. In the petrochemical sector for ethylene fell by 21% in the first half of 2020 against the same period last year and propylene fell by 24%

nctions 1 (205) (201) (245) (184) (219) (347) For Q2 2020, PKN Orlen

PKN Orlen Production (unit-kilo tons) Jan-Jun 20 **Product** Jan-Jun 19 240.8 266.5 Ethylene 221.3 Propylene 224.3 31.5 Butadiene 29.9 5.4 Toluene 6.7 Phenol 21.5 22.4 Polyethylene 176.1 192.8 PVC 141.3 147.9 Polypropylene 174.4 167.7 PTA 291.0 274.0

PKN Orlen Production (unit-kilo tons)

Product Jan-Jun 20 Jan-Jun 19

Ethylene 240.8 266.5

Propylene 224.3 221.3

Butadiene 29.9 31.5

Possible the drop in revenues the overall operating profit was the highest over the past six quarters. Over the second quarter, the petrochemical capacities were utilised in 73%, reflecting a round of regular maintenance shutdowns. Despite the pandemic petrochemical operating profits were still higher than in the fourth quarter last year when profits dropped to zl 177 million.

Production of petrochemicals at Plock and Wloclawek remained relatively stable in the first half of 2020, although ethylene production at Plock dropped from 266,500 tons to 240,800 tons. PTA production at Wloclawek rose from 274,000 tons to 291,000 tons. The petrochemical segment's EBITDA came in at zl 251 million, of which zl 63 million was attributable to Anwil and zl 72 million to

PKN Orlen Group Chemical Revenues (zl million)						
Product	Product Jan-Jun 20 Jan-Jun 19					
Monomers	1344	1869				
Polymers	792	1313				
Aromatics	350	550				
Fertilisers	401	455				
Plastics	619	737				
PTA	690	995				

PTA.

The maintenance programme for the PTA plant at Wloclawek commenced on 10 June and restarted on 15 July. The paraxylene plant at Plock started a maintenance shutdown from 13 June and restarted on 6 July. 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. PKN Orlen has

instructed its engineering division Orlen Projekt and Energa Invest to prepare documentation for technical security systems at the PTA plant at Wloclawek.

PKN Orlen Petrochemical Margins (€ per ton)						
Product	Q1 19	Q2 19	Q3 19	Q4 19	Q1 20	Q2 20
Polyethylene	308	299	280	300	273	389
Polypropylene ⁷	423	417	409	418	406	467
Ethylene	593	568	543	571	594	478
Propylene	511	467	421	480	480	421
Toluene	218	224	173	197	222	83
Benzene	174	273	188	184	309	39
Butadiene	422	362	306	387	356	177
Paraxylene	487	366	328	431	402	327

Revenues from petrochemical sales were lower across the board for PKN Orlen, dropping from zl 1.869 billion in the first half of 2019 to zl 1.344 billion in the same period in 2020 whilst polymer revenues dropped from zl 1.313 billion to zl 792 billion. Margins for olefins and polyolefins

performed well in the second quarter, whilst in the aromatic sector a slight decline in paraxylene was recorded to €327 per ton and huge falls were recorded for benzene and toluene to €83 and €39 per ton

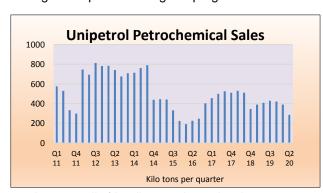
respectively. The capacities of all Orlen's refineries were utilised at 71% in the first half of 2020 with an aggregate crude throughput of 6.2 million tons and sales at 5.2 million tons.

Central European Refining Volumes (unit-mil tons)				
Company	Jan-Jun 20	Jan-Jun 19		
INA	1.3	1.9		
Lotos	5.4	5.5		
Lukoil Bourgas	2.4	2.3		
Lukoil Ploiesti	1.2	1.2		
MOL	5.5	4.8		
NIS	1.6	1.7		
Orlen-Lietuva	5.2	4.6		
Orlen-Plock	7.3	8.0		
Petrom	2.4	2.6		
Rompetrol	2.3	2.7		
Slovnaft	1.8	2.0		
Unipetrol	2.1	4.0		
Total	38.4	41.4		

In April PKN Orlen closed the purchase of an 80% equity stake in the Energa Group which helped drive group profitability in the second quarter. With oil prices in flux, PKN Orlen reduced its operating costs in the first half of 2020 by zl 12.2 billion. Operating costs were also affected by the reduction in processing as a result of maintenance shutdowns.

During the second quarter further progress was made on the group's strategic capital projects, including the construction of a visbreaker unit designed to improve the Płock refinery's operational efficiency. The first half of 2020 saw completion of the polyethylene unit at Litvinov in the Czech Republic and continued intensive work on the offshore wind farm project to be built in the Baltic Sea.

By taking over the Energa Group in the second quarter, PKN Orlen has decided to change the company's policy towards low and zero-carbon sources and, as a financially strong shareholder, is ready to support the Energa Group. Following the progression on the acquisition of Lotos, a process has now started where



environmentally friendly propylene glycol.

PKN Orlen could take over state assets in the gas					
company PGNiG. PKN Orlen is at the helm of the					
process aimed at creating a single, all-Polish group					
with well diversified revenue sources and					
significant market standing in Europe.					

In other project areas PKN Orlen signed a license agreement for an isopropanol plant at Plock whilst at Orlen Południe's Trzebinia site work commenced on a project to build a lactic acid unit. Progress was made on the construction of Europe's largest unit for the production of

Czech Petrochemical Exports (unit-kilo tons)			
Product	Jan-Jun 20	Jan-Jun 19	
Ethylene	7.0	46.2	
Propylene	5.1	6.0	
Butadiene	0.0	2.0	
Benzene	10.2	31.9	
Toluene	2.9	6.4	
Ethylbenzene	29.4	78.2	

Unipetrol, Jan-Jun 2020

Unipetrol's revenue amounted to Kc 15 billion in the first half of 2020, 15% down on the same period in 2019. The financial results were affected by low margins in both the refinery and petrochemical sector, the turnaround at the chemical plant at Litvinov, and restrictions related to measures taken against the spread of the coronavirus. Within the framework of the turnaround at the Litvinov plant, Unipetrol succeeded in preparing production

technologies for a new four-year cycle. In terms of trade Unipetrol reduced ethylene exports in the first half of 2020 to 7,000 tons against 46,200 tons in the same period in 2019. The Unipetrol-Synthos jv Butadien Kralupy undertook a planned 20 day from 10 May due to the cracker shutdown at Litvinov. The 544,000 tpa ethylene cracker at Litvinov is one of the main suppliers of C4s to Kralupy for the production of butadiene.

Unipetrol processed 776,000 tons of crude oil at its two refineries in the second quarter against 1.9 million tons in the same period in 2019. Sales volumes amounted to 1.013 million tons for refinery products and 0.286 million tons for petrochemical products which is the lowest level since the cracker was undergoing

major repairs in 2016. Investments for Unipetrol in the second guarter of 2020 amounted to Kc 3.9 billion and were aimed primarily at the expansion, greening and maintenance of production technologies.

MOL's Olefin & Polyolefin Production (unit-kilo tons)			
Product	Jan-Jun 20	Jan-Jun 19	
Ethylene	410	418	
Propylene	210	215	
Butadiene	27	44	
Raffinate	45	75	
Product	Jan-Jun 20	Jan-Jun 19	
LDPE	129	124	
HDPE	202	200	
PP	265	265	

MOL's Petrochemical Sales

19 19

Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2

19 19 Kilo tons per quarter

18

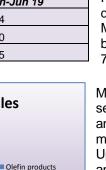
400

300

200

100

0



■ Polymer products

■ Butadiene products

MOL, Jan-Jun 2020

MOL recorded a second-quarter loss of Ft 41.5 billion as sales plummeted due to the coronavirus pandemic. Revenue for MOL Group fell 40% to Ft 812.6 billion as lockdowns reduced fuel sales and crude prices reached record lows. The cost of raw material and consumables fell by 48% to Ft 561.4 billion, but total operating costs were down just 35% at Ft 820.7 billion. Net revenue of MOL's downstream business fell 43% to Ft 678.6 billion and upstream revenue declined 41% to Ft 73.6 billion.

MOL faced unprecedented challenges in the second quarter of 2020, from significant health and safety risks stemming from the pandemic to major operational issues during the lockdown. Upstream EBITDA declined to \$112 million in Q2 and \$297 million in H1 affected by the collapsing oil and gas prices. The downstream EBITDA declined materially to \$110 million in Q2, as refinery margins turned negative from id-May.

A strong first quarter for MOL was followed by major operational challenges in the second quarter with significant price and margin movements. The petrochemical contributions remained stable, as both margins and volumes held up reasonably well during the pandemic. MOL's flagship polyol project reached 65% overall completion at the end of Q2. All major prefabricated equipment reached the site whilst the transportation of all oversize equipment via river/sea have been completed. MOL remains fully committed to complete this flagship investment, with group

emphasis on moving away from fuel and energy towards plastics and chemicals.

nave been completed. WOL remains fully col			
Polish Chemical Pro	duction (un	it-kilo tons)	
Product	Jan-Jun 20	Jan-Jun 19	
Caustic Soda Liquid	189.5	182.1	
Caustic Soda Solid	37.6	31.2	
Toluene	5.4	6.7	
Phenol	21.5	22.4	
Caprolactam	77.1	86.0	
Acetic Acid	2.6	3.3	
EPS	47.4	53.5	
Synthetic Rubber	137.4	143.4	
Ammonia (Gaseous)	1148.2	1271.0	
Ammonia (Liquid)	50.7	49.9	
Pesticides	39.5	33.5	
Nitric Acid	1216.0	1173.0	
Nitrogen Fertilisers	1065.0	1009.0	
Phosphate Fertilisers	207.7	241.6	
Potassium Fertilisers	185.9	220.2	

Grupa Azoty Jan-Jun 2020

Grupa Azoty and Grupa Azoty Puławy recorded significant declines in revenues in the second quarter despite COVID-19, although the profits remained stable. Consolidated revenues of the Grupa Azoty Group fell to zl 2,268.9 million in the second quarter from zl 2,732 million in the same period last year and in the case of Grupa Azoty Puławy it amounted to zl 653 million, compared to zl 881.5 million. In the second quarter, the Grupa Azoty's EBITDA amounted to zl 353.4 million, compared to zl 332 million in the second quarter of 2019.

The plastics segment for Grupa Azoty was the hardest hit due to the pandemic restrictions where revenues dropped by 43% against the same period in 2019. In the chemistry segment, the situation was more mixed.

Revenues generated by Azoty ZAK in the second quarter of 2020 for oxo alcohols were by 32% lower than in the same quarter last year and for melamine, the decrease in revenues was 38%. Titanium white sales from the Police plant remained fairly stable, whilst the fertiliser segment did not suffer significantly from the pandemic.

Czech Petrochemical Imports (unit-kilo tons)			
Product	Jan-Jun 20	Jan-Jun 19	
Ethylene	2.4	0.1	
Propylene	26.4	19.1	
Butadiene	26.1	8.1	
Benzene	43.4	47.4	
Toluene	2.7	0.0	
Styrene	18.1	10.0	

tons.

Czech petrochemical trade, Jan-Jun 2020

Czech trade in chemical and petrochemicals recovered in June against May with prices reflecting some recovery. Ethylbenzene exports from the Czech Republic to Poland have been suspended in the past few months although benzene and propylene imports were similar to other months in 2020. Propylene imports into Czech Republic amounted to 26,400 tons in the first six months in 2020 against 19,100 tons in the same period in 2019, whilst benzene imports dropped from 47,400 tons to 43,400

A total of 44,544 tons of methanol was imported into the Czech Republic in the first six months versus 61,000 tons in the same period last year. The largest source of imports was from Poland which shipped 18,400 tons in the first half against 3,400 tons. Imports from Poland were mostly redirected from Russian imports, whilst direct imports from Russia dropped from 35,700 tons in January to June 2019 to 17,800 tons in the

Czech Methanol Imports (unit-kilo tons)			
Country	Jan-Jun 20	Jan-Jun 19	
Germany	6.7	11.5	
Norway	0.4	8.5	
Russia	17.8	35.7	
Slovakia	0.5	0.1	
Poland	18.8	3.4	
Others	0.4	1.7	
Total	44.5	61.0	

same period in 2020. For isopropanol, imports into the Czech Republic rose from 1,764 tons in the first six months in 2019 to 2,944 tons in the same period in 2019. The two largest suppliers were Germany and the Netherlands. Imports rose to meet the demand for sanitizer.

MDI imports into the Czech Republic made up the declines from March and April to total 14,200 tons for the first half of 2020 up from14,000 tons from the same period in 2019. TDI imports dropped from 4,383 tons in January to June 2019 to 2,983 tons in 2020. Regarding DINP plasticizers, imports into

the Czech Republic dropped from 6,334 tons in the first six months last year to 5,160 tons, whilst exports rose to 26,380 tons from 21,305 tons.

Ciech, silicates and polyuerthane markets improve

Two plants of the Ciech group, which had to reduce production due to the decline in demand caused by the coronavirus pandemic, have revived production levels. Ciech Pianki, which produces polyurethane foams, is already operating at full production capacity, whilst Ciech Vitrosilicon is systematically increasing the production of silicates. Ciech Vitrosilicon is currently the largest supplier of sodium silicates in Europe and has two production plants at Żary and Iłowa. Ciech Vitrosilicon plans to return to full production capacity in the third quarter of 2020.

Since May, Ciech Pianki has been observing a steadily growing demand for products, and clear signals of recovery in both Polish and foreign markets. The coronavirus pandemic contributed to the decline in orders on the polyurethane foam market, which is directly related to the furniture sector in Poland and Europe. Due to the rebound in the Polish and European furniture production segment, the production of polyurethane foams in the Ciech group's Bydgoszcz plant has already returned to the level from before the pandemic. Ciech Pianki produces approximately 30,000 tpa of foams.

Ciech sells epoxy resin division Ciech Żywice to Lerg

In August Ciech signed a preliminary 100% sale agreement with Lerg SA for shares of Ciech Żywice, the only producer of epoxy resins in Poland and an important supplier of polyester resins. Lerg SA from Podkarpacie is one of the leading producers of resins in Central Europe, specializing in the production of polyester resins. The sale will be finalized after obtaining the necessary regulatory approvals. Ciech Żywice is based in Nowa Sarzyna and generated zl 298 million in revenues in 2019.

The acquisition of Ciech Żywice is an important step towards the implementation of the company's strategic goals, which are consolidating the position of a leader in the production of resins and increasing the value, development potential and security of the company.

RUSSIA

Russian Chemical Production (unit-kilo tons)			
Product	Jan-Jun 20	Jan-Jun 19	
Caustic Soda	658.0	645.0	
Soda Ash	1,682.0	1,695.0	
Ethylene	2,109.8	1,577.8	
Propylene	1,219.1	1,201.4	
Benzene	714.0	738.4	
Xylenes	256.6	191.8	
Styrene	374.7	389.3	
Phenol	128.7	110.2	
Ammonia	10,100.0	9,200.0	
Nitrogen Fertilisers	5,715.0	5,859.0	
Phosphate Fertilisers	2,196.0	2,097.0	
Potash Fertilisers	4,846.0	3,971.0	
Plastics in Bulk	4,906.0	4,244.0	
Polyethylene	1,667.0	1,144.0	
Polystyrene	282.8	275.2	
PVC	542.5	531.8	
Polypropylene	783.3	783.1	
Polyamide	82.0	79.2	
Synthetic Rubber	727.0	777.0	

Russian chemical production, Jan-Jun 2020

Russian chemical production rose 2.6% in the first six months in 2020, driven mostly by an increase in polymers. Ethylene production exceeded 2.1 million tons compared to 1.6 million tons in the same period in 2019. Benzene production dropped from 738,400 tons to 714,000 tons. Bulk plastics rose from 9.2 million tons in January to June last year to 10.1 million tons in the first half this year.

Russian chemical & polymer trade, Jan-Jun 2020

Exports of chemicals, plastics and rubber totalled 25.294 million tons in the period in January to June 2020 for a combined value of \$10.417 billion. This measures against 26.257 million tons in the same period in 2019 for a total of \$12.213 billion, and thus average prices per ton of exports dropped from \$465 per ton in 2019 to \$411 in 2020.

Imports totalled 7.522 million tons in January to June 2020 to a total of \$20.050 billion against 7.719 million tons in January to June 2019 for \$21.3 billion. Average prices of imported chemicals and plastics declined from \$2759 per ton to \$2666 per ton in the first six months this year.

Pharmaceutical imports into Russia were valued at \$5.2 billion for the first half of 2020 which is consistent with previous

years. Exports of pharmaceutical imports from Russia comprise less than 10% of total import values although only a third down on volume. Imports of vaccine related products into Russia amounted to a total of \$1.368 billion in the first half of 2020 only against \$101.3 million of exports.

	Russian Chemical & Chemical Product Trade Jan-Jun 2020					
Category	Exports ktons	Exports \$ mil	Av Price \$ per ton	Imports ktons	Imports \$ mil	Av Price \$ per ton
Inorganic	3932	1380	351.0	2863	1460	510.0
Organic	3084	1380	447.5	764	2380	3115.2
Pharmaceuticals	21.3	407	19108.0	63.3	5120	80884.7
Fertilisers	15375	3190	207.5	142	72.7	512.0
Cosmetics	69.1	346	5007.2	182	1320	7252.7
Soap and detergents	255	261	1023.5	280	686	2450.0
Paints & lacquers	148	159	1074.3	269	794	2951.7
Protein substances, enzymes	11.5	24.5	2130.4	118	334	2830.5
Explosives	17.9	53.3	2977.7	1.99	11.3	5678.4
Photo chemicals	6	0.394	65.7	8.78	112	12756.3
Other Chemicals	415	496	1195.2	633	1820	2875.2
Plastics	1352	1590	1176.0	1748	4190	2397.0
Syn & Nat Rubber	607	1130	1861.6	449	1750	3897.6
Total	25293.8	10417.19	411.8	7522.07	20050	2665.5

By value, exports of fertilisers accounted for 31% of total chemical product revenues in the first half of 2020, whilst organic chemicals and inorganic chemicals both accounted for 13%. Regarding imports, inorganic chemicals accounted for 38% of inward trade by weight but this only accounted for 7% of value whilst organic chemicals comprised 12% in value and 10% in weight.

Russian petrochemical projects

SIBUR commences start of construction of Amur Gas Chemical Complex

The first test pile was driven into the foundation of the Amur Gas Chemical Complex (AGHK) on 18 August, into what which will become one of the largest and most modern plants for the production of base polymers. The AGHK project involves the construction of a complex for the production of basic polymers with a total capacity of 2.7 million tpa including 2.3 million tpa of polyethylene and 400,000 tpa of polypropylene.

The construction of the complex will be synchronized with the gradual reaching full capacity of the Amur GPP of Gazprom, the supply of ethane and LPG from which should provide the AGHK with raw materials for further processing. Estimated terms of completion of construction and commissioning works 2024-2025. It is assumed that the Chinese state corporation Sinopec will act as SIBUR's partner in the project.

The main part of the preparatory work has already been completed at the AGHK construction site. Contracts for detailed design and complete supply of equipment and materials for the main technological units of the future complex have been signed and are being implemented.

Gazprom neftekhim Salavat-MTO project

Gazprom neftekhim Salavat remains interested in launching a new gas chemical complex using MTO technology. Currently, options are being developed for integrating existing plants with promising installations. As guidelines for the development of the Monomer plant, options are being considered with the integration of the existing olefin production capacities of the EP-355 unit and polymerisation using the scheme: natural gas to methanol and then to olefins and polyolefins.

In September 2018, Gazprom neftekhim Salavat and the Chinese company Wison Engineering held talks on cooperation in a new project for the production of olefins and polyolefins at Salavat. As part of the planned cooperation, the Chinese company is ready to provide technical support to the project at the Pre-FEED stage, participate in the design of the complex, selection of technology, etc. Gazprom neftekhim Salavat is considering processing about 2.5 billion cubic metres of natural gas per annum, which could produce another 416,000 tpa of polyethylene and 617,000 tpa of polypropylene to current production facilities.

SIBUR's technological partners include Linde and NIPIGAZ consortium (pyrolysis units), Univation Technologies and Chevron Phillips (ethylene polymerization) and LyondellBasell (propylene polymerization). NIPIGAZ will manage the design, procurement and construction of off-site facilities. In areas that do not involve the purchase of unique licensed foreign-made equipment, the project assumes its localization up to 80%.

The construction of the complex will become a key project in SIBUR's investment programme for the next five years, and the launch will almost double capacity for the production of base polymers, even taking into account ZapSibNeftekhim, which is already reaching full capacity. Processing of ethane, which will become one of the main raw materials for the AGHK, quadruples the added value of the products created from the feedstock.

Nizhnekamskneftekhim-ethylene project update

Russian state body Glavgosexpertiza has reviewed and approved the design documentation and the

results of engineering surveys for the construction of an EP-600 ethylene production complex at Nizhnekamskneftekhim. The design documentation provides for the construction of a new EP-600 ethylene production complex which is intended for the processing of naphtha and for obtaining ethylene and propylene of polymer grades. Other products include butadiene, high-purity benzene, as well as petrochemical by-products.

The construction is taking place in the Nizhnekamsk municipal district, in the second industrial zone of Nizhnekamskneftekhim. The site of the complex will include a zone of pyrolysis furnaces (consisting of six high-performance furnaces), a zone for primary fractionation and washing of raw materials and a zone of compressors for compressing cracking gas. The main access to the territory of the new complex will be via the Nizhnekamsk-Begishevo motorway, then along the on-site roads of the second industrial zone of Nizhnekamskneftekhim. 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 in 2020 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 at Nizhnekamsk and a shift camp is being constructed in parallel. In the near work on the main foundations for the new cracker will start, including underground pipelines, steel structures, etc. Already a column DA036-01 was installed which is designed to separate propylene from propylene-propane fractions. The project is estimated at 36% completion by mid-August.

SIBUR's Chemical Sales (unit-kilo tons) Jan-Jun 20 Jan-Jun 19 1,779 2,414 Petrochemical totals 509 280 PΕ 551 131 269 Elastomers 213 Plastics and organic synthesis products 404 396 Intermediates and other chemicals 372 228 Midstream products, including: 2,326 3,334 LPG 2,735 1,835 Naphtha 491 599

SIBUR. Jan-Jun 2020

SIBUR reduced its revenue by 11.6% in the first half of 2020 to 235.3 billion roubles. The production at ZapSibNeftekhim led to a 58.2% increase in revenues in the olefins and polyolefins up to 77.7 billion roubles and this helped offset some of the negative economic effects resulting from COVID-19. For example, in the sector for plastics, elastomers and intermediate products, SIBUR recorded a decline in revenues of 51.2% to 5.2 billion roubles.

SIBUR's revenue in the gas processing and infrastructure segment decreased in the first half of 2020 by 44.2% to 31.4 billion roubles. The EBITDA

fell by 15.4% over the first half year to 78 billion roubles whilst the EBITDA margin dropped to 31.4% versus 32.3% in 2019.

SIBUR's monomer & Intermediate Production (unit-kilo tons) **Product** Jan-Jun 20 Jan-Jun 19 85.4 83.4 Benzene 99.4 87.9 Styrene PTA 116.2 28.7 Propylene 544.7 318.0 160.0 Ethylene Oxide 163.8 Butadiene 98.5 151.9 Isoprene 0.0 41.9 84.0 Isobutylene 9.9 Ethylene 862.9 330.7

As a result of the weak performance across the main divisions SIBUR recorded a net loss of 4.46 billion roubles in the first half of 2020. In terms of production ethylene rose from 330,700 tons to 862,900 tons whilst propylene increased from 318,000 tons to 544,700 tons. Due to the launch of

the ZapSibNeftekhim complex, LPG export sales decreased for SIBUR by 32.9% in the first half of 2020 to 1.8 million tons, whilst naphtha sales decreased by 18% to 491,000 tons. The EBITDA in the olefins and polyolefins segment increased by 37.2% for SIBUR mainly due to growth in sales volumes, which was partially offset by lower product margins.

Russian Ethylene Production (unit-kilo tons)		
Producer	Jan-Jun 20	Jan-Jun 19
Angarsk Polymer Plant	112.6	107.2
Kazanorgsintez	318.5	328.5
Stavrolen	175.6	168.9
Nizhnekamskneftekhim	328.3	326.3
Novokuibyshevsk Petrochemical	23.8	33.4
Gazprom n Salavat	193.1	189.9
SIBUR-Kstovo	209.3	191.6
SIBUR-Khimprom	28.2	28.7
Tomskneftekhim	142.7	137.8
Ufaorgsintez	66.8	64.1
ZapSibNeftekhim	510.9	0.0
Total	2109.8	1576.5

Polypropylene sales for SIBUR increased by 81.6% in the first half of 2020 over the same period in 2019 to 508,700 tons. Sales of polyethylene increased by more than 100% to 551,300 tons. Sales of rubbers and elastomers declined by 20.6% to 213,300 tons due primarily to the sale of Togliatti-based assets. This decline was partly offset by stronger sales of DOTP following the launch of the new production facility in May 2019.

Russian petrochemical markets

Russian ethylene production, Jan-Jun 2020

Russian ethylene production totalled 2.110 million tons in the first six months in 2020 against 1.577

million tons in the same period in 2019. ZapSibNeftekhim produced 510,900 tons in January to June and is still running less than 85% of capacity. Full capacity at the 1.5 million tpa plant at Tobolsk is expected by the end of the year. In the first six months in 2020 Nizhnekamskneftekhim increased ethylene production

from 326,300 tons to 328,300 tons whilst Kazanorgsintez dropped slightly from 328,500 tons to 318,500 tons.

Other important ethylene producers in the first six months included SIBUR-Kstovo which produced 209,300 tons versus 191,600 tons and Gazprom neftekhim Salavat which produced 189,900 tons against 193,100 tons. In terms of feedstocks, ZapSibNeftekhim relies on LPGs delivered from the gas processing plants in

Russian Propylene Production (unit-kilo tons)		
Producer	Jan-Jun 20	Jan-Jun 19
Angarsk Polymer Plant	62.1	59.3
Kazanorgsintez	24.6	25.4
Lukoil-NNOS	111.4	149.0
Stavrolen	67.7	67.6
Nizhnekamskneftekhim	157.6	164.8
Novokuibyshevsk Petrochemical	17.3	20.7
Omsk Kaucuk	19.7	20.3
Polyom	90.6	95.5
Gazprom n Salavat	83.4	84.7
SIBUR Kstovo	91.8	84.6
SIBUR-Khimprom	27.9	33.5
Tomskneftekhim	80.3	73.5
SIBUR Tobolsk	189.1	225.6
Ufaorgsintez	95.6	96.9
ZapSibNeftekhim	196.1	0.0
Total	1315.3	1201.4

West Siberia, whilst Kazanorgsintez relies heavily on ethane feedstock supplies from the Orenburg and Minnibayevo gas plants but also needs to purchase other hydrocarbons. Propane supplies are purchased by Kazanorgsintez mostly from Uralorgsintez and SIBUR-Novatek at Tobolsk, usually in volumes of 8-10,000 tons per month.

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

Russian propylene production amounted to 1.315 million tons in the first six months in 2020 against 1.201 million 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 196,100 tons in the first six 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 225,600 tons in the first six months in 2019 to 189,100 tons.

Nizhnekamskneftekhim reduced propylene production slightly in the first six months from 164,800 tons to 157,600 tons, whilst Lukoil-NNOS at the Kstovo refinery reduced output from 149,000 tons to 111,400 tons. Gazprom neftekhim Salavat produced 83,400 tons against 84,700 tons.

Russian Propylene Domestic Sales (unit-kilo tons)		
Company	Jan-Jun 20	Jan-Jun 19
Angarsk Polymer Plant	37.7	42.6
SIBUR-Kstovo	80.7	68.7
Lukoil-NNOS	100.5	109.8
Others	6.9	10.2
Total	225.8	231.4

Russian sales of propylene on the domestic merchant market amounted to 225,800 tons in the first six months in 2020 against 231,400 tons in the same period last year. Although production was started at ZapSibNeftekhim all volumes were consumed internally in the production of polypropylene.

Russian Propylene Exports (unit-kilo tons)		
Producer	Jan-Jun 20	Jan-Jun 19
Lukoil-NNOS	16.5	26.9
SIBUR-Kstovo	3.4	6.1
Omsk Kaucuk	0.0	0.0
Angarsk Polymer Plant	0.7	0.0
Stavrolen	2.0	12.1
Total	22.6	45.0

The largest propylene supplier to the domestic market in the first six months was Lukoil-NNOS, shipping 100,500 tons against 109,800 tons followed by SIBUR-Kstovo which increased from 68,700 tons to 80,700 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. As in-plant processing of propylene in Russia has increased this year in the production of polypropylene export volumes have fallen, dropping from 45,000 tons in the first six months to 22,600 tons in the same period this year.

Russian styrene production & sales, Jan-Jun 2020

Russia produced 375,700 tons of styrene in the first six months in 2020 versus 389,300 tons in the same period in 2019. The largest producer Nizhnekamskneftekhim reduced production from 153,200 tons to 149,400 tons. Gazprom neftekhim Salavat reduced production from 116,900 tons to 92,400 tons due to maintenance in January, whilst SIBUR-Khimprom at Perm reduced from 74,500 tons to

Russian Styrene Production (unit-kilo tons)		
Producer	Jan-Jun 20	Jan-Jun 19
Nizhnekamskneftekhim	149.4	153.2
Angarsk Polymer Plant	35.1	20.5
SIBUR-Khimprom	73.0	74.5
Gazprom n Salavat	92.4	116.9
Plastik, Uzlovaya	25.7	24.2
Total	375.7	389.3

73,000 tons. In terms of raw materials, four of the five producers are integrated back into ethylbenzene with the exception being Plastik at Uzlovaya.

Styrene sales on the Russian domestic merchant market totalled 53,400 tons in January to June 2020 against 54,600 tons in the same period in 2019, with Gazprom neftekhim Salavat increasing shipments from 22,000 tons to 28,100 tons and SIBUR-Khimprom reducing shipments from 19,600 tons to 14,600 tons.

Bulk Polymers

Russian polyethylene production and trade Jan-Jun 2020

Russian polyethylene production rose 56% in the first half of 2020 to a total of 1.463 million tons against 938,900 tons in the same period in 2019. Whilst LDPE production rose by 3% to 338,600 tons, LLDPE production rose from 122,100 tons to 231,000 tons and HDPE rose from 493,900 tons to 892,800 tons. Regarding producers Angarsk Polymer Plant stopped production of LDPE on 10 August due to technical problems in ethylene production. The stoppage was expected to last a few days and follows a planned outage from 22 June to 2 August. Other upcoming plant outages include Ufaorgsintez which will stop in two stages, the first of which is from 29 August. Tomskneftekhim will stop from 2 September for two weeks and Kazanorgsintez will stop in two stages from 17 September to 13 October.

Russian Polyethylene Exports 2019-2020		
Period	Ktons	Value (\$ million)
Q1 19	84.2	95.2
Q2 19	94.1	102.3
Q3 19	94.7	98.9
Q4 19	75.3	76.7
Q1 20	108.4	98.5
Q2 20	218.9	161.5

Exports of polyethylene increased in the first half of 2020 to 327,300 tons against 178,300 tons in the same period last year. Export values rose to \$260 million against \$197.5 million in the first half of 2019. The rise this year was attributed to the start-up at ZapSibNeftekhim.

Import deliveries of polyethylene to Russia decreased by 7% in the first half of 2020 and totalled 328,000 tons compared to 367,000 tons in the same period in 2019. HDPE imports dropped 14% to 147,400 tons due to reduced purchases of

tons. Imports of other ethylene polymers amounted to 46,100 tons in the first half of 2020 against 45,200 tons a year earlier.

film and pipe HDPE. LDPE imports rose 9% to 51,400 tons whilst LLDPE imports dropped 5% to 83,200

Russian HDPE Production (unit-kilo tons)		
Producer	Jan-Jun 20	Jan-Jun 19
Kazanorgsintez	271.1	279.0
Stavrolen	163.9	159.9
Gazprom neftekhim Salavat	64.4	55.0
ZapSibNeftekhim	393.4	0.0
Total	892.8	493.9

Russian HDPE production Jan-Jun 2020

Russian HDPE production amounted to 892,800 tons in the first half of 2020, which represented a rise of 84% over the 486,400 tons in the same period last year. As a new producer ZapSibNeftekhim added 393,400 tons to Russian production in the period January to June 2020.

Gazprom neftekhim Salavat and Stavrolen increased production of HDPE by 5% and 6%, respectively, to 64,400 tons and 163,900 tons. Kazanorgsintez reduced production slightly by 271,100 tons.

SIBUR-polyolefin transportation to China to include rail

SIBUR has started diversifying its polyethylene and polypropylene shipments to China through rail

SIBUR-Polyolefin Production (unit-kilo tons)		
Product	Jan-Jun 20	Jan-Jun 19
PP	504.4	340.0
PE	645.0	132.5

transportation. The deliveries of polyolefins to China are carried out from Tobolsk and Tomsk and delivered through to Chongqing and Chengdu by rail. Prior to 2020 SIBUR had shipped finished products to the China mainly by sea. However, it is now expected that

the use of railway transport will reduce the delivery time of goods from up to 30 to 10 days and will help to expand the client base in the central and western regions of China.

Russian polypropylene, Jan-Jun 2020

In the first half of 2020 Russian polypropylene production increased by 24%, amounting to 904,900 tons

Russian Polypropylene Market (unit-kilo tons)		
Producer Jan-Jun 20 Jan-Jun 19		
Production	904.5	729.8
Exports	314.0	116.2
Imports	119.1	104.9
Supply/demand	709.6	718.5

against 729,800 tons in January to June 2019. The main increase in production volumes was provided by ZapSibNeftekhim. The SIBUR-Tobolsk plant produced 218,100 tons in the first six months in 2020 which was 17% down on the same period in 2019. ZapSibNeftekhim produced 202,500 tons in the first six months, whilst Polyom at Omsk dropped 13% to 94,000 tons.

Russian Polypropylene Production (unit-kilo tons)		
Producer	Jan-Jun 20	Jan-Jun 19
Ufaorgsintez	65.3	67.4
Stavrolen	62.8	53.3
Neftekhimya	75.1	73.7
Nizhnekamskneftekhim	110.0	105.3
Polyom	94.0	108.2
Tomskneftekhim	77.1	74.4
SIBUR-Tobolsk	218.1	247.5
ZapSibNeftekhim	202.5	0.0
Total	904.5	729.8

Nizhnekamskneftekhim increased polypropylene production to 110,000 tons in January to June compared to 105,900 tons in the same period in 2019, whilst Tomskneftekhim increased output by 4% to 77,100 tons. Ufaorgsintez dropped 2% to 65,300 tons and Neftekhimya rose 6% to 75,100 tons. Stavrolen at Budyennovsk increased production to 62,800 tons against 56,100 tons in January to June 2019.

Russian polypropylene exports amounted to 314,000 tons in the period January to June 2020, of which 38.1% of shipments went to China. Exports were up almost three-fold from the 116,200 tons which was shipped in the first six months in 2019. Of the 314,000 tons shipped in the first six

months in 2020 up to 298,000 tons comprised homopolymer.

Imports of polypropylene to Russia grew by 21% in the first half of 2020 to 119,100 tons against 104,900 tons in 2019. The total volume of PP-homo imports into the country amounted to 43,600 tons against 28,600 tons. Imports of block copolymers increased to 28,800 tons against 25,600 tons whilst random copolymer imports dropped from 17,400 tons down to 15,100 tons.

Russian PVC production & trade, Jan-Jun 2020

Russia's production of PVC totalled 509,300 tons in January-June 2020 from 500,000 tons a year earlier. RusVinyl produced 28,500 tons of PVC in June (with emulsion polyvinyl chloride (EPVC)

•			
Russian Polypropylene Exports			
Period	Ktons	\$ million	
Q1 19	47.4	63	
Q2 19	68.8	87	
Q3 19	92.7	105	
Q4 19	110	114	
Q1 20	143	141	
Q2 20	171	150	

accounting for 2,300 tons), compared to 29,900 tons in May. RusVinyl's overall SPVC output reached 177,100 tons in the first six months of 2020, compared to 166,800 tons.

In the Irkutsk Oblast, Sayanskkhimplast produced 165,000 tons of PVC in January-June 2020, compared to 162,500 tons. Bashkir Soda Company stopped its PVC production for five days in mid-June due to disruptions in ethylene shipments, and this helped reduce total production in the first half of 2020 by 5% to 130,700

tons. Kaustik Volgograd stopped its production capacities for maintenance in May-June, although was still able to record a slight increase in production for the first half of 2020 to 36,500 tons.

Russian PVC Production (unit-kilo tons)		
Producer	Jan-Jun 20	Jan-Jun 19
Bashkir Soda	130.7	134.9
Kaustik	36.5	37.8
RusVinyl	177.1	166.6
Sayanskkhimplast	165.0	160.7
Total	509.3	500.0

Kazanorgsintez Polymer Revenues				
Billion Roubles				
Product Jan-Jun 20 Jan-Jun 19				
LDPE	3.5	4.3		
HDPE	7.9	10.6		
Polycarbonate	2.4	2.3		
Percentage of	Total Revenue	s		
Product	Product Jan-Jun 20 Jan-Jun 19			
LDPE	21.6	21.6		
HDPE	48.6	53.6		
Polycarbonate	15.0	11.0		

PVC exports from Russia amounted to 141,300 tons in the first half of 2020 against 121,100 tons in the same period in 2019. Imports of PVC to the Russian market grew by 5% in the first half of the year to 66,500 tons. Scheduled repairs of Russian enterprises were the main reason for the growth of imports.

Kazanorgsintez-polycarbonate expansion

Kazanorgsintez aims to complete the modernisation of the polycarbonate plant by the end of 2020, which will increase capacity from 70,000 tpa to 100,000 tpa. The second phase of work is planned to be completed in August-September during the overhaul period.

The stoppage will affect the production of Bisphenol A where the cumene unit is undergoing conversion to a zeolite catalyst using Badger technology. This technology reduces energy consumption by three times and raw material consumption up to 2.5%. The project is planned in two stages and scheduled for completion by 2022. Kazanorgsintez reduced its revenues by 22% in the first half of the year to 31.270 billion roubles. The company's net profit for the period amounted to 4.05 billion

roubles against 7.89 billion roubles in the same period in 2019.

Paraxylene-PTA-PET

Russian Paraxylene Production (unit-kilo tons)			
Producer Jan-Jun 20 Jan-Jun 19			
Kirishinefteorgsintez	20.0	28.0	
Gazprom Neft	71.9	47.0	
Ufaneftekhim	74.2	57.0	
Total	166.1	132.0	

SIBUR's PTA & PET Production (unit-kilo tons)			
Product	Jan-Jun 20	Jan-Jun 19	
Paraxylene Purchases	63.7	56.9	
PTA Production	116.2	28.7	
PTA Domestic Sales	4.5	0.7	
PTA Exports	0.0	0.2	
PET Production	59.4	73.9	
PET Domestic Sales	126.8	61.2	
PET Exports	3.0	1.8	

Russian paraxylene production Jan-Jun 2020

Russian paraxylene production totalled 166,100 tons in the first half of 2020 against 132,000 tons in the same period in 2019. Both Gazprom Neft and Ufaorgsintez increased production, rising respectively from 47,000 tons to 71,900 tons and 57,000 tons to 74,200 tons. Kirishinefteorgsintez reduced production from 28,000 tons to 20,000 tons. Russian exports of paraxylene totalled 59,400 tons in the first half of 2020 for \$31.5 million.

Polief-environmental damage

Following last year's accident Polief is expected to lose around 40% of its net profit for 2019 to cover the costs of environmental damage. In 2019, Polief experienced two accidents that led to pollution of the Izyak river, affecting soil and the environment. The authorities have been entrusted to reclaim around 160 million roubles from Polief. The Ministry of

Forestry has placed two claims worth 44 million and 7.6 million roubles of damage from Polief. The federal body Rosprirodnadzor has placed demands to reimburse in one of the claims for 105.7 million roubles, in the other 6.8 million roubles for damage caused to soils and a water body as a result of pollution with chlorides, sulphates, nitrates and zinc. SIBUR explained that the cause of the first accident was due to technical problems at the plant and by weather conditions. The second accident was associated with hidden design features of the tank. On 20 July Polief filed a motion to the court to consider a dispute with Rosprirodnadzor for 105 million roubles behind closed doors.

Russian PTA imports, Jan-Jun 2020

PTA imports into Russia totalled 155,800 tons in the first six months in 2020 against 221,200 tons in the same period last year. Import activity was reduced due to the higher production at Polief, rising from 26,700 tons in January to June 2019 to 116,200 tons this year.

Russian PTA Imports by Country (unit-kilo tons)				
Country Jan-Jun 20 Jan-Jun 19				
Belgium	8.0	14.0		
India	0.0	1.0		
China	135.9	164.7		
South Korea	7.0	36.9		
Poland	3.0	1.0		
Thailand	0.0	3.0		
Others	1.9	0.6		
Total	155.8	221.2		

February.

first six months from 164,700 tons to 135,90	00 tons
and South Korea reduced shipments from	36,900
tons to 7,000 tons. Average prices for PTA i	mports
amounted to \$531 per ton in January to Jun	e 2019
against \$627 per ton in the same period in 2	020.

China reduced PTA shipments into Russia in the

Ekopet at Kaliningrad accounted for 58.5% of imports (\$56.3 million in value) over the first six months in 2020 against \$134.2 million in the same period last year. Ekopet's PTA imports dropped in the first part of 2020 against the same period in 2019 due to plant maintenance in January and

Russian PTA Imports by Region (unit-kilo tons)			
Location	Jan-Jun 20 Jan-Jun 19		
Kaliningrad	90.3	147.4	
Moscow	59.7	33.8	
Others	5.8	40.0	
Total	155.8	221.2	

time than by sea.

Regarding the mode of delivery PTA imports from China to Kaliningrad are now available by rail. The journey from Dalian in China before moving to Zabaykalsk on the Sino-Russian border and then transiting through Russia and Latvia before arriving at the Kaliningrad. This year a new container system has been introduced enabling shipments of up to 2,650 tons of PTA which can be delivered in shorter

Ekopet-share sale

The Bank of non-core assets Trust has put up for auction for Ekopet which is the largest Russian producer of PET. The initial price of the asset is 5.5 billion roubles. The auction will take place at the National Electronic Site (NEP) on 21 September and applications for participation in the auction are accepted until 11 September.

Russian Benzene Production (unit-kilo tons)		
Producer	Jan-Jun 20	Jan-Jun 19
Angarsk Polymer Plant	45.9	41.5
Gazprom Neft	63.7	41.5
LUKoil-Neftekhim	24.4	21.6
LUKoil-Permnefteorgsintez	28.0	25.9
Magnitogorsk MK	20.9	26.2
Nizhnekamskneftekhim	152.1	144.4
Novolipetsk MK	0.6	4.7
Gazprom Neftekhim Salavat	111.8	96.6
Severstal	16.5	19.3
SIBUR-Holding	45.8	37.1
Slavneft-Yaroslavlorgsintez	32.8	24.0
Surgutneftegaz	32.3	40.9
Ryazan RN Holding	16.3	15.0
Ufaneftekhim	47.1	46.3
Ural Steel	5.2	5.1
Uralorgsintez	39.6	42.1
Zapsib	30.8	39.1
Novokuibyshevsk Petrochemical	8.2	12.7
Total	722.0	683.9

The Ekopet group includes 3 legal entities: an industrial complex, a trading house, and an industrial park BaltTechProm (Baltic Industrial Park). The total area of the park's land plots is 132 hectares. The plant of Ekopet was commissioned in 2011 (initial design capacity of 220 thousand tons of PET per year) and manufactures products under the Ekopet trademark, intended for the production of bottles, as well as other types of packaging for food and non-food purposes. Revenue of the Ekopet Group of Companies in 2019 amounted to 15.4 billion roubles. The Bank of Non-Core Assets (Bank Trust (PJSC)) is a Russian financial institution with majority participation.

Aromatics

Russian benzene production Jan-Jun 2020

Russian benzene production rose in the first six months this year from 683,900 tons to 722,000 tons. Nizhnekamskneftekhim increased benzene

production from 144,400 tons to 152,100 tons, whilst Gazprom neftekhim Salavat increased production from 96,600 tons to 111,800 tons. Rosneft's three benzene plants at Angarsk, Novokuibyshevsk, Ufa and Ryazan

produced a combined total of 70,400 tons against 69,200 tons in January to June 2019, whilst Gazprom Neft at Omsk increased benzene production from 41,500 tons to 63,700 tons.

Russian Benzene Consumers (unit-kilo tons)			
Consumer	Jan-Jun 20	Jan-Jun 19	
Kuibyshevazot	95.0	105.1	
Azot Kemerovo	52.5	64.8	
Shchekinoazot	44.5	34.9	
Kazanorgsintez	35.6	37.6	
Omsk Kaucuk	23.4	6.9	
Novokuibyshevsk Petrochemical	25.5	21.0	
Zapsib	23.0	34.3	
SIBUR-Khimprom	51.1	55.2	
Ufaorgsintez	3.6	8.3	
Uralorgsintez	34.9	33.0	
Others	5.2	17.0	
Total	394.4	419.1	

Since July benzene stocks have come under greater control due to the repair work carried out at several plants. From 21 June to 1 August, aromatics production was stopped at Lukoil-PNOS, and from 22 June to 1 August at the pyrolysis unit of the Angarsk Polymer Plant. At SIBUR-Kstovo, the pyrolysis unit was down from 19 July to 12 August. For technical reasons, benzene production at Stavrolen was idle in July whilst the production of benzene at Severstal was idle for about two weeks in June.

On the demand side the Novokuibyshevsk Petrochemical Company undertook a maintenance shutdown on the phenol plant from 15 June to 15 July, whilst in June and July Azot at Kemerovo has been forced to reduce capacity utilisation to around

85% 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 half of 2020 Kuibyshevazot's net profit decreased by almost 40% against the same period in 2019.

Domestic sales of benzene in Russia dropped from 419,100 tons in the first half of 2019 to 394,400 tons in the same period in 2020. SIBUR-Kstovo increased shipments to the merchant market from 30,800 tons in January to June 2019 to 44,500 tons in the same period in 2020, whilst Gazprom Neft at Omsk increased shipments from 40,400 tons to 40,900 tons.

Kuibyshevazot reduced benzene purchases from 105,100 tons to 95,000 tons in the first half of 2020 whilst Azot at Kemerovo reduced purchases from 64,800 tons to 52,500 tons. For the production of cumene Kazanorgsintez purchased a total of 35,600 tons of benzene in January to June 2020, versus 37,600 tons in 2019, whilst Omsk Kaucuk purchased 23,400 tons against 6,900 tons. The rise in demand from Omsk Kaucuk was due to the start-up of the modernised phenol facilities.

For the first six months of 2020, 196,500 tons of benzene were shipped to enterprises in the caprolactam

Russian Benzene Exports (unit-kilo tons)			
Producer Jan-Jun 20 Jan-Jun 19			
Nizhniy Tagil	0.8	3.4	
Novolipetsk MK	9.2	1.9	
Kirishinefteorgsintez	25.4	1.2	
SIBUR-Kstovo	0.0	13.2	
Others	15.6	16.9	
Total	51.0	36.6	

sector, which is 8% less than in the first half of 2019. At the same time, the supply of benzene to phenol producers increased by 16% to 91,900 tons due to the start-up at Omsk Kaucuk.

Russian benzene trade, Jan-Jun 2020

The railway export of benzene from Russia in the first half of 2020 more than doubled compared to 2019 from 15,300 tons to 38,000 tons, against the background of an excess of product. This was facilitated by a decrease in benzene

purchases from Russian caprolactam producers due to the Covid-19 pandemic.

Benzene was sent to the Latvian port of Liepaja, while the supply of benzene produced by SIBUR-Kstovo to Belarus was halted due to lower production of caprolactam at Grodno. Most of Russian benzene exports in the period January-June stemmed from the Kirishi refinery of Surgutneftegaz. The surplus on the market led to the resumption of the export of benzene produced by Gazprom neftekhim Salavat, Ufaneftekhim, Bashneft, Ryazan Oil Refinery Rosneft, and Yaroslavl Oil Refinery Slavneft.

The import of benzene to the Russian market decreased by 11,100 tons in the first half of 2020 to 24,800 tons. Despite the reduction in imports, the number of benzene suppliers increased. The shipments were carried out by the Atyrau Refinery (Kazakhstan), Karpatneftekhim (Ukraine), and the Mozyr Refinery (Belarus). Kuibyshevazot reduced its purchases of benzene by 17,200 tons to 18,100 tons amid falling

Russian Caprolactam Production (unit-kilo tons)			
Producer Jan-Jun 20 Jan-Jun 19			
Kuibyshevazot	99.7	98.3	
Shchekinoazot	29.3	26.4	
SDS Azot	56.6	61.3	
Total	185.6	186.0	

demand for caprolactam. Shchekinoazot, on the contrary, increased its consumption of foreign benzene by 6,100 tons up to 6,700 tons.

Russian caprolactam production, Jan-Jun 2020

Russian caprolactam production amounted to 185,600 tons in January to June 2020 against 186,000 tons in 2019. Kuibyshevazot increased production from 98,300 tons to 99,700 tons whilst

SDS Azot at Kemerovo reduced production to 56,600 tons from 61,300 tons.

Russian OX-toluene markets, Jan-Jun 2020

Orthoxylene sales on the Russian domestic market amounted to 79,300 tons in the first half of 2020 against 77,400 tons in the same period in 2019. Gazprom Neft reduced domestic shipments from 53,600 tons to

Russian Orthoxylene Domestic Sales (unit-kilo tons)			
Company Jan-Jun 20 Jan-Jun 19			
Gazprom Neft	40.1	53.6	
Ufaneftekhim	35.8	18.0	
Kinef, Kirishi	3.4	5.8	
Total	79.3	77.4	

40,100 tons whilst Ufaneftekhim increased shipments from 18,000 tons to 35,800 tons. The largest consumer of orthoxylene in Russia is Kamteks-Khimprom at Perm, which produces phthalic anhydride, reduced purchases from 43,700 tons in the first six months in 2019 to 32,300 tons in the same period this year. The smaller phthalic producer Gazprom neftekhim Salavat reduced

purchases from 6,500 tons to 4,500 tons. Whilst orthoxylene consumption may have declined for phthalic anhydride, other applications such as explosives and fuels made up the difference.

Russian Toluene Production (unit-kilo tons)			
Producer Jan-Jun 20 Jan-Jun			
Kinef	13.1	15.4	
Gazprom N Salavat	8.5	12.0	
Slavneft-Yanos	21.7	16.4	
LUKoil-Perm	14.5	14.2	
Gazprom Neft	41.5	50.6	
RN Holding	22.4	22.2	
Ufaneftekhim	21.3	32.1	
Others	7.4	7.6	
Total	150.4	170.6	

Toluene production in Russia amounted to 150,400 tons in the first six months in 2020 against 170,600 tons in the same period in 2019, with most producers reducing volumes.

Sales of toluene on the merchant domestic market totalled 65,300 tons in the first half of 2020 against 72,400 tons in the same period last year.

Russian phenol market, Jan-Jun 2020

Russian phenol production rose from 110,300 tons in the first six months in 2019 to 128,600 tons in the same period in 2020. Novokuibyshevsk Petrochemical produced 36,100 tons of phenol against 33,600 tons whilst Ufaorgsintez reduced production from 38,100 tons to

32,000 tons. Kazanorgsintez increased slightly from 38,600 tons to 40,400 tons. The significant change came from Omsk Kaucuk which produced 20,100 tons against no activity in 2019.

Russian Phenol Production (unit-kilo tons)				
Producer Jan-Jun 20 Jan-Jun 19				
Ufaorgsintez	32.0	38.1		
Kazanorgsintez	40.4	38.6		
Novokuibyshevsk Petrochemical	36.1	33.6		
Omsk Kaucuk, Omsk	20.1	0.0		
Total	128.6	110.3		

Sales of phenol on the Russian domestic market amounted to 61,100 tons in the first six months in 2020, up from 60,400 tons. Omsk Kaucuk supplied 13,100 tons of phenol to the domestic market, compensating for lower sales from Ufaorgsintez and Kazanorgsintez. Ufaorgsintez reduced sales from 33,300 tons in January to June 2019 to 18,000 tons whilst Novokuibyshevsk Petrochemical Company

increased shipments from 25,200 tons to 29,800 tons.

Russian Market Phenol Sales by Supplier (unit-kilo tons)			
Producer Jan-Jun 20 Jan-Jun 19			
Omsk Kaucuk	13.1	0.0	
Novokuibyshevsk Petrochemical	29.8	25.2	
Kazanorgsintez	0.1	2.0	
Ufaorgsintez 18.0 33.3			
Total	61.1	60.4	

Russian phenol exports rose to 21,400 tons in the first six months in 2020 against 11,100 tons in the same period in 2019. Ufaorgsintez exported 10,400 tons, but Kazanorgsintez did not ship either to the export market. The Novokuibyshevsk Petrochemical Plant exported only 1,000 tons of phenol in the first six months against 2,200 tons last year. Omsk Kaucuk sold 5,100 tons in the first six months, comprising around a 35% of production.

Kuibyshevazot, Jan-Jun 2020

Kuibyshevazot reduced its revenue for the first half of 2020 by 16% with a 40% fall in in net profit. The plant achieved revenues of 23.8 billion roubles against 28.3 billion roubles, whilst net profit amounted to 1.74 billion roubles against 3.08 billion roubles. For the first six months, the company increased the output of ammonia by 5.8% to 544,000 tons, ammonium nitrate by 2.8% to 375,600 tons, and urea by 2.8% to 184,400 tons. Urea ammonium nitrate production increased by 63.9% to 154,400 tons.

Kuibyshevazot-Production (unit-kilo tons)			
Product	Jan-Jun 20	Jan-Jun 19	
Polyamide-6	70.6	72.2	
Caprolactam	99.7	98.3	
Ammonia	544.0	514.2	
Urea	184.4	179.4	
Ammonium Nitrate	375.6	365.4	

Caprolactam production for Kuibyshevazot increased by 1.5% to 99,700 tons whilst polyamide-6 dropped 2.3% to 70,600 tons. The production of polyamide yarns fell to 1,800 tons and cord fabrics to 1,000 tons. In the first half of the year, commissioning work was carried out for the production of ammonium sulphatenitrate and the construction of a plant for the production of sulphuric acid grade and improved oleum with a total capacity of 500,000 tpa. In partnership with the Italian concern Maire Tecnimont Group, work continued on the construction of a new

urea unit.

Russian C4 Purchases (unit-kilo tons)				
Consumer Jan-Jun 20 Jan-Jun 19				
Omsk Kaucuk	47.9	31.2		
Nizhnekamskneftekhim	46.0	104.0		
Togliattikaucuk	121.6	104.8		
Sterlitamak Petrochemical Plant	7.4	0.0		
Total	222.8	240.1		

Russian C4 Supplies (unit-kilo tons)			
Supplier	Jan-Jun 20	Jan-Jun 19	
Angarsk Polymer	10.1	9.9	
Kazanorgsintez	24.1	23.3	
Stavrolen	33.7	35.8	
SIBUR-Kstovo	49.1	47.3	
Gazprom neftekhim Salavat	21.4	22.6	
Tomskneftekhim	43.6	44.4	
Ufaorgsintez	18.2	16.0	
Naftan (Belarus)	4.9	14.6	
Azerkhimya	15.5	23.6	
Others	2.2	13.7	
Total	222.8	240.1	

Synthetic rubber

Russian rubber feedstocks, Jan-Jun 2020

C4 purchases by Russian synthetic rubber producers dropped in the first half of 2020 to 222,800 tons from 240,100 tons in the same period last year. Due to a change in plant ownership and impact on the internal market,

Nizhnekamskneftekhim reduced C4 purchases from 104,800 tons in the first half in 2019 to 46,000 tons this year. By contrast, Togliattikaucuk increased purchases from 104,800 tons to 121,600 tons.

The volumes both change in bν Nizhnekamskneftekhim and Togliattikaucuk was due largely to the change in asset ownership at Togliatti and switch in Tatneft's rubber sources. As Tatneft's acquisition of the former SIBUR Togliatti plant allowed it to source its own isoprene and butyl rubber for tyre production in Tatarstan, it meant that Nizhnekamskneftekhim has been forced to reduced rubber production this year. The new arrangement for Togliattikaucuk has meant new feedstock sources, such as Taneko refinery at Nizhnekamsk

plans to supply Togliattikaucuk in the near future with isobutane for rubber production.

The largest supplier of C4s to the domestic market in the first half of 2020 was SIBUR-Kstovo which shipped 49,100 tons against 47,300 tons in 2019. This was followed by Tomskneftekhim with 43,600

tons of delivery in the first half of 2020 against 44,400 tons. Import sources this year have originated from Belarus and Azerbaijan.

Regarding butadiene supply domestic shortages have appeared recently partly due the low profitability of the butane dehydrogenation process at SIBUR-Tobolsk. Due to shortages SIBUR imported 2,040 tons of butadiene for Voronezhsintezkaucuk in July to be followed by another 2,100 tons in August.

Russian Synthetic & Natural Rubber Market (unit-kilo tons)		
	Jan-Jun 20	Jan-Jun 19
Production	727.0	778.0
Exports	437.4	514.0
Imports	95.6	108.8
Supply/Demand Balance	385.2	372.8

Russian Tyre Production (unit-mil pieces)			
Product	Jan-Jun 20	Jan-Jun 19	
Car Tyres	15.6	21.2	
Lorry tyres	3.4	2.9	
Agricultural tyres	0.8	0.7	
Total	19.9	24.8	
Russian Tyre P	Russian Tyre Production (unit-kilo tons)		
Product Jan-Jun 20 Jan-Jun 19			
Car Tyres	123.8	167.9	
Lorry tyres	27.1	23.3	
Agricultural tyres	6.6	5.8	
Total	157.6	197.0	

Deliveries were supplied from Finland from Borealis and from Germany.

Russian rubber production and market balance 2020

Synthetic rubber production in Russia totalled 727,000 tons in the first half of 2020 against 778,000 tons in the same period last year. Domestic consumption rose to 385,200 tons against 372,800 tons. The higher performance in the first six months is largely accounted to the redirection of production from Togliattikaucuk away from exports to the new owners Tatneft's tyre plants in

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. The fall in demand for synthetic rubbers has led to increased competition and lower prices for some brands of products. Russian rubber producers recognise that they need to look for new markets and new directions. In the first half of 2020 Russian tyre production dropped from 197,000 tons in the same period in 2019 to 157,600 tons.

As an indicator of tyre company performance, Nizhnekamskshina (part of the Tatneft tyre group) halved its revenue in the first half of the year to 3.45 billion roubles. Net profit decreased by 2.2 times to 70.2 million roubles and the gross profit fell by 3.8 times against the first half of 2019.

Tatarstan.

Russian synthetic rubber exports, Jan-Jun 2020

Russian exports of synthetic rubber amounted to 437,400 tons in the first six months in 2020, down from 514,000 tons in the same period in 2019. Average prices dropped from \$1605 per ton to \$1302. As a result

Russian Synthetic Rubber Exports (unit-kilo tons)			
Product	Jan-Jun 20	Jan-Jun 19	
E-SBR	17.3	20.4	
Block	29.3	19.6	
SSBR	3.0	6.8	
SBR	56.0	39.9	
Polybutadiene	104.8	121.5	
Butyl rubber	59.0	64.5	
Halogenated butyl	51.3	66.8	
NBR	16.3	17.9	
Isoprene	93.6	138.4	
Others	6.8	18.2	
Total	437.4	514.0	

of lower volumes and prices revenues from synthetic rubber exports dropped from \$825 million to \$569.4 million in January to June 2020.

Regarding shipment destinations China represented the largest market for Russian exporters in the first six months in 2020, accounting for nearly 25% 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 rise in the first six months to 110,700 tons against 76,000 tons in the same period in January to June 2019.

SIBUR rubber markets Jan-Jun 2020

SIBUR's synthetic rubber production dropped in the first half of 2020 to 213,000 tons from 258,500

tons in the same period last year. The effects of the sale of the Togliatti assets resulted in falls in commodity rubber production, principally isoprene where production dropped from 41,900 tons in January to June 2019 to no activity in the first half this year. Speciality rubber production also dropped from 57,100 tons to 18,300 tons. As a result of the sale of Togliatti SIBUR was required to purchase 56,000 tons of rubber from other suppliers in the first half of 2020.

SIBUR-Synthetic Rubber Production (unit-kilo tons)			
•	Jan-Jun 20	Jan-Jun 19	
Commodity Rubber	88.4	160.2	
Speciality Rubber	18.3	57.1	
Thermoplastic elastomers	50.3	41.2	
3rd part purchases	56.0	0.0	
Total	213.0	258.5	
SIBUR-Synthetic Rubber I	Domestic Sales	(unit-kilo tons)	
	Jan-Jun 20	Jan-Jun 19	
Commodity Rubber	44.0	55.7	
Speciality Rubber	3.9	5.6	
Thermoplastic elastomers	16.4	17.5	
Total	64.3	78.8	
SIBUR-Synthetic Rubber	Export Sales (u	ınit-kilo tons)	
	Jan-Jun 20	Jan-Jun 19	
Commodity Rubber	84.3	117.2	
Speciality Rubber	39.3	53.2	
Thermoplastic elastomers	24.5	19.6	
Total	148.1	190.0	

The production of thermoplastic elastomers at Voronezhsintezkaucuk rose in the first half to 50,300 tons against 41,200 tons in the same period last year. Domestic sales of TEPs dropped to 16,400 tons against 17,500 tons whilst exports rose from 8,000 tons to 9,600 tons.

SIBUR-Reliance jv on halobutyl rubber & NBR project in China

SIBUR and Indian Reliance Industries are close to launching halobutyl rubber production in India where construction is in the final stages. A plant with a capacity of 60,000 tpa will add to the butyl rubber plant launched last year. It is expected that the products of the new complex will push out imported counterparts from the local market. The joint project is based on a licensing agreement, which provides for the use of SIBUR-owned butyl rubber technology.

In China SIBUR's jv for constructing a plant

for nitrile-butadiene rubber (NBR) is still waiting for the necessary checks and balances in order to allow construction to proceed. The agreement on constructing an NBR plant in the Shanghai Chemical Park between SIBUR and Sinopec was signed in the spring of 2014. Even now though construction is not expected to commence in the near future until market indicators start to settle.

Voronezhsintezkaucuk Jan-Jun 2020

Voronezhsintezkaucuk reduced synthetic rubber exports from 82,000 tons in the first half of 2019 to 68,700 tons in the same period this year. At the start of 2020 Voronezhsintezkaucuk launched a new

Voronezhsintez	/oronezhsintezkaucuk Exports (unit-kilo tons)		
Product Jan-Jun 20		Jan-Jun 19	
Polybutadiene	28.9	33.0	
SBR	39.2	46.4	
Others	0.6	2.7	
Total	68.7	82.0	

brand of high-viscosity polybutadiene rubber (SKD-ND VV), adding 20,000 tpa of capacity to the 76,000 tpa already in existence.

Voronezhsintezkaucuk purchased seven new firefighting tankers in August based on KAMAZ and one gas rescue vehicle based on Gazelle NEXT. This is part of SIBUR's corporate programme to upgrade fire

and rescue equipment and to improve the industrial safety.

Nizhnekamskneftekhim, rubber production

In the first half of 2020, Nizhnekamskneftekhim reduced the production of synthetic rubbers by 24% to a total of 262,700 tons. The sharp drop is explained by the shutdown of tyre factories combined with the suspension of purchases of rubber by the Tatneft group, which in 2019 acquired a rubber production facility in Togliatti from SIBUR. 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 has begun commissioning works at the production of styrene-divinyl synthetic rubber (DSSK). Currently, the new production is preparing pipeline systems for receiving raw materials. The production capacity will comprise 60,000 tpa of DSSK, in addition to 10,000 tpa of thermoplastic elastomers (TEP, SBS). The production licensor for the DSKK project is the Japanese company ETIC Inc.

Nizhnekamskneftekhim Rubber Exports (unit-kilo tons)			
Product	Jan-Jun 20	Jan-Jun 19	
Isoprene Rubber	75.4	110.0	
Butyl Rubber	37.4	32.2	
HBR	51.3	67.6	
Polybutadiene	71.6	89.4	
Others	4.7	0.4	
Total	240.4	299.2	

Nizhnekamskneftekhim's exports of synthetic rubbers fell in the first six months to 240,400 tons against 299,200 tons in the same period in 2019. Isoprene rubber exports amounted to 110,000 tons against 75,400 tons last year whilst exports of halogenated butyl rubber fell from 67,300 tons to 51,300 tons.

Togliattikaucuk-rubber exports

Togliattikaucuk exported a total of 41,600 tons of synthetic rubber in the first six months in 2020 against 74,300 tons in the same period in 2019. Isoprene rubber exports dropped from 16,800 tons to 3,600

Togliattikaucuk Rubber Exports (unit-kilo tons)				
Product	Jan-Jun 20	Jan-Jun 19		
Isoprene Rubber	3.9	16.8		
Butyl Rubber	21.8	33.1		
SBR	15.7	23.9		
Others	0.2	0.5		
Total	41.6	74.3		

tons, whilst butyl rubber fell from 33,100 tons to 21,800 tons and SBR exports dropped from 23,900 tons to 15,700 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.

The sale of the assets at Togliatti by SIBUR to Tatneft appears to constitute a success and a win-win for both

parties. As part of the feedstock process for Togliattikaucuk steam consumption is being reduced by increasing the efficiency of the butadiene purification unit. The company also continues to work out strategic directions of development, for example, if possible, the production of halobutyl rubber or the transition to one-stage isoprene synthesis would be feasible. At present, only Nizhnekamskneftekhim produces halobutyl rubber in Russia.

Russian Methanol Production (unit-kilo tons)					
Producer Jan-Jun 20 Jan-Jun 19					
Shchekinoazot	480.4	469.4			
Sibmetakhim	453.1	472.8			
Metafrax	625.3	614.8			
Akron	43.9	50.8			
Azot, Novomoskovsk	97.8	127.2			
Angarsk Petrochemical	29.6	21.8			
Azot, Nevinnomyssk	56.2	59.7			
Tomet	459.4	363.7			
Ammoni	38.6	90.5			
Totals	2282.3	2270.7			

(unit-kilo tons)				
Producer Jan-Jun 20 Jan-Jun 19				
Shchekinoazot	480.4	469.4		
Sibmetakhim	453.1	472.8		
Metafrax	625.3	614.8		
Akron	43.9	50.8		
Azot, Novomoskovsk	97.8	127.2		
Angarsk Petrochemical	29.6	21.8		
Azot, Nevinnomyssk	56.2	59.7		
Tomet	459.4	363.7		
Ammoni	38.6	90.5		
Totals	2282.3	2270.7		

Russian Methanol Exports (unit-kilo tons)			
Producer Jan-Jun 20 Jan-Jun 19			
Azot Novomoskovsk	32.8	33.9	
Akron	6.1	3.8	
Metafrax	296.0	254.6	
Sibmetakhim	262.1	232.8	
Tomet	192.1	170.8	
Shchekinoazot	360.9	386.5	
Ammoni	0.0	13.5	
Total	1150.0	1095.9	

Methanol

Russian methanol production Jan-Jun 2020

Russia produced 2.282 million tons of methanol in the first six months in 2020 against 2.271 million tons in same period in 2019. Metafrax produced 625,300 tons against 614,800 tons in January-June 2019 whilst Sibmetakhim at Tomsk reduced production from 472,800 tons to 453,100 tons. Tomet at Togliatti increased production to 459,400 tons from 363,700 tons. Shchekinoazot increased volumes from 469,400 tons to 480,400 tons. In early July, the Ammoni plant in Tatarstan resumed methanol production after being idle for two months. Ammoni reduced methanol production from 90,500 tons in the first half of 2019 to 38,600 tons for the same period this year.

In the first half of 2020 Russian methanol producers delivered a total of 1.829 million tons by rail, either for sale on the domestic merchant market or sent for export either overland or the ports. From January to June 2020, supplies to the domestic market decreased by 22% compared to the same period last year to 684,800 tons. Exports rose in the first half to 1.15 million tons against 1.10 million tons in the same period in 2019. Russian methanol export sales, Jan-Jun 2020

Export shipments of Russian methanol totalled 1.150 million

tons in the period January to June 2020 against 1.096 million tons last year. The average ratio of exports

as a share of production achieved 49% so far this year, which is the highest ratio for a decade. Metafrax increased exports from 254,600 tons in the first half of 2019 to 296,000 tons in the same period this year whilst Sibmetakhim increased exports from 232,800 tons to 260,000 tons. The largest Russian exporter was Shchekinoazot shipping 360,900 tons versus 386,500 tons.

Russian Methanol Exports by Destination (unit-kilo tons)			
Country	Jan-Jun 20	Jan-Jun 19	
Belarus	47.9	31.3	
Belgium	0.0	5.0	
Bulgaria	4.5	0.2	
Czech R	0.3	0.0	
Finland	542.7	461.6	
Georgia	0.3	0.0	
Germany	1.1	1.6	
Israel	4.0	11.1	
Kazakhstan	21.3	17.3	
Latvia	6.3	7.1	
Lithuania	36.6	68.6	
Netherlands	89.3	74.7	
Poland	187.1	190.7	
Romania	32.1	45.7	
Slovakia	74.3	66.1	
Spain	5.5	5.0	
Switzerland	0.0	6.4	
Turkey	19.3	16.2	
UK	37.5	11.0	
Ukraine	16.0	21.9	
Others	5.6	9.6	
Total	1131.9	1041.4	

The main destination for Russian methanol exports remains Finland where volumes totalled 542,700 tons in the first six months against 461,600 tons in the same period in 2019.

Poland reduced purchases from Russia to 187,100 tons in January to June 2020 against 190,700 tons in the same period in 2019, whilst Slovakia increased volumes from 66,100 tons to 74,300 tons.

Russian methanol domestic sales, Jan-Jun 2020

The domestic merchant market for methanol has started to recover from the declines in the second quarter, although full year consumption is expected to be lower for 2020 than in 2019. Deliveries to the domestic market increased by 38% in June over May to 107,500 tons helped by the demand for MTBE and increase

in fuel consumption as the lockdown was lifted. Despite the revival of purchasing patterns in June and July the market is likely to continue feeling the economic fall-out from COVID-19 for the rest of the year and

probably most of 2021.

Russian Methanol Domestic Sales (unit-kilo tons)				
Producer Jan-Jun 20 Jan-Jun 19				
8.2	16.2			
58.1	76.7			
159.4	127.4			
159.6	190.7			
206.0	201.2			
75.4	69.0			
18.1	52.7			
684.8	734.0			
	Jan-Jun 20 8.2 58.1 159.4 159.6 206.0 75.4 18.1			

Methanol stocks in the warehouses of domestic producers declined by around 15% in July against June, dropping from about 106,100 tons to 90,600 tons. Whilst the merchant market has improved captive usage of methanol by producers has also risen, rising by 30% in June over May or by volume up to 47,400 tons.

For the first half of 2020 Russian merchant sales of methanol on the domestic market totalled 684,800 tons against 734,000 tons in the first half of 2019. Sibmetakhim reduced shipments to 159,600 tons

from 190,700 tons whilst Metafrax increased shipments to 159,600 tons against 127,400 tons.

Nizhnekamskneftekhim increased purchases of methanol by 90% in June over May and amounting to 17,000 tons. For other buyers Uralorgsintez increased purchases by 182% in June over May to 3,600 tons, whilst Novokuibyshevsk Petrochemical increased by 171% to 3,200 tons and Togliattikaucuk increased by 111% to 3,000 tons.

Russian formaldehyde market

Methanol demand for formaldehyde and derivatives dropped in the first half of 2020 by 41%, or by 28,500 tons to a total of 109,400 tons. Kronospan (Yegorevsk, Moscow Region), reduced its methanol purchases

from 53,100 tons to 38,800 tons. Khimsintez at Chapaevsk in the Samara region), which produces formalin and synthetic resins, reduced the consumption of methanol in the first half of the year by 4,500 tons to a total of 5,500 tons. Tomet was the only supplier of methanol to Khimsintez.

Russian Methanol Consumption (unit-kilo tons)		
Consumer	Jan-Jun 19	
Nizhnekamskneftekhim	89.1	122.9
Togliattikaucuk	74.1	80.4
Uralorgsintez	30.7	39.4
SIBUR-Khimprom	9.7	13.2
SIBUR Tobolsk	19.7	16.4
Ektos-Volga	23.2	27.2
Omsk Kaucuk	38.2	50.2
Novokuibyshevsk NPZ	21.3	25.3
Uralkhimplast	9.1	14.6
Slavneft-Yanos	3.8	8.1
Metadynea	35.0	37.4
Kronospan	38.8	53.1
Gazprom	67.7	79.8
Khimsintez	5.5	10.0
Volzhsky Orgsintez	4.4	5.4
Others	214.6	150.6
Total	684.8	734

Uralkhimplast reduced its methanol purchases in January-June from 14,600 tons to 9,100 tons. The entire volume was shipped to the plant from Sibmetakhim. The railroad deliveries of methanol to the Metadynea plant (Orekhovo-Zuyevo, Moscow Region) dropped from 37,400 tons to 35,000 tons. Of the total shipments to Metadynea, 22,600 tons were shipped by Novomoskovsk Azot and the rest of the parent company Metafrax.

Metadynea is the largest Russian manufacturer of synthetic resins for wood-based panels and is faced by the prospect of a long recovery in demand following the economic effects of the pandemic. The construction industry in Russia could see a large fall in activity in 2021 which could threaten timber production, forecast possibly to decline by 30% next year. The drop in construction volumes by the end of 2021 could range from 16% under the optimistic scenario, assuming containment of the pandemic, to 49% under negative developments.

Metadynea expects the plywood market to start growing in the second quarter of 2021 due to domestic and export demand although this assumes that the global economy will recover quickly. In the negative scenario of a pandemic, the plywood market will fall by 20% (to 294,000 cubic metres). In the wood-based panel sector, a fall in the chipboard market also appears unavoidable. Based on the dynamics of the previous economic crises of 2008 and 2014, according to the calculations of Metadynea, maximum falls can be expected during the first three to four months after the start of the economic downturn (from July-August).

Metafrax, Jan-Jun 2020

Metafrax reduced its revenue in the first half of the year by 25.9% to 9.75 billion roubles, which is 3.4 billion

Azot Nevinnomyssk-acetic acid

Azot at Nevinnomyssk reduced acetic acid production in the first half of 2020 by 2% to 77,000 tons. The reduction was due to reduced methanol production dropping from 59,700 tons in the first half last year to 56,200 tons in the same period in 2020. At the same time captive acetic acid consumption increased with Azot processing 18% more acetic acid in the first six months to 19,700 tons. Azot increased production of butyl acetate in the first half of 2020, in addition to increasing production of methyl acetate.

roubles less than in the first six months in 2019. Metafrax produced 625,300 tons of methanol in the period January to June 2020, 108,700 tons of concentrated formalin, 80,400 tons of urea-formaldehyde concentrate, 12,400 tons of pentaerythritol and 13,700 tons of urotropine.

Despite the pandemic Metafrax continues to implement investment projects for the construction of formalin and paraformaldehyde plants, as well as the construction of the Ammonia-Urea-Melamine (AKM) production complex. The total investment budget in the first half of the year amounted to 5 billion roubles, of which 4.2 billion roubles was outlaid on the AKM complex.

Metafrax-Production (unit-kilo tons)			
Product Jan-Jun 20 Jan-Jun 19			
Methanol	625.3	614.8	
Formaldehyde 55%	108.7	133.9	
Urea-formaldehyde concentrate	80.4	94.4	
Pentaerythritol	12.4	12.1	
Utropin	13.7	18.0	

In the first half 2020 domestic sales for Metafrax were affected particularly in the rubber and woodworking sectors. In the first quarter this year, Metafrax was actively engaged in the purchase of methanol from third party producers, using an already prepared sales system. About 27,000 tons of methanol was purchased from third party

producers but purchases were not made in the second quarter.

Metafrax continues to export methanol through terminals in Finland but is taking part in studies and research into new terminals on the Russian part of the Baltic coastline. The effects and disruption from COVID-19 have slowed down this process but will become more important as new capacity comes onstream.

Nizhnekamskneftekhim-methanol project

Methanol production at Nizhnekamsk may not start until 2024 which would help the domestic market balance where Nizhnekamskneftekhim plays a key role. Nizhnekamskneftekhim currently buys methanol from Metafrax and Ammoni, mainly for the production of isoprene rubber. Although not officially announced the project costs for constructing the 500,000 tpa methanol plant at Nizhnekamskneftekhim are estimated at 22 billion roubles. excluding VAT.

Nizhnekamskneftekhim Methanol Purchases by Supplier (unit-kilo tons)				
Producer Jan-Jun 20 Jan-Jun 19				
Azot Novomoskovsk	0.0	8.9		
Metafrax	61.6	22.6		
Shchekinoazot	4.7	18.1		
Tomet	13.7	12.3		
Ammoni	9.1	51.1		
Total	89.1	112.9		

The effect on the net profit from the commissioning of a methanol production with a capacity of 500,000 tpa can be calculated as savings of its own production versus the cost of outsourcing, and also the profit generated by selling surplus methanol.

Volgograd methanol project

The coronavirus pandemic has not affected

the timing of the design of the methanol complex at Volgograd based on the site of the former company Khimprom. At present, the project documentation is about 80% ready and in September-October the full project will be 100% submitted for the environmental expertise. Currently, Japanese specialists are calculating capital investments in the project which are estimated provisionally about \$800 million.

The project partners comprise RDIF, Marubeni Corporation and AEON infrastructure corporation. The engineering of the project, as well as the main technological solutions, will be prepared by GTM ONE and Mitsubishi Heavy Industries Engineering Ltd. Haldor Topsoe will provide methanol technology and rights, whilst Mitsubishi Heavy Industries Engineering will be engaged in design and construction.

Russian N-Butanol Production (unit-kilo tons)		
Producer	Jan-Jun 20	Jan-Jun 19
Angarsk Petrochemical Company	19.5	21.7
Azot Nevinnomyssk	7.7	7.0
Gazprom neftekhim Salavat	44.3	45.6
SIBUR-Khimprom, Perm	42.1	50.8
Total	113.6	125.1
Russian Isobutanols Produ	ction (unit-k	(ilo tons)
Producer	Jan-Jun 20	Jan-Jun 19
Angarsk Petrochemical Company	13.0	13.6
Gazprom neftekhim Salavat	7.7	7.0
SIBUR-Khimprom, Perm	28.0	28.8
Total	48.7	49.4

Organ	ic c	hemi	ical	S

Russian butanol production Jan-Jun 2020

Russian normal butanol production totalled 113,600 tons in January to June 2020, against 125,100 tons in the same period in 2019. Gazprom neftekhim Salavat was the largest Russian producer, producing 44,300 tons against 45,600 tons in January to June 2019. Isobutanol production in Russia dropped from 49,400 tons to 48,700 tons in the first six months this year during which Gazprom neftekhim Salavat increased production to 7,700 tons from 7,000 tons, and SIBUR-Khimprom reduced from 28,800 tons from 28,000 tons.

Russian Butanol Domestic Sales (unit-kilo tons)			
Producer Jan-Jun 20 Jan-Jun 19			
Gazprom n Salavat	2.3	2.6	
SIBUR-Khimprom	12.6	15.0	
Angarsk Polymer Plant	9.9		
Azot Nevinnomyssk 1.3 0.8			
Totals	29.9	28.3	

Russian domestic butanol sales, Jan-Jun 2020

Whilst merchant butanol sales on the domestic market rose in the first six months to 29,900 tons from 28,300 tons, demand underwent a significant fall in the second quarter due to the economic effects resulting from COVID-19. June saw some improvement in market fundamentals and in July the cost of the SIBUR's isobutanol increased by 10,000 roubles, which was due to a temporary sharp increase in demand for gasoline. Gazprom neftekhim Salavat continues to ship n-butanol at

66,450 roubles, and isobutanol at 63,650 roubles per ton respectively although prices dropped in

August. The largest butanol buyer on the domestic market in the first half of 2020 was Dimitrievsky Chemical which took 10,400 tons against 9,400 tons in 2019 whilst Akrilat at Dzerzhinsk reduced purchases from 9,700 tons to 9,700 tons.

Russian Acetone Production (unit-kilo tons)			
Producer	Jan-Jun 20	Jan-Jun 19	
Ufaorgsintez	20.1	20.0	
Kazanorgsintez	25.6	20.7	
Novokuibyshevsk Petrochemical	22.4	19.3	
Omsk Kaucuk	11.5	0.0	
Total	79.7	59.9	

Russian acetone production & exports, Jan-Jun 2020

Russian acetone production increased in the first six months in 2020 to 79,900 tons against 59,900 tons in the same period in 2019. Omsk Kaucuk produced 11,500 tons of acetone from the modernised plant which started up in late 2019. This plant has been the main difference to total production this year.

Regarding the domestic market stocks of acetone in the warehouses of Russian producers have dropped in the past two months as demand has risen. In July, inventories decreased from 1,750 tons to 1,380 tons.

Russian Acetone Exports (unit-kilo tons)		
Country	Jan-Jun 20	Jan-Jun 19
Belarus	5.5	7.9
Netherlands	9.6	3.9
Turkey	6.4	3.8
Latvia	0.8	1.1
Others	6.5	4.3
Total	28.8	21.0

Acetone is one the solvents that has benefited from demand associated with sanitisation products although not on the same scale as isopropanol. In June, the volume of acetone production in Russia decreased by 10% to 11,400 tons due to the repair work at plants belonging to Omsk Kaucuk and Novokuibyshevsk Petrochemical. In addition, Kazanorgsintez reduced inplant processing from 2,190 tons to 1,920 tons.

Acetone exports totalled 28,800 tons in the first half of 2020 against 21,000 tons in the same period in 2019. Prices achieved the highest level this year at \$465 per ton. The domestic market is also benefiting from upward pressure from European prices and Kazanorgsintez was able to increase quotations by 14,000 roubles per ton in July over June to 92,000 roubles. The rise in prices has led some buyers to replace expensive acetone with other raw materials, where technology allows. Recently, the market has increased the demand for methyl acetate, which has led to its rise in price.

SIBUR Ethylene Oxide Production & Sales (unit-kilo tons)		
Product	Jan-Jun 20	Jan-Jun 19
Production	160.0	153.5
Domestic Sales	22.7	19.7
Exports	4.1	5.5

SIBUR-ethylene oxide expansion

SIBUR-Neftekhim at Dzerzhinsk is working on preparations for the reconstruction of the production of ethylene oxide and glycol plants with an increase in capacity up to 1,067 tons per day in terms of ethylene oxide equivalent. Increasing the production capacity for ethylene oxide is being undertaken by installing a new water-cooled reactor

block, which was developed by ThyssenKrupp Industrial Solutions (RUS). The new reactor block should

SIBUR Acrylate Production & Sales (unit-kilo tons)		
Product	Jan-Jun 20	Jan-Jun 19
Production	24.7	26.4
Domestic Sales	16.5	11.8
Exports	12.6	19.6

help to eliminate bottlenecks. SIBUR-Neftekhim is conducting public discussions with the Administration of Dzerzhinsk to conduct an environmental impact assessment (EIA) procedure. The final stage of the EIA is due to end in November this year.

SIBUR-Neftekhim's production capacity includes 300,000 tpa of glycols, for the production of acrylic acid of ester and polymer grades 35,500 tpa, production of heavy esters (butyl acrylate and 2-ethylhexyl acrylate 43,600 tpa, and production of light ethers (methyl acrylate) 10,000 tpa.

Sintez-ethanolamines project

Sintez Oka Group of Companies has identified investments of 2 billion roubles as required to increase the capacity for the production of alkyl ethanolamines. By the end of 2022, the company intends to launch a unit for the production of methyl diethanolamine and dimethylethanolamine with a total capacity of 17,000 tpa. The main consumers stem from the oil and gas industry and ammonia production. As a result of the

increase in the production of alkyl ethanolamines, the company expects to increase its share in the world market from 3% to 5%.

SIBUR's Organic Chemical Production (unit-kilo tons)		
Product	Jan-Jun 20	Jan-Jun 19
DOTP	47	13
Oxo Alcohols	74	80
Acrylates	24.675	26.42
SIBUR's Organic Ch	emical Domestic Sa	les (unit-kilo tons)
Product	Jan-Jun 20	Jan-Jun 19
DOTP	34.9	11.6
Oxo Alcohols	22.3	33.4
Acrylates	16.5	11.8
SIBUR's Organic Chemical Exports (unit-kilo tons)		
Product	Jan-Jun 20	Jan-Jun 19
DOTP	12.8	4.1
Oxo Alcohols	13.4	18.7
Acrylates	12.6	19.6

Sintez Oka plans to start construction of the new facilities in the first quarter of 2021 and finish in the second quarter of 2022. The supplier of raw materials monomethylamine, dimethylamine is expected to be Rosneft, and for ethylene oxide SIBUR. The demand for the products of the Dzerzhinsk enterprise can be provided by Gazprom's liquefied natural gas projects.

Titan-cumene and isopropanol projects Omsk

Titan is yet to announce timing of the start-up of the isopropyl alcohol plant under construction at Omsk but is focused currently on the completion of the cumene upgrade on a zeolite catalyst. The plant's capacity for cumene will increase by 33%

to 160,000 tpa, whilst the production capacity of the new plant for isopropyl alcohol will be 75,000 tpa.

Russian Acrylonitrile Exports (unit-kilo tons)		
Country	Jan-Jun 20 Jan-Jun 19	
Turkey	70.2	79.4
Hungary	3.0	2.5
Total	73.2	81.9

Saratovorgsintez-acrylonitrile stoppage

Lukoil stopped the production of acrylonitrile at Saratovorgsintez for repairs on 10 August and all activities are expected to be completed on 10 September. The plant was working at full capacity July in order to maximize the formation of inventory. The last time the acrylonitrile plant was stopped for repairs was in mid-May. The work was combined with the planned capacity expansion from 150,000 tpa to 190,000 tpa.

Russian TDI Imports (unit-kilo tons)		
Country	Jan-Jun 20	Jan-Jun 19
Belgium	0.2	0.4
China	1.2	1.2
France	0.0	0.1
Germany	6.5	4.9
Hungary	5.2	4.7
Japan	0.4	0.8
Netherlands	0.9	0.7
Saudi Arabia	2.7	5.0
South Korea	1.5	0.5
Turkey	0.1	0.1
US	1.1	4.7
Total	19.7	23.1

Other products

Russian TDI-MDI imports, Jan-Jun 2020

Russian TDI imports dropped to 19,700 tons in the first six months in 2020 against 23,100 tons in the same period last year. Germany was the largest supplier shipping 6,510 tons in the first half of 2020 against 4,900 tons in 2019. Other important suppliers included Hungary which increased TDI shipments to Russia to 5,200 tons against 4,700 tons in January to June 2019 and Saudi Arabia which reduced from 5,000 tons to 2,700 tons. Around 43% of TDI imports were sold into the Moscow region followed by Tatarstan with 16.1%.

MDI imports into Russia amounted to 65,200 tons in the first six months in 2020 against 74,700 tons in the same period last year with values dropping from \$115.9 million to \$89.2 million. Saudi

Arabia was the largest supplier accounting for 25.4%, shipping 18,910 tons in the first half of 2020 against a similar volume last year. This was followed by China with 24.5% and the Netherlands with 19%. The largest region for Russian MDI imports this year has been the Vladimir Oblast accounting for 21,300 tons or 29.7% followed by Moscow with 16,600 tons.

Regarding polyurethane trade imports amounted to 21,600 tons in the first half of 2020 against 22,500 tons in January to June 2019, with values dropping from \$75.4 million to \$69.1 million. The largest suppliers of polyurethanes to the Russian market are Germany and Italy. Exports of polyurethanes amounted to 3,600

tons in the first six months this year versus 4,300 tons last year with values dropping from \$9.8 million to \$8 million. The largest destinations for Russian polyurethane exports comprise Uzbekistan, Kazakhstan and Relarus

Russian Imports of MDI (unit-kilo tons)		
Country	Jan-Jun 20	Jan-Jun 19
Belgium	7.1	8.4
China	15.8	18.1
Germany	9.0	7.6
Hungary	1.8	3.9
Japan	0.1	0.0
Netherlands	12.1	15.4
Saudi Arabia	19.9	18.8
South Korea	0.3	1.0
Others	0.0	0.2
Total	65.2	75.6

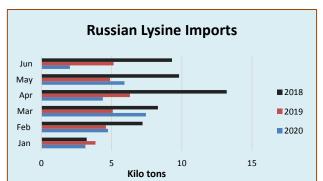
Bioethanol and ethyl acetate plant for Bryansk region

Russian company JSC Biotechnology plans to launch the production of bioethanol and ethyl acetate in the Bryansk region. The production of bioethanol and ethyl acetate is planned to be launched in the Klintsovsky district of the Bryansk region in the first quarter of 2021. The production capacity, which will be located on the territory of the plant shut down for more than 10 years, will amount to 20,000 tpa.

The concept of bioethanol is proposed to be interpreted as denatured ethyl alcohol, denatured in the manner prescribed by the Federal Law, and containing no more than 1% water. It is proposed to understand motor biofuels as alcohol-containing non-food products produced using bioethanol.

Russian lysine market 2020

From 27 July this year Russia banned the import of lysine from three enterprises in Brazil and France. The state safety organisation Rostekhnadzor introduced restrictions due to the lack of official replies from the state bodies of the two countries. The problem for the Russian market is that demand cannot solely be



satisfied by domestic producers and the National Union of Feed Providers has asked for a review of the decision.

In the first half of 2020 Russian imports of lysine totalled 27,650 tons against 29,890 tons in the same period in 2019. Imports have been generally falling in the past few years as production has increased. The country could turn itself into a net exporter if it can complete the Donbiotech project in the Rostov area which has been faced by bankruptcy issues. The cost of the project has

increased by 12 billion roubles due to the change in technology provided by Evonik (the main partner of Donbiotech), and an increase in the capacity of the enterprise. The Donbiotech project at Volgodonsk assumes a processing capacity of 250,000 tpa of grain for production 85,000 tpa of lysine, 25,000 tpa of gluten and up to 100,000 tpa of grain.

Ukraine

Ukrainian polymer imports & production, Jan-June 2020

In the first six months of the year, the total volume of polypropylene imports to the Ukrainian market amounted to about 61,100 tons, against 66,800 tons in the same period in 2019. Homopolymer imports dropped from 52,200 tons to 47,900 tons whilst imports of block copolymers dropped from 6,400 tons to 5,700 tons. Inward shipments of random copolymers dropped from 7,300 tons to 6,500 tons whilst imports of other copolymers amounted to 900 tons.

Ukrainian Polypropylene Imports (unit-kilo tons)		
Category	Jan-Jun 20	Jan-Jun 19
Homo	47.9	52.2
Block	5.7	6.4
Random	6.5	7.3
Propylene copolymers	0.0	0.0
Other	0.9	0.9

Karpatneftekhim, Jan-June 2020

Karpatneftekhim increased exports of propylene in the first six months in 2020 from 35,400 tons to 53,400 tons, whilst benzene exports dropped from 26,900 tons to 20,600 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.

Karpatneftekhim Petrochemical Exports (unit-kilo tons)		
Product	Jan-Jun 20	Jan-Jun 19
Propylene	53.4	35.4
Benzene	20.6	26.9

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.

Belarus

Belarussian refineries may reduce operating rates due to people protest

Belarusian oil refineries may cut their workload due to protest moods of the country's citizens. The management of the Mozyr Oil Refinery announced in writing on 14 August that it plans to hold strikes every day from 12.00 to 15.00 local time, starting from 20 August 20 for an indefinite period. The refinery fears that this could lead to a decrease in production volumes. Employees of Naftan have also joined the protests although production at Novopolotsk face a scheduled shutdown repairs in August. Oil shipments from Russia to Belarusian refineries via the Transneft system are expected this month at the previously planned level: 844,000 tons will be delivered to the Mozyr refinery, and 295,000 tons to the Novopolotsk refinery. Earlier, Belneftekhim said that this year the refineries will process 16-16.5 million tons of oil.

Belarus sources most of its crude from Russia. At present, oil is transported to Belarusian refineries from Russia via the Druzhba main oil pipeline, it also enters the ports of Klaipeda and Odessa, from where it is delivered by rail and pipeline to refineries in Mozyr and Novopolotsk. In addition to Azerbaijan, supplies in 2020 were carried out by Norway, Saudi Arabia and the US.

Belarussian Chemical Production (unit-kilo tons)		
Product	Jan-Jun 20	Jan-Jun 19
Ethylene	42.6	45.0
Propylene	26.7	27.7
Benzene	44.9	53.4
Caprolactam	31.6	58.5
Orthoxylene	28.2	3.5
Paraxylene	10.1	6.0
Methanol	29.0	40.7

Belarussian petrochemical production 2020

Ethylene production in Belarus amounted to 42,600 tons in the first six months in 2020 against 45,000 tons in the same period last year. Propylene production dropped from 27,700 tons to 26,700 tons whilst in the aromatics sector benzene production went down from 53,400 tons to 44,900 tons due to the large fall in caprolactam production at Grodno.

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

Belarussian Aromatic Imports (unit-kilo tons)		
Product	Jan-Jun 20	Jan-Jun 19
Orthoxylene	2.9	9.2
Paraxylene	4.4	9.2
Benzene	0.0	3.0
Toluene	3.4	4.6

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 trade aromatics, Jan-Jun 2020

The major change in trade in Belarussian aromatics this year has come from benzene where 21,200 tons was exported in the first six months against no activity last year. Benzene from the Naftan and Mozyr refineries has become available due to the reduction in caprolactam

production at Grodno. Belarus exported 2,966 tons of benzene to the Russian market in the first six months whilst 18,244 tons was exported to the Netherlands. Belarus did not import benzene in the first six months against 3,047 tons imported in the first six months in 2019.

Orthoxylene imports into Belarus dropped from 9,138 tons in the first half in 2019 to 5,628 tons in the same period this year whilst paraxylene imports dropped from 9,244 tons to 4,357 tons. Prices for paraxylene imports into Belarus amounted to \$673 per ton in the first half in 2020 against \$1035 in January to June 2019. Russia remains the sole supplier of orthoxylene and paraxylene into Belarus.

Belarussian Acrylonitrile Exports (unit-kilo tons)		
Product	Jan-Jun 20	Jan-Jun 19
Russia	1.7	0.9
Netherlands	2.1	6.1
Turkey	5.5	11.9
UAE	2.8	0.5
Total	12.1	19.3

Belarussian acrylonitrile exports, Jan-Jun 2020

Exports of acrylonitrile from Belarus dropped from 19,326 tons in the first six months in 2020 against 12,083 tons in the same period in 2019. Prices dropped on average from \$1343 per ton last year to \$1039 in January to June 2020. Turkey reduced purchases from 11,900 tons to 5,496 tons in the first six months this year whilst the UAE increased purchases from 455 tons to 2,777 tons.

Belarussian PTA imports Jan-Jun 2020

Belarussian PTA Imports (kilo tons)				
Country	Jan-Jun 20	Jan-Jun 19		
South Korea	15.5	6.5		
Portugal	3.2	5.0		
Poland	16.7	15.3		
Turkey	0.0	1.0		
Total	35.3	28.0		

PTA imports into Belarus totalled 35,320 tons in the first half in 2020 versus 28,042 tons in the same period in 2019. Average prices dropped from \$930 per ton in January to June 2019 to \$690 in 2020, but higher volumes meant that total import costs rose from \$12.960 million to \$14.367 million.

Imports of PTA from South Korea increased to 15,058 tons in the first six months from 6,500 tons. Poland increased shipments of PTA to Belarus from 15,348 tons to 16,652 tons, whilst Portugal

shipped 3,161 tons in the first half of 2020 against 5,021 tons.

Central Asia/Caucasus

Azerbaijan petrochemical exports Jan-Jun 2020

Azerbaijan exported 214,633 tons of methanol in January-June 2020 for \$21.463 million. The share of methanol in the total export volume amounted to 0.28%, and in the structure of non-oil exports 2.35%. In June, export of methanol from Azerbaijan amounted to 47,651.9 tons for\$4.765 million. Methanol production totalled 243,800 tons in the first half of 2020 which was 33% up on the same period in 2019.

Azerbaijan Polymer Exports Jan-Jun 2020				
Product	Jan-Jun 20	Jan-Jun 19		
Polyethylene	74,156	\$47.327		
Polypropylene	50,599	\$39.877		

Azerbaijan exported 129,486.36 tons of polymer products in January-June 2020, (an increase of 0.7%) for \$93.230 million (a decline of 9.8%). The share of these products in the total export volume in the

reporting period amounted to 1.21%, and in the structure of non-oil exports 10.22%.

The total export of polyethylene in January-June 2020 accounted for 74,156 tons for \$47.327 million, polypropylene in primary form 50,599 tons for \$39.877 million. In Azerbaijan, polypropylene is produced at the SOCAR Polymer plant, which was commissioned in July 2018. The design capacity of the plant is 184,000 tpa. In February 2019, the company put into operation a HDPE plant with a capacity of 120,000 tpa.

Import of pharmaceutical products to Azerbaijan in the first half of 2020 increased by 68.9% to \$180.783 million. In the first half of 2020, Azerbaijan imported 11,744.35 tons (an increase of 68.9%) of pharmaceutical products for \$180.783.million (an increase of 34.4%). As reported, in 2019 Azerbaijan imported a total of 16,527 tons of pharmaceutical products for \$296.532 million.

Shurtan Gas Chemical-GTL project

In August the power substation was completed that will ensure stable operation of the Shurtan Gas Chemical Complex and Uzbekistan GTL. The project completion rate for the GTL installation at the Shurtan Gas

Chemical Complex had achieved 95% in August. At a distance from the substation to the Uzbekistan GTL plant, the construction of a two-line 35 kV air network with a width of 220 kV has been completed.

The electrical equipment and devices for the station were fully supplied by Hyundai Engineering and Construction. Uzbekistan GTL will become one of the largest plants producing synthetic liquid fuels from natural gas. The construction of the plant is planned to be completed at the end of 2020. The plant will process 3.6 billion cubic metres of natural gas per annum and produce 1.5 million and synthetic liquid fuels.

The Shurtan complex can process up to 4 billion cubic metres of gas per annum and produce up to 3.5 billion cubic metres of methane. In the first half of 2020, natural gas processing at the Shurtan Complex totalled 2.1 million cubic metres (110.2% of the plan), production of gas condensate 52,989 tons (118.5% of the plan), and polyethylene 66,970 tons. Uzbekneftegaz is working on the expansion of the increase the polyethylene capacity of the Shurtan gas and chemical complex from the current 125,000 tpa to 380,000 tpa. Licensors for the project were selected as Chevron Phillips and Lummus with completion aimed for 2022.

Kazakh polymer imports, Jan-Jun 2020

In the first six months of this year, imports of PVC to Kazakhstan increased by 27% to 29,800 tons against 23,500 tons in January to June 2019. This year China accounted for 84% of imports into Kazakhstan.

Imports of polypropylene to Kazakhstan increased by a quarter to 21,800 tons against 17,500 tons in

Kazakh Polymer Imports (unit-kilo tons)				
Polymer	Jan-Jun 20	Jan-Jun 19		
PVC	29.6	23.5		
Homopolymer PP	18.2	14.1		
Propylene copolymers	3.7	3.4		
HDPE	79.8	60.5		
LDPE	10.4	11.8		
LLDPE	5.9	5.7		

January to June 2020. Imports of propylene homopolymers totalled 18,200 tons in the first six months this year against 14,100 tons a year earlier. Supplies of propylene copolymers in amounted to 3,700 tons against 3,400 tons in the same period in 2019.

In the first six months of this year, imports of polyethylene to Kazakhstan increased

by 23% and amounted to 96,100 tons against 77,900 tons. HDPE imports amounted to 79,800 tons, which is 32% more than in 2019. LDPE imports dropped 13% to 10,400 tons whilst LLDPE imports rose 4% to 5,900 tons.

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