CIREC monthly NEWS

Chemical industry reporting for Central and South East Europe
Supplemented by developments in Russia & neighbouring states

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Czech Republic-Hungary, Poland-Romania-Serbia-Slovakia, Ukraine
Russia, Kazakhstan, Azerbaijan, Uzbekistan

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Key points from this issue:

Central European petrochemical markets

- Saudi Arabia supplied 6.421 million tons to Poland in the first half of 2023, just under 50% of total supply, at an average price of €562.1 per ton
- Chemical raw material prices declined across the board in Central Europe in the first half of 2023 due to a range of factors evolving from the war and Ukraine
- PKN Orlen reduced ethylene production in the first six months in 2023 to 181,800 tons from 243,500 tons in the same period in 2022. Propylene production at Plock dropped from 235,200 tons to 157,600 tons
- MOL's ethylene production in Hungary and Slovakia totalled 338,000 tons in the first half of 2023 against 323,000 tons in the same period in 2022, whilst propylene rose from 166,000 to 179,000 tons

Central European polymer and organic chemical markets-weak economies affect demand

- Import costs for organic chemicals into Poland dropped from €2.662 billion in the first six months in 2022 to €2.061 billion in the same period in 2022, whilst export revenues dropped from €1.239 billion to €783 million
- Polyethylene consumption in Poland amounted to 594,300 tons in the first six months in 2023 against 685,900 tons in January to June 2022
- Overall consumption of polypropylene in Poland amounted to 443,700 tons in the first six months against 556,500 tons in the same period in 2022
- Average prices for synthetic rubber imports into Poland dropped in the first six months to €2175.5 per ton against €2465.5 per ton. Imports of synthetic rubber into Poland amounted to 133,370 tons in January to June 2023 against 151,324 tons in the same period in 2022
- MDI imports into Poland dropped from 79,834 tons in the first six months in 2022 to 71,852 tons in the same period this year
- Methanol imports into Poland dropped from 468,512 tons in the first six months in 2022 to 350,502 tons in the same period in 2023, with volumes from Russia constrained by sanctions
- Synthos reduced the production of synthetic rubber from 143,200 tons in the first six months to 96,800 tons in the same period in 2023, the drop attributed to lower demand

Russian chemical production & trade-increasing role of China

- In the late July the assets of several Russian chemical companies have been seized by the Prosecutor General's Office of Russia in order to raise finance for the war in Ukraine
- Russian ethylene production increased in the first six months this year to 2.314 million tons against 2.204 million tons in January to June 2022
- Russian propylene production amounted to 1.437 million tons in January to June 2023 against 1.452 million tons in the same period last year
- Russian production of synthetic rubber in the first half of 2023 in Russia amounted to 722,000 tons which was lower by 9.3% against 2022
- Russia produced 1.996 million tons of methanol in the first six months in 2023 against 2.336 million tons in the same period in 2022
- By volume Russia shipped 99,300 tons of polypropylene to China in the first six months versus only 18,114 tons in the same period in 2022, with revenues rising from $21.444 million to $83.800 million
- In the first six months this year polyol imports from China into Russia amounted to 51,216 tons against 16,102 tons in the same period in 2022
- Imports of MDI from China into Russia rose from 23,439 tons in January to June 2022 to 61,513 tons in the same period in 2023 and TDI imports rose from 13,533 tons to 12,599 tons

CENTRAL and SOUTH EAST EUROPE

Central European feedstocks

Main Sources of Czech Crude Imports (unit-kilo tons)		
Country	***Jan-Jun 23***	***Jan-Jun 22***
Azerbaijan	944.0	788.3
Kazakhstan	226.7	555.5
Russia	2336.1	1764.7
Czech Crude Import Prices (€ per ton)		
Country	***Jan-Jun 23***	***Jan-Jun 22***
Azerbaijan	617.0	721.6
Kazakhstan	605.2	630.1
Russia	360.5	554.0

Latest crude supply news Central Europe

Czech imports of Russian crude amounted to 2.336 million tons in the first half of 2023 against 1.765 million tons in the same period in 2022.

Due to the price cap imposed by the EU the costs of Russian crude amounted to €360.5 per ton against €617.0 per ton for crude supplied by Azerbaijan and €605.2 for crude supplied by Kazakhstan. Unipetrol is required by EU sanction law to stop buying Russian oil from December 2024.

The Czech Republic consumes around 8.0 million tpa of which around two thirds currently is sourced from Russia. In future larger volumes will be steadily ensured by the TAL crude oil pipeline leading from Trieste. The second half of 2024 will be particularly difficult, when the capacity of the TAL pipeline will be temporarily limited due to modifications and expansion to 4.0 million tpa.

Hungarian crude purchases Jan-May 2023		
Country	***Vol (ktons)***	***€ per ton***
Azerbaijan	90.323	47.641
Croatia	244.569	139.573
Iraq	225.427	99.993
Kazakhstan	450.673	252.489
Russia	1628.685	542.796
Others	0.720	0.363
Total	2640.398	1082.855

MOL has already started transporting crude oil from its oil field in Azerbaijan to Slovnaft in Bratislava via the Adria oil pipeline. The Adria is seen the key alternative to the Druzhba for Hungary and Slovakia. MOL is taking actions to manage the risk of possible crude oil supply disruption, including consideration of using alternative supply routes of sufficient capacity. MOL Group has access to state reserves which enables it to supply its markets in case of interruptions of the Druzhba pipeline.

Current problems for Slovnaft relate to quality of the oil coming from non-Russian sources. The company was forced to reduce the quantities of alternative oil in July, supplied through the Adria pipeline as problems had emerged with substances and impurities. Currently, the refinery processes about 30% of alternative non-Russian crude oil, which amounts to the current technical limit. For a larger share of processing, Slovnaft will need to make further technological adjustments. These should be completed next year during planned shutdowns.

Hungary's average price for crude imports in January to May amounted to €390 per ton, mainly helped by the price cap on Russian crude. Purchases of crude from Russia in January to May amounted to 1.629 million tons from the total of 2.640 million tons, thus accounting for 62% of supply. The Russian average price of €336.476 per ton compared against the next lowest price of €439.009 per ton from Iraq, although volumes from Iraq were small. Volumes from Kazakhstan, delivered by the Druzhba, amounted to 450,673 tons in the first five months at an average price of €557.969 per ton.

Polish Imports of Crude Oil Jan-Jun 2023		
Country	***Vol (million tons)***	***€ per ton***
Saudi Arabia	6.421	562.1
Lithuania	0.013	565.4
Russia	1.150	316.4
Nigeria	1.118	606.2
Norway	3.311	553.2
US	0.464	604.6
UK	0.706	599.5
Total	13.182	537.3

Polish imports of crude oil Jan-Jun 2023

Poland imported 13.182 million tons in the first six months in 2023 at an average price of €537.3 per ton. Saudi Arabia supplied 6.421 million tons at an average price of €562.1 per ton followed by Norway which supplied 3.311 million tons at an average price of €553.2 per ton. Other sources included Nigeria, the US and the UK, whilst imports from Russia were stopped in late February.

Central European petrochemical production and trade

PKN Orlen Production (unit-kilo tons)		
Product	***Jan-Jun 23***	***Jan-Jun 22***
Ethylene	181.8	243.5
Propylene	157.6	235.2
Butadiene	31.2	34.8
Toluene	0.5	4.3
Phenol	21.3	21.9
Polyethylene	153.3	167.3
PVC	98.6	156.5
Polypropylene	139.4	182.2

Poland-petrochemical production Jan-Jun 2023
PKN Orlen reduced ethylene production in the first six months in 2023 to 181,800 tons from 243,500 tons in the same period in 2022. Propylene production at Plock dropped from 235,200 tons to 157,600 tons. Production of propylene is expected to increase in Poland this year, particularly in the fourth quarter, if the new Polimery Police plant starts without difficulties. Butadiene production at Plock dropped from 34,800 tons versus 31,200 tons in January to June 2023.

MOL Jan-Jun 2023
MOL's ethylene production in Hungary and Slovakia totalled 338,000 tons in the first half of 2023 against 323,000 tons in the same period in 2022, whilst propylene rose from 166,000 tons to 179,000 tons. Butadiene production increased from 37,000 tons to 39,000 tons.

MOL's Olefin Production (unit-kilo tons)		
Product	***Jan-Jun 23***	***Jan-Jun 22***
Ethylene	338	323
Propylene	179	166
Butadiene	39	37
Raffinate	50	60

MOL's downstream EBITDA resulted in $102 million in Q2 2023 due to the regulatory impact, margin pressure in petrochemicals and less favourable macro in refining.

Overall, for the first six months this year the MOL Group achieved $1.125 billion in EBITDA, whilst the second quarter alone the EBITDA amounted to $411 million. Both downstream and upstream results were hit by worsening macro conditions and upheld massive government levies, including extra taxes and extra mining royalty fees. Moreover, 2nd quarter results were also distorted by a new revenue-based extra tax in Hungary amounting to $315 million for full-year 2023, recognised fully as a one-time expense in Q2.

MOL's Petrochemical Pricing & Margin		
Product	***Jan-Jun 23***	***Jan-Jun 22***
Ethylene (€/ton)	1,229	1,484
Butadiene-naphtha spread (€/ton)	389	453
MOL Group Petrochemicals (€/ton)	343	544

MOL Group's most significant commitments in Hungary relate to a polyol project of MOL Petrochemicals (€105.8 million), which aims to become a major producer of polyether polyols. Another €106.9 million is being invested in the construction of the metathesis project, which is a greenfield investment providing propylene for the polyol complex. For the expansion of the maleic anhydride plant at the Danube refinery, which is located at Szazhalombatta, €30.7 million has been allocated.

MOL's Capex in Petrochemicals Jan-Jun 2023 (€ million)	
(€ million)	**Project investment**
105.8	MOL: Polyol Project
106.9	Metathesis Project (Olefin Conversion Unit)
30.7	Maleic anhydride expansion

Other projects being undertaken by MOL in Hungary include a revamp of the PP3 unit and modernisation of the ethylene. In Croatia the Rijeka refinery, belonging to MOL subsidiary INA is undergoing an upgrade project.

Polish propylene imports Jan-Jun 2023
Imports of propylene into Poland dropped in the first six months in 2023 to 69,834 tons against 73,797 tons in the same period in 2022.

Average prices dropped from €1309.8 per ton in January to June 2022 to €953.1 per tons in the first six months in 2023. Import volumes are not expected to be significantly

Polish Propylene Imports (unit-kilo tons)		
Country	***Jan-Jun 23***	***Jan-Jun 22***
Bulgaria	9.138	1.987
Czech Rep	6.845	0.000
Germany	34.540	31.286
Russia	0.000	21.625
Ukraine	0.000	17.018
Serbia	4.828	0.000
Netherlands	11.917	0.000
Others	2.565	1.881
Total	69.834	73.797
Av price € per ton	953.1	1309.8

affected by the start of the 437,000 tpa plant by Grupa Azoty Polyolefins. Most of the propylene from the PDH plant is intended to be used in the production of PP. Any surplus is expected to be transferred to Azoty's subsidiary ZAK at Kedzierzyn-Kozle for the production of oxo alcohols.

Although polypropylene trade with Russia has been sanctioned by the EU, propylene monomer has not been included thus far. Even so due to problems with logistics Russia stopped exporting to Poland in the latter part of 2022. To compensate for the drop in imports from Russia and Ukraine (where production was suspended at Karpatneftekhim following the Russian invasion), Poland started to receive deliveries from other regional countries in East Europe. Germany supplied 34,540 tons in the first six months followed by the Netherlands with 11,917 tons and Bulgaria with 9,138 tons. Propylene from Bulgaria came from the Bourgas refinery.

Polish Butadiene Imports (unit-kilo tons)		
Country	***Jan-Jun 23***	***Jan-Jun 22***
Austria	18.363	18.227
Germany	7.121	11.022
Hungary	13.861	12.316
Others	1.139	0.000
Total	40.484	40.443
Av price € per ton	901.3	1141.5

Polish butadiene imports Jan-Jun 2023

Poland imported 40,484 tons of butadiene monomer in the first six months in 2023, versus 40,443 tons in the same period in 2022. Imports from Hungary increased from 12,316 tons last year to 13,861 tons in January to June 2023, whilst shipments from Austria increased from 18,227 tons to 18,363 tons. Average prices dropped from €1141.5 per ton in January to June last year to €901.3 per ton.

Hungarian Propylene Exports (unit-kilo tons)		
Country	***Jan-May 23***	***Jan-May 22***
Germany	0.000	3.184
Poland	1.019	1.881
Slovakia	37.969	33.780
Total	38.988	38.845
Av price € per ton	1139.7	1295.4

Hungarian Butadiene Exports (unit-kilo tons)		
Country	***Jan-May 23***	***Jan-May 22***
Czech Republic	11.900	4.088
Germany	1.995	5.035
Poland	12.880	12.258
Total	26.775	21.381
Av price € per ton	1099.2	1025.7

Hungarian propylene & butadiene imports Jan-May 2023

Hungarian propylene exports amounted to 38,988 tons in the first five months this year, most of which went to Slovakia at a price of €1139.7 per ton. MOL currently produces a surplus of propylene and is also building a new plant of 100,000 tpa which is intended to cover the new propylene oxide plant. Propylene production by Slovnaft is not sufficient to maintain high utilisation rates for polypropylene and additional supplies need to be purchased. Slovnaft in Slovakia is currently upgrading its steam cracker unit which should increase the capacity for propylene production.

Hungarian butadiene exports dropped slightly in the first five months to 26,775 tons versus 21,381 tons in the same period in 2022. Despite a weak market Hungarian exports rose from €1025.7 per ton in the first five months last year to €1099.2 per ton.

MOL produced 21,000 tons of butadiene in the first five months, of which around 75% is exported. The remainder consumed in a small plant at Tiszaujvaros for synthetic rubber production.

Czech Petrochemical Imports (unit-kilo tons)		
Product	***Jan-Jun 23***	***Jan-Jun 22***
Ethylene	22.485	11.712
Propylene	22.197	22.060
Butadiene	48.036	35.526

Czech Petrochemical Exports (unit-kilo tons)		
Product	***Jan-Jun 23***	***Jan-Jun 22***
Ethylene	6.176	7.557
Propylene	7.883	0.025
Butadiene	0.403	1.100

Czech monomer trade, Jan-Jun 2023

Propylene imports into the Czech Republic increased from 22,080 tons in January to June 2022 to 22,197 tons in the same period in 2023. Germany supplied 16,459 tons in the first six months, up from 12,089 tons. Other suppliers included Bulgaria from which the Czech Republic purchased 3,742 tons and Romania where volumes amounted to 1,048 tons. Average prices for Czech propylene imports dropped from €1373.0 per ton in the first six months in 2022 to €1022.6 per ton in 2023. Ethylene exports from the Czech Republic amounted to 6,156 tons in the first six months in 2023 against 7,157 tons in the same period last year, whilst ethylene imports rose from 11,712 tons to 22,485 tons.

Polish Average Chemical Prices (€ per ton)		
Product	***Jan-Jun 23***	***Jan-Jun 22***
Propylene	953.1	1309.8
Butadiene	901.3	1141.5
Toluene	977.6	1049.6
Styrene	1141.4	1593.6
Ethylbenzene	1048.3	1309.5
Methanol	303.0	374.6
Isopropanol	1275.0	1643.6
Ethylene Glycol	624.9	893.4
Phenol	1324.7	1608.8
Bisphenol A	1346.1	2503.4
Ethylene Oxide	1215.4	1433.9

Polish Styrene Imports (unit-kilo tons)		
Country	***Jan-Jun 23***	***Jan-Jun 22***
Belgium	3.785	5.441
Czech Republic	5.319	1.187
Finland	0.513	0.143
Netherlands	22.500	30.205
Germany	8.532	6.015
Others	2.432	1.653
Total	43.080	44.643
Av price € per ton	1141.4	1593.6

Czech Styrene Imports (unit-kilo tons)		
Product	***Jan-Jun 23***	***Jan-Jun 22***
Belgium	0.771	1.475
Germany	8.329	0.004
Netherlands	10.912	7.542
Poland	0.000	1.188
Others	2.084	0.173
Total	22.096	10.381
Av price per ton	1056.3	1677.7

Hungarian styrene imports (unit-kilo tons)		
Country	***Jan-May 23***	***Jan-May 22***
Germany	0.627	1.592
Italy	29.986	41.361
Netherlands	1.703	1.255
Others	0.273	0.062
Total	32.589	44.270
Av price € per ton	1306.1	1528.5

Germany supplied 22,334 tons of ethylene to Czech Republic in the first six months in 2023 at a cost of €21.033 million. This compares against 23,062 tons for the whole of 2022.

Czech imports of butadiene in the first six months this year increased from 35,526 tons to 48,036 tons, supplementing butadiene production at Kralupy. Germany supplied 35,943 tons for €31.826 million, followed by Hungary which supplied 11,857 tons for €10.372 million.

Central European styrene trade Jan-Jun 2023
Poland imported 43,080 tons of styrene in the first six months in 2023 versus 44,643 tons in the same period in 2022. Prices for styrene monomer and ethylbenzene both tended to drop in the first half of 2023 in line with lower energy and feedstock costs. The Netherlands reduced shipments to Poland from 30,205 tons to 22,500 tons whilst imports from Germany rose from 6,015 tons to 8,532 tons. Cost prices averaged €1141.4 per ton in January to June 2023 against €1593.6 per ton in the same period in 2022.

The decline in styrene prices reflects the same trend in import prices for the mainstream chemical raw materials into Poland in the first half in 2023. All of the major monomers declined in cost due to a range of factors some of which have evolved from the war and Ukraine.

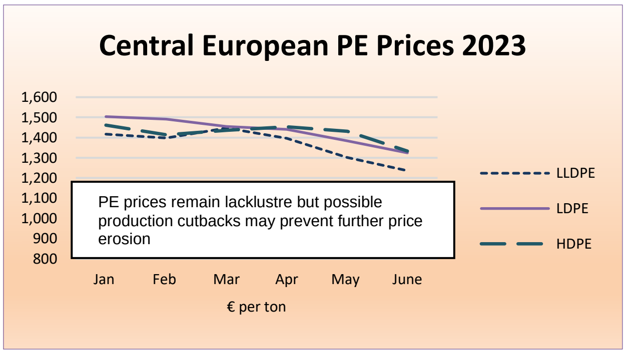
Styrene imports into the Czech Republic amounted to 22,096 tons in the first six months in 2023, rising from 10,381 tons in January to June 2022. Costs averaged €1056.3 per ton in January to June 2023 against €1677.7 per ton in the same period in 2022.

Hungarian styrene imports amounted to 32,589 tons in the first five months in 2023 against 44,270 tons in the same period in 2022, with average prices dropping from €1528.5 per ton to €1306.1 per ton in 2022. Italy supplied 41,361 tons in January to May 2022 which fell to 29,986 tons in the same period this year. Styrene in Hungary is used for the production of polystyrene by Versalis at the Szazhalombatta plant.

NIS expanding in petrochemicals
NIS took over HIP Petrohemija at the end of 2022 with the obligation to construct a new polypropylene plant at Pancevo with a capacity of at least 140,000 tpa. This project is current being worked out in addition to other aspects of investment relating to olefin production at Pancevo. Naphtha is directed from NIS to pyrolysis within HIP Petrochemicals in order to obtain as much high-concentration ethylene as possible.

Having taken over Petrohemija NIS is seeking to diversify and to expand its business in petrochemical products after the modernisation of existing facilities and building new production capacity. For the petrochemical sector the company is helped by the absence of any competition within 200 km from Pancevo. The drawback for NIS is the majority ownership held by Gazprom Neft and the political implications that might entail.

Central European polyolefins



Central European polyethylene market first half of 2023

Polyethylene margins in Europe declined to €320 per ton in the first half of 2023, whilst polypropylene margins dropped to €372 per ton. Most producers reported lower polyolefin sales in the first six months due to recessionary trends affecting most of Europe. For the third quarter demand for LDPE and HDPE is stable in Central Europe but showing only slight signs of growth in certain applications. Prices have been on a falling trajectory this year. The most active buyers have been producers of films for the food and construction industries.

MOL Polyolefins Production (unit-kilo tons)		
Product	***Jan-Jun 23***	***Jan-Jun 22***
LDPE	111	113
HDPE	152	125
PP	247	237
PE Totals	263	238

MOL polyolefin production Jan-Jun 2023

MOL's combined polyethylene production in Hungary and Slovakia totalled 263,000 tons in the first half of 2023 against 238,000 tons in the same period in 2022, whilst polypropylene rose from 237,000 tons to 247,000 tons. HDPE production only takes place for the MOL Group at Tiszaujvaros, where production increased from 125,000 tons in the first half of 2022 to 152,000 tons in 2023.

Polish PE Supply/Demand Balance (unit-kilo tons)		
	Jan-Jun 23	***Jan-Jun 22***
Production	153.3	167.3
Exports	144.6	179.5
Imports	585.6	698.1
Market Balance	594.3	685.9

Poland-polyethylene market first half of 2023

Polyolefin trade into and out of Poland experienced declines in the first six months in 2023, with nearly all grades of polyethylene and polypropylene affected. Based on production and trade, polyethylene consumption amounted to 594,300 tons in the first six months in 2023 against 685,900 tons in January to June 2022. Poland's consumption of polyethylene amounted to 1.291 million tons in 2022 versus 1.350 million tons in 2021.

Polish PE imports (unit-kilo tons)		
Type	***Jan-Jun 23***	***Jan-Jun 22***
LDPE	158.692	185.454
LLDPE	101.292	131.060
HDPE	202.180	238.013
EVA	6.779	9.121
EAO	90.903	103.017
Other	25.775	31.424
Total	585.621	698.089
Av price € per ton	1453.2	1863.7

Polish polyethylene production & trade Jan-Jun 2023

PKN Orlen and Basell Orlen Polyolefins (BOP) produced a combined total of 153,300 tons of polyethylene at Plock in the first six months in 2023 against 167,300 tons in the same period last year.

Polyethylene imports into Poland totalled 585,621 tons in January to June 2023 versus 698,089 tons in the same period in 2022, with average prices dropping from €1863.7 per ton to €1453.2 per ton this year.

Polish PE Exports (unit-kilo tons)		
Type	***Jan-Jun 23***	***Jan-Jun 22***
LDPE	24.305	31.035
LLDPE	9.015	10.926
HDPE	101.244	123.416
EVA	2.629	1.238
EAO	5.054	11.169
Other	2.387	2.520
Total	144.633	179.525
Av price € per ton	1424.1	1696.1

HDPE imports into Poland dropped from 238,013 tons to 202,180 tons in January to June 2023 whilst LDPE imports dropped from 185,454 tons to 158,692 tons. LLDPE imports declined from 131,060 tons to 101,292 tons. Most of the LLDPE imports were sourced mostly from West Europe, including France, the Netherlands and Germany.

Polyethylene exports from Poland have also dropped this year. Exports decreased from 179,525 tons in the first six months in

2022 to 144,633 tons in the same period in 2022, with average prices dropping from €1696.1 to €1424.1. HDPE was Poland's largest export grade amounting to 101,244 tons in the first six months against 123,416 tons in January to June 2022.

Serbian Chemical Exports (unit-kilo tons)		
Product	***Jan-May 23***	***Jan-May 22***
Polyethylene	42.734	50.200
Polypropylene	5.698	6.969

HIP-Petrohemija polymer exports Jan-May 2023

HIP-Petrohemija exported 42,734 tons of polyethylene in the first five months in 2023 against 50,200 tons in the same period in 2022. From 9 June is year NIS increased its stake in Petrohemija to 90%, while the state of Serbia retains a stake of 10%. NIS is planning the construction of a polypropylene production plant at Petrohemija with a capacity of at least 140,000 tpa, to be constructed within a period of six years.

Rompetrol Rafinare-polyolefin production and sales Jan-Jun 2023

Rompetrol Rafinare is the sole producer of polypropylene and polyethylene (LDPE, HDPE) in Romania. Besides its own products, the company is now actively selling a wide range of petrochemical products which are not currently produced by the Rompetrol Rafinare such as LLDPE, PVC, PET and PP.

Rompetrol Rafinare Polymer Production (unit-kilo tons)		
Product	***Jan-Jun 23***	***Jan-Jun 22***
Polypropylene	61	59
Polyethylene	14	24

The most important distribution channels for polymers comprise the Romanian domestic market with 50%, and for export markets Bulgaria 19%, Italy 6% and Serbia 5%. The external sales of polymers were targeted to both the European Union and third countries. The distribution of petrochemical products sold by Rompetrol Rafinare was done by means of auto and railway in the case of sales on the domestic market and, in the case of sales on the foreign market, the distribution of these products was made both by means of automotive and maritime transport through the ports of Agigea and Constanta.

Polish PP Supply/Demand Balance (unit-kilo tons)		
	Jan-Jun 23	***Jan-Jun 22***
Production	139.4	182.2
Exports	114.1	134.1
Imports	418.4	508.4
Market Balance	443.7	556.5

Polish PP Imports (unit-kilo tons)		
Type	***Jan-Jun 23***	***Jan-Jun 22***
PP homo	265.144	334.578
Polyisobutylene	1.508	2.267
Propylene copolymers	142.397	161.572
Other	9.312	10.017
Total	418.361	508.434
Av price € per ton	1538.2	1873.8

Polish polypropylene production & trade Jan-Jun 2023

Polypropylene production at Plock dropped from 182,200 tons in January to June 2022 to 139,400 tons in the first six months this year. Overall consumption of polypropylene in Poland amounted to 443,700 tons in the first six months against 556,500 tons in the same period in 2022.

Imports of polypropylene into Poland dropped from 508,434 tons in the first six months in 2022 versus 418,361 tons in the same period in 2023, with average prices dropping from €1873.8 to €1538.2 per ton. Homo grade imports dropped from 334,578 tons in the first six months last year to 265,144 tons.

Copolymer imports into Poland fell from 161,572 tons in the first six months in 2022 to 142,397 tons in the same period this year, with costs dropping to €234.106 million against €323.777 million in the same period in 2022.

Germany was the largest supplier of propylene copolymers to the Polish market in 2022 transporting 82,907 tons for €156.748 million. In the first six months in 2023 Germany supplied 42,897 tons of copolymers to the Polish market for €71.091 million. Imports are expected to fall as the new Polimery Police plant starts to take effect in the domestic market.

Polimery Police PP distributor

Grupa Azoty has selected the German company Ter Hell Plastic to act as distributor for its polypropylene sales from Polimery Police.

Ter Hell Plastic will distribute polypropylene under the name Gryfilen will serve the markets of the following countries: the so-called DACH (Germany, Austria, Switzerland), Benelux (Belgium, the Netherlands, Luxembourg) and the markets of Central and East Europe (including Hungary, Slovakia, the Czech Republic, Romania, Slovenia, Bulgaria). The polypropylene plant has a capacity of 429,000 tpa of different grades.

Polish PP Exports (unit-kilo tons)		
Type	*Jan-Jun 23*	*Jan-Jun 22*
PP homo	71.827	92.815
Polyisobutylene	0.339	0.060
Propylene copolymers	38.630	39.908
Other	3.276	1.354
Total	114.072	134.136
Av price € per ton	1488.5	2107.9

Supply sources this year have changed as Russian imports have disappeared from the market. Shipments from Russia accounted for 21% of total Polish imports in 2021 but dropped to 8.5% in 2022. Russia provided 51,179 tons of homo grade to Poland in 2022 for €75.955 million, but there has been no trade this year or expected in the foreseeable future.

Polish exports of polypropylene dropped from 134,136 tons in the first six months in 2022 to 114,072 tons in the same period in 2023. Average prices for exports amounted to €1488.5 per ton in the first six months which was down from €2107.9 per ton last year.

Czech Polyethylene Exports (unit-kilo tons)		
Product	*Jan-Jun 23*	*Jan-Jun 22*
LDPE	12.775	16.523
LLDPE	1.702	1.844
HDPE	172.523	183.807
EVA	1.667	1.780
Other	5.450	6.360
Total	194.117	210.313
Av price € per ton	1413.8	1735.5

The largest destination for Polish homo grade polypropylene in the first half of 2023 was Germany which took 18,566 tons for €25.435 million followed by the Czech Republic with 13,599 tons for €17.850 million. Other important markets in Europe included Italy, taking 7,260 tons in the first half in 2023 for €10.380 million followed by Slovakia with 6,637 tons for €9.786 million.

Czech Polyethylene Imports (unit-kilo tons)		
Product	*Jan-Jun 23*	*Jan-Jun 22*
LDPE	52.015	63.922
LLDPE	10.463	11.040
HDPE	58.078	64.355
EVA	5.146	4.638
Other	22.800	22.578
Total	148.502	166.534
Av price € per ton	1693.69	1994.83

Polish polypropylene trade is expected to undergo some major changes in the next few months when the new Polimery Police plant starts to operate on a commercial basis. The plant is currently going through its start-up procedure.

Czech polyethylene trade Jan-Jun 2023

Czech exports of polyethylene amounted to 194,117 tons in the first six months in 2023 from 210,313 tons in the corresponding period in 2022, with average prices falling from €1735.5 per ton to €1413.8. HDPE represents the largest category of Czech polyethylene falling from 183,807 tons to 172,523 tons. Lacklustre demand has been one of the main drivers of lower polyethylene prices this year.

Czech Polypropylene Exports (unit-kilo tons)		
Product	*Jan-Jun 23*	*Jan-Jun 22*
PP	112.484	124.343
Propylene Copolymers	24.834	26.214
Other	3.612	1.686
Total	140.931	152.242
Av price € per ton	1530.7	1787.3

Imports of polyethylene into the Czech Republic dropped from 166,534 tons in the first six months in 2022 to 148,502 tons in 2023. Average prices dropped from €1947.0 per ton to €1717.1 per ton. HDPE imports dropped from 64,355 tons to 58,078 tons, whilst LDPE imports decreased from 63,022 tons to 52,015 tons.

Polypropylene exports from Orlen Unipetrol dropped in the first six months from 124,343 tons in 2022 to 112,484 tons in 2023. Prices dropped on average from €1787.3 per ton to €1530.7. The largest market for Czech polypropylene exports in the first six months in 2023 was Poland followed by Germany.

Czech Polypropylene Imports (unit-kilo tons)		
Product	*Jan-Jun 23*	*Jan-Jun 22*
PP	154.634	159.182
Propylene Copolymers	109.463	100.436
Other	7.588	8.852
Total	271.684	268.470
Av price € per ton	1651.2	1944.3

Polypropylene imports into the Czech Republic amounted to 271,684 tons in the first six months this year against 268,470 tons in the same period in 2023, with average prices falling from €1944.3 per ton to €1651.2 per ton. Copolymer imports increased from 100,436 tons to 109,625 tons whilst homo polymer imports dropped from 159,182 tons to 154,634 tons.

Total costs for polypropylene imports totalled €285.491 in January to June 2023 against €338.539 million in the same period in 2022.

Copolymer imports were sourced mostly from Europe, with Germany supplying 30,233 tons in the first six months for €57.723 million. The largest non-European supplier was South Korea from where the Czech Republic imported 16,748 tons in January to June this year for €24.680 million.

Hungarian polyethylene Imports (unit-kilo tons)		
Product	***Jan-May 23***	***Jan-May 22***
LLDPE	10.890	8.694
LDPE	19.514	25.283
HDPE	35.588	42.091
EAO	4.197	5.642
EVA	1.568	2.578
Other	14.449	8.444
Total	86.207	92.732
Av price € per ton	1682.3	1910.0

Hungarian polyethylene trade Jan to May 2023

Hungarian imports of polyethylene dropped from 92,732 tons in January to May 2022 to 86,207 tons in the same period this year. LDPE imports dropped from 25,283 tons to 19,514 tons whilst HDPE dropped from 42,091 tons to 35,588 tons in January to May this year.

Import costs dropped from €177.122 million for polyethylene in January to May 2022 to €145.026 million in the first five months this year, with average prices dropping from €1910.0 per ton to €1682.3 per ton. Hungarian export prices dropped from €1631.6 per ton in January to May 2022 to €1330.7 per ton in 2023.

Hungarian polyethylene exports (unit-kilo tons)		
Product	***Jan-May 23***	***Jan-May 22***
LLDPE	2.862	2.458
LDPE	40.950	36.739
HDPE	96.621	99.891
EAO	0.109	0.273
EVA	0.054	0.061
Other	4.995	12.641
Total	145.592	152.063
Av price € per ton	1330.7	1631.6

Export volumes of polyethylene from Hungary amounted to 145,592 tons in the first five months this year versus 152,063 tons in January to May 2022.

HDPE exports dropped from 99,891 tons to 96,021 tons and LDPE increased from 36,739 tons to 40,950 tons. The rise in polyethylene exports this year has taken place despite the slight decline in production by MOL at Tiszaujvaros.

Hungarian polypropylene exports (unit-kilo tons)		
Product	***Jan-May 23***	***Jan-May 22***
PP homo	56.045	50.866
Propylene copolymers	39.624	43.723
Others	7.076	11.203
Total	102.745	105.792
Av price € per ton	1408.0	1765.5

Hungarian polypropylene trade Jan-May 2023

Propylene copolymer imports into Hungary amounted to 22,375 tons in January to May this year versus 28,216 tons in the same period in 2022, whilst polypropylene homo grade inward shipments decreased from 50,652 tons to 49,160 tons. Overall imports of polypropylene dropped from 91,536 tons in the first five months last year to 82,695 tons.

Due to softening prices import costs dropped from €170.172 million to €133.635 million in January to May 2022. Hungarian polypropylene exports in the first five months amounted to 102,745 tons against 105,792 tons in the same period in 2022. Export revenues amounted to €144.670 million against €186.774 million last year.

Hungarian Polypropylene Imports (unit-kilo tons)		
Product	***Jan-May 23***	***Jan-May 22***
PP homo	49.160	50.652
Propylene copolymers	22.375	28.216
Others	10.759	12.668
Total	82.295	91.536
Av price € per ton	1623.9	1859.1

By volume Hungarian homo grade polypropylene exports rose to 56,045 tons from 50,866 tons. Copolymer exports dropped from 29,141 tons to 24,222 tons. Overall average prices dropped from €1765.5 per ton to €1408.In terms of consumption Hungarian trends in polyolefins reflect the broader European picture of recessionary factors. Polypropylene consumption did not recover in the first two quarters and demand remains weak.

Central European Rubber Markets

Hungarian synthetic rubber trade Jan to May 2023

Hungarian imports of synthetic rubber amounted to 60,502 tons in the first five months this year for total costs of €137.057 million, against 57,876 tons in January to May 2022 for total costs of €126.707 million. Average costs per ton rose over the five-month period to €2411.2 against €2189.3 per ton last year. Russia continues to supply the Hungarian market with butadiene rubber and halogenated butyl rubber, although volumes are significantly down on pre-war trade.

Hungarian synthetic rubber imports (unit-kilo tons)		
Product	***Jan-May 23***	***Jan-May 22***
Butadiene Rubber	22.966	18.487
HBR	3.507	6.485
SBR	21.408	16.213
Other	12.620	16.692
Total	60.502	57.876
Hungarian synthetic rubber imports (€ million)		
Product	***Jan-May 23***	***Jan-May 22***
Butadiene Rubber	42.143	35.089
HBR	8.632	16.368
SBR	51.451	34.506
Other	34.831	40.743
Total	137.057	126.707
Av price € per ton	2411.2	2189.3

Halogenated butyl rubber (HBR) exports from Hungary totalled 3,462 tons for €10.481 million, whilst imports totalled 3,507 tons for revenues of €8.633 million. Exports of HBR largely balance out imports, reflecting the lack of consumption in Hungary.

Import sources of HBRs were dominated by Russia which supplied 2,318 tons in the first five months. Although the sanctions on Russian HBRs to the EU were imposed in July last year the rules were amended in February 2023 when earlier sanctions on synthetic rubber were extended to June 2024.

Hungarian butadiene rubber imports Jan-May 2023

Hungarian butadiene rubber Imports (unit-kilo tons)		
Product	***Jan-May 23***	***Jan-May 22***
Indonesia	9.199	0.098
Russia	1.935	6.902
Others	11.832	11.506
Total	22.966	18.506

Hungary imported 22,966 tons of butadiene rubber in January to May this year against 18,506 tons in January to May 2022. The main change to market sources in recent months has come from Indonesia from where Hungary imported 9,199 tons in the first five months.

Imports of butadiene rubber from Russia amounted to 1,935 tons in January to May this year versus 6,902 tons in the same period in 2022. EU sanctions on butadiene rubber trade with Russia, introduced in July last year, have since been loosened under the pressure of European tyre manufacturers but this has not led to much of a revival of purchases from Russia.

Synthos production at Oswiecim Jan-Jun 2023

Synthos Production in Poland (unit-kilo tons)		
Product	***Jan-Jun 23***	***Jan-Jun 22***
Polystyrene	36.5	37.4
EPS	47.3	51.6
Synthetic Rubber	96.8	143.2

Synthos reduced the production of synthetic rubber in Poland from 143,200 tons in the first six months to 96,800 tons in the same period in 2023, the drop attributed to lower demand.

In the styrene division Synthos reduced general purpose polystyrene production from 37,400 tons to 36,500 tons and EPS from 51,600 tons to 47,300 tons.

Polish Tyre Production (unit-kilo tons)		
Category	***Jan-Jun 23***	***Jan-Jun 22***
Car Tyres	145.7	154.4
Bus & truck Tyres	96.9	115.0
Tractor	4.5	6.8
Agricultural tyres	8.5	11.6
Total	255.6	287.8

Domestic market sales of rubber in Poland dropped in the first half of 2023, mainly from lower consumption in the tyre sector. Total consumption of synthetic and natural rubber used in the tyre industry dropped from 287,800 tons in the first half months in 2022 to 255,600 tons in the same period this year.

Synthos announced in March 2023 that it intended to close the Kralupy plant by the end of the second quarter. ESBR production is continuing at the Oswiecim plant in Poland. Even in the first half of 2022, the Kralupy unit was still running at full speed and making money. However, due to several times higher gas costs, Synthos was no longer able to compete on non-European markets. More than half of the production was sold in the US and Asia where competitive prices made it very difficult to sell at profitable levels.

A primary focus of Synthos in Poland includes the development of green energies not only for the company's own usage but also wider applications in the Polish economy and abroad. Orlen Synthos Green Energy has recently submitted two more applications regarding small modular nuclear reactors in Poland at Wloclawek and Ostrołęka.

Polish synthetic rubber trade, Jan-Jun 2023

Average prices for synthetic rubber imports into Poland dropped in the first six months to €2175.5 per ton against €2465.5 per ton. Imports of synthetic rubber into Poland amounted to 133,370 tons in January to June 2023 against 151,324 tons in the same period in 2022.

Polish Synthetic Rubber Imports (unit-kilo tons)		
Product	***Jan-Jun 23***	***Jan-Jun 22***
ESBR	12.123	7.047
Block SBR	17.102	21.664
S-SBR	12.425	6.989
Butadiene Rubber	29.791	28.703
Butyl Rubber	2.845	2.113
HBR	6.039	9.048
NBR	2.932	7.931
Isoprene Rubber	5.002	18.493
EPDM	22.018	24.569
Others	23.092	24.766
Total	133.370	151.324
Av price € per ton	2,175.5	2,466.5

Butadiene rubber imports rose from 28,7063 tons to 29,791 tons and EPDM imports dropped from 24,766 tons to 22,018 tons. Synthetic rubber exports from Poland totalled 132,287 tons in the period January to June 2023 versus 159,197 tons in the same period last year. SBR formed the largest share of exports.

Czech synthetic rubber market Jan-Jun 2023

Prices for synthetic rubber exports and imports of both synthetic and natural rubber have stabilised since the start of 2023. Prices for Czech exports of synthetic rubber tend to be lower than import prices due to different product grades, with export prices in April consolidating at €1858 per ton and import prices at €2239 per ton. Natural rubber prices tend to range at the lower end of synthetic rubber prices but are influenced by different market dynamics.

Czech Rubber Trade Prices (€ per ton)		
	Jan-Jun 23	***Jan-Jun 22***
Export	1913.1	2026.0
Import	2264.5	2228.4
Natural	1720.7	1946.5

Exports of synthetic rubber into Czech Republic amounted to 82,077 tons in the period January to June 2023 against 67,559 tons in the same period last year. Imports of synthetic rubber amounted to 62,876 tons in the first six months in 2023 against 80,579 tons in January to June 2022, with natural rubber imports declining from 42,198 tons to 39,620 tons.

Imports of synthetic rubber from Russia into the Czech Republic dropped from 15,325 tons in the first six months in 2022 (for €29.826 million) to 3,687 tons (for €6.448 million).

The largest category of imports from Russia this year was for SBR grades where volumes amounted to 1,856 tons. Butadiene rubber imports from Russia amounted to 1,474 tons against 6,418 tons in the same period in 2022, whilst imports of halogenated butyl rubber fell to 143 tons from 3,093 tons in January to June 2022.

Czech Exports of EBSR		
	Jan-Jun 23	***Jan-Jun 22***
Kilo tons	17.845	40.224
€ million	30.807	76.664
Average price	1726.3	1905.9

Czech exports of ESBR dropped in the first six months this year to 17,845 tons against 40,224 tons in the same period in 2022. The plant was closed in April and will not produce in future. Prices per ton for ESBR dropped slightly from €1905.9 to €1726.3 but according to Synthos production costs have risen to levels where the Kralupy plant is not able to be profitable.

Czech Trade in Butadiene Rubber (unit-kilo tons)		
	Jan-Jun 23	*Jan-Jun 22*
Exports	54.263	56.897
Imports	13.069	14.769
Czech Trade in Butadiene Rubber (€ million)		
	Jan-Jun 23	*Jan-Jun 22*
Exports	99.301	115.784
Imports	32.011	31.702

Czech butadiene rubber trade Jan-Jun 2023
Czech exports of butadiene rubber comprised 54,263 tons in the first six months in 2023 against 56,897 tons in the same period in 2022. Revenues from butadiene exports dropped from €115.784 million to €99.301 million. Imports of butadiene rubber amounted to 13,069 tons in the first six months which was down from 14,769 tons in the same period in 2022.

The largest customer for Czech butadiene rubber is India which took 6,938 tons in the first six months in 2023 against 11,419 tons last year. South Korea purchased 4,686 tons in the first six months, rising from 3,066 tons. The largest European consumer this year for butadiene rubber produced by Synthos at Kralupy was Poland taking 7,522 tons followed by Slovakia with 5,854 tons.

Central European aromatics

Polish Imports of Aromatics (unit-kilo tons)		
Product	*Jan-Jun 23*	*Jan-Jun 22*
Bisphenol A	10.997	10.300
Ethylbenzene	60.392	48.979
Paraxylene	0.000	22.274
Phenol	37.775	49.709
Phthalic Anhydride	18.523	13.687
PTA	3.359	0.910
Styrene	35.319	44.782
TDI	33.547	39.170
Toluene	11.197	10.288

Polish aromatics trade Jan-Jun 2023
Phenol imports into Poland amounted to 37,774 tons in the first six months in 2023 against 48,648 tons in the same period last year. Supplies from Russia, which had previously been a major supplier to the Polish market, stopped in August last year following sanctions imposed by the EU. Germany was the largest supplier of phenol to Poland in the first six months, shipping 28,100 tons. Other suppliers included Finland which delivered 6,300 tons in the first half this year for €8.4 million and Spain which supplied 2,600 tons for €2.7 million.

In other aromatic product areas, styrene imports into Poland amounted to 35,319 tons in the period January to June 2023 versus 44,782 tons in the same period in 2022 whilst ethylbenzene imports rose from 48,979 tons to 60,392 tons. Nearly all of the ethylbenzene imports come from the Synthos plant at Kralupy Czech Republic, which are delivered to the Oswiecim plant.

Polish Exports of Benzene (unit-kilo tons)		
Country	*Jan-Jun 23*	*Jan-Jun 22*
Czech Republic	12.006	27.734
Germany	56.151	56.146
Others	4.765	8.424
Total	72.922	92.303
Av €/ton	869.8	1094.5

Poland exported 72,922 tons of benzene in the first six months which was down from 92,303 tons last year. Average prices dropped from €1094.5 per ton to €869.8. Germany was the largest destination for Polish benzene exports, taking 56,151 tons against 56,146 tons in the same period in 2022. Exports of benzene from Poland to the Czech Republic dropped from 27,734 tons in January to June last year to 9,885 tons.

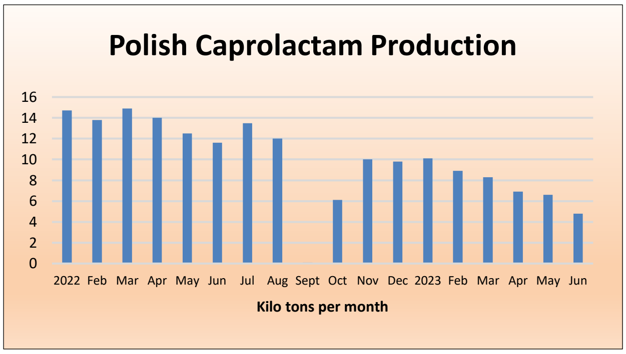
Polish Exports of PTA (unit-kilo tons)		
Country	*Jan-Jun 23*	*Jan-Jun 22*
Belarus	1.275	4.409
Belgium	0.470	0.000
Germany	90.485	184.469
Lithuania	1.618	23.561
Switzerland	4.147	3.958
Turkey	3.278	3.058
Others	11.981	0.756
Total	113.252	183.312
Av Price € per ton	864.4	942.2

Paraxylene imports into Poland were not required by Poland in the first six months against imports of 22,474 tons in the same period in 2022.

Polish PTA sales and production Jan-Jun 2023
Lower PTA production at Wloclawek this year impacted on exports shipments from Poland, falling from 183,312 tons in the first six months in 2022 to 113,252 tons.

Germany reduced inward shipments of PTA from Wloclawek from 184,469 tons to 90,485 tons, whilst shipments to

Lithuania fell from 23,561 tons to 1,618 tons. PTA prices dropped this year to €864.4 per ton in the first six months against €942.2 per ton last year.



Central European caprolactam production and trade

Caprolactam production in Poland dropped from 81,500 tons in the first half of 2022 to 45,600 tons this year. Production has been in decline since the middle of 2022, with frequent stoppages undertaken. Azoty hopes for better economic conditions for caprolactam production before the end of 2023. The group operates two plants at Tarnow and Pulawy, the latter which is part of an Orlen enquiry to purchase from Azoty in order to raise cash.

Caprolactam exports from the Czech Republic fell in the first six months to 11,006 tons against 22,442 tons in the same period in 2022. Average prices dropped from €2495.4 per ton to €1821.6 per ton.

Spolana Caprolactam Exports (unit-kilo tons)		
Country	***Jan-Jun 23***	***Jan-Jun 22***
Belgium	0.866	4.210
Germany	0.222	5.477
Italy	7.077	8.215
Slovenia	1.444	3.043
Switzerland	1.258	1.426
Others	0.138	0.071
Total	11.006	22.442
Av Price € per ton	1821.6	2495.4

Polyamide imports into the Czech Republic fell from 48,303 tons in the first half of 2022, for €196.291 million, to 46,526 tons for €204.468 million. Despite weaker consumption in Europe polyamide prices have been slightly higher this year than in 2022 due to supply/demand factors.

The European market has exhibited weak demand for both caprolactam and PA6, and despite lower energy costs it has been difficult for Azoty to produce at full capacity. The average European contract price of liquid caprolactam fell by 10% and 15% quarter on quarter, while the average quarterly contract price of caprolactam on the broad Asian market went down 20% and 3% quarter on quarter. Imports of cheaper PA6 chain products, especially from Asia, further eroded demand for PA6 and caprolactam.

Czech Styrene Trade (unit-kilo tons)		
Product	***Jan-Jun 23***	***Jan-Jun 22***
Exports	5.055	0.000
Imports	21.737	10.390

Czech Benzene Trade (unit-kilo tons)		
Product	***Jan-Jun 23***	***Jan-Jun 22***
Exports	9.181	24.427
Imports	18.336	42.938

Czech aromatic trade Jan-Jun 2023

Czech exports of ethylbenzene amounted to 60,662 tons in the first six months versus 51,475 tons in the same period in 2022, whilst styrene exports jumped from zero to 5,050 tons. Styrene imports are still required in the Czech Republic, rising from 10,390 tons to 21,737 tons.

Benzene exports in the first six months in 2023 amounted to 9,181 tons against 24,427 tons in January to June 2022, whilst imports of benzene dropped to 18,336 tons from 42,398 tons.

Unipetrol operates a benzene plant at Litvinov with a capacity of 250,000 tpa, whilst benzene is also produced in the Czech Republic by Deza at Valasske Mezirici. Deza also owns Petrochemia at Blachownia at Kedzierzyn Kozle and possesses a combined capacity of 160,000 tpa for benzene and 25,000 tpa for toluene. Exports of toluene from the Czech Republic amounted to 6,442 tons in the first six months this year. Czech imports of Bisphenol A amounted to 15,039 tons in the first half of 2023 against 17,475 tons in the same period in 2022, with average prices dropping from €2308.8 per ton to €1458.2. The leading supplier was South Korea which shipped 6,262 tons in the first six months this year.

Czech Bisphenol A Imports (unit-kilo tons)		
Country	***Jan-Jun 23***	***Jan-Jun 22***
Total	15.039	17.475
Av € per ton	1458.2	2308.8

Central European Organic Chemicals

Polish Organic Chemical Trade		
Exports	***Jan-Jun 23***	***Jan-Jun 22***
Value (€ million)	783	1,239
Vol (kilo tons)	625	896
Imports	***Jan-Jun 23***	***Jan-Jun 22***
Value (€ million)	2,061	2,662
Vol (kilo tons)	1,339	1,587

Polish organic chemical trade Jan-Jun 2023

Values and volumes for Polish trade in organic chemicals fell for both exports and imports in the first six months, as recessionary trends took effect.

Import costs for organic chemicals into Poland dropped from €2.662 billion in the first six months in 2022 to €2.061 billion in the same period in 2022, whilst export revenues dropped from €1.239 billion to €783 million. Volumes for exports dropped from 896,000 tons to 625,000 tons whilst imports fell from 1.587 million tons to 1.339 million tons.

Ethylene glycol was one of the few products showing an increase in imports, rising in the first six months from 20,396 tons in the first six months last year to 50,843 tons in the same period in 2023.

Belgium was the main supplier, providing 28,846 tons for €18.416 million. Poland exported 6,138 tons of ethylene glycol in the first six months this year. Diethylene glycol imports amounted to 10,169 tons in the first six months versus 10,227 tons.

Methanol imports into Poland dropped from 468,512 tons in the first six months in 2022 to 350,502 tons in the same period in 2023, with volumes from Russia constrained by sanctions. No further methanol imports from Russia are now legally possible into Poland, with the full sanctions taking effect from 18 June. The impact is probably one of higher costs on consumers, but markets are being controlled by the war in Ukraine.

Polish solvent exports, Jan-Jun 2023

Acetone exports in the first six months this year amounted to 7,021 tons against 9,589 tons in January to June 2022. N-butyl acetate exports fell from 9,019 tons in January to June 2022 to 5,798 tons in the same period in 2023. Germany was the largest destination for Polish butyl acetate exports last year, amounting to 8,999 tons followed by Italy with 3,763 tons.

Monochloroacetic acid exports from Poland have been resumed this year after investment and totalled 18,431 tons in the first six months this year. The plant is part of the PCC Group, located at Brzeg Dolny with a capacity of 42,000 tpa.

Polish Organic Chemical Imports (unit-kilo tons)		
Product	***Jan-Jun 23***	***Jan-Jun 22***
Acetic Acid	18.449	23.158
Acetone	3.581	4.010
Adipic Acid	6.238	4.936
Butadiene	26.385	31.352
DEG	14.880	10.227
DINP/DOP	15.887	10.943
Ethyl Acetate	9.364	6.627
Ethylene Glycol	50.843	20.936
Ethylene Oxide	8.525	6.740
Isopropanol	5.059	4.280
Maleic Anhydride	6.293	5.939
Methanol	350.502	468.512
Propylene	70.150	75.555
Propylene Glycol	9.433	8.848
VAM	7.633	8.452

Polish acetic acid imports, Jan-Jun 2023

Acetic acid imports into Poland dropped from 18,421 tons to 26,278 tons in January to June 2023. The main suppliers to the Polish market this year include the UK, which delivered 3,588 tons versus 7,492 tons in January to June 2022, and the US which increased shipments from 6,634 tons to 9,430 tons. Average prices for acetic acid dropped from €1181 per ton to €781.1 per ton this year.

Hungarian acrylonitrile imports (unit-kilo tons)		
Country	***Jan-May 23***	***Jan-May 22***
Netherlands	4.916	9.697
Germany	1.770	0.994
France	0.891	3.869
Russia	0.000	1.488
Others	2.637	0.587
Total	10.214	16.636
Av € per ton	2052.8	2363.6

Hungarian organic chemical trade Q1 2023

Acrylonitrile imports into Hungary amounted to 10,214 tons in January to May this year versus 16,636 tons in the same period in 2022. Average prices dropped from €2363.6 per ton against €2052.8 per ton in the first quarter in 2023.

The largest supplier of acrylonitrile to Hungary in 2022 was the Netherlands, accounting for 22,953 tons for €55.452 million. The Netherlands reduced shipments in the first five months to 4,916 tons from 9,697 tons.

Hungarian Maleic Anhydride Exports (unit-kilo tons)		
Country	***Jan-May 23***	***Jan-May 22***
Total	8.486	9.717
Av price € per ton	1287.3	2258.0

Maleic anhydride exports from Hungary amounted to 8,486 tons in the first five months in 2023 against 9,717 tons in the same period in 2022. Most of the exports were delivered in liquid form to customers up to 500 km from the Szazhalombatta plant which is located at the Danube refinery. One of the main maleic anhydride applications includes the manufacture of unsaturated polyester resins.

Hungarian aniline imports (unit-kilo tons)		
Country	***Jan-May 23***	***Jan-May 22***
Belgium	18.555	0.799
China	11.067	0.019
Czech Republic	32.864	46.056
Others	0.000	1.269
Total	62.486	48.143
Av price € per ton	1469.6	1860.1

Aniline imports into Hungary amounted to 62,486 tons in January to May this year against 48,143 tons in the same period in 2022. Imports of aniline from China amounted to 11,067 tons whilst imports from the BorsodChem Ostrava plant in the Czech Republic totalled 32,864 tons against 46,056 tons in the same five months in 2023. Imports from Belgium rose from only 799 tons in January to May 2022 to 18,555 tons this year.

Central European Isocyanates & polyols

Central European MDI trade Jan-Jun 2023

MDI imports into the Czech Republic totalled 19,170 tons in the first six months in 2023 against 19,061 tons in the same period in 2022. Hungary provided the largest share of imports at 5,996 tons followed by Belgium with 4,793 tons. Average MDI prices decline from €2615.9 per ton to €2423.6 per ton.

Czech MDI Imports (unit-kilo tons)		
Country	***Jan-Jun 23***	***Jan-Jun 22***
China	1.944	1.604
Belgium	4.793	6.580
Germany	2.412	5.315
Hungary	5.996	3.303
Netherlands	3.403	1.666
Others	0.622	0.593
Total	19.170	19.061
Av price € per ton	2423.6	2615.9

MDI imports into Poland dropped from 79,834 tons in the first six months in 2022 to 71,852 tons in the same period this year. Hungary and Germany remain the two largest import sources, with overall average prices comprising €2239.7 per ton in January to June 2023 against €2534.6 per ton last year. Overall costs for MDI imports dropped from €202.344 million in the first half last year against €160.929 in the same period in 2022.

Polish MDI Imports (€ million)		
Country	***Jan-Jun 23***	***Jan-Jun 22***
Germany	17.594	23.828
Netherlands	11.569	10.155
Hungary	18.447	21.002
Belgium	12.053	18.375
South Korea	4.049	0.638
Others	8.140	5.836
Total	71.852	79.834
Av price € per ton	2239.7	2534.6

Hungarian MDI exports dropped in January to May 2023 to 103,002 tons versus 75,453 tons in the same period in 2022. Poland represented the largest destination with deliveries amounting to 15,968 tons, down from 18,062 tons, followed by Germany which reduced purchases from 10,646 tons to 8,645 tons.

The most notable destination fall came from the US where shipments declined from 22,032 tons in January to May last year to zero this year. MDI export prices dropped from €2585.1 per ton in the first five months in 2022 to €2243.9 this year.

Hungarian MDI Exports (unit-kilo tons)		
Country	***Jan-May 23***	***Jan-May 22***
Czech Republic	3.324	3.345
Germany	8.645	10.646
Italy	4.973	2.929
France	5.175	4.867
UK	2.147	3.794
Poland	15.968	18.022
Romania	8.060	10.952
Turkey	5.472	6.084
US	0.000	22.032
Others	21.689	20.330
Total	75.453	103.002
Av price € per ton	2243.9	2585.1

Central European TDI trade Jan-Jun 2023

TDI exports from Hungary amounted to 99,916 tons in the first five months in 2023 versus 128,215 tons in the first five months last year, with average prices rising this year to €3036.4 per ton from €2686.6 per ton in January to May 2022. TDI exports to Turkey amounted to 14,493 tons in the first five months in 2023 against 18,080 tons last year whilst Italy reduced imports from Hungary from to 8,217 tons.

Hungarian TDI Exports (unit-ktons)		
Country	***Jan-May 23***	***Jan-May 22***
Austria	1.330	1.159
Belgium	14.166	18.061
Germany	4.485	6.534
Italy	12.642	17.723
Poland	11.986	15.129
Portugal	5.680	6.860
Romania	5.486	6.198
Spain	4.772	5.278
Turkey	14.493	18.080
Others	24.877	33.193
Total	99.916	128.215
Av price € per ton	3036.4	2686.6

Polish imports dropped from 9,869 tons to 12,642 tons. Belgium took 14,166 tons in January to May this year down from 18,061 tons, whilst Romania reduced purchases slightly from 6,198 tons 5,486 tons.

Hungary remains the largest supplier of TDI to the Polish market, although volumes fell in value from €39.326 million in the first five months in 2022 to €35.542 million in the same period this year.

Overall Polish TDI import costs declined from €110.810 million in the first six months in 2022 to €99.284 million. Despite the fall in volumes from 39,970 tons to 33,547 tons average prices for TDI increased from €2793.0 per ton to €2974.9 per ton this year. European demand for TDI is faced by recessionary trends and slowly declining feedstock costs. In effect only global capacity constraints can help to sustain prices.

Hungarian Polyol Imports (unit-kilo tons)		
Country	***Jan-May 23***	***Jan-May 22***
Austria	0.136	0.121
Belgium	9.880	0.984
China	2.948	3.554
Germany	1.304	1.464
Italy	0.172	0.132
Netherlands	1.175	3.543
Poland	0.835	1.641
Romania	0.749	1.409
Others	0.495	0.365
Total	17.695	13.214

Hungarian polyol imports Jan-May 2023

Hungarian polyol imports amounted to 17,695 tons in the first five months this year against 13,214 tons in the same period in 2022.

Belgium was the largest supplier this year, shipping 9,880 tons. Major suppliers of polyols to Hungary in 2022 included China with 11,091 tons and the Netherlands with 10,746 tons.

MOL is currently constructing its new plant at Tiszaujvaros which should have probably been on stream now. In June MOL fed propylene oxide into the pilot polyol plant and large-scale test production at the base is expected to start in the second half of 2023. MOL is waiting for European markets to revive before starting production.

Czech Polyol Imports		
	Jan-Jun 23	***Jan-Jun 22***
Volume ktons	25.075	21.679
Value € million	66.300	60.501
Av price € per ton	2590.1	2841.3

Czech polyol imports Jan-Jun 2023

Czech polyol imports amounted to 25,075 tons in the first six months in 2023 against 21,679 tons in the same period in 2022. The major sources of imports came from Belgium, France and Germany. Polyol import costs increased in the first six months to €66.300 million from €60.501 million in January to June 2022 with average prices dropping from €2841.3 per ton to €2590.1 per ton. Whereas prices ended the second quarter last year on an upward trajectory, the opposite trend occurred this year. Over the second quarter prices dropped from €2583.1 per ton in April against €2457.2 in June.

Polish Polyol Imports (unit-kilo tons)		
Country	***Jan-Jun 23***	***Jan-Jun 22***
Belgium	9.022	15.027
China	4.556	0.840
France	2.651	0.000
Germany	16.899	14.319
Netherlands	14.608	8.125
Romania	8.193	18.176
Saudi Arabia	1.663	12.633
South Korea	8.459	0.000
Others	5.804	10.410
Total	71.856	79.529
Av price € per ton	2157.6	2660.4

Polish polyol imports Jan-Jun 2023

Polish polyol imports amounted to 71,856 tons in the first six months in 2023 against 79,529 tons in the same period in 2022. The major sources of imports came from Belgium, Germany and the Netherlands.

Polyol import costs dropped in the first six months to €101.085 million from €146.280 million in January to June 2022 with average prices dropping from €2660.4 per ton to €2157.6 per ton. The largest source of imports came from Germany in the first six months, amounting to 16,899 tons against 14,319 in the same period in 2022.

Polish Methanol Exports (unit-kilo tons)		
Country	***Jan-Jun 23***	***Jan-Jun 22***
Austria	29.359	39.196
Czech	32.407	40.111
Germany	43.303	57.438
Romania	18.927	13.107
Slovakia	24.037	25.084
Ukraine	11.156	4.745
Hungary	12.283	24.755
Others	0.167	3.014
Total	171.640	207.451
Av price € per ton	385.846	435.135

Polish Methanol Imports (unit-kilo tons)		
Country	***Jan-Jun 23***	***Jan-Jun 22***
Azerbaijan	4.981	1.138
Belgium	33.413	0.044
Finland	0.000	33.699
Germany	28.922	61.606
Netherlands	3.514	0.628
Norway	48.713	16.787
Russia	185.481	352.705
US	15.002	0.000
Trinidad	7.989	0.000
Venezuela	20.765	0.000
Others	1.110	1.913
Total	350.502	468.512
€ price per ton	303.4	374.3

Czech methanol Imports (unit-kilo tons)		
Country	***Jan-Jun 23***	***Jan-Jun 22***
Germany	3.332	3.384
Norway	0.849	0.525
Russia	6.237	17.670
Poland	25.247	17.961
Others	2.173	0.554
Total	37.838	40.093
Av price € per ton	394.221	444.705

Hungarian methanol imports (unit-kilo tons)		
Country	***Jan-May 23***	***Jan-May 22***
Austria	0.774	0.929
Germany	11.330	4.258
Netherlands	11.501	4.174
Poland	10.212	4.050
Russia	0.000	10.763
Slovenia	0.422	0.522
Slovakia	4.568	8.011
Others	2.325	3.192
Total	41.132	35.898
€ per ton	445.928	474.967

Polish exports of polyols amounted to 19,378 tons in the first six months this year against 19,519 tons in the same period in 2022, but prices dropped from €2905.5 per ton to €2285.5. Revenues from polyol exports dropped from €56.712 million in January to June 2022 to €46.525 million. The largest destinations for Polish polyol export include Hungary, Italy and Denmark.

Central European Methanol

Central European methanol trade Jan-Jun 2023

Exports of methanol from Poland totalled 171,640 tons in the first six months in 2023 against 207,451 tons in January to June 2022. Exports to Germany fell from 57,438 tons to 43,303 tons. Ukraine imported 11,156 tons of methanol from Poland in the first half of 2023 versus 4,745 tons last year.

Other destinations include the Czech Republic where Polish exports dropped from 40,111 tons to 32,407 tons whilst deliveries to Austria dropped from 39,196 tons to 29,359 tons. Although export volumes were similar in the first two quarters, shipments in June amounted to only 14,775 tons which is partly due to the ban on Russian methanol taking full effect from 18 June.

Russia reduced exports to Poland in January to June 2023 to 185,481 tons from 352,705 tons. The EU embargo on Russian methanol took full effect from 18 June. Norway shipped 48,713 tons in the first six months to Poland, against 16,787 tons last year, whilst Germany reduced exports to 28,922 tons from 61,606 tons.

Imports of methanol into Poland totalled 349,892 tons in January to June 2023 versus 468,512 tons in the same period in 2022. The average price for Polish imports comprised €303.4 per ton in the first six months against the average price of €374.3 per ton in January to June 2022.

Czech imports of methanol amounted to 37,838 tons in the first six months in 2023 against 40,093 tons in the same period in 2022. Russia accounted for 6,237 tons in January-June 2023 against 17,670 tons in 2022, but no deliveries have been made since May.

Imports of methanol into the Czech Republic were dominated by Poland which increased shipments from 17,961 tons to 25,247 tons. Average prices for methanol imports dropped from €444.705 per ton last year to €394.221 per ton.

Hungarian imports of methanol totalled 22,226 tons in January to May this year versus 25,784 tons in January to May last year. Prices averaged €445.928 per ton in the first five months against €474.967 per ton in the same period in 2022.

RUSSIA

Russian gas-LNG production Jan-Jun 2023

- Russian natural gas production fell by 14.9% in the first half of 2023 to 267 billion cubic metres
- The production of LNG in January-June 2023 amounted to 16 million tons, 4.5% less than in the same period in 2022
- Sanctions on LNG have not been fully introduced yet by the EU, allowing significant Russian volumes to be imported, but restrictions are likely to be introduced.
- Expansion of LNG exports depends a large extent on completion of Novatek's Arctic-2 project

Russian chemical industry Jan-Jun 2023

Russian official statistics state that the production of chemicals and chemical products rose by 2.1% in the first half of 2023 against the first half of 2022. Compared to June last year, the increase in June 2023 was 9.3%. Chemical production volumes, dominated overall by fertilisers, showed stabilisation in the second quarter despite the significant changes in market dynamics and market sales.

The production of plastic and rubber products for the first half of the year increased by 6.1%, with the increase in June recorded at 15.1%.

One of the main factors behind the growth in plastics production has been the strong demand for polyethylene pipes, used in gas and water. Aside a general necessity to replace many domestic pipe networks for communal water supply, in the gas sector Gazprom has been forced to concentrate more on the domestic market (entailing the construction of gas pipelines) after losing much of its European gas export market. Currently only a small proportion of Russia's gas production is consumed internally by industry and domestic households.

Russian renationalisation of chemical companies

In the late July the assets of several Russian chemical companies have been seized by the Prosecutor General's Office of Russia. This has included Metafrax Chemicals, Volzhsky Orgsintez and the Dalnegorsk Mining and Processing Plant. In each case the Prosecutor General Office filed a lawsuit with the regional arbitration court demanding that the shares and shares be transferred to the state. For all three companies the pretexts for seizing the assets include strategic significance for the Russian defence industry and claims of an illegal privatisation process. In all three cases appeals are being made, the outcome of which should be known in early September.

Metafrax Chemicals is not a monopoly producer of methanol or formaldehyde but is the sole producer of paraformaldehyde and utropin in Russia. Volzhskiy Orgsintez is a leading producer of organic synthesis products in Russia. It produces aniline, methionine, flotation reagents, carbon disulphide, gasoline additives. Dalnegorsk GOK is the only plant in Russia that produces boric acid. All of these companies have stated they are not connected to the defence industry, and all major share transfers have been conducted according to the law.

Russian base chemical production Jan-Jun 2023

The production of mineral fertilisers in the first half of 2023 amounted to 12.4 million tons which is 0.9% more than in the same period in 2022. Fertiliser production decreased by 8.3% in the first quarter to 6 million tons but recovered in the second quarter.

The best results were shown by the production of nitrogen fertilisers, where production increased by 6.5% over the same period in 2022 to 6.3 million tons.

Production of phosphate fertilisers increased by 7.2% in the first quarter but then fell in the second which meant production for the six months was unchanged at 2.2 million tons. The production of potash fertilisers dropped 7.0% in the first half of 2023.

Russian Base Chemical Production (unit-kilo tons)		
Product	***Jan-Jun 23***	***Jan-Jun 22***
Caustic Soda	612.0	646.0
Soda Ash	1,740.0	1,815.0
Ammonia	8,600.0	8,800.0
Nitrogen Fertilisers	6,338.0	5,957.0
Phosphate Fertilisers	2,211.0	2,128.0
Potash Fertilisers	4,110.0	4,115.0

Russian ammonia production fell from 8.8 million tons to 8.6 million tons in the first six months. Russia's largest exporter Togliattiazot which has been unable to export through Odesa has concluded several agreements on the creation of railway links. Construction has started for a terminal for transshipment of fertilisers in Taman and rail deliveries.

SIBUR develops alternative routes to new customers

SIBUR radically changed its export policy in 2022, redirecting about 4 million tons of its products from the European markets to the countries of Southeast Asia and Turkey. However, transport companies were not ready to change routes and: delivery times increased by 30-100%, with delivery costs rising in some cases by 2.5 times.

SIBUR-new ports and trade channels
In terms of port transhipments St Petersburg has become more important this year, with SIBUR tripling sales threefold in the first six months. SIBUR has been considering the Northern Sea Route as one of the potentially sustainable logistics destinations. From October 2023, it is planned to supply raw materials to the countries of Southeast Asia from the ports of St. Petersburg and Arkhangelsk. A new transport channel, the North-South corridor, has also been developed.

The impact of sanctions on exports and shift from Europe to China meant that the share of land shipments increased from 17% in 2022 to 30% in the first half of 2023. At the same time the share of sea shipments decreased from 82% to 70%. Overall export delivery times have increased by 20-50 days, depending on the route.

One of the main problems for shipments through the Far East is still the high congestion of railways and port infrastructure. In order to increase the stability and predictability of the supply chain, SIBUR is developing its vessel leasing business. It allows the company to be to a certain extent independent of sea lines, the regularity of ship calls and the transfer of ships, making it possible to form a production programme provided by its own fleet. SIBUR has also concluded agreements with the Russian shipping company FESCO which operates out of the Pacific coast ports with aims to provide logistics solutions for deliveries to the Middle East and the Asia-Pacific region.

Russian Petrochemical Production (unit-kilo tons)		
Product	***Jan-Jun 23***	***Jan-Jun 22***
Ethylene	2314.3	2203.9
Propylene	1436.8	1451.9
Butadiene	256.0	316.9
Benzene	665.0	688.0
Butanols	151.6	116.7
Methanol	1995.9	2335.9
Acetone	77.1	69.1

Russian petrochemical production Jan-Jun 2023
Russian ethylene production increased in the first six months this year to 2.314 million tons against 2.204 million tons in January to June 2022. Propylene production declined slightly from 1.452 million tons to 1.436 million tons.

Russian butadiene production amounted to 256,005 tons in the first six months in 2023 against 316,871 tons in the same period in 2022. Methanol production dropped sharply from 2.336 million tons in the first six months last year to 1.996 million tons, whilst butanol production rose from 116,700 tons to 151,600 tons.

Russian Polymer Production (unit-kilo tons)		
Product	***Jan-Jun 23***	***Jan-Jun 22***
Plastics in Bulk	5,377.0	5,281.0
Polyethylene	1,832.0	1,722.0
Polystyrene	296.2	294.4
PVC	491.3	544.0
Polyamide	69.7	95.2
Synthetic Rubber	722.0	796.0
Synthetic Fibres	90.9	96.0

Russian polymer production Jan-Jun 2023
The production of bulk plastics in Russia in the first six months this year amounted to 3.562 million tons versus 3.557 million tons in the same period in 2022. Polyethylene production increased from 1.722 million tons to 1.832 million tons whilst PVC fell from 491,300 tons to 544,000 tons. Due to sanctions polymer manufacturers have found opportunities to restructure their production and sales processes including through the reorientation of exports, increased domestic demand, growth of import substitution of brands and components, etc.

Whilst demand for polyethylene and polypropylene has been growing polyamide production has been affected by lower exports and PVC by lower construction in the domestic market. Polyamide production in Russia has also been affected by the tyre sector, with overall production dropping from 95,200 tons to 69,700 tons. As the main Russian polyamide producer Kuibyshevazot reduced production from 88,400 tons to 59,600 tons. Synthetic rubber production fell from 798,000 tons in January to June 2022 to 722,000 tons in the same six months this year. Only exports of synthetic rubber to China have helped sustain production in Russia, with the tyre industry reporting much lower output. Tyre production has been affected partly by the exit of Western manufacturers but mostly due to the drop in car sales against pre-war sales.

Russian petrochemical markets

Russian Ethylene Production (unit-kilo tons)		
Producer	***Jan-Jun 23***	***Jan-Jun 22***
Angarsk Polymer Plant	97.294	111.756
Kazanorgsintez	328.494	331.292
Stavrolen	164.150	167.509
Nizhnekamskneftekhim	327.726	323.364
Novokuibyshevsk Petrochemical	16.522	23.658
Gazprom n Salavat	166.068	166.093
SIBUR-Kstovo	220.209	206.769
SIBUR-Khimprom	28.735	27.872
Tomskneftekhim	143.850	148.938
Ufaorgsintez	53.395	49.885
ZapSibNeftekhim	767.907	646.753
Total	2314.349	2203.889

Russian ethylene production, Jan-Jun 2023
Russian ethylene production totalled 2.314 million tons in the first six months in 2023 against 2.204 million tons in January to June 2022.

The main reason for higher output this year was due to ZapSibNeftekhim at Tobolsk which produced 767,907 tons, up from 646,753 tons from January to June 2022, and this was the main reason behind the rise this year. Nizhnekamskneftekhim produced 327,726 tons of ethylene in January to June against 323,364 tons, whilst Kazanorgsintez reduced production from 331,292 tons to 328,494 tons. The advantages for both Nizhnekamskneftekhim and Kazanorgsintez of joining the SIBUR group in 2021 have included the widening of raw material sources in addition to increased access to finance and technology.

Russian Propylene Production (unit-kilo tons)		
Producer	***Jan-Jun 23***	***Jan-Jun 22***
Angarsk Polymer Plant	50.940	62.375
Kazanorgsintez	25.921	27.453
Lukoil-NNOS	121.185	161.821
Stavrolen	65.760	85.998
Nizhnekamskneftekhim	163.464	161.715
Novokuibyshevsk	14.104	15.749
Omsk Kaucuk	30.428	27.011
Polyom	80.291	98.700
Gazprom n Salavat	74.137	74.037
SIBUR Kstovo	85.285	91.432
SIBUR-Khimprom	40.705	41.684
Tomskneftekhim	78.061	77.973
Ufaorgsintez	82.308	84.352
ZapSibNeftekhim	524.260	441.578
Total	1436.849	1451.877

Other important ethylene producers included SIBUR-Kstovo in the Nizhniy Novgorod region which produced 220,209 tons in the first six months versus 206,769 tons in 2022. SIBUR-Kstovo does not consume ethylene internally but sells to RusVinyl for PVC production and SIBUR-Neftekhim for ethylene oxide production. For RusVinyl Solvay reached agreement to sell its stake to SIBUR in March for $433 million. In July SIBUR-Neftekhim suffered a fire which interrupted ethylene oxide and glycols production for several days.

In Siberia the Angarsk Polymer Plant produced 97,294 tons of ethylene in the first six months in 2023 versus 111,756 tons in the same period in 2022, whilst Tomskneftekhim reduced production from 148,938 tons to 143,850 tons. Last year Tomskneftekhim switched to an increased overhaul interval from a two-year to a four-year cycle.

In Bashkortostan Gazprom neftekhim Salavat’s production was unchanged at 166,100 tons, whilst Ufaorgsintez increased production from 49,885 tons to 53,395 tons. Stavrolen at Budyennovsk produced 164,100 tons of ethylene which was down slightly from 167,500 tons from January to June 2022.

Russian propylene production, Jan-Jun 2023
Russian propylene production amounted to 1.437 million tons in January to June 2023 against 1.452 million tons in the same period last year. ZapSibNeftekhim produced 524,260 tons in January to June this year up from 441,578 tons. In Tatarstan Nizhnekamskneftekhim produced 164,300 tons of propylene against 161,700 tons in the first half in 2022 whilst Kazanorgsintez produced 25,921 tons against 27,453 tons.

In Bashkortostan Gazprom neftekhim Salavat produced 74,137 tons of propylene in January to June 2023 versus 74,037 tons, whilst Ufaorgsintez reduced production from 84,400 tons to 82,308 tons. In the Nizhny Novgorod region SIBUR-Kstovo reduced production of propylene from 91,400 tons to 85,285 tons, with the decline attributed to the loss of export opportunities. Lukoil-NNOS at Kstovo reduced production from 161,821 tons to 121,185 tons which was lower due to some maintenance undertaken.

Russian Propylene Exports (unit-kilo tons)		
Producer	***Jan-Jun 23***	***Jan-Jun 22***
Lukoil-NNOS	15.236	44.762
SIBUR-Kstovo	0.483	10.552
Stavrolen	0.000	5.100
Angarsk Polymer Plant	15.625	12.348
Total	31.344	72.762

Russian propylene sales Jan-Jun 2023

Propylene exports from Russia amounted to 31,344 tons in the first six months in 2023 against 72,762 tons in the same period in 2022. Lukoil-NNOS reduced export shipments from 44,762 tons to 15,236 tons whilst SIBUR-Kstovo did not ship propylene in the first six months after shipping 10,552 tons in the period January-June last year.

Russian Propylene Domestic Purchases (unit-kilo tons)		
Consumer	***Jan-Jun 23***	***Jan-Jun 22***
Saratovorgsintez	98.198	94.614
Volzhskiy Orgsintez	4.471	5.997
Akrilat	13.226	17.115
SIBUR-Khimprom	23.140	14.867
Omsk-Kaucuk	20.005	4.307
Tomskneftekhim	2.261	1.706
ZapSibNeftekhim	35.847	74.020
Moscow refinery	5.388	1.218
Ufaorgsintez	8.692	7.453
Gazprom n Salavat	2.618	0.000
Stavrolen	1.877	0.000
Khimprom Kemerovo	2.154	4.185
Plant of Synthetic Alcohol	0.252	3.436
Others	3.546	19.467
Total	218.199	231.559

Exports of propylene to Europe started to drop in the second half of 2022, and by the end of the year China was the only destination for Russian shipments. Angarsk Polymer Plant shipped 15,625 tons in the first six months this year against 12,348 tons in the same period in 2022.

Russian sales of propylene on the domestic merchant market amounted to 143,738 tons in the first six months in 2023 against 156,971 tons in the same period in 2022. The largest propylene supplier to the domestic market was Lukoil-NNOS, shipping 112,279 tons against 93,039 tons in January to June 2022. SIBUR Kstovo reduced domestic sales in the first six months from 85,619 tons in 2022 to 77,079 tons.

Russian Propylene Domestic Sales (unit-kilo tons)		
Company	***Jan-Jun 23***	***Jan-Jun 22***
Angarsk Polymer Plant	13.941	16.109
Akrilat	6.644	13.216
SIBUR-Kstovo	77.079	85.619
Lukoil-NNOS	112.279	93.039
Tomskneftekhim	1.947	0.485
Stavrolen	3.302	16.882
Others	2.208	0.896
Total	143.738	152.554

Russia's largest merchant consumer Saratovorgsintez increased purchases of merchant propylene from 94,614 tons in the first six months last year to 98,198 tons, followed by SIBUR-Khimprom at Perm which increased purchases from 14,867 tons to 23,140 tons. ZapSibNeftekhim reduced purchases from 74,020 tons to 35,847 tons.

Other consumers of merchant propylene in Russia include Akrilat at Dzerzhinsk which reduced purchases from 17,115 tons in the first six months last year against 13,226 tons in the same period in 2022. Akrilat uses propylene in the production of acrylic acid and acrylates.

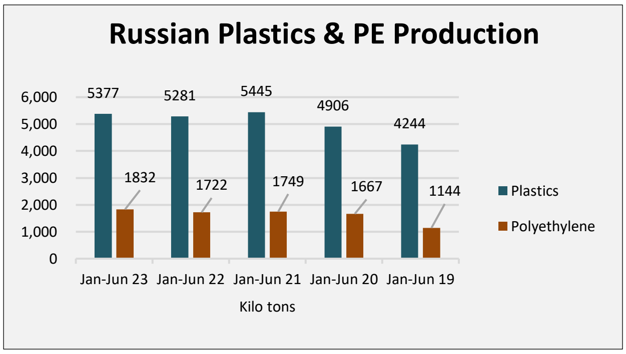
Russian Butadiene Production (unit-kilo tons)		
Producer	***Jan-Jun 23***	***Jan-Jun 22***
ZapSibNeftekhim	110.543	143.568
Nizhnekamskneftekhim	86.907	112.280
Togliattikaucuk	23.110	26.690
Sterlitamak Petrochemical Plant	13.545	15.543
Omsk Kaucuk	21.900	18.790
Total	256.005	316.871

Russian butadiene production Jan-Jun 2023

Russian butadiene production amounted to 256,005 tons in the first six months in 2023 against 316,871 tons in the same period in 2022. From the group of olefinic monomers, butadiene has been affected most of all from sanctions on the Russian petrochemical industry.

ZapSibNeftekhim reduced production from 143,568 tons in January to June 2022 to 110,543 tons this year, whilst Nizhnekamskneftekhim reduced production from 112,280 tons to 86,907 tons. Butadiene production in Russia has fallen over the past year in line with lower production of synthetic rubber.

Russian bulk polymers



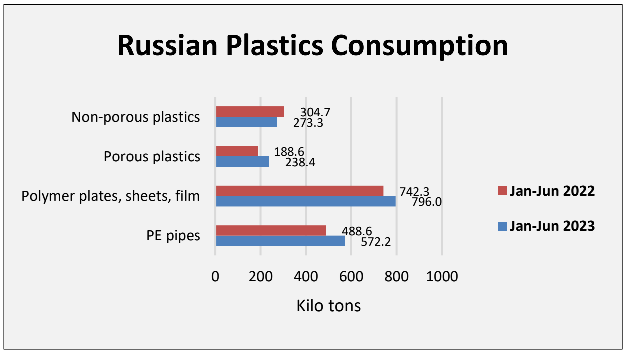
Russian plastics and polyethylene production Jan-Jun 2023

The production of bulk plastics in Russia in the first six months this year amounted to 5.377 million tons versus 4.450 million tons in the same period in 2022. Despite the challenges presented by sanctions the production of bulk plastics has performed at stable levels. Most of the growth this year has come from polyethylene. The production of styrene polymers in Russia increased by 0.6% but at the same time falls were recorded in the production of polyamides, PVC, and urea-formaldehyde resins. PVC production in the first half of 2023 amounted to 491,300 tons, which is 10% lower than for the same period last year.

Polyethylene production totalled 1.832 million tons in the first half of 2023 against 1.722 million tons in 2022. By comparison production of polyethylene in the first half of 2019 amounted to 1.144 million tons and since then the increase has been largely driven by output at Tobolsk after the ZapSibNeftekhim complex started at the end of 2019.

Russian polymer pipe market Jan-Jun 2023

Domestic consumption of plastics has increased this year as domestic manufacturers have filled some market gaps left by Western companies that had previously sold into Russia. The production of polymer pipes in Russia rose from 488,600 tons in the first half of 2022 to 572,200 tons in the same period this year. Production of polymer plates, sheets and film rose from 742,300 tons to 796,000 tons whilst porous plastics increased from 188,600 tons to 234,400 tons. Only non-porous plastics recorded a decline, dropping from 304,700 tons to 273,300 tons in January to June 2023.



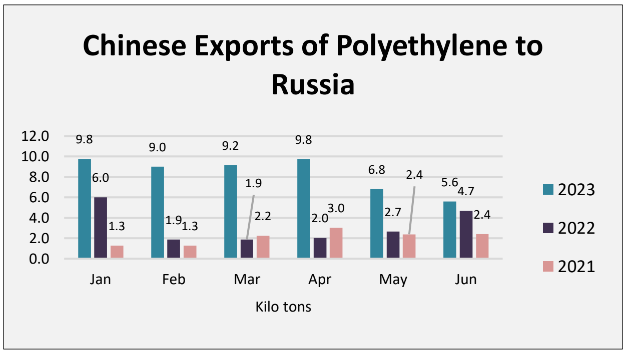
ZapSibNeftekhim-coloured polyethylene pipe grades

ZapSibNeftekhim produced the first batches of coloured polyethylene pipe grades in July, producing grades for the first time in Russia such as blue HD 03505 RC blue and orange HD 03505 PE orange Particularly strong RC grades are used in the production of polymer pipes, as well as an outer or inner layer in multilayer solutions for water and gas supply systems. Current consumption in Russia is estimated at around 25,000 tpa.

Until mid-2023, Russian demand for RC brands was completely covered by imports. Until the beginning of 2022, the main suppliers to were Borealis, LyondellBasell and SABIC, located in Sweden, Germany and Finland. After February 2022, European producers began to curtail the supply of RC grades to Russia. Russian pipe manufacturers experienced an acute shortage of them and assessed the problem with their supply as one of the priorities. In total, ZapSibNeftekhim operates four production lines for the production of various grades of polyethylene with a total capacity of 1.5 million tpa. Currently, the production of 36 grades of polyethylene has been mastered, of which six are intended for the production of pipes, including three related to black, one to white and two new to colour. In general, the new pipe grades are part of SIBUR's attempts to fill parts of the market which previously depended on Western imports.

Chinese Imports of Polyethylene from Russia		
	Jan-Jun 23	*Jan-Jun 22*
Kilo tons	100.399	165.437
$ million	112.760	136.319

Russian polyethylene trade Jan-Jun 2023
Russian exports of polyethylene to China fell from 165,437 tons in January to June 2022 to 100,399 tons in the same period in 2023. HDPE exports from Russia to China dropped from 73,191 tons in the first six months in 2022 to 45 tons.



Overall Chinese polyethylene exports to Russia amounted to $97 million against $36 million last year. By volume exports increased from 19,200 tons to 50,100 tons in January to June this year.

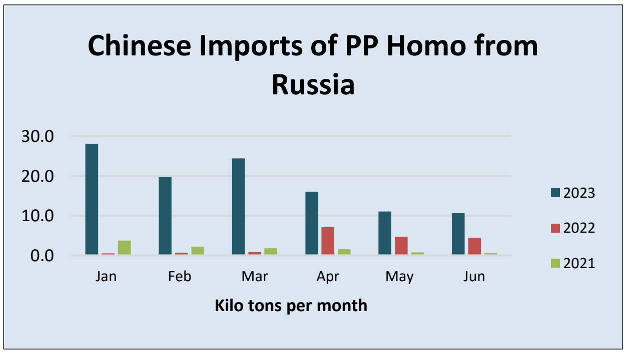
Imports of polyethylene from China into Russia are more diversified than Russian exports to China and include higher grades such as ethylene-vinyl acetate copolymers. EVA imports into Russia from China amounted to 6,779 tons in the first six months this year against 8,926 tons for the whole of 2022. Import values of EVA from China amounted to $24.062 million in the period January to June 2023 versus a total of $27.761 for last year's full shipment.

South Korean Polyethylene Exports to Russia		
	Jan-Jun 23	*Jan-Jun 22*
$ million	39.8	52.6
Ktons	56.6	89.1

Partly due to increased domestic production at Tobolsk, exports of polyethylene from South Korea to Russia showed signs of slowing in the first six months this year. Exports dropped from 89,100 tons in January to June 2022 to 56,600 tons in the same period in 2023.

Chinese Imports of PP from Russia		
	Jan-Jun 23	*Jan-Jun 22*
$ million	83.800	21.444
Ktons	99.300	18.114

Russian polypropylene market Jan-Jun 2023
Whilst polyethylene consumption has been boosted in the past year by the manufacture of pipes, the polypropylene market in Russia has been weaker dropping by 5.5% in 2022 against 2021 and totalling 1.332 million tons.



Regarding external trade for polypropylene exports to China have increased since the second quarter last year. By volume Russia shipped 99,300 tons of polypropylene to China in the first six months versus only 18,114 tons in the same period in 2022, with revenues rising from $21.444 million to $83.800 million. However, over the first half year volumes of exports have been following a gradual decline.

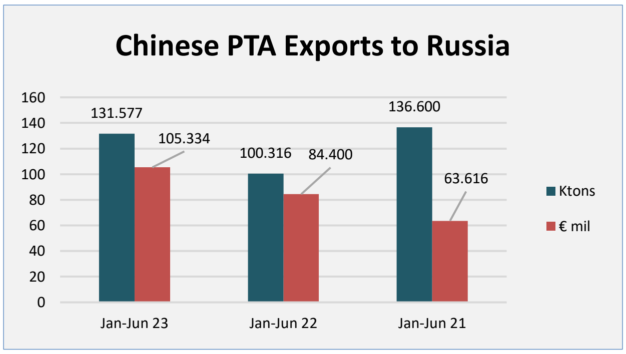
Russian imports of polypropylene increased in the first half of 2023 to 23,666 tons from 7,951 tons in the same period last year. Values increased from $17.395 million to $67.763 million.

SIBUR's new polypropylene production facility in Tobolsk will have a capacity of 570,000 tpa.
SIBUR's new project for a polypropylene plant at Tobolsk, with a capacity of 570,000 tpa, is designed in part to use the propane available already at the site. The plant is targeted for a start-up in 2027. The dehydrogenation of propane and the construction of a polypropylene plant at Tobolsk will allow SIBUR to utilise the feedstock instead of export. Another incentive for constructing the plant is the reverse excise tax from the Ministry of Energy which provides financial advantages for constructing petrochemical plants. ZapSibNeftekhim is currently the largest petrochemical complex in Russia. Its capacity is 2.5 million tpa of basic polymers (1.5 million tpa of polyethylene and 1 million tpa of polypropylene).

Russian PTA-PET Chain

PTA deliveries from China to Kaliningrad

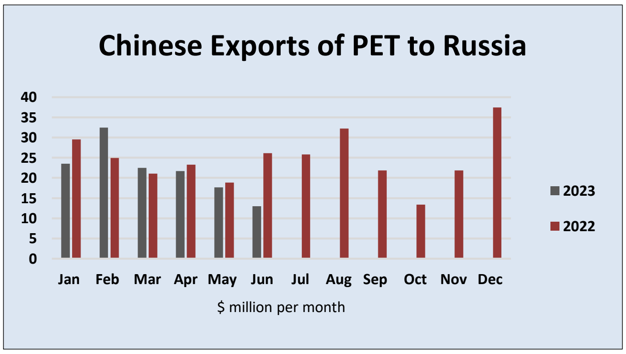
PTA exports from China to Russia totalled 131,577 tons in the first six months in 2023 against 105,334 tons in the same period in 2022 and 136,600 tons in 2021. PTA imports from China continue to provide the main basis for feedstock supplies for Ekopet at Kaliningrad. Russian imports from China amounted to $105.334 million in value the first six months against €84.400 million in 2022, with average prices dropping from €841.340 per ton to €800.554 in January to June 2023.



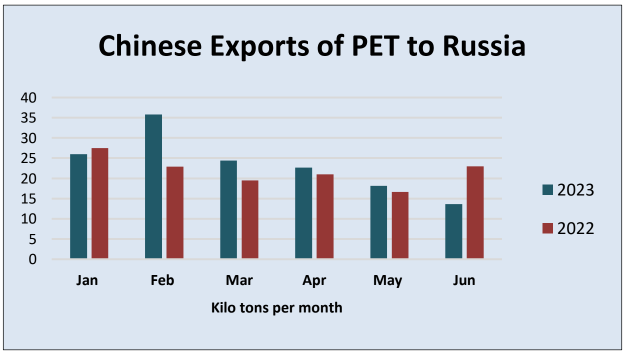
Regarding PTA production at Polief, recent technical difficulties were reported in June although the plant is operating at full capacity. Polief's PTA production is consumed mostly within the integrated complex for PET production. Any small volumes left for surplus are usually sold to SIBUR subsidiary SIBUR-PETF at Tver.

Russian PET market and imports from China

PET imports into Russia from China amounted to $130.8 million by value in the first six months in 2023 against $143.8 million in the same period in 2022 and $82.0 million in 2021.



By volume this converted into 140,696 tons versus 130,464 tons in January to June 2022 and 107,835 tons in the same period in 2021.



Russian PET imports from China in 2022 amounted to a total of 238,000 tons, which is 34.7% more than in 2021. As a result, the share of Chinese PET in total Russian imports increased from 84% to 95%. Russia imported 194,260 tons of PET from China in 2021 for $194.690 million, whilst Import values rose to $296.478 million.

Russian PTA-PET projects

Tatneft has largely completed the construction of aromatics complex at Nizhnekamsk, including 60,000 tpa of benzene and 150,000 tpa paraxylene. However, production has yet to start on a commercial scale as both benzene and paraxylene remain in surplus in Russia. Ultimately Tatneft wants to build a PTA plant and then set up a regular transshipment delivery system to Ekopet at Kaliningrad.

The benzene market in Russia could improve to allow production to start and sales to be profitable, but paraxylene is more difficult with only one producer of PTA operating in Russia and excess product available from the three paraxylene producers in Russia.

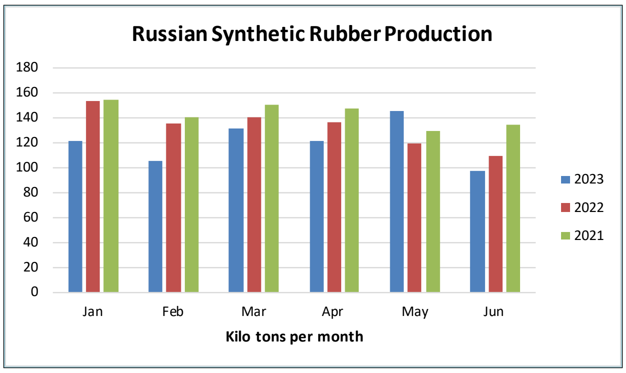
The main problem facing Russian paraxylene sales is the sanctions imposed by the EU from July 2022 which prevents sales to Europe. In the second quarter last year the Russian armed forces entered into Ukraine Ufaneftekhim was completing its expansion of paraxylene capacity from 165,000 tpa to 260,000 tpa. Paraxylene production in Russia totalled 251,000 tons in 2022 and is expected to be lower in 2023.

Russian synthetic rubber

Russian C4 Purchases (unit-kilo tons)		
Consumer	***Jan-Jun 23***	***Jan-Jun 22***
Omsk Kaucuk	56.0	44.7
Nizhnekamskneftekhim	68.5	53.9
Togliattikaucuk	82.3	86.1
Sterlitamak Petrochemical Plant	2.2	7.4
Total	209.0	192.1

Russian rubber feedstocks Jan-Jun 2023
C4 purchases made by Russian synthetic rubber producers amounted to 209,000 tons in the first half in 2023 against 192,100 tons in the same period in 2022. Nizhnekamskneftekhim purchased 68,500 tons against 53,900 tons.

Togliattikaucuk reduced purchases from 86,100 tons to 82,300 tons whilst Omsk Kaucuk increased purchases from 44,700 tons to 56,000 tons. Omsk Kaucuk purchases C4s on top of its own production. Work has recently started on the second stage of modernisation of its C4 unit which will increase the processing of technical butane by around 25%. The goal of the project is to provide consistently high loads for the MTBE production unit, as well as to increase the production of normal butane and pentane fractions. Modernisation of production will increase the processing of technical butane fraction at Omsk Kaucuk to 210,000 tpa.



Russian butadiene production totalled 119,372 tons in the first half of 2023 against 172,003 tons in the same period in 2022. The largest producers ZapSibNeftekhim and Nizhnekamskneftekhim both showed lower production as 2022 progressed.

ZapSibNeftekhim produces butadiene only for merchant market sales whilst Nizhnekamskneftekhim processes most of its butadiene into rubber SKD-N and SKD-L are butadiene rubbers based on neodymium and lithium catalysts.

Russian rubber production and consumption Jan-Jun 2023
Russian production of synthetic rubber in the first half of 2023 in Russia amounted to 722,000 tons which was lower by 9.3% against the same period last year. Second quarter volumes, from April to June, amounted to 364,000 tons against 365,000 tons last year but 413,000 tons in 2021. Although this year's second quarter data showed a recovery against the first quarter, prospects for the second half of 2023 are not promising.

Regarding production additives NPP Macromer has completed pilot tests of the new reagent Macromer SP-9 at the facilities of Voronezhsintezkaucuk. This product was developed at the request of SIBUR to replace the previously used anti-agglomerators Sokalan from BASF and Geropon from Solvay. The dispersant Macromer SP-9 is a copolymer of alpha-olefin and maleic anhydride. Both raw materials are produced by SIBUR.

Russian Tyre Production (unit-kilo tons)		
Product	***Jan-Jun 23***	***Jan-Jun 22***
Car Tyres	114.3	165.7
Lorry tyres	26.5	23.5
Agricultural tyres	5.5	6.7
Total	146.3	195.9

Whilst export trade with China has helped to replace European business, the domestic tyre industry remains suppressed by weak demand. Due to fluctuating trade patterns moreover, production volumes in the second quarter varied sharply, ranging from 146,000 tons in May to 97,000 tons in June. As long as China keeps buying Russian producers should be able to maintain reasonable capacity utilisation rates.

The sharp declines in the Russian automotive sector meant that rubber consumption in the production of passenger car tyres fell from 195,900 tons in the first six months in 2022 to 146,300 tons in the same period this year. Tyres for the agricultural sector also have fallen, dropping from

6,700 tons in the first six months last year to 5,500 tons. The only sector to show growth was for lorry tyres where consumption rose from 23,500 tons to 23,500 tons.

Chinese Imports of Synthetic Rubber from Russia ($ million)		
Product	***Jan-Jun 23***	***Jan-Jun 22***
SBRs (HS Code 40021990)	57.554	20.890
Butadiene Rubber	62.362	19.923
Butyl Rubber	85.322	74.469
HBR	51.077	74.388
ABR	25.689	4.663
Isoprene Rubber	40.729	29.668
Others	47.783	14.022
Total	370.515	238.023
Chinese Imports of Synthetic Rubber from Russia (unit-kilo tons)		
Product	***Jan-Jun 23***	***Jan-Jun 22***
SBRs (HS Code 40021990)	49.692	14.041
Butadiene Rubber	50.866	8.170
Butyl Rubber	54.630	44.727
HBR	25.223	29.764
NBR	17.931	4.587
Isoprene Rubber	26.839	23.869
Others	29.297	8.181
Total	254.477	133.340

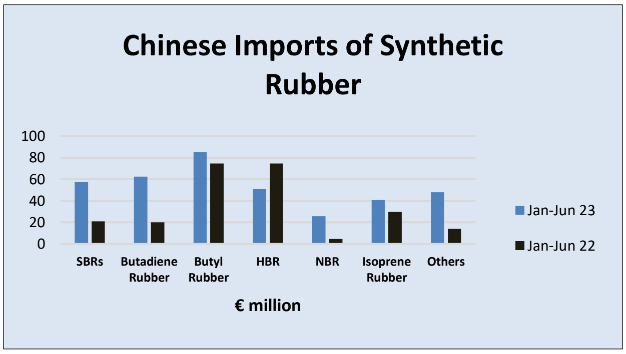
Russian-Chinese trade Jan-Jun 2023

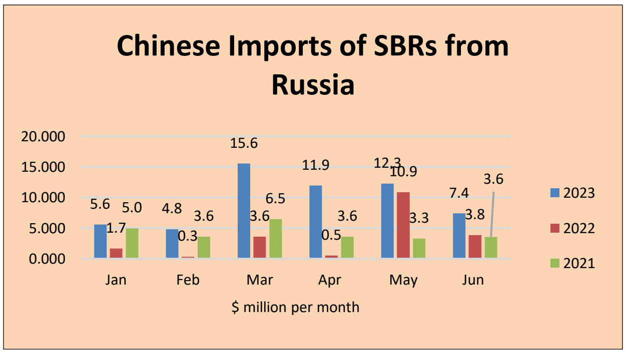
Both exports to China and imports from China of synthetic rubber have increased sharply in the past twelve months, as producers have been forced to reorient trade away from Europe. Sanctions on EU trade do not come until full force until June 2024, which does allow some shipments to traditional partners. However, Russian producers have been developing the Chinese market whilst European consumers have been diversifying their sources of synthetic rubber. The sanctions deadline of 30 June 2024 at least buys time for producers to fully adapt to the new markets.

The value of Russian synthetic rubber exports to China amounted to $370.515 million in the first six months this year against $238.023 in the same period in 2022.

By volume this resulted in an increase from 133,340 tons to 254,477 tons. Imports of synthetic rubber into Russia from China amounted to $43.333 million in the first six months in 2023 against $15.957 in 2022.

The largest categories of synthetic rubber exports comprised butyl rubber, butadiene rubber and SBRs. All of the main product categories recorded rises in the first six months, apart from halogenated butyl rubber which dropped from 29,764 tons to 25,223 tons in January to June 2023. Butyl rubber exports, by contrast, increased from 44,727 tons in January to June 2022 to 54,630 tons.





In other product groups, butadiene rubber exports from Russia to China increased from 8,170 tons to 50,886 tons and isoprene rubber from 23,869 tons to 26,839 tons.

Exports of SBRs under HS code increased from 14,041 tons to 49,692 tons. Product values rising from $20.890 million to $57.554 million. It should be noted that volumes in 2021 were higher than in 2022. In 2021 Germany was the main buyer of Russian rubbers (20% of Russian exports), but in 2022 China took the leading position with 21% of Russian exports.

Whilst China is now the most important market for Russian rubber exports, trade with Europe is allowed in some product areas to continue until June 2024.

Russian methanol market

Russian Methanol Production (unit-kilo tons)		
Producer	***Jan-Jun 23***	***Jan-Jun 22***
Shchekinoazot	674.627	759.631
Gazprom Methanol	369.470	374.790
Metafrax Chemicals	589.140	565.825
Akron	40.030	49.695
Azot Novomoskovsk	9.320	117.525
Angarsk Petrochemical	15.079	16.294
Azot Nevinnomyssk	49.498	62.189
Tomet	204.818	334.832
Ammoni	43.869	55.134
Totals	1995.851	2335.915

Russian methanol production Jan-Jun 2023

Russia produced 1.996 million tons of methanol in the first six months in 2023 against 2.336 million tons in the same period in 2022. Most producers recorded a decline in production, with only Metafrax Chemicals reporting a slight increase from 565,825 tons to 589,140 tons. Gazprom Methanol reduced production slightly from 374,790 tons to 369,470 tons. Exports to China from Gazprom Methanol amounted to 206,050 tons in the first half year.

The largest producer remained Shchekinoazot which produced 674,62 tons in the first six months against 759,631 tons last year. Tomet reduced production from 241,793 tons to 119,450 tons in January to June 2023 whilst Azot at Novomoskovsk reduced production from 117,525 tons to 9,320 tons. Ammoni in Tatarstan reduced methanol production from 55,134 tons in the first six months in 2022 to 204,818 tons in the same period in 2023.

Russian Methanol Exports by Producer (unit-kilo tons)		
Producer	***Jan-Jun 23***	***Jan-Jun 22***
Azot Nevinnomyssk	3.5	1.0
Azot Novomoskovsk	44.6	37.9
Akron	0.0	4.9
Metafrax Chemicals	233.9	219.4
Gazprom Methanol	206.6	146.3
Tomet	39.3	119.8
Shchekinoazot	363.4	568.0
Ammoni	0.0	1.5
Total	891.3	1098.7

The Russian government is seeking to impose a new bill on controlling methanol supply in an attempt to control the excess number of deaths from alcohol poisoning. This is a long-term problem for Russian society. Domestic producers are expected to cooperate in any new controls, even though this may mean increased costs.

Russian methanol exports, Jan-Jun 2023

Russian producer exports of methanol fell from 1.1 million tons in the first six months in 2022 to 891,300 tons in the same period in 2023. Tomet reduced exports to 39,300 tons of methanol against 119,000 tons last year. Metafrax Chemicals reduced exports from 119,300 tons in January to June 2022 to 163,600 tons whilst Gazprom Methanol increased exports from 106,300 tons to 134,700 tons.

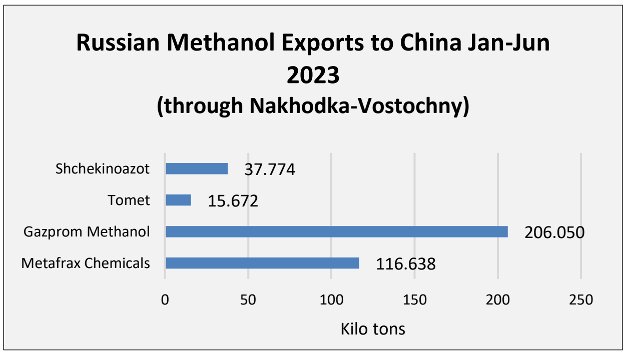
Summary of Russian Methanol Export Destinations (unit-kilo tons)		
Country	***Jan-Jun 23***	***Jan-Jun 22***
Belarus	90.275	112.191
China	377.171	0.000
Finland	91.370	290.211
Germany	5.265	1.110
Kazakhstan	18.294	18.417
Latvia	1.230	32.213
Lithuania	9.019	38.484
Netherlands	20.814	124.472
Poland	126.002	219.739
Romania	0.000	26.488
Slovakia	0.000	49.035
Turkey	135.655	49.290
UK	0.000	8.398
Ukraine	0.000	11.916
Others	1.510	0.547
Total	891.676	1099.823

The largest Russian exporter was Shchekinoazot which shipped 363,400 tons in the first six months in 2023 against 568,000 tons last year. Azot at Novomoskovsk increased methanol exports in the first six months to 44,600 tons from 37,900 tons in the same period in 2022. This is despite the plant producing only 9,320 tons in the first half this year.

In the first six months this year China represented the largest destination for Russian methanol exports, accounting for 377,171 tons from the total 891,676 tons. Finland accounted for 91,370 tons of Russian methanol, down from 290,211 tons in January to June 2022 whilst Poland reduced inward shipments from Russia from 219,739 tons to 126,002 tons. Exports to the Netherlands dropped to 20,814 tons from 124,472 tons.

Direct exports to Hungary, Romania, Slovakia and Ukraine stopped earlier in 2022, whilst the full EU sanctions on Russian methanol took effect from 18 June. The reorientation to new markets in the Asia-Pacific region, at this stage solely China, has been accompanied by a multiple increase in transport costs.

Nearly all Russian exports to China go through the port of Nakhodka-Vostochny. Gazprom Methanol from Tomsk has been the leading supplier to China this year shipping 206,050 tons. Rail costs from Tomsk are estimated at around $130 per ton, whilst as the second largest exporter Metafrax the tariff rises to $160 per ton. For shipments from Togliatti and Shchekino, rail costs are estimated at $182 and $200 per ton respectively which at current prices yields



Rail costs have been partially mitigated by state support aimed at reducing the cost of transporting methanol, but sending product to China remains much less profitable than to EU markets. Paradoxically, by being too profitable increases the spectre of windfall taxes being imposed by the Ministry of Finance in order to support the Russian military.

Russian methanol domestic sales, Jan-Jun 2023

Merchant sales of methanol on the Russian domestic market amounted to 736,959 tons in the first six months in 2023 against 826,636 tons in the same period in 2022. Domestic demand has tended to stabilise after the fall last year, based on the first six months. Tomet reduced sales from 194,627 tons to 148,147 tons whilst Gazprom Methanol reduced sales from 196,406 tons to 157,675 tons. Metafrax Chemicals increased shipments to the domestic market from 185,673 tons in January to June 2022 to 217,346 tons in January-June 2023.

Russian Methanol Domestic Sales (unit-kilo tons)		
Producer	***Jan-Jun 23***	***Jan-Jun 22***
Azot Nevinnomyssk	4.479	15.360
Azot Novomoskovsk	0.000	65.526
Metafrax Chemicals	217.346	185.673
Gazprom Methanol	157.675	196.406
Tomet	148.147	194.627
Shchekinoazot	193.032	140.059
Ammoni (Mendeleevsk)	16.280	28.985
Total	736.959	826.636

Russian methanol producers may now be required to sell around 10% of its product sales in the domestic merchant market through the exchange. This measure is laid down in the draft joint order of the FAS, the Ministry of Energy and the Ministry of Industry and Trade on the approval of the mandatory standard for sales on the exchange of petrochemical products.

Shares of Metafrax Chemicals seized by Russian state

The Prosecutor General's Office of Russia succeeded in seizing the property of Metafrax Chemicals on 7 August. The pretext of the seizure is that the privatisation of the company was undertaken on illegal grounds, whilst at the same time the plant facilities are considered important for the Russian defence industries. It is not entirely which products are considered vital for Russian defence, and whether or not other methanol producers may be at risk of being renationalised.

Since 2018, Metafrax has invested more than €1.2 billion in the construction of a complex for the production of ammonia, urea and melamine with a capacity of 855,000 tpa. As a result, the government is taking over plant facilities that have been well developed. Unless the court decision is revoked the company's management bodies will not be able to make decisions on the payment or declaration of dividends, the distribution of profits and losses, the payment of remuneration to members of the board of directors. It is also forbidden to pay dividends and remuneration to members of the board of directors in any form. The court also forbade Metafrax Chemicals to perform any actions that worsen the situation of employees: or partially stop production and technological processes, and so on.

Volzhskiy Orgsintez-potassium butyl xanthate

Assets of Volzhskiy Orgsintez, a mid-sized Russian consumer of methanol in the Volgograd Region, were seized on 25 July by the Prosecutor General's Office. The pretext involves a revision of the privatisation process that started in the early 1990s, and a link of the company’s importance to the defence industry. Volzhskiy Orgsintez is a leading producer of organic synthesis products in Russia and claims that it has nothing to do with the defence industry. All products are manufactured exclusively for the civilian consumer market.

Russian organic chemicals

Russian N-Butanol Production (unit-kilo tons)		
Producer	***Jan-Jun 23***	***Jan-Jun 22***
Angarsk Petrochemical company	16.752	17.961
Azot Nevinnomyssk	10.325	7.984
Gazprom neftekhim Salavat	38.633	27.655
SIBUR-Khimprom, Perm	19.299	13.976
Total	85.008	67.576
Russian Isobutanol Production (unit-kilo tons)		
Producer	***Jan-Jun 23***	***Jan-Jun 22***
Angarsk Petrochemical Company	12.763	12.773
Gazprom neftekhim Salavat	21.238	15.058
SIBUR-Khimprom, Perm	38.027	27.757
Total	72.027	55.588

Russian Butanol Exports (unit-kilo tons)		
N-Butanol	***Jan-Jun 23***	***Jan-Jun 22***
Gazprom neftekhim Salavat	7.268	2.465
SIBUR-Khimprom	0.000	0.683
Angarsk Petrochemical	5.041	1.189
Azot Nevinnomyssk	0.529	1.745
Dmitrievsky Chemical Plant	0.000	1.553
Total	12.838	7.635
Isobutanols	***Jan-Jun 23***	***Jan-Jun 22***
Gazprom Neftekhim Salavat	3.956	15.276
SIBUR-Khimprom	6.887	9.597
Angarsk Petrochemical	0.118	0.000
Dmitrievsky Chemical Plant	1.437	0.498
Total	12.398	25.370

Russian Acetone Production (unit-kilo tons)		
Producer	***Jan-Jun 23***	***Jan-Jun 22***
Ufaorgsintez	18.139	15.629
Kazanorgsintez	27.956	23.095
Novokuibyshevsk Petrochemical	14.761	14.907
Omsk Kaucuk	17.160	15.461
Total	78.016	69.092

Russian butanol production Jan-Jun 2023

Production of butanols increased in the first six months for both normal and iso grade. Russian normal butanol production rose from 67,576 tons in the first six months in 2022 to 85,008 tons in the same period this year. Gazprom neftekhim Salavat was the largest Russian producer, increasing production from 27,655 tons to 38,633 tons in January to June 2022.

Isobutanol production in Russia increased from 55,588 tons in the first six months in 2022 to 72,027 tons in the same period in 2023. SIBUR-Khimprom increased production from 27,757 tons in January-June 2022 to 38,027 tons in the same period this year.

Regarding export activity Russian exports of butanols increased from 5,800 tons in the first six months in 2022 to 9,100 tons in the same period this year whilst isobutanol exports dropped from 25,370 tons to 12,398 tons.

Russian acetone & solvents market Jan-Jun 2023

Russian acetone production amounted to 78,016 tons in the first six months in 2023 against 69,092 tons in the same period in 2022. Omsk Kaucuk produced 17,160 tons of acetone against 15,461 tons whilst Kazanorgsintez increased production from 23,095 tons to 27,956 tons. Novokuibyshevsk Petrochemical Combine reduced production from 14,907 tons to 14,761 tons.

Acetone exports from Russia totalled 3,757 tons in the first half of 2023 against 55,660 tons in the same period in 2022.

Russian Exports of Organic Chemicals to China (unit-kilo tons)		
Product	***Jan-Jun 23***	***Jan-Jun 22***
Propylene	31.133	11.098
Methanol	351.708	0.000
N-Butanol	6.770	0.000
Isobutanol	10.243	1.627
Methyl Acrylate	2.181	0.000
Butyl Acrylate	4.803	0.000
Caprolactam	74.655	40.882

Russia reduced imports of ethyl acetate by 8.6% in the first six months this year. Prior to the invasion of Ukraine, the main volumes of ethyl acetate imports came from Ineos. From January to June 2023, the main importers of products included the Chinese company Taizhou Ruibai Chemical and the Indian company Laxmi Organics Industries. The import buyers this year have included companies Khimintekhno and Ruskhimset.

Russian exports of organic chemicals to China increased in the first SIX months in a number of product areas. Methanol saw the largest volumes, but also oxo alcohol exports were higher this year in addition to acrylates from the Salavat plant.

Other products included propylene and caprolactam. The loss of EU markets has been a major factor in leading to more Sino-Russian trade in chemicals, despite the high logistics costs.

Kuibyshevazot-Production (unit-kilo tons)			
Product	***Jan-Jun 23***	***Jan-Jun 22***	***Jan-Jun 21***
Polyamide-6	59.6	88.4	70.5
High Tenacity Tech Yarns	2.4	4.2	0.0
Tyre Cord Fabric	4.2	6.5	0.0
Caprolactam	88.8	96.0	103.4
Ammonia	520.3	525.1	554.0
Urea	174.4	178.2	178.0
Ammonium Nitrate	310.3	391.0	359.4
Ammonium Sulphate	186.4	236.0	258.9

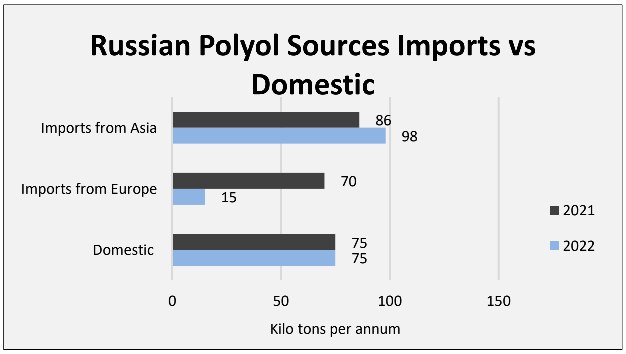
Kuibshevazot Jan-Jun 2023

Kuibyshevazot 's revenue dropped by 35.6% in the first half of 2023 to 35 billion roubles in versus 54.38 billion roubles in the first half in 2022. The net profit fell from 20.77 billion roubles to 11.87 billion roubles. Production was down for most products, with polyamide dropping from 88,400 tons in January to June 2022 to 59,600 tons and caprolactam dropping from 96,000 tons to 88,800 tons.

Russian polyurethane raw materials 2023

The Russian polyurethane market has been affected by sanctions and the economic isolation, impacting on the full chain of production from imported raw materials through to end-use products. In 2022, polyurethane production in Russia decreased by around 12% due to a decline in both consumption and export segments of finished products.

The production of polyurethanes in Russia rose by 13.8% from 2015 to 2019, rising from 335,000 tpa to 381,000 tpa. In the same timeframe consumption of polyurethanes increased from 408,000 tons in 2015 to 462,000 tons in 2019.



From 2020 to 2022 polyurethane markets in Russia underwent significant pressure from firstly the pandemic and secondly the combined impact from sanctions and volatility in raw material prices.

Russian polyurethane consumption was restricted last year by the restriction of exports of finished products. The market was badly affected after the departure of a number of large international companies. As a result demand for soft foams fell by 27% in 2022, affected by the automotive industry and the production of household appliances.

The volume of consumption of the Russian polyester polyol market amounted to 231,000 tons in 2021 but dropped 19% in 2022 to 188,000 tons. Prior to the war in Ukraine Russian furniture manufacture relied on around 80% of imported components in order to operate, particularly isocyanates and melamine. Besides raw materials manufacturers are largely dependent on foreign equipment for which spare parts need to be imported.

Chinese Exports of MDI to Russia		
	Jan-Jun 23	***Jan-Jun 22***
Kilo tons	61.513	23.439
$ million	113.074	65.115
Chinese Exports of TDI to Russia		
	Jan-Jun 23	***Jan-Jun 22***
Kilo tons	12.599	13.533
$ million	36.070	40.432
Chinese Exports of Polyols to Russia		
	Jan-Jun 23	***Jan-Jun 22***
Kilo tons	51.216	16.102
$ million	81.383	25.755

Despite production at Nizhnekamskneftekhim domestic capacities are not enough to cover the needs of industry in polyols. The deficit is covered by imports where in 2022 the share from Europe decreased from 48% to 18%, while the share of Chinese imports increased from 52% to 80%.

In the first six months this year polyol imports from China amounted to 51,216 tons against 16,102 tons in the same period in 2022. Regarding isocyanates, imports of MDI rose from 23,439 tons in January to June 2022 to 61,513 tons in the same period in 2023 and TDI imports rose from 13,533 tons to 12,599 tons.

The Elastokam plant at Nizhnekamsk coped with the consequences of the departure of its foreign partner and the search for new suppliers of raw materials for the production of polyurethane systems. Until 2022, the company was a joint venture between SIBUR and BASF. However, in 2022, due to the departure of BASF and the lack of access to many components, the company was on the verge of stopping.

Central Asia

Kazakh PTA-PET project

The investment portfolio of KazMunaiGaz includes a project for the production of PTA and the production of PET. The estimated design capacity of PTA production will comprise 300,000 tpa and PET will amount to 400,000 tpa. The company is close to identifying suppliers of licensed technologies, whilst at the same time the issues of providing raw materials and the location of the plant are yet to be decided. It is most likely be located either in close proximity to the Atyrau refinery, or at the site where there is now a polypropylene plant, and a polyethylene plant will be built.

Kazakh Exports of PP to China

	Jan-Jun 23	*Jan-Jun 22*
Kilo tons	56.876	0.000
$ million	45.204	0.000

Kazakh polypropylene exports Jan-Jun 2023

Kazakh exports of polypropylene to China amounted to 56,876 tons in the first half of 2023 against zero in 2022. Polypropylene production at Atyrau is expected to exceed 400,000 tons this year. Production economics at the plant will be helped by 2027 from the completion of the propane pipeline, extending 205 km from Tengiz to Karabatan. Currently propane is delivered to the plant in railway tanks. Before the launch of KPI, the only producer of polypropylene in the country was Neftekhim Ltd (70,000 tpa). The plant receives raw materials from the Pavlodar Oil Refinery and sells polypropylene in the domestic market.

Evrokhim-fertiliser project in Kazakhstan
Evrokhim has started construction of a chemical complex for the production of mineral fertilisers in the Zhambyl region in Kazakhstan. The production capacity will initially be set at 500,000 tpa which could ultimately rise to 1.2 million tpa.

Butadiene project Kazakhstan

Lummus Technology has announced that the jv Butadiene LLP in Kazakhstan has selected C4 technologies and BASFs butadiene extraction technology for units at the new petrochemical plant at Atyrau. In November 2022 KazMunayGaz and Tatneft established a joint venture Butadien LLP to create a butadiene rubber production site with a completion date of 2026. The capacities of the individual plants include 85,120 tpa of isobutylene, 120,000 tpa of butadiene and 40,000 tpa of MTBE. These products will be supplied for the production of synthetic rubber, as well as to the domestic fuel market in Kazakhstan.

The future plant will produce five different types of products. These include styrene-butadiene-styrene-rubber (SBSR), which is used in road surfaces, divinyl-styrene synthetic rubber, which is used in the tyre industry, isobutane-isobutylene fraction, which is designed to produce MTBE, butyl rubber, isoprene and alkylate. Finished products will be supplied to the KamaTyresKZ tyre plant in the Karaganda region, as well as for export to Europe, Russia, China, Turkey, etc.

In addition to the licensed technologies, Butadiene LLP will have access to Lummus portfolio of lifecycle services during the implementation and operation stages of this project, such as advanced operator training simulators, extended technical support and digitalisation services.

Uzbek Exports of PE (unit-kilo tons)

Country	*Jan-Jun 23*
Turkey	48,900
Latvia	18,700
China	14,429
Russia	11,900
Kazakhstan	7,100
Others	4,500

Uzbek polyethylene exports Jan-Jun 2023

In January-June 2023, Uzbekistan exported 105,200 tons of polyethylene (mostly HDPE) worth $90.4 million. Turkey was the largest recipient, taking 48,900 tons followed by 18,700 tons to Latvia. Exports of HDPE to China amounted to 14,429 tons in January to June 2023 for $13.332 million. This compares against 19,973 tons in the first six months in 2022 for $22.715 million.

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