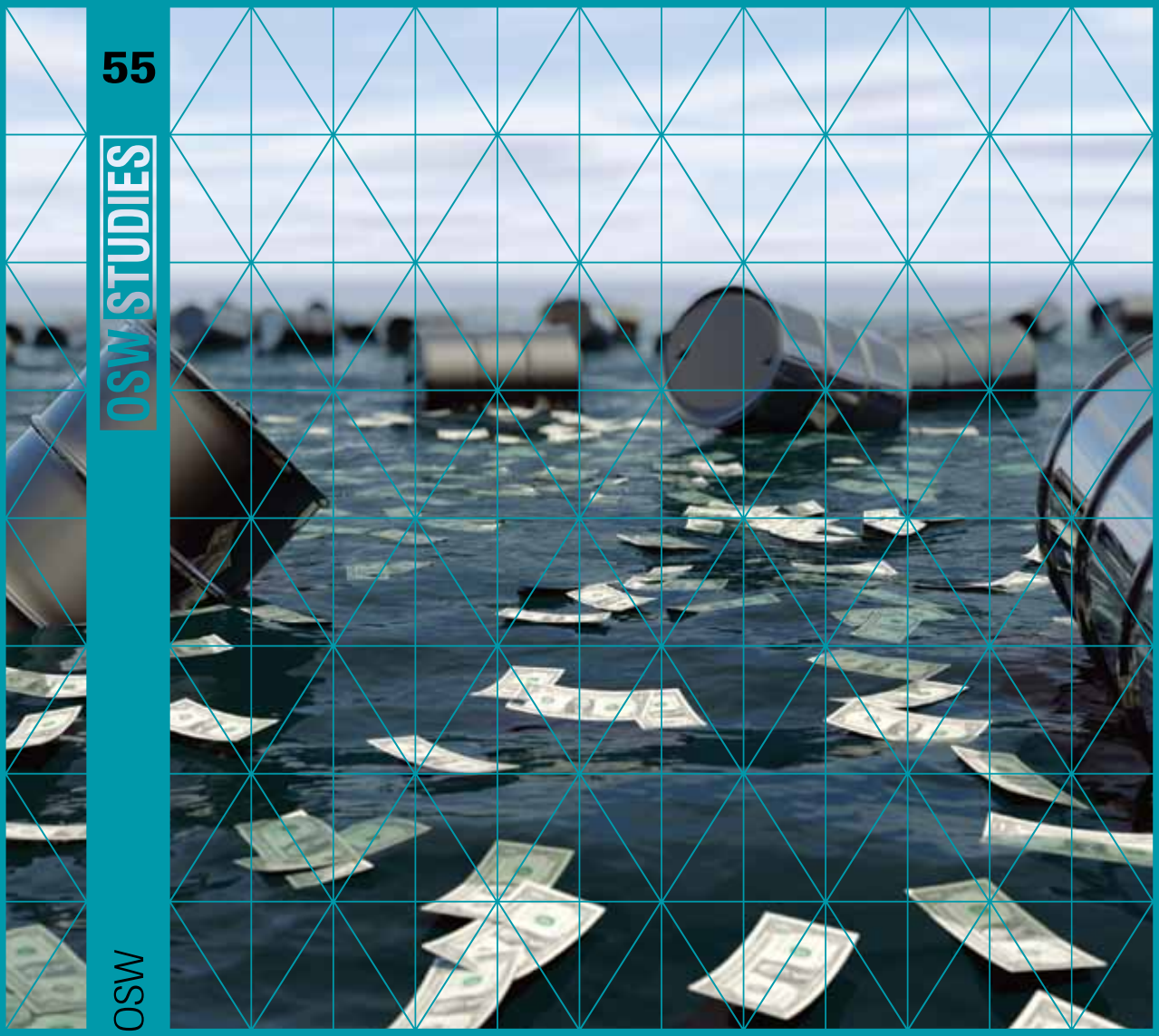
55

OSW STUDIES



OSW

THE TWILIGHT OF THE OIL ELDORADO

HOW THE ACTIVITY OF RUSSIAN OIL COMPANIES ON THE EU MARKET HAS EVOLVED

Szymon Kardaś

OSW STUDIES

NUMBER 55
WARSAW
MARCH 2016

THE TWILIGHT OF THE OIL ELDORADO

HOW THE ACTIVITY OF RUSSIAN OIL COMPANIES ON THE EU MARKET HAS EVOLVED

Szymon Kardaś

OSW | CENTRE FOR EASTERN STUDIES
OŚRODEK STUDIÓW WSCHODNICH im. **Marka Karpia**

CONTENT EDITORS
Adam Eberhardt, Marek Menkiszak

EDITOR
Katarzyna Kazimierska

CO-OPERATION
Halina Kowalczyk, Anna Łabuszewska

TRANSLATION
Jim Todd

GRAPHIC DESIGN
PARA-BUCH

PHOTOGRAPH ON COVER
Shutterstock

DTP
GroupMedia

FIGURES
Wojciech Mańkowski

PUBLISHER
Ośrodek Studiów Wschodnich im. Marka Karpia
Centre for Eastern Studies
ul. Koszykowa 6a, Warsaw, Poland
Phone + 48 /22/ 525 80 00
Fax: + 48 /22/ 525 80 40
osw.waw.pl

ISBN 978-83-62936-74-8

Contents

THESES

1. One of the key objectives of Russian energy strategy has been, and still remains, to strengthen the country's position on the international energy markets, especially among exporters of oil and oil products. Despite the need to diversify the economy, as declared by the Russian government, oil exports is still a fundamental source of income for the state. In this context the EU market is of vital importance, as – despite the rise in Russian exports to Asian countries – it remains the most important outlet for Russian oil companies, and as such yields the biggest profits from sales of oil and oil products.

2. In the period 2011-14, a consistent drop in Russian crude oil supplies to the EU could be observed, of about 15.6%, both via sea and land routes (the 'Druzhba' pipeline). At the same time, exports of oil-derived products produced by Russian refineries have risen. These processes are, on the one hand, determined by the situation on the EU market: a decline in demand for oil associated with the economic downturn, and a reduction in refinery output (and the closure of refineries in Europe), among other factors. On the other hand, they are a reflection of trends visible in Russia itself, primarily an increase in output in Russian refineries.

3. The period 2011-14 saw a significant strengthening in the dominant position of the state oil company Rosneft, which as a result of the acquisition of the company TNK-BP has become the leading Russian supplier to the EU market, of both crude oil and oil products. Its status has also been boosted by direct contracts to supply Russian oil to German, Polish and Czech customers, and by investments in assets (in particular, refinery assets in Germany and Italy). Apart from Rosneft, only Lukoil has become actively involved in the EU market, although most recently we have observed its withdrawal from the oil sector in Central Europe.

4. At present it is difficult to say that there is any coherent Russian oil strategy regarding the European Union. The current shape of Russian activity in the EU (the export targets of crude oil and oil products; the investments in assets) is more the chance result of individual companies' business, rather than the effect of activities coordinated by the state (on the model of the gas sector). This does not mean, however, that the state cannot influence the oil companies' strategies. One illustration of this is the tariff (export duties) and fiscal policy, which affects the profitability of exports of crude oil and

oil products; or the activities concerning the logistics of Russian exports (the visible increase in the use of maritime routes to export crude oil; the increased use of Russian ports to export oil products, at the expense of ports in the Baltic states).

5. The long-term prospects (10-20 years) for the Russian position on the EU market are pessimistic. It is true that factors such as unfavourable production forecasts within the EU itself (regarding both crude oil and oil products) and the adaptation of many European refineries to process Russian Urals oil are advantageous for Russia. However, the significance of the negative factors is increasing. These include the overall decline in oil consumption in the EU, the observed increase in competition among exporters of oil (Africa, mainly Nigeria and Angola; and in the long term, Iran, Saudi Arabia, and possibly also the USA) and oil products (India, China, the USA) on the EU market, and the deterioration in Russian/EU cooperation in the context of the anti-Russian sanctions. Domestic factors – in particular the unclear prospects for the upstream sector, including the risk of a significant decline in oil production over the next decade; or the long-term effects of the fiscal changes being introduced in Russia – may also be of considerable importance for Russian oil activity in the EU.

6. If the negative trend in crude oil exports to the EU in the short term (up to 2020) can be halted, then in the medium and long term (after 2020, especially in the period 2030-40) the importance of European exports will probably decrease more dynamically than Russian forecasts assume. Thus if total Russian oil exports decline in the long term, the importance of the Asian market will rise.

   It is also possible that in the long term (2030-40), the share of Asian markets in the total export of Russian oil will be comparable to the importance of the EU countries' export markets, although this would require a significant, quantitative increase in Russian exports to Asia. On the one hand, the very optimistic long-term forecasts for growth in oil consumption in Asia (especially in China) suggest this will be a favourable scenario. On the other hand, however, there are serious doubts about the prospects of significant rises of oil production in Eastern Siberia and the Far East. In turn, the transmission of oil from Western Siberia (which in the long term will remain Russia's main production centre) towards the East would require a large investment in expanding the pipeline infrastructure; this might also prove unprofitable, taking into consideration the costs of transmission. Moreover, the intensifying

competition among exporters on Asian markets will be a factor operating to Russia's detriment.

However, it should be noted that the inevitable decline of the importance of the EU market and the ability to further boost the role of Asia in Russian oil exports will be the result not so much of political decisions (though the strategic pivot to the East announced by President Putin has some significance in that regard) as primarily a consequence of economic necessity.

INTRODUCTION

The oil sector is of strategic importance for the stable functioning of the Russian state[1]. It plays a key role both in the context of tax revenues to the state budget (41.8%), and in Russian exports in general (53.8%)[2]. The export of crude oil and oil-derived products is also one of the key dimensions of Russian energy policy. In official Russian documents, primarily the energy strategies adopted by the government of the Russian Federation[3], one of the major declared strategic objectives is to strengthen Russia's position on the international market for oil and gas exporters. The implementation of this objective was intended, on the one hand, to facilitate the recovery of the global oil market which began in the first decade of this century; and on the other, to bring about a dynamic increase in oil production in the Russian Federation (annual production rose from 323.2 million tonnes in 2000 to 533 million tonnes in 2015)[4]. Russian oil exports rose especially dynamically in the period 2000-04, from 145 million tonnes in 2000 to 258 million tonnes in 2004, while remaining within the range of 243-258 million tonnes per annum for the next six years. In this context, the member states of the European Union are of particular importance, as they have for years been a key market for Russian energy (on average about 65% annually).

The aim of this text is to analyse the evolution of the importance of the EU market in the external activity of Russian oil companies (the export of crude oil and oil products, the investments in assets) in the period 2011-15. The choice of the time-frame is mainly due to the fact that after 2011, following a period of dynamic growth in oil exports from Russia, a declining trend became clearly visible.

In this publication, we attempt to indicate the major internal and external factors affecting the position of Russia on the EU market (the markets for crude oil

1 A detailed analysis of the state of the Russian oil sector and its political and economic importance is presented in Wojciech Konończuk's report *Najlepszy sojusznik Rosji. Kondycja i perspektywy rosyjskiego sektora naftowego* [Russia's best ally. The situation of the Russian oil sector and forecast for its future], CES, Warsaw 2012. http://www.osw.waw.pl/en/publikacje/osw-studies/2012-04-15/russias-best-ally-situation-russian-oil-sector-and-forecast-its

2 Data for 2013 issued by the Ministry of Energy of the Russian Federation.

3 May 2003 saw the adoption of the Energy Strategy for Russia by 2020, and November 2009 the Energy Strategy for Russia by 2030. Currently, work on the adoption of the Energy Strategy for Russia by 2035 is ongoing (the new plan for the document was announced in September 2015; its final adoption is planned for 2016).

4 Official figures from the Ministry of Energy of the Russian Federation.

and oil products, the investments in assets). In the final part, we will examine the prospects for the evolution of Russia's position on the EU oil market, taking into account the rise in crude-oil cooperation between Russia and Asian countries, particularly with China.

The statistical data referenced in this work are essentially drawn from the period 2011-2015 (full, annual statistics). Selected passages cite statistical data for the period 2000-2015, in order to reflect wider trends in Russian oil exports. The data used in this study is based on official communiqués published by the Federal Customs Service of Russia and the Ministry of Energy of the Russian Federation, as well as on data published by the media, including news agencies (Argus, Interfax) and industry periodicals (in particular *Neftegazovaya vertikal* [*Нефтегазовая вертикаль*]).

I. RUSSIA'S POSITION ON THE EU'S CRUDE OIL MARKET

1. The EU market compared to other target markets for Russian oil exports

Russia consistently ranks second in the world among countries exporting crude oil, behind only Saudi Arabia (377 million tonnes in 2013, 353 million tonnes in 2014), but clearly ahead of countries such as Canada (135 million tonnes), the UAE (128 million tonnes), Iraq (121 million tonnes), Nigeria (90 million tonnes) and Iran (56 million tonnes)[5].

The member states of the EU are the main market for Russia's crude oil. The largest volume of supply onto the EU market was noted in 2005-2007 (165-173.5 million tonnes per annum). In the following years, supplies remained within the range of 151.5-169.3 million tonnes per annum, in 2014 reaching their lowest level since 2004 (142.8 million tonnes). The fall in the EU's share of Russian oil exports is also noteworthy, from 67.1% in 2007 to 63.9% in 2014[6].

Table 1. The European Union's share in Russian crude oil exports

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total exports (million tonnes)	144.4	164.5	189.5	228	260.3	252.5	248.4	258.6	243.1	247.5	250.7	244.5	240	236.6	223.4	242,9
Volume of exports to the EU (in million tonnes)	55.8	68	83.4	110.5	126.3	165	164.9	173.5	160.9	165.5	169.3	157.1	158	151.5	142.8	154,2
The EU's share in Russian oil exports (%)	38.6	41.3	44	48.5	48.5	65.3	66.4	67.1	66.2	66.9	67.5	64.2	65.8	64	63.9	63,5

Author's own calculations, based on data published by the Federal Customs Service and the Observatory of Economic Activity; http://atlas.media.mit.edu/ru/

Meanwhile the share of Asian countries in Russian crude oil exports is rising steadily. Whereas in 2001 the Asian share in oil exports amounted to about 1.1%, by 2005 it had reached 4.5%, and by 2010 it was up to 15.3%. The

[5] Data from http://www.vlant-consult.ru/projects/world-trade/

[6] The significant rise in the EU states' percentage of Russian oil exports stems from the fact that after 2005, the figures began to include the imports of Russian oil by states which joined the EU on 1 May 2004, and likewise after 2007 by the EU's enlargement to include Bulgaria and Romania.

most dynamic growth, however, occurred in the period 2011-14, when exports to Asian countries made up almost 25% of total Russian exports (the rate of change in the targets of Russian oil export is illustrated in Table 2).

Table 2. The individual geographical targets of Russian crude oil export, totals (%)

	2005	2010	2011	2012	2013	2014	2015
EU	65.3	67.5	64.2	65.8	64	63.9	63.5
CIS	15	10.6	12.3	12	12.1	10.1	9.5
Asia	4.5	15.3	12.7	17.4	21	24.2	26.4
USA	1.8	3.9	3.4	1.7	0.8	0.4	0.3
Others, including Turkey, Morocco, Israel, Algeria, Peru, Uruguay, Trinidad & Tobago, Egypt)	13.4	2.7	7.4	3.1	3.1	1.4	0.3

Author's own calculations, based on data published by the Ministry of Energy of the Russian Federation, the Federal Customs Service of Russia, FSU Argus, EIA; http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=mcrim_nus-nrs_2 & f = m

Although the group of Asian customers of Russian oil is expanding steadily, China is of key importance among these importers.[7] Total Russian crude oil exports to China rose in the period 2011-15 from 19.7 to 41.29 million tonnes, i.e. by almost 68% (via Kozmino, ESPO[8] and Kazakhstan[9]). Supplies to China via the Skovorodino-Mohe oil pipeline remain stable (15 million tonnes in 2011, 16 million tonnes in 2015). Meanwhile, supplies to China via Kazakhstan

7 Russian crude oil is principally exported to Asian countries via the far eastern port of Kozmino, the endpoint of the Eastern Siberia-Pacific Ocean (ESPO) pipeline, and via the Skovorodino-Mohe oil pipeline (an offshoot of the ESPO pipeline which runs to China); deliveries to China are also being made via Kazakhstan through the use of swap mechanisms (Russian companies provide crude oil to Kazakh refineries, and Kazakhstan exports the appropriate amounts to China) and the Transneft pipeline system, mainly through ports located in the Far East.

8 The ESPO (Eastern Siberia-Pacific Ocean) is a Russian oil pipeline.

9 In addition to Russian ESPO oil, delivered via Asian routes, China also purchases small amounts of Russian Urals oil (2 million tonnes in 2014). Part of this trade is officially recorded as part of the transactions via the Black Sea ports; in the case of Baltic cargo, some is purchased in the Danish port of Skagen.

increased significantly: 200,000 tonnes in 2011, no deliveries during the period 2012-2013, and nearly 7 million tonnes in 2014 and 2015. Data for 2015 shows that China has become the leader among countries importing Russian oil via the port of Kozmino (exports to China 14.95 million tonnes; exports to Japan 8.7 million tonnes). Before 2014, Japan held first place (8.9 million tonnes in 2014), and China was second (5.9 million tonnes in 2014).

The increase in exports to Asian countries is due, on the one hand, to new contracts concluded primarily with China (see chapter IV, section 3), but also to redirects towards Asia of crude oil that had previously been sent to the American market (the reduction in exports to the United States is linked to the shale revolution and the reduction in American oil imports).

Table 3. Russian crude oil exports to Asian countries (million tonnes)

	2011	2012	2013	2014	2015
China	19.7	24.3	24.4	33.1	41.29
Japan	8.6	10.7	14.5	14	14.8
South Korea	1.1	1.1	2.4	3.9	4
Other	1.65	5.66	8.3	3	4
Share of Asian countries in total Russian oil exports (%)	12.7	17.4	21	24.2	26.4

Author's own calculations, based on data published by the FSU Argus, as well as the following sources: http://www.russchinatrade.ru/assets/files/ru-ru-cn-coop/ru_ch_trade_2012.pdf, http://www.ved.gov.ru/exportcountries/cn/cn_ru_relations/cn_ru_trade/, http://www.reuters.com/article/2015/03/11/russia-crude-japan-idUSL4NoW82XD20150311

2. Russia's share in imports of crude oil to the EU

Russia remains a consistent leader among countries exporting oil onto the EU market. Russian oil makes up almost a third of total crude oil imports to the EU, although 2014 saw the lowest figure (28.9%) among exporters onto the EU market since 2009[10]. Russia exports three times more crude oil than Saudi Arabia (8.86% of EU imports) onto the European market, and more than twice as much

[10] In the period 2005-14 this figure fell within the range of 28.9-31.7%; at its lowest in 2009 it was 28.89%, at its highest in 2013 it was 31.72%. Data: http://ec.europa.eu/energy/observatory/oil/import_export_en.htm

as Norway (currently 12.63% of EU imports). At the same time, since 2012 the quantitative indicators of Russian oil imports onto the EU market have fallen, from 169.3 million tonnes in 2010 to 142.8 million tonnes in 2014, while imports of oil products from Russia have risen (chapter II, section 2).

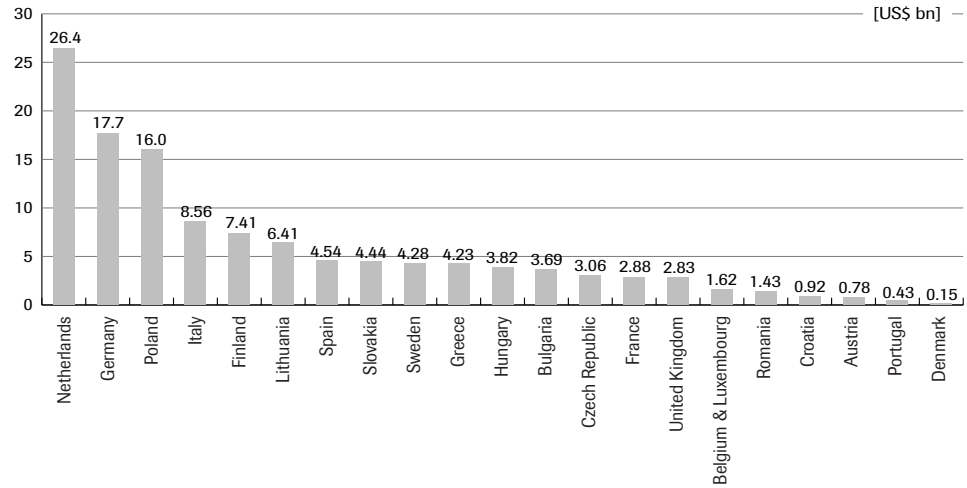
Table 4. The shares of individual countries and regions in crude oil imports to the EU

Country	Share of imports (%)			
	2011	2012	2013	2014
Russia	29.6	31.4	31.7	28.9
African countries	18.4	25.6	25.5	24.2
Europe (outside the EU)	15.1	13.6	14	15.4
Middle Eastern countries	19.5	15.6	13.6	14.6
Kazakhstan	6.4	5.4	5.9	6.5
North and South America	3.4	4.3	4.9	5.7
Azerbaijan	4.7	3.5	4.3	4.5
Other	2.9	0.6	0.1	0.2
Oil imports to the EU, total (in million tonnes)	**497.8**	**516.3**	**487**	**498.3**

Author's own calculations, based on data from the Registration of Crude Oil Imports and Deliveries in the European Union (EU27), http://ec.europa.eu/energy/observatory/oil/import_export_en.htm

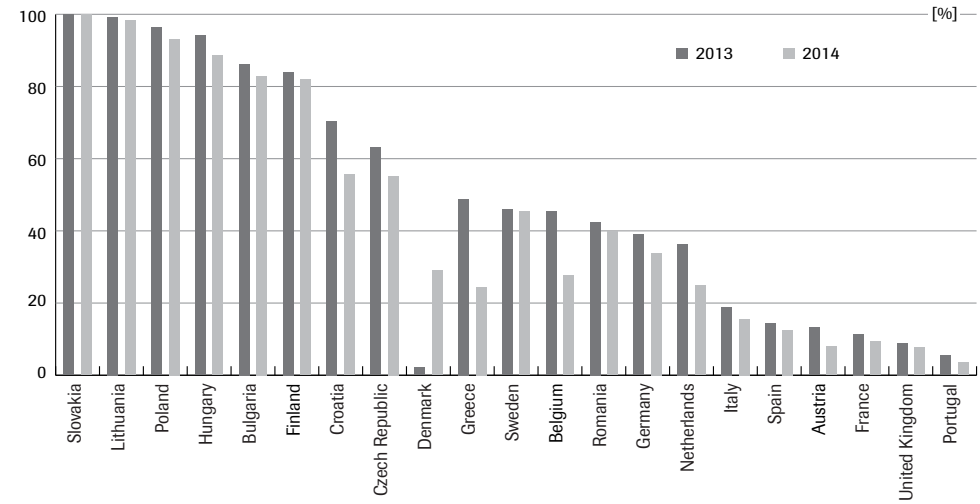
Meanwhile, taking into account the shares of Russian oil in total imports in individual countries, the biggest proportions of supplies from Russia (according to data from 2013) are received by member states in Central Europe: Slovakia (100%); Poland (96.3%), Hungary (94.1%), the Czech Republic (63.14%); and member states in southern Europe: Bulgaria (86.21%), Croatia (70.41%), Greece (48.8%), as well as Lithuania (99.25%). It is also worth mentioning that in 2014 the majority of EU importers of oil from Russia reduced the share of imports of Russian oil in their national totals, with Greece, the Netherlands and Belgium doing so to the greatest extent (detailed data in Figures 1 and 2).

Figure 1. The importance of individual member states in the EU in Russian oil exports[11] (in 2013)



Author's own calculations, based on data published at http://atlas.media.mit.edu/ru/visualize/tree_map/hs92/export/rus/show/2709/2013/

Figure 2. The share of Russian oil in total national oil imports in EU member states[12] (%)



Author's own calculations, based on data published at http://ec.europa.eu/energy/en/statistics/eu-crude-oil-imports

[11] In the official EU statistics involving Russian oil importers, the following EU countries do not appear: Cyprus, Malta, Latvia, Estonia, Ireland and Slovenia. All of the above member states (except Malta, which buys negligible quantities, around 100,000 tonnes per annum) import oil products from Russia, not crude oil itself.

[12] The figure concerns import from third states (non-EU) and does not include crude oil import from EU member states.

3. Russian oil export routes to the EU

Currently, Russian crude oil is exported to customers in EU member states by both sea and land. Around 68% of supplies reach the EU market via seaports; the Druzhba pipeline transports around 32%. Russian ports remain the main channel for crude oil exports to European countries, in particular Primorsk and Ust-Luga on the Baltic Sea, and the Black Sea port of Novorossiysk.

The main recipients of the raw materials exported by the **Russian Baltic ports** are the Netherlands, Sweden, Finland, Lithuania, Poland, France and Germany. Italy, Spain, Belgium and Denmark come further down the list. Among the major recipients of Russian oil import, only Sweden (28%) and Italy (about 7.5%) have increased their deliveries, which is mainly because prices of Urals oil in the Baltic ports were lower than those from the Black Sea ports; the other importers noted declines in 2014.

In turn, the **Black Sea port of Novorossiysk** exports crude oil onto the EU market, primarily to Italy, Greece, Bulgaria, Romania, Croatia and Spain; and in smaller quantities to France and the United Kingdom. In 2014 almost a third of the supplies (about 9.3 million tonnes) was accounted for by Italy (despite a drop of 3 million tonnes compared to 2013). In turn, only Romania noted an increase in the supply of Russian crude oil exported from Novorossiysk (by about 14%, to 6.2 million tonnes)[13].

The other important export route is the **Druzhba pipeline**. It transmits crude oil to five EU member states[14]: Germany, Poland (which receives its oil via the so-called Northern branch) and the Czech Republic, Slovakia and Hungary (which receive oil via the so-called Southern branch).

[13] Data calculated on the basis of statistics published by the FSU Argus.

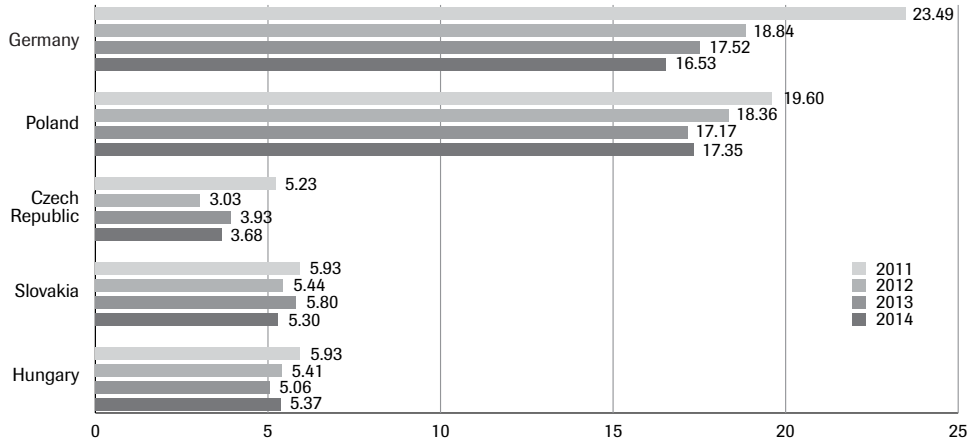
[14] The non-EU country Bosnia and Herzegovina also imports Russian crude oil via the Druzhba pipeline. Its overall share of oil imported via this route is falling steadily (from 1.11 million tonnes in 2011, 680,000 tonnes in 2012, 790,000 tonnes in 2013 and 650,000 tonnes in 2014; in 2015 it imported only 390,000 tonnes). Part of the oil supplied to Bosnia & Herzegovina is supplied by Zarubiezhneft on the spot market through its own trading company Nestro Optima (between 40,000 and 70,000 tonnes per month in 2014).

4. The drop in Russian crude oil supplies to the EU, and its main causes

In recent years, a systematic drop in exports of Russian oil onto the European market, both by pipeline and by sea, has become clearly visible.

The years 2011-14 saw a systematic **decrease in the supplies of Russian crude oil exports via the Druzhba pipeline**. Total deliveries to all countries along the pipeline's route fell from 60.18 million tonnes in 2011 to 49.48 million tonnes in 2013 (for details, see Figure 3). The downward trend, though not as significant, continued in 2014: deliveries fell by 2.52% in comparison to 2013. In 2012, crude oil deliveries via the Druzhba pipeline dropped to 51.08 million tonnes (compared to 60.18 million tonnes in 2011). Among the EU member states importing oil via Druzhba, Germany (almost 29%) and the Czech Republic (almost 30%) have noted the biggest declines in the period 2011-14. Nevertheless, in terms of volume, the leading recipients of exports via Druzhba are still Germany and Poland (which together receive close to 70% of supplies).

Figure 3. Crude oil supplies via the Druzhba pipeline to recipient countries in the period 2011-14 (million tonnes)



Author's own calculations, based on data published by FSU Argus.

In the period 2012-2014, there was also **a drop of over 20% in oil exports by sea**. This applies above all to Primorsk, which saw a drop in oil transit of over 30%, and Novorossiysk, with a fall of nearly 25% (detailed data concerning the transit of Russian crude oil via its Baltic and Black Sea ports is given in Table 5).

Table 5. Russian crude oil exports to EU countries via Russia's Baltic and Black Sea ports in the period 2011-2015 (million tonnes)

	2011	2012	2013	2014	2015
Primorsk	65.5	63.1	47.2	40.6	43.8
Ust-Luga	0	11	16.2	14.2	17.9
Novorossiysk	25.5	27.6	21.6	21.6	19.1
Tuapse	3.35	0.76	0	0	0
Total	94.35	102.46	85	76.4	80.8

Author's own calculations, based on data published by the FSU Argus.

On the one hand, the drop in oil exports along the various transmission routes was caused by changes in the logistics of Russian crude oil exports. The fall in quantities of crude oil exported via the Druzhba pipeline in 2012 was directly linked to the redirection of a part of Russian crude oil exports along the BTS-2 pipeline, which was activated in March 2012, and via the oil terminal in Ust-Luga. In 2012 11.5 million tonnes of oil were exported via the new oil terminal in Ust-Luga. At the same time, the total volume of Russian oil exports via the Baltic ports (Primorsk, Ust-Luga) and the Druzhba pipeline remained at similar levels in the years 2011-2012: 123.9 million tonnes in 2011 and 126.4 million tonnes in 2012. In the year 2013 oil exports via Ust-Luga did increase, to 16.2 million tonnes, but this came at the expense of reducing the quantities exported via the terminal in Primorsk; the amount supplied via Druzhba remained at the level of 49.48 million tonnes, slightly less than in 2012.

The opening of the new terminal also led to a temporary reduction in the transit of crude oil via Primorsk; this was additionally affected by the decision to change the function of one branch of the BTS pipeline, which had previously been used for oil exports, to the transmission of diesel.

On the other hand, the reduction in Russian crude oil exports to the EU has primarily been caused by a change in the situation on the European market.

The main reason is the **decline in oil consumption in the EU**, resulting on the one hand from the economic downturn, and on the other from a change in the

structure of energy consumption in general (gas has become more important in the energy mix). The level of refinery output has also fallen steadily in European states. In the years 2008-13, the European refineries' capacity dropped by nearly 8%, and the number of refineries fell from 102 to 87, which led to a reduction in the output level of 80 million tonnes per annum. Many of the existing refineries are running at a loss or are barely breaking even.

According to the International Energy Agency's latest forecasts, the long-term negative trend concerning oil consumption in the EU is likely to be maintained. The World Energy Outlook 2015 predicts a drop in oil consumption in the EU from 10.6 million barrels a day in 2014 (i.e. around 527.7 million tonnes per annum) to 8.9 million barrels a day (about 443 million tonnes per annum) in 2025; 7.3 million barrels per day (363.4 million tonnes per annum) in 2035, and 6.6 million barrels per day (328.5 million tonnes per annum) in 2040[15].

No less important are the **domestic causes in Russia itself**. In recent years, Russian refineries have consistently **raised the levels of their own output,** which translates to an increase in exports of oil-derived products at the expense of crude oil. During the period 2004-14, the Russian refineries' capacity rose by nearly 17% (from 5.42 million barrels a day in 2008 to 6.34 million barrels a day in 2014), and their output has increased from 235.6 million tonnes in 2008 to 288.9 million tonnes in 2014, an increase of 22.6%[16]. Russian companies are interested in increasing their refinery capacity because it strengthens their position on the domestic market, and also gives them the flexibility to respond to changing trends on foreign markets (rising demand for oil products).

Many Russian oil companies, including Gazpromneft and Lukoil, **have been obliged to restrict their exports in order to supply their own refineries** in Russia because other providers have violated their contracts. This took place after Rosneft's acquisition of the company TNK-BP in spring 2013. Rosneft began to revoke its contracts with TNK-BP to supply crude oil to refineries belonging to other Russian oil companies, which forced some of the exporters to increase supplies to their own refineries, for example, in May 2013 Rosneft

[15] See World Energy Outlook 2015, p. 119. It is worth noting that this estimate is lower than that previously reported in World Energy Outlook 2014.

[16] BP Statistical Review of World Energy, June 2015, p. 16, http://www.bp.com/content/dam/bp/pdf/Energy-economics/statistical-review-2015/bp-statistical-review-of-world-energy-2015-full-report.pdf

stopped selling oil to TNK-BP for the refinery in Omsk (about 200,000 tonnes per month).

The temporary problems of supply to Europe, particularly via the Druzhba oil pipeline, are connected to the competition among Russian oil companies for export quotas awarded by the Russian Energy Ministry (these give companies the right to export specified quantities of oil to designated geographical targets).

For example, Rosneft was unable to start supplies on time to the Czech Republic, on the basis of the long-term contract it had concluded in June 2013, because it did not have sufficient export quotas (Lukoil and Gazpromneft did have sufficient allocations). Rosneft eventually obtained additional allocations in exchange for permission to allocate export quotas[17] to Lukoil and Gazpromneft to export oil via the Far Eastern port of Kozmino (the relevant agreement was concluded in July 2013; Lukoil gained access to ESPO and the Baltic ports by conceding to Rosneft its export quotas for supplies via Druzhba to the Czech Republic[18]).

5. A new 'balance of oil powers': Rosneft's dominant position

In recent years, **the state-owned oil company Rosneft has strengthened its unchallenged leading position among Russian oil exporters onto the EU market**. It is now the principal exporter of crude oil, both by land (via the Druzhba oil pipeline) and by sea. This is primarily due to its acquisition in spring 2013 of TNK-BP, which has increased the level of Rosneft's crude oil exports by more than 50% (the details of crude oil exports by Russian companies over the period 2011-15 are given in Table 6).

[17] Trading in export quotas is officially prohibited. In April 2012, the Ministry of Energy of the Russian Federation did announce the introduction of legislative changes to allow the rotation of market allocations, but these plans have not yet been implemented. Thus in most cases, the 'exchange of export quotas' takes place without the necessary approval of the Ministry of Energy of the Russian Federation, and remains the subject of informal arrangements between the oil corporations.

[18] Rosneft denied Czech access, Argus FSU, 4 July 2013, p. 11.

Table 6. Russian oil exports during the period 2011-15 (in million tonnes)

Company	2011	2012	2013	2014	2015
Rosneft	59	60.9	94.3 **	93.8	97.5
TNK-BP	29.8	30.1	-	-	-
Lukoil	23.8	24.6	20.3	19.3	22.6
Surgutneftegaz	27	26.7	28.8	26	29.9
Gazpromneft	12.7	11.9	7.7	7.5	7.9
Tatneft	15.6	11.9	11.4	8.5	10.4
Bashneft	3.6	4.5	4.1	4.9	5.3
Russneft	5.5	5.3	4.5	2.8	2.5
Others	11.1	13.2	12.9	13.4	15.9
Total	**188.1**	**189.1**	**184**	**176.2**	**192**

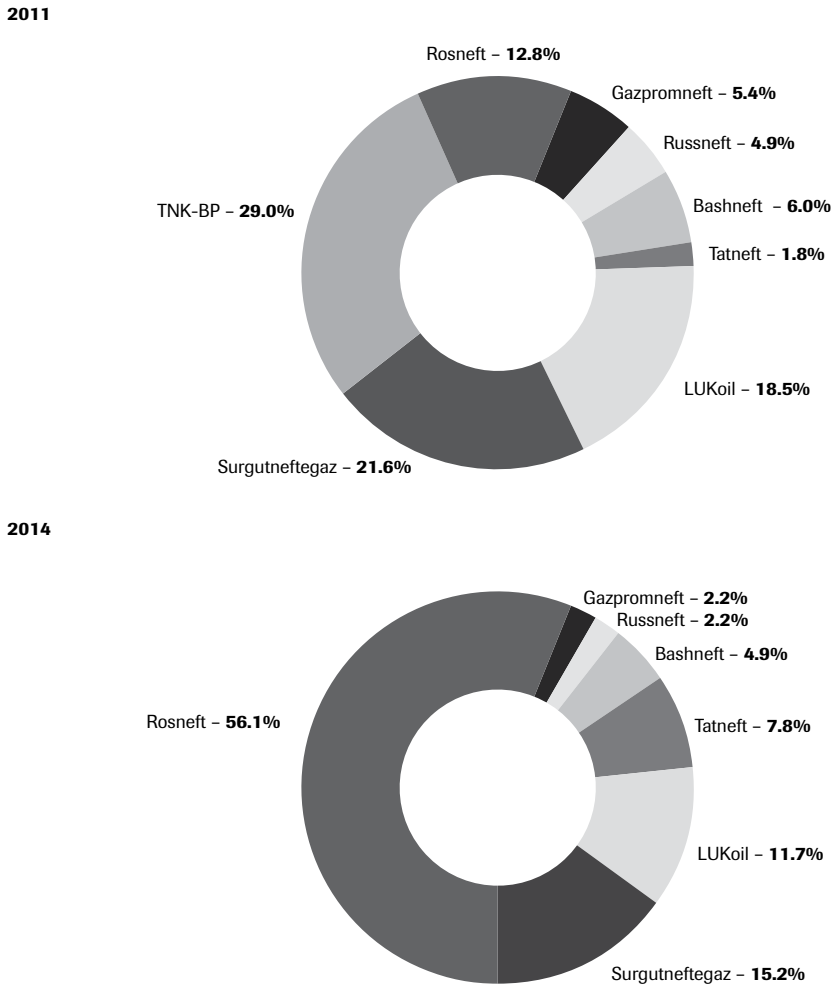
* Includes exports via the oil pipeline network belonging to Transneft, excluding deliveries to CIS countries
** Also includes exports by TNK-BP
Author's own calculations, based on data published by the magazine Neftegazovaya vertikal and the FSU Argus.

Rosneft's share in supplies via the oil pipeline **Druzhba** have more than quadrupled during the period 2011-14, from 6.2 million tonnes in 2011 to 26.5 million tonnes in 2014. The biggest decline in this period was noted by Lukoil (from 8.9 million tonnes in 2011 to 5.5 million tonnes in 2014) and Tatneft (from 7.7 million tonnes in 2011 to 3.2 million tonnes in 2014). The figures for the year 2015 confirm these trends (supplies via Druzhba totalled almost 52.3 million tonnes, of which Rosneft was responsible for almost 28 million tonnes).

As for **deliveries by sea**, only Rosneft and Surgutneftegaz export crude oil from all the oil ports on the Baltic (Ust-Luga, Primorsk) and the Black Sea (Novorossiysk). In the years 2013-14 Rosneft's exports via the Baltic port of Ust-Luga rose significantly, although its output via the ports in Primorsk and Novorossiysk fell. Via the port of Ust-Luga, Rosneft exported 6.3 million tonnes of crude oil to EU consumers in 2013, and 8.8 million tonnes in 2014. In 2013, it exported 20.3 million tonnes to EU customers via Primorsk, and only 16.4 million tonnes

in 2015. From Novorossiysk, Rosneft exported 8.2 million tonnes to the EU in 2013, and only 5.2 million tonnes in 2015.

Figure 4. Individual companies' shares in Russian oil exports to the EU, totals in 2011 and 2014 (%)



Author's own calculations, based on data published by FSU Argus. Figures do not include the so called small producers from Russia.

Surgutneftegaz ranks second in Russian oil suppliers to the EU, although the quantity of oil it exports has dropped steadily over recent years. This applies to both the Druzhba oil pipeline (a drop of close to 30%) and the Baltic ports: in the case of Primorsk, from 8.8 million tonnes in 2012 to 6 million tonnes in 2015; in Ust-Luga, from 6.6 million tonnes in 2013 to 5.1 million tonnes in 2014; in the case of Novorossiysk a drop from 2.8 million tonnes in 2011 to 0.1 million tonnes in 2015.

The amount of oil exported to the EU by Lukoil is also falling steadily. In the case of the Druzhba pipeline, the decrease during the period 2011-14 was about 38%, and about 45% via the Baltic ports. Lukoil's supplies via the port of Novorossiysk have intermittently risen significantly, from 1.7 million tonnes in 2011 to 7.3 million tonnes in 2013, although in 2015 this fell to 6.2 million tonnes. The main cause was the increase in supplies onto the domestic market in Russia.

The importance of the remaining Russian oil exporters is also decreasing, which is particularly evident in the cases of Gazpromneft (a decrease of over 50% in the period 2011-14) and Tatneft (a decrease of nearly 50% for the period 2011-14).

The downward trend affects both the deliveries via Druzhba, where Tatneft has recorded the largest fall in the amount of oil delivered (over 50%), and the sea route, which the companies mentioned above use in only negligible quantities.

In 2011, **Gazpromneft** exported 7.6 million tonnes (5.9 million tonnes via Primorsk, 0.7 million tonnes via Novorossiysk and 0.8 million tonnes via Tuapse), and only 3.4 million tonnes in 2015 (0.6 million tonnes via Primorsk, and 2.8 million via Novorossiysk). Meanwhile, **Tatneft's** exports in 2015 amounted to 5.4 million tonnes of oil a figure of 22.9% less than in 2011.

Table 7. Exports of crude oil from Russia to the EU, by companies and transmission routes, in the period 2011-15 (million tonnes)

Company	Year	Primorsk	Ust-Luga	Novorossiysk	Tuapse	Druzhba	Total
Rosneft	2011	25.1	-	8.8	0.55	6.2	40.65
	2012	22.9	3.4	7.9	0.06	9.4	43.66
	2013	20.3	6.3	8.2	0	20	54.8
	2014	16.7	8.8	7.9	0	26.5	59.9
	2015	16.4	8.7	5.2	0	27.8	58.1
TNK-BP	2011	6.1	-	3.9	0.8	13.9	24.7
	2012	4.8	1.9	3.7	0.2	13.2	23.8
	2013	1.6	1.5	1	0	5.3	9.4
	2014	0	0	0	0	0	0
	2015	0	0	0	0	0	0
Lukoil	2011	12.2	-	1.7	1	8.9	23.8
	2012	10.5	0.3	5.5	0.1	8.1	24.5
	2013	6.5	0	7.3	0	4.7	18.5
	2014	6.7	0	5.4	0	5.5	17.6
	2015	9.5	0	6.2	0	4.5	20.2

Company	Year	Primorsk	Ust-Luga	Novorossiysk	Tuapse	Druzhba	Total
Surgutneftegaz	2011	8.3	-	2.8	0	10.3	21.4
	2012	8.8	2.4	1	0	7.7	19.9
	2013	7.7	6.6	0.1	0	7.7	22.1
	2014	4.6	5.1	0.8	0	7.2	17.7
	2015	6	6.8	0.1	0	8.1	21
Gazpromneft	2011	6.1	-	0.7	0.8	2.6	10.2
	2012	5.9	1.5	0.8	0.3	2.9	11.4
	2013	2.5	0.5	1	0	1.8	5.8
	2014	2.7	0	1.7	0	1	5.4
	2015	0.6	0	2.8	0	1.7	5.1
Tatneft	2011	1.5	-	4.5	0	7.7	13.7
	2012	2.5	1	4.7	0	3.2	10.4
	2013	3.6	0.3	1.2	0	4.6	9.7
	2014	2.1	0	2.4	0	3.2	7.7
	2015	3.4	0.7	1.3	0	4.4	9.8
Bashneft	2011	0.5	-	0.2	0	2.9	3.6
	2012	1.1	0.5	0.6	0	2.2	4.4
	2013	0	0.3	1	0	2.4	3.7
	2014	0.1	0.3	2	0	2.3	4.6
	2015	0.6	0.4	0.8	0	2.5	4.3
Russneft	2011	1.5	-	1.3	0.2	2.3	5.3
	2012	1.2	0	1.8	0.1	2	5.1
	2013	1	0.7	0.7	0	1.6	4
	2014	1	0	0.5	0	1	2.5
	2015	0.6	0.6	0.5	0	0.3	2
Small producers	2011	4.2	-	1.6	0	2.6	8.4
	2012	5.4	0	1.6	0	2.6	9.6
	2013	4	0	1.1	0	1.4	6.5
	2014	6.8	0	0.9	0	0.8	8.5
	2015	6.7	0.7	2.2	0	1.1	10.7

Author's own calculations, based on data published by FSU Argus.

Another new trend which has arisen in recent years is a reduction in the number of Russian producers whose oil is delivered via the Druzhba pipeline to individual countries in Central Europe, leading to a *de facto* division of the Central European market among Russian exporters. Polish and German refineries are supplied mainly by Rosneft and Surgutneftegaz, and those in Slovakia and Hungary primarily by Lukoil, and to a lesser extent by Tatneft, Bashneft and Russneft.

Table 8. List of Russian oil producers and their supplies via the Druzhba pipeline to individual customers in the EU

	Germany	Poland	Czech Republic	Slovakia	Hungary
2011	Rosneft TNK-BP Surgutneftegaz Tatneft Gazpromneft	Rosneft TNK-BP Surgutneftegaz Lukoil Tatneft Bashneft	TNK-BP Lukoil Bashneft Russneft Gazpromneft	Lukoil Tatneft Russneft	TNK-BP Lukoil Tatneft Russneft
2015	Rosneft Surgutneftegaz Gazpromneft	Rosneft Tatneft Surgutneftegaz	Rosneft	Lukoil Tatneft Bashneft Russneft	Lukoil Tatneft Bashneft

Author's own calculations, based on data published by FSU Argus.

6. More direct contracts, and a change in the balance of power among the trading companies

An important phenomenon which typifies the current state of affairs is the rise in the number of contracts Russian exporters are concluding directly with their customers (particularly in the case of oil exported via the Druzhba pipeline). At the same time, a reconfiguration of power among the trading companies buying Russian oil is also noticeable.

A new development in Russia's oil cooperation with Central European countries is **the move by major Russian exporters towards direct contracts, thus reducing the participation of trading companies in exporting Russian crude oil to countries in the region via the Druzhba pipeline**[19].

[19] Some exporters continue to use the services of trading companies in oil exports via Druzhba: Tatneft, Bashneft (for deliveries to the MOL refineries in Slovakia and Hungary) and other smaller producers use Normeston, and Russneft and Neftisa use Glencore.

Table 9. Direct contracts signed by Russian companies to supply oil via the Druzhba pipeline in 2011-15

Exporter	Contractor	Importer country	Date of contract's signature	Import volume and duration of contracts
Rosneft	PKN ORLEN	Poland	1 February 2013	6 million tonnes per annum, in the period 1 February 2013 – 31 January 2016
			30 December 2015	From 18 to 25.2 million tonnes, in the period 1 February 2016 to 31 January 2019 (supplied via Druzhba or by sea)
	Lotos Group		20 December 2013	2.4 million tonnes per annum, in the period 1 January 2014 to 31 December 2016 (supplied via Druzhba or by sea)
			22 January 2016	From 5.4 to 6 million tonnes, in the period 2016-2017 (supplied via Druzhba or by sea)
	PKN ORLEN	Czech Republic	21 June 2013	8.28 million tonnes, in the period 1 July 2013 – 30 June 2016
			21 March 2014	Additional 50,000 tonnes per month during the period 1 April 2014 to 30 June 2016
			30 April 2015	120,000 tonnes per month
	Total	Germany	January 2013	2 million tonnes, to 31 December 2013
	Shell		January 2013	600,000 tonnes, to 31 December 2013
	ENI		March 2013	240,000 tonnes, to 31 December 2013
Lukoil	MOL	Hungary	2011	Average c. 300,000 tonnes per month. Contract applies until the end of 2016
		Slovakia		
Tatneft	Lotos Group	Poland	6 December 2013	2.4 million tonnes annually, in the period 1 January 2014 to 31 December 2016
	PKN ORLEN		23 December 2015	3.6 – 7.2 million tonnes annually, in the period 1 January 2016 to 31 December 2018
Gazpromneft	ENI	Czech Republic	December 2013	30-50,000 tonnes per month (expired in 2014)

Author's own calculations, based on data published by the Interfax agency and FSU Argus.

At present, Rosneft is delivering its supplies via Druzhba mainly on the basis of direct contracts; the exception was a contract signed on 21 December 2012[20] with the trading company Mercuria Energy Trading, to send 3.6 million tonnes of oil per annum to the PKN ORLEN refinery in Płock from 1 January 2013 to 31 December 2015[21]. In addition, Rosneft has concluded direct contracts with a number of other European customers: France's Total, Shell of the Netherlands, and the Italian company Eni (a list of the largest oil contracts for deliveries via Druzhba is given in Table 9). In addition, thanks to an agreement with Unipetrol (a Czech subsidiary of PKN ORLEN), Rosneft started its first crude oil exports to the Czech Republic in July 2013, at the same time supplanting the Russian supplier Lukoil as leader of the local market, as well as Gazpromneft, which started in January 2015[22].

Lukoil also supplies crude oil it has produced to Slovakia and Hungary, on the basis of direct contracts with the Hungarian company MOL. In January 2014 the Lotos Group revoked its contract with the trading company Mercuria (which had been in operation since 2009, and provided for annual deliveries of 3.6 million tonnes of crude oil). Direct contracts to supply oil to Poland have also been signed by Russia's Tatneft, in December 2013 with the Lotos Group[23] and in December 2015 with PKN ORLEN[24]. Surgutneftegaz has also entered into direct

[20] This was basically an extension of a contract between ORLEN and Mercuria Energy Trading in December 2009; http://www.orlen.pl/PL/BiuroPrasowe/Strony/PKN-ORLEN-przedluzyl-z-Mercuria-Energy-Trading-umowe-na-dostawy-ropy-naftowej.aspx

[21] Regardless of this, in 2013 Rosneft signed contracts with trading companies to deliver oil via the Russian ports of Novorossiysk, Primorsk, and Ust-Luga, on the basis of prepayment. The contracts were agreed for five years and include supplies for Glencore (39.2 million tonnes), Vitol (16.8 million tonnes), and Trafigura (10.1 million tonnes); the sum received by Rosneft under the prepayment scheme amounted to US$9.8 billion.

[22] This is connected with Unipetrol's increase of its holding of shares in the CRC at the beginning of 2014 to 67.6% (through the acquisition of 16.3% of the shares belonging to the Shell company). In April 2015, in turn, Unipetrol finalised the transaction of the remaining 32.44% of shares owned by the Italian company Eni (until 2014 it had been bound by a contract with Gazpromneft to supply oil). On 30 April 2015 it was reported that PKN ORLEN had concluded an additional agreement with Rosneft for the supply of 120,000 tonnes of oil per month during the period from 1 May 2015 to 30 June 2016; http://www.rosneft.com/printable/news/pressrelease/30042015.html (15 May 2015).

[23] See the communiqué from the company: Conclusion of agreement between Tatneft Europe AG and the Lotos Group S.A., http://inwestor.lotos.pl/1185/p,194,i,749/raporty_i_dane/raporty_biezace/zawarcie_umowy_znaczacej_pomiedzy_tatneft_europe_ag_a_grupa_lotos_sa (20 October 2015).

[24] The contract replaces the agreement between PKN ORLEN and the trading company Mercuria which expired in December 2015. See the communiqué from the company: ORLEN has contracted to supply crude oil to Płock from Tatneft Europe AG, http://www.orlen.pl/

contracts with the European companies Eni, Shell and Total, to supply oil to German refineries; in doing so it has ended its long-time cooperation with the trading company Sunimex. One consequence of the Russian companies' changes to their contract policies is a noticeable decline in the participation of trading companies in the trade in crude oil exported via the Druzhba pipeline, such as Mercuria (down 50% to 300,000 tonnes per month in 2014), and Sunimex (which until recently was a leader among traders buying oil supplied via Druzhba); its share on the German market has fallen from 77% in 2013 to 33% in 2014.

The main reason why Russian exporters have been signing direct contracts to supply their oil is to increase the proceeds from their sales. This was of particular importance for Rosneft, which incurred high costs associated with its 2013 takeover of TNK-BP. Signing direct contracts with the importers was supposed to ease the concerns of the customer states and the European Commission regarding the risk of reducing the volume of exports sent via the Druzhba pipeline[25]. In addition to this, direct contracts, especially for Rosneft, were intended to strengthen the Russian exporters' positions on the regional market, which will be increasingly important in the light of the expected fierce competition among global oil exporters.

The second important phenomenon is the change in the balance of power among the trading companies which buy Russian oil.

First, there has been a dramatic decrease in the importance of the trading company Gunvor[26], which until recently had the largest share in trading Russian oil (up to 40%, according to sources at Reuters)[27]. Its share decreased to 7.1% in 2012, and to just 1% in the years 2013-2014. The decline in Gunvor's importance to the Russian oil trade is primarily the consequence of rivalries within the Russian energy sector (the struggle for influence between Igor Sechin, the CEO of Rosneft, and Gennadiy Timchenko, co-owner of Novatek). In 2013, Rosneft,

PL/BiuroPrasowe/Strony/ORLEN-zakontraktowa%C5%82-dostawy-ropy-naftowej-do-P%C5%82ocka-od-Tatneft-Europe-AG.aspx (29 December 2015).

25 Роснефть сольет посредников, (4 February 2013), http://www.kommersant.ru/doc-y/2119720

26 A trading company registered in Switzerland; until March 2014 one of its main shareholders was Gennady Timchenko, a Russian oligarch who is a member of a close circle of business elites.

27 Russian oil trading king Gunvor crown slips, http://www.reuters.com/article/gunvor-idUSL5E8KC9OS20120914; Выход Тимченко из Gunvor не сказался на показателях трейдера, http://www.vedomosti.ru/business/articles/2014/09/26/gunvor-udvoil-supplies-nalichnyh (20 October 2014).

TNK-BP (which Rosneft acquired in mid-2013) and Surgutneftegaz all stopped selling crude oil to Gunvor. Moreover, an additional factor currently limiting Gunvor's role is the US's sanctions against Russia. On 19 March 2014 – the day before the publication of the list of American sanctions – Timchenko (whose name was one of those covered by the sanctions) sold a 43% stake in Gunvor to the shareholder Torbjorn Tornqvist. Meanwhile in autumn 2014, representatives of the company announced their intention to sell many of their Russian assets, including some connected with oil: 50% of the shares in the oil terminal belonging to the company NTK (Nevskaya truboprovodnaya kompaniya), which runs the oil terminal in Ust-Luga, 100% of the shares in the terminal exporting oil products in Ust-Luga (Ust-Luga Oil)[28], and 50% in the company NMT (Novorossiyskiy mazutnyy terminal)[29].

Secondly, there has been an increase in the number of trading companies buying Russian crude oil, mainly that which is exported via the Russian ports; this has led to the fragmentation of the market and a rise in competition. The policy of the trading companies themselves is also of some importance; during the period of high oil prices (2012-13), they preferred to trade oil on the spot markets, as there was little chance of obtaining the expected returns (low margins) on the basis of the contracts they had signed with Russian exporters.

Thirdly, there has been a rise in the importance of those trading companies which have concluded long-term oil agreements with Rosneft for supplies[30] based on the principle of prepayment. In 2013 Rosneft decided to enter into long-term contracts (five years) with trading companies, so that the prepayments would yield the necessary funds to pay off the debts it had incurred in connection with its acquisition of TNK-BP. Its agreements with Glencore and Vitol, providing for annual deliveries of 67 million tonnes (46.9 million to Glencore, 20.1 million to Vitol) yielded US$8.3 billion in prepayments; meanwhile its contract with the Swiss trading company Trafigura (which provides for annual supplies of 10.11 million tonnes of oil and oil-derived products) yielded a prepayment of US$1.5 billion. Confirmation of the growing participation of the

[28] In the light of press reports, the buyer may be Gazprombank, which already owns 24% of the shares in the terminal; Transneft has 26%. Gunvor нашла на покупателя Усть-Лугу, https://www.vedomosti.ru/newspaper/articles/2015/06/26/598122-gunvor-nashla-pokupatelya-na-ust-lugu (25 June 2015).

[29] The buyer of the shares will most likely be Transneft. Транснефть купит у Gunvor Новороссийский мазутный терминал, https://www.vedomosti.ru/business/news/2015/12/28/622806-transneft (29 December 2015).

[30] This does not apply to deliveries to Central European countries.

abovementioned companies in Russian crude oil trade can be seen in the statistics for the first half of 2015, from which it follows that Trafigura has acquired a leading position among Russian oil buyers (having bought about 7.6 million tonnes in the period January-June 2015).

II. RUSSIA'S POSITION ON THE OIL PRODUCT MARKET

For several years, **Russia has been the world's leading exporter of oil products,** comfortably ahead of countries such as the United States (121 million tonnes), Singapore (79 million tonnes), the Netherlands (73 million tonnes) and India (71 million tonnes). It has been able to maintain its position as the world leader thanks to a consistent increase in the volume of its exports, from 62.6 million tonnes in 2000 to 171.5 million tonnes in 2015.

1. The importance of the EU market for Russian exports of oil products

1.1. The EU's market share in the export of oil products

The statistics published by the Russian Federal Customs Service show that in 2014, over 94% of the exports of oil products from Russia went to countries outside the CIS area. The most important among these were EU member states. In 2014 the EU market received a total of 114.2 million tonnes of crude oil products, which represents close to 70% of Russia's total exports of oil products. It is worth noting that the EU's market share in Russian exports has been rising steadily, by almost 7.8% in 2014 compared to the previous year.

Currently, over a quarter of Russian oil products exported to the EU goes to the Netherlands (26.1%)[31]. Its other major customers include Denmark (9.2%), Estonia (8.3%)[32], Italy (6.8%), Germany (6.7%), France (6.4%), the United Kingdom (5%), Belgium (5.6%) and Malta (5%)[33]. These figures include both sea (from the Baltic and Black Sea ports) and land routes of transmission (rail and pipelines). Russian oil products sent via the Baltic mainly reach the Netherlands, Denmark, Estonia, Germany, Belgium, Great Britain and France. In turn, Russia's Black Sea ports mostly[34] send oil products to Italy, Malta, Greece and Cyprus.

[31] Some of the crude oil products going to the Netherlands are re-exported to other EU countries. https://www.portofrotterdam.com/en/cargo-industry/liquid-bulk/crude-oil (30 June 2015).

[32] Estonia's large participation is due to the fact that a significant proportion of the crude oil products it imports are re-exported.

[33] Author's own calculations, based on statistics published by FSU Argus.

[34] The most important non-EU recipient of Russian crude oil products from the Black Sea ports (in particular Novorossiysk) is Turkey.

The share of oil products in the total income from Russian oil exports (crude oil and oil products) continues to rise steadily. In 2001, the proceeds from the sale of oil and oil products totalled US$34.2 billion, a figure which had already risen to US$239.4 billion in 2008. Record levels were reported in 2012, when the income from oil exports amounted to US$284.3 billion (a detailed summary for the period 2001-2015 is given in Table 10). The participation of EU countries in income from oil exports reached a record level of 78% in 2005, and fluctuated within the range of 64-76% in the following years.

The decrease in income from crude oil exports observed in the period 2011-14 (from US$181.8 billion in 2011 to US$153.9 billion in 2014) was offset by an increase in revenue from the export of oil products from Russia. Robust growth in earnings from exports of crude oil products in total oil exports came in the period 2009-2013 (from US$46.8 billion in 2009 to US$109 billion in 2013).

2015, on the one hand, has seen an increase in exports of crude oil and oil products, but on the other hand a significant decrease in revenue, which was mainly due to the drastic fall in oil prices (the average barrel of Urals in 2014 cost US$99; by 2015 the figure was about US$54).

Table 10. Revenue from the export of Russian oil and oil products (in US$ billion)

Year	Price of oil (US$ per barrel)	Crude oil (in US$ billion)			Crude oil products (in US$ billion)	Total (in US$ billion)
		Total	For deliveries to the EU	Share of receipts from exports to the EU in income from total oil exports (in %)		
2001	20.78	24.9	14.7	59	9.3	34.2
2002	21.02	29.1	18.3	63	11.2	40.3
2003	23.81	39.7	24.3	61	14	53.7
2004	31.02	59	33.3	56	19.2	78.2
2005	45.21	83.4	65.2	78	33.8	117.2
2006	56.32	102.3	78	76	44.6	146.9
2007	64.28	121.5	88.8	73	51.4	172.9

Year	Price of oil (US$ per barrel)	Crude oil (in US$ billion)			Crude oil products (in US$ billion)	Total (in US$ billion)
		Total	For deliveries to the EU	Share of receipts from exports to the EU in income from total oil exports (in %)		
2008	90.68	161.1	116.2	72	78.3	239.4
2009	55.61	100.6	67.1	67	46.8	147.4
2010	74.11	135.8	87.5	64	69.4	205.2
2011	101 74	181.8	118.8	65	91.3	273.1
2012	103.14	180.9	131.3	72	103.4	284.3
2013	100.41	173.7	122.1	70	109.2	282.9
2014	94.22	153.9	103.8	67	109	262.9
2015	54	89.58	56.8	63.4	67.4	156.98

Author's own calculations, based on data published by the Federal Customs Service of Russia.

1.2. The main oil-derived products exported by Russia to EU countries

The main product exported by Russian oil companies onto the European market remains **fuel oil**. In 2014, its share in the export of oil products to the EU amounted to close to 47%[35]. In recent years, the volume of its export has been slightly but steadily decreasing (63.4 million tonnes in 2012; 59.1 million tonnes in 2014).

Another significant part of the Russian export of oil products into the EU is **diesel** (26.5%). According to FSU Argus, 49.1 million tonnes of diesel were exported from Russia in 2014, nearly 12% more than in the previous year (43.8 million tonnes), of which 22.9 million tonnes was sent via the pipeline network, nearly 25 million tonnes by rail, and around 1.2 million tonnes by river[36]. From the data published by the Ministry of Energy of the Russian Federation, it also appears

[35] According to the periodical *Neftegazovaya vertikal*, the share of fuel oil in the total export of Russian oil-derived products is even higher, even exceeding 50% (55.1% in 2012, 56% in 2013).

[36] In turn, according to data from the Ministry of Energy of the Russian Federation, Russian exports of diesel amounted to 45.4 million tonnes in 2014 (36.4 million tonnes in 2011, 35.9

that both the production and export of oil are rising steadily. Diesel oil of inferior quality (high-sulphation) is mainly assigned for export purposes.

Table 11. Production and export of diesel in 2011-15 (million tonnes)

	2011	2012	2013	2014	2015
Production	70.6	69.4	72.6	77.3	76.05
Export	36.4	35.9	38.8	45.4	46

Source: http://minenergo.gov.ru/upload/iblock/66a/66a29d8d8e1537fe12327a4dea355a5d.pdf

The third most important product in terms of Russian exports onto the EU market is **naphtha**. In 2014 total Russian exports of naphtha increased significantly (by 22.3%, from 17.8 million tonnes in 2013 to 22.1 million tonnes in 2014; the size of the increase is even more apparent in relation to 2011's figure of 12.6 million tonnes), about 52.7% of which reaches the EU market. This is illustrated by data relating to the export of naphta from Russia's European ports, mostly from Ust-Luga (an increase of 158% from 3.6 million tonnes in 2013 to 9.3 million tonnes in 2014) and Tuapse (an increase of 25.4%, from 3.7 million tonnes in 2013 to 4.7 million tonnes in 2014). In 2014 both ports handled nearly 64% of Russia's total naphtha exports[37].

The EU market also receives **vacuum gas oil** (VGO) and small quantities of Russian **gasoline**, representing around 7.2% and 2.6% respectively of Russian exports to the EU[38].

2. Export routes of Russian oil-derived products

Russian oil-derived products are exported onto the EU market along several transit routes: principally by sea (via Russia's Baltic ports, ports in Lithuania, Latvia, Estonia, and Black Sea ports) and to a small extent overland (via rail and pipeline).

million tonnes in 2012 and 38.8 million tonnes in 2013). http://minenergo.gov.ru/upload/iblock/66a/66a29d8d8e1537fe12327a4dea355a5d.pdf

37 Author's own calculations, based on data published by FSU Argus concerning the target markets for crude oil exports sent via the Baltic and Black Sea ports.

38 Other oil-derived products account for less than 7% of exports, and include LPG and fuel for jet engines.

2.1. The sea route

The majority of exports of Russian oil products onto the EU market comes via **the Baltic ports** (primarily Primorsk, Ust-Luga and Vysotsk; to a lesser extent Petersburg and Kaliningrad); almost 55% of deliveries were carried out via these ports in 2014. In recent years, however, the importance of transit via the Baltic states' ports has fallen consistently compared to the Russian ports, both those on the Baltic and the Black Sea (Russian exports of oil products via ports on the Baltic and the Black Sea are listed in Table 12).

Table 12. Russian exports of oil products exported via the Baltic ports during the period 2012-2014 (million tonnes per annum)

Country	Port	2012			2013			2014		
		by rail	pipeline	total	by rail	pipeline	total	by rail	pipeline	total
Russia	Primorsk	–	6.5	6.5	0	9.3	9.3	0	11.3	11.3
	Ust-Luga	12.7	–	12.7	15.9	–	15.9	22.5	–	22.5
	Petersburg	7.3	–	7.3	6.7	–	6.7	6.4	–	6.4
	Vysotsk	10.3	–	10.3	10.5	–	10.5	11.2	–	11.2
	Kaliningrad	3.9	–	3.9	2	–	2	3.3	–	3.3
	Total	34.2	6.5	**40.7**	35.1	9.3	**44.4**	43.4	11.3	**54.7**
Lithuania	Klaipeda	0.7	–	**0.7**	0.4	–	**0.4**	0.4	–	**0.4**
Latvia	Riga	3.6	–	3.6	4.1	–	4.1	5.6	–	5.6
	Ventspils	2.5	6.3	6.8	5.9	5.4	11.3	5.2	5.7	10.9
	Liepaja	0.13	–	0.13	0.1	–	0.11	0.1	–	0.1
	Total	6.23	6.3	**12.53**	10.1	5.4	**15.5**	10.9	5.7	**16.6**
Estonia	Tallinn	8.7	–	8.7	8.6	–	8.6	3.3	–	3.3
	Sillamäe	2	–	2	2	–	2	2.3	–	2.3
	Total	10.7	**–**	**10.7**	10.6	–	**10.6**	5.6	–	**5.6**

Author's own calculations, based on data published by FSU Argus.

In the period 2012-14, Russian exports of oil-derived products via the Baltic ports of Russia rose by over 34%. The port of Ust-Luga is acquiring the most importance in exports onto the EU market (exports rose by more than 77% in

the period 2012-2014), as is the port of Primorsk (exports rose by almost 74% in the period 2012-2014).

The growing importance of Russia's Baltic ports is also demonstrated by the data on the quantities of oil products being transmitted, nearly 55 million tonnes in 2014 (40.7 million tonnes in 2013); for comparison, Latvian ports supplied a total of 16.6 million tonnes, and Estonian ports 5.6 million tonnes. The biggest decrease (nearly 50%) was recorded at the port in Tallinn; in 2012 the Estonian capital exported 10.7 million tonnes of Russian oil products, but only 5.6 million tonnes in 2014. The biggest decline in exports through the Baltic ports affects fuel oil; exports through ports in Latvia, Estonia and Lithuania fell by more than 50% in 2014 to 3.99 million tonnes (Tallinn saw the biggest fall, of 64.8%). The slight increases in the exports of certain products via Baltic state ports are only temporary. One example is the export of Russian fuel oil by pipeline to the port of Ventspils; the rise in exports from 5.4 million tonnes in 2013 to 5.7 million tonnes in 2014 is more related to Rosneft's bigger exports from refineries in Samara (the importance of this route is expected to decline in 2015, with a projected drop of up to 2.5-3 million tonnes per annum).

Furthermore, the importance of the **Black Sea ports** in Russia's export of oil-derived products to Europe is consistently growing. The port of Novorossiysk is becoming crucially important; Russian exports of oil-derived products rose by almost 32%, from 11.9 million tonnes in 2012 to 15.7 million tonnes in 2014. Exports via the port of Tuapse remain steady (5.75 million tonnes in 2012; 6.1 million tonnes in 2014). The increase in the importance of the Black Sea ports is especially apparent in the case of Russian fuel oil exports: both Novorossiysk (up by 33.7%, to 7.83 million tonnes in 2013) and Tuapse (by 11.55%, to 4.8 million tonnes).

The rise in the importance of Russia's Black Sea and Baltic ports in its exports of oil products, at the expense of the Baltic states' ports, is primarily a result of the policy consistently implemented by the Russian government. Its goal is to create the conditions whereby Moscow can (if it deems such action necessary) take the political decision to totally redirect the export of oil from the Baltic states' ports to Russian routes.

One of the principal instruments of the Russian strategy is **tariff policy.** Currently, tariffs on the transmission of diesel fuel to the Latvian port of Ventspils are lower than those which apply to routes leading from individual Russian refineries to Primorsk. However, Transneft has been consistently raising the

levels of tariffs for the transport of diesel fuel via the pipeline network. The latest increases (which took effect as of 1 February 2015) are much higher in the case of routes to the Latvian port of Ventspils (by an average of 8.8%) than on those routes connecting the refineries with the Russian port of Primorsk (an average increase of about 6%). For example, since 1 February 2015 the tariff on the transmission of diesel fuel from the refineries in Moscow to the port of Primorsk has been almost 1340 roubles, but only around 910 roubles to the port of Ventspils; the increase in the case of the first route was 6.26%, but 10% for the second. It is very likely that this policy will continue; the effect of these changes will further weaken the competitiveness and, consequently, the importance of the Latvian route for exporting Russian oil.

The second element is the consistent **increase in the transmission capacity** of the Russian **Baltic ports**, and the **expansion of the transit infrastructure** (including pipelines), allowing Russia to increase the export of oil-derived products. By 2020, Transneft plans to expand the network's capacity from the current 31 million tonnes to 54.5 million tonnes, leading to the Baltic ports (the North pipeline), and from Samara to Novorossiysk (the South pipeline). The North pipeline's capacity to transport oil-derived products is currently 8.4 million tonnes per annum. Transneft has therefore decided to expand the pipeline's capacity to 25 million tonnes, in three stages: (1) to 13-14 million tonnes at the turn of 2015; (2) to 18 million tonnes by 2017; (3) to 25 million tonnes by 2018. Transneft's plans also include a project to construct a South pipeline, which is intended to serve the transit of oil-derived products along the Syzran-Saratov-Volgograd-Novorossiysk route. The operation is scheduled to start in 2016, and the initial capacity is estimated at 6 million tonnes per annum, to be eventually increased to 8.7 million tonnes annually. A problem may lie in the attitude adopted by the Russian Railway (RZhD) concerning the rate of the transport tariffs (which represent one of the main items in RZhD's budget revenue), and in the difficulty of managing the funds to expand the planned pipeline infrastructure (according to estimates in autumn 2014, 25-26 billion roubles will be needed to expand the North pipeline). Besides, RZhD has not yet constructed the rail lines along the line to Primorsk via Vyborg–Primorsk–Yermolovo[39].

Russia's actions to date confirm that the strategy of marginalising exports via Latvian ports is being put into practice. Any escalation of tensions between Moscow and the Baltic States could contribute to an intensification

[39] Российские нефтяники ищут замену Латвии, http://www.vedomosti.ru/business/articles/2014/10/16/neftyaniki-ischut-zamenu-latvii (16 October 2015).

of this programme. This is demonstrated by Transneft's public contemplation of plans to redirect all its supplies to Russian ports. During a special meeting of a government commission in October 2014, this proposal was supported by key Russian exporters of oil-derived products, namely Rosneft, Lukoil, Surgutneftegaz, Bashneft, Tatneft and Gazpromneft.

2.2. The land route

As for Russian exports of oil-derived products to the EU via rail, the target customers include Estonia, Finland, Lithuania, Latvia, Poland, Romania, Slovakia and Hungary. This route is mostly used to export fuel oil (mostly to Lithuania; small amounts also go to Finland) and LPG (mainly to Poland and Finland).

The pipeline network is also currently used to export Russian oil to Hungary. However, the amounts are not significant and, in recent years, a steady fall in the supply has been noted (from 820,000 tonnes in 2013 to 460,000 tonnes in 2014, a decrease of 43.8%).

3. The reasons for the rise in exports of oil-derived products

The rise in Russian exports of oil-derived products onto the EU market has been caused by both internal and external considerations. The former include the Russian government's fiscal policies, and the changes on the domestic market accompanying them. The most important of the latter include the trends in the production and consumption of oil products in the EU.

One of the reasons why exports of oil products are steadily rising is **the actions of the Russian government, although these are not motivated so much by the interests of the oil sector, as by the traditional**[40] **desire to increase budget revenues in the light of the state's deteriorating financial situation.**

One particular illustration of this approach is the fiscal changes to the oil sector introduced by the government of the Russian Federation. In 2011, changes were introduced to export duties on oil-derived products: the duty on fuel oil was raised from 46.7% to 66%; in contrast, the rate of customs duty on highly-processed products – with the exception of gasoline and naphtha – was lowered

[40] Targeting specific markets, as an essential criterion for increasing budgetary revenues, has long been one of the major weaknesses of Russian fiscal policy in the oil sector. More on this topic in Konończuk, *op. cit.*, pp. 42-48.

from 67% to 66%. At the same time, a progressive decline in export duty on diesel fuel was introduced: from 66% to 65% in 2014, to 63% in 2015, and to 61% in 2016.

In an attempt to encourage producers to manufacture as much high-processed product as possible, the Government adopted a law in autumn 2014 introducing a so-called tax manoeuvre, levelling the export duty on fuel oil to that of crude oil. At the same time, the rates for high-processed product were substantially lowered; for example, the duty on diesel fuel was reduced from 48% to 30%, and that on gasoline from 78% to 30%. The most serious consequences were felt by Rosneft, Bashneft and Tatneft (these companies have experienced enormous delays in upgrading their refineries), whereas the biggest beneficiary – given the capacity of its refineries – is most likely to be Lukoil, hence the considerable resistance to the new solutions expressed by Rosneft's CEO Igor Sechin (Rosneft is the largest producer and exporter of fuel oil).

The government's fiscal policy is also clear in the context of setting the excise duty on diesel and gasoline; the authorities have set high ceilings on products which have a high sulphur content.

Table 13. Excise duties on diesel and gasoline (in thousands of roubles per tonne) and shares of fuel types in total fuel production (%)

Fuel type		2011		2012		2013		2014	
		Excise duty (thousand roubles per tonne)	Share of fuel type in total fuel production (%)	Excise duty (thousand roubles per tonne)	Share of fuel type in total fuel production (%)	Excise duty (thousand roubles per tonne)	Share of fuel type in total fuel production (%)	Excise duty (thousand roubles per tonne)	Share of fuel type in total fuel production (%)
Diesel	Class 3 (150 ppm)	2.485	10	3.814 (1st half) 4.3 (2nd half)	16	5.86	30	6.446	18
	Class 4 (50 ppm)	2.247	10	3.562	9	4.934	10	5.427	7
	Class 5 (10 ppm)	2.247	17	3.562 (1st half) 2.962 (2nd half)	25	4.334	43	4.767	58

Fuel type		2011		2012		2013		2014	
		Excise duty (thousand roubles per tonne)	Share of fuel type in total fuel production (%)	Excise duty (thousand roubles per tonne)	Share of fuel type in total fuel production (%)	Excise duty (thousand roubles per tonne)	Share of fuel type in total fuel production (%)	Excise duty (thousand roubles per tonne)	Share of fuel type in total fuel production (%)
Gasoline	Class 3	5.672	41	7.382	30	9.75	15	10.725	11
	Class 4	5.143	26	6.822	37	8.56	17	9.416	9
	Class 5	5.143	2	6.822 (1st half) 5.143 (2nd half)	25	5.143	63	5.657	75

Source: http://minenergo.gov.ru/upload/iblock/66a/66a29d8d8e1537fe12327a4dea355a5d.pdf

One consequence of the fiscal changes is an increase in the level of output from Russian refineries. The period 2011-14 has seen an increase of 12.7%. The level of investment in the refining sector has almost doubled (from 155 billion roubles in 2011 to 289.6 billion roubles in 2014)[41].

Table 14. Output from refineries in Russia during the period 2011-15 (million tonnes) and investment in the modernisation of refineries

	2011	2012	2013	2014	2015
Refineries output (million tonnes)	256.5	265.4	274.5	288.9	290
Size of investments in modernising refineries (billion roubles)	155	178	259.5	289.6	214

Source: http://minenergo.gov.ru/node/92

[41] Итоги работы ТЭК России в 2014 году. Задачи на среднесрочную перспективу, http://minenergo.gov.ru/node/92

Table 15. Production of the main oil-derived products in Russia in the period 2011-15

	2011	2012	2013	2014	2015
Gasoline	36.6	38.2	38.7	38.3	39.2
Diesel	70.6	69.4	72	77.3	76.05
Fuel oil	73.3	74.5	76.8	78.4	71.7

Source: http://minenergo.gov.ru/upload/iblock/66a/66a29d8d8e1537fe12327a4dea355a5d.pdf

The state's actual objectives are also clearly demonstrated by its tariff policy. Transneft has been consistently raising the tariffs for the transmission oil products for export via the pipeline network (the most recent increases averaged 3.5%[42]); these actually represent nearly 70% of the total products sent via Transneft's pipeline system (those intended for the domestic market amount to about 30%). At the same time, the company has been reducing its tariffs on the transportation of oil products for the domestic market, which it treats as a kind of support for local companies operating in the deteriorating economic situation.

In the case of certain oil products, the rise in exports is associated with the technical limitations of Russian refineries. This applies in particular to fuel oil, which arises as a secondary raw material during the initial processing of oil. Few Russian refineries have the technical capabilities to carry out the necessary secondary processing, which means that fuel oil still retains a significant share in total Russian exports of oil-derived products.

The increase in exports of oil-derived products is also **affected by the situation on the EU market for oil products**.

Although the largest quantitative contribution to the export of Russian oil-derived products is made by fuel oil, the product which holds most promise for the future is diesel. This is primarily seen in the increase in demand for diesel fuel

[42] These rates vary according to the specific transit route: for example, for the Slavneft refinery (whose owners are Rosneft and Gazpromneft, operating through a joint consortium) the tariff for transmission from the refinery in Yaroslavl to Primorsk was raised by 22%, and for the Moscow refinery belonging to Gazpromneft, it was raised by 7.5%. Транснефть повышает тарифы на экспорт нефтепродуктов, http://www.vedomosti.ru/business/articles/2015/05/25/593375-transneft-povishaet-tarifi-na-eksport-nefteproduktov (24 May 2015).

in the EU over recent years. Already in 2012, diesel cars made up about 65% of the total number of vehicles in the EU (according to forecasts, this figure will rise to 75% in 2035). In turn, according to forecasts by Wood Mackenzie, the diesel market in the EU may rise from 234.9 million tonnes in 2012 to 274.4 million tonnes in 2020[43]. Due to internal regulations, a significant part of overall diesel consumption in the EU is made up of low-sulphur diesel fuel (10 ppm), the total consumption of which in EU countries amounted to 207 million tonnes in 2013.

Seeing a chance to increase their market share in the EU, Russian energy companies have significantly increased their production of diesel. In 2012 Russian refineries doubled their production capacity of diesel with a low sulphur content (from 8 to 16 million tonnes per annum, which may double the export of 10 ppm diesel). The main producers are Lukoil, Gazpromneft and Surgutneftegaz.

[43] Дизельная гонка: впереди тупик?, *Нефтегазовая вертикаль*, 10/2014.

III. RUSSIAN INVESTMENTS IN OIL ASSETS ON THE EU MARKET

Regarding Russian oil activity in Europe in recent years, it is noteworthy that of the Russian energy companies present on the European market, only Rosneft has really increased its share of investments in the EU. Other companies, despite having previously declared their interest in EU assets, have withdrawn from their plans (Gazpromneft, Surgutneftegaz); some have even sold the assets they had previously acquired (Lukoil, Surgutneftegaz).

Table 16. Shares of Russian companies in refineries in the EU[44]

Company	Country	Refinery	Capacity (barrels per day)	Share owned by Russian company
Rosneft	Germany	Gelsenkirchen	265,000	100% (through Ruhr Oel)
		Schwedt	208,000	54.2% (through Ruhr Oel)
		Karlsruhe	301,000	24% (through Ruhr Oel)
		Neustadt-Vohburg	210,000	25% (through Ruhr Oel)
	Italy	Sarroch	300,000	12% of shares in the Saras company
Lukoil	Bulgaria	Burgas	194,000 (176,000)	100% of shares
	Romania	Ploiesti (Petrotel)	53,000,(50,000)	100% of shares
	Netherlands	Zeeland (Vlissingen)	71,000	45% of shares
	Italy	Isab*	320,000	80% of shares

* Purchased by Lukoil in 2008; lost US$100 million in 2012.
Author's own calculations, based on data published by FSU Argus and *Neftegazovoye obozrenie* [Нефтегазовое обозрение]

[44] Meanwhile, refinery assets in non-EU countries are owned by Gazpromneft and Zarubiezhneft. The former controls refineries in Pančevo and Novi Sad in Serbia (56.15% of shares, in the company NIS); the latter, a refinery in Bosanski Brod in Bosnia & Herzegovina (79.99% of its shares, in the company OAO NeftegazInKor). Data from http://ir.nis.eu/about-the-company/group-structure-hide/ (9 February 2015) and http://www.rafinerija.com/eng/onama.html (10 February 2015). In addition, Gazpromneft owns 322 petrol stations in Serbia, and Zarubiezhneft owns 82 in Bosnia & Herzegovina (it bought 79 stations in 2007 at a cost of US$150 million). Data from: http://www.zarubezhneft.ru/en/operations/downstream/ (9 February 2015). Gazpromneft is also the owner of an oil and lubricant plant in Bari, Italy: http://www.gazpromneft-oil.com/clients/gpn.nsf/all/m01

Rosneft has mainly expanded its investments to cover the German and Italian markets. In May 2011, the Russian group spent US$1.6 billion to acquire 50% of shares in the Ruhr Oel GmbH company (a joint venture with BP), through which it obtained stakes in four **German** refineries: Gelsenkirchen (100% of shares), PCK Raffinerie GmbH (in Schwedt, 37.5% of shares), MiRO (in Karslruhe, 24% of shares) and Bayernoil (in Neustadt-Vohburg, 25% of shares)[45]. Thanks to the acquisition of a 50% stake in the Ruhr Oel refinery, Rosneft's refinery capacity has risen by 21%. Rosneft's acquisitions in Ruhr Oel helped increase its export of oil-derived products in 2011 to countries outside the CIS by 19.2%, up to 30.41 million tonnes (without the German refineries, its export figure would have fallen by about 4%, due to the need to increase the supply of diesel and fuel oil onto the domestic market). During the St. Petersburg International Economic Forum in June 2014, Rosneft and BP agreed on the reorganisation of Ruhr Oel. As a result of this agreement, Rosneft increased its stake in Bayernoil from 12.5 to 25%, in MiRO from 12 to 24%, and in PCK Raffinerie of 18.75 to 37.5%; BP, in turn, obtained 100% of the shares in the Gelsenkirchen refinery[46].

On 28 November 2014, Rosneft's chairman Igor Sechin signed a contract with the French company Total to acquire 16.67% of the PCK Raffinerie GmbH, allowing the Russian group to increase its joint stake with Ruhr Oel GmbH in the refinery to 54.2%[47]. Ruhr Oel GmbH is the market leader in oil processing in Germany (around 21 million tonnes in 2014), and the main supplier of oil is Rosneft (supplies from the Russian company amount to around 360,000 tonnes per month). Rosneft is also still interested in modernising the Ingolstadt-Kralupy-Litvinov oil pipeline (via which oil is delivered from Germany to the Czech Republic) so that oil can flow along it in both directions, thus allowing the transit of Russian oil[48].

In June 2013, speculation appeared in Russian press sources (the newspaper *Vedomosti*) about negotiations on Rosneft's acquisition of stakes in the Polish

[45] Ruhr Oel GmbH also holds shares in five pipelines leading to the above-mentioned refineries; it is also a shareholder in oil terminals on the Baltic, the Adriatic, the North Sea and the Mediterranean.

[46] Роснефть и BP подписали соглашения в области добычи, геологоразведки и нефтепереработки, http://www.rosneft.ru/printable/news/pressrelease/190620152.html (23 June 2015).

[47] The agreement on the acquisition of shares from Total was confirmed on 19 June 2015 during the St. Petersburg International Economic Forum. The other shareholders in the Schwedt refinery are Shell (37.5%) and Eni (8.33%), http://rosneft.ru/news/pressrelease/190620155.html (23 June 2015).

[48] Saras co-operation on cards, Argus FSUE, 3 October 2013, p. 5.

oil group PKN ORLEN and the Mažeikiai refinery[49]. Although no agreement was concluded, and the report was met with a strong rebuttal by the Polish company and the Polish government (the Treasury), the emergence of this type of speculation shows that Rosneft is interested in expanding its presence in Central Europe.

In 2013 Rosneft also took a 20.99% stake in **the Italian** company Saras, which controls the Sarroch refinery located in Sardinia, one of Italy's largest (it processes 300,000 barrels per day, or about 15 million tonnes per annum). Besides this, Saras has fuel stores in Italy and Spain and a network of 124 petrol stations in southern Spain. It is true that even in October 2014 reports appeared that Rosneft was interested in continuing to increase its stake in Saras, and in June 2013 Saras and Rosneft signed an agreement to create a joint venture to trade crude oil and oil-derived products; however the plans were postponed that August, due to the deterioration of Russia's relations with the West, and in October 2015 the Russian company's representatives reported the conclusion of a contract to sell 8.99% of its stake in the Italian company[50].

Rosneft also owns (via Ruhr Oel) 11% of shares in the Tal pipeline[51] (the other shareholders are OMV [25%], Shell [24%], Eni [10%], BP [9%] and ExxonMobil [6%]).

In contrast to Rosneft, other Russian oil companies are not presently displaying any interest in investing in the region, and some are even selling off their assets.

Examples of this include the Russian group **Lukoil**, which in August 2014 announced the decision to sell 44 of its petrol stations in the Czech Republic (to the Hungarian group MOL), 19 in Slovakia, and 75 in Hungary (to the Norm Benzinkút Kft company). Their decision was related to investment concerns

[49] PKN Orlen просится под крыло Роснефти, http://www.vedomosti.ru/business/articles/2013/06/27/pkn_orlen_prositsya_pod_krylo_rosnefti (28 June 2013); Роснефть и PKN Orlen опровергли слухи о возможной сделке, http://uaenergy.com.ua/post/14690 (28 June 2013).

[50] Роснефть планирует увеличить долю в итальянской Saras, http://1prime.ru/companies/20141028/794798718.html. Rosneft has also become the largest shareholder in Pirelli, the Italian tyre manufacturer (13% of shares for €500 million euro); Роснефть договорилась о продаже 8,99% доли в компании Saras S.p.A., http://rosneft.ru/news/pressrelease/20102015.html

[51] An oil pipeline 753 km in length that runs from the Italian port of Trieste via Austria to Germany.

arising from the introduction of sanctions by the US and the EU against Russia[52]. In addition, Lukoil announced the sale of 240 petrol stations and 6 oil storage units in Ukraine to the Austrian company AMIC Energy Management GmbH[53]. In April 2015, the company Litasco – a trader for Lukoil established in 2000, which is responsible for selling 85% of the company's oil and 100% of its oil-derived products (under the total control of Lukoil) – signed a contract to sell its shares in the service terminal in Rotterdam (STR-Service Terminal Rotterdam), which has a 65,000 m^3 volume of storage space, mainly to hold fuel oil[54]. In June 2015 Lukoil also announced the sale of 100% of shares in the company Lukoil Eesti AS, which owns 37 petrol stations in Estonia[55]; and in December 2015 it announced the sale of all of its petrol stations in Lithuania and Latvia[56]. The Russian group has also withdrawn from joint renewable energy projects. On 25 June 2015 Lukoil signed a contract with ERG Renew (an Italian company) to dissolve the LUKERG Renew joint venture, created in 2011, whose aim was to develop wind energy projects in Bulgaria and Romania[57].

52 Russia's LUKoil Sells Petrol Stations in Czech Republic, Slovakia, Hungary, 5 August 2014, http://www.themoscowtimes.com/business/article/russia-s-lukoil-sells-petrol-stations-in-czech-republic-slovakia-hungary/504573.html

53 Russia's Lukoil says sells filling stations in Ukraine to AMIC, http://www.reuters.com/article/2014/07/31/russia-lukoil-ukraine-idUSL6N0Q61Q420140731 (31 July 2014).

54 Лукойл продаст сервисный терминал в Роттердаме, http://www.vedomosti.ru/business/news/2015/04/02/lukoil-prodast-servisnii-terminal-v-rotterdame (30 June 2025).

55 Лукойл объявил о продаже сети АЗС в Эстонии, http://top.rbc.ru/business/03/06/2015/556eb6209a79472fc9335492 (3 May 2015).

56 ЛУКОЙЛ продает активы в Литве и Латвии, http://interfax.com.ua/news/economic/313679.html (25 December 2015).

57 As a result of the agreement, there will be a division of assets between the shareholders: Lukoil will remain the owner of the Topolog wind power plant in Romania, whereas ERG Renew will own the wind power plants at Khrabrovo and Cherga in Bulgaria and Gebeleizis in Romania. Лукойл выходит из проектов возобновляемой энергетики в Болгарии, http://www.newsbg.ru/ekonomika/100-ekonomika/12338-lukojl-vyhodit-iz-proektov-vozobnovljaemoj-energetiki-v-bolgarii.html

Table 17. Petrol stations owned by Russian companies in Europe

Name of company	Country	Number of stations
Zarubiezhneft	Croatia	No data
Lukoil	Finland	451
	Romania	328
	Bulgaria	221
	Belgium	179
	Lithuania	119
	Poland	115
	Hungary	76
	Netherlands	76
	Latvia	56
	Czech Republic	44
	Croatia	44
	Estonia	37
	Cyprus	31
	Slovakia	16
	Italy	16

Author's own calculations

Lukoil's total investments in the EU amount to about US$8.8 billion, which includes shares (with a total value of US$6.8 billion) in four refineries: Burgas (Bulgaria), Ploiesti (Romania), Zeeland (Netherlands) and Isab (Italy) – the EU's third largest in terms of refinery capacity – and 1773 petrol stations (US$1.8 billion). From all these refineries Lukoil gained a daily capacity of 572,000 barrels, which is about 3% of the EU's total refinery capacity, and Lukoil's output from the above-mentioned refineries stand at 21.1 million tonnes. Besides, each of Lukoil's European refineries has a higher Nelson index[58] than any of its Russian refineries (ISAB 9.3; Ploiesti 10; Burgas 8.9; Zeeland 8.4).

[58] An indicator of the refinery's technological advancement.

Some of Lukoil's assets are controlled by Litasco, which owns the service terminal in Rotterdam. Besides this, Litasco is the co-owner of one of the largest oil terminals in Europe, with a capacity of 1 million m^3, through a joint venture with Spanish Meroil (set up in 2010). It was opened in April 2012.[59]

In March 2012, Litasco's CEO Sergei Chaplygin said that investments in refineries are important for Lukoil, even if only for the sake of oil projects in Iraq. He added, however, that the currently difficult situation in Europe (the drop in refinery output) means that the Russian company is not expected to increase its market shares in the near future.

Gazpromneft has also given up on its investment plans for the time being, having declared an interest in investing in oil assets in Central Europe in the years 2010-12. In 2010, the company declared an interest in acquiring a 51.19% stake in the Lotos Group (primarily in the context of the use of the oil terminal and four refineries belonging to Lotos, in Gdansk, Jasło[60], Czechowice[61]and the Glimar refinery in Gorlice[62]). Rosneft and TNK-BP also declared their interest in these assets[63]. In March 2011 reports appeared that Gazpromneft was considering the acquisition of a block of 32.44% of shares (belonging to Eni) in the Czech company CRC (Česká rafinerská, the largest crude oil company in the Czech Republic). In April 2011 there were further reports that Gazpromneft was interested in acquiring 8.3% of Eni's shares in the Schwedt refinery. Gazpromneft's aspirations resulted from the fact that its oil exports to Europe had increased, which stirred interest in increasing its processing power. TNK-BP was also interested in acquiring a stake in the Lotos group (before its own takeover by Rosneft)[64].

In September 2011, reports emerged that Gazpromneft was looking to create subsidiaries in Bosnia & Herzegovina, Romania, Bulgaria and Hungary in order

59 http://www.lukoil.ru/press_6_5div__id_21_1id_23482.html (25 June 2015).

60 The refinery in Jasło ceased processing crude on 1 November 2008. The group, which is still part of the Lotos Group, now deals exclusively with the provision of services on behalf of the Lotos Group and other actors in areas directly adjacent to it, in the field of media distribution, water and wastewater management, leases and facility management; http://www.lotos.pl/165/grupa_kapitalowa/nasze_spolki/lotos_infrastruktura

61 This refinery was converted into a terminal which is currently used for storage and distribution of fuels.

62 Currently not operational.

63 Россия готовится купить польские нефтяные активы, http://uaprom.info/news/96618-rossija-gotovitsja-privatizirovat-polskie-neftjanye-aktivy--ugmk-info-.html (20 June 2015).

64 Gazpromneft' eyes Czech refining stake, Argus FSUE, 18 March 2011, p. 5.

to increase its market share of oil products. In April 2012, there was a report that Gazpromneft was interested in investing in a 35.5% share of the Hellenic Petroleum company, which is the owner of three Greek refineries: in Thessaloniki (producing 83,000 barrels per day), Elefsis in Athens (100,000 barrels per day) and Aspropyrgos (140,000 barrels a day); these three refineries represent about two-thirds of Greece's total refinery capacity[65].

Surgutneftegaz also got rid of its refinery assets. In 2011, the company was forced to sell 21.22% of its shares in the Hungarian group MOL for about €1.88 billion (which it had bought in 2009 from the Austrian company ÖMV for €1.4 billion)[66].

Zarubiezhneft was interested in investing in petrol stations, and in the construction of an oil terminal in Omisalj, as well as in a pipeline to transport oil products between Slavonski Brod (on the border between Croatia and Bosnia & Herzegovina) and Omisalj, but in the end its planned investment there failed to amount to anything.

There is also doubt over the project to build a new oil terminal in Rotterdam proposed by the Shtandart TT B.V. consortium, whose majority shareholders are the Russian **Summa Group** and the Netherlands' VTTI company (a subsidiary of the trading company Vitol S.a.)**.** According to preliminary assumptions arising from the contract signed in October 2011 by Shtandart TT and representatives of the port of Rotterdam, the construction of the terminal (with a planned capacity of 50 million tonnes of crude oil and 12 million tonnes of oil products) should have begun in 2014, and the terminal itself handed over for use in 2016. The supposed advantage of this new terminal was that small Russian oil importers could buy the oil directly in Rotterdam, without the need to submit contracts in advance in the port of Primorsk[67]. In February 2014, however, VTTI withdrew from the consortium, which had the effect of suspending the project.

[65] In 2001-2, Lukoil and Yukos were interested in acquiring shares in the company.

[66] The transaction was the result of consistent efforts by the government of Viktor Orbán to increase control over the Hungarian national energy company MOL. In addition, the board of the Hungarian group, perceiving the transactions between Surgutneftegaz and ÖMV as a form of hostile takeover, has consistently refused to register the Russian company as a full partner. As a result, Surgutneftegaz has not had any representatives on the board, nor the right to vote at general shareholders' meetings, which has *de facto* prevented the implementation of proprietary powers. See: Hungary will buy Russian shares in MOL, *CES Analysis*, 25 May 2011, http://www.osw.waw.pl/en/publikacje/analyses/2011-05-25/hungary-will-buy-russian-shares-mol

[67] Extended reach, Argus FSU, 28 October 2011, p. 2.

IV. THE PROSPECTS FOR THE RUSSIAN PRESENCE ON THE EU OIL MARKET

The prospects for the Russian position on the EU oil market depend on the changing conditions within the EU itself, on the evolution of the situation in the Russian oil sector, and the dynamics of the development of oil cooperation between Russia and China.

1. Unclear prospects for the development of the situation on the EU oil market

The dynamics of the processes taking place on the EU energy market includes phenomena which are both beneficial and negative for Russian energy companies, with the latter predominating.

A **positive** factor for Russia is the projected drop in production of the EU's own oil, and the pessimistic forecasts for shale oil extraction in Europe. According to World Energy Outlook 2015, in the long term there will be a drop in crude oil production in Europe from 3.3 million barrels a day in 2014 (about 164.3 million tonnes per annum) to 2.2 million barrels per day in 2040 (109.5 million tonnes per annum). In turn, the decrease in profitability of European refineries (a trend which will apparently be maintained in the coming years) will lead to a drop in their value, which in turn could be an incentive for Russian investors. Some Russian oil companies (Rosneft, Lukoil) have shown an interest in transforming refinery plants into distribution centres. These could attract wholesale batches of oil-derived products, which would create opportunities for Russian producers to make more profits.

Besides, many European refineries are suited for processing Russian Urals oil, and major changes in this area would require significant financial expenditure, which in terms of the current crisis on the oil processing market in Europe is unlikely.

On the other hand, **potentially unfavourable processes** for Russian companies on the EU market are accumulating, such as the drop in demand for crude oil in the EU; increased competition among exporters of crude oil and oil products on the EU market; the indirect effects of EU and American financial and technological sanctions; and uncertain forecasts for oil prices.

The projected further **decline in oil consumption** in the EU (connected with the maintenance of negative trends in the refining sector) could lead to further

restrictions on the sale of Russian crude oil on the EU market. According to the long-term forecasts in World Energy Outlook 2015, oil consumption in the EU will fall steadily from 527.6 million tonnes in 2014, to 443 million tonnes in 2025, to 328.6 million tonnes in 2040[68].

The expected rise of competition among exporters of crude oil could also be unfavourable for Russia. Thanks to the shale revolution in the US, and falling American crude oil imports from third countries (Saudi Arabia, Nigeria, Angola[69]), as well as the increase in competition on Asian markets, it is highly likely that additional quantities of crude oil will start to reach the EU market. In the short term, the most serious challenge to Russia may come from Saudi Arabia, which is interested in entering the markets of European countries traditionally dominated by oil imported from Russia. Russian concerns have been demonstrated in statements by representatives of Russia's government and energy companies, such as the Energy Minister Alexander Novak and the chairman of Rosneft Igor Sechin[70]. Another long-term challenge could be competition from Iran. It is true that before the introduction of the EU sanctions, Iranian oil did not constitute serious competition for Russia on the EU market (the share of Iranian crude in EU imports did not exceed 7% at that time, and so was much lower than that of Russian oil, running at an average of about 30%). In the medium term, however (after 2020), particularly with the involvement of Western multinationals in Iran's upstream sector, Iran may be able to substantially increase both the production and export of crude oil. According to predictions, Iran is likely to increase its oil production from 2.7 million barrels a day in June 2015 to 4.7 million (World Energy Outlook 2015) or 4.4 million (Wood Mackenzie) barrels in 2025[71].

[68] World Energy Outlook 2015, p. 119.

[69] There is particular optimism about forecasts for the growth of oil production in Angola, for which the main outlet has traditionally been Asian countries, especially China. However, intensified competition for the Asian market with Russia and Saudi Arabia could lead to more crude from Angola becoming available on the EU market. More on the increasing competition among exporters of crude oil onto the EU market: Европейский рынок нефти: куча претендентов на место России, *Нефтегазовая вертикаль*, 17-18/2015, p. 72-79.

[70] The chairman of Rosneft has even accused Saudi Arabia of dumping, the aim of which would be to increase the share of Saudi crude on the oil market, http://www.rbc.ru/politics/14/10/2015/561e30179a794738c0e8027a

[71] More about the potential consequences for Russia of Iran's exit from international isolation: W. Rodkiewicz, S. Kardaś, The consequences for Russia of the nuclear deal with Iran, *OSW Commentary*, 4 Aug 2015. http://www.osw.waw.pl/en/publikacje/osw-commentary/2015-08-04/consequences-russia-nuclear-deal-iran

Another important challenge for Russia may turn out to be **an increase in imports of oil products from other countries, which would raise the level of competition on the EU market**. The United States is becoming Russia's biggest competitor on this market, something which is particularly clear on the market for diesel. Russia's share here, although still the largest, fell from 45% to 40% in the period 2002-12; at the same time the share of diesel coming from the US rose significantly (from 2% to 17%). This trend is likely to continue, and in the face of prospects for a rise in EU imports from countries in the Middle East and China, this strong competition would make it difficult for Russia to maintain its market share.

A very likely negative effect of an increase in imports of diesel fuel into the EU could be oversupply on the fuel market, which could make Russian exports less profitable in the long run. Besides, according to OECD projections, a slow but consistent rise in demand for gasoline (4.2% per annum) is noticeable in the EU, which in the long term could weaken the position of diesel. If Russia changes production to focus on diesel fuel, at the same time as investments to increase gasoline production remain low, this may lead to it once again reacting too slowly to dynamically evolving market trends. The forecasts for naphtha are also pessimistic. Russian exports have indeed continued to rise steadily, but signs of oversupply are already starting to appear on the EU market, which means it will be very hard for Russian companies not only to improve, but even to maintain their existing position[72].

Some Russian oil companies find themselves in more difficulties due to the **sanctions** imposed as a result of Russia's aggression on Ukraine. American technological sanctions cover all the major Russian oil companies: Rosneft, Gazpromneft, Lukoil and Surgutneftegaz. Similar technological sanctions have also been introduced by the EU, although there is no specific indication of which companies they cover. Financial sanctions (from both the United States and the EU) cover Rosneft, Gazpromneft and Transneft. The sanctions already introduced have not had any immediate negative consequences for Russian exports of oil or oil-derived products (commercial contracts are not covered by the sanctions mechanisms). However the sanctions' indirect effects may be of significance, above all by making it more difficult for Russian oil companies to obtain the foreign capital and production technology they need for their ambitious nationwide upstream projects. Yet the continuing political tension between the

[72] *Нефтегазовая вертикаль,* 2014-15, pp. 24-28.

West and Russia does not prevent Russian companies from investing in the EU (an example of this is Rosneft's new investments in German refinery assets). Nevertheless, it worsens the atmosphere for the presence of Russian capital on the EU market. This is confirmed by the words of Vagit Alekperov, the head of Lukoil, who admitted that the anti-Russian sanctions were one of the reasons for his company's withdrawal from trading in liquid fuels in EU countries.

2. The domestic factor

The structural economic difficulties in Russia, which have been deepened by increased political tension in relations with the West, make it difficult to formulate predictions about the development prospects for the Russian oil sector.

First and foremost, the medium- and long-term prospects for the upstream sector are unclear. In 2014 the amount extracted produced came to 526 million tonnes, or about 21 million tonnes more than provided for in the General Scheme for the development of the oil sector to 2020[73]. The uncertainty on the global oil market means that there are important differences among forecasts for oil production in Russia[74]. According to the preliminary assumptions of the Russian Energy Strategy to 2035, production in 2035 must remain at 515-535 million tonnes per annum, whereas according to the International Energy Agency (IEA) the figure must run at about 600 million tonnes per annum; according to OPEC it should be about 570 million tonnes, and according to the IEA the figure should be 495 million tonnes per annum. These differences in evaluations have links to both the uncertainty of demand for Russian crude oil on external markets, and to doubts as to whether Russian oil companies will be able to exploit new fields, which would require significant financial and technological investments.

The so-called tax manoeuvre (see chapter II, section 3) which came into force from 1 January 2015, may have two-fold implications for the export of Russian oil and oil-derived products onto the EU market. The new regulation was intended

[73] Генеральная схема развития нефтяной отрасли Российской Федерации до 2020 года, утвержденная приказом Минэнерго России от 6 июня 2011 г., № 212.

[74] The result of this precarious situation is a series of delays in preparing strategic documents relating to the energy sector: the *Energy Strategy for Russia to 2035* (which was to have been adopted in 2014, then the decision was put off until autumn 2015, and in December 2015 Russia's energy minister Alexander Novak reported that the document would be accepted no earlier than spring 2016); and the *General Scheme for the Development of the Oil Sector by 2030* (which should have been adopted in autumn 2015, but was not).

to bring measurable financial benefits to the oil companies: according to estimates by the Moscow Oil & Gas Institute, a total of around US$2 billion at a price of $80 per barrel of crude; US$6 billion dollars at a price of $110 per barrel. However, the drastic fall in oil prices (from $113 in June 2014 to $30 in January 2016) may mean not just the absence of the expected profits, but even losses for the Russian producers. The same applies to oil products, where the production costs will rise significantly together with the introduction of the tax manoeuvre. The consequences of the tax manoeuvre may be particularly acute for Rosneft, the largest Russian exporter of crude oil and oil products. In addition, Rosneft found itself on the list of EU and US sanctions, making it difficult to acquire foreign capital, which among other things would have helped to cover the costs of upgrading its refineries (Rosneft's refineries are some of the oldest in Russia). The sense of uncertainty is also reinforced by discussions on fiscal changes, including the introduction of the so-called tax on financial results (initially this was only applied to selected pilot projects).

Most forecasts indicate an increase in refineries output in Russia in the medium-term (to 2020). According to the Platts agency, Russian production should rise: diesel from 70 million tonnes in 2010 up to 90 million tonnes by 2020; gasoline from 36 million tonnes in 2010 to 50 million tonnes in 2020. At the same time there will be a significant decline in the production of fuel oil (from 70 million tonnes in 2010 to 25 million tonnes in 2020)[75]. However, it remains unclear whether, in conditions of the new fiscal regulations and the current economic difficulties, Russia's refineries will continue to modernise at the same pace.

3. Today Europe, tomorrow Asia?

In the medium term (to 2020), the negative trend in the export of crude oil to the EU observed over recent years could be stopped, and even slightly reversed. This is well illustrated by the figures on Russian oil exports for the year 2015 (an increase of 8% compared to the similar period in 2014), mainly due to the increase in the volume transmitted via the Druzhba pipeline (6.8%, in comparison with 2014). This mainly consists of a rise in the volume of crude oil sent to Germany via the Northern branch of the Druzhba pipeline, which is confirmed by the figures for the 2015 (16.5 million tonnes in 2014; 19.7 million tonnes in 2015). This trend is also demonstrated by the actions taken by Russian companies, mainly Rosneft, such as the following: direct contracts

[75] *Нефтегазовая вертикаль*, 2014-15, pp. 24-28.

agreed with European customers to ensure deliveries to refineries in Germany; investment in German oil assets; and the actions taken by the Russian government to maintain Russia's position on the European market, including in Central Europe. One illustration of this is the Slovak-Russian 15-year intergovernmental agreement, signed on 5 December 2014, providing for the supply of oil to Slovakia at 6 million tonnes per annum, and the same amount in transit via Slovakian territory.

There is a certain risk of more noticeable restrictions on supplies via the Southern branch of the Druzhba pipeline, associated with the possible further erosion of political and economic relations between Russia and Ukraine. It is true that even in March 2014, Nikolay Tokarev, the chairman of Transneft (the owner and operator of the Russian pipeline network), claimed that oil transit via Ukraine would not be affected, but then in May 2014, and then in August the same year, another representative of the government, Igor Dyomin, noted that Russia could redirect supplies via Druzhba's Southern branch to its Northern branch, and also to the Russian Baltic ports of Ust-Luga and Primorsk. Russia may use Ukraine's domestic actions as a pretext, such as for example Kiev's announcement on 2 December 2014 that it would raise the transit fares on the Druzhba oil pipeline by 9%. However, it should be noted that redirecting supplies from Druzhba's Southern branch to its Northern branch – if Russia wants to continue supplying the Czech Republic, Slovakia and Hungary – would not currently be possible; the appropriate infrastructure that would allow supplies to the Czech Republic of oil via the Northern branch of Druzhba is lacking. Any change in the strategies of certain companies that regularly raise the level of processing at their own refineries in Russia (such as Lukoil) could lead to a reduction in deliveries.

In the long term, however, we should expect a more significant drop in supplies of crude oil to the EU. This is principally confirmed by forecasts from global institutions analysing the energy markets, which speak of declining demand for crude oil in the EU's member states. The World Energy Outlook 2015 report indicates that during the period 2014-2040, consumption in the EU is expected to fall by almost 40% (from 10.6 to 6.6 million barrels per day)[76]. The drop in the European share of total Russian oil exports was forecast in the plan for the new *Energy Strategy for Russia to 2035*, originally published in January 2014: exports to Europe (both the EU and other European countries) were not

[76] World Energy Outlook 2015, p. 119.

to exceed 60%, and those to Asia were to rise to 32%. The revised version of the draft strategy, published in September 2015, calls for an increase of 1.8-2.2 times in the volume of Russian crude oil exports to Asian countries, which would mean Asia's share of Russian crude oil exports would reach a level of 43-45%[77].

Much more pessimistic scenarios for Russian oil exports, especially in relation to the European markets, have been presented by the experts of the Russian Academy of Sciences. According to their forecasts of energy development for Russia and the world until 2040 (published in 2014), Russian crude oil export to the EU will drop from 160 million tonnes in 2015 to 83 million tonnes in 2040, which will particularly affect oil supplies by sea (estimated at just 35-40 million tonnes in 2040)[78]. A negative long-term trend in the crude oil market is also indicated by the representatives of the Russian oil companies, including Nikolay Tokarev, the CEO of Transneft[79].

It is thus very likely that shrinking crude oil supplies to the EU will be compensated for by a steady increase in exports to Asian countries, mainly China. Firstly, this will arise from the need to meet existing commitments, mainly those undertaken by the state-owned group Rosneft. These include the contract concluded by Rosneft and the CNPC in June 2013, to supply 365 million tonnes of oil over 25 years, providing for regular increases in supply: 15.8 million tonnes in 2013, 17.2 million tonnes in 2014, 20 million tonnes in the period 2015-17, and 30 million tonnes per annum in the period 2018-2030[80]; the memorandum of understanding with Sinopec from 2013, providing for the signing of a contract to supply 100 million tonnes of oil in 10 years[81]; and a ten-year contract with the Indian company Essar, signed on 8 July 2015, to supply 10 million tonnes

77 Энергетическая стратегия России на период до 2035 года (проект), version published in January 2014: http://minenergo.gov.ru/upload/iblock/621/621d81f0fb5a11919f912bfafb3248d6.pdf; for the version from September 2015, see http://minenergo.gov.ru/upload/iblock/43e/proekt-energeticheskoy-strategii-rossii-na-period-do-2035.pdf

78 Прогноз развития энергетики мира и России до 2040 года, p. 138-139, http://www.eriras.ru/files/forecast_2040.pdf (30 April 2015).

79 Меньше нефти на экспорт, http://www.vedomosti.ru/newspaper/articles/2014/01/14/menshe-nefti-na-eksport (15 January 2015).

80 «Роснефть» и CNPC подписали соглашения о поставках нефти, http://www.rosneft.ru/news/pressrelease/210620139.html (21 June 2013).

81 «Роснефть» и Sinopec согласовали Меморандум в отношении заключения экспортного контракта на условиях предоплаты, http://www.rosneft.ru/news/pressrelease/221020132.html (22 October 2013).

of oil per annum[82]. Secondly, the long-term forecasts of crude oil consumption in Asia are very beneficial for exporters. In the period 2013-2040 demand for crude oil is projected to rise by more than 70% (up to 1.6678 billion tonnes in 2040), and in China alone by around 60% (up to 781.6 million tonnes in 2040). Taking into account the anticipated fall in Asian countries' domestic production, from 393.3 million tonnes in 2013 to 288.7 million tonnes in 2040 (including China, from 214.1 million tonnes to 169.3 million tonnes), Asia's dynamically rising demand will mainly be covered by imported oil (details in table 18).

Table 18. Forecasts of production and consumption of crude oil in Asia (million tonnes)

		2013	2020	2025	2030	2035	2040
Japan	Consumption	219	184.2	164.3	149.4	139.4	129.4
	Domestic production	-	-	-	-	-	-
China	Consumption	487.9	597.4	692	751.7	776.6	781.6
	Domestic production	214.1	219.1	204.1	189.2	179.3	169.3
Total Asia	Consumption	980.7	1189.8	1349.2	1493.5	1593.1	1667.8
	Domestic production	393.3	378.4	343.5	318.6	303.7	288.7

Author's own calculations, based on data published in World Energy Outlook 2014.

On its way to implementing these ambitious plans, Russia will have to confront several major challenges. These include the need to expand its infrastructure, to maintain the growth rate of oil production in the eastern part of the country, and to compete with other countries exporting oil onto Asian markets.

Regarding the infrastructure used to export oil onto the Asian markets, Russian companies can currently transmit crude oil via the Eastern Siberia-Pacific Ocean pipelines: ESPO-1 (Taishet-Skovorodino; original capacity 50 million tonnes) and ESPO-2 (Skovorodino-Kozmino; original capacity 30 million tonnes). In December 2014, the chairman of Transneft reported that the ESPO's

[82] The agreement also provides for Rosneft to acquire a 49% stake in the Indian Wadinar refinery (capacity of 20 million tonnes). '«Роснефть» и Essar расширяют комплексное сотрудничество', http://rosneft.ru/news/pressrelease/08072015.html (8 July 2015).

capacity along first section would be expanded from 50 to 58 million tonnes. The existing capacity is insufficient in the context of the above-mentioned plans (mainly by Rosneft) to increase crude oil exports. In 2015 the port of Kozmino reached its maximum possible export capacity[83]; meanwhile, it will not be possible to increase oil transit to China via a branch of the ESPO pipeline (Skovorodino-Mohe), due to delays in the construction work on the Chinese side[84].

In accordance with the earlier provisions, there is a plan to increase the capacity of the existing infrastructure by 2020: that of the Taishet-Skovorodino section to 80 million tonnes, and that of the Skovorodino-Kozmino section to 50 million tonnes. The cost of the project was estimated at 172 billion roubles (about US$3 billion) in February 2014. It is true that the decline in oil prices and the limited ability to raise external capital due to the sanctions could to a certain extent hinder the implementation of the investment plans; however, the fact that energy cooperation with China is a high priority for Russia, and has the political support of Vladimir Putin, allows us to assume that any financial difficulties will be overcome, and that the oil infrastructure projects will be carried out.

It will be a major challenge to maintain the growth in the rate of oil production in the eastern part of Russia, in conditions of low oil prices. The initial plan in the *Energy Strategy for Russia to 2035*, published in January 2015, did provide for an increase in the participation of Eastern Siberia and the Far East in oil production in Russia, from 7% in 2010 to 20% in 2035 (that is, from 35 million tonnes per annum to 94-106 million tonnes per annum). These forecasts, however, were made at a time when the price of a barrel of crude was about $106 (January 2014). In the beginning of 2016 the price of barrel of oil fell below $30, which makes the long-term forecasts of a rise in production, including the exploitation of new fields in the eastern part of Russia, highly unrealistic.

[83] The port's current capacity is about 30 million tonnes. Rosneft will be forced to take up negotiations on the acquisition of additional export quotas granted by Transneft to Lukoil and Surgutneftegaz (1.4 million and 500,000 tonnes). Роснефти для поставок в Китай нужен весь объем ВСТО, http://www.kommersant.ru/doc/2655227 (28 January 2015).

[84] This is the version presented by Russia, including the CEO of Transneft, Nikolai Tokariev. In accordance with the agreements with the CNPC, Rosneft is obliged to increase its 2015 exports to China by 5 million tonnes. The original plan was to increase the shipment of oil via the Skovorodino-Mohe pipeline (a branch of the ESPO pipeline). However, a real increase in supply will not be possible in 2015 due to uncompleted work on the Chinese side. Any increase in deliveries will thus only be possible via the port of Kozmino.

The *Strategy*'s assumptions show that Western Siberia will remain the main region of oil production. Although the Western Siberian fields could potentially be a source of growth in exports to Asian markets, this would require a significant investment in pipeline infrastructure, which combined with the cost of transmitting the oil from West to East, would render such a move uneconomic.

Another **challenge may be the need for Russia to compete with other oil--exporting countries on Asian markets**. It is true that by 2015 Russia had moved ahead of the other countries exporting oil to China, even leaving Saudi Arabia (hitherto the Chinese market's main supplier) behind in the rankings; in the long term, however, the situation could change. Falling exports onto the American market and a drop in supplies to the shrinking European market could encourage suppliers from Africa or the Middle East to increase their oil sales to Asian markets. Competition for customers in Asia could lead to a reduction in prices, which may reduce the profitability of Russian exports.

As for exports of oil products, quantitative falls in supply drops are forecast for the EU market, both in the medium and long term, while the key importance of the European market in total exports of oil products continues.

According to the *Forecast of energy development for Russia and the world to 2040*, exports of oil products to the EU will fall from 114.2 million tonnes in 2014 to 84 million tonnes in 2020 and 64 million tonnes in 2040[85]. The decline of oil product export to Europe will not be replaced by oil products export to Asia. This is illustrated by the data for the period 2011-14 indicating the systematic decline in transit via Russia's Far East ports (from 9.4 million tonnes in 2011 to around 6.7 million tonnes in 2014). In particular, this applies to fuel oil (a drop of 46%, to 1.5 million tonnes per annum); meanwhile exports of diesel have risen, albeit slightly (an increase in 2014 of about 18.5%, to 3.7 million tonnes per annum). This negative trend in oil products export to Asia is set to continue in the long term: 4 million tonnes in 2020, 2 million tonnes in 2040[86].

[85] 'Прогноз развития энергетики мира и России до 2040 года', p. 139, http://www.eriras.ru/files/forecast_2040.pdf (30 April 2015).

[86] *Ibid*.

Table 19. Russian exports of oil products via ports in the far east of Russia in the period 2011-14 (million tonnes)

	2011	2012	2013	2014
Nakhodka	5.7	5.35	5.21	5.44
Slavianka	1.05	0.95	0.95	0.25
Vanino	2.65	2.37	1.98	1.04
Total	**9.4**	**8.67**	**8.14**	**6.73**

Author's own calculations, based on data published by the FSU Argus.

***

This analysis of the Russian presence on the EU oil market during the period 2011-15 shows that this is the beginning of a transitional period, which in the long term will lead to a significant limitation of the role of the EU market in Russian oil exports, arising mainly from changes in market conditions in the EU. This means that in the current environment, Russian companies will operate on the basis that they will continue to own what they already have, and will boost their presence on Asian markets, the importance of which will rise steadily. The scale of this increase, however, will depend on whether Russia can maintain the momentum of growth in the volume of crude oil it exports onto Asian markets; this may be difficult, in terms of the current internal and external challenges, in particular in the context of a downturn in the world market price of oil. It is therefore possible that instead of the importance of European and Asian exports of Russian oil becoming equal, as predicted by some, there will on the one hand be a fall in exports to Europe, in parallel with a regular, but not as significant, rise in deliveries to Asia on the other.

However, taking into account the negative prospects for the development of the situation on Russia's traditional European market for oil, reorienting exports to Asia is becoming more and more an expression not so much of a political choice (although the political & economic *pivot* to the East announced by the Kremlin is important in this respect), as of an economic necessity.

SZYMON KARDAŚ