

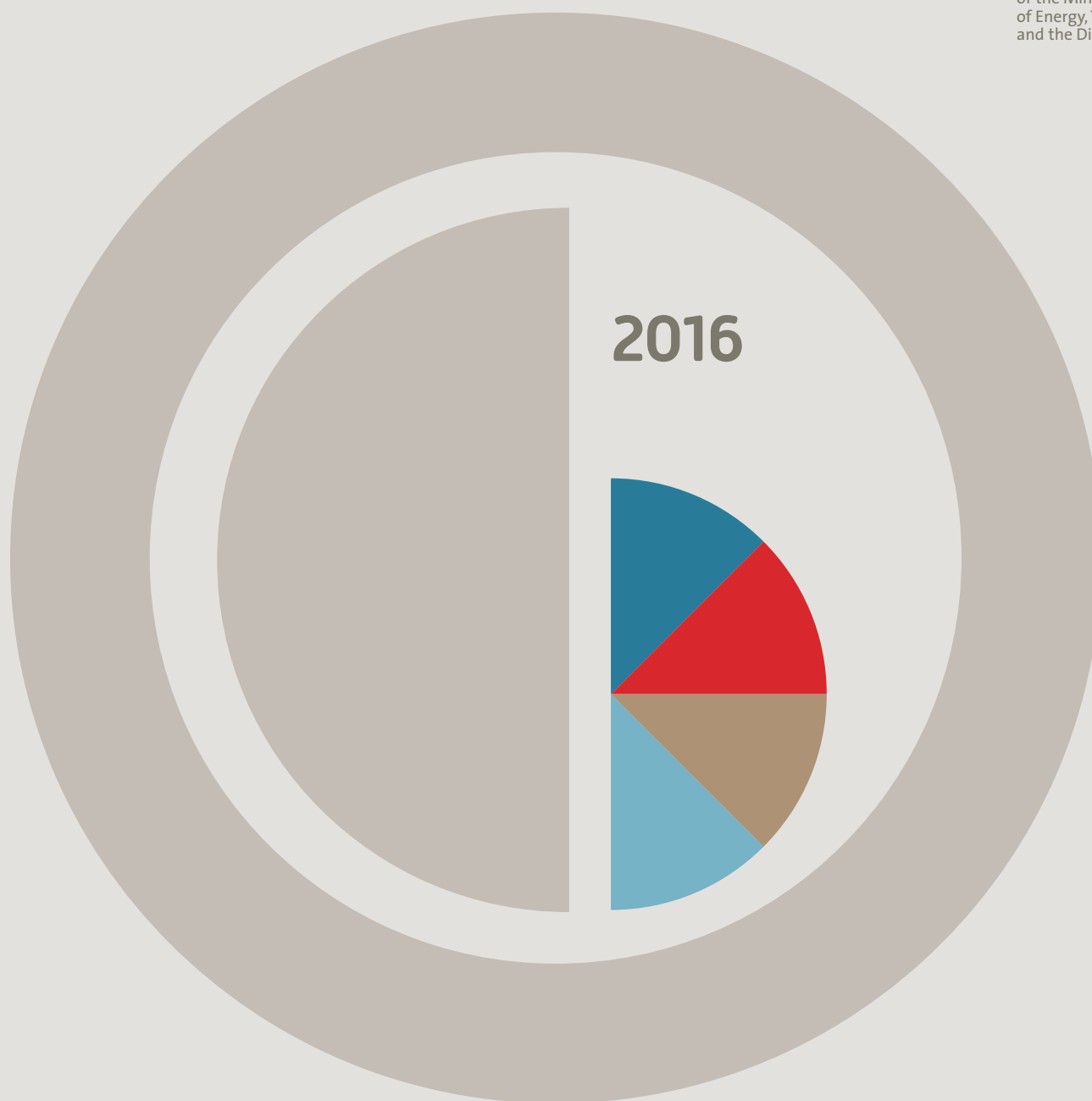
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Corporación de reservas estratégicas de productos petrolíferos 2016 Annual Statistical Report



cores

Public Law Corporation
under the aegis
of the Ministry
of Energy, Tourism
and the Digital Agenda.





2016



1

International Statistics



2

Spanish Statistics

Corporación de Reservas Estratégicas de Productos Petróíferos

Public Law Corporation under the aegis of the Ministry of Energy, Tourism and the Digital Agenda

This publication responds to the provisions of the statistical operation No. 6113 of the National Statistical Plan 2013-2016 in which it is included the preparation and publication of an annual report regarding the market of petroleum products, and the agencies listed as responsible for its implementation are the General Department of Hydrocarbons (Ministry of Energy, Tourism and the Digital Agenda) and the Corporation of Strategic Reserves of Petroleum Products (Cores).

1 Petroleum products 2012-2016	14	1 Basic indicators 2012-2016	30
Global oil demand	14	Indicators	30
Global oil production	15	Annual consumption of primary energy in Spain and degree of self-sufficiency	30
Global oil reserves	16	Annual consumption of final energy in Spain	30
Global refining capacity	17	2 Petroleum products 2012-2016	31
Stock of crude oil and petroleum products in OECD countries	17	• Petroleum products consumption in Spain 2012-2016	31
Road fuel consumption in OECD Europe	18	Annual consumption of petroleum products	31
Monthly consumption of road fuels in OECD Europe 2016	18	Monthly consumption of petroleum products 2016	31
2 Natural gas 2012-2016	20	Liquefied petroleum gas consumption	32
Global natural gas demand	20	Gasoline consumption	33
Global natural gas production	21	Biofuels in gasoline and diesel	33
Global natural gas reserves	22	Gasoil consumption	34
3 International prices	23	Gasoline & gasoil consumption by Autonomous Region 2016	34
Benchmark crude oil prices and exchange rate	23	Road fuel consumption	35
Evolution of crude oil spot prices	23	Annual evolution of vehicle holding in Spain	35
International FOB prices of petroleum products	24	Evolution of sale points in Spain	35
Refining margins indicators	25	Kerosene consumption	36
Benchmark natural gas prices and exchange rates	25	Fuel oil consumption	37
		Other products consumption	37
		Petroleum product consumption by sector	37
		• Foreign trade in hydrocarbons 2012-2016	38
		Annual crude oil imports by country and economic region	38



Spanish oil and natural gas reserves

Monthly crude oil imports by country and economic region 2016	38	3 Natural gas 2012-2016	51	1 Crude oil, raw materials and petroleum products	62
Evolution of crude oil imports CIF cost	38	• Natural gas consumption 2012-2016	51	Total OECD stocks	62
Quality of crude oil imports 2016	39	Annual consumption of natural gas	51	Minimum security stocks and strategic reserves in Spain	62
Foreign trade in petroleum products	40	Annual consumption of natural gas by pressure levels	51	Stocks of crude oil, raw materials and petroleum products in Spain	63
Monthly evolution of foreign trade in petroleum products 2016	40	Monthly consumption of natural gas 2016	51	Strategic reserves in Spain	63
Imports by petroleum product group & country of origin 2016	41	Natural gas consumption by Autonomous Region and pressure levels	51	Types of storage for strategic reserves in Spain 2016	64
Exports by petroleum product group & country of destination 2016	42	• Foreign trade in natural gas 2012-2016	52	Evolution of strategic reserves location in Spain	64
• Balance of petroleum products 2012-2016	43	Natural gas imports by country	52	Stocks level in Spain calculated in net import days	64
Indigenous crude oil production	43	Monthly natural gas imports by country 2016	52	2 Natural gas	65
Processed crude oil and raw materials	43	Natural gas exports by country	53	Annual natural gas stocks	65
Balance of petroleum products production and consumption	44	Monthly natural gas exports by country 2016	53	Monthly natural gas stocks 2016	65
Spanish refinery capacity	45	Natural gas imports by entry point	54	Units and conversion factors	68
Total refinery capacity	46	Monthly natural gas imports by entry point 2016	54		
Gross refinery production	46	Natural gas exports by exit point	55		
• Petroleum product prices 2012-2016	47	Monthly natural gas exports by exit point 2016	55		
Maximum retail price of butane cylinder (12,5 kg)	47	• Natural gas balance 2012-2016	56		
Retail price of RON-95 gasoline and road diesel in Spain	47	Indigenous natural gas production	56		
Average retail price of RON-95 gasoline 2016	48	Balance of natural gas production and consumption	56		
Retail price of RON-95 gasoline	48	• Natural gas prices 2012-2016	57		
Average retail price of road diesel 2016	49	Maximum last resort tariff of natural gas	57		
Retail price of road diesel	49	Evolution of natural gas supply cost	57		
Average retail price of heating oil 2016	50				
Retail price of heating oil	50				



Cores 2016
Annual
Statistical
Report

**Pedro Miras
Salamanca**
Cores Chairman

Presentation

I am pleased to present the Cores Annual Statistical Report for 2016, which includes the main figures for the hydrocarbon sector at both national and international levels.

As usual, this latest edition maintains the same structure, format, content and time series data as previous reports and once again aims to provide a common source of reference for the hydrocarbons sector, based on the quality and accessibility of the statistical information it contains. In this way Cores consolidates its role as the benchmark for sector information in Spain, a position it has occupied since the Corporation was founded more than twenty years ago.

The report is divided into three sections. The first two chapters, International Statistics and National Statistics, provide extensive information on the main figures for the sector: demand, consumption, production, reserves, imports & exports and prices, focusing on the international picture in the first chapter and the national situation in the second. Lastly, given that Cores's main function - as the Central Stockholding Entity in Spain - is the maintenance, management and control of minimum security stocks of petroleum products, LPGs and natural gas, the third chapter, Spanish Oil and Natural Gas Reserves, provides more detailed information on stocks of these materials.

A new feature of the 2016 edition is an update on the MIBGAS trading platform, which began operations in December 2015, issuing a price signal for the Spanish natural gas market, comparable to other European price indexes.

This report, along with all other Cores publications and statistics, can be found on the Corporation website, www.cores.es/en. The internet version of this document includes information which can be downloaded on Excel format, allowing optimum data processing.

I trust that this publication will be of interest to you all.

7th consecutive year of growth in the global demand for oil and natural gas



International

The global demand for oil in 2016 was 96.6 million barrels per day (MBbl/d), a 1.7% increase over the previous year. According to the figures of the International Energy Agency (IEA) in 2016, 51.5% of oil consumption worldwide corresponded to countries not belonging to the OECD, an increase of 2.3%. Meanwhile, oil demand among OECD countries rose by 1.0%, with their weighting reduced since 2013. By region, growth was observed in the geographical areas of Asia-Pacific (+3.2%), Europe and Eurasia (+2.6%), and Africa (+2.4%), while the Central and South American region saw a decrease (-1.6%). Consumption in North America and the Middle East remained stable compared with the previous year.

Global oil production reached 96.9 MBbl/d in 2016 (+0.4% compared with 2015), with the USA as the main producer for the third year running (12.9% of the total) in spite of a recorded decline (-3.6%). Saudi Arabia was practically levelled with the USA (12.8%) having increased production in 2016 by 3.3%. Production in OPEC countries increased by 3.1% to 39.3 MBbl/d, with the recovery of Iran (+22.7%) particularly notable,

following the lifting of international sanctions in relation to their nuclear program, as well as the growth of production in Iraq (+10.3%). Meanwhile, however, production in Non-OPEC countries saw a decline (-1.4%) to stand at 57.6 MBbl/d.

In terms of global oil reserves in 2016, these reached 1,706,670 MBbl, 0.9% higher than 2015, with marked increases in Iraq and Russia (+7.4% and +7.0% respectively), compared with a 66.6% drop in the reserves of Trinidad & Tobago. Venezuela, with 17.6% of the total, has been the country with the largest reserves of oil in the world every year since 2009, above Saudi Arabia (15.6%) and Canada (10.0%).

Worldwide refining capacity (97.4 MBbl/d) has remained virtually constant, with a growth of 0.5% compared with 2015. By geographical region, Asia-Pacific and North America account for 56.4% of total refining capacity, with China and the USA leading, with 14.6% and 19.1% respectively.

Demand for road fuel in OECD Europe saw an annual growth in 2016 of 2.1%, reaching 6.73 MBbl/d. By country, Germany continues to be the largest consumer, with 17.7% of the total. 71.4% of road fuel consumption

The USA continues to be the leading global producer of oil and natural gas

The trend towards falling international prices continues



in the region corresponds to diesel, which increased by 3.0% compared with 2015, while consumption of gasoline remained stable (-0.1%).

Global demand for natural gas has seen a similar trend as that for oil. In 2016 it reached 3,543 billion cubic metres (bcm), a further increase (+1.8% compared with 2015), which now represents seven years of uninterrupted growth. Demand in both OECD countries (46.4%) as well as the emerging nations (the remaining 53.6%) recorded increases in 2016, of 2.0% and 1.6% respectively. In 2016 demand rose in all the geographic regions with the exception of Central and South America (-2.2%). There was, however, a marked fall in demand in Russia (-3.0%) which represents 11.0% of the total and is the second largest consumer of natural gas after the USA (22.0%).

Global production of natural gas saw less growth than previous years, slightly above the 2015 figures at 3,552 bcm (+0.6%). The USA continues to be the leading global producer (21.1%), followed by Russia (16.3%). It is worth highlighting the growth in production of natural gas in the

Middle East (+3.6%) and in Asia-Pacific (+3.2%), led by Iran and Australia (+6.9% and +25.5% respectively).

In 2016, global reserves of natural gas were estimated at 186.6 thousand bcm, with 42.5% located in the Middle East, and with Iran as the country with the largest reserves in the world (18.0% of the total).

In terms of the average price of crude oil for 2016, one would again highlight a fall in the benchmarks of both Brent (-16.4%) and WTI (-11.1%) compared with 2015, due to a continued surplus of supply. In 2016 the average price of both crude oils was practically on a par, slightly above US\$ 43/Bbl, with a Brent/WTI differential of US\$ 0.4/Bbl, reduced by 88.4% compared with 2015.

For their part, the international benchmarks of products on the European markets in 2016 have continued on the downward path that began in 2013, with reductions of around 18%. The average benchmarks of NWE products this year stood at 468.0 US\$/t for gasoline, 416.9 US\$/t for kerosene, 391.8 US\$/t for diesel and 217.6 US\$/t for fuel oil.

All the refining margins studied showed a drop compared with the figures for 2015, a year in which refining margins increased, especially in the European and Asian indicators. Particularly notable in 2016 was the reduction on the “Brent Hydro Rot” indicator (-40.4%) standing at 2.36 US\$/Bbl.

In terms of the benchmarks for natural gas, 2016 saw a new fall which was greater in Europe than in the USA. The price at TTF, the Dutch virtual trading point, fell by 29.2% in 2016, to stand at 14.03 €/MWh. Meanwhile the UK benchmark, NBP, fell by 18.7% to 34.69 GBP/therm, equivalent to 14.50 €/MWh. In the USA the Henry Hub price was reduced by 4.4% to 2.49 US\$/MMBtu, its lowest figure since 2001. It is worth highlighting the incorporation of MIBGAS, which began trading in December 2015 and closed 2016 with an average price of 17.03 €/MWh.

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Spain

In 2016 primary energy in Spain grew by 0.2% and final energy by 1.5% compared with 2015. In terms of primary energy, consumption of all energy sources increased, with the exception of coal which fell by 23.7% and non-renewable waste (-3.7%). In regards to final energy, petroleum products and natural gas, the two energy sources with the highest weighting, increased in comparison with the previous year by 2.1% and 1.7% respectively. Coal, however showed a negative variation rate (-11.5%), a symptom of the stagnation in its use worldwide.

The demand for electricity has maintained the positive trend which began last year, with a moderate growth of 0.8% compared with 2015. Production, however, was down (-2.2%), with a shift in balance towards imports, compared with the trend towards exports over recent years.

Spain is now totally self-sufficient in terms of nuclear and renewable energy, while it

continues to depend on foreign imports of petroleum and natural gas (99.7% and 99.8%, respectively). The same is true of coal, where the level of self-sufficiency stood at 6.6%, 2.5 percentage points lower than 2015 and 7.4 points less than 2014.

2016 was a very warm year in Spain, the fifth warmest in the 21st century, but also damp, with abundant rainfall especially over the first five months of the year.

The industrial production index continued to show growth (+2.0%), as it has since 2014, while apparent cement consumption decreased (-3.6%), in contrast with the upward trend over the two previous years.

Road fuels,
close to 2011
levels (27,272 kt)



Petroleum Products

Consumption of petroleum products in 2016 increased by 3.6% compared with 2015, reaching 58,108 kilotonnes (kt), figures which confirm the improvement in consumption which began last year and now indicate the highest demand for the last four years. This growth is due to an increase in consumption of all products. LPGs had a higher weighting (4.3% vs. 3.5% in 2015), kerosene was also up (10.1% vs. 9.8% in 2015) and had the maximum figures on record in August (619 kt), along with fuel oil (14.8% vs. 14.7% in 2015), with increases in consumption of 28.3%, 7.1% and 4.7% respectively. Consumption of the remaining petroleum product groups also increased, albeit in different proportions: gasoline (+2.3%), gasoil (+1.8%) and the other products group (+0.8%).

Following the monthly increases recorded over the course of 2015, the year began with a drop in road fuel consumption (-1.4% in January 2016). In spite of this start,

consumption in 2016 was higher than that recorded in 2015 (+3.2%), 2014 (+6.8%) and 2013 (+8.3%), confirming the recovery which began in 2014. Figures were up for both gasoline (+2.3%) and road diesel (+3.4%).

Within a scenario where maximum figures were recorded for crude oil imports in 2015, levels were virtually maintained in 2016, reaching 64,171 kt, a slight fall of 0.9% compared with the previous year.

By geographic region, 2016 saw an increase in imports from the Middle East (+35.3%) and Europe and Eurasia (+8.4%). Africa continued to be the main supply region, although in 2016 it fell in the weighting (31.6% vs. 38.4% in 2015) while the Middle East rose (22.4% vs. 16.4% in 2015). Supply from America saw a 4.1% year-on-year fall, dominated by reduced imports from Central and South America (-19.4%). By country, Mexico and Nigeria have alternated as the main suppliers of crude oil to Spain month by month, accounting for 14.4% and 12.6%



Crude oil imports from Non-OPEC countries (51.4%) exceed those from OPEC (48.6%)

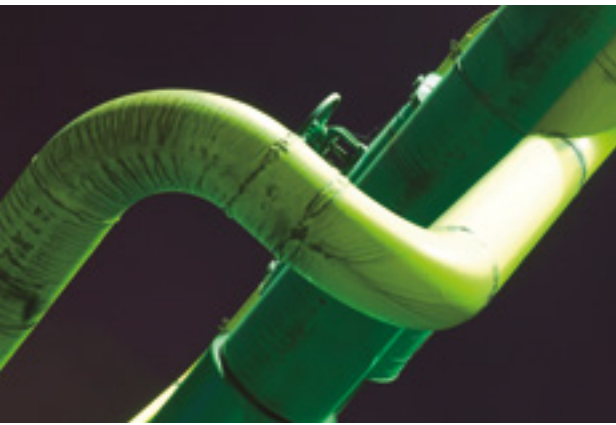
of the 2016 total respectively. In short, over the course of 2016 Spain imported 83 types of crude oil from 27 different countries, with 51.4% from Non-OPEC nations. In 2016 supply from OPEC member countries fell by 16.6% compared with 2015, largely due to the reduction in recorded imports from the two main OPEC suppliers: Nigeria (-24.5%) and Saudi Arabia (-3.3%).

In 2016 65,696 kt of crude oils and raw materials were distilled in Spanish refineries, a similar quantity as 2015 (+0.1%). Refining capacity use increased slightly to 84.44% compared with 84.40% in the previous year.

In terms of imports and exports of petroleum products, 2016 saw an increase for the third year running of both imports (+14.7%) and exports (+6.3%) compared with 2015. The year ended with December 2016 showing the highest recorded figures for petroleum product exports of 2,410 kt. Spain once again was a net exporter (+3,886 kt), with the largest exports from

the other products group (33.8% of the total), followed by gasoil (28.8%) and gasoline (19.6%). Meanwhile fuel oil had a higher weighting in imports (32.1%) with an increase of 37.0% compared with 2015, followed by gasoil (29.4%), which rose by 8.0%.

As of 31st December 2016, total crude oil, raw material and petroleum product stocks in Spain stood at 17,658 kt, 1.2% down on December 2015. Stocks of crude oil and raw materials fell by 7.6%, while petroleum products were up by 2.3% against the previous year, at their highest level for the last five years.



Natural gas

Consolidation of the natural gas consumption recovery which began in 2015 (+1.8%)

After a start of the year which saw figures down, 2016 ended with a 1.8% increase in natural gas consumption compared with 2015, to reach 319,881 GWh. The same trend was reflected in consumption destined for power generation (-2.6%), with a recovery by the end of the year, although figures did not reach 2015 levels. There was a rise in both conventional consumption (+2.8%) and LNG for direct consumption (+4.6%).

Net imports of natural gas reached 319,497 GWh for the year, an increase of 4.0% against the previous year.

In terms of natural gas imports (364,325 GWh), the figures were very similar to those recorded in 2015. By country of origin supply percentages were up from Peru (86.7%), Nigeria (21.8%) and Norway (19.6%) and proportionally lower from Qatar (-14.9%) and Algeria (-4.8%), although the latter continues to be the largest single supplier (56.8% of the total).

Exports of natural gas in 2016 fell by 21.3%, with a significant drop in exports of LNG (-87.9%), which contrasts with maximum recorded figures of gas pipeline exports (42,879 GWh), with a 4.9% year-on-year increase. Europe and Eurasia is the main destination for natural gas exports from Spain accounting for 96.9% of the total.

Lastly, as of 31st December 2016, natural gas stocks maintained in regasification plants and underground storage stood at 27,861 GWh, down by 11.0% compared with the same date in 2015, and 31.2% less than in 2014. This reduction in stock levels is evident at both the regasification plants (-13.7%) as well as underground storage (-9.8%).



International Statistics

1



Global oil demand

Unit: thousands of barrels per day

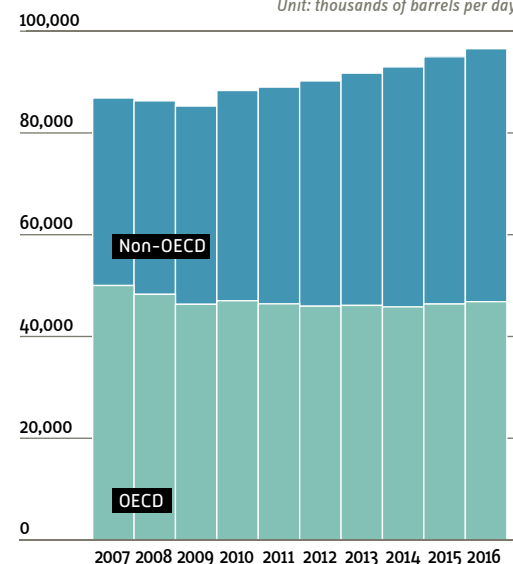
	2012	2013	2014	2015	2016	Structure (%)	Vr (%) 2016/2015
USA	18,791	19,265	19,412	19,840	19,945	20.7	0.5
Canada	2,470	2,455	2,407	2,406	2,434	2.5	1.2
Mexico	2,102	2,090	2,040	2,007	1,952	2.0	-2.7
Total North America	23,363	23,810	23,859	24,253	24,331	25.2	0.3
Argentina	758	749	787	769	769	0.8	-
Brazil	2,968	3,112	3,244	3,192	3,077	3.2	-3.6
Chile	332	340	337	342	349	0.4	2.0
Colombia	318	314	328	339	344	0.4	1.5
Ecuador	256	268	287	288	285	0.3	-1.0
Panama	134	135	140	144	150	0.2	4.2
Peru	223	227	222	246	258	0.3	4.9
Venezuela	823	777	728	672	623	0.6	-7.3
Others Central & South America	1,051	1,062	1,089	1,111	1,131	1.2	1.8
Total Central & South America	6,863	6,984	7,162	7,103	6,986	7.2	-1.6
Austria	261	264	261	265	270	0.3	1.9
Belgium	603	623	619	648	663	0.7	2.3
Czech Republic	194	187	200	193	178	0.2	-7.8
Denmark	155	155	154	154	158	0.2	2.6
Finland	201	197	193	192	208	0.2	8.3
France	1,739	1,714	1,692	1,691	1,689	1.7	-0.1
Germany	2,389	2,435	2,374	2,372	2,409	2.5	1.6
Greece	306	283	284	298	303	0.3	1.7
Hungary	132	130	145	155	158	0.2	1.9
Ireland	136	139	139	148	152	0.2	2.7
Italy	1,370	1,260	1,266	1,266	1,267	1.3	0.1
Luxemburg	59	58	57	56	56	0.1	-
Netherlands	998	991	991	946	994	1.0	5.1
Norway	215	218	211	218	220	0.2	0.9
Poland	533	505	506	528	584	0.6	10.6
Portugal	230	234	234	245	238	0.2	-2.9
Romania	191	182	186	191	197	0.2	3.1
Russia	3,117	3,193	3,514	3,483	3,609	3.7	3.6
Slovakia	71	75	74	83	86	0.1	3.6
Spain	1,301	1,208	1,200	1,255	1,297	1.3	3.3
Sweden	300	297	305	291	304	0.3	4.5
Switzerland	246	251	230	230	217	0.2	-5.7
Turkey	696	763	765	878	943	1.0	7.4
United Kingdom	1,535	1,527	1,520	1,545	1,593	1.6	3.1
Others Europe & Eurasia	1,825	1,832	1,705	1,731	1,771	1.8	2.3
Total Europe & Eurasia	18,803	18,721	18,825	19,062	19,564	20.3	2.6
Iran	1,843	2,045	2,039	1,991	1,961	2.0	-1.5
Iraq	782	856	881	821	843	0.9	2.7
Israel	285	235	221	225	229	0.2	1.8
Kuwait	483	449	462	458	458	0.5	-
Qatar	213	213	236	285	299	0.3	4.9
Saudi Arabia	2,980	2,964	3,191	3,297	3,205	3.3	-2.8
United Arab Emirates	665	696	748	780	847	0.9	8.6
Others Middle East	548	563	597	588	588	0.6	-
Total Middle East	7,799	8,021	8,375	8,445	8,430	8.7	-0.2
Algeria	396	418	433	459	451	0.5	-1.7
Egypt	834	711	686	812	863	0.9	6.3
South Africa	611	633	628	658	661	0.7	0.5
Others Africa	1,963	2,064	2,079	2,124	2,176	2.3	2.4
Total Africa	3,804	3,826	3,826	4,053	4,151	4.3	2.4
Australia	1,095	1,121	1,119	1,123	1,123	1.2	-
China	9,794	10,392	10,799	11,537	11,939	12.4	3.5
Hong Kong	347	354	341	378	378	0.4	-
India	3,642	3,683	3,836	3,990	4,276	4.4	7.2
Indonesia	1,613	1,613	1,652	1,740	1,798	1.9	3.3
Japan	4,630	4,504	4,267	4,120	3,992	4.1	-3.1
Malaysia	613	714	733	768	804	0.8	4.7
New Zealand	152	154	157	161	167	0.2	3.7
Pakistan	425	455	483	501	526	0.5	5.0
Philippines	310	328	349	378	398	0.4	5.3
Singapore	1,228	1,222	1,214	1,256	1,300	1.3	3.5
South Korea	2,322	2,328	2,348	2,407	2,566	2.7	6.6
Taiwan	938	970	982	994	1,004	1.0	1.0
Thailand	1,248	1,331	1,349	1,327	1,384	1.4	4.3
Vietnam	343	352	390	412	434	0.4	5.3
Others Asia Pacific	889	864	915	963	1,007	1.0	4.6
Total Asia Pacific	29,589	30,385	30,934	32,055	33,096	34.3	3.2
Total Worldwide*	90,223	91,748	92,980	94,969	96,557	100.0	1.7
of which:							
OECD	45,952	46,104	45,818	46,380	46,842	48.51	1.0
Non-OECD	44,271	45,644	47,162	48,589	49,715	51.49	2.3

* Includes national consumption, international marine navigation, refinery fuel and self-consumption - equal to 0.0

Source: International Energy Agency (IEA)

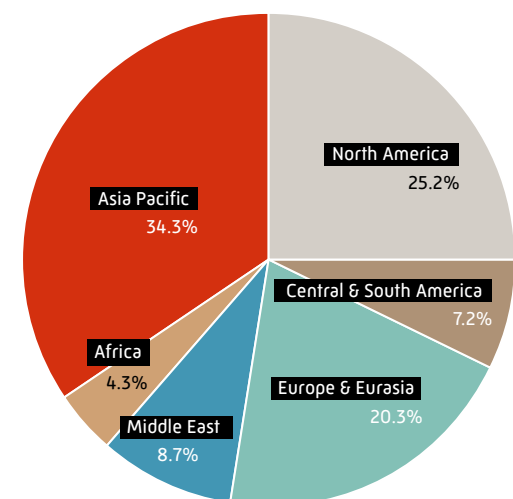
Evolution of oil demand

Unit: thousands of barrels per day



Source: International Energy Agency (IEA)

Oil demand by region 2016



Source: International Energy Agency (IEA)

Global oil production

Unit: thousands of barrels per day

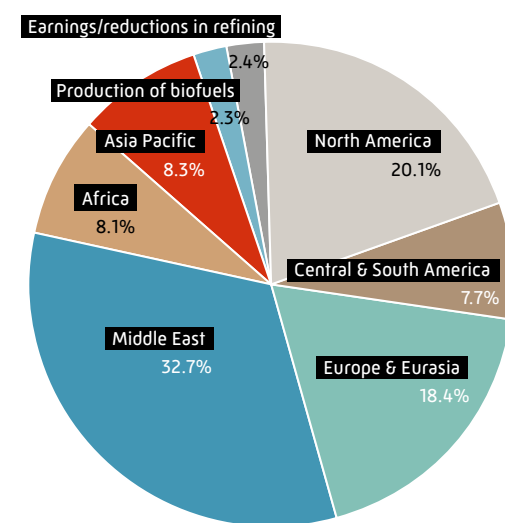
	2012	2013	2014	2015	2016	Structure (%)	Vr (%) 2016/2015
USA	9,110	10,291	12,000	12,993	12,522	12.9	-3.6
Canada	3,740	4,000	4,278	4,385	4,466	4.6	1.8
Mexico	2,922	2,890	2,805	2,600	2,463	2.5	-5.3
Total North America	15,772	17,181	19,083	19,978	19,451	20.1	-2.6
Argentina	657	637	630	632	611	0.6	-3.3
Brazil	2,155	2,120	2,352	2,531	2,613	2.7	3.2
Colombia	947	1,012	994	1,009	890	0.9	-11.8
Ecuador	502	518	551	541	547	0.6	1.1
Peru	153	166	173	150	134	0.1	-10.7
Trinidad & Tobago	120	117	114	109	97	0.1	-11.0
Venezuela	2,733	2,722	2,672	2,665	2,429	2.5	-8.9
Others Central & South America	142	150	161	158	149	0.2	-5.7
Total Central & South America	7,409	7,442	7,647	7,795	7,470	7.7	-4.2
Azerbaijan	879	885	862	849	829	0.9	-2.4
Denmark	201	175	165	156	141	0.1	-9.6
Italy	108	110	114	109	74	0.1	-32.1
Kazakhstan	1,669	1,714	1,692	1,672	1,645	1.7	-1.6
Norway	1,917	1,838	1,889	1,948	1,995	2.1	2.4
Romania	85	85	83	81	78	0.1	-3.7
Russia	10,623	10,793	10,895	11,087	11,341	11.7	2.3
Turkmenistan	204	237	249	273	253	0.3	-7.3
United Kingdom	954	886	870	970	1,028	1.1	6.0
Uzbekistan	68	68	66	64	62	0.1	-3.1
Others Europe & Eurasia	450	465	440	437	413	0.4	-5.5
Total Europe & Eurasia	17,158	17,256	17,325	17,646	17,859	18.4	1.2
Iran	3,551	3,289	3,437	3,596	4,411	4.6	22.7
Iraq	3,031	3,163	3,425	4,088	4,508	4.7	10.3
Kuwait	2,713	2,849	2,899	3,061	3,194	3.3	4.3
Oman	925	955	951	989	1,012	1.0	2.3
Qatar	2,011	2,056	2,034	1,993	2,001	2.1	0.4
Saudi Arabia	11,470	11,253	11,413	12,012	12,408	12.8	3.3
Syria	171	59	33	27	25	^	-7.4
United Arab Emirates	3,385	3,503	3,572	3,769	3,865	4.0	2.5
Yemen	174	193	148	43	16	^	-62.8
Others Middle East	726	728	596	283	209	0.2	-26.1
Total Middle East	28,157	28,048	28,508	29,861	31,649	32.7	6.0
Algeria	1,619	1,573	1,585	1,590	1,598	1.6	0.5
Angola	1,854	1,792	1,732	1,830	1,783	1.8	-2.6
Egypt	693	707	707	722	691	0.7	-4.3
Equatorial Guinea	332	307	302	276	231	0.2	-16.3
Gabon	253	232	232	230	227	0.2	-1.3
Libya	1,476	953	497	437	426	0.4	-2.5
Nigeria	2,482	2,293	2,330	2,258	1,935	2.0	-14.3
Republic of Congo	281	250	266	257	238	0.2	-7.4
Sudan	125	118	120	105	81	0.1	-22.9
Others Africa	604	666	712	695	643	0.7	-7.5
Total Africa	9,719	8,891	8,483	8,400	7,853	8.1	-6.5
Australia	472	399	427	377	351	0.4	-6.9
Brunei	159	135	126	127	121	0.1	-4.7
China	4,175	4,182	4,247	4,331	4,037	4.2	-6.8
India	898	888	876	868	848	0.9	-2.3
Indonesia	912	873	835	822	877	0.9	6.7
Malaysia	657	619	647	706	712	0.7	0.8
Thailand	444	439	431	451	461	0.5	2.2
Vietnam	345	343	319	346	315	0.3	-9.0
Others Asia Pacific	313	322	341	337	311	0.3	-7.7
Total Asia Pacific	8,375	8,200	8,249	8,365	8,033	8.3	-4.0
Production of biofuels	2,135	2,178	2,214	2,240	2,267	2.3	1.2
Earnings/reductions in refining	1,852	2,083	2,235	2,287	2,342	2.4	2.4
Total Worldwide*	90,588	91,290	93,754	96,579	96,927	100.0	0.4
of which:							
OPEC	37,624	36,714	36,763	38,139	39,331	40.6	3.1
Non-OPEC	52,965	54,576	56,991	58,440	57,596	59.4	-1.4
OECD	19,802	20,980	22,926	23,920	23,396	24.1	-2.2
Non-OECD	66,799	66,049	66,379	68,132	68,923	71.1	1.2

* Includes: crude oil, non conventional crude oil, natural gas liquids, production of biofuels and earnings/reductions in refining

^ different from o.o

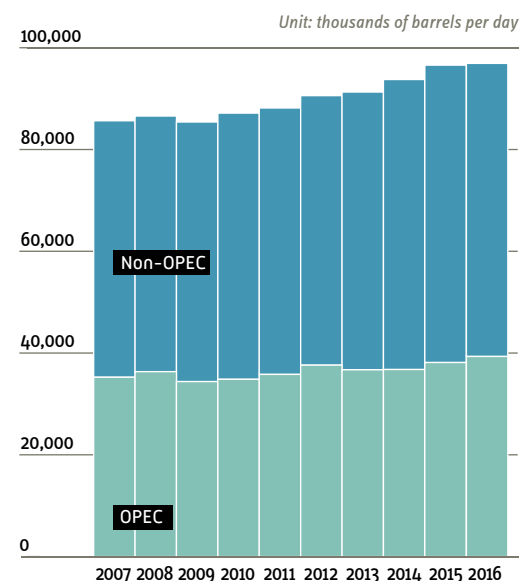
Source: International Energy Agency (IEA)

Oil production by region 2016



Source: International Energy Agency (IEA)

Evolution of oil production



Note: Non-OPEC includes processing gains

Source: International Energy Agency (IEA)

Global oil reserves*

Unit: millions of barrels

	2012	2013	2014	2015	2016	Structure (%)	Vr (%) 2016/2015
USA	44,180	48,463	54,962	47,987	47,987	2.8	-
Canada	173,716	173,038	172,156	171,512	171,512	10.0	-
Mexico	11,424	11,079	10,816	7,977	7,977	0.5	-
Total North America	229,320	232,579	237,935	227,475	227,475	13.3	-
Argentina	2,354	2,330	2,380	2,395	2,395	0.1	-
Brazil	15,314	15,593	16,184	13,000	12,634	0.7	-2.8
Colombia	2,200	2,377	2,445	2,308	2,002	0.1	-13.3
Ecuador	8,383	8,191	8,000	8,000	8,000	0.5	-
Peru	1,423	1,617	1,410	1,187	1,187	0.1	-
Trinidad & Tobago	830	830	830	728	243	^	-66.6
Venezuela	297,735	298,350	299,953	300,878	300,878	17.6	-
Others Central & South America	512	528	529	536	520	^	-3.0
Total Central & South America	328,751	329,815	331,730	329,032	327,858	19.2	-0.4
Azerbaijan	7,000	7,000	7,000	7,000	7,000	0.4	-
Denmark	730	673	610	491	440	^	-10.3
Italy	621	603	642	617	541	^	-12.4
Kazakhstan	30,000	30,000	30,000	30,000	30,000	1.8	-
Norway	7,495	7,047	6,539	8,005	7,601	0.4	-5.0
Romania	600	600	600	600	600	^	-
Russia	105,492	105,016	103,164	102,375	109,500	6.4	7.0
Turkmenistan	600	600	600	600	600	^	-
United Kingdom	3,037	3,030	2,805	2,542	2,542	0.1	-
Uzbekistan	594	594	594	594	594	^	-
Others Europe & Eurasia	2,013	2,008	2,058	2,068	2,091	0.1	1.1
Total Europe & Eurasia	158,182	157,172	154,612	154,892	161,510	9.5	4.3
Iran	157,300	157,800	157,800	158,400	158,400	9.3	-
Iraq	140,300	144,211	143,069	142,503	153,000	9.0	7.4
Kuwait	101,500	101,500	101,500	101,500	101,500	5.9	-
Oman	5,500	4,974	5,151	5,306	5,373	0.3	1.3
Qatar	25,229	25,063	25,705	25,244	25,244	1.5	-
Saudi Arabia	265,850	265,850	267,000	266,578	266,455	15.6	^
Syria	2,500	2,500	2,500	2,500	2,500	0.1	-
United Arab Emirates	97,800	97,800	97,800	97,800	97,800	5.7	-
Yemen	3,000	3,000	3,000	3,000	3,000	0.2	-
Others Middle East	279	261	239	217	194	^	-10.4
Total Middle East	799,258	802,959	803,764	803,048	813,466	47.7	1.3
Algeria	12,200	12,200	12,200	12,200	12,200	0.7	-
Angola	12,667	12,667	12,598	11,776	11,567	0.7	-1.8
Chad	1,500	1,500	1,500	1,500	1,500	0.1	-
Egypt	4,200	3,900	3,681	3,473	3,473	0.2	-
Equatorial Guinea	1,705	1,705	1,100	1,100	1,100	0.1	-
Gabon	2,000	2,000	2,000	2,000	2,000	0.1	-
Libya	48,472	48,363	48,363	48,363	48,363	2.8	-
Nigeria	37,139	37,070	37,070	37,070	37,062	2.2	^
Republic of Congo	1,600	1,600	1,600	1,600	1,600	0.1	-
South Sudan	3,500	3,500	3,500	3,500	3,500	0.2	-
Sudan	1,500	1,500	1,500	1,500	1,500	0.1	-
Tunisia	425	425	425	425	425	-	-
Others Africa	3,684	3,684	3,684	3,684	3,684	0.2	-
Total Africa	130,592	130,114	129,222	128,192	127,974	7.5	-0.2
Australia	3,922	3,957	3,982	3,985	3,985	0.2	-
Brunei	1,100	1,100	1,100	1,100	1,100	0.1	-
China	24,409	24,702	25,142	25,655	25,655	1.5	-
India	5,720	5,711	5,743	4,786	4,677	0.3	-2.3
Indonesia	3,741	3,693	3,625	3,603	3,307	0.2	-8.2
Malaysia	3,668	3,750	3,600	3,600	3,600	0.2	-
Thailand	449	462	405	396	396	^	-
Vietnam	4,400	4,400	4,400	4,400	4,400	0.3	-
Others Asia Pacific	1,075	1,345	1,283	1,290	1,266	0.1	-1.8
Total Asia Pacific	48,483	49,120	49,280	48,814	48,386	2.8	-0.9
Total Worldwide**	1,694,586	1,701,760	1,706,543	1,691,453	1,706,670	100.0	0.9
of which:							
OPEC	1,206,575	1,211,065	1,213,058	1,212,312	1,222,468	71.5	0.8
Non-OPEC	488,011	490,695	493,485	479,141	484,202	28.5	1.1
OECD	246,422	249,210	253,887	244,478	243,970	14.3	-0.2
Non-OECD	1,448,164	1,452,550	1,452,656	1,446,975	1,462,700	85.7	1.1
EU	5,953	5,845	5,645	5,232	5,052	0.3	-3.4

* Reserves to 31st December each year

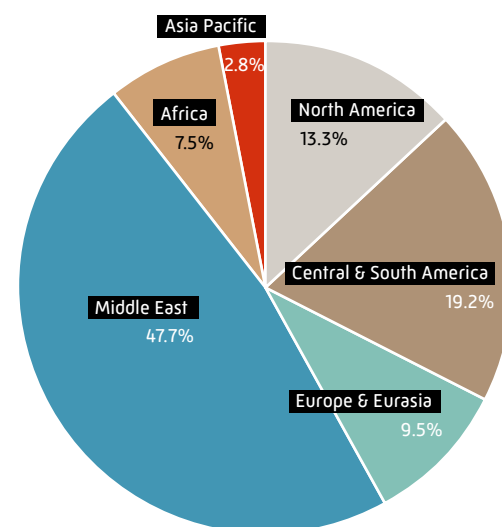
** Includes: crude oil, gas condensate and natural gas liquids

^ different from 0.0

- equal to 0.0

Source: BP Statistical Review

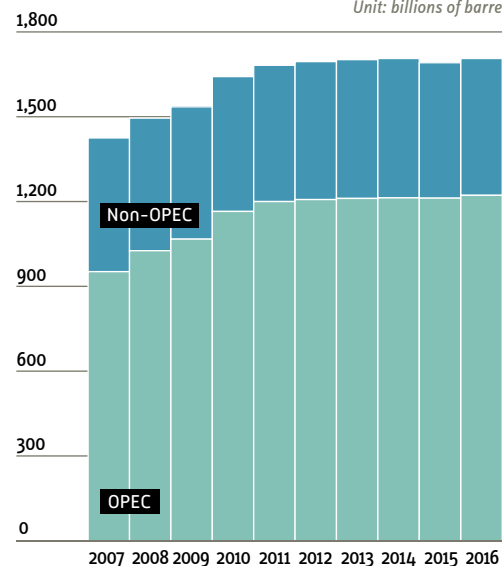
Oil reserves by region 2016



Source: BP Statistical Review

Evolution of oil reserves

Unit: billions of barrels



Source: BP Statistical Review

Global refining capacity

Unit: thousands of barrels per day

	2012	2013	2014	2015	2016	Structure (%)	Vr (%) 2016/2015
USA	17,824	17,925	17,889	18,315	18,621	19.1	1.7
Canada	2,050	1,965	1,965	1,966	1,967	2.0	^
Mexico	1,606	1,606	1,522	1,522	1,522	1.6	-
Total North America	21,479	21,495	21,375	21,803	22,110	22.7	1.4
Argentina	657	657	657	657	657	0.7	-
Brazil	2,001	2,093	2,235	2,278	2,289	2.3	0.5
Colombia	336	336	336	421	421	0.4	-
Venezuela	1,303	1,303	1,303	1,303	1,303	1.3	-
Others Central & South America	1,522	1,528	1,547	1,555	1,590	1.6	2.2
Total Central & South America	5,819	5,917	6,078	6,214	6,259	6.4	0.7
Belarus	460	460	460	460	460	0.5	-
Belgium	753	776	776	776	776	0.8	-
France	1,513	1,375	1,375	1,375	1,224	1.3	-11.0
Germany	2,097	2,061	2,077	2,049	2,024	2.1	-1.2
Greece	498	498	498	498	498	0.5	-
Italy	2,113	1,876	1,915	1,915	1,915	2.0	-
Netherlands	1,274	1,274	1,274	1,293	1,293	1.3	-
Poland	582	582	582	581	581	0.6	-
Russia	5,826	6,245	6,347	6,408	6,418	6.6	0.2
Spain	1,546	1,546	1,546	1,562	1,562	1.6	-
Turkey	613	613	613	613	613	0.6	-
United Kingdom	1,526	1,498	1,337	1,337	1,227	1.3	-8.3
Others Europe & Eurasia	4,691	4,732	4,727	4,695	4,712	4.8	0.4
Total Europe & Eurasia	23,492	23,536	23,528	23,563	23,304	23.9	-1.1
Iran	1,952	1,985	1,985	1,985	1,985	2.0	-
Iraq	971	823	931	903	919	0.9	1.8
Kuwait	936	936	936	936	936	1.0	-
Saudi Arabia	2,107	2,507	2,899	2,899	2,899	3.0	-
United Arab Emirates	710	710	1,143	1,143	1,143	1.2	-
Others Middle East	1,553	1,441	1,448	1,448	1,594	1.6	10.1
Total Middle East	8,229	8,402	9,342	9,314	9,476	9.7	1.7
Total Africa	3,435	3,449	3,457	3,457	3,457	3.5	-
Australia	663	662	536	443	452	0.5	2.0
China	12,962	13,594	14,534	14,306	14,177	14.6	-0.9
India	4,279	4,319	4,319	4,307	4,620	4.7	7.3
Indonesia	1,141	1,152	1,155	1,155	1,155	1.2	-
Japan	4,254	4,123	3,749	3,721	3,600	3.7	-3.2
Malaysia	606	612	612	612	612	0.6	-
Singapore	1,422	1,414	1,514	1,514	1,514	1.6	-
South Korea	2,878	2,878	3,110	3,110	3,234	3.3	4.0
Taiwan	1,197	1,197	1,197	988	988	1.0	-
Thailand	1,230	1,237	1,252	1,252	1,235	1.3	-1.4
Others Asia Pacific	1,091	1,224	1,231	1,234	1,238	1.3	0.3
Total Asia Pacific	31,723	32,410	33,210	32,642	32,825	33.7	0.6
Total Worldwide	94,176	95,210	96,990	96,992	97,430	100.0	0.5
of which:							
OECD	44,810	44,314	43,832	44,073	44,105	45.3	^
Non-OECD	49,367	50,896	53,158	52,920	53,325	54.7	0.8
EU	14,641	14,247	14,134	14,151	13,882	14.2	-1.9

^ different from 0.0 / - equal to 0.0

Source: BP Statistical Review

Stock of crude oil and petroleum products in OECD countries

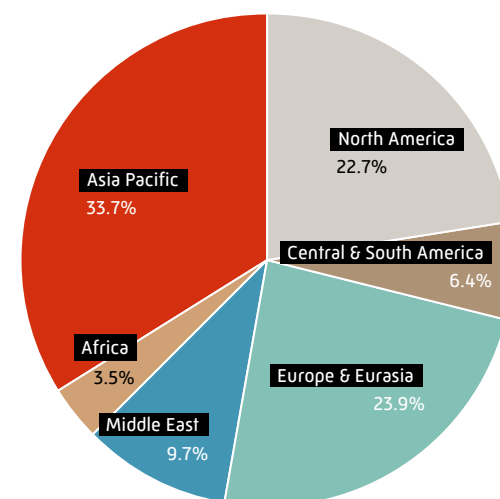
Years		Stocks (Millions of barrels)		Days of Consumption**			
		Total	Governments*	Industry	Total	Governments*	Industry
2012	1Q	4,184	1,536	2,648	92	34	58
	2Q	4,218	1,539	2,679	92	34	58
	3Q	4,266	1,542	2,724	92	33	59
	4Q	4,202	1,547	2,655	92	34	58
2013	1Q	4,231	1,580	2,651	93	35	58
	2Q	4,224	1,576	2,648	91	34	57
	3Q	4,267	1,582	2,686	92	34	58
	4Q	4,144	1,584	2,559	90	35	56
2014	1Q	4,164	1,585	2,579	93	35	57
	2Q	4,229	1,580	2,649	92	34	58
	3Q	4,297	1,578	2,718	93	34	59
	4Q	4,285	1,580	2,704	92	34	58
2015	1Q	4,372	1,583	2,789	96	35	61
	2Q	4,463	1,585	2,878	95	34	61
	3Q	4,533	1,579	2,954	98	34	64
	4Q	4,573	1,587	2,986	98	34	64
2016	1Q	4,608	1,593	3,014	100	35	66
	2Q	4,645	1,591	3,054	98	34	65
	3Q	4,655	1,594	3,061	98	34	65
	4Q	4,583	1,598	2,985	98	34	64

* Includes government ownership and emergency stocks

** Days calculated on basis of demand for the following quarter

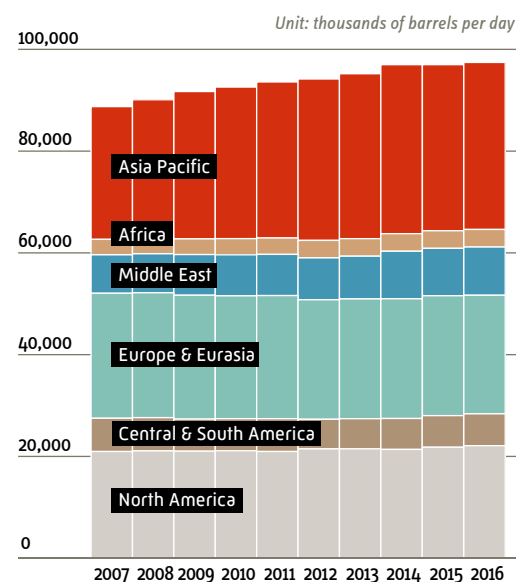
Source: International Energy Agency (IEA)

Refining capacity by region 2016



Source: BP Statistical Review

Evolution of refining capacity



Source: BP Statistical Review

Road fuel consumption in OECD Europe

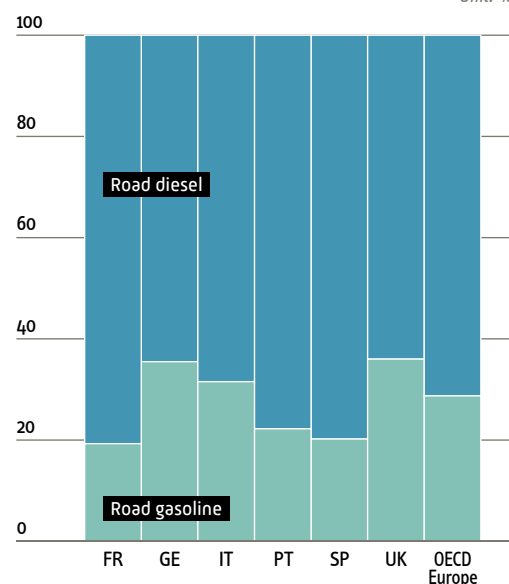
Unit: thousands of barrels per day

	2012	2013	2014	2015	2016	Structure (%)	Vr (%) 2016/2015
Road gasoline							
France	165	160	162	164	168	8.7	2.4
Germany	427	427	429	422	421	21.9	-0.2
Italy	216	201	205	212	202	10.5	-4.7
Portugal	26	25	25	26	25	1.3	-3.8
Spain	114	108	107	114	116	6.0	1.8
United Kingdom	320	306	300	294	290	15.1	-1.4
Others OECD Europe	724	698	691	691	700	36.4	1.3
Total	1,992	1,925	1,919	1,923	1,922	100.0	-0.1
Road diesel							
France	692	692	699	706	704	14.6	-0.3
Germany	673	699	714	751	772	16.1	2.8
Italy	466	454	478	444	437	9.1	-1.6
Portugal	87	86	88	89	88	1.8	-1.1
Spain	433	420	428	445	458	9.5	2.9
United Kingdom	450	461	480	496	515	10.7	3.8
Others OECD Europe	1,525	1,578	1,630	1,734	1,833	38.1	5.7
Total	4,326	4,390	4,517	4,665	4,807	100.0	3.0
Road fuels							
France	857	852	861	870	872	13.0	0.2
Germany	1,100	1,126	1,143	1,173	1,193	17.7	1.7
Italy	682	655	683	656	639	9.5	-2.6
Portugal	113	111	113	115	113	1.7	-1.7
Spain	547	528	535	559	574	8.5	2.7
United Kingdom	770	767	780	790	805	12.0	1.9
Others OECD Europe	2,249	2,276	2,321	2,425	2,533	37.6	4.5
Total	6,318	6,315	6,436	6,588	6,729	100.0	2.1

Source: International Energy Agency (IEA)

Road fuel demand in OECD Europe 2016

Unit: %



Source: International Energy Agency (IEA)

Monthly consumption of road fuels in OECD Europe 2016

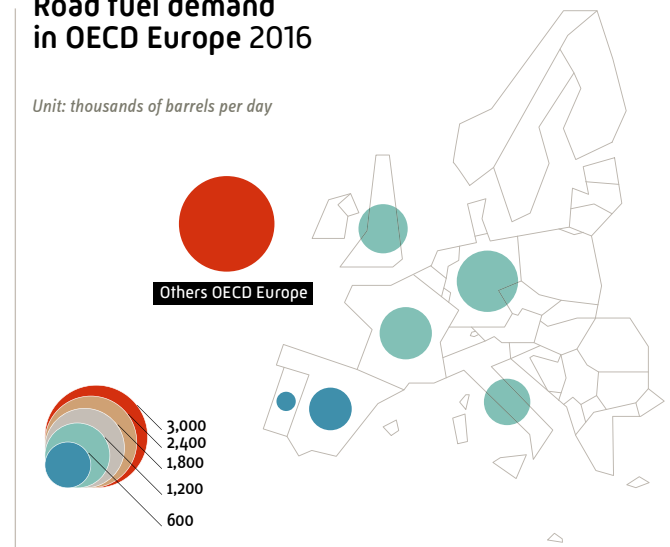
Unit: thousands of barrels per day

	J	F	M	A	M	J	J	A	S	O	N	D
Road gasoline												
France	132	151	162	168	183	174	185	189	177	163	160	172
Germany	367	407	411	430	428	436	438	434	445	419	431	409
Italy	185	203	206	207	213	204	218	215	214	188	179	192
Portugal	24	24	26	25	25	26	27	30	26	24	24	22
Spain	100	110	113	115	113	124	130	132	122	113	110	113
United Kingdom	273	293	277	293	294	312	284	287	302	284	295	286
Others OECD Europe	596	643	665	708	711	751	739	767	749	689	688	690
Total	1,677	1,831	1,860	1,946	1,967	2,027	2,021	2,054	2,035	1,880	1,887	1,884
Road diesel												
France	605	697	716	715	754	690	711	704	737	701	703	719
Germany	644	731	763	813	743	804	806	790	845	782	827	724
Italy	387	436	438	442	443	457	458	425	473	432	422	439
Portugal	81	80	87	92	90	91	92	98	93	86	88	81
Spain	399	454	457	470	452	488	485	475	476	439	460	445
United Kingdom	455	535	493	535	493	540	510	512	520	516	548	530
Others OECD Europe	1,500	1,709	1,755	1,818	1,802	1,897	1,771	1,952	2,024	1,945	1,959	1,845
Total	4,071	4,642	4,709	4,885	4,777	4,967	4,833	4,956	5,168	4,901	5,007	4,783
Road fuels												
France	737	848	878	883	937	864	896	893	914	864	863	891
Germany	1,011	1,138	1,174	1,243	1,171	1,240	1,244	1,224	1,290	1,201	1,258	1,133
Italy	572	639	644	649	656	661	676	640	687	620	601	631
Portugal	105	104	113	117	115	117	119	128	119	110	112	103
Spain	499	564	570	585	565	612	615	607	598	552	570	558
United Kingdom	728	828	770	828	787	852	794	799	822	800	843	816
Others OECD Europe	2,096	2,352	2,420	2,526	2,513	2,648	2,510	2,719	2,773	2,634	2,647	2,535
Total	5,748	6,473	6,569	6,831	6,744	6,994	6,854	7,010	7,203	6,781	6,894	6,667

Source: International Energy Agency (IEA)

Road fuel demand in OECD Europe 2016

Unit: thousands of barrels per day



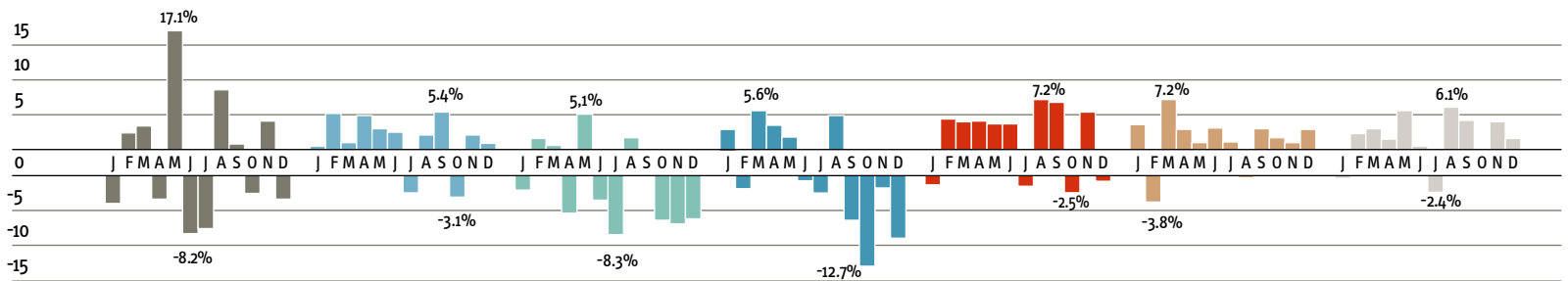
Source: International Energy Agency (IEA)

Year-on-year 2016/2015 variation rate of road demand in OECD Europe

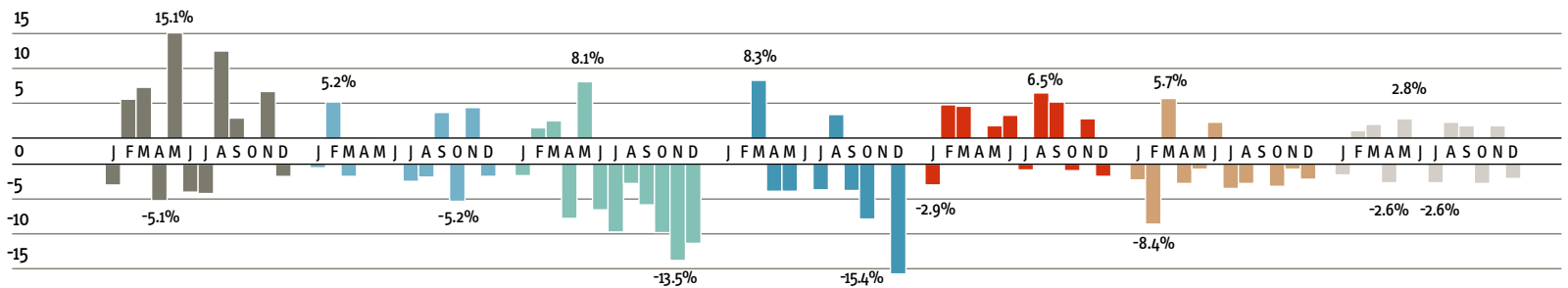
Unit: %

France Germany Italy Portugal Spain United Kingdom OECD Europe

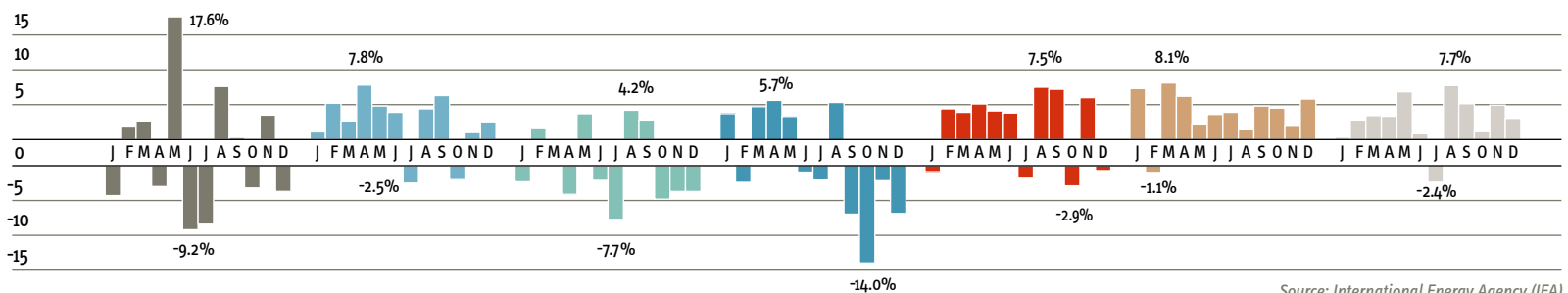
Road fuels



Road gasoline



Road diesel



Source: International Energy Agency (IEA)

Global natural gas demand

Unit: bcm

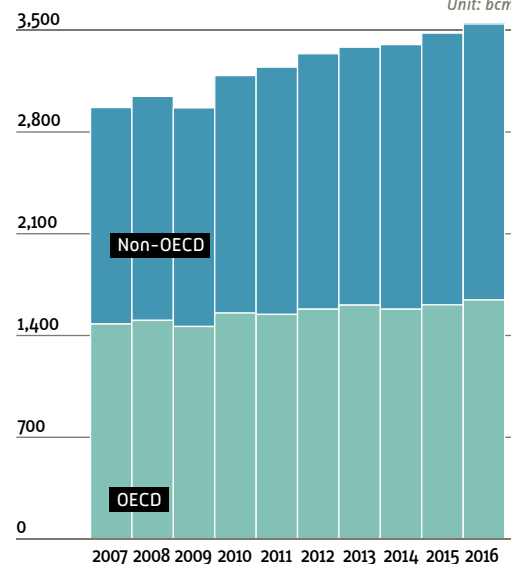
	2012	2013	2014	2015	2016	Structure (%)	Vr (%) 2016/2015
USA	723.2	740.6	753.0	773.2	778.6	22.0	0.7
Canada	100.2	103.9	104.2	102.5	99.9	2.8	-2.5
Mexico	79.9	83.3	86.8	87.1	89.5	2.5	2.8
Total North America	903.3	927.8	944.1	962.8	968.0	27.3	0.5
Argentina	46.7	46.7	47.2	48.2	49.6	1.4	2.9
Brazil	31.7	37.3	39.5	41.7	36.6	1.0	-12.3
Chile	4.6	4.6	3.8	4.1	4.5	0.1	11.4
Colombia	9.8	10.0	10.9	10.7	10.6	0.3	-1.4
Ecuador	0.6	0.6	0.7	0.6	0.6	^	1.8
Peru	6.2	6.0	6.8	7.2	7.9	0.2	10.1
Trinidad & Tobago	22.2	22.4	22.0	21.5	19.1	0.5	-11.2
Venezuela	31.4	30.5	30.7	34.5	35.6	1.0	3.0
Others Central & South America	6.5	7.0	7.3	7.3	7.4	0.2	1.3
Total Central & South America	159.6	165.2	168.9	175.8	171.9	4.9	-2.2
Austria	8.9	8.6	7.9	8.3	8.7	0.2	4.7
Azerbaijan	8.5	8.6	9.4	10.6	10.4	0.3	-1.9
Belarus	18.5	18.5	18.3	15.6	17.0	0.5	9.3
Belgium	16.0	15.8	13.8	15.1	15.4	0.4	2.1
Bulgaria	2.7	2.6	2.6	2.9	3.0	0.1	4.2
Czech Republic	7.6	7.7	6.9	7.2	7.8	0.2	8.2
Denmark	3.9	3.7	3.1	3.2	3.2	0.1	1.7
Finland	3.1	2.8	2.5	2.2	2.0	0.1	-9.0
France	42.5	43.1	36.2	38.9	42.6	1.2	9.3
Germany	77.5	81.2	70.6	73.5	80.5	2.3	9.5
Greece	4.0	3.6	2.7	2.8	2.8	0.1	0.9
Hungary	9.3	8.7	7.8	8.3	8.9	0.3	7.3
Ireland	4.5	4.3	4.1	4.2	4.8	0.1	14.3
Italy	68.2	63.8	56.3	61.4	64.5	1.8	5.0
Kazakhstan	10.8	11.2	12.5	12.9	13.4	0.4	4.1
Lithuania	2.9	2.4	2.3	2.3	2.0	0.1	-10.9
Netherlands	36.0	36.5	31.8	31.5	33.6	0.9	6.7
Norway	4.4	4.4	4.7	4.8	4.9	0.1	0.7
Poland	16.6	16.6	16.3	16.3	17.3	0.5	6.0
Portugal	4.5	4.3	4.1	4.8	5.2	0.1	8.4
Romania	12.4	11.3	10.5	9.9	10.6	0.3	6.5
Russia	416.2	413.5	409.7	402.8	390.9	11.0	-3.0
Slovakia	4.9	5.3	4.2	4.3	4.4	0.1	1.9
Spain	31.7	29.0	26.3	27.3	28.0	0.8	2.3
Sweden	1.0	1.0	0.9	0.9	0.9	^	10.3
Switzerland	2.9	3.1	2.7	2.9	3.0	0.1	5.1
Turkey	41.4	42.0	44.6	43.6	42.1	1.2	-3.4
Turkmenistan	26.3	22.9	25.6	29.4	29.5	0.8	0.3
Ukraine	49.6	43.3	36.8	28.8	29.0	0.8	0.6
United Kingdom	73.9	73.0	66.7	68.1	76.7	2.2	12.6
Uzbekistan	47.2	46.8	48.8	50.2	51.4	1.4	2.2
Others Europe & Eurasia	16.0	14.9	14.9	15.1	15.5	0.4	2.7
Total Europe & Eurasia	1,074.0	1,054.4	1,005.6	1,010.2	1,029.9	29.1	2.0
Iran	161.5	162.9	183.7	190.8	200.8	5.7	5.3
Israel	2.6	6.9	7.6	8.4	9.7	0.3	14.9
Kuwait	18.5	18.7	18.5	21.3	21.9	0.6	2.8
Qatar	23.4	37.9	36.4	43.9	41.7	1.2	-5.2
Saudi Arabia	99.3	100.0	102.4	104.5	109.4	3.1	4.7
United Arab Emirates	65.6	66.9	65.9	73.8	76.6	2.2	3.9
Others Middle East	44.2	46.9	46.3	51.0	52.3	1.5	2.5
Total Middle East	415.0	440.3	460.8	493.6	512.3	14.5	3.8
Algeria	31.0	33.4	37.5	39.4	40.0	1.1	1.5
Egypt	52.6	51.4	48.0	47.8	51.3	1.4	7.2
South Africa	4.4	4.6	5.0	5.1	5.1	0.1	1.6
Others Africa	32.6	33.8	36.6	43.5	41.7	1.2	-4.1
Total Africa	120.6	123.2	127.0	135.8	138.2	3.9	1.7
Australia	33.8	35.5	38.3	42.9	41.1	1.2	-4.1
Bangladesh	22.2	22.8	23.9	26.9	27.5	0.8	2.5
China	150.9	171.9	188.4	194.8	210.3	5.9	8.0
Hong Kong	2.8	2.6	2.5	3.2	3.3	0.1	2.7
India	71.1	49.3	48.8	45.7	50.1	1.4	9.5
Indonesia	42.2	40.8	40.9	40.4	37.7	1.1	-6.8
Japan	116.9	116.9	118.0	113.4	111.2	3.1	-1.9
Malaysia	35.5	40.3	42.2	41.8	43.0	1.2	3.0
New Zealand	4.2	4.5	4.9	4.5	4.7	0.1	4.6
Pakistan	43.8	42.6	41.9	43.5	45.5	1.3	4.5
Philippines	3.7	3.4	3.6	3.3	3.8	0.1	14.6
Singapore	9.4	10.5	10.9	12.2	12.5	0.4	2.8
South Korea	50.2	52.5	47.8	43.6	45.5	1.3	4.2
Taiwan	16.3	16.3	17.2	18.4	19.1	0.5	3.9
Thailand	46.5	46.7	47.7	48.7	48.3	1.4	-0.8
Vietnam	9.4	9.8	10.2	10.7	10.7	0.3	0.5
Others Asia Pacific	6.2	6.4	7.2	7.8	8.0	0.2	3.0
Total Asia Pacific	665.1	672.9	694.4	701.8	722.5	20.4	3.0
Total Worldwide	3,337.7	3,383.8	3,400.8	3,480.1	3,542.9	100.0	1.8
of which:							
OECD	1,580.9	1,609.5	1,580.6	1,611.4	1,644.1	46.4	2.0
Non-OECD	1,756.8	1,774.4	1,820.2	1,868.7	1,898.8	53.6	1.6
EU	438.6	431.2	383.0	399.1	428.8	12.1	7.4

^ different from 0.0

Source: BP Statistical Review

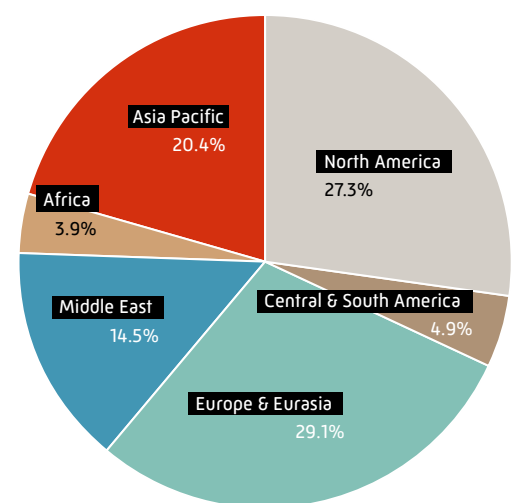
Evolution of natural gas demand

Unit: bcm



Source: BP Statistical Review

Natural gas demand by region 2016



Source: BP Statistical Review

Global natural gas production

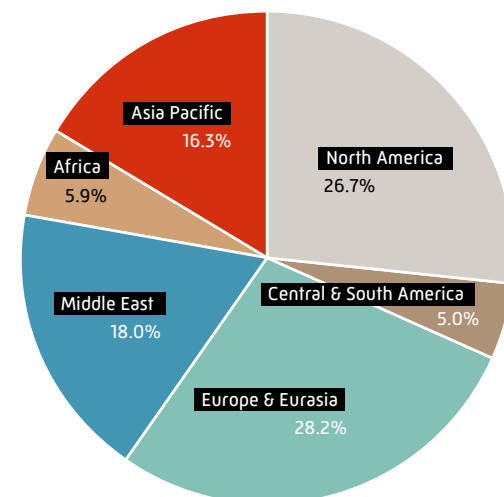
Unit: bcm

	2012	2013	2014	2015	2016	Structure (%)	Vr (%) 2016/2015
USA	680.5	685.4	733.1	766.2	749.2	21.1	-2.2
Canada	141.1	141.4	147.2	149.1	152.0	4.3	1.9
Mexico	57.2	58.2	57.1	54.1	47.2	1.3	-12.7
Total North America	878.9	885.0	937.3	969.4	948.4	26.7	-2.2
Argentina	37.7	35.5	35.5	36.5	38.3	1.1	4.9
Bolivia	17.8	20.3	21.0	20.3	19.7	0.6	-2.7
Brazil	19.3	21.3	22.7	23.1	23.5	0.7	1.5
Colombia	12.0	12.6	11.8	11.1	10.4	0.3	-6.3
Peru	11.9	12.2	12.9	12.5	14.0	0.4	12.1
Trinidad & Tobago	42.7	42.8	42.1	39.6	34.5	1.0	-13.0
Venezuela	29.5	28.4	28.6	32.4	34.3	1.0	5.8
Others Central & South America	2.7	2.4	2.3	2.5	2.4	0.1	-4.4
Total Central & South America	173.4	175.6	176.9	178.0	177.0	5.0	-0.6
Azerbaijan	15.6	16.2	17.6	17.9	17.5	0.5	-2.7
Denmark	5.7	4.8	4.6	4.6	4.5	0.1	-1.9
Germany	9.0	8.2	7.7	7.2	6.6	0.2	-8.0
Italy	7.8	7.0	6.5	6.2	5.3	0.1	-14.6
Kazakhstan	17.2	18.4	18.7	19.0	19.9	0.6	4.8
Netherlands	63.8	68.6	57.9	43.3	40.2	1.1	-7.3
Norway	114.7	108.7	108.8	117.2	116.6	3.3	-0.4
Poland	4.3	4.2	4.1	4.1	3.9	0.1	-3.5
Romania	10.0	9.6	9.7	9.8	9.2	0.3	-6.3
Russia	592.3	604.7	581.7	575.1	579.4	16.3	0.7
Turkmenistan	62.3	62.3	67.1	69.6	66.8	1.9	-4.0
Ukraine	18.6	19.3	18.2	17.9	17.8	0.5	-0.8
United Kingdom	38.9	36.5	36.8	39.6	41.0	1.2	3.6
Uzbekistan	56.9	56.9	57.3	57.7	62.8	1.8	8.7
Others Europe & Eurasia	8.3	7.2	6.4	6.2	8.7	0.2	40.7
Total Europe & Eurasia	1,025.5	1,032.7	1,003.2	995.4	1,000.1	28.2	0.5
Bahrain	13.7	14.7	15.5	15.5	15.5	0.4	-0.5
Iran	166.2	166.8	185.8	189.4	202.4	5.7	6.9
Iraq	0.6	1.2	0.9	1.0	1.1	^	12.9
Kuwait	15.5	16.3	15.0	16.9	17.1	0.5	1.3
Oman	32.2	34.8	33.3	34.7	35.4	1.0	2.0
Qatar	157.0	177.6	174.1	178.5	181.2	5.1	1.6
Saudi Arabia	99.3	100.0	102.4	104.5	109.4	3.1	4.7
Syria	5.8	4.8	4.4	4.1	3.6	0.1	-11.4
United Arab Emirates	54.3	54.6	54.2	60.2	61.9	1.74	2.8
Yemen	7.3	9.9	9.3	2.7	0.7	^	-73.4
Others Middle East	2.7	6.5	7.7	8.4	9.4	0.3	12.2
Total Middle East	554.7	587.2	602.6	615.9	637.8	18.0	3.6
Algeria	81.5	82.4	83.3	84.6	91.3	2.6	7.9
Egypt	60.9	56.1	48.8	44.3	41.8	1.2	-5.5
Libya	11.1	11.6	11.3	11.8	10.1	0.3	-14.5
Nigeria	43.3	36.2	45.0	50.1	44.9	1.3	-10.4
Others Africa	17.6	20.0	18.6	19.3	20.2	0.6	4.8
Total Africa	214.4	206.3	207.1	210.0	208.3	5.9	-0.8
Australia	56.9	59.0	63.6	72.6	91.2	2.6	25.5
Bangladesh	22.2	22.8	23.9	26.9	27.5	0.8	2.5
Brunei	12.6	12.2	11.9	11.6	11.2	0.3	-3.5
China	111.8	122.2	131.6	136.1	138.4	3.9	1.7
India	38.9	32.1	30.5	29.3	27.6	0.8	-5.7
Indonesia	77.1	76.5	75.3	75.0	69.7	2.0	-7.1
Malaysia	61.5	67.3	68.4	71.2	73.8	2.1	3.7
Myanmar	12.7	13.1	16.8	19.6	18.9	0.5	-3.6
Pakistan	43.8	42.6	41.9	42.0	41.5	1.2	-1.1
Thailand	41.0	41.3	41.6	39.3	38.6	1.1	-1.9
Vietnam	9.4	9.8	10.2	10.7	10.7	0.3	0.5
Others Asia Pacific	17.5	18.1	23.1	27.6	30.8	0.9	11.6
Total Asia Pacific	505.4	517.0	538.8	561.9	579.9	16.3	3.2
Total Worldwide	3,352.3	3,403.9	3,465.9	3,530.6	3,551.6	100.0	0.6
of which:							
OECD	1,197.2	1,202.0	1,247.6	1,284.5	1,281.6	36.1	-0.2
Non-OECD	2,155.1	2,201.9	2,218.3	2,246.1	2,270.0	63.9	1.1
EU	146.6	144.8	132.5	119.8	118.2	3.3	-1.3

^ different from 0.0

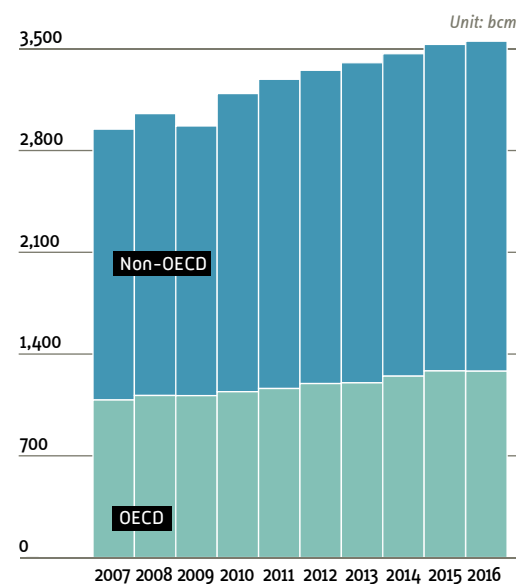
Source: BP Statistical Review

Natural gas production by region 2016



Source: BP Statistical Review

Evolution of natural gas production



Source: BP Statistical Review

Global natural gas reserves*

Unit: thousands of bcm

	2012	2013	2014	2015	2016	Structure (%)	Vr (%) 2016/2015
USA	8.7	9.6	10.4	8.7	8.7	4.7	-
Canada	2.0	2.0	2.0	2.2	2.2	1.2	-
Mexico	0.4	0.3	0.3	0.2	0.2	0.1	-
Total North America	11.1	12.0	12.8	11.1	11.1	6.0	-
Argentina	0.3	0.3	0.3	0.4	0.4	0.2	-
Bolivia	0.3	0.3	0.3	0.3	0.3	0.2	-
Brazil	0.5	0.5	0.5	0.4	0.4	0.2	-12.2
Colombia	0.2	0.2	0.1	0.1	0.1	0.1	-
Peru	0.4	0.4	0.4	0.4	0.4	0.2	-
Trinidad & Tobago	0.4	0.3	0.3	0.3	0.3	0.2	-7.9
Venezuela	5.6	5.6	5.6	5.7	5.7	3.1	-
Others Central & South America	0.1	0.1	0.1	0.1	0.1	^	-0.1
Total Central & South America	7.7	7.6	7.6	7.7	7.6	4.1	-1.0
Azerbaijan	0.9	0.9	1.2	1.1	1.1	0.6	-
Denmark	^	^	^	^	^	^	-23.5
Germany	0.1	0.1	^	^	^	^	-9.3
Italy	0.1	0.1	^	^	^	^	-22.4
Kazakhstan	0.8	0.9	0.9	1.0	1.0	0.5	-
Netherlands	0.8	0.8	0.7	0.7	0.7	0.4	-
Norway	2.1	2.0	1.9	1.9	1.8	0.9	-5.0
Poland	0.1	0.1	0.1	0.1	0.1	^	-
Romania	0.1	0.1	0.1	0.1	0.1	0.1	-
Russia	32.0	32.3	32.4	32.3	32.3	17.3	-
Turkmenistan	17.5	17.5	17.5	17.5	17.5	9.4	-
Ukraine	0.6	0.6	0.6	0.6	0.6	0.3	-2.1
United Kingdom	0.2	0.2	0.2	0.2	0.2	0.1	-
Uzbekistan	1.1	1.1	1.1	1.1	1.1	0.6	-
Others Europe & Eurasia	0.2	0.2	0.2	0.2	0.2	0.1	5.8
Total Europe & Eurasia	56.6	56.9	57.0	56.8	56.7	30.4	-0.2
Bahrain	0.2	0.2	0.2	0.2	0.2	0.1	-5.2
Iran	33.8	34.0	34.0	33.5	33.5	18.0	-
Iraq	3.6	3.6	3.7	3.7	3.7	2.0	-
Israel	0.2	0.2	0.2	0.2	0.2	0.1	-13.9
Kuwait	1.8	1.8	1.8	1.8	1.8	1.0	-
Oman	0.5	0.7	0.7	0.7	0.7	0.4	-
Qatar	24.9	24.7	24.5	24.3	24.3	13.0	-
Saudi Arabia	8.1	8.2	8.3	8.4	8.4	4.5	-
Syria	0.3	0.3	0.3	0.3	0.3	0.2	-
United Arab Emirates	6.1	6.1	6.1	6.1	6.1	3.3	-
Yemen	0.3	0.3	0.3	0.3	0.3	0.1	-
Others Middle East	^	^	^	^	^	^	-
Total Middle East	79.7	80.0	80.1	79.4	79.4	42.5	^
Algeria	4.5	4.5	4.5	4.5	4.5	2.4	-
Egypt	2.0	1.8	1.8	1.8	1.8	1.0	-
Libya	1.5	1.5	1.5	1.5	1.5	0.8	^
Nigeria	5.1	5.1	5.3	5.3	5.3	2.8	-
Others Africa	1.2	1.2	1.2	1.1	1.1	0.6	1.3
Total Africa	14.4	14.2	14.3	14.2	14.3	7.6	0.1
Australia	3.5	3.5	3.5	3.5	3.5	1.9	-
Bangladesh	0.3	0.3	0.2	0.2	0.2	0.1	-
Brunei	0.3	0.3	0.3	0.3	0.3	0.1	-
China	3.2	3.5	3.7	4.8	5.4	2.9	11.9
India	1.3	1.4	1.4	1.3	1.2	0.7	-2.0
Indonesia	2.9	2.9	2.8	2.8	2.9	1.5	3.3
Malaysia	1.1	1.1	1.2	1.2	1.2	0.6	-
Myanmar	0.3	0.5	0.5	0.5	1.2	0.6	125.0
Pakistan	0.6	0.6	0.5	0.5	0.5	0.2	-
Papua New Guinea	0.2	0.2	0.2	0.1	0.2	0.1	48.9
Thailand	0.3	0.2	0.2	0.2	0.2	0.1	-
Vietnam	0.6	0.6	0.6	0.6	0.6	0.3	-
Others Asia Pacific	0.3	0.3	0.3	0.3	0.3	0.1	-0.1
Total Asia Pacific	14.8	15.2	15.4	16.2	17.5	9.4	8.4
Total Worldwide	184.3	185.8	187.2	185.4	186.6	100.0	0.6
of which:							
OECD	18.3	19.1	19.6	17.9	17.8	9.5	-0.7
Non-OECD	166.0	166.7	167.5	167.5	168.8	90.5	0.8
EU	1.5	1.4	1.3	1.3	1.3	0.7	-1.5

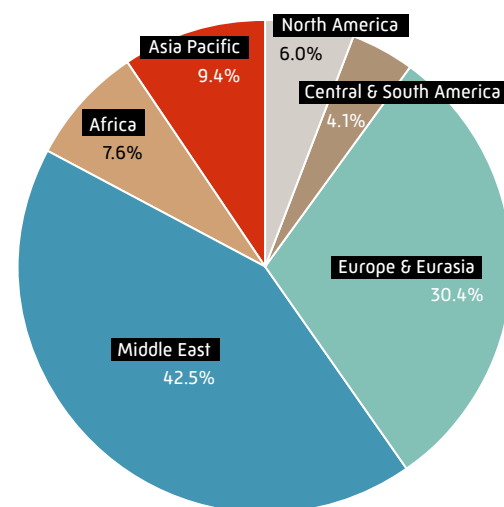
* Reserves up to 31st December each year

^ different from 0.0

- equal to 0.0

Source: BP Statistical Review

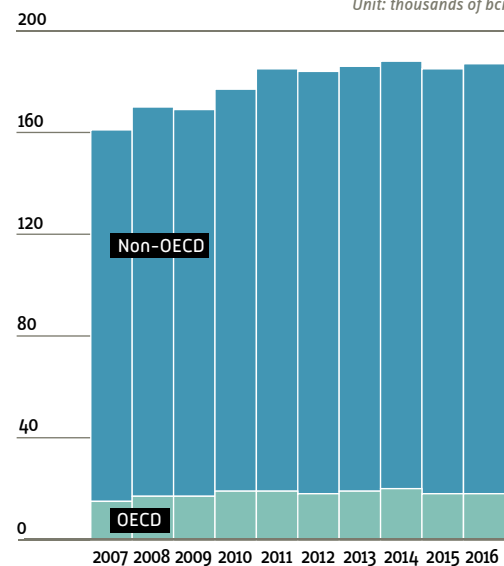
Natural gas reserves by region 2016



Source: BP Statistical Review

Evolution of natural gas reserves

Unit: thousands of bcm



Source: BP Statistical Review

Benchmark crude oil prices and exchange rate

Unit: US\$ per barrel

	Annual average					Vr*	Monthly average 2016											
	2012	2013	2014	2015	2016		J	F	M	A	M	J	J	A	S	O	N	D
Brent Dated	111.84	108.72	98.89	52.31	43.71	-16.4	31.13	32.28	38.36	41.67	46.87	48.36	44.98	45.87	46.60	49.48	44.89	53.27
WTI	94.09	97.98	93.02	48.68	43.28	-11.1	31.84	30.28	37.82	40.96	46.83	48.76	44.86	44.72	45.16	49.85	45.71	51.97
Exchange rate US\$/€	1.2848	1.3281	1.3285	1.1095	1.1069	-0.2	1.0860	1.1093	1.1100	1.1339	1.1311	1.1229	1.1069	1.1212	1.1212	1.1026	1.0799	1.0543

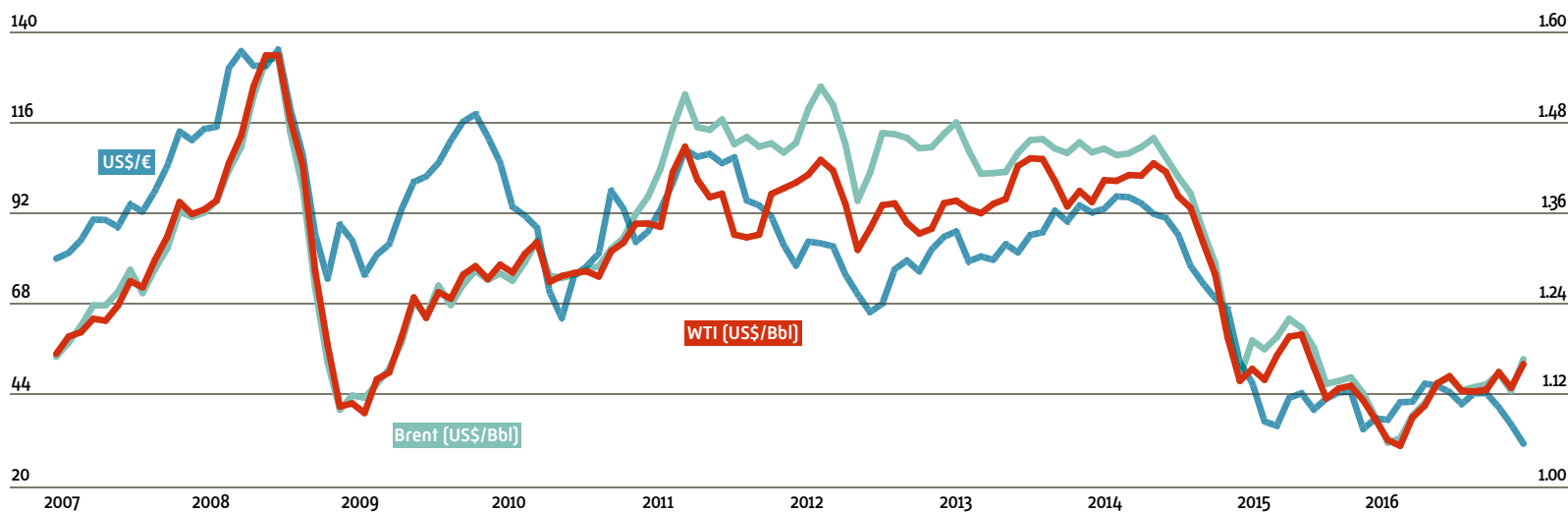
* % 2016/2015

Source: Reuters

Evolution of crude oil benchmark prices and exchange rates

Unit: US\$/Bbl

Unit: US\$/€



Source: Reuters

Evolution of crude oil spot prices

Unit: US\$ per barrel

	Annual average					Vr*	Monthly average 2016											
	2012	2013	2014	2015	2016		J	F	M	A	M	J	J	A	S	O	N	D
Middle East																		
Arabian Light	110.1	107.1	96.7	50.1	40.4	-19.4	28.0	28.9	34.7	38.2	43.0	45.5	42.1	42.4	43.0	46.7	41.8	50.2
Dubai	109.1	105.6	96.5	50.9	41.5	-18.5	27.5	29.9	35.5	39.4	44.3	46.3	42.5	43.9	43.8	48.8	44.0	52.1
Iran (light)	109.7	106.6	96.8	50.1	40.4	-19.4	28.0	29.0	34.6	38.1	43.0	45.5	42.2	42.4	42.9	46.7	41.7	50.1
Iran (heavy)	108.1	104.8	95.0	48.5	38.6	-20.4	26.3	27.3	33.3	36.6	41.2	43.5	40.1	40.5	41.4	45.0	40.2	48.3
Iraq (Kirkuk)	109.6	106.5	95.6	47.8	38.4	-19.6	25.6	27.1	33.2	36.4	41.5	43.0	39.8	40.4	41.4	44.3	39.8	48.7
Africa																		
Algeria (Saharan)	111.3	109.2	99.3	52.5	44.0	-16.2	31.5	32.9	38.9	42.4	47.4	48.6	45.4	46.0	46.5	49.5	44.8	53.5
Libya (Es Sider)	111.9	108.6	98.3	51.2	42.5	-16.9	30.0	31.1	37.4	40.7	45.8	47.4	44.0	44.9	45.5	48.4	43.2	51.8
Nigeria (Bonny)	113.5	111.1	100.7	53.1	44.5	-16.1	31.2	32.9	38.9	42.3	47.6	49.3	46.3	47.5	48.3	50.3	45.5	54.1
Russia																		
Ural	110.7	108.3	98.0	51.4	42.0	-18.4	29.1	30.6	36.6	40.0	45.0	46.7	43.7	43.8	44.4	48.0	43.5	52.1
North America																		
USA (Texas Int.)	94.1	98.0	93.0	48.7	43.2	-11.2	31.7	30.3	37.8	41.0	46.7	48.8	44.7	44.7	45.2	49.8	45.7	52.0
Mexico (Maya)	102.9	99.2	87.6	39.9	33.5	-16.0	19.7	23.0	28.7	30.7	36.2	37.6	36.1	36.7	36.7	38.8	34.8	42.8
North Sea																		
Ekofisk	113.5	110.1	99.7	52.5	43.8	-16.6	31.3	32.6	38.6	42.1	47.7	48.5	45.0	45.7	46.9	49.4	44.5	53.4
Forties	111.8	108.9	99.0	51.9	43.2	-16.8	30.3	31.9	38.0	41.1	46.6	47.9	44.4	45.3	46.7	48.9	44.0	53.0
Brent	112.4	109.6	99.4	52.1	43.3	-16.9	30.8	31.9	38.1	41.3	46.8	47.8	44.5	45.3	46.8	49.0	44.0	53.0
OPEC basket	109.4	105.9	96.2	49.5	40.7	-17.8	26.5	28.7	34.7	37.9	43.2	45.8	42.7	43.1	42.9	47.9	43.2	51.7

* % 2016/2015

Source: Reuters

International FOB prices of petroleum products

Unit: US\$ per tonne

		Annual average					Vr*	Monthly average 2016											
		2012	2013	2014	2015	2016		J	F	M	A	M	J	J	A	S	O	N	D
Gasoline**	MED	1,021.3	981.5	904.1	556.9	463.2	-16.8	401.6	358.7	432.3	466.9	497.1	496.5	440.3	465.4	479.0	511.5	471.4	532.8
	NWE	1,036.5	987.1	918.0	568.9	468.0	-17.7	392.3	352.8	419.4	485.4	512.3	513.2	453.9	473.0	492.3	519.0	468.0	530.5
Kerosene	MED	1,003.5	965.7	883.9	500.8	409.7	-18.2	295.4	314.9	363.7	378.5	429.3	451.4	419.3	421.3	430.7	472.8	440.4	492.3
	NWE	1,014.1	976.1	895.1	514.0	416.9	-18.9	304.6	321.8	370.2	390.1	436.4	457.6	425.2	426.9	435.0	478.5	447.9	503.1
Diesel**	MED	968.6	930.6	849.3	493.4	395.3	-19.9	284.0	299.9	350.3	363.3	421.5	439.9	401.9	406.4	417.2	459.0	421.0	473.1
	NWE	968.5	926.5	842.8	489.8	391.8	-20.0	274.4	292.5	347.0	364.2	417.4	435.7	396.0	403.5	412.0	456.9	420.3	474.8
Fuel oil***	MED	671.9	614.1	562.6	268.3	222.9	-16.9	131.7	141.9	162.2	179.2	215.4	247.0	243.3	243.5	255.2	286.4	257.9	306.8
	NWE	667.9	610.6	552.5	260.3	217.6	-16.4	124.0	135.4	158.6	175.3	209.8	236.5	235.5	239.9	251.7	281.1	255.2	303.7

* % 2016/2015

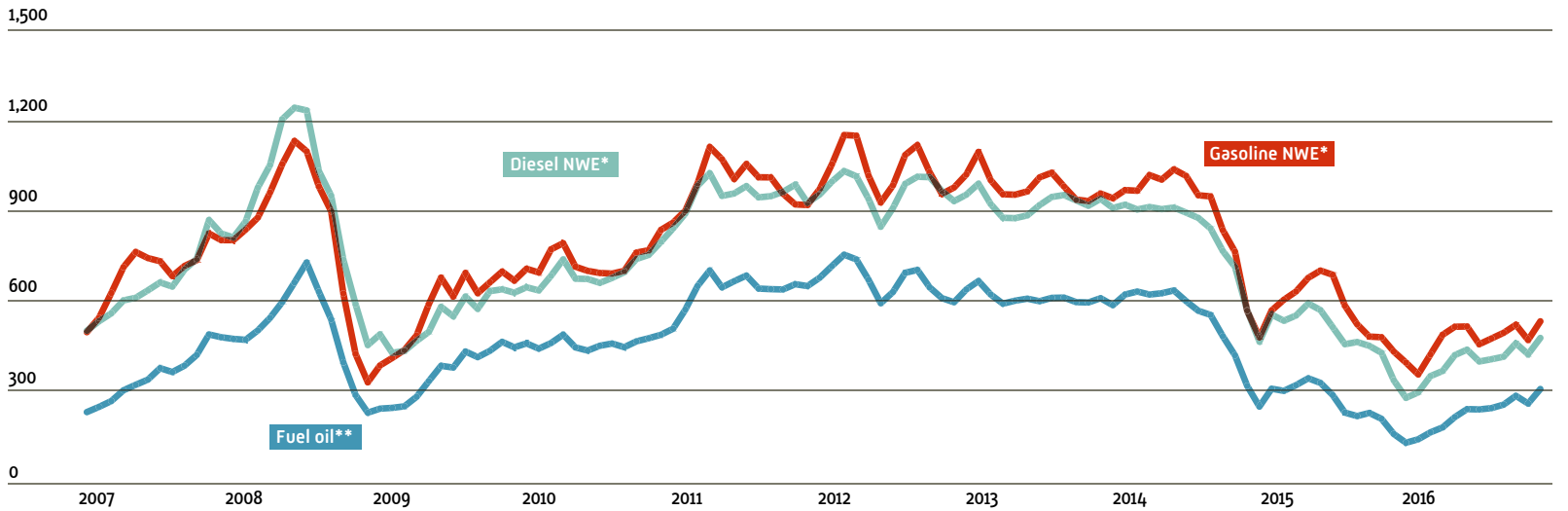
** Sulphur content of 10 parts per million (ppm)

*** Sulphur content of 1%

Source: Reuters

Evolution of international FOB prices of petroleum products

Unit: US\$ per tonne



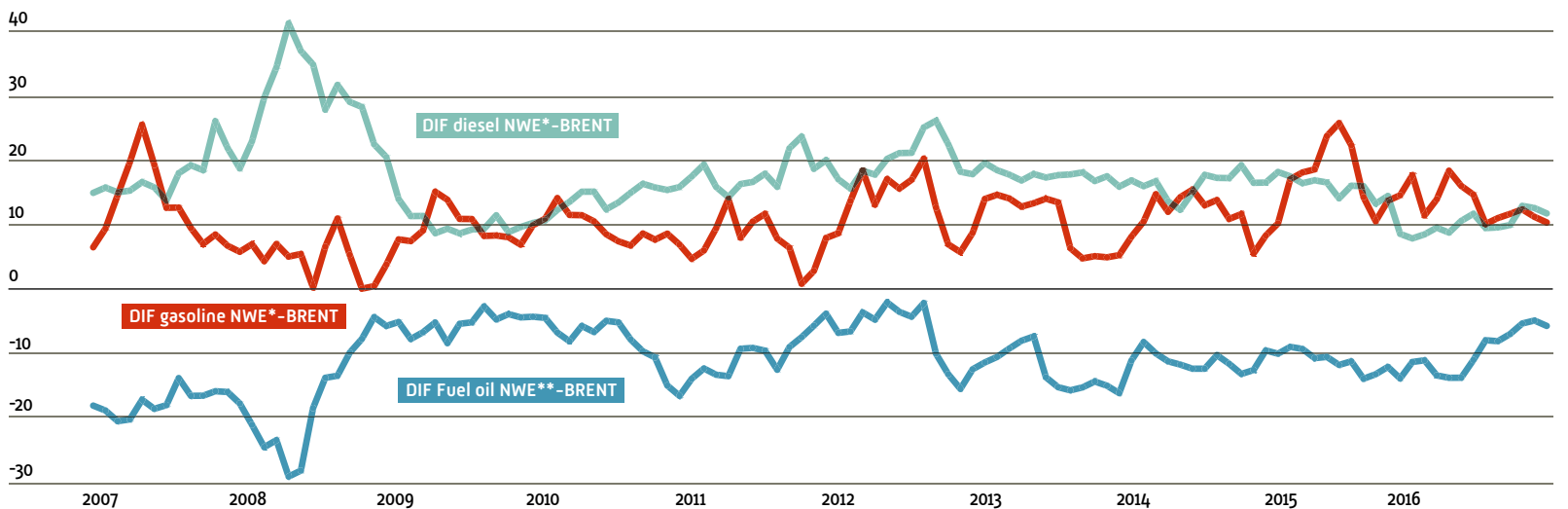
* Sulphur content of 10 parts per million (ppm)

** Sulphur content of 1%

Source: Reuters

Evolution of NWE-Brent price differentials

Unit: US\$ per tonne



* Sulphur content of 10 parts per million (ppm)

** Sulphur content of 1%

Source: Reuters

Refining margins indicators

Unit: US\$ per barrel

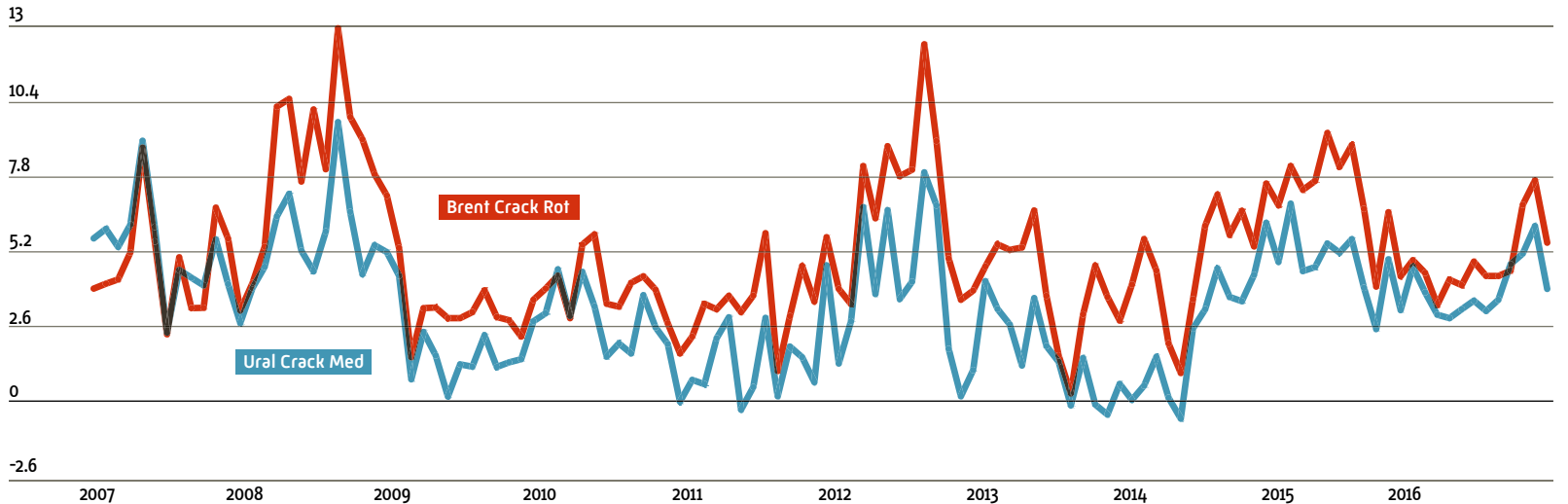
	Annual average					Vr*	Monthly average 2016											
	2012	2013	2014	2015	2016		J	F	M	A	M	J	J	A	S	O	N	D
Brent Crack Rot	6.84	3.99	4.55	7.13	4.92	-31.0	4.91	4.47	3.35	4.23	4.04	4.86	4.36	4.36	4.54	6.84	7.69	5.52
Ural Crack Med	4.19	1.64	2.03	4.83	3.97	-17.8	4.68	3.79	3.01	2.89	3.20	3.50	3.14	3.53	4.77	5.14	6.10	3.91
WTI Crack USG	23.39	15.80	12.14	13.61	8.24	-39.5	6.63	7.46	8.33	8.41	8.08	7.94	7.19	9.13	8.73	9.18	8.22	9.46
Dubai Crack Singapore	7.44	6.44	5.76	7.71	6.13	-20.4	9.91	6.60	6.70	5.26	4.92	4.82	4.86	3.89	6.62	5.98	7.82	6.41
Brent Hydro Rot	5.16	1.67	2.38	3.96	2.36	-40.4	1.59	1.94	0.22	0.50	0.69	1.60	2.48	2.27	2.47	4.67	5.97	3.99
Ural Hydro Med	2.42	-0.08	0.28	2.30	1.55	-32.5	1.27	1.46	-0.13	-0.65	0.16	0.88	1.36	1.54	2.63	3.16	4.44	2.52
Dubai Hydro Singapore	2.87	0.92	0.11	2.17	1.48	-31.7	3.73	1.91	0.88	-0.41	-0.70	-0.22	1.48	0.11	2.49	1.71	4.15	2.76

* % 2016/2015

Source: Reuters

Evolution of refining margins indicators

Unit: US\$ per barrel



Source: Reuters

Benchmark natural gas prices and exchange rates

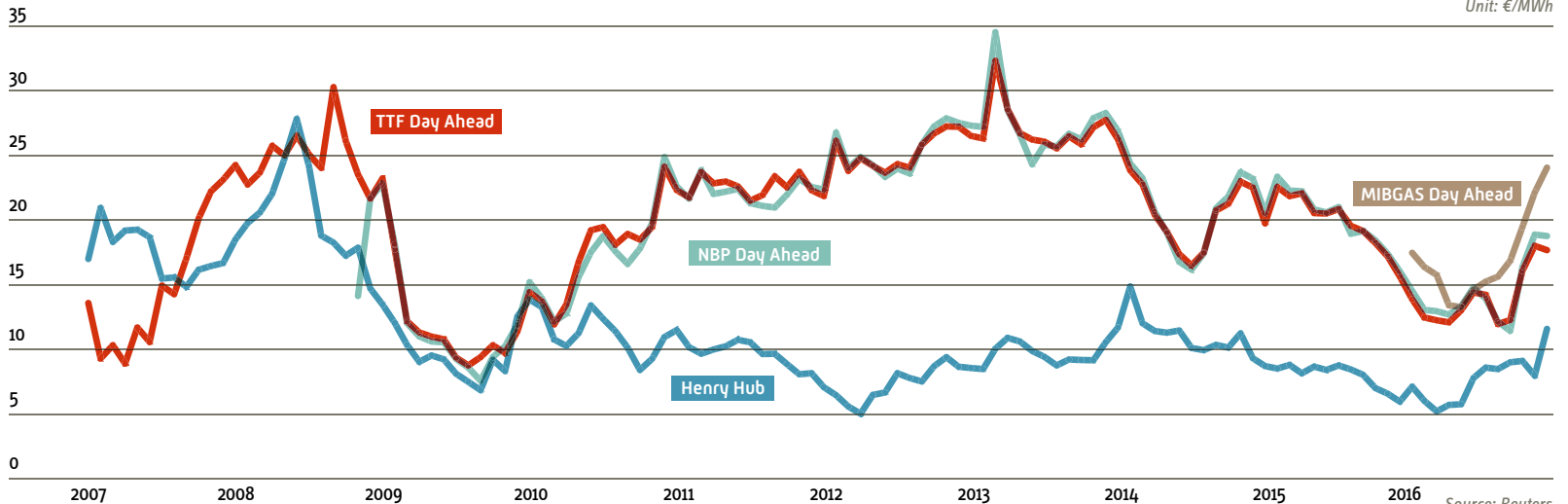
	Annual average					Vr*	Monthly average 2016											
	2012	2013	2014	2015	2016		J	F	M	A	M	J	J	A	S	O	N	D
Henry Hub (US\$/MMBtu)	2.76	3.73	4.34	2.61	2.49	-4.4	2.27	1.96	1.70	1.90	1.92	2.57	2.79	2.79	2.96	2.95	2.52	3.58
NBP Day Ahead (GBP/therm)	59.71	68.17	50.09	42.67	34.69	-18.7	32.12	29.69	29.60	29.47	30.45	34.26	34.39	30.42	28.49	42.97	48.18	46.47
TTF Day Ahead (€/MWh)	24.97	27.12	20.93	19.81	14.03	-29.2	13.90	12.48	12.27	12.11	13.04	14.42	14.24	11.98	12.29	16.09	18.02	17.69
MIBGAS Day Ahead** (€/MWh)					17.03		17.48	16.38	15.77	13.43	13.28	14.63	15.25	15.64	16.87	19.48	22.14	24.06
Exchange rate US\$/€	1.28	1.33	1.33	1.11	1.11	-0.2	1.09	1.11	1.11	1.13	1.13	1.12	1.11	1.12	1.12	1.10	1.08	1.05
Exchange rate GBP/US\$	1.59	1.56	1.65	1.53	1.36	-11.3	1.44	1.43	1.43	1.43	1.45	1.42	1.31	1.31	1.31	1.23	1.24	1.25

* % 2016/2015 ** There is no quotation of MIBGAS prior to December 16, 2015

Source: Reuters

Evolution of natural gas prices

Unit: €/MWh



Source: Reuters

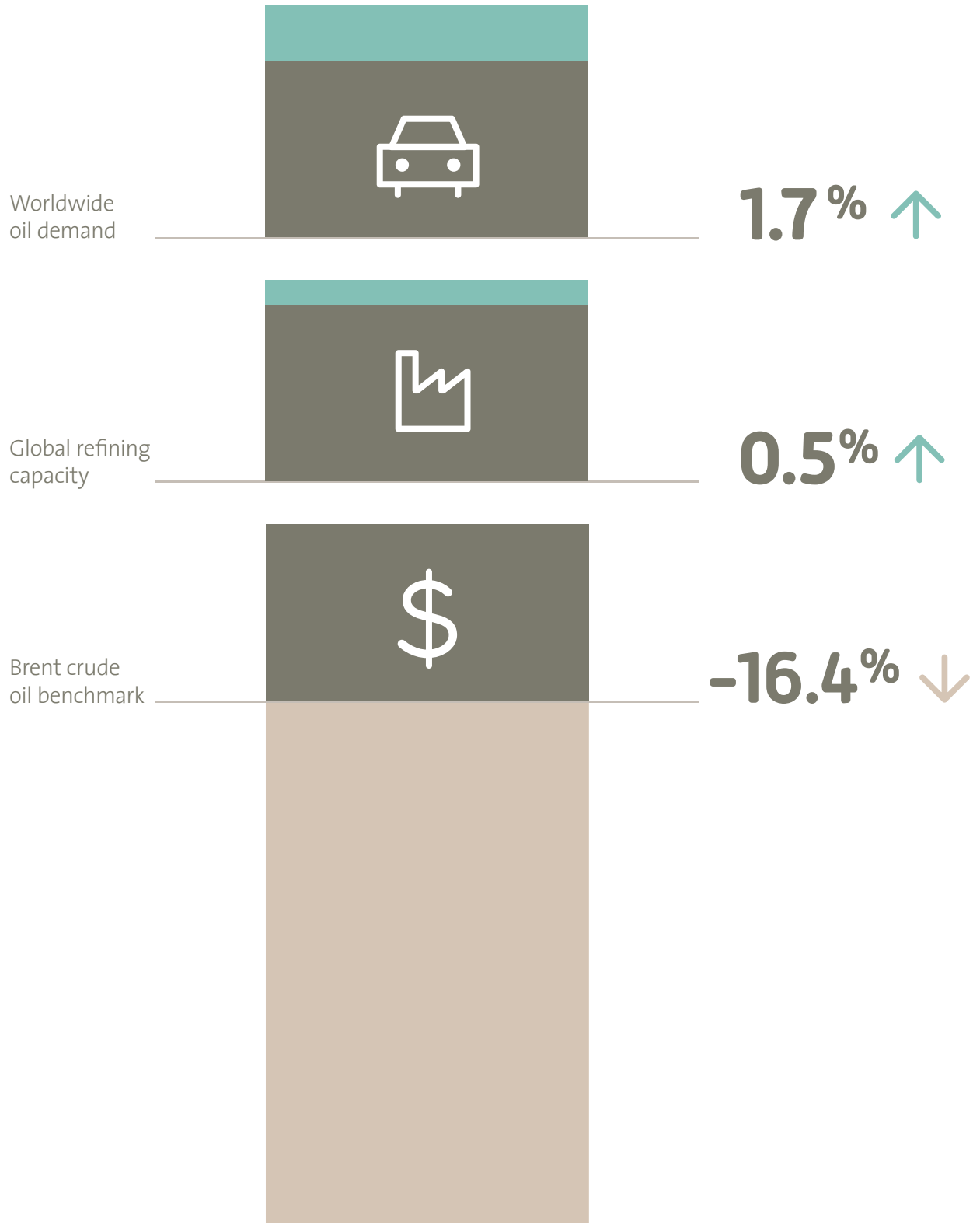
International Statistics

Summary for 2016

Oil

96.93

MBbl/d of global
oil production

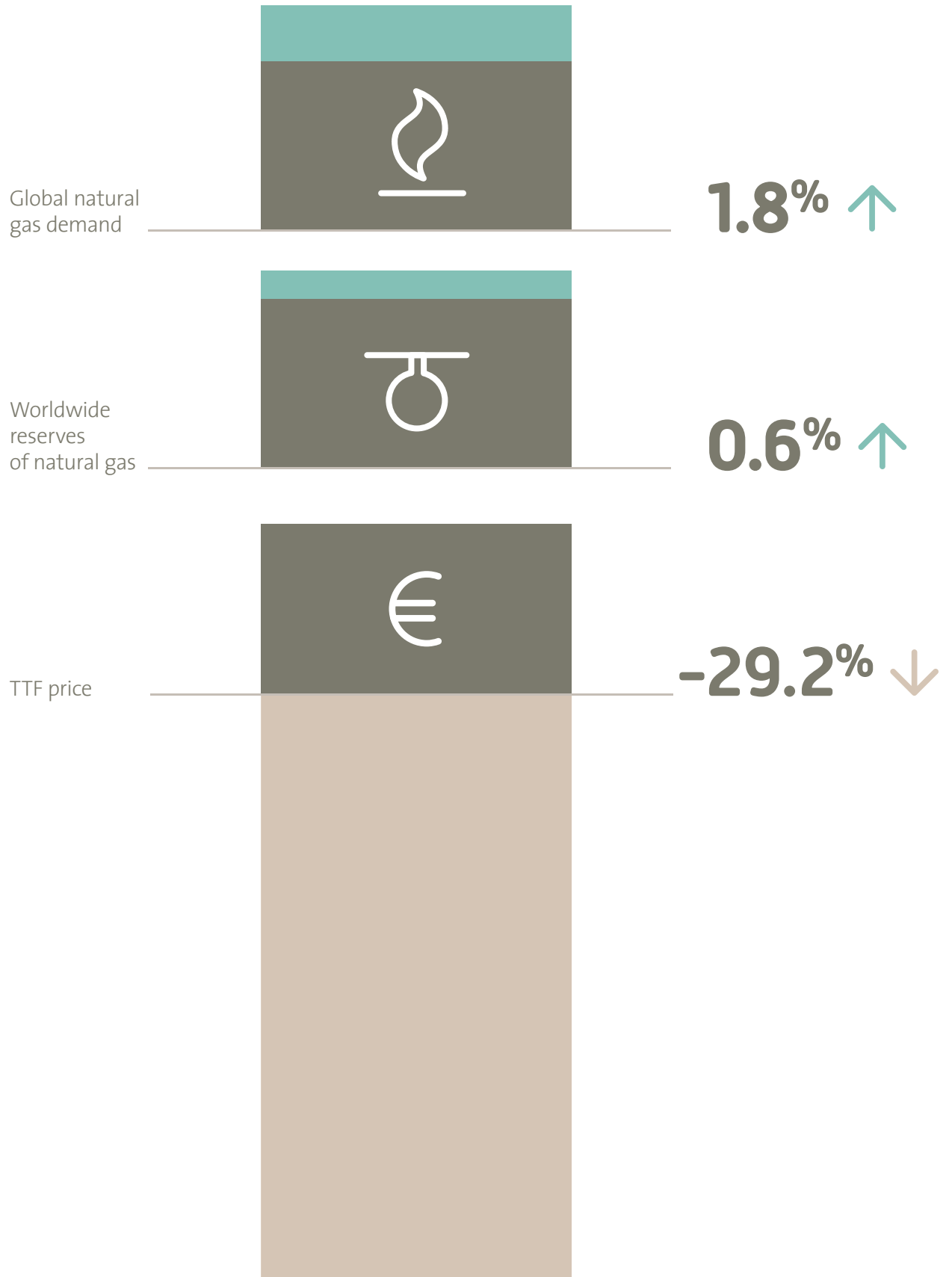


Note: Variations 2016/2015

Natural gas

3,551

bcm of global
natural
gas production







Spanish Statistics

Indicators

	Source	Units	2012	2013	2014	2015	2016
Consumption & demand							
Total petroleum products	CORES	kt	59,984	54,642	53,889	56,080	58,108
LPG	CORES	kt	1,602	1,588	1,664	1,956	2,509
Gasoline	CORES	kt	4,923	4,656	4,615	4,651	4,759
Kerosene	CORES	kt	5,278	5,130	5,266	5,501	5,894
Road fuel	CORES	kt	21,240	20,532	20,931	21,781	22,517
Natural gas	CORES	GWh	365,351	335,577	301,721	314,210	319,881
Foreign trade							
Imports of crude oil	CORES	kt	58,807	57,871	59,054	64,628	64,171
Imports of natural gas	CORES	GWh	394,795	375,525	383,973	364,172	364,325
Clf cost of imported crude oil	CORES	€/Bbl	85.43	80.46	72.96	44.57	36.25
Cost of natural gas supply	DGA	€/MWh	26.88	26.36	25.27	21.73	15.57
Export-import balance of petroleum products	CORES	kt	620	4,218	2,721	4,953	3,866
Energy balance figures	DGA	M€	-45,043	-40,984	-36,844	-25,844	-19,633
Petroleum commercial balance figures	DGA	%	112.82	206.69	124.94	85.75	88.67
Refining & petroleum stocks							
Processed raw materials	CORES	kt	61,893	61,037	61,407	65,663	65,696
Use of refinery capacity	CORES	%	80.38	79.27	79.75	84.40	84.44
Stocks of crude oil & products (as of 31 st December)	CORES	kt	16,278	15,066	16,388	17,872	17,658
Indigenous production							
Crude oil	CORES	kt	143	368	305	232	141
Natural gas	CORES	GWh	674	644	269	699	620
Level of self-sufficiency (oil)	CORES	%	0.24	0.67	0.57	0.41	0.24
Level of self-sufficiency (gas)	CORES	%	0.18	0.19	0.09	0.22	0.19
Price of crude oil & products							
Brent price (annual average)	Reuters	\$/Bbl	111.84	108.72	98.89	52.31	43.71
Exchange rate (annual average)	BCE	\$/€	1.2848	1.3281	1.3285	1.1095	1.1069
Retail price RON-95 gasoline (annual average)	MINETAD	c€/litre	142.47	143.30	138.34	122.83	115.19
Retail price road diesel (annual average)	MINETAD	c€/litre	136.55	136.13	130.27	111.41	101.54
Retail price 12.5 kg butane cylinder (as of 31 st December)	MINETAD	€/cylinder	16.10	17.50	17.50	12.68	12.28
Last resort tariff of natural gas TUR1 (as of 31 st December)	MINETAD	c€/kWh	9.2797	9.3229	9.3314	8.5953	8.2213
Activity indicators							
Industrial production index ¹	INE	(%) Annual Var.	-6.6	-1.6	1.2	3.2	2.0
Electrical energy consumption ²	REE	(%) Annual Var.	-1.8	-2.2	-0.1	1.7	-0.1
Apparent cement consumption ³	OFICEMEN	(%) Annual Var.	-33.6	-20.9	0.8	6.1	-3.6
Automobile registration	DGT	(%) Annual Var.	-12.1	4.5	18.3	20.9	10.9
Energy indicators							
Consumption of petroleum products by inhabitant	CORES	toe/i	1.28	1.17	1.16	1.21	1.25
Energy intensity (primary energy/GDP)	MINETAD	toe/M€(*)	124.3	118.0	114.2	114.6	110.9
Energy intensity (final energy/GDP)	MINETAD	toe/M€(*)	85.6	83.3	80.2	78.7	77.1
Consumption of primary energy by inhabitant	CORES	toe/i	2.77	2.60	2.55	2.65	2.66
Consumption of final energy by inhabitant	CORES	toe/i	1.90	1.84	1.79	1.82	1.85
Primary energy degree of self-sufficiency	MINETAD	%	25.93	28.73	29.68	27.30	26.66
GDP m.p. (2010 Base)	INE	M€	1,039,758	1,025,634	1,037,025	1,075,639	1,113,851
Population census	INE	Thousands	46,728	46,512	46,450	46,446	46,468

* Constant euros / Notes: 1. Corrected by seasonal and calendar effects. 2. Corrected by calendar date & temperature effect. 3. Calendar adjusted.

Annual consumption of primary energy in Spain and degree of self-sufficiency

Unit: thousands of tonnes oil equivalent

	2012	2013	2014	2015	2016	Structure (%)	Vr (%) 2016/2015	Self sufficiency 2016 (%)
Coal	15,331	11,348	11,639	13,686	10,442	8.5	-23.7	6.6
Oil	53,978	51,318	50,447	53,171	54,633	44.2	2.7	0.3
Natural gas	28,569	26,158	23,662	24,533	25,035	20.3	2.0	0.2
Nuclear	16,019	14,783	14,934	14,934	15,260	12.4	2.2	100.0
Renewable energy	16,163	17,773	17,808	16,659	17,212	13.9	3.3	100.0
Non-renewable waste	176	200	204	252	243	0.2	-3.7	93.6*
Electr. balance (Imp.-Exp.)	-963	-581	-293	-11	659	0.5		
Total	129,273	120,999	118,401	123,225	123,484	100.0	0.2	26.7

* This degree of self-sufficiency corresponds to biomass, biofuels and waste

Source: Directorate General for Energy Policy and Mines

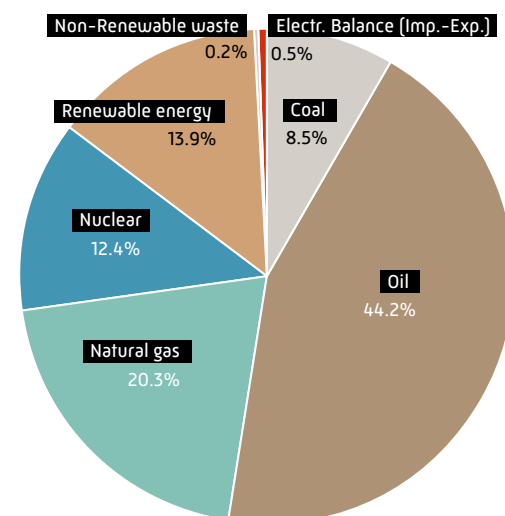
Annual consumption of final energy in Spain

Unit: thousands of tonnes oil equivalent

	2012	2013	2014	2015	2016	Structure (%)	Vr (%) 2016/2015
Coal	1,507	1,782	1,499	1,515	1,340	1.6	-11.5
Petroleum products	45,543	43,603	42,264	44,197	45,144	52.6	2.1
Natural gas	14,987	15,254	14,778	13,655	13,891	16.2	1.7
Electricity	20,661	19,787	19,513	19,955	20,115	23.4	0.8
Renewable energy	6,298	5,063	5,109	5,287	5,385	6.3	1.9
Total	88,996	85,489	83,164	84,608	85,875	100.0	1.5

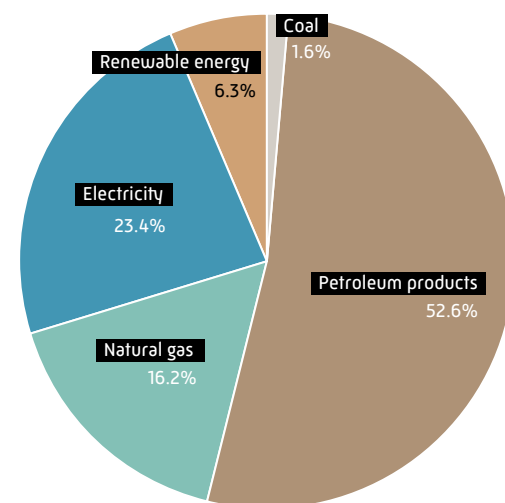
Source: Directorate General for Energy Policy and Mines

Distribution of primary energy consumption 2016



Source: Directorate General for Energy Policy and Mines

Distribution of final energy consumption 2016



Source: Directorate General for Energy Policy and Mines

Annual consumption of petroleum products

Unit: thousands of tonnes

	2012	2013	2014	2015	2016	Structure (%)	Vr (%) 2016/2015
Liquefied petroleum gas (LPG)	1,602	1,588	1,664	1,956	2,509	4.3	28.3
Bottled	959	928	859	864	860	1.5	-0.5
Bulk	617	575	510	516	535	0.9	3.6
Road (bottled & bulk)	26	31	35	43	47	0.1	9.9
Others	^	55	260	532	1,067	1.8	100.5
Gasoline	4,923	4,656	4,615	4,651	4,759	8.2	2.3
RON-95	4,557	4,336	4,297	4,307	4,379	7.5	1.7
RON-98	360	314	314	340	376	0.6	10.6
Biogasoline	1	^	^	^	^	^	-12.9
Subtotal road gasoline	4,917	4,651	4,612	4,647	4,755	8.2	2.3
Other gasoline	5	5	3	4	4	^	-6.3
Kerosene	5,278	5,130	5,266	5,501	5,894	10.1	7.1
Jet	5,278	5,130	5,266	5,501	5,893	10.1	7.1
Other	^	^	^	^	^	^	9.1
Gasoil	29,163	28,229	28,378	29,789	30,331	52.2	1.8
Road diesel	21,084	20,500	20,908	21,761	22,500	38.7	3.4
Biodiesel	27	5	7	3	5	^	34.5
Biodiesel blend	129	27	16	16	13	^	-22.0
Subtotal road diesel	21,240	20,532	20,931	21,781	22,517	38.8	3.4
Agricultural diesel	3,811	3,706	3,632	3,784	3,913	6.7	3.4
Heating oil	2,723	2,352	2,027	2,013	1,855	3.2	-7.8
Other gasoil	1,389	1,640	1,788	2,211	2,046	3.5	-7.4
Fuel oil	10,161	8,628	8,935	8,241	8,626	14.8	4.7
Low sulphur fuel oil	2,551	2,271	2,086	2,103	2,222	3.8	5.6
Other fuel oil	7,610	6,356	6,850	6,138	6,405	11.0	4.3
Other products	8,858	6,411	5,032	5,942	5,990	10.3	0.8
Lubricants	360	364	366	381	402	0.7	5.6
Asphalt product	1,862	1,418	885	906	740	1.3	-18.3
Petroleum coke	3,255	2,132	1,771	2,686	2,737	4.7	1.9
Others *	3,381	2,497	2,010	1,970	2,111	3.6	7.2
Total **	59,984	54,642	53,889	56,080	58,108	100.0	3.6
Bunkers	8,618	7,399	8,012	7,649	7,696	13.2	0.6

* Includes naphthas, condensates, parafins, solvents & others

** Includes international marine bunkers listed below

^ different from 0.0

Source: CORES

Monthly consumption of petroleum products 2016

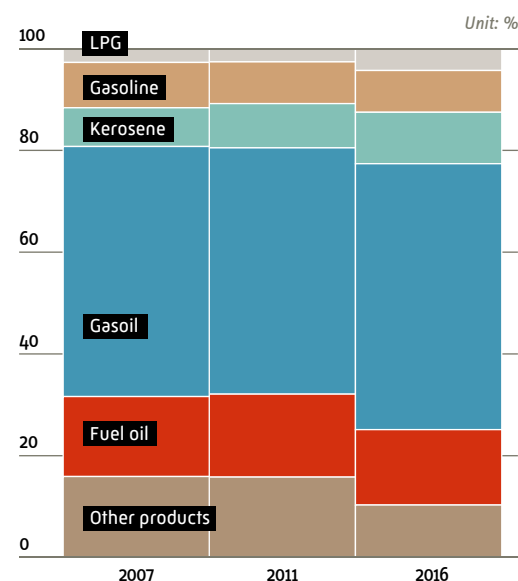
Unit: thousands of tonnes

	LPG	Gasoline	Kerosene	Gasoil	Fuel oil	Other products *	Total
January	234	342	387	2,406	750	458	4,578
February	225	353	359	2,511	638	463	4,550
March	248	390	415	2,669	779	404	4,904
April	192	383	450	2,521	697	378	4,621
May	175	393	520	2,430	731	436	4,685
June	163	418	560	2,549	687	492	4,869
July	200	455	611	2,533	771	550	5,120
August	184	460	617	2,501	745	506	5,013
September	186	412	563	2,471	689	605	4,926
October	197	392	541	2,475	776	571	4,953
November	220	368	431	2,606	738	581	4,944
December	284	393	440	2,659	626	542	4,944
Total	2,509	4,759	5,894	30,331	8,626	5,990	58,108

* Includes lubricants, asphalt products, petroleum coke and others

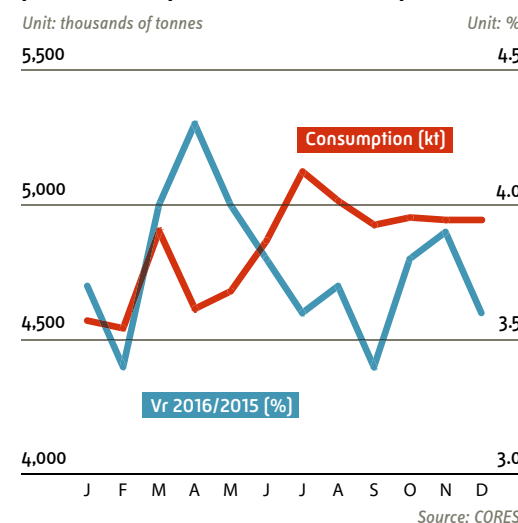
Source: CORES

Distribution of petroleum product consumption



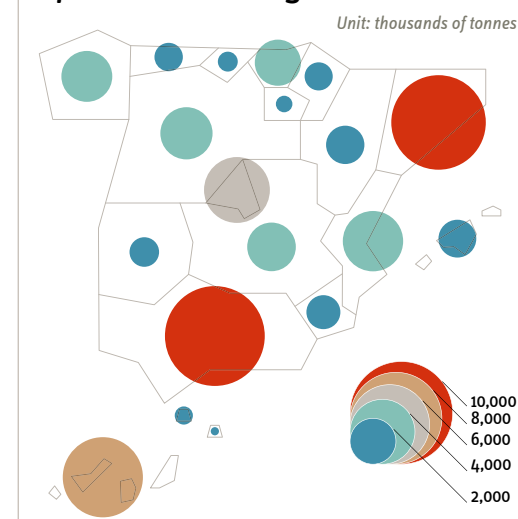
Source: CORES

12 month period evolution in petroleum products consumption



Source: CORES

Consumption of petroleum products by Autonomous Region 2016



Source: CORES

Liquefied petroleum gas consumption

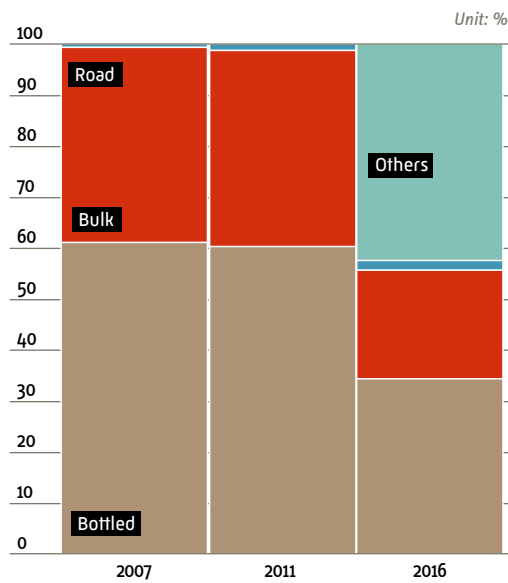
Unit: thousands of tonnes

	Annual total					Structure (%)	Vr*	Monthly figures 2016											
	2012	2013	2014	2015	2016			J	F	M	A	M	J	J	A	S	O	N	D
Bottled	959	928	859	864	860	34.3	-0.5	89	87	94	74	64	54	51	55	55	56	78	103
Bulk	617	575	510	516	535	21.3	3.6	54	63	66	56	41	32	24	24	26	29	47	73
Road (bottled & bulk)	26	31	35	43	47	1.9	9.9	3	4	4	4	4	4	4	4	4	4	4	4
Others	^	55	260	532	1,067	42.5	100.5	88	71	83	58	66	72	121	101	101	107	92	105
Total	1,602	1,588	1,664	1,956	2,509	100.0	28.3	234	225	248	192	175	163	200	184	186	197	220	284

* % 2016/2015
^ different from 0.0

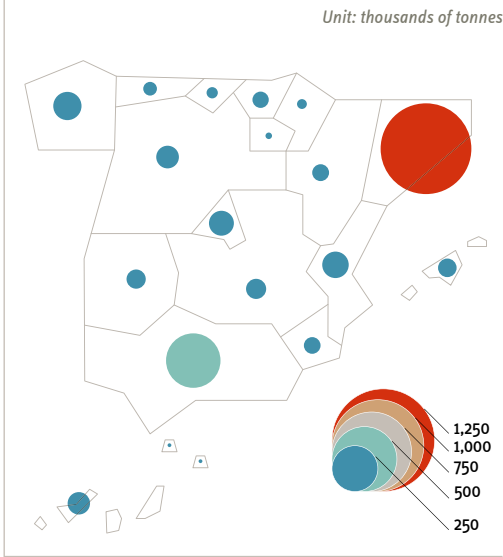
Source: CORES

Distribution of LPG consumption



Source: CORES

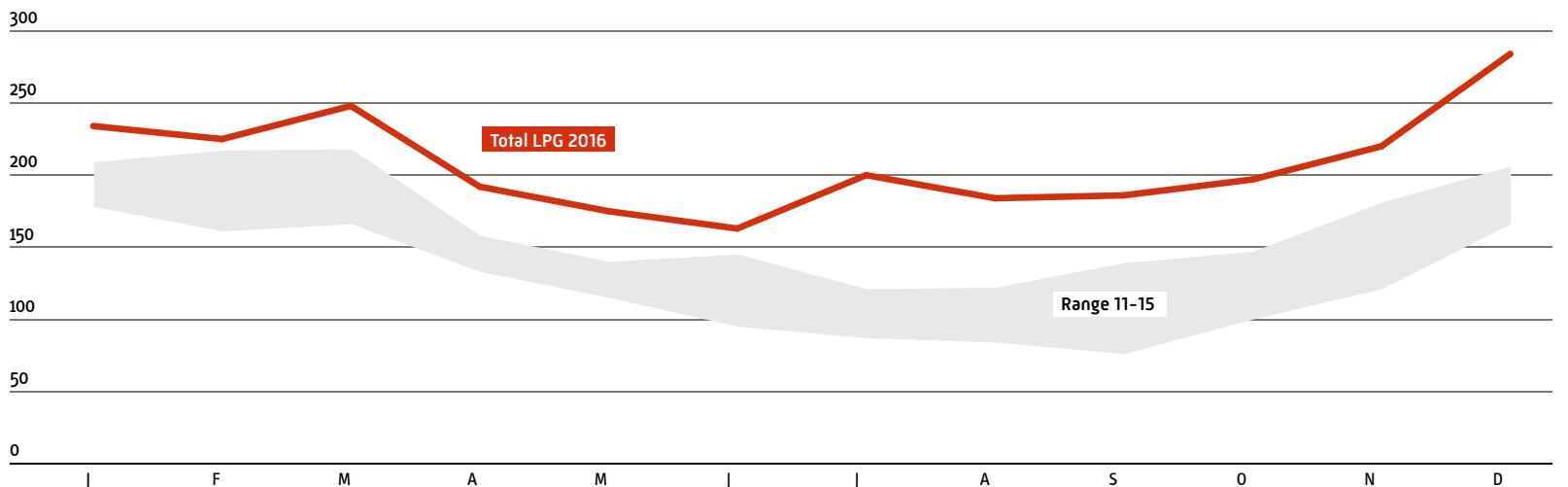
LPG consumption by Autonomous Region 2016



Source: CORES

Monthly evolution of LPG consumption 2016

Unit: thousands of tonnes



Source: CORES

Gasoline consumption

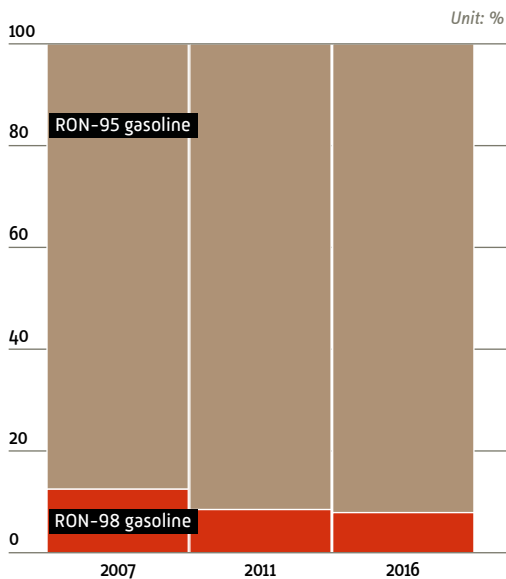
Unit: thousands of tonnes

	Annual total					Structure (%)	Vr*	Monthly figures 2016											
	2012	2013	2014	2015	2016			J	F	M	A	M	J	J	A	S	O	N	D
RON-95	4,557	4,336	4,297	4,307	4,379	92.0	1.7	316	327	359	353	362	385	417	423	379	361	338	360
RON-98	360	314	314	340	376	7.9	10.6	26	27	31	30	31	33	38	37	32	31	29	33
Biogasoline	1	^	^	^	^	^	-12.9	-	^	^	-	-	^	-	-	^	^	^	-
Subtotal road gasoline	4,917	4,651	4,612	4,647	4,755	99.9	2.3	342	353	390	383	392	417	455	459	411	392	368	393
Other gasoline	5	5	3	4	4	0.1	-6.3	^	^	^	^	^	^	^	^	^	^	^	^
Total	4,923	4,656	4,615	4,651	4,759	100.0	2.3	342	353	390	383	393	418	455	460	412	392	368	393

* % 2016/2015 / ^ different from 0.0 / - equal to 0.0

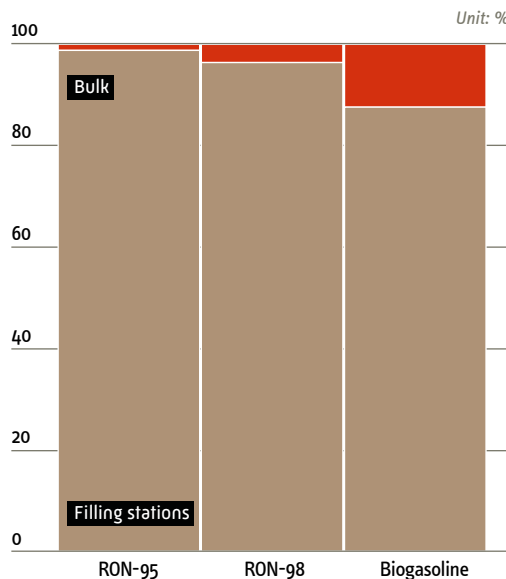
Source: CORES

Distribution of gasoline consumption



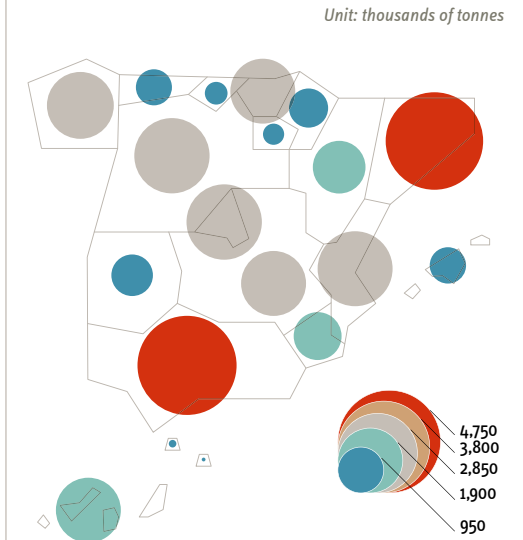
Source: CORES

Distribution of gasoline by sales channel 2016



Source: CORES

Gasoline consumption by Autonomous Region 2016



Source: CORES

Biofuels in gasoline and diesel

Unit: thousands of tonnes

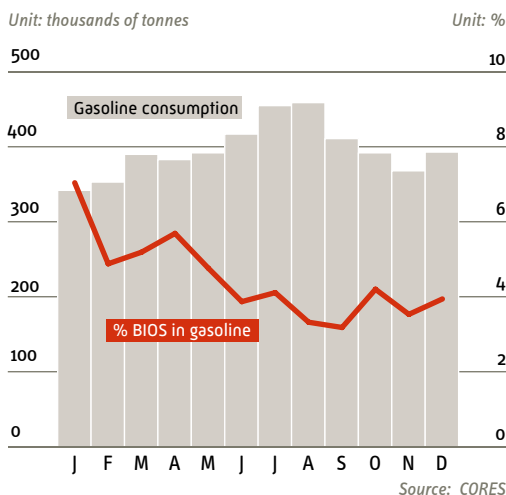
	Annual total					Vr *	Monthly figures 2016											
	2012	2013	2014	2015	2016		J	F	M	A	M	J	J	A	S	O	N	D
Ethanol fuel	312	264	294	298	210	-29.4	24	17	20	22	19	16	19	15	13	16	13	15
Biofuels **	2,149	825	881	894	1,110	24.1	82	67	68	74	93	96	102	106	104	103	99	116

* % 2016/2015

** Includes Biodiesel & HVO

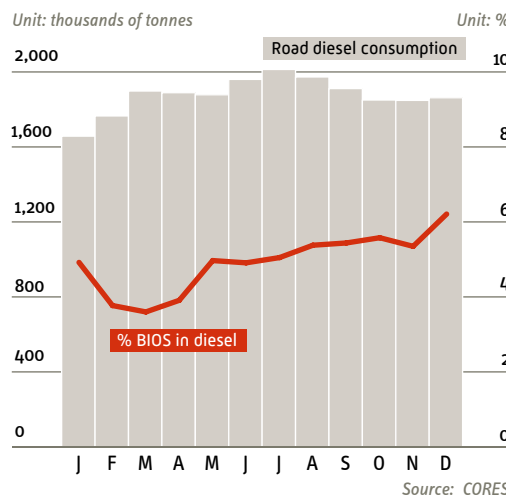
Source: CORES

Biofuels in gasoline 2016



Source: CORES

Biofuels in diesel 2016



Source: CORES

Gasoil consumption

Unit: thousands of tonnes

	Annual total					Structure (%)	Vr*	Monthly figures 2016											
	2012	2013	2014	2015	2016			J	F	M	A	M	J	J	A	S	O	N	D
Road diesel	21,084	20,500	20,908	21,761	22,500	74.2	3.4	1,656	1,764	1,897	1,889	1,878	1,960	2,013	1,973	1,910	1,850	1,848	1,862
Biodiesel	27	5	7	3	5	^	34.5	1	^	1	1	1	1	^	^	^	^	^	^
Biodiesel blend	129	27	16	16	13	^	-22.0	2	2	1	1	1	1	1	1	2	1	1	1
Subtotal road diesel	21,240	20,532	20,931	21,781	22,517	74.2	3.4	1,658	1,766	1,899	1,890	1,879	1,961	2,014	1,974	1,912	1,851	1,849	1,863
Agricultural diesel	3,811	3,706	3,632	3,784	3,913	12.9	3.4	334	362	360	299	279	302	284	270	295	322	397	410
Heating oil	2,723	2,352	2,027	2,013	1,855	6.1	-7.8	247	241	237	163	118	66	80	71	79	129	191	232
Other gasoil	1,389	1,640	1,788	2,211	2,046	6.7	-7.4	168	142	173	169	153	220	155	185	172	169	169	155
Total **	29,163	28,229	28,378	29,789	30,331	100.0	1.8	749	745	770	630	550	588	519	527	559	624	757	797
Bunkers	1,167	1,216	1,267	1,660	1,560	5.1	-6.0	132	111	142	127	137	137	130	131	125	139	130	119

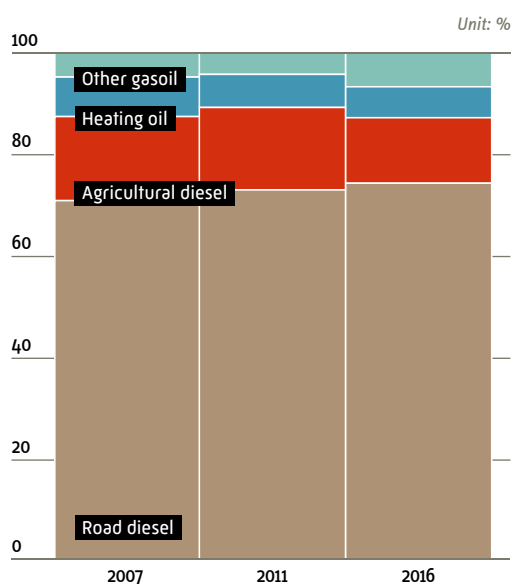
* % 2016/2015

** Includes international maritime bunkers listed below

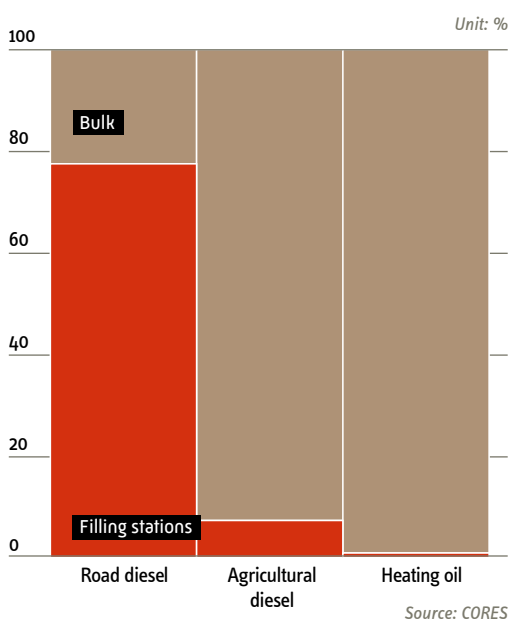
^ different from 0.0

Source: CORES

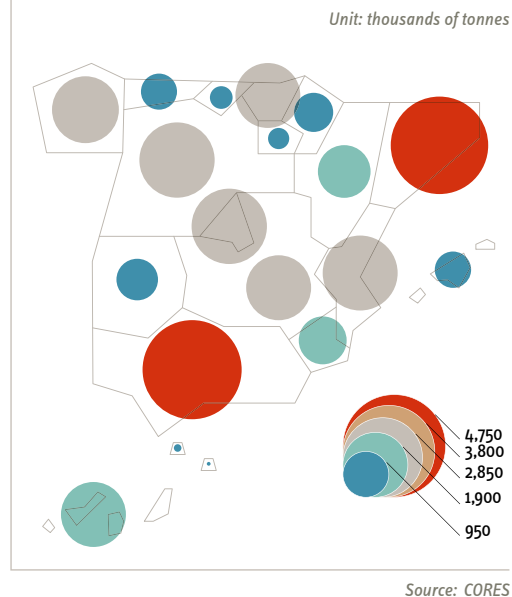
Distribution of gasoil consumption



Distribution of gasoil by sales channel 2016



Consumption of gasoil by Autonomous Region 2016



Gasoline & gasoil consumption by Autonomous Region 2016

Unit: thousands of tonnes

	Gasoline					Gasoil					
	RON-95	RON-98	Biogasoline	Other gasoline	Total gasoline	Road diesel	Other road diesel*	Agricultural diesel	Heating oil	Other gasoil	Total gasoil
Andalusia	675	31	-	1	707	3,419	3	593	119	385	4,518
Aragon	128	8	-	^	136	892	^	290	94	^	1,276
Asturias	83	7	-	^	90	444	2	77	53	22	598
Balearic Islands	208	13	-	^	221	412	-	46	125	24	607
Basque Country	167	12	-	^	180	1,689	6	149	70	22	1,937
Canary Islands	371	131	-	^	502	663	-	^	176	1,050	1,889
Cantabria	58	4	-	^	62	321	1	56	6	7	391
Castilla y Leon	250	18	-	^	268	1,744	2	637	223	1	2,606
Castilla-La Mancha	165	9	-	^	175	1,255	^	537	131	-	1,923
Catalonia	735	56	-	1	792	3,579	2	454	221	113	4,370
Ceuta	6	1	-	-	6	14	-	^	^	121	135
Extremadura	92	3	-	^	96	630	-	142	22	-	794
Galicia	227	15	-	^	242	1,382	^	259	242	173	2,056
La Rioja	29	2	-	^	31	188	^	48	20	-	256
Madrid	519	32	-	1	552	2,217	^	160	234	^	2,612
Melilla	7	-	-	-	7	20	-	-	-	-	20
Murcia	114	7	-	^	121	882	-	144	14	15	1,055
Navarra	60	3	-	^	63	583	^	95	26	-	704
Valencian Region	485	24	-	^	509	2,166	1	227	78	113	2,584
Total	4,379	376	^	4	4,759	22,500	17	3,913	1,855	2,046	30,331

^ different from 0.0 / - equal to 0.0 / * Pure biodiesel + biodiesel blend

Source: CORES

Road fuel consumption

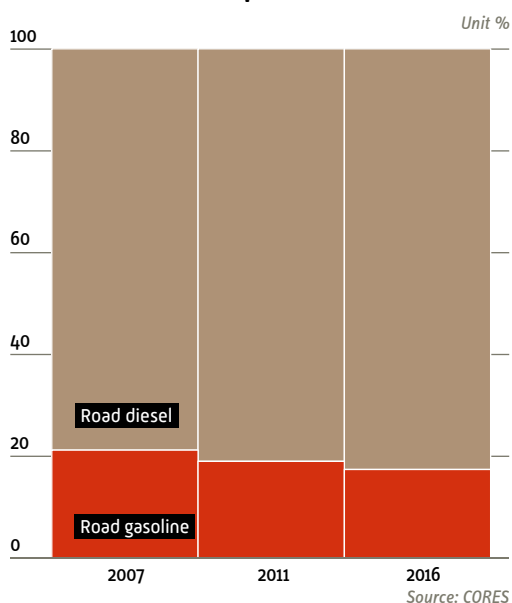
Unit: thousands of tonnes

	Annual total					Structure (%)	Vr*	Monthly figures 2016											
	2012	2013	2014	2015	2016			J	F	M	A	M	J	J	A	S	O	N	D
RON-95 gasoline	4,557	4,336	4,297	4,307	4,379	16.1	1.7	316	327	359	353	362	385	417	423	379	361	338	360
RON-98 gasoline	360	314	314	340	376	1.4	10.6	26	27	31	30	31	33	38	37	32	31	29	33
Biogasoline	1	^	^	^	^	^	-12.9	-	^	^	-	-	^	-	-	^	^	-	
Subtotal road gasoline	4,917	4,651	4,612	4,647	4,755	17.4	2.3	342	353	390	383	392	417	455	459	411	392	368	393
Road diesel	21,084	20,500	20,908	21,761	22,500	82.5	3.4	1,656	1,764	1,897	1,889	1,878	1,960	2,013	1,973	1,910	1,850	1,848	1,862
Other road diesel **	156	32	23	20	17	0.1	-12.4	2	2	2	2	2	1	1	1	2	1	1	1
Subtotal road diesel	21,240	20,532	20,931	21,781	22,517	82.6	3.4	1,658	1,766	1,899	1,890	1,879	1,961	2,014	1,974	1,912	1,851	1,849	1,863
Total road fuels	26,157	25,182	25,543	26,428	27,272	100.0	3.2	2,000	2,119	2,289	2,273	2,272	2,379	2,469	2,434	2,323	2,243	2,216	2,255
Total petroleum products	59,984	54,642	53,889	56,080	58,108	-	3.6	4,578	4,550	4,904	4,621	4,685	4,869	5,120	5,013	4,926	4,953	4,944	4,944
Road Fuel vs.Total (%)	43.6	46.1	47.4	47.1	46.9	-	-	43.7	46.6	46.7	49.2	48.5	48.8	48.2	48.5	47.2	45.3	44.8	45.6

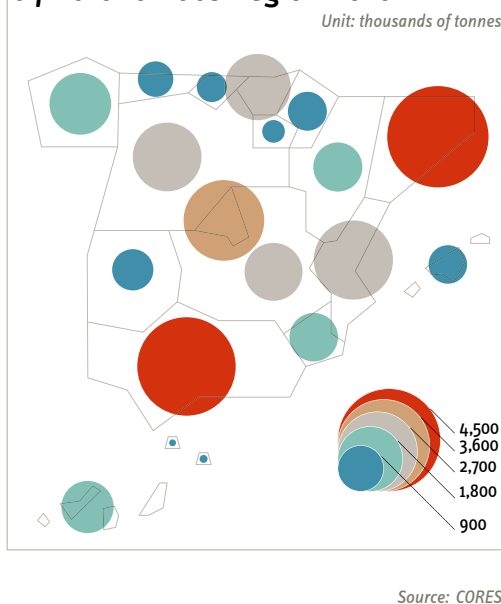
* % 2016/2015 / ** Pure biodiesel + biodiesel blend / ^ different from 0.0 / - equal to 0.0

Source: CORES

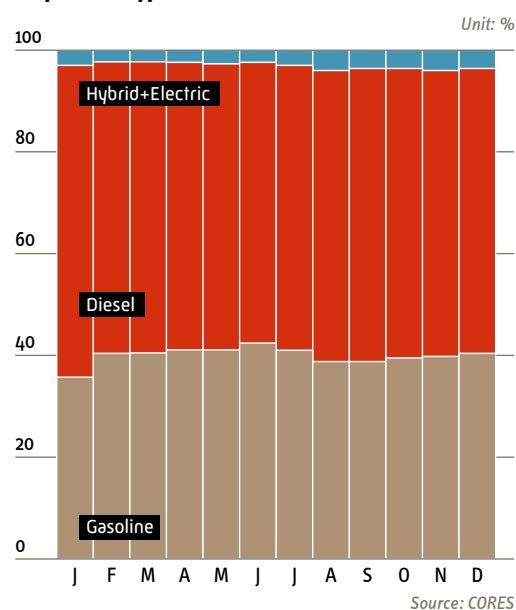
Distribution of road fuel consumption



Road fuel consumption by Autonomous Region 2016



Vehicle Registration by fuel type 2016



Annual evolution of vehicle holding in Spain

	Cars		Trucks & Vans		Buses & Coaches		Industrial vehicles (Tractors etc.)		Motorcycles & mopeds		Total*	
	# Vehicles	Vr**	# Vehicles	Vr**	# Vehicles	Vr**	# Vehicles	Vr**	# Vehicles	Vr**	# Vehicles	Vr**
2012	22,247,528	-0.1	4,984,722	-1.5	61,127	-2.0	186,964	-4.6	5,021,965	-0.1	33,372,871	-0.4
2013	22,024,538	-1.0	4,887,352	-2.0	59,892	-2.0	182,822	-2.2	4,998,320	-0.5	33,023,952	-1.0
2014	22,029,512	^	4,839,484	-1.0	59,799	-0.2	186,060	1.8	5,033,209	0.7	33,037,091	^
2015	22,355,549	1.5	4,851,518	0.2	60,252	0.8	195,657	5.2	5,102,674	1.4	33,412,894	1.1
2016	22,876,247	2.3	4,880,697	0.6	61,841	2.6	207,911	6.3	5,198,939	1.9	34,094,619	2.0

* Includes the other vehicles, trailers and semi-trailers chapter

** % against previous year / ^ different from 0.0

Sources: Own elaboration based on DGT data

Evolution of sale points in Spain*

	2012	2013	2014	2015	2016	Structure (%)	Vr (%) 2016/2015
Wholesalers	7,791	7,734	7,699	7,631	7,645	68.3	0.2
Other Brands	1,700	1,900	2,130	2,400	2,600	23.2	8.3
Hyper/Supermarkets	295	308	323	341	358	3.2	5.0
Cooperatives**	638	675	560	575	585	5.2	1.7
Total	10,424	10,617	10,712	10,947	11,188	100.0	2.2

* Sale points to 31st December / ** Cooperatives: form a part of the total; 2016 figures estimated on 60% of total cooperatives

Sources: AOP, UPI and company figures

Kerosene consumption

Unit: thousands of tonnes

	Annual total					Structure (%)	Vr*	Monthly figures 2016											
	2012	2013	2014	2015	2016			J	F	M	A	M	J	J	A	S	O	N	D
Jet	5,278	5,130	5,266	5,501	5,893	100.0	7.1	387	359	415	450	520	560	611	617	563	541	431	440
Others	^	^	^	^	^	^	9.1	^	^	^	^	^	^	^	^	^	^	^	^
Total	5,278	5,130	5,266	5,501	5,894	100.0	7.1	387	359	415	450	520	560	611	617	563	541	431	440

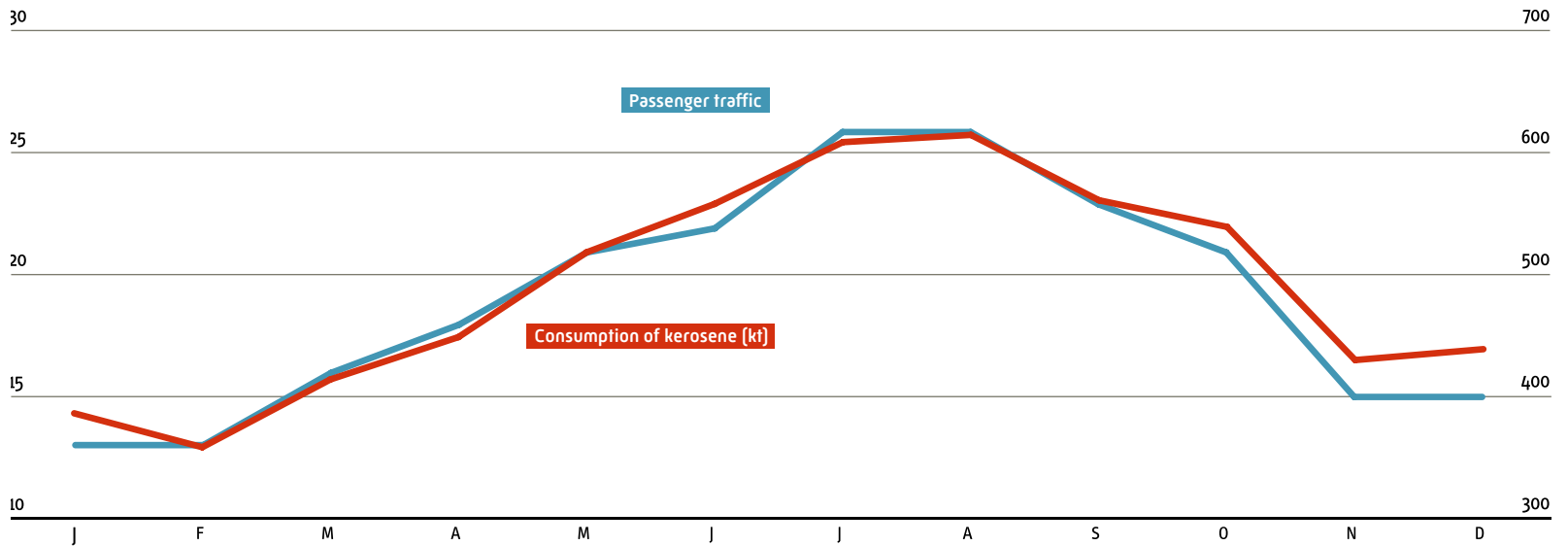
* % 2016/2015
^ different from 0.0

Source: CORES

Consumption of kerosene and passenger traffic at Spanish airports 2016

Unit: million passengers

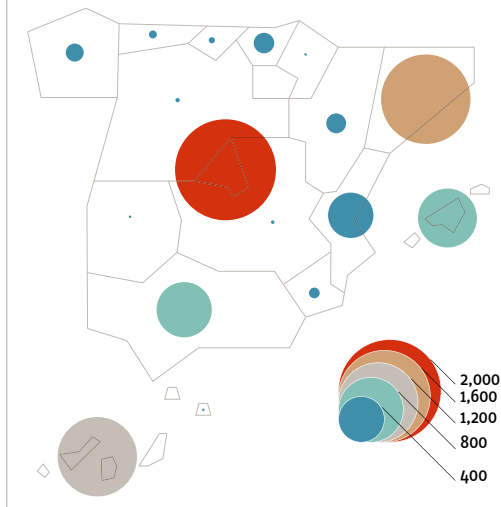
Unit: thousands of tonnes



Source: CORES, AENA

Consumption of kerosene by Autonomous Region 2016

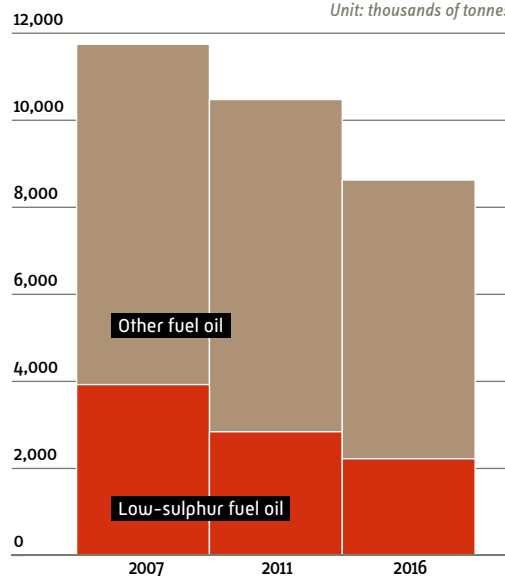
Unit: thousands of tonnes



Source: CORES

Evolution of fuel oil consumption

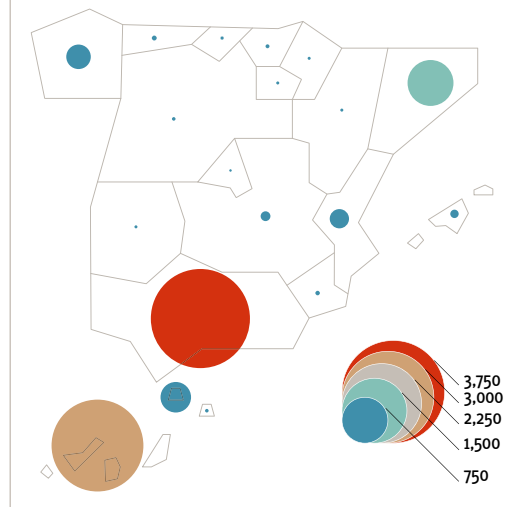
Unit: thousands of tonnes



Source: CORES

Fuel oil consumption by Autonomous Region 2016

Unit: thousands of tonnes



Source: CORES

Fuel oil consumption

Unit: thousands of tonnes

	Annual total					Structure (%)	Vr*	Monthly figures 2016											
	2012	2013	2014	2015	2016			J	F	M	A	M	J	J	A	S	O	N	D
Low sulphur	2,551	2,271	2,086	2,103	2,222	25.8	5.6	195	163	203	163	197	174	208	182	207	167	199	164
Other fuel oil	7,610	6,356	6,850	6,138	6,405	74.2	4.3	555	476	576	534	534	513	563	563	482	610	539	461
Total **	10,161	8,628	8,935	8,241	8,626	100.0	4.7	750	638	779	697	731	687	771	745	689	776	738	626
Bunkers	7,451	6,183	6,745	5,989	6,136	71.1	2.5	537	459	560	517	516	494	542	541	462	572	492	442

* % 2016/2015 ** Includes international marine navigation bunkers listed below

Source: CORES

Other products consumption

Unit: thousands of tonnes

	Annual total					Structure (%)	Vr*	Monthly figures 2016											
	2012	2013	2014	2015	2016			J	F	M	A	M	J	J	A	S	O	N	D
Lubricants	360	364	366	381	402	6.7	5.6	31	32	33	35	34	36	34	26	37	36	36	32
Asphalt product	1,862	1,418	885	906	740	12.4	-18.3	30	44	51	53	64	83	72	51	82	73	75	63
Petroleum coke	3,255	2,132	1,771	2,686	2,737	45.7	1.9	148	184	149	104	148	212	273	310	315	319	312	263
Others **	3,381	2,497	2,010	1,970	2,111	35.2	7.2	249	203	171	187	190	161	170	119	172	143	158	185
Total	8,858	6,411	5,032	5,942	5,990	100.0	0.8	458	463	404	378	436	492	550	506	605	571	581	542

* % 2016/2015 ** Includes naphthas, condensates, paraffin, solvents & others

Source: CORES

Petroleum product consumption by sector*

Unit: thousands of tonnes

	LPG	Gasoline	Kerosene	Gasoil **	Fuel oil **	Total
2012						
Transport	26	4,771	5,189	22,077	108	32,171
Industry ***	293	5	-	1,916	2,426	4,640
Other sectors	1,283	147	89	4,003	175	5,697
Total 2012	1,602	4,923	5,278	27,996	2,709	42,508
2013						
Transport	31	4,617	5,004	20,747	128	30,527
Industry ***	336	1	-	1,878	2,180	4,395
Other sectors	1,221	38	126	4,388	137	5,910
Total 2013	1,588	4,656	5,130	27,013	2,445	40,832
2014						
Transport	35	4,580	5,158	20,945	87	30,805
Industry ***	504	1	-	2,046	2,029	4,580
Other sectors	1,125	37	108	4,082	86	5,438
Total 2014	1,664	4,618	5,266	27,073	2,202	40,823
2015						
Transport	43	4,610	5,490	21,741	111	31,995
Industry ***	675	1	-	1,945	2,089	4,710
Other sectors	1,158	40	45	4,440	50	5,733
Total 2015	1,876	4,651	5,535	28,126	2,250	42,438
2016						
Transport	47	4,725	5,869	22,439	233	33,313
Industry ***	1,270	-	-	1,907	2,187	5,364
Other sectors	1,192	34	25	4,425	70	5,746
Total 2016	2,509	4,759	5,894	28,771	2,490	44,423

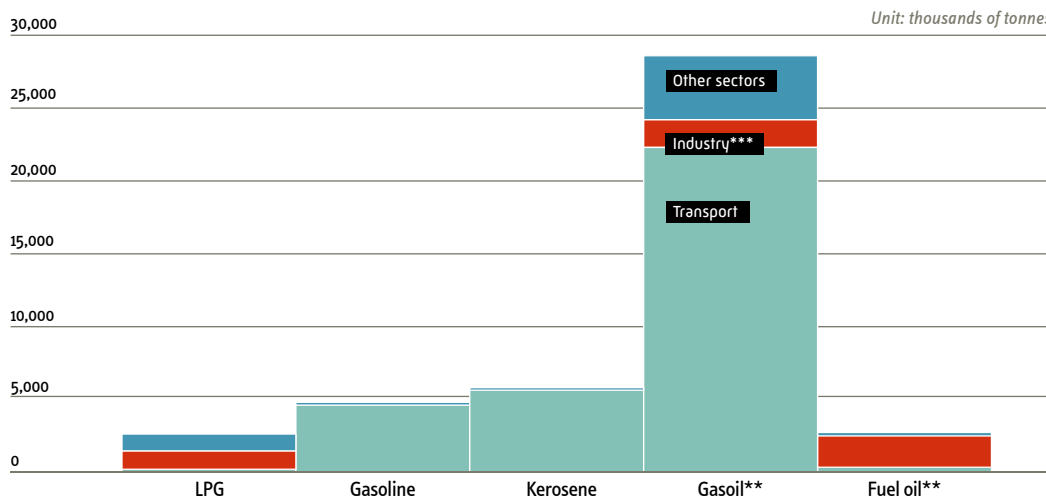
- equal to 0.0 / * Provisional figures / ** Does not include international bunker / *** Includes industry, energy and transformation sectors

Source: CORES

Note: based on the division into sectors listed in the Regulation (EC) No 1099/2008 of the European Parliament and of the council of 22 October 2008 on energy statistics

Petroleum product consumption by sector 2016*

Unit: thousands of tonnes



* Provisional figures

** International marine navigation bunkers is not included

*** Includes Industry, Energy and Transformation sectors

Source: CORES

Annual crude oil imports by country and economic region

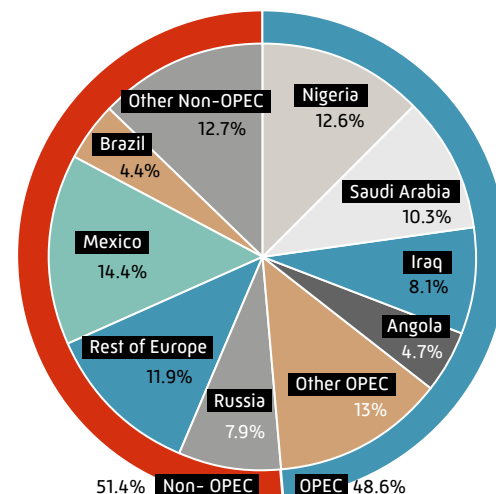
Unit: thousands of tonnes

	2012	2013	2014	2015	2016	Structure (%)	Vr (%) 2016/2015
OPEC	34,106	30,604	31,453	37,408	31,216	48.6	-16.6
Nigeria	8,414	7,611	9,900	10,737	8,110	12.6	-24.5
Saudi Arabia	7,848	8,140	7,242	6,814	6,588	10.3	-3.3
Iraq	4,933	2,008	1,867	3,815	5,191	8.1	36.1
Angola	1,920	3,595	5,274	5,815	2,989	4.7	-48.6
Libya	4,882	2,849	1,427	1,603	2,703	4.2	68.6
Iran	1,101	-	-	-	2,513	3.9	-
Algeria	1,644	3,182	2,082	2,861	1,519	2.4	-46.9
Venezuela	2,574	2,371	2,917	3,191	1,120	1.7	-64.9
Other OPEC	790	848	744	2,572	483	0.8	-
Non-OPEC	24,701	27,267	27,601	27,318	32,955	51.4	20.6
Europe	9,316	11,176	11,360	11,742	12,726	19.8	8.4
Russia	8,201	8,127	4,558	3,999	5,073	7.9	26.9
Kazakhstan	392	1,072	2,677	3,013	2,852	4.4	-5.3
Rest of Europe	723	1,977	4,125	4,730	4,801	7.5	1.5
Mexico	8,662	8,941	8,559	8,747	9,234	14.4	5.6
Brazil	576	800	1,149	1,907	2,840	4.4	48.9
Colombia	3,287	3,091	3,933	3,099	2,644	4.1	-14.7
Other Non-OPEC	2,860	3,259	2,600	1,823	5,511	8.6	202.3
Total	58,807	57,871	59,054	64,726	64,171	100.0	-0.9

- equal to 0.0

Source: CORES

Annual crude oil imports by country and economic region 2016



Source: CORES

Monthly crude oil imports by country and economic region 2016

Unit: thousands of tonnes

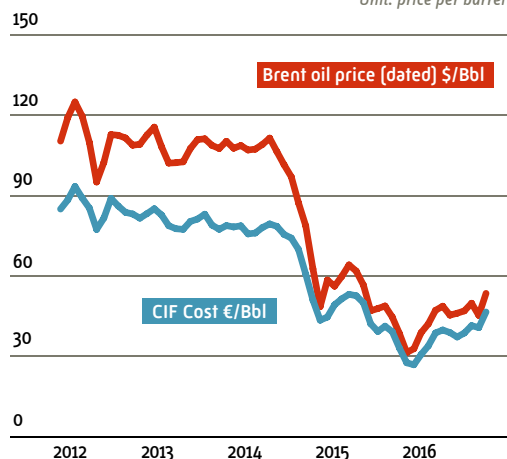
	J	F	M	A	M	J	J	A	S	O	N	D	Total
OPEC	3,195	2,865	2,023	2,654	2,005	2,518	2,644	3,079	2,310	2,371	3,154	2,398	31,216
Nigeria	1,210	875	633	636	794	740	497	680	247	619	917	262	8,110
Saudi Arabia	561	558	505	417	410	703	557	634	418	561	703	561	6,588
Iraq	526	516	144	144	428	337	485	831	531	484	372	393	5,191
Angola	268	287	-	546	130	-	678	280	274	138	131	257	2,989
Libya	247	327	244	247	176	171	85	163	159	352	308	224	2,703
Iran	-	-	136	421	-	273	283	137	423	137	429	274	2,513
Algeria	26	110	139	30	67	234	59	354	196	80	93	131	1,519
Venezuela	228	61	135	213	-	60	-	-	62	-	201	160	1,120
Other OPEC	129	131	87	-	-	-	-	-	-	-	-	136	483
Non-OPEC	2,085	2,207	3,766	2,629	2,594	2,110	3,269	2,692	2,817	3,042	2,777	2,967	32,955
Europe	898	909	1,574	1,171	1,144	781	1,453	1,022	764	832	793	1,385	12,726
Russia	400	230	568	299	399	400	700	508	462	539	368	200	5,073
Kazakhstan	273	220	534	522	219	85	254	90	85	85	232	253	2,852
Rest of Europe	225	459	472	350	526	296	499	424	217	208	193	932	4,801
Mexico	442	590	1,025	803	749	594	881	899	593	750	1,172	736	9,234
Colombia	185	243	360	295	-	148	370	-	449	445	-	149	2,644
Rest of Africa	215	265	571	276	408	206	130	209	586	670	552	464	4,552
Brazil	268	200	236	-	293	200	351	562	240	91	260	139	2,840
Other Non-OPEC	77	-	-	84	-	181	84	-	185	254	-	94	959
Total	5,280	5,072	5,789	5,283	4,599	4,628	5,913	5,771	5,127	5,413	5,931	5,365	64,171

- equal to 0.0

Source: CORES

Evolution of CIF cost vs. Brent

Unit: price per barrel



Source: CORES

Evolution of crude oil imports CIF cost

Unit: € per barrel

	2012	2013	2014	2015	2016	Vr (%) 2016/2015
January	85.11	83.38	78.33	43.07	26.97	-37.4
February	88.55	85.22	78.76	44.26	26.21	-40.8
March	93.63	82.87	75.70	48.90	30.10	-38.4
April	89.28	78.79	76.03	51.15	33.36	-34.8
May	85.44	77.66	78.12	52.87	38.24	-27.7
June	77.38	77.43	79.47	52.32	39.36	-24.8
July	81.66	80.42	78.55	49.65	38.39	-22.7
August	89.12	81.33	75.50	41.73	36.72	-12.0
September	86.25	83.15	74.12	38.82	38.23	-1.5
October	83.86	79.03	69.81	40.81	41.01	0.5
November	83.23	77.45	60.46	38.74	40.27	3.9
December	81.66	78.84	50.63	32.49	46.16	42.0
Annual average	85.43	80.46	72.96	44.57	36.25	-18.7

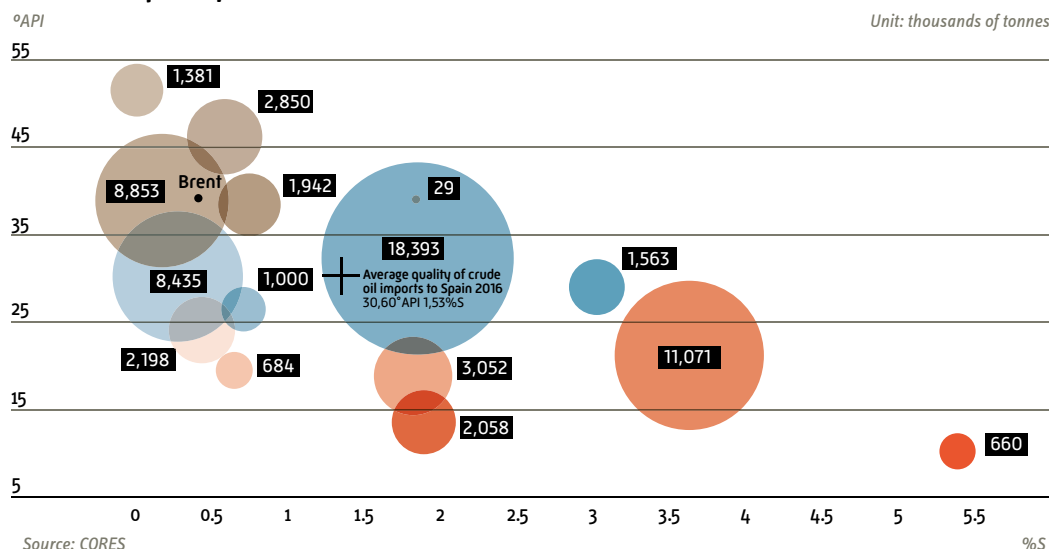
Source: CORES

Quality of crude oil imports 2016

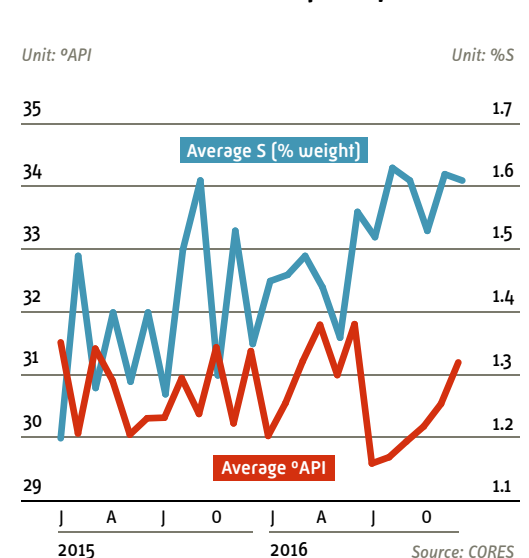
Region & Country of origin	Crude oil category	Reported °API density	Reported S % (by weight)	Volume 1,000 Bbl	Volume 1,000 tonnes	
Middle East	Iran	Iranian Light	33.47	1.54	11,401	1,553
		Iranian Heavy	29.43	2.11	6,871	960
	Iraq	Basrah Light	29.02	3.10	10,309	1,439
		Others Iraq	28.95	2.80	26,847	3,753
	Kuwait	Kuwait Blend	30.80	2.60	626	87
	Saudi Arabia	Arabia Light	33.02	1.97	47,111	6,424
		Arabia Heavy	27.70	2.97	600	85
		Berri Extra Light	39.87	0.95	601	79
	Africa	Algeria	Saharan Blend	44.47	0.08	10,892
		Others Algeria	69.36	0.01	1,165	130
Angola		Others Angola	26.59	0.43	21,017	2,989
Cameroon			30.88	0.32	5,025	695
Congo			27.25	0.44	3,604	509
Egypt		Medium/Light (30-40° API)	41.24	0.38	10,856	1,411
Gabon		Others Gabon	29.59	1.04	2,834	396
Libya		Light (>40° API)	39.41	0.40	855	112
		Medium (30-40° API)	35.85	0.62	10,660	1,428
		Heavy (<30° API)	27.07	1.68	8,223	1,163
Nigeria		Medium (<33° API)	29.52	0.27	19,062	2,660
		Light (33-45° API)	37.11	0.12	39,951	5,325
		Condensate (>45° API)	46.30	0.07	1,000	126
		Others Africa	30.89	0.32	14,003	1,937
Europe	Russia	Ural	30.71	1.61	29,143	4,036
		Others Rusia	32.94	1.01	7,596	1,038
	Azerbaijan		37.07	0.16	12,221	1,630
	Kazakhstan		46.68	0.56	22,615	2,852
	Norway	Oseberg	39.80	0.22	731	96
		Others Norway	25.47	0.72	5,878	841
	United Kingdom	Forties	39.68	0.73	7,512	985
		Flotta	36.69	0.63	5,531	737
		Others United Kingdom	19.77	1.18	478	71
		Others Europe	13.73	5.04	2,835	442
	America	Canada	Light Sweet (>30° API)	33.87	0.36	674
		Heavy	21.79	3.41	2,351	346
Brazil			15.52	1.54	18,564	2,840
Colombia		Others Colombia	18.74	1.67	17,681	2,644
United States			53.23	0.03	4,327	522
Mexico		Maya	21.14	3.68	59,324	8,718
		Isthmo	32.97	1.57	3,301	451
		Olmecca	38.87	0.91	497	66
Venezuela	Extra Heavy (<17° API)	14.43	3.62	7,279	1,120	
Total		30.60	1.53	462,050	64,171	

Source: CORES

Crude oil quality 2016



Evolution of crude oil quality



Foreign trade in petroleum products

Unit: thousands of tonnes

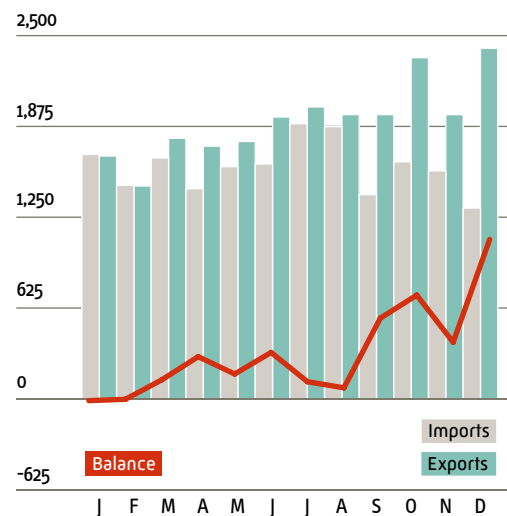
	2012	2013	2014	2015	2016	Structure (%)	Vr (%) 2016/2015
Imports							
LPG	355	326	643	780	1,443	7.5	85.0
Gasoline	84	81	105	136	172	0.9	26.5
Kerosene	2,300	1,836	1,951	2,212	2,186	11.4	-1.2
Gasoil	6,696	4,658	4,925	5,208	5,624	29.4	8.0
Fuel oil	3,233	4,391	5,555	4,484	6,144	32.1	37.0
Other products	3,837	3,037	3,437	3,872	3,571	18.7	-7.8
Total Imports	16,505	14,329	16,616	16,692	19,140	100.0	14.7
Exports							
LPG	300	398	425	395	462	2.0	17.0
Gasoline	3,379	3,407	3,419	4,907	4,505	19.6	-8.2
Kerosene	176	422	339	516	619	2.7	20.0
Gasoil	6,192	5,400	6,411	6,314	6,617	28.8	4.8
Fuel oil	1,438	2,992	3,026	2,298	3,023	13.1	31.5
Other products	5,640	5,928	5,717	7,215	7,780	33.8	7.8
Total Exports	17,125	18,547	19,337	21,645	23,006	100.0	6.3
Balance Exports - Imports							
LPG	-55	72	-218	-385	-981	N.A.	154.8
Gasoline	3,295	3,326	3,314	4,771	4,333	N.A.	-9.2
Kerosene	-2,124	-1,414	-1,612	-1,696	-1,567	N.A.	-7.6
Gasoil	-504	742	1,486	1,106	993	N.A.	-10.2
Fuel oil	-1,795	-1,399	-2,529	-2,186	-3,121	N.A.	42.8
Other products	1,803	2,891	2,280	3,343	4,209	N.A.	25.9
Total Balance	620	4,218	2,721	4,953	3,866		-21.9

N.A.: not applicable

Source: CORES

Foreign trade in petroleum products 2016

Unit: thousands of tonnes



Source: CORES

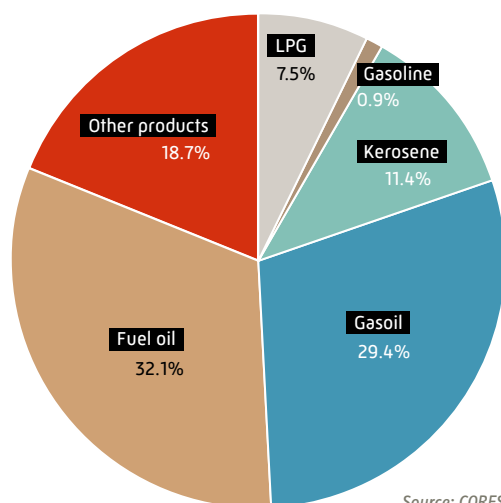
Monthly evolution of foreign trade in petroleum products 2016

Unit: thousands of tonnes

	J	F	M	A	M	J	J	A	S	O	N	D	Total
Imports													
LPG	175	99	94	62	85	83	132	94	135	175	121	188	1,443
Gasoline	8	12	12	4	17	39	17	25	6	3	16	13	172
Kerosene	119	131	195	174	200	198	287	335	86	176	148	137	2,186
Gasoil	635	402	554	457	431	594	534	481	347	402	374	413	5,624
Fuel oil	423	419	411	522	603	340	614	731	542	605	568	366	6,144
Other products	322	403	392	226	262	362	306	207	285	270	340	196	3,571
Total Imports	1,682	1,466	1,658	1,445	1,598	1,616	1,890	1,873	1,401	1,631	1,567	1,313	19,140
Exports													
LPG	27	23	38	31	44	37	48	64	40	41	40	29	462
Gasoline	315	415	499	430	345	427	410	251	267	406	338	402	4,505
Kerosene	85	15	130	17	108	58	42	38	11	14	27	74	619
Gasoil	456	370	425	420	457	612	562	492	633	749	594	847	6,617
Fuel oil	157	207	126	170	229	104	229	363	388	391	350	309	3,023
Other products	632	435	573	669	588	699	719	743	619	745	609	749	7,780
Total Exports	1,672	1,465	1,791	1,737	1,771	1,937	2,010	1,951	1,958	2,346	1,958	2,410	23,006
Balance Exports - Imports													
LPG	-148	-76	-56	-31	-41	-46	-84	-30	-95	-134	-81	-159	-981
Gasoline	307	403	487	426	328	388	393	226	261	403	322	389	4,333
Kerosene	-34	-116	-65	-157	-92	-140	-245	-297	-75	-162	-121	-63	-1,567
Gasoil	-179	-32	-129	-37	26	18	28	11	286	347	220	434	993
Fuel oil	-266	-212	-285	-352	-374	-236	-385	-368	-154	-214	-218	-57	-3,121
Other products	310	32	181	443	326	337	413	536	334	475	269	553	4,209
Total Balance	-10	-1	133	292	173	321	120	78	557	715	391	1,097	3,866

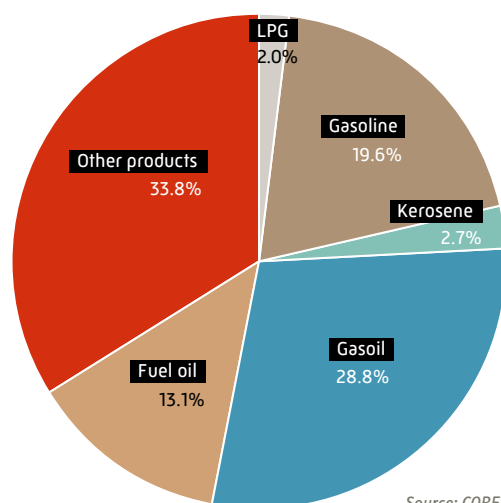
Source: CORES

Petroleum products imports 2016



Source: CORES

Petroleum products exports 2016



Source: CORES

Imports by petroleum product group & country of origin 2016

Unit: thousands of tonnes

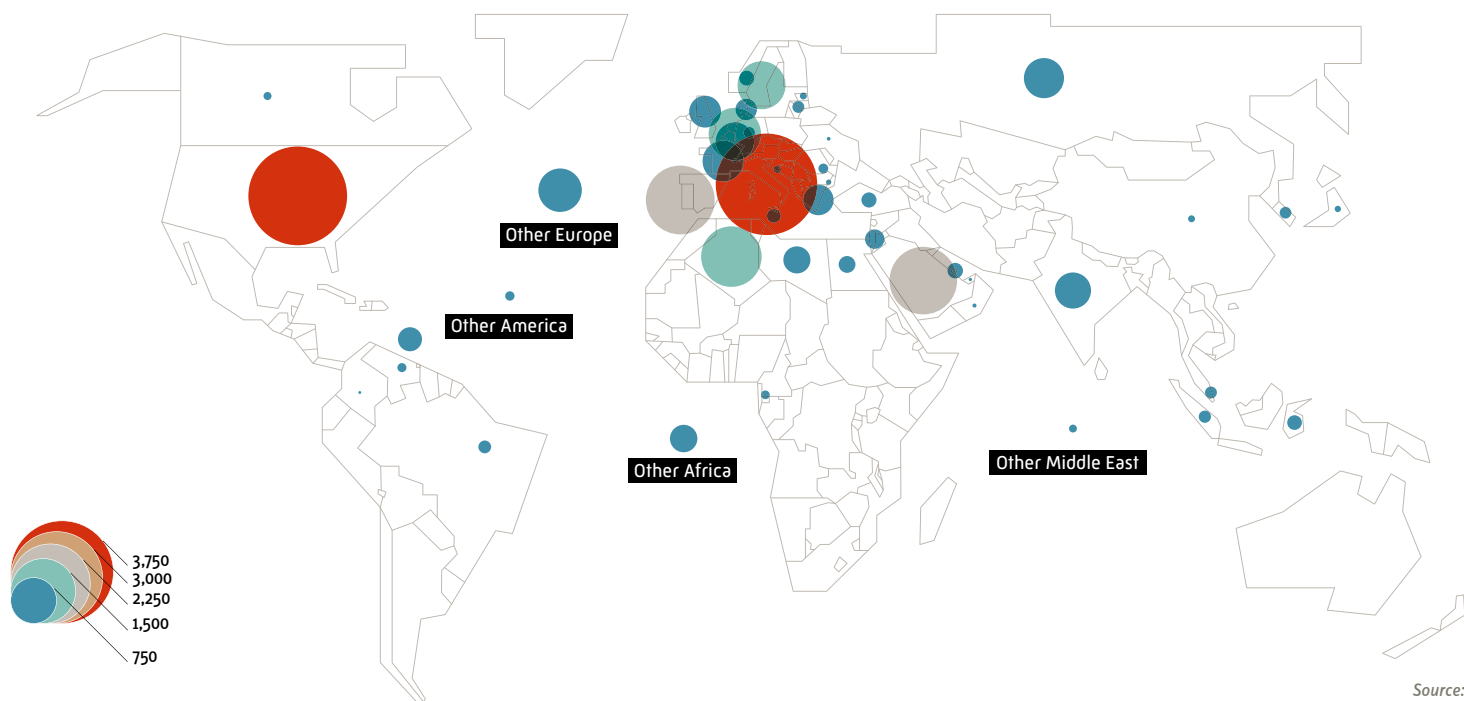
Countries	LPG	Gasoline*	Kerosene	Gasoil*	Fuel oil	Other products	Total
Algeria	639	-	347	-	-	411	1,397
Bahrain	-	-	66	20	-	-	86
Belgium	-	-	-	92	418	15	525
Brazil	-	-	-	11	44	3	58
Bulgaria	-	-	-	10	-	-	10
Canada	-	-	-	-	-	23	23
China	-	-	-	5	-	12	17
Colombia	-	-	-	3	-	-	3
Croatia	-	-	-	-	20	-	20
Denmark	-	-	-	3	161	-	164
Egypt	-	-	30	-	-	70	100
Equatorial Guinea	27	-	-	-	-	-	27
Estonia	-	5	-	-	12	-	17
France	33	29	-	65	417	52	596
Germany	-	-	-	29	-	17	46
Greece	-	-	96	-	232	-	328
India	-	-	69	389	-	3	461
Indonesia	-	-	-	76	-	-	76
Israel	-	-	-	-	109	24	133
Italy	-	28	144	1,533	1,636	297	3,638
Japan	-	-	-	-	-	14	14
Latvia	-	-	-	-	50	-	50
Libya	9	3	-	-	-	247	259
Malaysia	-	-	-	53	-	-	53
Malta	-	-	-	3	66	-	69
Netherlands	6	36	33	733	136	25	969
Norway	78	-	-	-	-	3	81
Oman	-	-	-	-	-	6	6
Other Africa	-	-	-	2	264	-	266
Other America	-	-	31	-	-	-	31
Other Europe	-	-	52	188	428	-	668
Other Middle East	-	-	22	-	-	-	22
Portugal	19	67	1	561	872	153	1,673
Romania	-	-	-	21	-	13	34
Russia	11	-	-	353	128	77	569
Saudi Arabia	-	-	1,003	509	-	102	1,614
Singapore	-	-	35	-	-	15	50
South Korea	-	-	-	48	-	-	48
Sweden	-	-	-	11	757	-	768
Switzerland	-	-	-	7	-	-	7
Trinidad & Tobago	-	4	-	-	-	-	4
Turkey	-	-	30	-	79	10	119
UAE	-	-	111	93	-	-	204
Ukraine	-	-	-	-	-	5	5
United Kingdom	8	-	-	29	315	6	358
United States	613	-	87	777	-	1,968	3,445
Venezuela	-	-	29	-	-	-	29
Total	1,443	172	2,186	5,624	6,144	3,571	19,140

* Includes biofuel
- equal to 0.0

Source: CORES

Petroleum product imports by country of origin 2016

Unit: thousands of tonnes



Source: CORES

Exports by petroleum product group & country of destination 2016

Unit: thousands of tonnes

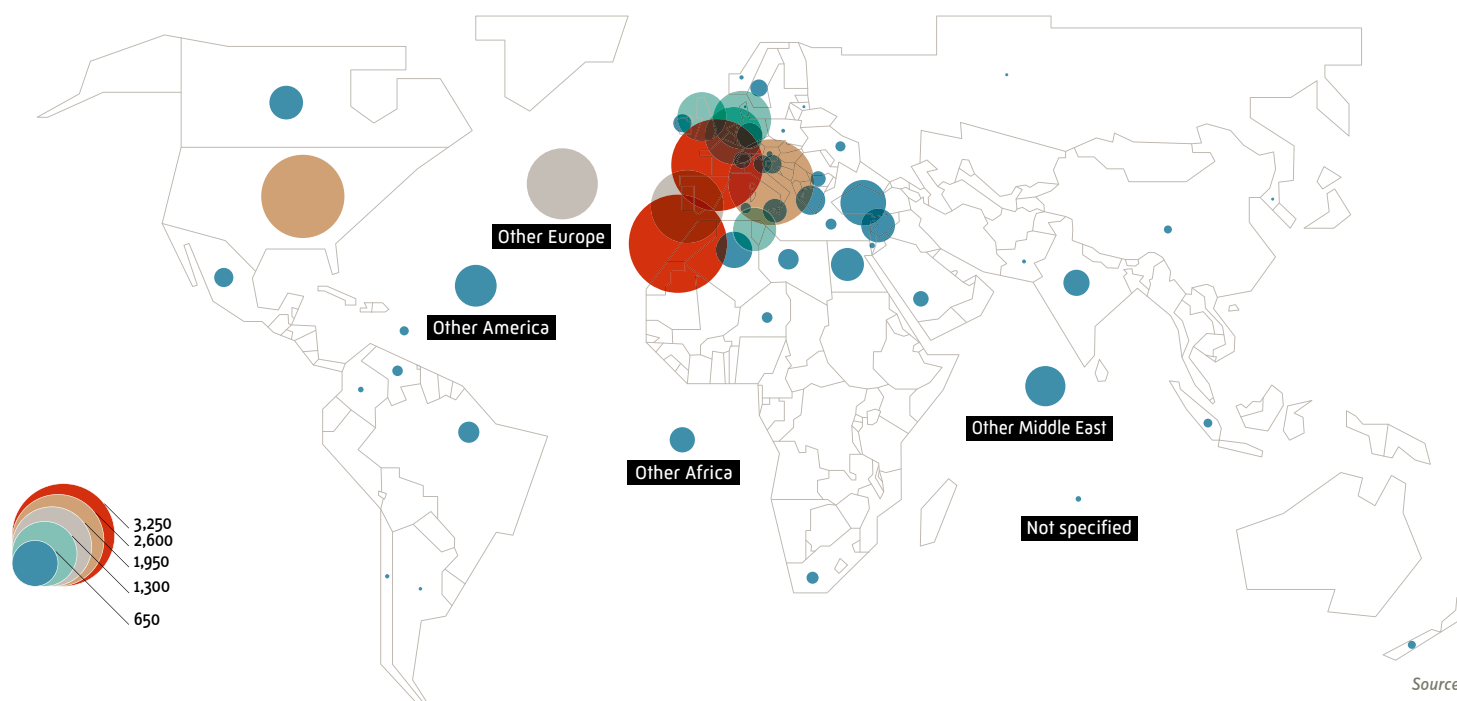
Countries	LPG	Gasoline*	Kerosene	Gasoil*	Fuel oil	Other products	Total products
Algeria	-	26	-	-	49	354	429
Argentina	-	-	4	-	-	-	4
Austria	-	-	-	-	-	13	13
Belgium	-	318	-	78	30	638	1,064
Brazil	-	-	-	-	-	145	145
Canada	-	156	-	-	-	211	367
Chile	-	6	-	-	-	-	6
China	-	-	-	-	-	21	21
Colombia	-	-	-	-	-	10	10
Croatia	10	-	-	-	-	107	117
Cyprus	-	-	-	-	36	3	39
Denmark	-	3	-	-	-	-	3
Egypt	5	-	-	33	-	314	352
France	5	141	26	1,559	25	898	2,652
Germany	-	-	-	2	-	213	215
Greece	2	-	-	10	201	67	280
India	-	-	-	-	39	183	222
Ireland	-	3	30	6	-	67	106
Israel	-	-	-	4	-	6	10
Italy	-	61	72	1,304	471	478	2,386
Latvia	-	-	-	-	-	3	3
Lebanon	-	-	-	102	63	205	370
Libya	-	-	-	-	136	-	136
Malta	-	-	-	183	3	-	186
Mexico	-	119	-	-	-	-	119
Morocco	297	176	61	1,177	609	745	3,065
Netherland Antilles	-	27	-	-	-	-	27
Netherlands	-	370	-	368	12	348	1,098
New Zealand	-	-	-	-	-	21	21
Nigeria	-	-	-	-	-	37	37
Norway	-	-	-	-	-	6	6
Not specified	-	-	-	-	-	10	10
Other Africa	14	-	-	25	10	157	206
Other America	-	501	-	42	-	21	564
Other Europe	7	114	42	622	749	100	1,634
Other Middle East	-	416	-	-	-	107	523
Pakistan	-	-	-	-	-	5	5
Poland	-	-	-	-	-	5	5
Portugal	95	133	16	795	61	619	1,719
Romania	-	-	-	5	-	69	74
Russia	-	-	-	-	-	3	3
Saudi Arabia	-	35	-	-	-	43	78
Singapore	-	25	-	-	-	-	25
Slovenia	-	-	-	105	-	1	106
South Africa	-	32	-	-	-	15	47
South Korea	-	-	-	-	-	3	3
Sweden	-	5	-	-	-	91	96
Switzerland	-	-	-	8	-	83	91
Tunisia	27	-	-	-	-	599	626
Turkey	-	-	-	91	451	132	674
Ukraine	-	-	-	-	-	33	33
United Kingdom	-	119	30	21	78	450	698
United States	-	1,683	338	77	-	143	2,241
Venezuela	-	36	-	-	-	-	36
Total	462	4,505	619	6,617	3,023	7,780	23,006

* Includes biofuel
- equal to 0.0

Source: CORES

Petroleum product exports by country of destination 2016

Unit: thousands of tonnes



Source: CORES

Indigenous crude oil production

Unit: thousands of tonnes

	2012	2013	2014	2015	2016	Structure (%)	Vr (%) 2016/2015
Ayoluengo	7	5	5	6	6	4.0	-11.7
Boquerón	34	33	24	29	23	16.5	-20.8
Casablanca	42	36	48	39	33	23.7	-14.2
Montanazo-Lubina	60	294	228	114	61	43.0	-46.8
Rodaballo	^	1	1	42	16	11.5	-61.4
Viura *	-	-	-	2	2	1.4	-2.8
Total	143	368	305	232	141	100.0	-39.3
Degree of self-sufficiency (%)	0.24	0.67	0.57	0.41	0.24	N.A.	-41.5

* Condensate production turned into oil equivalent

^ different from 0.0

- equal to 0.0

N.A.: not applicable

Source: MINETAD

Processed crude oil and raw materials

Unit: thousands of tonnes

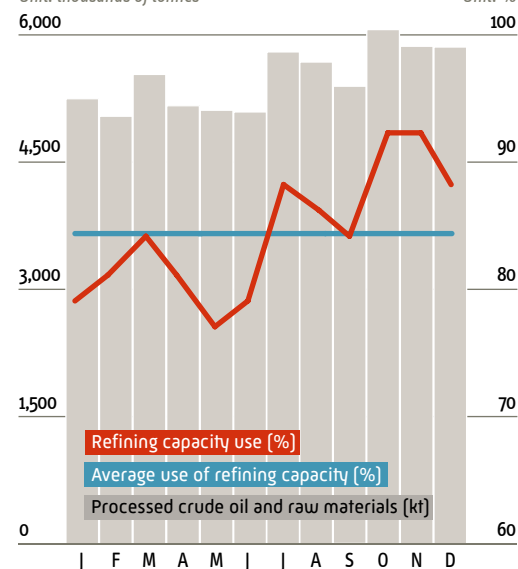
	2012	2013	2014	2015	2016	Vr (%) 2016/2015
January	4,771	5,209	4,677	5,373	5,238	-2.5
February	4,693	4,810	4,831	4,627	5,029	8.7
March	4,659	5,097	5,118	5,330	5,521	3.6
April	4,524	5,426	4,972	5,597	5,153	-7.9
May	4,676	5,625	5,340	5,670	5,099	-10.1
June	4,747	5,220	5,267	5,174	5,079	-1.8
July	5,744	5,403	5,270	5,752	5,786	0.6
August	5,696	5,206	5,389	6,009	5,667	-5.7
September	5,440	5,029	4,921	5,335	5,382	0.9
October	5,710	4,726	5,148	5,786	6,048	4.5
November	5,464	4,392	5,073	5,271	5,852	11.0
December	5,769	4,894	5,401	5,739	5,842	1.8
Total	61,893	61,037	61,407	65,663	65,696	0.1

Source: CORES

Degree of refining capacity use 2016

Unit: thousands of tonnes

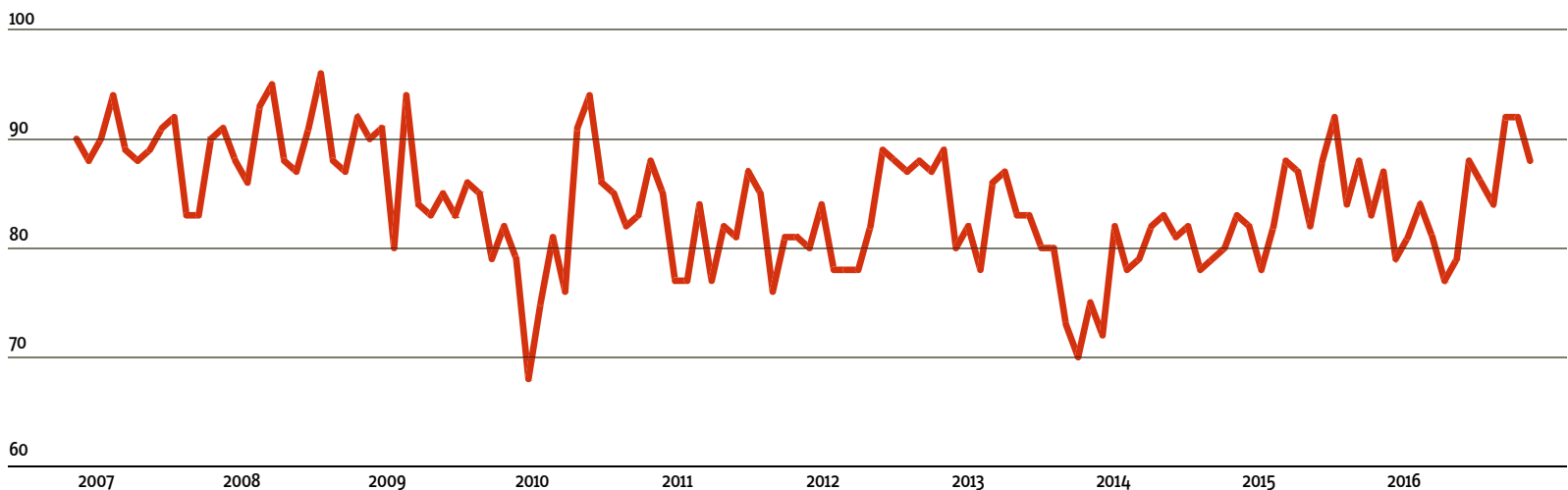
Unit: %



Source: CORES

Evolution of degree of refining capacity use in Spain

Unit: %



Source: CORES

Balance of petroleum products production and consumption

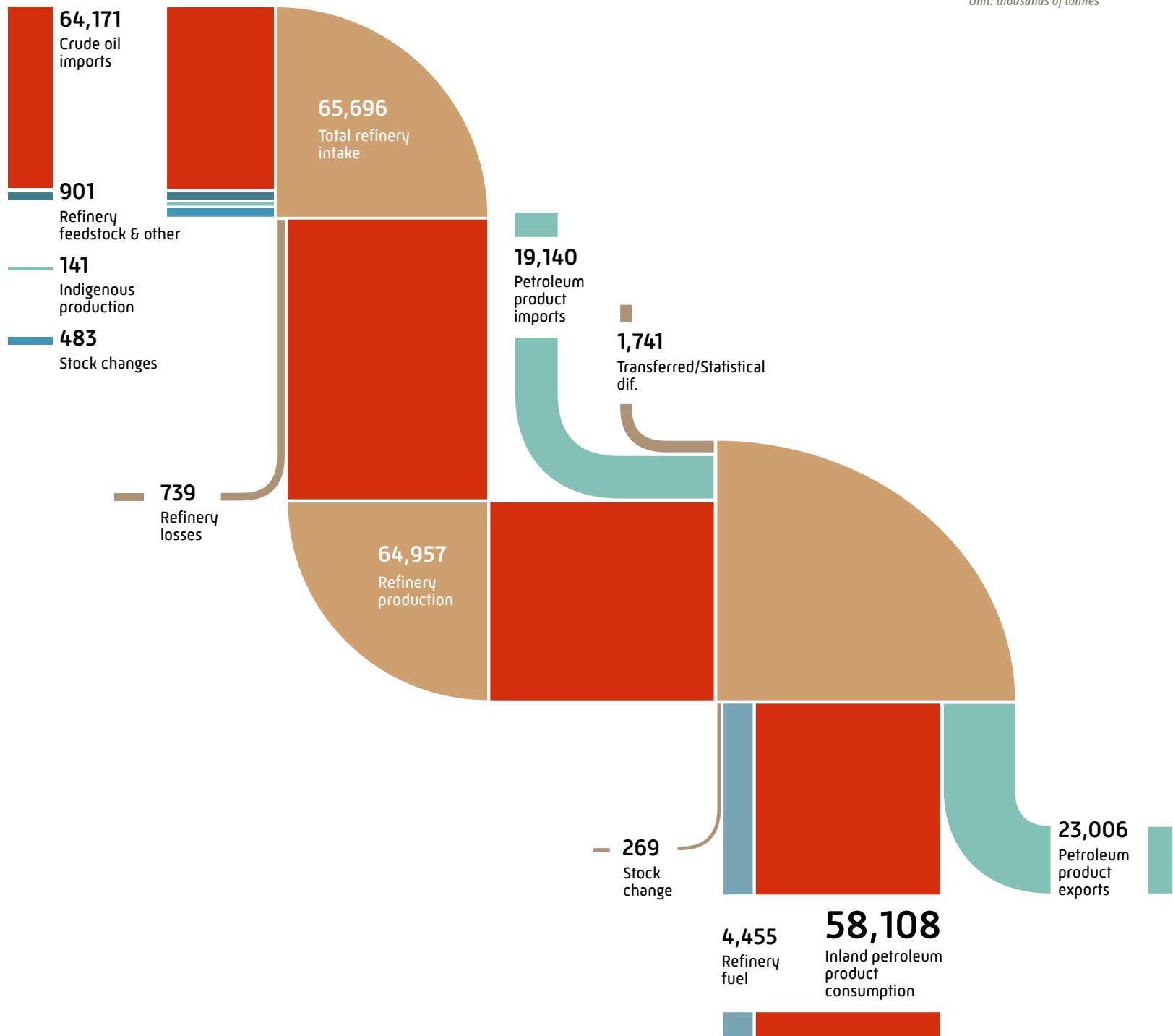
Unit: thousands of tonnes

	2014	2015	2016		2014	2015	2016
Indigenous crude oil production	305	232	141	Refinery production	60,563	64,983	64,957
Crude oil imports	59,054	64,726	64,171	Refinery fuel	-4,360	-4,495	-4,455
Refinery feedstock & other	2,369	570	901	Products transferred / Statistical dif.	1,401	2,164	1,741
Stock change	-321	135	483	Petroleum product imports	16,616	16,692	19,140
Total refinery intake	61,407	65,663	65,696	Petroleum product exports	-19,337	-21,645	-23,006
Refinery losses	844	680	739	Stock change	-993	-1,619	-269
Refinery production	60,563	64,983	64,957	Inland oil product consumption	53,889	56,080	58,108

Source: CORES

Petroleum products balance 2016

Unit: thousands of tonnes



Source: CORES

Spanish refinery capacity

Unit: thousands of tonnes

Company	Refinery	Unit	2012	2013	2014	2015	2016
Repsol Group							
Bilbao		Crude	11,000	11,000	11,000	11,000	11,000
		Vacuum	4,760	4,760	4,760	4,760	4,760
		FCC	2,280	2,280	2,280	2,280	2,280
		Hydrocracking	-	-	-	-	-
		Visco-reduction	2,430	2,430	2,430	2,430	2,430
		Mild hydrocracker	1,740	1,740	1,740	1,740	1,740
		Coking	2,000	2,000	2,000	2,000	2,000
Cartagena		Crude	11,000	11,000	11,000	11,000	11,000
		Vacuum	6,000	6,000	6,000	6,000	6,000
		FCC	-	-	-	-	-
		Hydrocracking	2,500	2,500	2,500	2,500	2,500
		Visco-reduction	-	-	-	-	-
		Mild hydrocracker	-	-	-	-	-
		Coking	3,000	3,000	3,000	3,000	3,000
La Coruña		Crude	6,000	6,000	6,000	6,000	6,000
		Vacuum	2,980	2,980	2,980	2,980	2,980
		FCC	1,710	1,710	1,710	1,710	1,710
		Hydrocracking	-	-	-	-	-
		Visco-reduction	-	-	-	-	-
		Mild hydrocracker	1,510	1,510	1,510	1,510	1,510
		Coking	1,100	1,100	1,100	1,100	1,100
Puertollano		Crude	7,500	7,500	7,500	7,500	7,500
		Vacuum	3,940	3,940	3,940	3,940	3,940
		FCC	1,600	1,600	1,600	1,600	1,600
		Hydrocracking	-	-	-	-	-
		Visco-reduction	-	-	-	-	-
		Mild hydrocracker	1,830	1,830	1,830	1,830	1,830
		Coking	1,420	1,420	1,420	1,420	1,420
Tarragona		Crude	9,000	9,000	9,000	9,000	9,000
		Vacuum	3,700	3,700	3,700	3,700	3,700
		FCC	-	-	-	-	-
		Hydrocracking	2,600	2,600	2,600	2,600	2,600
		Visco-reduction	1,600	1,600	1,600	1,600	1,600
		Mild hydrocracker	-	-	-	-	-
		Coking	-	-	-	-	-
Cepsa Group							
Algeciras		Crude	12,000	12,000	12,000	12,000	12,000
		Vacuum	3,600	3,600	3,600	3,785	3,785
		FCC	2,100	2,100	2,100	2,095	2,095
		Hydrocracking	-	-	-	-	-
		Visco-reduction	2,100	2,100	2,100	2,125	2,125
		Mild hydrocracker	-	-	-	-	-
		Coking	-	-	-	-	-
Tenerife		Crude	4,500	4,500	4,500	4,500	4,500
		Vacuum	500	500	500	462	462
		FCC	-	-	-	-	-
		Hydrocracking	-	-	-	-	-
		Visco-reduction	2,100	2,100	2,100	1,973	1,973
		Mild hydrocracker	-	-	-	-	-
		Coking	-	-	-	-	-
Huelva		Crude	9,200	9,200	9,200	10,000	10,000
		Vacuum	3,900	3,900	3,900	3,750	3,750
		FCC	1,100	1,100	1,100	1,065	1,065
		Hydrocracking	2,300	2,700	2,700	2,750	2,750
		Visco-reduction	700	700	700	746	746
		Mild hydrocracker	-	-	-	-	-
		Coking	-	-	-	-	-
BP Group							
Castellón		Crude	5,400	5,400	5,400	5,400	5,400
		Vacuum	2,900	2,700	2,700	2,700	2,700
		FCC	1,600	1,600	1,600	1,600	1,600
		Hydrocracking	-	-	-	-	-
		Visco-reduction	-	-	-	-	-
		Mild hydrocracker	-	-	-	-	-
		Coking	1,200	1,200	1,200	1,300	1,300
Asesa*							
Tarragona		Crude	1,400	1,400	1,400	1,400	1,400
		Vacuum	1,120	1,120	1,120	1,120	1,120
		FCC	-	-	-	-	-
		Hydrocracking	-	-	-	-	-
		Visco-reduction	-	-	-	-	-
		Mild hydrocracker	-	-	-	-	-
		Coking	-	-	-	-	-
Total national			150,920	151,120	151,120	151,971	151,971

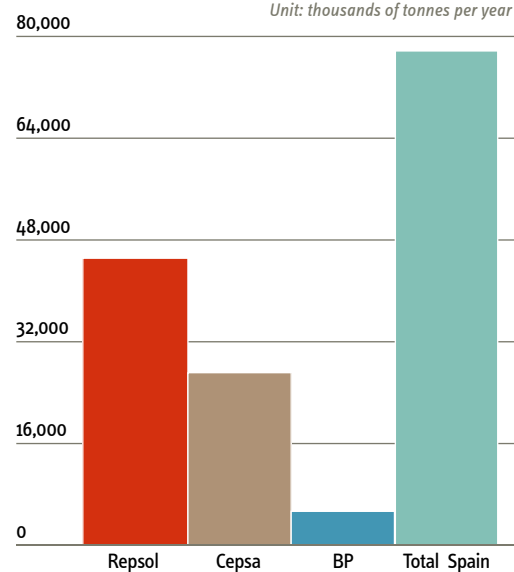
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* Asesa: 50% Repsol & 50% Cepsa

Source: company figures, CORES

Crude oil capacity 2016

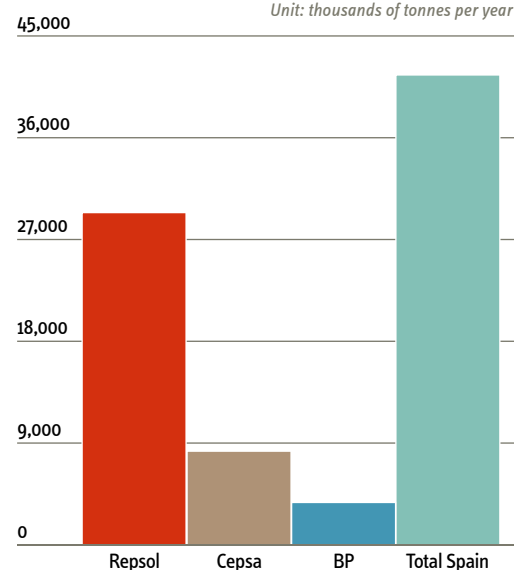
Unit: thousands of tonnes per year



Source: Companies

FCC Eq. capacity 2016

Unit: thousands of tonnes per year



Source: Companies

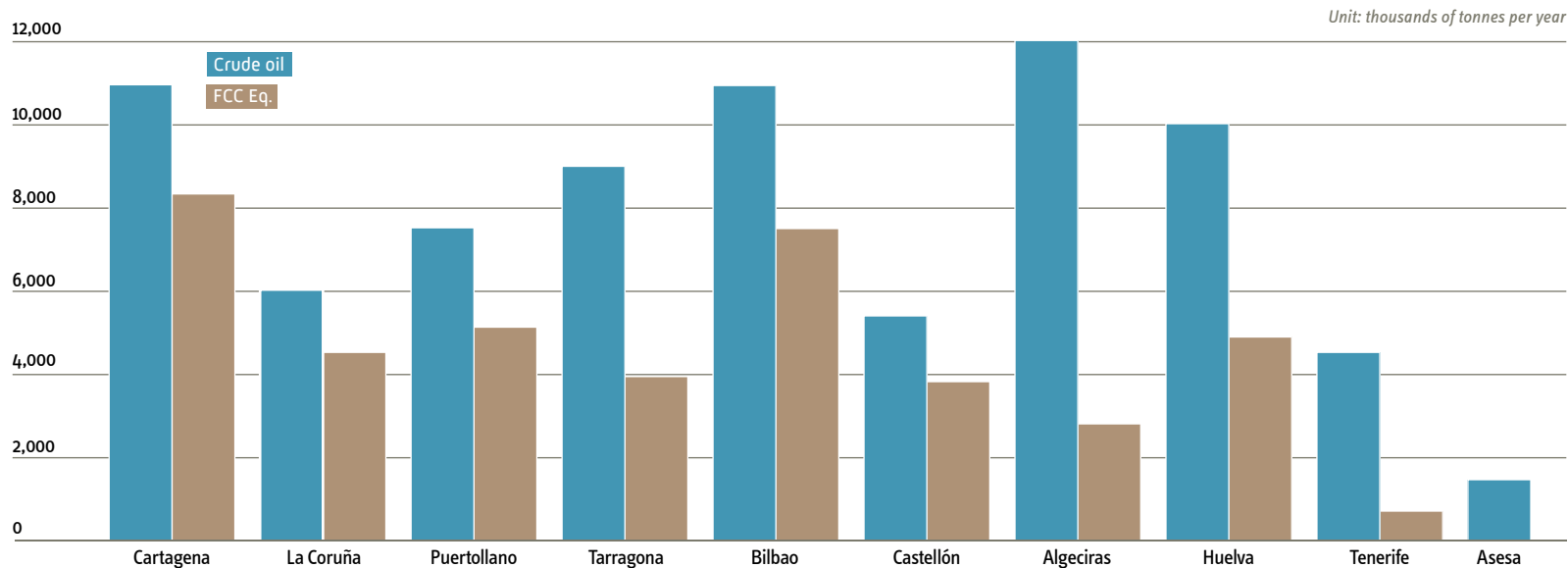
Total refinery capacity

Unit: thousands of tonnes

	2012	2013	2014	2015	2016
Crude	77,000	77,000	77,000	77,800	77,800
Vacuum	33,400	33,200	33,200	33,197	33,197
FCC	10,390	10,390	10,390	10,350	10,350
Hydrocracking	7,400	7,800	7,800	7,850	7,850
Visco-reduction	8,930	8,930	8,930	8,874	8,874
Mild hydrocracker	5,080	5,080	5,080	5,080	5,080
Coking	8,720	8,720	8,720	8,820	8,820

Source: Companies

Total refinery capacity 2016



Source: Companies

Gross refinery production

Unit: thousands of tonnes

	2012	2013	2014	2015	2016	Structure (%)	Vr (%) 2016/2015
LPG	1,702	1,712	1,575	1,699	1,541	2.4	-9.3
Gasoline	7,232	7,471	7,275	9,105	9,555	14.7	4.9
Kerosene	8,534	8,627	8,876	9,511	8,886	13.7	-6.6
Gasoil	26,489	26,783	27,384	27,483	26,709	41.1	-2.8
Fuel oil	6,537	5,296	4,482	3,984	5,109	7.9	28.3
Other products *	10,852	10,613	10,971	13,200	13,157	20.3	-0.3
Total	61,346	60,502	60,563	64,983	64,957	100.0	0.0

* Refinery gas, naphtha, petroleum coke and others

Source: CORES

Maximum retail price of butane cylinder (12.5 kg)

Unit: €/cylinder

		€/cylinder	Vr*
2012	28 April	15.53	2.92
	1 July	16.45	5.92
	1 September	16.87	2.55
	1 October	16.10	-4.56
2013	1 January	16.32	1.37
	26 March	17.13	4.96
	14 May	17.50	2.16
2015	17 March	15.81	-9.66
	19 May	14.12	-10.69
	21 July	13.42	-4.96
	15 September	12.76	-4.92
	17 November	12.68	-0.63
2016	19 January	13.10	3.31
	15 March	12.46	-4.89
	17 May	11.85	-4.90
	19 July	11.27	-4.89
	20 September	11.71	3.90
	15 November	12.28	4.87

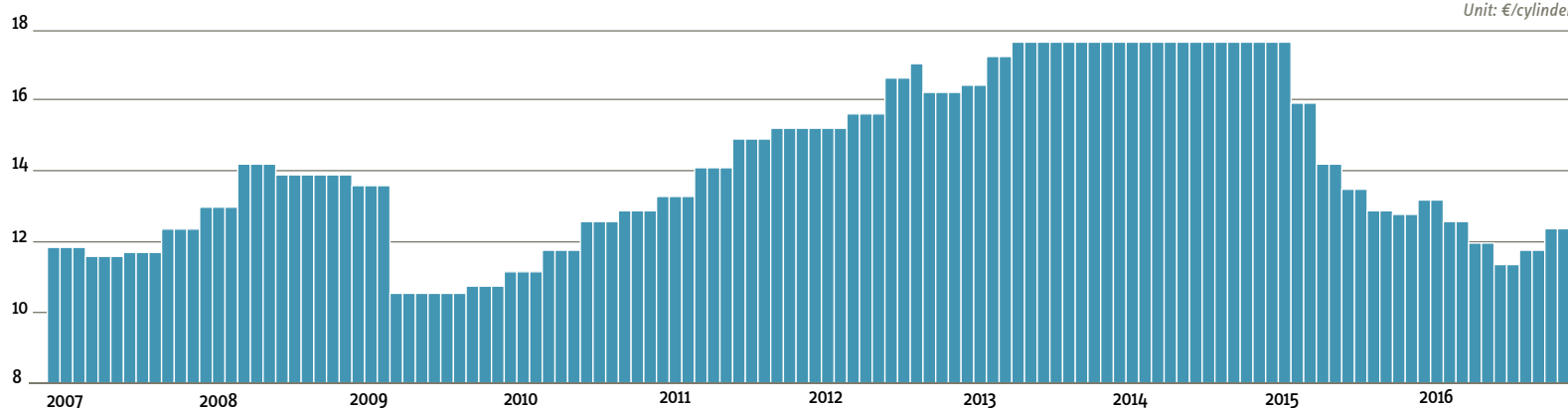
* % against previous price

Note: no price variations since May 2013 to March 2015

Source: MINETAD

Evolution of maximum retail price per butane cylinder (12,5 kg)

Unit: €/cylinder



Source: MINETAD

Retail price of RON-95 gasoline and road diesel in Spain

Unit: c€/litre

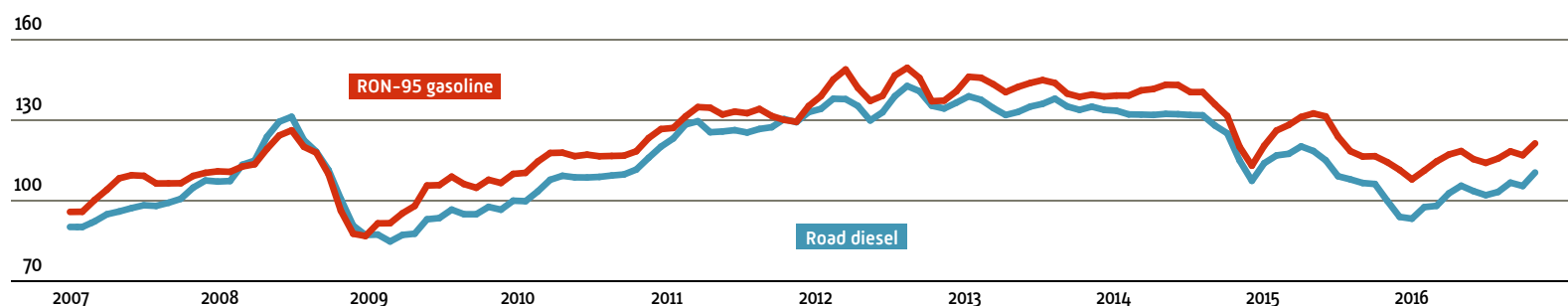
	Annual average					Vr*	Monthly average 2016											
	2012	2013	2014	2015	2016		J	F	M	A	M	J	J	A	S	O	N	D
RON-95 gasoline	142.47	143.30	138.34	122.83	115.19	-6.2	111.30	107.69	111.02	114.52	117.16	118.49	115.41	113.99	115.65	118.38	116.91	121.42
Road Diesel	136.55	136.13	130.27	111.41	101.54	-8.9	93.38	92.70	97.10	97.60	102.35	105.26	103.22	101.66	102.90	106.44	105.17	110.29

* % 2016/2015

Source: MINETAD

Evolution of the retail price of RON-95 gasoline and road diesel in Spain

Unit: c€/litre



Source: MINETAD

Annual consumption of natural gas

Unit: gigawatt hours

	2012	2013	2014	2015	2016	Structure (%) 2016/2015	Vr(%) 2016/2015
Conventional consumption	267,286	267,979	239,346	243,683	250,492	78.3	2.8
Electricity generation	84,722	56,141	51,427	61,084	59,513	18.6	-2.6
LNG for direct consumption	13,343	11,457	10,948	9,443	9,876	3.1	4.6
Total	365,351	335,577	301,721	314,210	319,881	100.0	1.8

Source: CORES

Annual consumption of natural gas by pressure levels

Unit: gigawatt hours

	2012	2013	2014	2015	2016	Structure (%) 2016/2015	Vr(%) 2016/2015
Group 1* (Pressure > 60 bar)	140,461	116,876	110,401	122,185	124,790	39.0	2.1
Group 2 (Pressure > 4 bar and ≤ 60 bar)	144,663	136,676	119,329	117,364	118,067	36.9	0.6
Group 3 (Pressure ≤ 4 bar)	66,884	70,569	61,043	65,218	67,147	21.0	3.0
LNG for direct consumption	13,343	11,457	10,948	9,443	9,876	3.1	4.6
Total	365,351	335,577	301,721	314,210	319,881	100.0	1.8

* Includes natural gas for raw materials

Source: CORES

Monthly consumption of natural gas 2016

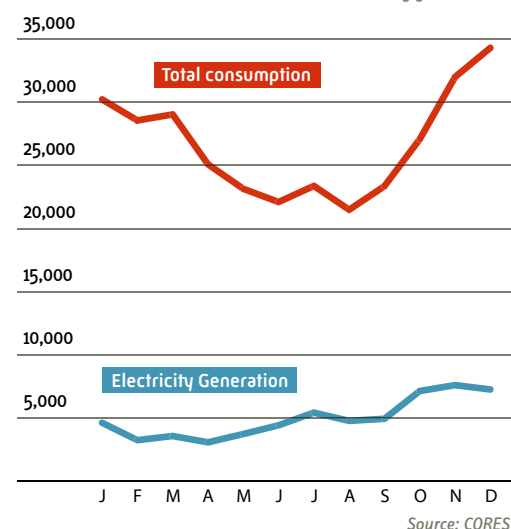
Unit: gigawatt hours

	Conventional consumption	Electricity generation	LNG for direct consumption	Total
January	24,873	4,596	770	30,240
February	24,576	3,219	778	28,574
March	24,686	3,548	818	29,051
April	21,261	3,046	790	25,096
May	18,632	3,705	813	23,150
June	16,915	4,398	792	22,104
July	17,188	5,403	788	23,380
August	15,872	4,748	871	21,491
September	17,566	4,913	883	23,362
October	19,173	7,116	797	27,087
November	23,533	7,582	902	32,017
December	26,217	7,237	875	34,329
Total	250,492	59,513	9,876	319,881

Source: CORES

Natural gas consumption 2016

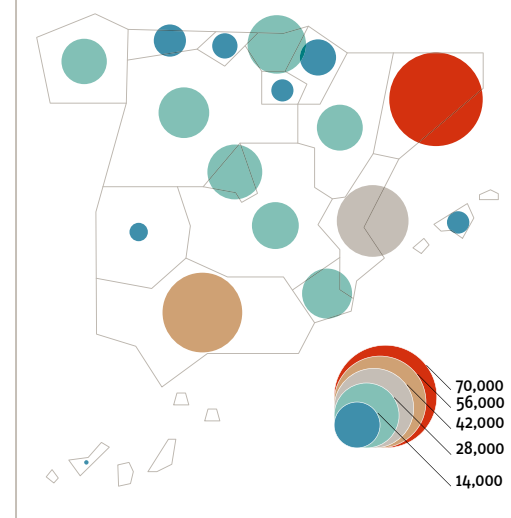
Unit: gigawatt hours



Source: CORES

Natural Gas consumption by Autonomous Region 2016

Unit: gigawatt hours (G.C.V)



Source: CORES

Natural gas consumption by Autonomous Region and pressure levels

Unit: gigawatt hours

	2014					2015					2016				
	Group 1	Group 2	Group 3	LNG	Total	Group 1	Group 2	Group 3	LNG	Total	Group 1	Group 2	Group 3	LNG	Total
Andalusia	31,910	6,850	2,131	2,872	43,762	33,390	6,323	2,294	3,002	45,008	35,731	6,408	2,374	3,082	47,594
Aragon	4,741	6,676	2,693	523	14,633	4,908	6,736	2,960	484	15,088	3,845	7,018	3,057	507	14,427
Asturias	692	3,624	1,926	1,221	7,462	804	3,651	2,007	1,215	7,677	835	3,967	2,024	1,100	7,926
Balearic Islands	3,442	6	744	12	4,204	4,525	7	775	67	5,373	2,973	7	827	29	3,835
Basque Country	6,801	16,844	4,629	127	28,401	6,920	15,780	4,994	77	27,772	6,857	14,190	5,077	55	26,179
Canary Islands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Cantabria	2,044	1,966	934	21	4,964	1,871	1,727	1,007	20	4,624	2,239	1,650	989	23	4,901
Castilla y Leon	2,415	8,847	5,699	633	17,594	2,559	8,740	6,173	527	17,999	2,954	8,315	6,304	564	18,137
Castilla-La Mancha	10,865	3,538	2,164	396	16,964	10,228	3,650	2,453	369	16,700	10,098	3,772	2,496	453	16,819
Catalonia	11,963	34,337	14,928	1,585	62,813	15,953	33,604	16,084	1,080	66,720	16,065	33,417	15,984	1,421	66,886
Extremadura	-	1,502	529	570	2,601	-	1,545	557	415	2,518	-	1,573	604	411	2,587
Galicia	1,295	6,858	1,771	1,505	11,429	3,903	7,055	1,869	605	13,432	4,954	7,728	1,978	577	15,237
La Rioja	351	541	928	36	1,855	1,215	629	1,011	44	2,898	2,082	596	1,038	41	3,758
Madrid	1,693	2,923	16,506	133	21,257	1,766	2,887	17,026	137	21,816	1,607	2,953	18,312	159	23,030
Murcia	19,571	1,205	546	568	21,890	18,841	1,095	591	624	21,150	16,697	1,242	581	641	19,162
Navarra	855	4,482	1,974	154	7,464	1,650	4,576	2,153	124	8,502	2,713	4,919	2,268	124	10,025
Valencian Region	11,765	19,130	2,942	592	34,429	13,652	19,359	3,266	655	36,932	15,150	20,303	3,236	687	39,376
Total	110,401	119,329	61,045	10,948	301,722	122,185	117,364	65,218	9,443	314,210	124,799	118,057	67,148	9,876	319,881

Note: due to inconsistencies in the information received there may be small differences in the listed consumption by pressure levels and that listed by Autonomous Region - equal to 0.0

Source: CORES

Natural gas imports by country

Unit: gigawatt hours

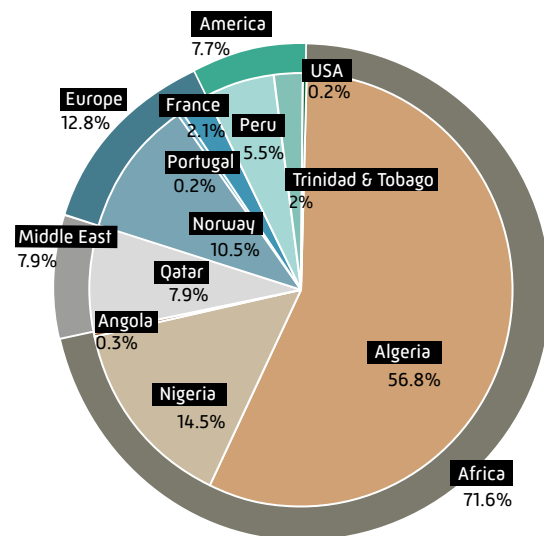
	2012	2013	2014	2015	2016	Structure (%)	Vr(%) 2016/2015
Algeria	164,591	193,705	211,869	217,427	207,038	56.8	-4.8
NG	121,788	156,043	154,556	175,346	173,539	47.6	-1.0
LNG	42,802	37,662	57,313	42,081	33,499	9.2	-20.4
Nigeria	61,126	36,176	32,574	43,324	52,762	14.5	21.8
Norway	46,276	43,792	47,010	32,130	38,416	10.5	19.6
Qatar	45,762	40,609	35,039	34,022	28,943	7.9	-14.9
Peru	27,341	16,898	13,971	10,794	20,151	5.5	86.7
France	8,879	15,227	16,219	12,752	7,818	2.1	-38.7
Trinidad & Tobago	26,629	23,327	22,557	12,755	7,306	2.0	-42.7
Angola	-	-	-	-	1,040	0.3	-
United States	-	-	-	-	846	0.2	-
Portugal	-	1,237	157	5	8	^	64.9
Oman	-	1,917	1,833	964	-	-	-100.0
Netherlands	-	-	1,448	-	-	-	-
Belgium	7,038	2,174	1,294	-	-	-	-
Egypt	7,153	464	-	-	-	-	-
Total	394,795	375,525	383,973	364,172	364,325	100.0	0.0

- equal to 0.0 / ^ different from 0.0

Note: In order to adapt to European legislation, since January 2015, the concept of gas transit contract has been changed, being considered hereinafter as import and export.

Source: CORES

Natural gas imports by region and countries 2016



Source: CORES

Monthly natural gas imports by country 2016

Unit: gigawatt hours

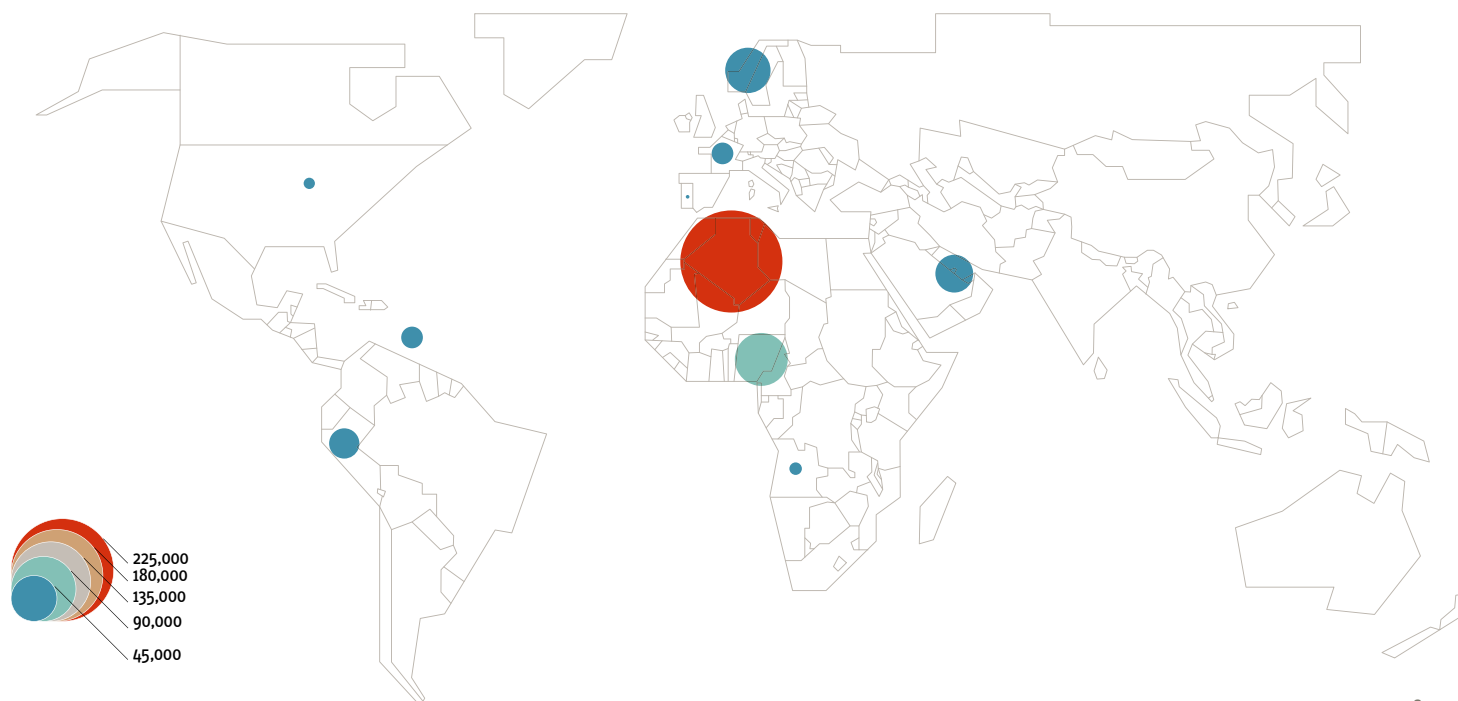
	J	F	M	A	M	J	J	A	S	O	N	D	Total
Algeria	20,432	12,996	15,629	16,947	16,893	18,431	16,779	17,649	17,283	14,990	19,786	19,224	207,038
Nigeria	3,810	3,223	4,669	3,711	5,134	4,838	4,757	3,784	3,999	5,129	3,781	5,927	52,762
Norway	4,347	3,343	4,039	2,085	1,876	2,643	2,748	2,697	3,569	3,682	3,393	3,993	38,416
Qatar	3,622	2,680	2,685	2,675	2,847	2,678	2,728	900	905	1,775	1,846	3,602	28,943
Peru	878	857	933	1,211	908	1,724	-	-	1,757	2,905	3,801	5,179	20,151
France	950	846	1,032	636	248	204	421	247	649	759	771	1,054	7,818
Trinidad & Tobago	1,278	841	854	1,664	-	-	1,020	1,037	612	-	-	-	7,306
Angola	-	-	-	-	-	-	-	-	-	-	-	1,040	1,040
United States	-	-	-	-	-	-	846	-	-	-	-	-	846
Portugal	-	-	-	-	-	-	-	-	-	-	-	8	8
Total	35,315	24,786	29,842	28,929	27,906	30,518	29,299	26,314	28,774	29,240	33,378	40,025	364,325

- equal to 0.0

Source: CORES

Natural gas imports by country 2016

Unit: gigawatt hours (G.C.V)



Source: CORES

Natural gas exports by country

Unit: gigawatt hours

	2012	2013	2014	2015	2016	Structure (%)	Vr (%) 2016/2015
Portugal	8,838	5,577	6,367	35,423	36,453	81.3	2.9
France	244	4,989	491	5,844	6,897	15.4	18.0
Pakistan	-	-	-	996	985	2.2	-1.0
Puerto Rico	-	-	930	-	351	0.8	-
Italy	2,017	2,529	78	744	68	0.2	-90.9
Switzerland	-	1	4	10	12	^	11.7
Andorra	-	-	-	-	7	^	-
Slovenia	^	1	1	-	1	^	-
Japan	5,942	2,738	12,447	3,214	-	-	-100.0
Kuwait	-	816	3,059	2,030	-	-	-100.0
Argentina	3,607	1,830	8,386	1,988	-	-	-100.0
Brazil	1,758	13,632	8,685	1,867	-	-	-100.0
Malaysia	991	-	1,024	1,066	-	-	-100.0
India	1,981	-	3,003	1,038	-	-	-100.0
Egypt	-	-	-	931	-	-	-100.0
Canada	-	-	-	912	-	-	-100.0
South Korea	918	2,846	11,237	486	-	-	-100.0
Cyprus	-	-	-	202	-	-	-100.0
Macedonia	-	-	-	1	-	-	-100.0
China	-	-	3,169	-	-	-	-
Turkey	2,479	-	2,845	-	-	-	-
Taiwan	1,082	1,777	1,912	-	-	-	-
Mexico	-	3,762	959	-	-	-	-
United States	-	-	950	-	-	-	-
United Arab Emirates	-	-	889	-	-	-	-
Greece	605	-	645	-	-	-	-
Norway	24	-	140	-	-	-	-
Israel	935	1,768	-	-	-	-	-
Singapore	-	23	-	-	-	-	-
Nigeria	68	-	-	-	-	-	-
Trinidad & Tobago	25	-	-	-	-	-	-
Other system departures*	-	-	124	199	55	0.1	-72.3
Total	31,513	42,289	67,346	56,948	44,828	100.0	-21.3

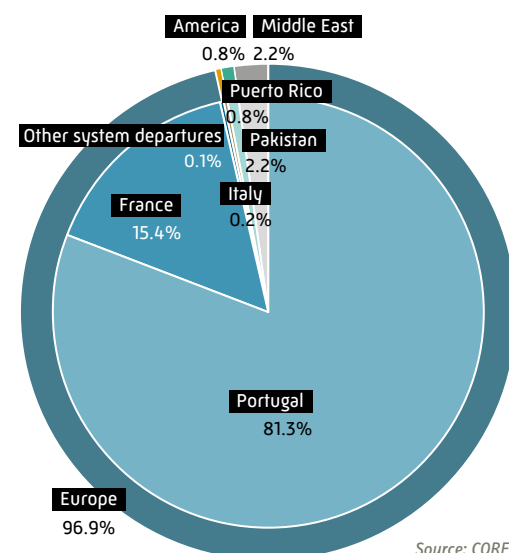
- equal to 0.0 / ^ different from 0.0

* Includes tank loads destined for other countries and other LNG operations (cold storage, direct supply to consumer vessels). Breakdown since January 2014.

Note: In order to adapt to European legislation, since January 2015, the concept of gas transit contract has been changed, being considered hereinafter as import and export.

Source: CORES

Natural gas exports by country 2016



Source: CORES

Monthly natural gas exports by country 2016

Unit: gigawatt hours

	J	F	M	A	M	J	J	A	S	O	N	D	Total
Portugal	2,738	2,340	2,528	2,666	2,373	2,963	3,848	4,006	3,638	2,671	3,551	3,132	36,453
France	37	43	43	440	1,228	1,374	1,798	1,297	482	82	46	27	6,897
Pakistan	985	-	-	-	-	-	-	-	-	-	-	-	985
Puerto Rico	-	-	-	-	-	-	351	-	-	-	-	-	351
Italy	9	6	7	8	8	8	4	2	4	4	3	4	68
Switzerland	1	1	1	1	1	1	1	1	1	1	1	1	12
Andorra	-	-	-	-	-	-	-	1	1	2	2	3	7
Slovenia	^	-	-	-	-	-	-	^	-	-	-	-	1
Other system departures*	-	19	-	-	-	-	-	-	-	-	36	-	55
Total	3,771	2,409	2,580	3,115	3,610	4,345	6,000	5,307	4,126	2,760	3,638	3,166	44,828

- equal to 0.0 / ^ different from 0.0

* Includes cooling down and direct supplies for consumer ships.

Source: CORES

Natural gas imports by entry point

Unit: gigawatt hours

	2012	2013	2014	2015	2016	Structure (%)	Vr (%) 2016/2015
International connections	157,066	201,583	203,880	212,249	211,112	57.9	-0.5
Almería	38,804	70,174	72,780	76,068	75,620	20.8	-0.6
Badajoz	3,220	1,438	-	-	-	-	-
Irún	1,532	1,857	1,809	-	-	-	-
Larrau	33,745	42,446	40,602	7,240	1,292	0.4	-82.2
Zahara de los Atunes	79,764	85,190	81,777	99,278	97,919	26.9	-1.4
VIP Ibérico	-	479	157	5	8	^	64.9
VIP Pirineos	-	-	6,755	29,658	36,274	10.0	22.3
Regasification plants	237,729	173,942	180,092	151,923	153,212	42.1	0.8
Barcelona	60,742	37,380	37,345	37,860	36,022	9.9	-4.9
Bilbao	40,092	30,265	18,425	22,914	18,006	4.9	-21.4
Cartagena	37,719	20,635	28,577	14,110	11,129	3.1	-21.1
Huelva	48,218	37,436	38,124	33,143	39,720	10.9	19.8
Mugardos	20,487	18,396	21,051	16,520	13,664	3.8	-17.3
Sagunto	30,470	29,831	36,570	27,378	34,672	9.5	26.6
LNG Trucks	-	-	1	-	1	^	-
Total	394,795	375,525	383,973	364,172	364,325	100.0	0.0

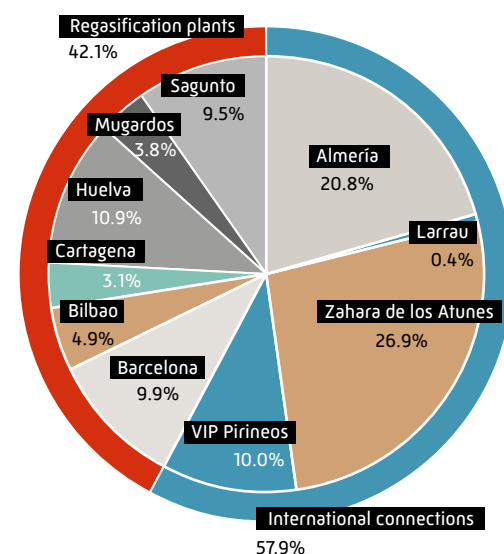
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Note: VIP Ibérico (Badajoz, Tuy and VIP Portugal) operative since 2013 and VIP Pirineos (Irún and Larrau) since 2014.

In order to adapt to European legislation, since January 2015, the concept of gas transit contract has been changed, being considered hereinafter as import and export.

Source: CORES

Natural gas imports by entry point 2016



Source: CORES

Monthly natural gas imports by entry point 2016

Unit: gigawatt hours

	J	F	M	A	M	J	J	A	S	O	N	D	Total
International connections	20,133	14,901	14,137	16,856	16,537	17,357	18,118	18,840	17,345	17,497	19,528	19,864	211,112
Almería	6,859	4,946	4,735	6,509	6,304	6,510	6,753	6,946	5,039	6,779	7,146	7,093	75,620
Larrau	41	29	31	30	86	18	96	136	219	127	220	258	1,292
Zahara de los Atunes	8,891	6,713	5,241	7,626	8,108	8,944	9,113	9,293	9,000	7,214	9,138	8,635	97,919
VIP Ibérico	-	-	-	-	-	-	-	-	-	-	-	8	8
VIP Pirineos	4,341	3,212	4,130	2,691	2,038	1,884	2,155	2,465	3,086	3,377	3,024	3,870	36,274
Regasification plants	15,183	9,885	15,704	12,073	11,369	13,161	11,181	7,474	11,429	11,743	13,850	20,161	153,212
Barcelona	4,238	2,643	3,212	2,705	3,076	2,815	4,656	-	2,789	2,804	3,869	3,215	36,022
Bilbao	2,197	841	1,787	2,043	908	945	1,020	1,037	1,581	907	1,985	2,754	18,006
Cartagena	848	857	1,102	831	1,151	1,991	-	-	878	-	924	2,546	11,129
Huelva	4,302	2,756	3,606	1,854	3,817	2,807	2,785	3,139	2,964	3,715	3,366	4,609	39,720
Mugardos	1,039	895	1,833	898	929	1,763	846	944	879	961	840	1,835	13,664
Sagunto	2,558	1,892	4,165	3,741	1,487	2,840	1,875	2,354	2,339	3,355	2,866	5,201	34,672
LNG Trucks	-	^	^	-	-	-	-	-	-	-	-	-	1
Total	35,315	24,786	29,842	28,929	27,906	30,518	29,299	26,314	28,774	29,240	33,378	40,025	364,325

- equal to 0.0 / ^ different from 0.0

Source: CORES

Natural gas exports by exit point 2016

Unit: gigawatt hours

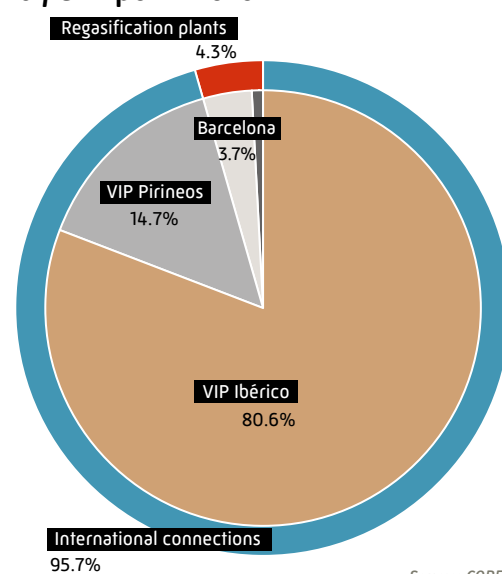
	2012	2013	2014	2015	2016	Structure (%)	Vr (%) 2016/2015
International connections	8,575	10,509	6,665	40,885	42,879	95.7	4.9
Badajoz	4,705	593	896	422	186	0.4	-55.8
Irún	94	-	-	-	-	-	-
Larrau	150	4,967	402	1,700	-	-	-100.0
Tuy	3,625	3,368	2,934	-	-	-	-
VIP Ibérico	-	1,582	2,431	34,878	36,111	80.6	3.5
VIP Pirineos	-	-	2	3,885	6,582	14.7	69.4
Regasification plants	22,939	31,780	60,681	16,063	1,949	4.3	-87.9
Barcelona	15	66	2,486	2,720	1,642	3.7	-39.6
Bilbao	-	-	-	3,061	72	0.2	-97.6
Cartagena	10,534	4,711	16,020	1,096	-	-	-100.0
Huelva	8,929	11,398	15,927	2,830	132	0.3	-95.4
Mugardos	3,461	3,292	6,984	114	79	0.2	-30.8
Sagunto	-	12,312	19,264	6,242	24	0.1	-99.6
Total	31,513	42,289	67,346	56,948	44,828	100.0	-21.3

- equal to 0.0

Note: VIP Ibérico (Badajoz, Tuy and VIP Portugal) operative since 2013 and VIP Pirineos (Irún and Larrau) since 2014. In order to adapt to European legislation, since January 2015, the concept of gas transit contract has been changed, being considered hereinafter as import and export.

Source: CORES

Natural gas exports by exit point 2016



Source: CORES

Monthly natural gas exports by exit point 2016

Unit: gigawatt hours

	J	F	M	A	M	J	J	A	S	O	N	D	Total
International connections	2,734	2,341	2,529	3,076	3,563	4,302	5,617	5,234	4,060	2,728	3,566	3,130	42,879
Badajoz	48	45	48	46	-	-	-	-	-	-	-	-	186
VIP Ibérico	2,684	2,288	2,473	2,613	2,365	2,955	3,839	3,956	3,599	2,665	3,546	3,129	36,111
VIP Pirineos	3	8	8	417	1,198	1,347	1,778	1,279	461	63	20	2	6,582
Regasification plants	1,037	69	51	40	47	43	383	73	67	32	72	36	1,949
Barcelona	1,016	28	31	28	33	29	370	19	22	21	22	22	1,642
Bilbao	13	13	11	2	4	4	2	1	4	4	7	9	72
Huelva	3	4	4	4	4	6	6	48	39	6	5	3	132
Mugardos	3	22	3	3	3	2	3	3	-	-	36	-	79
Sagunto	2	2	2	2	2	2	2	2	2	2	2	2	24
Total	3,771	2,409	2,580	3,115	3,610	4,345	6,000	5,307	4,126	2,760	3,638	3,166	44,828

- equal to 0.0

Source: CORES

Indigenous natural gas production

Unit: gigawatt hours

	2012	2013	2014	2015	2016	Structure (%)	Vr (%) 2016/2015
El Romeral	82	125	59	29	18	2.9	-36.8
El Ruedo	13	63	10	-	-	-	-
Marismas	5	5	10	2	-	-	-100.0
Poseidón	575	451	190	78	55	8.8	-29.9
Viura	-	-	-	590	547	88.3	-7.4
Total	674	644	269	699	620	100.0	-11.4
Degree of self-sufficiency (%)	0.18%	0.19%	0.09%	0.22%	0.19%	N.A.	-13.0

N.A.: not applicable
- equal to 0.0

Source: MINETAD

Balance of natural gas production and consumption

Unit: gigawatt hours

Inputs	2014	2015	2016	Outputs	2014	2015	2016
Natural gas input	409,323	364,871	364,945	Natural gas output	92,417	56,948	44,828
Indigenous gas production	269	699	620	Exports	67,346	56,948	44,828
LNG imports	180,093	151,923	153,213	Outputs in transit	25,071	N.A.	N.A.
NG imports	203,880	212,249	211,112	Distribution & consumption outputs	301,721	314,210	319,881
Inputs in transit	25,081	N.A.	N.A.	Conventional consumption	239,346	243,683	250,492
				Electricity generation	51,427	61,084	59,513
				LNG for direct consumption	10,948	9,443	9,876
Stock change	-11,088	9,164	3,452	Losses & statistical differences	4,096	2,878	3,688
Total	398,234	374,035	368,397	Total	398,234	374,035	368,397

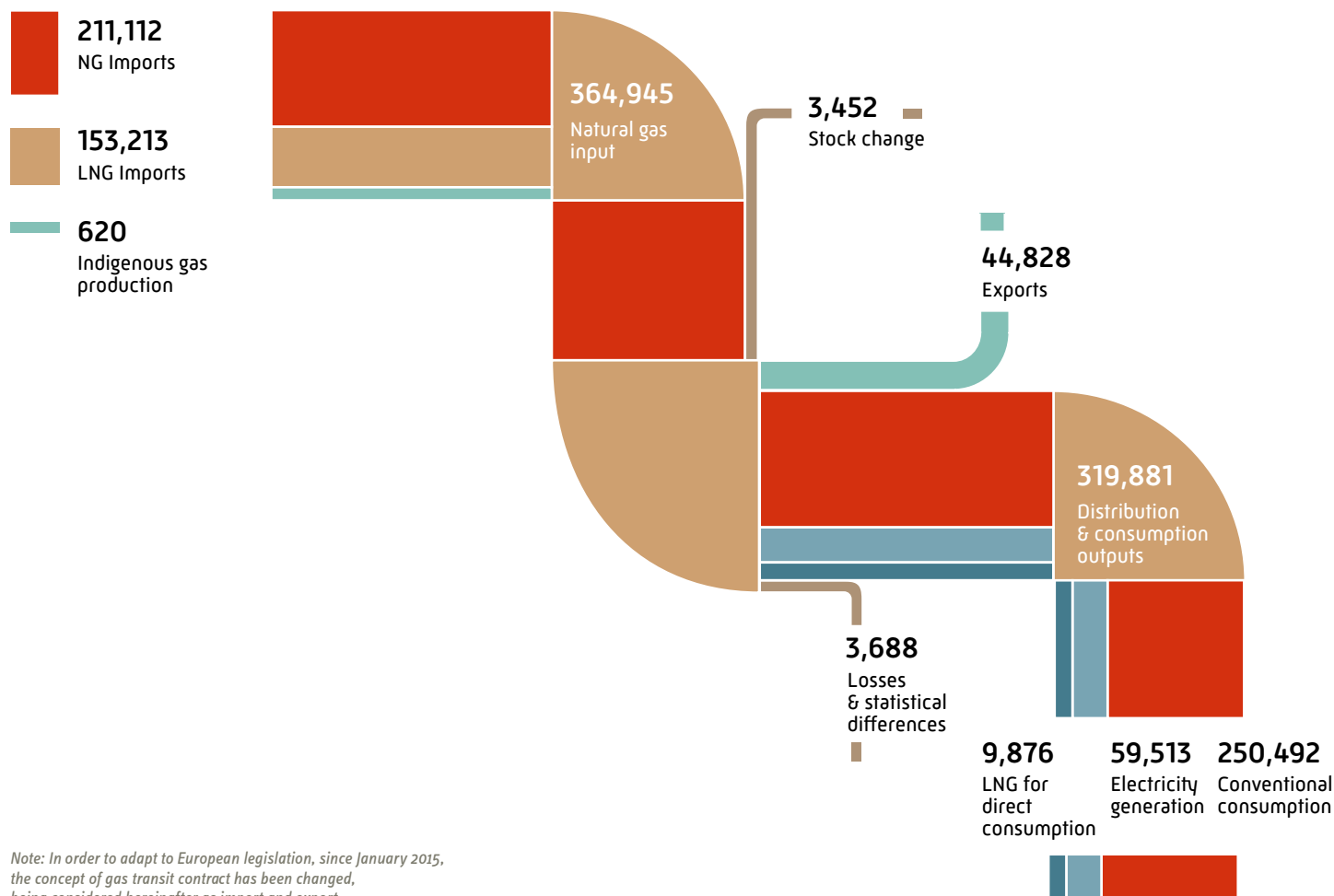
N.A.: not applicable

Note: In order to adapt to European legislation, since January 2015, the concept of gas transit contract has been changed, being considered hereinafter as import and export.

Source: CORES

Natural gas balance 2016

Unit: gigawatt hours



Note: In order to adapt to European legislation, since January 2015, the concept of gas transit contract has been changed, being considered hereinafter as import and export.

Source: CORES

Maximum last resort tariff of natural gas

Unit: c€/kWh

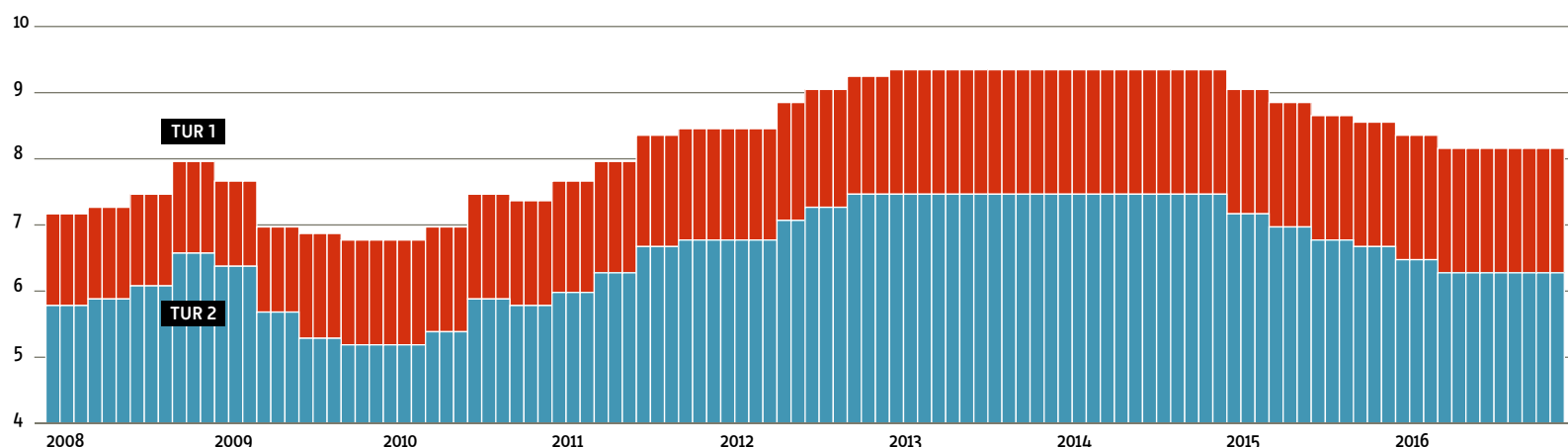
		TUR1	Vr*	TUR2	Vr*
2012	1 January	8.4931	0.9	6.7756	0.3
	28 April	8.8920	4.7	7.1146	5.0
	1 July	9.0496	1.8	7.2723	2.2
	1 September	9.2797	2.5	7.4572	2.5
2013	1 January	9.3229	0.5	7.4669	0.1
2014	1 January	9.3314	0.1	7.4542	-0.2
2015	1 January	9.0887	-2.6	7.2163	-3.2
	1 April	8.8967	-2.1	7.0243	-2.7
	1 July	8.6769	-2.5	6.8046	-3.1
	1 October	8.5953	-0.9	6.7230	-1.2
2016	1 January	8.3602	-2.7	6.4770	-3.7
	1 April	8.1463	-2.6	6.2630	-3.3
	1 October	8.2213	0.9	6.3381	1.2

* Rate of variation over previous year

Source: MINETAD

Evolution of maximum natural gas tariffs

Unit: c€/kWh



Note: Tariff TUR1: estimated consumption of 3,000 kWh/year. Tariff TUR2: estimated consumption of 12,000 kWh/year.

Source: MINETAD

Evolution of natural gas supply cost

Unit: c€/kWh

	2012	2013	2014	2015	2016	Vr (%) 2016/2015
January	26.95	27.12	25.90	25.20	19.12	-24.2
February	26.44	27.05	26.27	24.48	17.73	-27.6
March	26.75	26.55	25.88	24.56	16.09	-34.5
April	26.55	27.75	25.47	24.18	15.29	-36.8
May	27.26	26.30	23.24	21.40	13.85	-35.3
June	26.15	27.15	24.35	21.71	14.33	-34.0
July	28.41	26.20	24.37	20.28	13.85	-31.7
August	27.03	25.90	23.59	20.07	14.17	-29.4
September	27.69	25.55	26.62	19.62	14.54	-25.9
October	27.11	25.16	24.85	20.10	14.76	-26.6
November	25.00	25.20	26.37	19.20	16.17	-15.8
December	27.24	26.39	26.37	19.90	16.99	-14.7
Annual average	26.88	26.36	25.27	21.73	15.57	-28.3

Source: Inland Revenue Customs & Special Taxes Agency

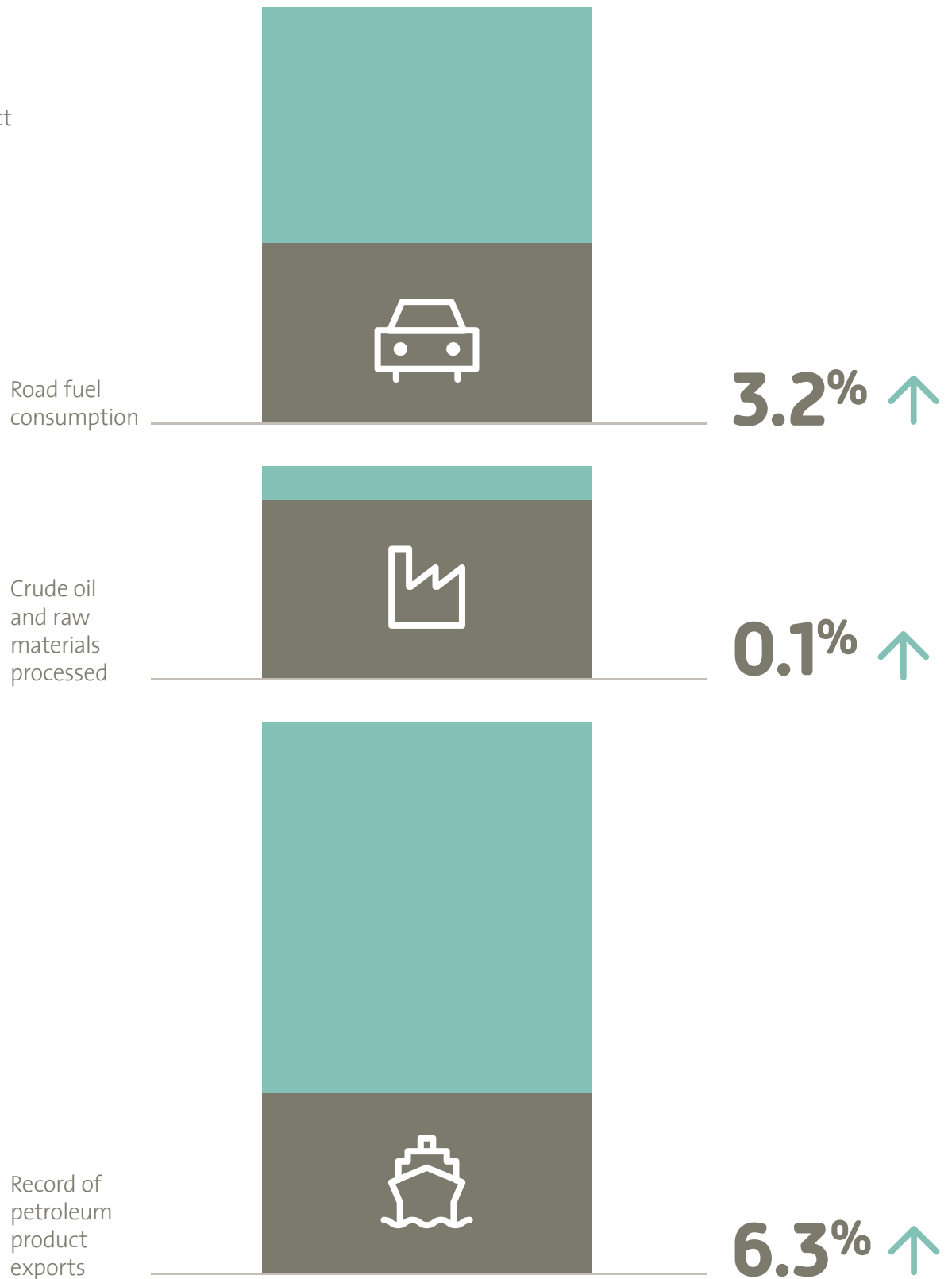
Spanish Statistics

Summary for 2016

Petroleum Products

58,108

kt of petroleum product consumption

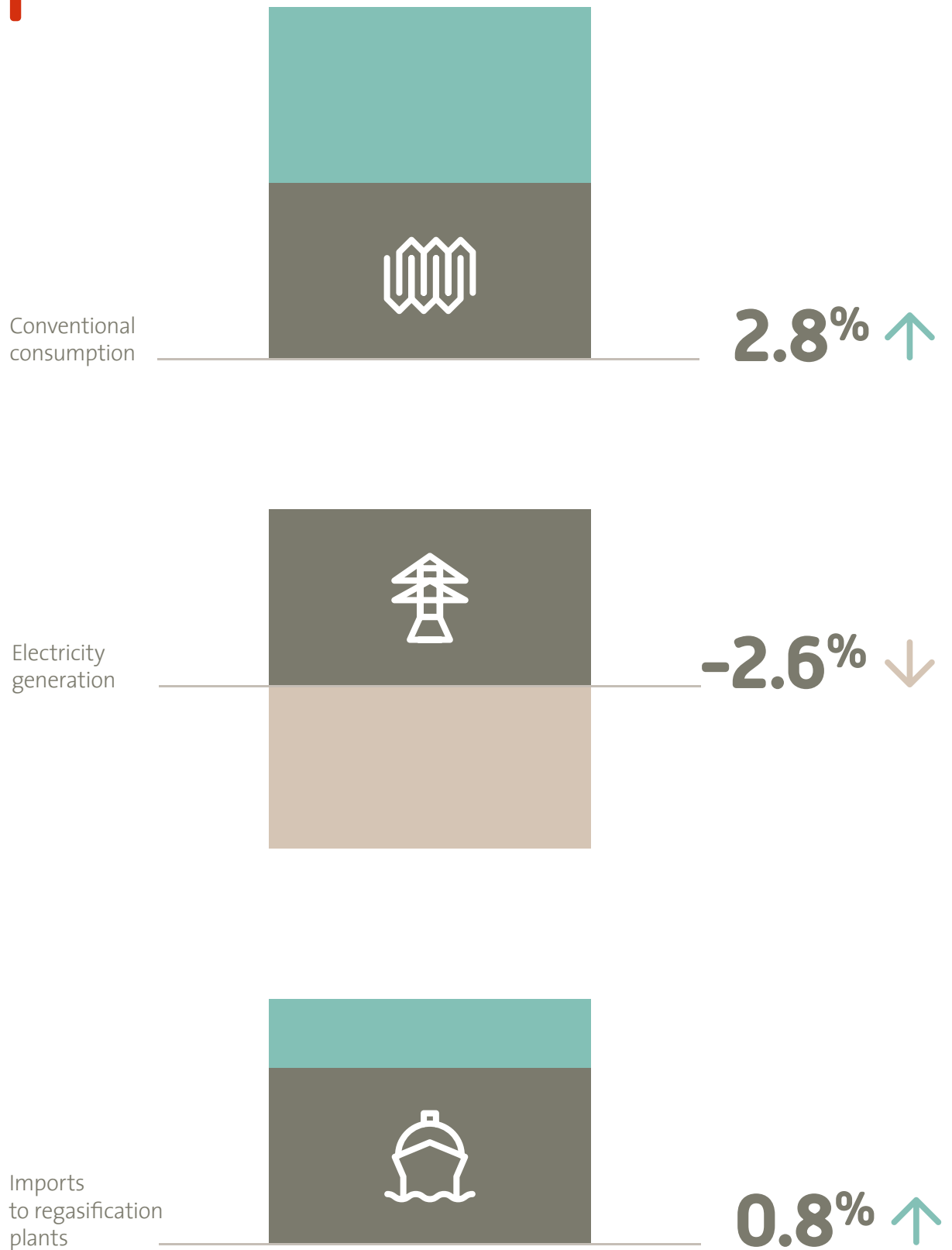


Note: Variations 2016/2015

Natural Gas

319,881

GWh of natural gas consumption







3

Spanish oil
and natural gas
reserves

Total OECD stocks

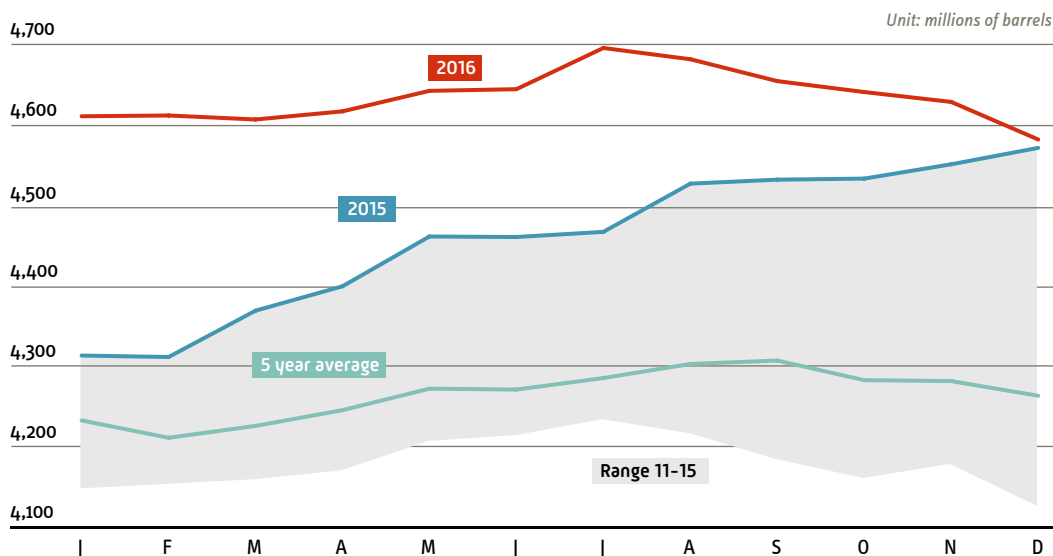
Unit: millions of barrels

	Annual total					Vr*	Monthly figures 2016											
	2012	2013	2014	2015	2016		J	F	M	A	M	J	J	A	S	O	N	D
Industry	2,655	2,559	2,704	2,986	2,985	^	3,022	3,022	3,014	3,026	3,052	3,054	3,102	3,087	3,061	3,048	3,028	2,985
Government	1,547	1,584	1,580	1,587	1,598	0.7	1,590	1,591	1,593	1,592	1,591	1,591	1,593	1,594	1,594	1,593	1,601	1,598
Total	4,202	4,144	4,285	4,573	4,583	0.2	4,611	4,612	4,608	4,618	4,643	4,645	4,696	4,682	4,655	4,641	4,629	4,583

* % 2016/2015 / ^ different from 0,0
 Nota: Annual figures to 31st December
 Monthly figures at the end of month

Source: International Energy Agency (IEA)

Evolution of total OECD stocks



Source: International Energy Agency (IEA)

Minimum security stocks and strategic reserves in Spain

Unit: thousand of tonnes

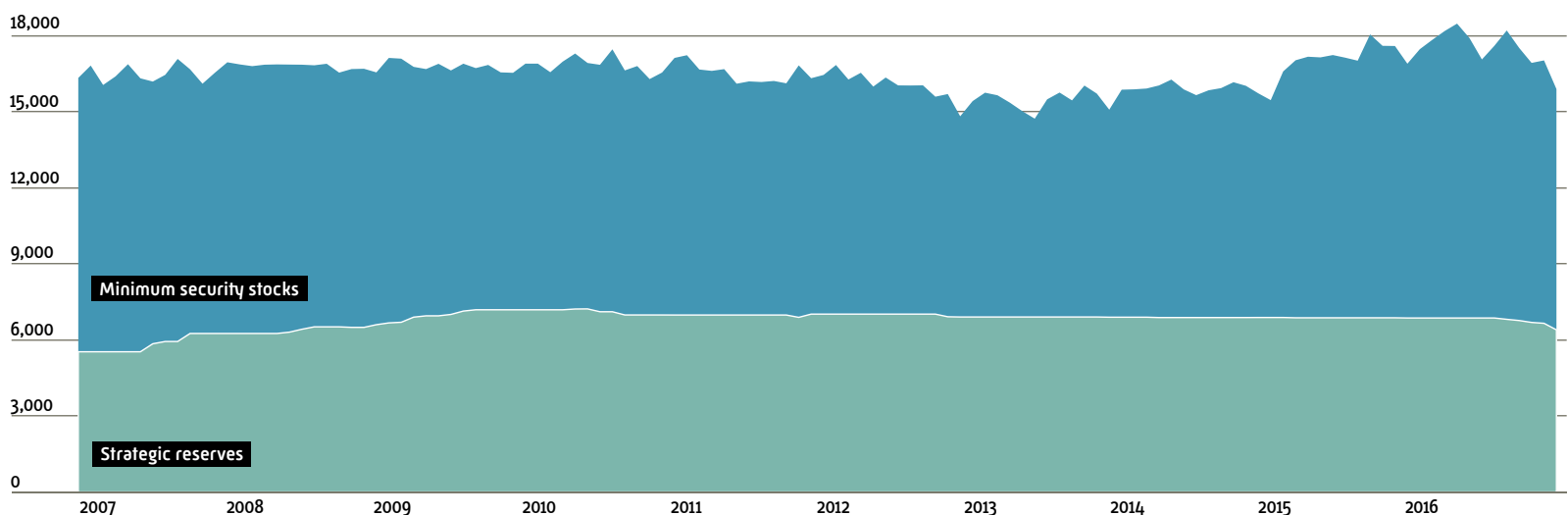
	Annual total					Vr*	Monthly figures 2016											
	2012	2013	2014	2015	2016		J	F	M	A	M	J	J	A	S	O	N	D
Strategic reserves	6,905	6,896	6,884	6,864	6,397	-6.8	6,864	6,864	6,864	6,864	6,864	6,864	6,864	6,812	6,764	6,689	6,655	6,397
Minimum security stocks	7,917	8,174	8,842	10,019	9,541	-4.8	10,603	10,956	11,281	11,615	11,152	10,303	10,743	11,401	10,754	10,238	10,371	9,541
Total	14,822	15,070	15,726	16,883	15,938	-5.6	17,467	17,820	18,145	18,479	18,016	17,167	17,607	18,213	17,518	16,927	17,026	15,938

* % 2016/2015
 Nota: Annual figures to 31st December
 Monthly figures at the end of month

Source: CORES

Evolution of minimum security stocks and strategic reserves in Spain

Unit: thousands of tonnes



Source: CORES

Stocks of crude oil, raw materials and petroleum products in Spain

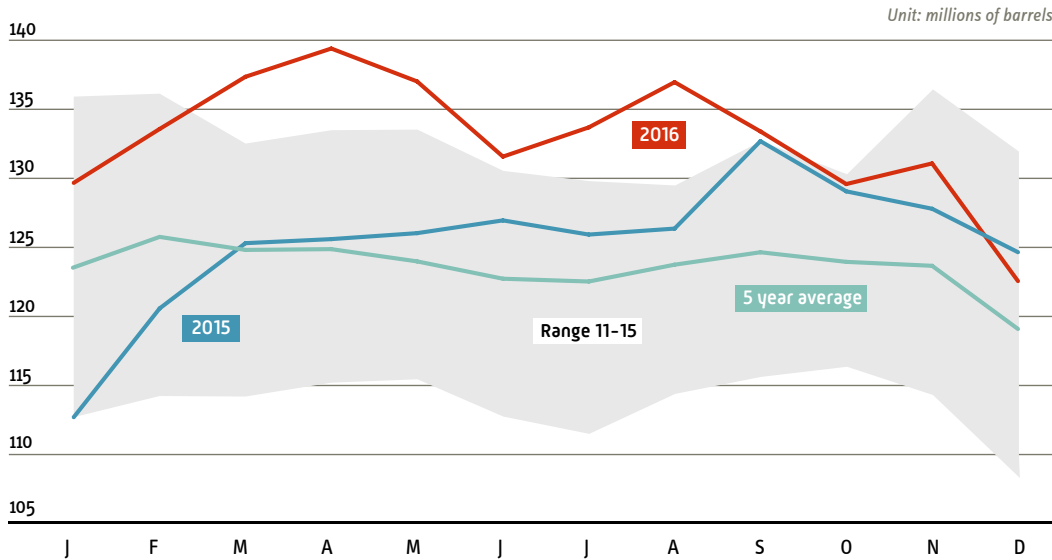
Unit: thousand of tonnes

	Annual total						Monthly figures 2016											
	2012	2013	2014	2015	2016	Vr*	J	F	M	A	M	J	J	A	S	O	N	D
Crude oil and raw materials	6,173	6,126	6,455	6,320	5,837	-7.6	6,589	6,992	7,123	7,290	7,035	6,625	6,838	7,011	6,836	6,232	6,364	5,837
Petroleum products	10,105	8,940	9,933	11,552	11,821	2.3	11,846	11,974	12,359	12,437	12,367	12,034	12,245	12,519	12,207	12,344	12,411	11,821
Total	16,278	15,066	16,388	17,872	17,658	-1.2	18,435	18,966	19,482	19,727	19,402	18,659	19,083	19,530	19,043	18,576	18,775	17,658

* % 2016/2015
 Nota: Annual figures to 31st December
 Monthly figures at the end of month

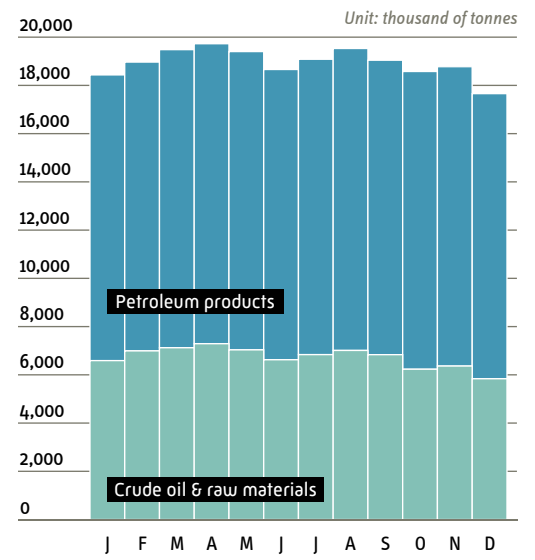
Source: CORES

Evolution of total stocks in Spain



Source: CORES

Evolution of total stocks in Spain 2016



Source: CORES

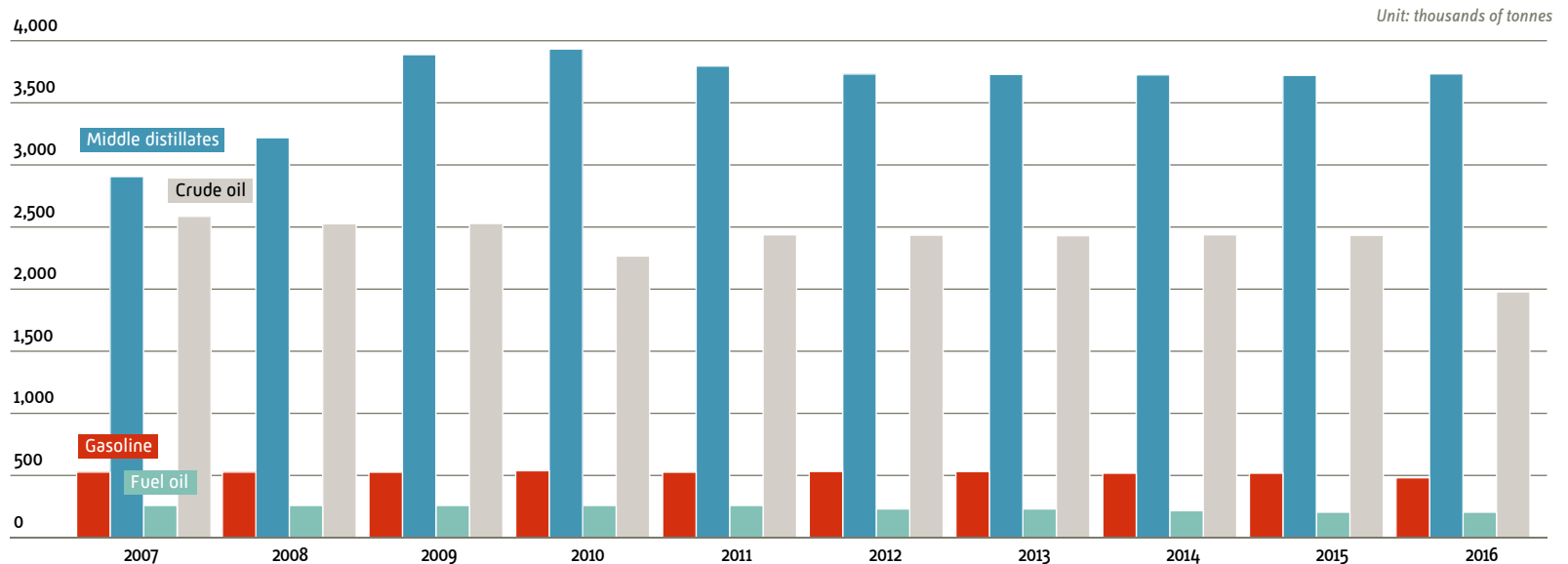
Strategic reserves in Spain

	2012	2013	2014	2015	2016	Vr (%)
Gasoline (m ³)	675,200	673,911	673,053	672,318	639,693	-4.9
Kerosene (m ³)	427,015	426,148	425,243	424,338	423,408	-0.2
Gasoil (m ³)	4,005,195	4,001,502	3,997,797	3,994,445	4,009,701	0.4
Fuel oil (t)	230,249	230,018	215,950	203,748	203,748	-
Crude oil (t)	2,433,511	2,429,876	2,437,025	2,433,370	1,977,937	-18.7

- equal to 0,0
 Nota: Figures to 31st December

Source: CORES

Evolution of strategic reserves in Spain



Source: CORES

Types of storage for strategic reserves in Spain 2016

	Gasoline <i>m³</i>	Middle distillates <i>m³</i>	Fuel oil <i>t</i>	Crude oil <i>m³</i>
CORES facilities	-	399,201	-	-
Refineries	235,239	626,931	203,748	2,269,998
Logistics & storage companies	404,454	3,406,977	-	-
Total	639,693	4,433,109	203,748	2,269,998

- equal to 0,0
Nota: Figures to 31st December

Source: CORES

Evolution of strategic reserves location in Spain

Unit: cubic meters

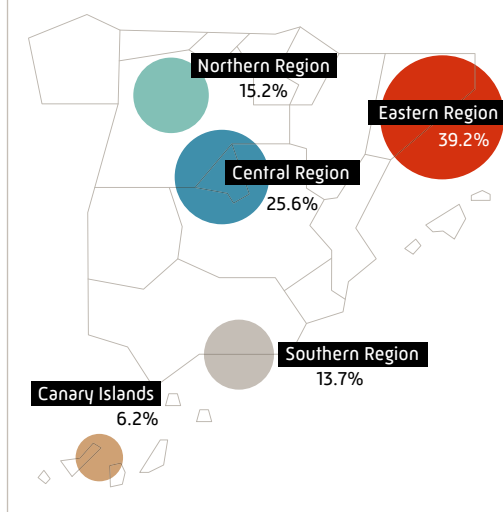
		2012	2013	2014	2015	2016	Vr (%) 2016/2015
Northern Region	Products	602,242	601,718	734,673	744,621	804,003	8.0
	Crude oils	212,077	211,758	218,759	218,430	218,103	-0.2
Central Region	Products	1,188,405	1,186,158	1,325,595	1,436,200	1,353,060	-5.8
	Crude oils	155,438	155,205	154,972	154,739	154,507	-0.2
Canary Islands	Products	302,201	301,864	301,528	301,462	327,849	8.8
	Crude oils	43,435	43,370	43,305	43,240	-	-100.0
Eastern Region	Products	2,352,736	2,350,755	2,165,110	2,069,512	2,070,611	0.1
	Crude oils	1,644,238	1,641,776	1,639,313	1,636,854	1,446,597	-11.6
Southern Region	Products	892,074	891,083	785,138	743,055	721,026	-3.0
	Crude oils	744,539	743,422	742,307	741,194	450,791	-39.2

- equal to 0,0
Nota: Figures to 31st December

Source: CORES

Strategic reserves location 2016
Products

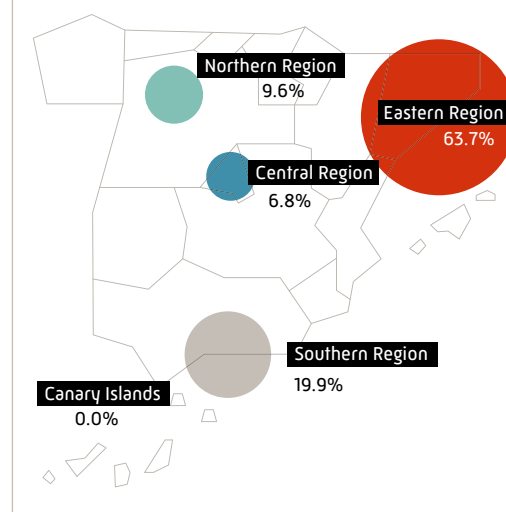
Unit: % over total petroleum products



Source: CORES

Strategic reserves location 2016
Crude oils

Unit: % over total crude oils



Source: CORES

Stocks level in Spain calculated in net import days

Unit: days

	Annual total						Monthly figures 2016											
	2012	2013	2014	2015	2016	(16-15)*	J	F	M	A	M	J	J	A	S	O	N	D
Stocks in net import days	100	99	113	125	119	-6	130	134	135	137	134	129	132	135	132	126	128	119
Industry	57	53	62	74	73	-1	79	83	85	87	84	78	81	85	83	78	80	73
CORES	43	47	51	51	46	-5	51	51	51	50	50	50	50	50	50	48	48	46
Obligation	90	90	90	90	90	0	90	90	90	90	90	90	90	90	90	90	90	90

* Annual difference Dec 2016 - Dec 2015
Note: Annual figures on 31st December
Monthly figures at the end of month

Source: International Energy Agency (IEA)

Annual natural gas stocks

Unit: megawatt hours (gross calorific value)

	2012	2013	2014	2015	2016	Vr (%) 2016/2015
Regasification plants	9,193,390	6,978,924	14,472,214	9,772,842	8,436,608	-13.7
Underground storage*	24,218,410	22,409,420	26,004,331	21,539,658	19,423,995	-9.8
Total	33,411,800	29,388,344	40,476,545	31,312,500	27,860,603	-11.0

* Includes both operative gas and cushion gas extractable by mechanical means
Note: figures to 31st December

Source: CORES

Monthly natural gas stocks 2016

Unit: megawatt hours (gross calorific value)

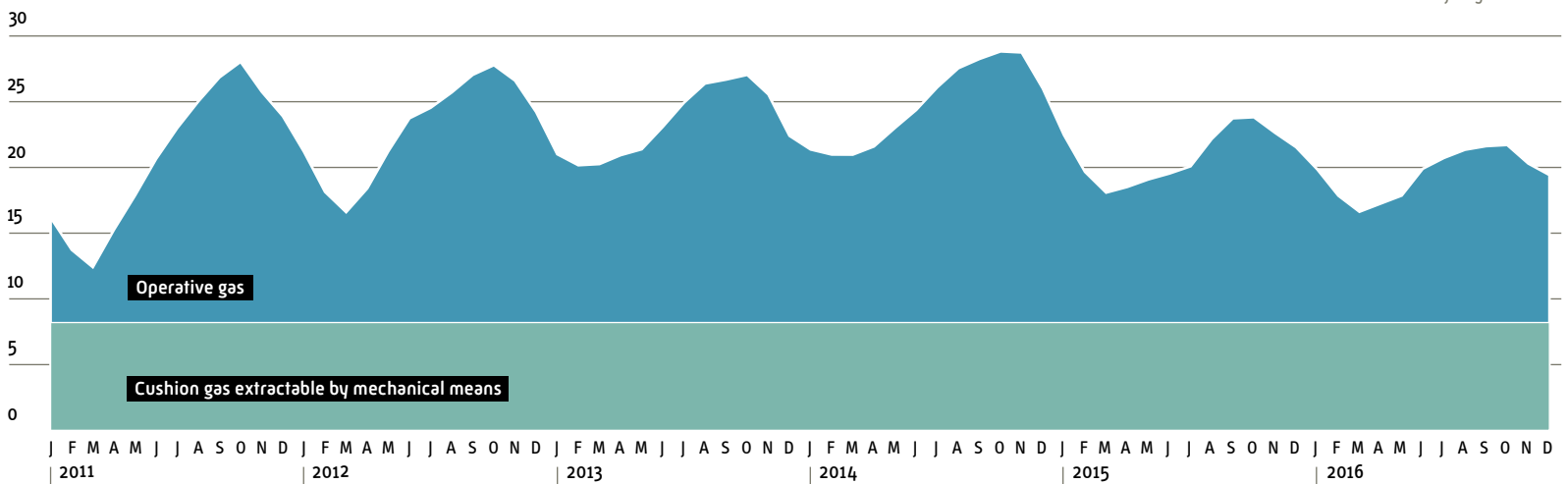
	J	F	M	A	M	J	J	A	S	O	N	D
Regasification plants	11,966,679	7,420,889	6,818,791	7,365,311	8,095,427	9,951,207	8,662,049	7,607,208	8,547,988	7,678,168	5,675,110	8,436,608
Underground storage*	19,859,138	17,856,032	16,631,350	17,248,416	17,860,225	19,900,456	20,723,340	21,347,210	21,621,386	21,710,202	20,295,862	19,423,995
Total	31,825,817	25,276,921	23,450,141	24,613,727	25,955,652	29,851,663	29,385,389	28,954,418	30,169,374	29,388,370	25,970,972	27,860,603

* Includes both operative gas and cushion gas extractable by mechanical means
Note: end of month figures

Source: CORES

Evolution of natural gas stocks in underground storage

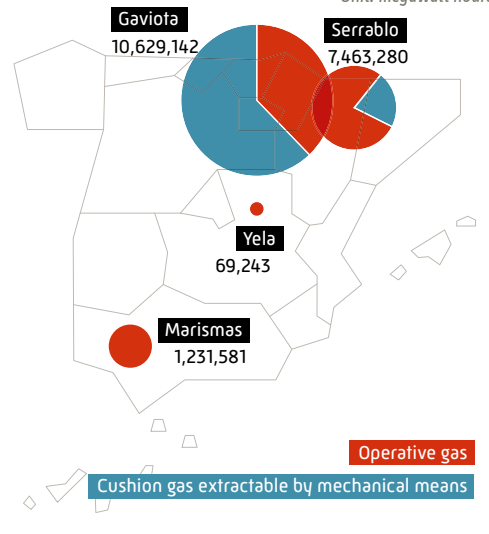
Unit: millions of megawatt hours



Source: CORES

Stocks in underground storage 2016

Unit: megawatt hours



Note: figures to 31st December

Source: CORES

Spanish oil and natural gas reserves

Summary for 2016

Oil reserves

17.66

Mt of crude oil, raw materials & petroleum product stocks

Days of net imports



-6 days ↓

Crude oil and raw materials



-7.6% ↓

Strategic reserves



-6.8% ↓

Note: Variations 2016/2015

Natural gas reserves

27,861

GWh of natural gas stocks

Total stock



-11.0% ↓

Stocks in regasification plants



-13.7% ↓

Underground storage



-9.8% ↓

Units and conversion factors

Units and conversion factors for energy

	TJ	Gcal	Mtherms	Mtoe	GWh
TJ	1	238.8	0.2388	2.388×10^{-5}	0,2778
Gcal	4.1868×10^{-3}	1	10^{-3}	10^{-7}	1.163×10^{-3}
Mtherms	4,1868	10^3	1	10^{-4}	1.163
Mtoe	4.1868×10^4	10^7	10^4	1	11,630
GWh	3.6	860	0,86	8.6×10^{-5}	1

Units and conversion factors for volume

	Gallons (USA)	Barrels	Cubic feet	Liter	Cubic metre
Gallons (USA)	1	0.02381	0.1337	3.785	0.0038
Barrels	42	1	5.615	159	0.159
Cubic feet	7.48	0.1781	1	28.3	0.0283
Liter	0.2642	0.0063	0.0353	1	0.001
Cubic metre	264.2	6.289	35.3147	1,000	1

Characteristics of consumer tariffs for the purpose of natural gas prices in Spain

Supply pressure ≤ 4 bar	kWh/year
Tariff TUR 1	$\leq 5,000$
Tariff TUR 2	$>5,000 \leq 50,000$

Other equivalences used

Natural Gas	11.86 kWh/m ³ (n) 10 ⁹ m ³ (n)/bcm
Crude oil	7.33 Bbl/t

Prefixes

Mega (M): 10 ⁶	Giga (G): 10 ⁹	Tera (T): 10 ¹²
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Aproximate conversion factors

	Bbl/ton
LPG	11.60
Gasoline	8.53
Kerosene	7.88
Kerosene Jet Fuel	7.93
Gasoil	7.46
Fuel oil	6.66
Other products	8.00

Rounding differences

Because of rounding, some totals may not agree exactly with the sum of their component parts.

Cores produces its national statistical information on the oil and natural gas sectors, mainly based on the annual and monthly information submitted by the obliged entities according to the Resolutions of May 29, 2007 and December 15, 2008 of the Directorate General for Energy Policy and Mines.

Data contained in this report correspond to updated data at publication date. Subsequent updates are included in the monthly statistical information published by CORES through its website www.cores.es/en

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