



ARGUS RUSSIAN NETBACKS

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The most up-to-date Argus Russian Netbacks methodology is available on www.argusmedia.com

Introduction

Netback indexation

Russia is the largest producer and exporter of energy in the world. Its refineries were built in Soviet times to produce mainly gasoline to satisfy internal fuel demand. Most of other oil products produced at refineries are exported. Over 80pc of Russian fuel oil and more than a half of gasoil production end up abroad.

For this reason pricing of crude and oil products in Russia often follows the "export parity" model when domestic prices are calculated as product's value at international market netted back to delivery basis in Russia. This methodology is often applied for trading and state regulation of the products market in Russia and other former Soviet Union countries.

Netback calculation

Netbacks for Russian oil products are calculated daily according to the formula:

$$N = P - F - D - S + T, \text{ where}$$

N – netback index;

P – price assessment for Russian crude or product at comparative international market (Northwest Europe, West Mediterranean or Asia-Pacific);

F – cost of seaborne transportation, including single voyage tanker freight, insurance, and additional navigation costs excluded from freight rate, such as Rotterdam harbour due, ice and towage due in Primorsk or demurrage payments for delays in Turkish strates;

D – Russian export duty;

T – Russian taxes (VAT and excise).

Netback indexes are published daily in *Argus Russian Netbacks* excluding and including Russian taxes, where applicable.

Price assessments

All components of the formula reflect values active on the date of price assessment. Argus assesses open market arm's-length prices for various grades of Russian crude and products traded on domestic and international markets, including former Soviet Union countries, Northwest Europe, the Mediterranean, Middle East, Americas and Asia-Pacific. The coverage of the Russian market includes spot market prices, netback values and differentials between the two.

Export destinations

When calculating netback indexes Argus uses market assessments of freight costs and officially published tariffs for destinations actively used by each refinery or crude production unit over last few months.

Export destinations are determined through monthly analysis of statistical data for pipelines, railways and internal waterways, published in *Argus Neftetransport*. Supplies to illiquid and regional markets or using routes, where tariffs are not set at the open mar-

ket, are not included in netback calculation.

Export duties

Russian export duty is set monthly based on the international market prices monitoring. Netback formulas for crude and products use current month's export duty values. Export duty is not collected for supplies to Kazakhstan.

Transportation costs

Railways

Russian railway tariffs are based on the tariff policy of former Soviet Union countries' railways for own (leased) tonnage effective on the date of publication. Argus uses specialized software for railway tariff calculation, such as Polyus and STM-Tarif.

The following assumptions are used for tariff calculations:

1. Number of tank car axles – 4, tank car capacity – 66t, average tank car load regardless of product type – 60t.
2. All the tariffs are used excluding value added tax with exception of empty tank car return in Russia and internal transportation in Kazakhstan.
3. Export railway tariffs used in netback calculation are for full train (fixed-route dispatch).
4. Tariffs for empty tank car return are set on per car basis.
5. Extra charges:
 - security guarding costs (diesel, gasoline, etc.) are charged by the State railway security guard enterprise of the Russian Federation;
 - the cargo security costs, used for calculation of the export alternative prices, are set for a loaded train (fixed-route dispatch);
 - in all other cases, the cargo security costs are set on a per car basis.
6. Market rates for rail tank car rent are assessed and published on the monthly basis in *Argus Neftetransport*. The information on tonnage prices is collected by personal contacts, telephone, electronic mail and messengers. A cross-section of car fleet owners, operators and shippers (producers and traders) is consulted and the market information cross-referenced with active market participants. The rent costs are assessed in Russia (in Roubles, ex-VAT), Ukraine and Kazakhstan (in US Dollars, ex-VAT). The rates are published in *Argus Neftetransport* no later than the 20th of each month.

The following base parameters are used for cost assessments:

- tank car load – 60t;
- speed of loaded tank car – 330km/d within Russia, 550km/d – on export routes;
- speed of empty railway tank car return – 330km/d;
- delays during tank car loading and discharge – 4 days;
- Delay on each border station – 1 day.

Crude pipelines

Argus monitors crude pipeline tariffs in Russia set by the Federal Tariff Service. The tariffs are published in *Argus Neftetransport*.

Product pipelines

Products pipeline tariff are set by the system operator Transneft and published in *Argus Neftetransport*.

Internal waterways

Argus monitors costs of product exports along the Russian inland waterways. River vessel freight rates are published by *Argus Neftetransport* on a monthly basis during the river navigation season from March to December. Freight rates are monitored by the enquiries of the most active participants of the river transportation market, by phone or by electronic means of communication.

Loading and storage at port terminals

Argus monitors the publishes port terminal **rates for loading operations** from overland transportation to sea-going tankers. Crude and product port loading operations and storage rates are set by FST and terminal operators in Russia, and by terminal operators in other former Soviet Union states. The costs of loading operations are assessed annually in January edition of *Argus Neftetransport*. The information is collected by personal contacts, telephone, electronic mail and messengers. A cross-section of terminal operators and shippers (producers and traders) is consulted and the information cross-referenced with active market participants.

Foreign exchange

For netback calculation Argus uses the Russian Rouble rate of the Central Bank of Russia and the Kazakh Tenge rate of the National Bank of Kazakhstan publish on official websites for the date of assessment. For Euro and US dollar rates Argus uses the market rate provided by Interactive Data for 6pm London time.

Crude

Netbacks for Russian crude are calculated as an average of daily Urals cif Rotterdam and cif Augusta prices price assessments less freight, insurance, navigation expenses (Rotterdam and Primorsk port dues, Black Sea straits delays), current export duty and average Transneft pipeline tariff from Primorsk and Novorossiysk to Nizhnevartovsk. Argus price assessment methodologies are available online at www.argusmedia.com.

Price reporting methodologies:

International crude prices and Urals quality – [Argus Crude](#)
 Transportation costs – [Argus Neftetransport](#)
 Russian crude prices – [Argus Russian Domestic Crude Market](#)

Fuel oil

Netbacks for Russian fuel oil are calculated as daily prices for 3.5pc fuel cracked oil basis cif Northwest Europe, cif West Mediterranean or fob Singapore less freight, insurance, navigation expenses (Rotterdam port dues, Black Sea straits delays), current export duty and railway tariffs between individual refineries and loadports. Argus price assessment methodologies are available online at www.argusmedia.com.

Price reporting methodologies:

European products prices – [Argus European Products](#)
 Asian products prices – [Argus Asia-Pacific Products](#)
 Transportation costs – [Argus Neftetransport](#)
 Russian fuel oil prices – [Argus Russian Fuel Oil](#)

Gasoil and diesel

Netbacks for Russian gasoil and diesel are calculated as daily prices for Russian gasoil cif (NWE and Med) and ddu Ukraine, French diesel 10ppm cif (NWE), or gasoil 500ppm fob (Asia-Pacific) less freight, insurance, navigation expenses (Rotterdam and Primorsk port dues), current export duty and railway tariffs between individual refineries and loadports. Argus price assessment methodologies are available online at www.argusmedia.com.

Price reporting methodologies:

European products prices – [Argus European Products](#)
 Asian products prices – [Argus Asia-Pacific Products](#)
 Ukrainian products prices – [Argus Ukrainian Motor Fuels](#)
 Transportation costs – [Argus Neftetransport](#)
 Russian diesel prices – [Argus Russian Motor Fuels](#)

Jet

Netbacks for Russian jet fuel are calculated as daily prices for Jet cif NWE and Med or the Kazakh jet index basis Almaty less freight, insurance, current export duty and railway tariffs between individual refineries and loadports or border crossing points. Argus price assessment methodologies are available online at www.argusmedia.com.

Jet price index in Kazakhstan

Argus calculates Kazakh jet price index by adding railway transportation costs from Pavlodar and Chimkent refineries to Almaty to jet fuel assessments basis fca Pavlodar and fca Chimkent less value added tax. Kazakh jet price index less rail transportation costs produce the Russian jet netback for refineries supplying fuel to Kazakhstan.

Price reporting methodologies:

European products prices – [Argus European Products](#)
 Asian products prices – [Argus Asia-Pacific Products](#)
 Central Asian products prices – [Argus Caspian Market](#)
 Transportation costs – [Argus Neftetransport](#)
 Russian jet prices – [Argus Russian Motor Fuels](#)

Naphtha

Netbacks for Russian naphtha are calculated as daily prices for naphtha 65 para cif (NWE and Med), or naphtha 65 para c+f Japan (Asia-Pacific) less freight, insurance, navigation expenses (Rotterdam port dues), current export duty and railway tariffs between individual refineries and loadports. Argus price assessment method-

ologies are available online at www.argusmedia.com.

Price reporting methodologies:

- European products prices – [Argus European Products](#)
- Asian products prices – [Argus Asia-Pacific Products](#)
- Transportation costs – [Argus Nefettransport](#)

Price reporting methodologies:

- European products prices – [Argus European Products](#)
- Asian products prices – [Argus Asia-Pacific Products](#)
- Central Asian products prices – [Argus Caspian Market](#)
- Transportation costs – [Argus Nefettransport](#)
- Russian gasoline prices – [Argus Russian Motor Fuels](#)

Motor gasoline

Netbacks for Russian jet fuel are calculated as daily prices for Motor gasoline cif NWE and Med or the Kazakh gasoline index basis Astana less freight, insurance, current export duty and railway tariffs between individual refineries and loadports or border crossing points. Argus price assessment methodologies are available online at www.argusmedia.com.

Motor gasoline price index in Kazakhstan

Argus calculates Kazakh motor gasoline price index for 92-93 Ron and 95-96 Ron product by adding railway transportation costs from Atyrau, Pavlodar and Chimkent refineries to Astana to gasoline assessments basis fca Atyrau, fca Pavlodar and fca Chimkent less value added tax. Kazakh jet price index less rail transportation costs produce the Russian gasoline netback for refineries supplying fuel to Kazakhstan.

Vacuum gasoil

Netbacks for vacuum gasoil (VGO) are calculated as daily prices for VGO 1,6pc cif (NEW), or VGO 1,5pc fob (Med) less freight, insurance, navigation expenses (Rotterdam port due), current export duty and railway tariffs between individual refineries and loadports. Argus price assessment methodologies are available online at www.argusmedia.com.

Price reporting methodologies:

- European products prices – [Argus European Products](#)
- Asian products prices – [Argus Asia-Pacific Products](#)
- Transportation costs – [Argus Nefettransport](#)

See detailed table of netbacks components on pp5-6.

Russian netbacks calculation components							
Product	Price assessment	Freight	Additional costs	Transshipment	Export duty	Tariff outside Russia	Tariff in Russia
CRUDE							
Northwest Europe	Urals cif NWE	Primorsk – Rotterdam (100,000t)	insurance, Rotterdam port due, ice and towage due in Primorsk	Primorsk	current month	–	Pipeline
Mediterranean	Urals cif Med (80,000t)	Novorossiysk – Augusta (80,000t)	insurance, demurrage costs in Bosphorus and Dardanelles	Novorossiysk	current month	–	Pipeline
Asia-Pacific	ESPO Blend fob Kozmino	–	–	Kozmino	current month	–	Pipeline
FUEL OIL							
Northwest Europe	Fuel oil 3.5pc cif NWE	Baltic ports – Rotterdam (100,000t), St. Petersburg – Rotterdam (30,000t)	insurance, Rotterdam port due	Baltic ports	current month	Belarus (Klaipeda)	Railway, river freight
Mediterranean	Fuel oil 3.5pc 0.998 cif W Med	Black Sea ports – Genoa/Lavera (30,000t)	insurance	Black Sea ports	current month	Ukraine (Odessa and Sevastopol)	Railway, river freight
Asia-Pacific	Fuel oil 3.5% c+f East China	Vanino/Nakhodka – Qingdao (60,000t)	–	Nakhodka, Vanino	current month	–	Railway
RUSSIAN GASOIL 500PPM							
Northwest Europe	Gasoil Russian cif NWE	Baltic ports – Rotterdam (30,000t)	insurance, Rotterdam port due	Baltic ports	current month	Belarus (Klaipeda)	Railway
Northwest Europe	Gasoil Russian cif NWE	Baltic ports – Rotterdam (30,000t)	insurance, Rotterdam port due	Venspils (Transneft)	current month	Belarus, Lithuania	Pipeline
Mediterranean	Gasoil Russian cif W Med	Black Sea ports – Genoa/Lavera (30,000t)	insurance	Black Sea ports	current month	Ukraine (Odessa and Sevastopol)	Railway
Asia-Pacific	Gasoil 0.5pc fob Singapore	Vanino/Nakhodka – Singapore (40,000t)	–	Nakhodka, Vanino	current month	–	Railway
Ukraine	Gasoil Russian ddu Novograd-Volynsky	–	–	–	current month	Belarus, Ukraine	Pipeline
DIESEL 10PPM							
Northwest Europe	Gasoil diesel French 10ppm cif NWE	Vysotsk – Rotterdam (30,000t)	insurance, Rotterdam port due	Vysotsk	current month	–	Railway
Northwest Europe	Gasoil diesel French 10ppm cif NWE	Primorsk – Rotterdam (30,000t)	insurance, Rotterdam port due	Primorsk (Transneft)	current month	–	Pipeline
JET							
Northwest Europe	Jet/kerosine cif NWE	Riga – Rotterdam (30,000t)	insurance, Rotterdam port due	Baltic ports	current month	–	Railway
Kazakhstan	Jet/kerosine fca Chimkent/Pavlodar	–	–	–	–	Kazakhstan	Railway
NAPHTHA							
Northwest Europe	Naphtha 65 para cif NWE	Baltic ports – Rotterdam (30,000t)	insurance, Rotterdam port due	Baltic ports	current month	–	Railway
Mediterranean	Naphtha 65 para cif W Med	Tuapse – Genoa/Lavera (30,000t)	insurance	Tuapse	current month	–	Railway
Asia-Pacific	Naphtha c+f Japan	Vanino/Nakhodka – Chiba (40,000t)	–	Nakhodka, Vanino	current month	–	Railway
MOTOR GASOLINE AI-92							
Northwest Europe	Gasoline 91r cif NWE	Baltic ports – Rotterdam (30,000t)	insurance, Rotterdam port due	Baltic ports	current month	–	Railway
Asia-Pacific	Gasoline 92r fob Singapore	Vanino/Nakhodka – Singapore (40,000t)	–	Nakhodka, Vanino	current month	–	Railway
Kazakhstan	Gasoline AI-92/93 fca Chimkent/Pavlodar/Atyrau	–	–	–	–	Kazakhstan	Railway

Russian netbacks calculation components							
Product	Price assessment	Freight	Additional costs	Transshipment	Export duty	Tariff outside Russia	Tariff in Russia
MOTOR GASOLINE AI-95							
Northwest Europe	Gasoline 95r cif NWE	Baltic ports – Rotterdam (30,000t)	insurance, Rotterdam port due	Baltic ports	current month	–	Railway
Asia-Pacific	Gasoline 95r fob Singapore	Vanino/Nakhodka – Singapore (40,000t)	–	Nakhodka, Vanino	current month	–	Railway
Kazakhstan	Gasoline AI-95/96 fca Chimkent/Pavlodar/Atyrau	–	–	–	–	Kazakhstan	Railway
VACUUM GASOIL							
Northwest Europe	VGO 1.6% cif NWE	Baltic ports – Rotterdam (30,000t)	insurance, Rotterdam port due	Baltic ports	current month	Belarus, Lithuania	Railway, river freight
Mediterranean	VGO 1.5% fob Med	Odessa – Augusta (30,000t)	insurance	Odessa	current month	Ukraine	Railway