EU imports of energy products - recent developments

Statistics Explained

Data extracted in April 2017. Planned article update: September 2017.

This article provides a picture of trade in energy products between the European Union (EU) and the rest of the world (extra-EU trade), and between the Member States (intra-EU trade). A special focus is given to Russia as the main supplier of petroleum oils and natural gas to the EU. Coal, lignite, peat and coke are the other key energy products considered hereafter.

Annual data from 2010 up to 2016 are included, thus reflecting the most recent developments. Priority was given to trade in value (expressed in millions of euros) and net mass (weight without packaging expressed in tonnes). Supplementary information like trade in terajoules for natural gas can be found in Eurostat databases.

Trade in energy products being very sensitive, real trade figures may need to be made confidential. In the context of this article, Eurostat has carried out some estimation in order to provide more accurate information while not disclosing confidential figures. Note that those estimated data cannot be retrieved from Eurostat databases or found in other publications. When going through the figures, it should also be kept in mind that confidentiality treatments may impact the data consistency. In particular, total values may slightly diverge from the sum of their subcomponents.

Main statistical findings

With the exception of peat and coke, the European Union is a net importer (imports higher than exports) of energy products. Crude oil largely dominates the EU imports in energy products with a share of 68 % in 2016, followed by natural gas in gaseous state with a share of 21 % in 2016. Both almost equal to the shares they had in 2015.

The EU energy bill has been continuously decreasing over the years since the peak recorded in 2012. This constant decrease is mainly due to the fall in prices as the imports in net mass remained relatively stable over the same period only falling slightly from 80 million tonnes in 2012 to 74 million tonnes in 2016.

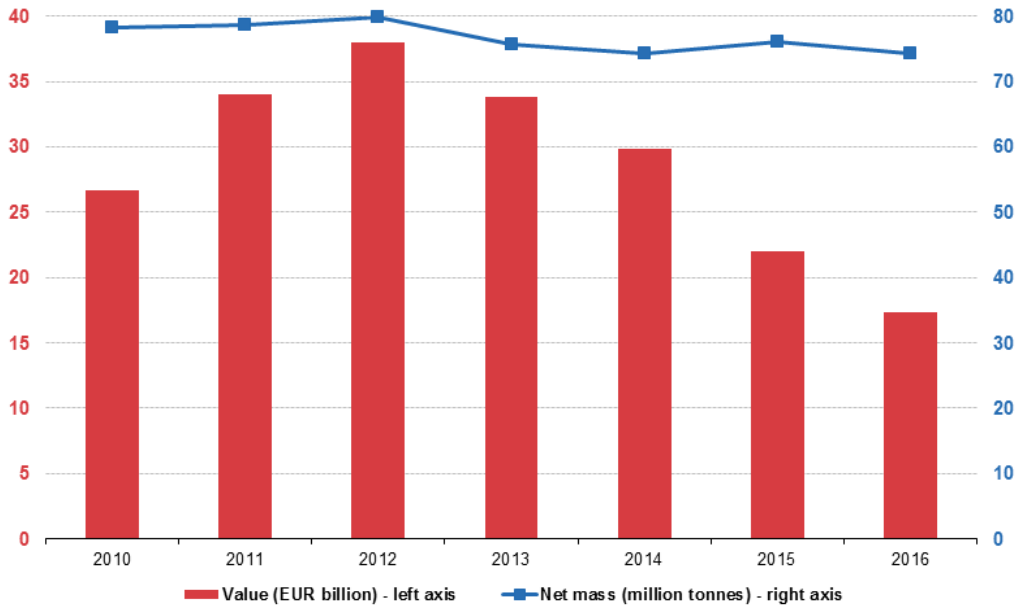

Figure 1: Extra-EU imports of energy products, monthly averages, 2010-2016

The figures for 2016 confirmed the downward trend of the energy bill (Figure 1). The average monthly value of imports in energy products fell by 21 % compared with 2015 (from 22.0 billion per month to 17.3 billion). Compared with 2012, the energy bill decreased by 54 %, from 38.0 billion per month to 17.3 billion, which means an average annual reduction of about 18 % over the period 2012-2016.As regards the origin of the energy products, Russia remains the largest supplier of natural gas and petroleum oil to the EU, ahead of Norway. In 2016, its share in the EU imports of natural gas stood at 38.2 % (37.5 % in 2015) and its share in EU imports of petroleum oil at 29.2 % (32.5 % in 2015).

Main suppliers of natural gas and petroleum oils to the EU

Figure 2 shows that crude oil is by far the largest imported energy product (68.5 % of total EU energy imports in 2016) ahead of natural gas in gaseous state (21.3 %).

Energy products	Value (billion EUR)		Net mass (million tonnes)		Share (%) of value in total	
	Extra-EU Imports	Extra-EU Exports	Extra-EU Imports	Extra-EU Exports	Extra-EU Imports	Extra-EU Exports
27090010: PETROLEUM OILS FROM NATURAL GAS CONDENSATES	3.2	0.0	8.0	0.0	1.2	0.0
27090090: PETROLEUM OILS AND OILS OBTAINED FROM BITUMINOUS MINERALS, CRUDE	178.4	3.7	507.3	10.0	67.6	59.5
27111100: NATURAL GAS, LIQUEFIED	9.1	0.7	30.0	1.9	3.4	11.0
27112100: NATURAL GAS IN GASEOUS STATE	56.5	1.0	184.8	2.8	21.4	15.7
2701: COAL	12.5	0.2	168.6	2.0	4.8	3.2
2702: LIGNITE	0.0	0.0	0.5	0.6	0.0	0.3
2703: PEAT	0.0	0.2	0.3	1.0	0.0	2.4
2704: COKE	0.3	0.4	1.2	1.4	0.1	5.8
TOTAL	263.9	6.2	913.9	20.0	100.0	100.0

Table 1a: Extra-EU imports and exports of energy products, 2015

Energy products	Value (billion EUR)		Net mass (million tonnes)		Share (%) of value in total	
	Extra-EU Imports	Extra-EU Exports	Extra-EU Imports	Extra-EU Exports	Extra-EU Imports	Extra-EU Exports
27090010: PETROLEUM OILS FROM NATURAL GAS CONDENSATES	2.5	0.0	7.4	0.1	1.2	0.5
27090090: PETROLEUM OILS AND OILS OBTAINED FROM BITUMINOUS MINERALS, CRUDE	142.4	3.7	498.5	11.8	68.5	63.5
27111100: NATURAL GAS, LIQUEFIED	5.4	0.3	25.5	1.2	2.6	4.5
27112100: NATURAL GAS IN GASEOUS STATE	44.4	0.7	200.3	2.8	21.3	12.5
2701: COAL	10.2	0.2	146.2	3.0	4.9	4.2
2702: LIGNITE	0.0	0.0	0.5	0.2	0.0	0.2
2703: PEAT	0.0	0.2	0.3	1.1	0.0	3.0
2704: COKE	0.3	0.4	1.3	1.8	0.1	7.6
TOTAL	207.9	5.8	892.8	23.0	100.0	100.0

Table 1b: Extra-EU imports and exports of energy products, 2016

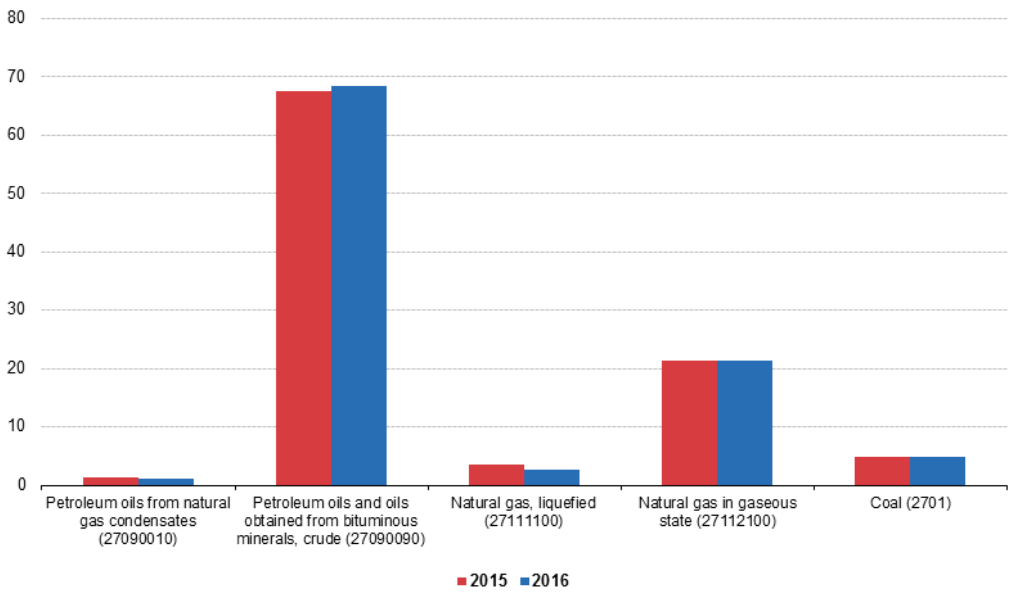

Figure 2: Share (%) of each product in extra-EU imports in energy, 2015 and 2016, trade in value

Table 2a and 2b show that Russia was the largest supplier of natural gas to the EU, both in 2015 and 2016, and that the only other partners with a significant share in total extra-EU imports were Norway and Algeria. The global share of all the other countries exporting natural gas to the EU was about 14 % in 2015 and 11 % in 2016 in terms of trade value.

Partner	Value (Share %)	Net mass (Share %)
Russia	39.1	37.5
Norway	34.8	37.3
Algeria	11.6	10.6
Qatar	7.9	8.3
Libya	2.6	2.3
Nigeria	1.7	1.7
Others	2.3	2.3

Table 2a: Extra-EU imports of natural gas, shares (%) of main trading partners, 2015

Partner	Value (Share %)	Net mass (Share %)
Russia	39.7	38.2
Norway	34.1	35.8
Algeria	15.2	14.3
Qatar	5.1	5.8
Nigeria	2.1	2.1
Libya	1.4	1.5
Others	2.4	2.3

Table 2b: Extra-EU imports of natural gas, shares (%) of main trading partners, 2016

Compared with natural gas, Table 3a and 3b show that the market of supplies of petroleum oils to the EU is split between a larger number of competitors. Russia was then less dominant but still far ahead of the second largest supplier, Norway. In addition, its share rose by 3.4 points in 2016 compared with 2015, from 28.4 % to 31.8 %.

Partner	Value (Share %)	Net mass (Share %)
Russia	28.4	29.2
Norway	12.6	11.9
Nigeria	9.0	8.5
Kazakhstan	7.5	7.0
Saudi Arabia	7.0	7.0
Iraq	6.6	7.7
Azerbaijan	5.7	5.3
Algeria	5.5	4.9
Angola	3.6	3.6
Libyan Arab Jamahiriya	2.7	2.6
Mexico	2.1	2.4
Egypt	1.6	1.5
Kuwait	1.2	1.3
Others	6.5	7.1

Table 3a: Extra-EU imports of petroleum oils, shares (%) of main trading partners, 2015

Partner	Value (Share %)	Net mass (Share %)
Russia	31.8	32.5
Norway	13.4	12.8
Kazakhstan	7.2	6.9
Iraq	7.1	7.7
Saudi Arabia	6.8	6.9
Nigeria	5.9	5.8
Azerbaijan	5.0	4.8
Algeria	3.8	3.4
Iran	2.9	2.9
Angola	2.5	2.5
Libyan Arab Jamahiriya	2.4	2.3
Mexico	2.1	2.3
Egypt	1.5	1.4
Others	7.6	7.8

Table 3b: Extra-EU imports of petroleum oils, shares (%) of main trading partners, 2016

Trend in extra-EU imports of energy products

Tables 4a and 5a show the EU imports from the rest of the world and from Russia expressed in value and net mass. In both cases, the trade in energy products increased from 2010 to 2012 and dropped since then. The share of Russia (Table 6a) fell from 35 % to 29 % between 2013 and 2015 but increased to 32 % in 2016. If excluding peat in which trade is negligible, in 2016 the share of Russia was the highest for the imports in natural gas in gaseous state (46 %), crude oil (32 %) and coal (31 %). For both crude oil (+ 3 points) and coal (+2 points), the shares were slightly up compared with 2015, while the share in natural gas in gaseous state remained stable.

Energy products	2010	2011	2012	2013	2014	2015	2016
27090010: PETROLEUM OILS FROM NATURAL GAS CONDENSATES	4.9	6.5	6.8	7.3	5.6	3.2	2.5
27090090: PETROLEUM OILS AND OILS OBTAINED FROM BITUMINOUS MINERALS, CRUDE	226.2	290.6	332.6	295.4	263.4	178.4	142.4
27111100: NATURAL GAS, LIQUEFIED	12.7	17.0	14.2	10.7	9.7	9.1	5.4
27112100: NATURAL GAS IN GASEOUS STATE	58.3	68.4	78.3	74.1	61.0	56.5	44.4
2701: COAL	15.4	20.9	19.8	15.8	14.1	12.5	10.2
2702: LIGNITE	0.1	0.1	0.1	0.1	0.0	0.0	0.0
2703: PEAT	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2704: COKE	0.4	0.4	0.2	0.4	0.3	0.3	0.3
TOTAL	321.9	409.3	457.0	406.9	357.7	263.9	207.9

Table 4a: Extra-EU imports of energy products, 2010-2016, trade in value (EUR billion)

Energy products	2010	2011	2012	2013	2014	2015	2016
27090010: PETROLEUM OILS FROM NATURAL GAS CONDENSATES	0.4	0.9	0.6	0.7	0.5	0.4	0.3
27090090: PETROLEUM OILS AND OILS OBTAINED FROM BITUMINOUS MINERALS, CRUDE	78.0	99.4	109.9	98.9	79.4	51.3	45.8
27111100: NATURAL GAS, LIQUEFIED	0.0	0.0	0.0	0.0	0.0	0.1	0.0
27112100: NATURAL GAS IN GASEOUS STATE	27.9	33.0	34.3	36.2	29.9	26.2	20.4
2701: COAL	3.6	4.7	4.9	4.5	4.2	3.7	3.2
2702: LIGNITE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2703: PEAT	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2704: COKE	0.1	0.1	0.1	0.0	0.1	0.1	0.1
TOTAL	110.1	138.5	149.9	140.4	114.1	81.8	69.9

Table 5a: EU-28 imports of energy products from Russia, 2010-2016, trade in value (EUR billion)

Energy products	2010	2011	2012	2013	2014	2015	2016
27090010: PETROLEUM OILS FROM NATURAL GAS CONDENSATES	9	13	9	10	8	11	12
27090090: PETROLEUM OILS AND OILS OBTAINED FROM BITUMINOUS MINERALS, CRUDE	35	34	33	34	30	29	32
27111100: NATURAL GAS, LIQUEFIED	0	0	0	0	0	1	0
27112100: NATURAL GAS IN GASEOUS STATE	48	48	44	49	49	46	46
2701: COAL	24	22	25	28	30	29	31
2702: LIGNITE	20	17	13	17	25	0	25
2703: PEAT	0	0	0	0	0	0	50
2704: COKE	21	18	27	11	18	18	19
TOTAL	34	34	33	35	32	31	34

Table 6a: Share (%) of Russia in extra-EU imports of energy products, 2010-2016, trade in value

Tables 4b and 5b show comparable results, but considering the EU imports expressed in net mass. In 2016, the shares of Russia in the EU imports of the three main products (Table 6b) were 44 % for natural gas in gaseous state, 34 % for coal and 33 % for crude oil, thus showing only small differences with the shares derived from the trade in value.

Energy products	2010	2011	2012	2013	2014	2015	2016
27090010: PETROLEUM OILS FROM NATURAL GAS CONDENSATES	9.4	9.8	9.4	10.8	9.0	8.0	7.4
27090090: PETROLEUM OILS AND OILS OBTAINED FROM BITUMINOUS MINERALS, CRUDE	513.2	496.7	516.7	486.9	477.9	507.3	498.5
27111100: NATURAL GAS, LIQUEFIED	46.7	49.4	35.9	27.0	27.2	30.0	25.5
27112100: NATURAL GAS IN GASEOUS STATE	193.3	185.3	183.9	180.4	172.8	184.8	200.3
2701: COAL	151.3	163.5	180.0	185.4	181.3	168.6	146.2
2702: LIGNITE	0.8	0.8	0.8	0.7	0.6	0.5	0.5
2703: PEAT	0.5	0.5	0.5	0.3	0.3	0.3	0.3
2704: COKE	1.5	1.1	0.7	1.3	1.0	1.2	1.3
TOTAL	937.7	926.3	945.4	903.4	882.3	913.9	892.8

Table 4b: Extra-EU imports of energy products, 2010-2016, trade in net mass (million tonnes)

Energy products	2010	2011	2012	2013	2014	2015	2016
27090010: PETROLEUM OILS FROM NATURAL GAS CONDENSATES	0.9	1.3	0.8	1.1	0.8	0.9	0.9
27090090: PETROLEUM OILS AND OILS OBTAINED FROM BITUMINOUS MINERALS, CRUDE	179.1	171.5	172.6	165.5	145.7	149.8	163.7
27111100: NATURAL GAS, LIQUEFIED	0.0	0.0	0.0	0.0	0.0	0.3	0.0
27112100: NATURAL GAS IN GASEOUS STATE	85.0	84.3	77.6	84.3	79.8	82.0	89.0
2701: COAL	45.1	43.2	51.5	56.8	57.3	52.7	49.0
2702: LIGNITE	0.2	0.1	0.1	0.1	0.2	0.1	0.1
2703: PEAT	0.1	0.0	0.0	0.0	0.0	0.1	0.1
2704: COKE	0.3	0.2	0.2	0.2	0.2	0.2	0.4
TOTAL	312.1	305.0	304.1	309.9	285.9	287.7	305.1

Table 5b: EU-28 imports of energy products from Russia, 2010-2016, trade in net mass (million tonnes)

Energy products	2010	2011	2012	2013	2014	2015	2016
27090010: PETROLEUM OILS FROM NATURAL GAS CONDENSATES	9	13	9	10	8	11	13
27090090: PETROLEUM OILS AND OILS OBTAINED FROM BITUMINOUS MINERALS, CRUDE	35	35	33	34	31	30	33
27111100: NATURAL GAS, LIQUEFIED	0	0	0	0	0	1	0
27112100: NATURAL GAS IN GASEOUS STATE	44	46	42	47	46	44	44
2701: COAL	30	26	29	31	32	31	34
2702: LIGNITE	20	14	11	12	27	14	23
2703: PEAT	10	6	6	12	16	22	22
2704: COKE	23	17	28	14	22	20	26
TOTAL	33	33	32	34	32	32	34

Table 6b: Share (%) of Russia in extra-EU imports of energy products, 2010-2016, trade in net mass

In Figure 3 the trade value and net mass of natural gas are compared, showing that while the net mass remained relatively stable, the trade value fluctuated more. It reached a peak in 2012 and then sharply declined following a fall in prices for natural gas. The same pattern can be seen for petroleum oils in Figure 4.

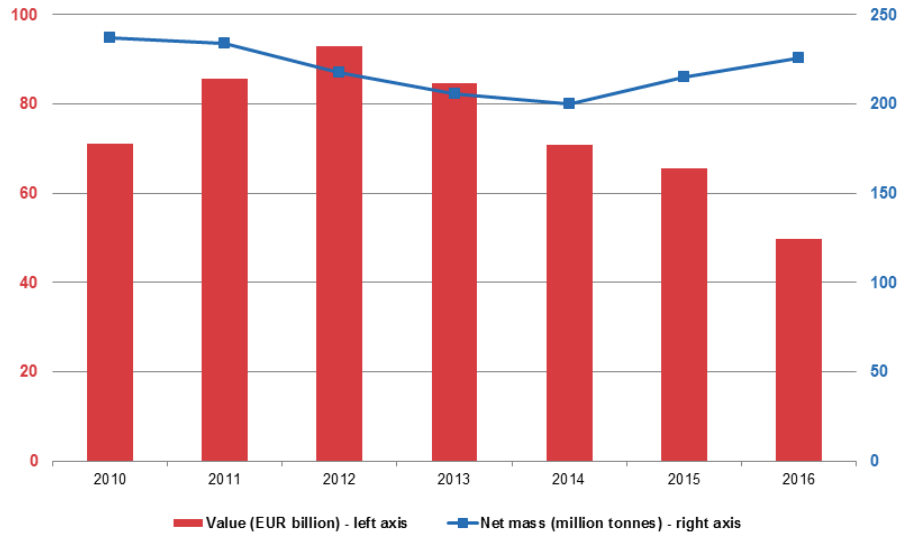

Figure 3: Extra-EU imports of natural gas, 2010-2016

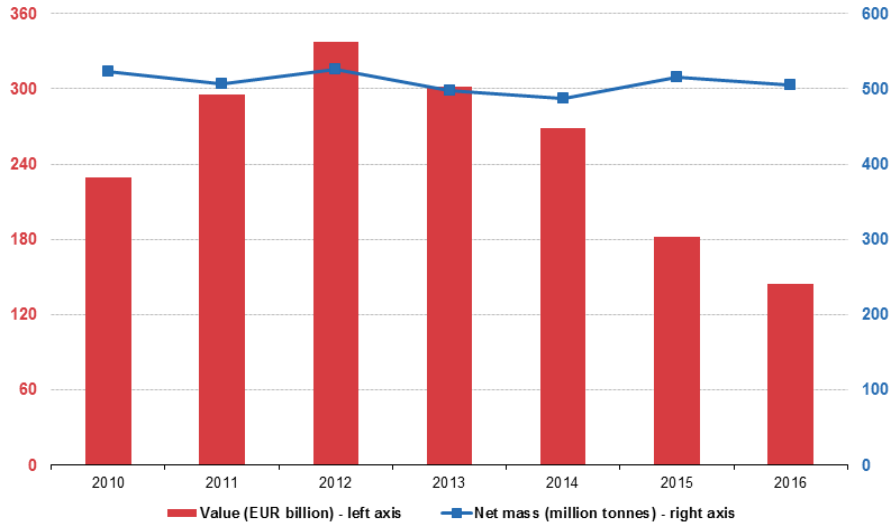

Figure 4: Extra-EU imports of petroleum oils, 2010-2016

The average monthly figures by year, displayed in Table 4c show that value and net mass for petroleum oils has fallen in 2016. For natural gas, the net mass slightly increased while the value decreased. In the total of these energy products both net mass and value decreased. The exact amount of these changes from year to year can be seen in Table 4d.

Energy products	Indicator	2010	2011	2012	2013	2014	2015	2016
Petroleum oils (crude and NLG)	Value (EUR billion)	19.3	24.8	28.3	25.2	22.4	15.1	12.1
	Net mass (million tonnes)	43.6	42.2	43.8	41.5	40.6	42.9	42.2
Natural gas (liquefied and gaseous state)	Value (EUR billion)	5.9	7.1	7.7	7.1	5.9	5.5	4.2
	Net mass (million tonnes)	20.0	19.6	18.3	17.3	16.7	17.9	18.8
Total	Value (EUR billion)	26.8	34.1	38.1	33.9	29.8	22.0	17.3
	Net mass (million tonnes)	78.1	77.2	78.8	75.3	73.5	76.2	74.4

Table 4c: Extra-EU imports of energy products, monthly averages, 2010-2016

Energy products	Indicator	2011	2012	2013	2014	2015	2016
Petroleum oils (crude and NLG)	Value (EUR billion)	28.6	14.2	-10.8	-11.1	-32.5	-20.3
	Net mass (million tonnes)	-3.1	3.9	-5.4	-2.2	5.8	-1.8
Natural gas (liquefied and gaseous state)	Value (EUR billion)	20.3	8.4	-8.3	-16.7	-7.2	-24.0
	Net mass (million tonnes)	-2.2	-6.3	-5.6	-3.6	7.4	5.1
Total	Value (EUR billion)	27.2	11.7	-11.0	-12.1	-26.2	-21.2
	Net mass (million tonnes)	-1.2	2.1	-4.4	-2.3	3.6	-2.3

Table 4d: Extra-EU imports of energy products, growth rates (%) of monthly averages, 2010-2016

Share of energy products in total EU imports

Table 7 shows the share in total EU imports of the key energy products considered in this article . This share rose from 21 % in 2010 to 25 % in 2012 and then dropped every year since then down to 12 % in 2016. Of these 12 %, 4 % came from Russia (Table 8). When considering only the EU imports from Russia, the share of the key energy products amounted to 59 % in 2016, which was 1 point lower than in 2015 and 11 points lower than it was in 2012 when it reached a peak of 70 % (Table 9).

Energy products	2010	2011	2012	2013	2014	2015	2016
27090010: PETROLEUM OILS FROM NATURAL GAS CONDENSATES	0	0	0	0	0	0	0
27090090: PETROLEUM OILS AND OILS OBTAINED FROM BITUMINOUS MINERALS, CRUDE	15	17	18	18	16	10	8
27111100: NATURAL GAS, LIQUEFIED	1	1	1	1	1	1	0
27112100: NATURAL GAS IN GASEOUS STATE	4	4	4	4	4	3	3
2701: COAL	1	1	1	1	1	1	1
2702: LIGNITE	0	0	0	0	0	0	0
2703: PEAT	0	0	0	0	0	0	0
2704: COKE	0	0	0	0	0	0	0
TOTAL	21	24	25	24	21	15	12

Table 7: Share (%) of energy products in total EU-28 imports, 2010-2016, trade in value

Energy products	2010	2011	2012	2013	2014	2015	2016
27090010: PETROLEUM OILS FROM NATURAL GAS CONDENSATES	0	0	0	0	0	0	0
27090090: PETROLEUM OILS AND OILS OBTAINED FROM BITUMINOUS MINERALS, CRUDE	5	6	6	6	5	3	3
27111100: NATURAL GAS, LIQUEFIED	0	0	0	0	0	0	0
27112100: NATURAL GAS IN GASEOUS STATE	2	2	2	2	2	2	1
2701: COAL	0	0	0	0	0	0	0
2702: LIGNITE	0	0	0	0	0	0	0
2703: PEAT	0	0	0	0	0	0	0
2704: COKE	0	0	0	0	0	0	0
TOTAL	7	8	8	8	7	5	4

Table 8: Share (%) of energy products from Russia in total EU-28 imports, 2010-2016, trade in value

Energy products	2010	2011	2012	2013	2014	2015	2016
27090010: PETROLEUM OILS FROM NATURAL GAS CONDENSATES	0	0	0	0	0	0	0
27090090: PETROLEUM OILS AND OILS OBTAINED FROM BITUMINOUS MINERALS, CRUDE	48	49	51	48	44	38	39
27111100: NATURAL GAS, LIQUEFIED	0	0	0	0	0	0	0
27112100: NATURAL GAS IN GASEOUS STATE	17	16	16	17	16	19	17
2701: COAL	2	2	2	2	2	3	3
2702: LIGNITE	0	0	0	0	0	0	0
2703: PEAT	0	0	0	0	0	0	0
2704: COKE	0	0	0	0	0	0	0
TOTAL	68	69	70	68	63	60	59

Table 9: Share (%) of energy products in total EU-28 imports from Russia, 2010-2016, trade in value

Member States' trade in petroleum oils and natural gas

Table 10 shows the share of each Member State in extra-EU imports of petroleum oils and natural gas. Note that only interval information is provided in order to avoid revealing confidential figures. The redistribution of imports among the Member States after import into the EU, as measured by intra-EU trade, is not taken into account.

Country	Share (%) in extra-EU28 imports from Russia		Share (%) in total extra-EU28 imports	
	Petroleum oils	Natural gas	Petroleum oils	Natural gas
EU	100	100	100	100
Belgium	0-5	0-5	0-5	0-5
Bulgaria	0-5	0-5	0-5	0-5
Czech Republic	0-5	0-5	0-5	0-5
Denmark	0-5	0-5	0-5	0-5
Germany	10-20	> 20	10-20	> 20
Estonia	0-5	0-5	0-5	0-5
Ireland	0-5	0-5	0-5	0-5
Greece	0-5	0-5	0-5	0-5
Spain	0-5	0-5	10-20	10-20
France	0-5	0-5	10-20	0-5
Croatia	0-5	0-5	0-5	0-5
Italy	0-5	> 20	10-20	10-20
Cyprus	0-5	0-5	0-5	0-5
Latvia	0-5	0-5	0-5	0-5
Lithuania	0-5	0-5	0-5	0-5
Luxembourg	0-5	0-5	0-5	0-5
Hungary	0-5	0-5	0-5	0-5
Malta	0-5	0-5	0-5	0-5
Netherlands	> 20	5-10	10-20	5-10
Austria	0-5	5-10	0-5	0-5
Poland	10-20	5-10	0-5	0-5
Portugal	0-5	0-5	0-5	0-5
Romania	0-5	0-5	0-5	0-5
Slovenia	0-5	0-5	0-5	0-5
Slovakia	0-5	0-5	0-5	0-5
Finland	5-10	0-5	0-5	0-5
Sweden	0-5	0-5	0-5	0-5
United Kingdom	0-5	0-5	5-10	10-20

Table 10: Share (%) of each Member State in extra-EU imports of petroleum oils and natural gas, 2016, trade in value

All Member States imported petroleum oils and natural gas in 2016. For seven Member States (Bulgaria, Estonia, Lithuania, Hungary, Poland, Slovakia and Finland), more than 75 % of their imports in petroleum oils came from Russia (Table 11). Ten countries (Bulgaria, the Czech Republic, Estonia, Latvia, Austria, Poland, Romania, Slovenia, Slovakia and Finland) imported more than 75 % of total national imports of natural gas from Russia. In contrast, for ten countries (Denmark, Ireland, Spain, France, Croatia, Cyprus, Luxembourg, Malta, Portugal and the United Kingdom), the share of imports from Russia in national imports was less than 25 % for both petroleum oils and natural gas.

Country	Share (%) of Russia in national extra-EU28 imports	
	Petroleum oils	Natural gas
Belgium	25-50	0-25
Bulgaria	75-100	75-100
Czech Republic	50-75	75-100
Denmark	0-25	0-25
Germany	25-50	50-75
Estonia	75-100	75-100
Ireland	0-25	0-25
Greece	0-25	50-75
Spain	0-25	0-25
France	0-25	0-25
Croatia	0-25	0-25
Italy	0-25	25-50
Cyprus	0-25	0-25
Latvia	0-25	75-100
Lithuania	75-100	25-50
Luxembourg	0-25	0-25
Hungary	75-100	50-75
Malta	0-25	0-25
Netherlands	25-50	25-50
Austria	0-25	75-100
Poland	75-100	75-100
Portugal	0-25	0-25
Romania	25-50	75-100
Slovenia	0-25	75-100
Slovakia	75-100	75-100
Finland	75-100	75-100
Sweden	25-50	0-25
United Kingdom	0-25	0-25

Table 11: Share (%) of Russia in national extra-EU imports of each Member State, 2016, trade in value

Three of the five largest importing Member States (France, Italy and Spain), as measured by their share in total extra-EU imports of the product, relied on Russia for less than 25 % of their national imports of petroleum oils, and the other two (Germany and the Netherlands) for less than 50 %. Stronger dependencies on such imports were observed for smaller importing countries.

For natural gas, Germany was the largest importer from the extra-EU (>20 % of EU imports) followed by Italy, Spain and the United Kingdom (between 10 % and 20 %) and then by the Netherlands (between 5 % and 10 %). None of these countries belongs to the group of Member States with more than 75 % dependence on imports from Russia. The share of Russia in national imports was less than 25 % for Spain and the United Kingdom, between 25 % and 50 % for Italy and the Netherlands and between 50 % and 75 % for Germany. For Member States whose national imports represented less than 5 % of total EU imports, the dependence on imports from Russia is diverse.

Part of the petroleum oil and natural gas imported from Russia is also traded in the EU Internal Market. Table 12 gives some indicative figures for this effect, but no indication is given of the origin of the energy products that are subsequently part of intra-EU trade flows. The same considerations as for the previous table on the distribution of extra-EU trade apply to intra-EU trade. The figures show that the most important intra-EU trade flows are realized in Central and Western Europe.

Country	Share (%) in total intra-EU imports		Share (%) in total intra-EU exports	
	Petroleum oils	Natural gas	Petroleum oils	Natural gas
EU	100	100	100	100
Belgium	> 20	10-20	0-5	10-20
Bulgaria	0-5	0-5	0-5	0-5
Czech Republic	0-5	0-5	0-5	0-5
Denmark	0-5	0-5	5-10	0-5
Germany	> 20	> 20	0-5	> 20
Estonia	0-5	0-5	0-5	0-5
Ireland	0-5	0-5	0-5	0-5
Greece	0-5	0-5	0-5	0-5
Spain	0-5	0-5	0-5	0-5
France	0-5	> 20	0-5	0-5
Croatia	0-5	0-5	0-5	0-5
Italy	0-5	0-5	0-5	0-5
Cyprus	0-5	0-5	0-5	0-5
Latvia	0-5	0-5	0-5	0-5
Lithuania	0-5	0-5	0-5	0-5
Luxembourg	0-5	0-5	0-5	0-5
Hungary	0-5	0-5	0-5	0-5
Malta	0-5	0-5	0-5	0-5
Netherlands	10-20	0-5	> 20	> 20
Austria	0-5	0-5	0-5	0-5
Poland	0-5	0-5	0-5	0-5
Portugal	0-5	0-5	0-5	0-5
Romania	0-5	0-5	0-5	0-5
Slovenia	0-5	0-5	0-5	0-5
Slovakia	0-5	0-5	0-5	0-5
Finland	0-5	0-5	0-5	0-5
Sweden	0-5	0-5	0-5	0-5
United Kingdom	0-5	0-5	> 20	5-10

Table 12: Share (%) of each Member State in intra-EU imports and exports of petroleum oils and natural gas, 2016, trade in value

Data sources and availability

Reporting countries

This article is based on the international trade in goods statistics provided by the EU-28 Member States to Eurostat. Trade of Croatia is included even for the period prior to joining the EU, i.e. before July 2013.

Partner country — Definitions

Extra-EU trade — The partner country is the country of last known destination for exports and the country of origin for imports. The country of last known destination is the non-EU country to which it is known, at the time of release into the customs procedure or customs approved treatment, that the goods are to be delivered. The country of origin means the country where the goods originate; the origin of goods wholly obtained or produced in a country is attributed to that country.

Intra-EU trade — The partner Member State is the Member State of destination for exports and the Member State of consignment for imports. The Member State of consignment is the Member State from which goods were dispatched to the reporting Member State, without any halts or legal operations which are not inherent in their transport taking place in any intermediate Member State.

Energy products

This article analyses the EU imports of the following energy products, as classified according to the Combined Nomenclature (CN):

- 27090010: Petroleum oils from natural gas condensates;
- 27090090: Petroleum oils and oils obtained from bituminous minerals, crude;
- 27111100: Natural gas, liquefied;
- 27112100: Natural gas in gaseous state;
- 2701: Coal;
- 2702: Lignite;
- 2703: Peat; and
- 2704: Coke.

To give a full picture of the EU trade in energy products, it should be noted that Chapter 27 of the Combined Nomenclature (mineral fuels, mineral oils) contains more products than the ones considered in this article.

Petroleum oils correspond to the aggregation of the CN8 codes 27090010: Petroleum oils from natural gas condensates and 27090090: Petroleum oils and oils obtained from bituminous minerals, crude.

Natural gas corresponds to the aggregation of the CN8 codes 27111100: Natural gas, liquefied and 27112100: Natural gas in gaseous state.

Data sources

This article is based on data available in Eurostat database (COMEXT) and on Eurostat estimation. Those data are issued from the Community concept and definitions as set up by the EU legislation. Note that data collected on the basis of Regulation (EC) No 1099/2008 relating to energy statistics are not considered in this article. Figures estimated by Eurostat cannot be found in Comext nor in other Eurostat databases or publications.

Units of measure

- **Trade values** are expressed in billions (109) of euros. They correspond to the statistical value, i.e. to the amount which would be invoiced in case of sale or purchase at the national border of the reporting country. It is called a FOB value (free on board) for exports and a CIF value (cost, insurance, freight) for imports.
- **Quantities** are expressed in millions of tonnes and correspond to the net mass, i.e. to the mass without any packaging. Note that values of 0 or 0.0 mean very small values.

Data limitations

- **A bias in the geographical allocation of extra-EU flows** — Extra-EU imports and exports are reported by the Member State where the customs declaration is lodged, usually the place where the goods cross the EU external frontier (here referred to as the exit/entry Member State). This is not necessarily the Member State of actual import or export. The geographical allocation of an extra-EU flow is biased in the case the entry/exit Member State is not the actual importing/exporting Member State. In such a case, the extra-EU trade will be allocated to the entry/exit Member State and the actual importing/exporting Member State will report only intra-EU flows with the exit/entry Member State. This issue particularly impacts the extra-EU imports of Member States having important ports for transshipment of goods like Antwerp in Belgium and Rotterdam in the Netherlands.

- **Missing EU data** — This article is mostly based on collected data (confidential and non-confidential). Wherever necessary, estimates for missing indicators have been compiled on the basis of other available indicators and EU averages for similar trade. Because of confidentiality, total values may differ from the sum of individual components.
- **Trade and consumption** — This article focuses on imports and exports of energy products and does not consider EU domestic energy production. Part of the energy products consumed in the EU is produced in the EU. According to energy statistics, in 2014, 33 % of natural gas consumption was supplied from a source within the EU. Similarly about 54 % of coal (all coals) and about 13 % of oil (crude oil and all petroleum products) consumed in the EU was supplied from a source within the EU.

Context

Having a secure supply of energy is crucial for the well-being of European citizens and the economy. The EU works to ensure that energy supplies are uninterrupted and energy prices remain stable.

In response to the political crisis in Ukraine and the overall importance of a stable and abundant supply of energy for the EU's citizens and economy, the European Commission released an EU energy security strategy on 28 May 2014.

This strategy is based on an in-depth study of Member States' energy dependence and addresses medium and long-term security of supply challenges.

Further Eurostat information

Publications

- Statistical analysis of EU trade in energy products, with focus on trade with the Russian Federation - Statistics in focus 13/2014
- Energy production and imports
- Energy, transport and environment indicators - 2016 edition
- Extra-EU trade in primary goods

Data visualisation

- International trade in a nutshell
- Top 5 partners in trade in goods
- My Country in a bubble

Main tables

- International trade in goods (textgo), see:

International trade in goods - long-term indicators (textgolti)

International trade in goods - short-term indicators (textgosti)

Database

- International trade in goods (extgo), see:

International trade in goods - aggregated data (extgoagg)

International trade in goods - long-term indicators (extgolti)

International trade in goods - short-term indicators (extgosti)

International trade in goods - detailed data (detail)

Dedicated section

- International trade in goods

Methodology / Metadata

- International trade in goods statistics - background
- International trade in goods (ESMS metadata file — extgoesms)
- User guide on European statistics on international trade in goods

Source data for tables, figures and maps (MS Excel)

- Download Excel file

Other information — Legal background

- Regulation (EC) No 1099/2008 of 22 October 2008 on energy statistics
- Regulation (EC) No 471/2009 of 6 May 2009 on Community statistics relating to external trade with non-member countries
- Regulation (EU) No 92/2010 of 2 February 2010 implementing Regulation (EC) No 471/2009, as regards data exchange between customs authorities and national statistical authorities, compilation of statistics and quality assessment
- Regulation (EU) No 113/2010 of 9 February 2010 implementing Regulation (EC) No 471/2009 , as regards trade coverage, definition of the data, compilation of statistics on trade by business characteristics and by invoicing currency, and specific goods or movements.
- Regulation (EC) No 638/2004 of 31 March 2004 on Community statistics relating to the trading of goods between Member States and repealing Council Regulation (EEC) No 3330/91.
- Commission Regulation (EC) No 1982/2004 of 18 November 2004 implementing Regulation (EC) No 638/2004 of the European Parliament and of the Council on Community statistics relating to the trading of goods between Member States and repealing Commission Regulations (EC) No 1901/2000 and (EEC) No 3590/92.

External links

- European Energy Security Strategy

View this article online at ***http://ec.europa.eu/eurostat/statistics-explained/index.php/EU_imports_of_energy_products_-_recent_developments***