

volume 2

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World Gas and Renewables Review 2017

World Gas and Renewables Review 2017

Eni presents the second volume of the World Oil and Gas Review, the annual statistics report on world reserves, production and consumption of oil and gas that this year has reached the 16th edition.

This volume follows the first one, published in July and focused on oil and the refining industry. It provides figures and statistics on natural gas, biofuels, and, for the first time, on modern renewable energy sources (wind and solar), which are a key element in the energy transition towards a low carbon future.

Solar and wind contribution to the primary energy demand is still marginal, around 1% globally, while in terms of power generation it represents 4.5%.

The key findings from the World Gas & Renewables Review are:

- In 2016, world gas reserves increased by 0.9%. This trend was driven by the United States, where reserves grew after a decrease in 2015, and by Nigeria and Iraq. Russia remains the top holder of gas reserves (25% of the world's total). Among the top ten, six are OPEC countries with 32% of the world's total.
- World gas production increased by 0.7%, driven mainly by the Australian new LNG plants. In the US, the world's largest producer of natural gas, production slightly declined (-3.2%), after a 10-year increase mainly due to the shale gas boom. In Europe, Norway's production was almost flat after a strong jump in 2015, whilst output continued to decline in the European Union (-3%). In Russia, the world's second gas producer, output resumed growth after the decline of the previous year.
- World gas demand recorded a robust growth in 2016 (+2.0%), thanks to strong recovery in Europe (+5.4%), mainly due to the power sector and weather conditions, and in Asia-Pacific (+5.1%), led by strong demand in China (+8.6%). Gas demand rose substantially also in India and S. Korea, after a year of stagnation and decline respectively. UK, Germany, Italy, and France showed the highest increases in Europe.
- At the end of 2016, solar and wind installed capacities (296 and 467 GW respectively) accounted for almost 40% of all renewables installed power capacity (about 15% of all power sources). China leads the market for solar and wind with an installed capacity of 226 GW (30% of the world total).
- In 2016, solar photovoltaic capacity additions grew by 50% compared to 2015, reaching a record 71 GW driven by declining cost of technology. Wind capacity increased by 51 GW, but additions fell by 21% vs 2015. Total new installations were concentrated in China (44%). North America (+21 GW), thanks to new PV installations, slightly overtook Europe (+19 GW), where wind led the growth.
- In 2015, in power generation wind represented 3.5% and solar energy 1%. The contribution
  of modern renewables to power generation remains lower than their contribution to capacity
  due to current low average capacity factors (below 25% for wind and 15% for
  solar).

The Review provides information for a deeper understanding of the main trends of the sector and is addressed to both energy specialists and a wider audience.

Claudio Descalzi Chief Executive Officer and General Manager audelledi

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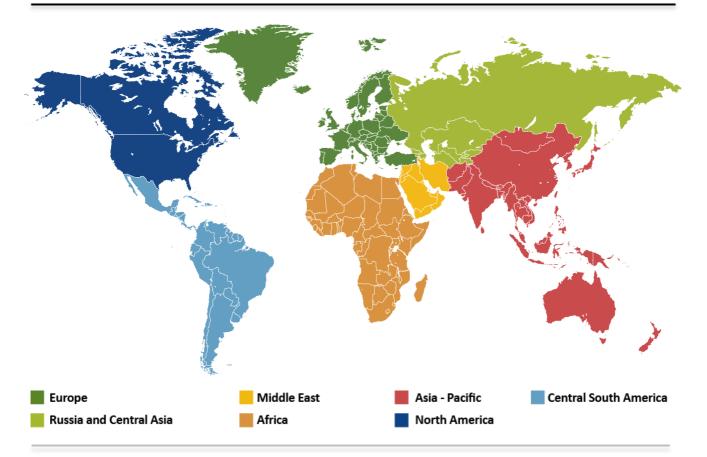
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#### List of Countries:

- Europe: Albania, Austria, Belarus, Belgium, Bosnia Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Gibraltar, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine and United Kingdom.
- Russia and Central Asia: Russia, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.
- Middle East: Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, United Arab Emirates and Yemen.
- Africa: Algeria, Angola, Benin, Cameroon, Chad, Congo, Côte d'Ivoire, Dem. Rep. Congo, Egypt, Equatorial Guinea, Ethiopia, Gabon, Ghana, Kenya, Libya, Madagascar, Mauritania, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Somalia, South Africa, Sudan, Tanzania, Tunisia, Uganda, Zambia and Zimbabwe.
- Asia Pacific: Afghanistan, Australia, Bangladesh, Brunei, China, East Timor, Hong Kong, India, Indonesia, Japan, Malaysia, Mongolia, Myanmar, Nepal, New Zealand, North Korea, Pakistan, Papua New Guinea, Philippines, Singapore, South Korea, Sri Lanka, Taiwan, Thailand and Vietnam.
- **Americas:** North America, Central South America.
- North America: Canada and the United States.
- Central South America: Argentina, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Netherlands Antilles, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, Uruguay and Venezuela.
- European Union: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom.
- OECD: Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Turkey, United Kingdom and United States.
- OPEC: Algeria, Angola, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates and Venezuela.
- MENA (Middle East and North Africa): Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, United Arab Emirates, Yemen and Algeria, Egypt, Libya, Morocco, Tunisia.

This Review adopts the most commonly used names for countries and not necessarily the official name.

The names used do not in any way indicate the opinion of Eni on the legal status of countries, territories, cities or areas mentioned. The term "country" is used to indicate, when necessary, also a territory or area. Borders between countries are indicated on the maps and do not imply judgement of any kind or the position of Eni with regard to current international disputes.

This Review has been prepared by Eni - Scenarios, Strategic Options & Investor Relations Department.

#### Notes and Methods

#### Natural Gas

#### Renewables

The sources of the data are: Cedigaz, DECC, EIA DOE, Enerdata, International Energy Agency (IEA), International Renewable Energy Agency (IRENA), IHS Global Insight, Italian Ministry for Economic Development, Norwegian Petroleum Directorate, Oil & Gas Journal, OPEC, Wood MacKenzie and other official sources.

Blank spaces in the tables indicate that the figure was not available, zero indicates a figure that is not significant (except for the two chapters **'Imports by Country of Origin'** and **'LNG Liquefaction and Regasification Capacity'** in the section "Natural Gas" and for the whole section **'Renewables'**).

Total may differ from the sum of the individual figures as a result of rounding up/down.

Percentages have been calculated before rounding.

Data for Sudan also include South Sudan.

In all the chapters of natural gas, in some countries figures may include natural gas from non conventional sources and others sources of supply.

The figures for **'Reserves'** of natural gas refer to proven reserves as at 31<sup>st</sup> December. The figures for other chapters indicate annual averages.

In the chapters **'Production'**, **'Consumption'**, **'Exports'** and **'Imports'** of natural gas, figures are assessed by using the same calorific value per cubic metre (39 MJ/cm, GCV), in order to make data among countries comparable.

In the chapter **"Production**" of natural gas, the figures concern traded production and do not include quantities of flared, dispersed or re-injected gas.

In the chapter **'Imports**" of natural gas, the figure reported as total imports for a single country may differ from the sum of "Imports by LNG and pipeline" for the same country, because of the different sources and different calorific attached to the cubic metre. The imports of liquefied natural gas cover only the dry marketable equivalent after regasification.

In all the chapters, the list of the "The world top 10 or 5..." is drawn up by ordering the countries on the basis of the last available year. In the chapters **'Reserves/Production Ratio'** and **'Production/Consumption Ratio'** of natural gas, the list of the "The world top 10..." is drawn up by selecting the largest producers in the last available year and ordering them on the basis of the value of the reserves/production and production/consumption ratio. In the chapter **'Per Capita Consumption'** of natural gas, the list of the world top is drawn up by selecting the largest consumers in the last available year and ordering them by the value of per capita consumption.

# natural gas

Reserves Production Reserves/Production Ratio Consumption Per Capita Consumption Production/Consumption Ratio Exports Imports Traded Gas LNG - Liquefaction and Regasification Capacity Natural Gas Balance - Italy

World Gas and Renewables Review 2017

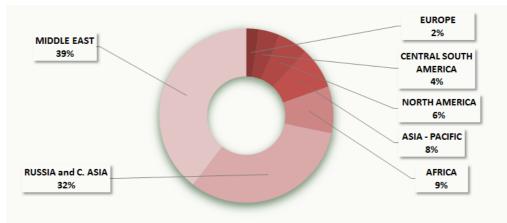
#### Areas and Aggregates (\*)

(billion cubic metres as at 31st December)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Europe	8,432	6,875	5,790	5,504	5,347	5,048	4,887	4,728	-3.3%	-3.6%
Russia and Central Asia	51,507	52,618	60,949	63,677	64,150	64,682	64,871	65,214	0.5%	1.5%
Middle East	59,145	72,493	78,945	79,686	79,843	79,857	79,193	80,140	1.2%	1.9%
Africa	12,370	14,169	14,498	17,229	17,189	17,219	17,271	17,587	1.8%	2.2%
Asia - Pacific	11,772	13,399	15,874	16,091	15,931	15,403	15,596	15,603	0.0%	1.8%
Americas	14,369	14,615	18,170	18,426	19,633	20,652	19,022	19,295	1.4%	1.9%
- North America	6,704	7,416	10,321	10,417	11,670	1 <i>2,704</i>	11,130	11,417	2.6%	3.4%
- Central South America	7,664	7,199	7,849	8,008	7,963	7,948	7,892	7,879	-0.2%	0.2%
World	157,594	174,169	194,227	200,613	202,092	202,861	200,839	202,566	0.9%	1.6%
European Union	3,470	2,668	1,998	1,806	1,694	1,510	1,445	1,361	-5.9%	-5.7%
MENA	66,496	80,448	87,222	87,991	88,104	88,118	87,354	88,436	1.2%	1.8%
OECD	7,107	5,638	4,651	4,376	4,236	3,950	3,805	3,652	-4.0%	-4.1%
NON OECD	150,487	168,531	189,575	196,237	197,856	198,911	197,034	198,914	1.0%	1.8%
OPEC	74,446	89,344	97,382	98,066	97,934	97,928	97,474	98,360	0.9%	1.8%
NON OPEC	83,148	84,825	96,845	102,547	104,158	104,933	103,365	104,206	0.8%	1.4%

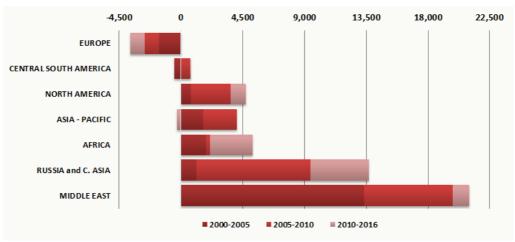
#### World Natural Gas Reserves (2016)

202,566 billion cubic metres as at 31st December



### World Natural Gas Reserves Growth (2000-2016)

**44,972** billion cubic metres as at 31<sup>st</sup> December

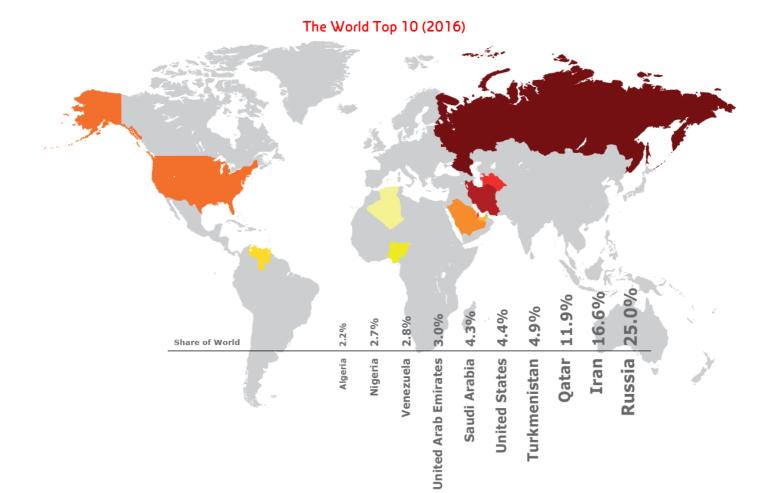


<sup>(\*)</sup> Data source: Eni's estimates on Enerdata *Global Energy Market & CO<sub>2</sub> Data* and other official data sources.

### The World Top 10 Reserves Holders (\*)

(billion cubic metres as at 31st December)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Russia	43,809	44,860	46,000	48,810	49,335	49,940	50,205	50,617	0.8%	0.9%
Iran	26,000	27,580	33,090	33,780	34,020	34,020	33,500	33,721	0.7%	1.6%
Qatar	14,443	25,636	25,201	25,069	24,681	24,531	24,299	24,073	-0.9%	3.2%
Turkmenistan	2,680	2,680	10,000	9,967	9,934	9,904	9,870	9,838	-0.3%	8.5%
United States	5,021	5,784	8,621	8,717	9,573	10,434	8,709	8,980	3.1%	3.7%
Saudi Arabia	6,301	6,900	8,016	8,235	8,317	8,489	8,588	8,619	0.4%	2.0%
United Arab Emirates	5,994	6,060	6,090	6,091	6,091	6,091	6,091	6,091	0.0%	0.1%
Venezuela	4,179	4,309	5,521	5,563	5,581	5,617	5,702	5,740	0.7%	2.0%
Nigeria	4,106	5,154	5,110	5,118	5,111	5,111	5,284	5,475	3.6%	1.8%
Algeria	4,523	4,504	4,504	4,504	4,504	4,504	4,504	4,504	0.0%	0.0%
The World Top 10	117,056	133,467	152,153	155,854	157,147	158,642	156,751	157,658	0.6%	1.9%
Rest of the World	40,538	40,701	42,074	44,759	44,945	44,219	44,088	44,908	1.9%	0.6%
World	157,594	174,169	194,227	200,613	202,092	202,861	200,839	202,566	0.9%	1.6%



(\*) Data source: Eni's estimates on Enerdata Global Energy Market & CO2 Data and other official data sources.

#### Countries (\*)

(billion cubic metres as at 31st December)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Europe	8,432	6,875	5,790	5,504	5,347	5,048	4,887	4,728	-3.3%	-3.6%
Albania	1	0	0	0	0	0	0	0	0.0%	-10.6%
Austria	26	21	15	12	11	10	9	8	-11.5%	-7.3%
Belarus	2	1	1	1	1	1	1	1	0.0%	-8.3%
Bulgaria	6	3	5	5	5	5	5	4	-11.1%	-2.5%
Croatia	29	30	25	16	14	13	11	10	-12.3%	-6.4%
Czech Republic	4	3	3	3	3	3	3	3	0.0%	-1.1%
Denmark	144	122	101	91	90	88	80	77	-3.8%	-3.8%
France	8	7	5	10	9	9	9	9	-1.6%	0.5%
Germany	264	178	87	71	63	51	46	42	-9.5%	-10.9%
Greece	1	1	1	1	1	1	1	1	0.0%	0.0%
Hungary	32	21	12	11	9	9	9	7	-17.6%	-9.1%
Ireland	34	25	25	25	25	30	30	30	0.0%	-0.8%
ltaly(**)	199	117	66	59	56	54	49	38	-22.4%	-9.8%
Moldova	20	20	20	20	20	20	20	20	0.0%	0.0%
Netherlands	1,684	1,431	1,236	1,072	989	864	825	789	-4.4%	-4.6%
Norway	3,841	3,108	2,762	2,687	2,654	2,547	2,461	2,388	-3.0%	-2.9%
Poland	119	106	71	73	69	63	61	58	-4.4%	-4.4%
Romania	202	143	110	119	113	109	103	99	-3.9%	-4.4%
Serbia and Montenegro	25	10	8	7	7	6	6	6	0.0%	-8.3%
Slovakia	7	6	5	5	5	5	5	5	0.0%	-2.3%
Slovenia	0	0	1	1	1	1	1	1	0.0%	
Spain	5	3	3	4	4	4	3	3	0.0%	-2.4%
Turkey	4	8	6	7	6	6	6	6	0.0%	2.9%
Ukraine	1,040	1,030	969	960	952	944	936	936	0.0%	-0.7%
United Kingdom	735	481	253	244	241	205	207	187	-9.9%	-8.2%
	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)

Russia and Central Asia	51,507	52,618	60,949	63,677	64,150	64,682	64,871	65,214	0.5%	1.5%
Russia	43,809	44,860	46,000	48,810	49,335	49,940	50,205	50,617	0.8%	0.9%
Armenia	165	165	18	18	18	18	18	18	0.0%	-12.9%
Azerbaijan	1,275	1,275	1,317	1,308	1,300	1,292	1,284	1,277	-0.5%	0.0%
Georgia	1	1	1	1	1	1	1	1	0.0%	-4.2%
Kazakhstan	1 <i>,</i> 840	1,900	1,950	1,939	1,929	1,918	1,907	1,898	-0.5%	0.2%
Kyrgyzstan	1	1	1	1	1	1	1	1	0.0%	-4.2%
Tajikistan	1	1	1	1	1	1	1	1	0.0%	-4.2%
Turkmenistan	2,680	2,680	10,000	9,967	9,934	9,904	9,870	9,838	-0.3%	8.5%
Uzbekistan	1,735	1,735	1,661	1,632	1,632	1,608	1,585	1,564	-1.3%	-0.6%

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Middle East	59,145	72,493	78,945	79,686	79,843	79,857	79,193	80,140	1.2%	1.9%
Bahrain	110	90	92	92	92	92	92	92	0.0%	-1.1%
Iran	26,000	27,580	33,090	33,780	34,020	34,020	33,500	33,721	0.7%	1.6%
Iraq	3,109	3,170	3,158	3,158	3,158	3,158	3,158	3,820	21.0%	1.3%
Israel	45	45	215	202	224	217	206	465	125.7%	15.7%
Jordan	7	6	6	6	6	6	6	6	0.0%	-1.0%
Kuwait	1,557	1,572	1,784	1,784	1,784	1,784	1,784	1,784	0.0%	0.9%
Oman	859	670	520	505	706	705	705	705	0.0%	-1.2%
Qatar	14,443	25,636	25,201	25,069	24,681	24,531	24,299	24,073	-0.9%	3.2%
Saudi Arabia	6,301	6,900	8,016	8,235	8,317	8,489	8,588	8,619	0.4%	2.0%
Syria	241	285	285	285	285	285	285	285	0.0%	1.1%
United Arab Emirates	5,994	6,060	6,090	6,091	6,091	6,091	6,091	6,091	0.0%	0.1%
Yemen	479	479	488	479	479	479	479	479	0.0%	0.0%

(\*) Data source: Eni's estimates on Enerdata *Global Energy Market & CO<sub>2</sub> Data* and other official data sources.

(\*\*) Data source: Italian Ministry for Economic Development.

#### Countries (\*)

(billion cubic metres as at 31<sup>st</sup> December)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Africa	12,370	14,169	14,498	17,229	17,189	17,219	17,271	17,587	1.8%	2.2%
Algeria	4,523	4,504	4,504	4,504	4,504	4,504	4,504	4,504	0.0%	0.0%
Angola	269	270	, 310	275	, 275	, 308	, 308	, 308	0.0%	0.9%
Benin	1	1	1	1	1	1	0	0		-100.0%
Cameroon	102	165	155	151	150	154	153	152	-0.7%	2.5%
Chad	0	0	1	1	1	1	1	1	0.0%	
Congo	122	130	127	121	118	115	112	111	-0.9%	-0.6%
Côte d'Ivoire	28	31	27	25	24	23	22	21	-4.5%	-1.8%
Dem. Rep. Congo	1	1	0	0	0	0	0	0		-100.0%
Egypt	1,433	1,920	2,210	2,185	2,185	2,186	2,086	2,221	6.5%	2.8%
Equatorial Guinea	17	91	82	71	66	60	54	47	-13.6%	6.6%
Ethiopia	25	25	28	28	28	28	28	28	0.0%	0.7%
Gabon	33	30	28	26	26	26	25	25	0.0%	-1.7%
Ghana	24	24	27	27	55	55	55	55	0.0%	5.3%
Libya	1,314	1,491	1,495	1,549	1,506	1,505	1,505	1,505	0.0%	0.9%
Madagascar	2	2	2	2	2	2	2	2	0.0%	0.0%
Mauritania	0	0	28	28	28	28	28	28	0.0%	
Morocco	3	3	3	2	1	1	1	1	0.0%	-6.6%
Mozambique	62	61	75	2,830	2,830	2,830	2,830	2,830	0.0%	27.0%
Namibia	85	70	70	70	70	70	70	70	0.0%	-1.2%
Nigeria	4,106	5,154	5,110	5,118	5,111	5,111	5,284	5,475	3.6%	1.8%
Senegal	11	11	10	2	2	2	2	2	0.0%	-10.1%
Somalia	6	6	б	б	б	6	б	6	0.0%	0.0%
South Africa	17	29	12	15	8	11	3	3	0.0%	-10.7%
Sudan	85	85	85	85	85	85	85	85	0.0%	0.0%
Tanzania	23	28	37	37	37	37	37	37	0.0%	3.0%
Tunisia	78	37	65	65	65	65	65	65	0.0%	-1.1%
Uganda	0	0	0	5	5	5	5	5	0.0%	

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Asia - Pacific	11,772	13,399	15,874	16,091	15,931	15,403	15,596	15,603	0.0%	1.8%
Afghanistan	100	100	100	100	100	100	99	99	0.0%	0.0%
Australia	2,203	2,428	3,759	3,727	3,769	3,215	3,205	3,193	-0.4%	2.3%
Bangladesh	306	407	354	458	436	412	385	366	-4.9%	1.1%
Brunei	366	333	301	276	270	263	258	252	-2.3%	-2.3%
China	1,269	1,690	2,244	2,313	2,355	2,421	2,644	2,716	2.7%	4.9%
India	821	1,162	1,210	1,391	1,416	1,488	1,549	1,518	-2.0%	3.9%
Indonesia	2,608	2,659	3,068	2,908	2,874	2,773	2,716	2,685	-1.2%	0.2%
Japan	40	39	37	34	33	32	31	29	-4.9%	-2.0%
Malaysia	2,189	2,346	2,334	2,550	2,611	2,676	2,740	2,805	2.4%	1.6%
Myanmar	489	687	724	698	499	492	484	469	-3.2%	-0.3%
New Zealand	57	62	52	50	53	64	56	51	-9.6%	-0.7%
Pakistan	677	852	810	762	749	736	723	711	-1.7%	0.3%
Papua New Guinea	3	3	263	264	231	223	216	238	10.2%	30.7%
Philippines	108	100	86	80	77	74	71	71	0.0%	-2.6%
South Korea	0	3	1	1	1	1	1	1	0.0%	
Taiwan	6	4	4	3	3	3	3	3	0.0%	-4.2%
Thailand	360	304	300	256	238	220	207	193	-6.8%	-3.8%
Vietnam	170	220	228	220	216	211	207	203	-1.9%	1.1%

(\*) Data source: Eni's estimates on Enerdata Global Energy Market & CO2 Data and other official data sources.

#### Countries (\*)

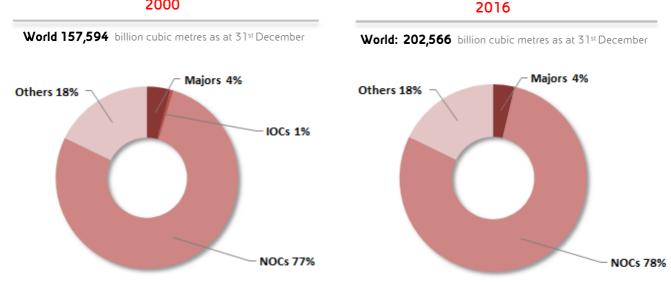
(billion cubic metres as at 31st December)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Americas	14,369	14,615	18,170	18,426	19,633	20,652	19,022	19,295	1.4%	1.9%
Argentina	778	439	359	316	328	332	350	361	3.1%	-4.7%
Barbados	0	2	2	2	2	2	2	2	0.0%	
Bolivia	675	710	281	317	296	300	305	310	1.6%	-4.7%
Brazil	221	306	417	459	458	471	429	378	-11.9%	3.4%
Canada	1,683	1,632	1,700	1,700	2,097	2,270	2,421	2,437	0.6%	2.3%
Chile	17	13	8	6	7	7	6	5	-15.3%	-7.5%
Colombia	129	113	153	162	156	135	123	114	-7.3%	-0.8%
Cuba	18	17	14	11	11	10	9	8	-11.1%	-4.9%
Ecuador	10	9	7	6	6	11	11	11	-0.8%	0.5%
Mexico	835	412	353	360	347	324	257	208	-19.1%	-8.3%
Peru	245	338	353	435	425	414	399	456	14.3%	4.0%
Trinidad and Tobago	557	531	381	371	346	325	300	286	-4.7%	-4.1%
United States	5,021	5,784	8,621	8,717	9,573	10,434	8,709	8,980	3.1%	3.7%
Venezuela	4,179	4,309	5,521	5,563	5,581	5,617	5,702	5,740	0.7%	2.0%

<sup>(\*)</sup> Data source: Eni's estimates on Enerdata Global Energy Market & CO2 Data and other official data sources.

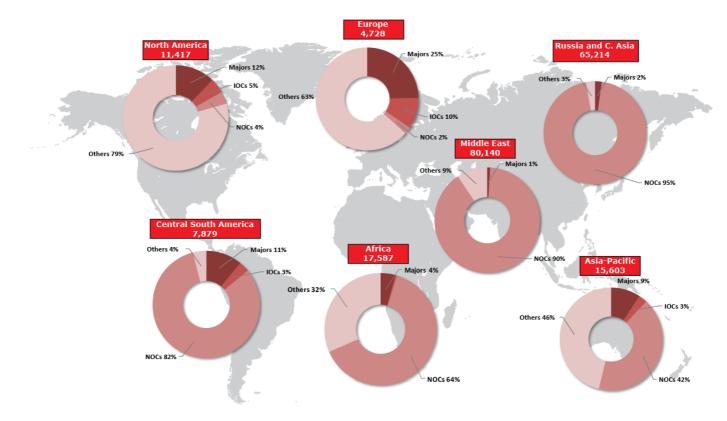
#### Cluster of Companies (\*)

#### 2000



#### 2016

(billion cubic metres as at 31<sup>st</sup> December)



(\*) Majors: ExxonMobil, BP, Shell, Chevron, Total, Eni, Statoil, ConocoPhillips, Anadarko, Marathon Oil, Apache. IOCs: BG, BHP Billiton, OMV, Repsol, Woodside Petroleum.

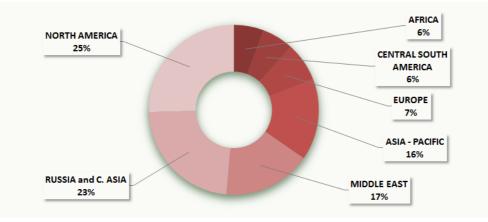
NOCs: ADNOC, Bahrain NOC, Bashneft, CNOOC, CNPC-PetroChina, CPC Taiwan, Dubai Petroleum, Ecopetrol, EGPC, Gazprom, INOC, Israel NOC, KazMunaiGaz, KNOC, KPC, Lybian NOC, Lukoil, MEDCO Energy, MOGE, Morocco NOC, Mubadala - Abu Dhabi, NIOC, NNPC, Novatek, Oil India, ONGC, Pakistan Oil Field, Pakistan Petroleum, PDO, PdVSA, Pemex, Pertamina, Petrobras, Petronas, PetroVietnam, PGNiG, PTTEP, QP, Rosneft, Saudi Aramco, Sinopec, SOCAR Azerbaijan, Sonangol, Sonatrach, Surgutneftegas, Syria Petroleum, Tatneft, Turkmengas, Uzbekneftegas, YPF.

### Areas and Aggregates<sup>(\*)</sup>

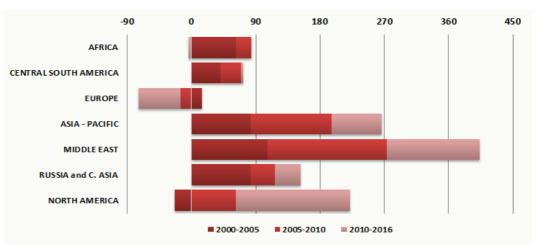
(billion cubic metres)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Europe	324.24	338.98	323.66	298.61	291.63	272.30	268.96	265.25	- 1.4%	-1.2%
Russia and Central Asia	676.47	759.48	792.70	824.98	850.20	828.08	826.16	829.55	0.4%	1.3%
Middle East	196.14	302.46	469.90	525.02	556.51	571.69	589.74	599.08	1.6%	7.2%
Africa	124.55	186.25	208.08	210.12	197.16	198.06	196.78	203.71	3.5%	3.1%
Asia - Pacific	288.27	370.54	484.53	484.37	508.66	521.22	528.30	554.96	5.0%	4.2%
Americas	852.98	870.27	959.90	1,041.15	1,050.58	1,109.74	1,140.08	1,123.62	-1.4%	1.7%
- North America	710.00	686.62	748.05	820.63	828.15	887.13	925.29	908.88	-1.8%	1.6%
- Central South America	142.97	183.65	211.85	220.52	222.43	222.61	214.79	214.74	0.0%	2.6%
World	2,462.65	2,827.99	3,238.77	3,384.26	3,454.74	3,501.09	3,550.02	3,576.17	0.7%	2.4%
European Union	249.52	227.30	190.44	158.69	157.22	139.81	128.32	124.44	-3.0%	-4.3%
MENA	304.69	456.91	631.18	679.58	701.48	712.69	726.62	744.19	2.4%	5.7%
OECD	1,085.16	1,084.61	1,157.59	1,202.82	1,213.90	1,252.52	1,288.60	1,288.99	0.0%	1.1%
NON OECD	1,377.48	1,743.38	2,081.18	2,181.44	2,240.84	2,248.57	2,261.42	2,287.18	1.1%	3.2%
OPEC	299.19	412.29	568.54	628.54	642.53	664.65	689.80	708.47	2.7%	5.5%
NON OPEC	2,163.46	2,415.69	2,670.23	2,755.72	2,812.21	2,836.45	2,860.22	2,867.70	0.3%	1.8%

World Natural Gas Production (2016) 3,576.17 billion cubic metres



World Natural Gas Production Growth (2000-2016) 1,113.52 billion cubic metres



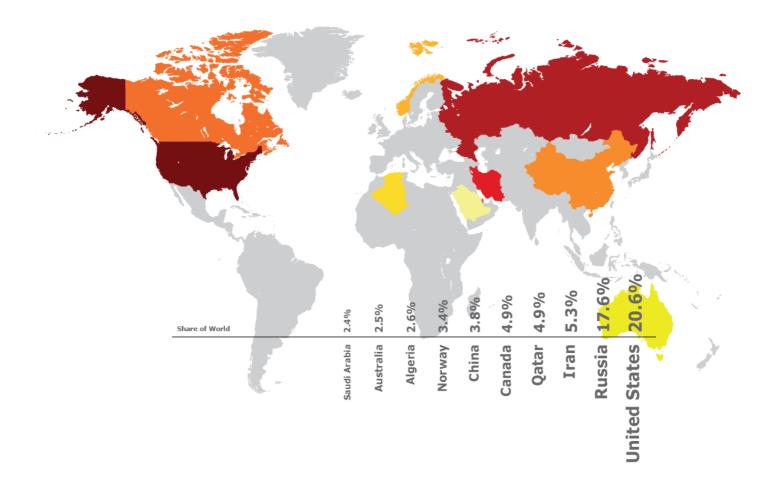
(\*) Data source: Eni's calculations. The original data are from *IEA Extended Balances* • OECD/International Energy Agency, 2017 and, for Italy, from Italian Ministry for Economic Development. Data have been converted by Eni using a unified gross calorific value of 39 MJ/cm.

### The World Top 10 Producers (\*)

(billion cubic metres)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
United States	533.06	502.78	590.11	665.95	672.69	723.05	759.33	735.06	-3.2%	2.0%
Russia	561.43	615.22	644.22	644.98	661.10	633.70	625.34	631.12	0.9%	0.7%
Iran	59.46	99.54	145.17	157.77	158.16	176.20	185.74	191.31	3.0%	7.6%
Qatar	25.98	47.55	127.97	153.22	173.28	169.82	174.12	175.52	0.8%	12.7%
Canada	176.94	183.84	157.94	154.68	155.46	164.08	165.96	173.82	4.7%	-0.1%
China	27.15	49.23	95.61	110.40	120.63	129.91	134.35	136.61	1.7%	10.6%
Norway	55.20	89.50	113.55	120.18	114.02	113.29	121.80	122.08	0.2%	5.1%
Algeria	83.31	90.18	85.83	86.50	82.18	83.74	85.18	93.70	10.0%	0.7%
Australia	34.04	37.40	53.05	54.43	62.19	63.12	67.24	88.22	31.2%	6.1%
Saudi Arabia	36.71	54.82	71.44	79.00	79.84	82.93	85.01	87.47	2.9%	5.6%
The World Top 10	1,593.28	1,770.05	2,084.90	2,227.12	2,279.55	2,339.83	2,404.08	2,434.91	1.3%	2.7%
Rest of the World	869.37	1,057.94	1,153.87	1,157.14	1,175.19	1,161.26	1,145.94	1,141.26	-0.4%	1.7%
World	2,462.65	2,827.99	3,238.77	3,384.26	3,454.74	3,501.09	3,550.02	3,576.17	0.7%	2.4%

### The World Top 10 (2016)



(\*) Data source: the original data are from *IEA Extended Balances* • OECD/International Energy Agency, 2017. Data have been converted by Eni using a unified gross calorific value of 39 MJ/cm.

#### Countries (\*)

(billion cubic metres)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Europe	324.24	338.98	323.66	298.61	291.63	272.30	268.96	265.25	-1.4%	-1.2%
Albania	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.08	158.1%	13.7%
Austria	1.85	1.59	1.67	1.76	1.42	1.29	1.24	1.15	-7.0%	-2.9%
Belarus	0.25	0.23	0.21	0.22	0.23	0.22	0.22	0.21	-4.4%	-1.1%
Bulgaria	0.01	0.46	0.07	0.37	0.28	0.19	0.10	0.09	-8.7%	12.2%
Croatia	1.62	2.22	2.64	1.95	1.80	1.72	1.75	1.61	-8.0%	0.0%
Czech Republic	0.20	0.18	0.24	0.26	0.25	0.25	0.24	0.21	-12.0%	0.4%
Denmark	8.84	11.19	8.76	6.15	5.11	4.94	4.94	4.82	-2.5%	-3.7%
France	1.79	1.08	0.77	0.54	0.35	0.01	0.02	0.02	-6.0%	-24.2%
Germany	18.84	17.10	13.25	11.41	10.57	8.19	7.56	6.85	-9.3%	-6.1%
Greece	0.05	0.02	0.01	0.01	0.01	0.01	0.01	0.01	103.7%	-8.9%
Hungary	2.95	2.78	2.67	2.11	1.84	1.71	1.63	1.71	4.5%	-3.4%
Ireland	1.14	0.55	0.27	0.20	0.17	0.15	0.13	2.89	2,163.3%	6.0%
Italy	16.25	11.79	8.21	8.41	7.56	6.98	6.61	5.65	-14.6%	-6.4%
Netherlands	62.24	67.11	75.65	68.50	73.67	59.81	46.52	43.03	-7.5%	-2.3%
Norway	55.20	89.50	113.55	120.18	114.02	113.29	121.80	122.08	0.2%	5.1%
Poland	3.95	4.63	4.40	4.66	4.56	4.44	4.39	4.24	-3.5%	0.4%
Romania	13.08	11.57	10.28	10.36	10.26	10.45	10.48	9.33	-11.0%	-2.1%
Serbia	0.74	0.27	0.37	0.51	0.50	0.53	0.54	0.54	0.1%	-1.9%
Slovakia	0.16	0.15	0.11	0.15	0.12	0.10	0.09	0.09	-1.6%	-3.4%
Slovenia	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.01	66.7%	-2.1%
Spain	0.18	0.17	0.05	0.06	0.06	0.02	0.06	0.06	-11.4%	-6.8%
Turkey	0.63	0.88	0.67	0.62	0.53	0.47	0.37	0.36	-3.5%	-3.4%
Ukraine	17.89	20.80	18.41	18.38	19.11	17.95	17.67	17.52	-0.8%	-0.1%
United Kingdom	116.35	94.69	61.38	41.79	39.20	39.53	42.53	42.67	0.3%	-6.1%

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Russia and Central Asia	676.47	759.48	792.70	824.98	850.20	828.08	826.16	829.55	0.4%	1.3%
Russia	561.43	615.22	644.22	644.98	661.10	633.70	625.34	631.12	0.9%	0.7%
Azerbaijan	5.45	5.54	16.68	17.71	18.32	19.31	19.26	18.74	-2.7%	8.0%
Georgia	0.07	0.02	0.01	0.01	0.00	0.01	0.01	0.00	-55.9%	-14.9%
Kazakhstan	9.09	18.88	29.35	34.06	36.62	37.30	39.79	40.69	2.3%	9.8%
Kyrgyzstan	0.03	0.03	0.02	0.03	0.03	0.03	0.03	0.03	-9.4%	-1.1%
Tajikistan	0.04	0.03	0.02	0.01	0.00	0.00	0.00	0.00	-2.6%	-13.2%
Turkmenistan	45.58	61.20	44.00	67.07	76.20	77.76	81.30	77.52	-4.7%	3.4%
Uzbekistan	54.79	58.57	58.39	61.11	57.92	59.97	60.42	61.44	1.7%	0.7%

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Middle East	196.14	302.46	469.90	525.02	556.51	571.69	589.74	599.08	1.6%	7.2%
Bahrain	8.17	9.96	12.61	12.72	13.88	14.55	14.51	14.39	-0.8%	3.6%
Iran	59.46	99.54	145.17	157.77	158.16	176.20	185.74	191.31	3.0%	7.6%
Iraq	3.07	1.77	5.00	6.85	6.81	6.58	6.77	7.04	4.0%	5.3%
Israel	0.01	1.57	3.19	2.45	6.28	7.39	8.06	9.04	12.2%	53.7%
Jordan	0.25	0.21	0.16	0.14	0.13	0.12	0.12	0.10	-14.3%	-5.5%
Kuwait	9.35	11.98	11.43	15.12	15.89	14.64	16.47	16.85	2.3%	3.7%
Oman	10.80	21.37	28.34	31.24	33.77	32.31	33.73	33.73	0.0%	7.4%
Qatar	25.98	47.55	127.97	153.22	173.28	169.82	174.12	175.52	0.8%	12.7%
Saudi Arabia	36.71	54.82	71.44	79.00	79.84	82.93	85.01	87.47	2.9%	5.6%
Syria	5.51	5.90	8.64	6.23	5.12	4.74	4.16	3.74	-10.0%	-2.4%
United Arab Emirates	36.83	47.78	49.54	52.45	52.74	52.40	58.13	58.71	1.0%	3.0%
Yemen	0.00	0.00	6.41	7.81	10.62	10.01	2.93	1.17	-60.0%	

(\*) Data source: the original data are from *IEA Extended Balances* • OECD/International Energy Agency, 2017 and, for Italy, from Italian Ministry for Economic Development. Data have been converted by Eni using a unified gross calorific value of 39 MJ/cm.

#### Countries (\*)

(billion cubic metres)

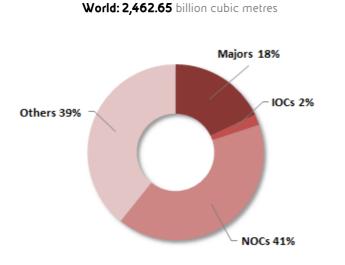
	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Africa	124.55	186.25	208.08	210.12	197.16	198.06	196.78	203.71	3.5%	3.1%
Algeria	83.31	90.18	85.83	86.50	82.18	83.74	85.18	93.70	10.0%	0.7%
Angola	0.56	0.63	0.72	0.74	0.91	0.72	0.75	1.86	148.4%	7.9%
Cameroon	0.00	0.00	0.31	0.27	0.15	0.30	0.35	0.35	-0.1%	
Congo	0.00	0.02	0.10	0.21	0.22	0.23	0.24	0.24	0.1%	
Côte d'Ivoire	1.51	1.49	1.58	1.70	1.95	1.97	2.01	2.01	0.0%	1.8%
Egypt	17.22	50.84	55.35	52.71	46.84	41.95	37.31	37.31	0.0%	5.0%
Gabon	0.12	0.15	0.32	0.37	0.31	0.34	0.37	0.37	-0.1%	7.1%
Ghana	0.00	0.00	0.00	0.00	0.00	0.03	0.56	0.56	0.1%	
Libya	5.73	11.01	16.38	11.89	12.47	12.13	11.30	11.36	0.5%	4.4%
Morocco	0.05	0.04	0.05	0.08	0.10	0.10	0.08	0.07	-8.5%	3.0%
Mozambique	0.00	2.23	3.20	3.76	3.82	4.14	4.88	4.88	0.0%	70.0%
Nigeria	12.14	23.59	31.70	40.14	36.21	41.33	42.56	40.14	-5.7%	7.8%
Senegal	0.00	0.02	0.03	0.04	0.04	0.05	0.05	0.05	-0.5%	30.8%
South Africa	1.67	2.13	1.50	1.15	1.23	1.04	1.22	1.22	0.0%	-1.9%
Tanzania	0.00	0.40	0.77	0.97	0.97	0.91	0.87	0.87	0.1%	
Tunisia	2.25	2.38	3.67	3.38	3.37	3.08	3.00	2.67	-11.0%	1.1%
Others Africa	0.00	1.16	6.57	6.21	6.38	6.00	6.04	6.04	0.0%	68.3%
	2000	2005	2010	2012	2013	2014	2015	2016	Δy/y (2016-2015)	CAGR (2016-2000)
Asia - Pacific	288.27	370.54	484.53	484.37	508.66	521.22	528.30	554.96	5.0%	4.2%
Australia	34.04	37.40	53.05	54.43	62.19	63.12	67.24	88.22	31.2%	6.1%
Bangladesh	8.80	12.89	19.83	20.97	22.61	23.19	25.21	25.21	0.0%	6.8%
Brunei	11.29	11.93	12.25	12.53	12.17	11.82	11.23	10.89	- 3.0%	-0.2%
China	27.15	49.23	95.61	110.40	120.63	129.91	134.35	136.61	1.7%	10.6%
India	27.51	30.94	51.24	39.77	34.63	32.79	31.24	30.93	- 1.0%	0.7%
Indonesia	72.95	78.21	89.22	80.30	79.60	78.35	78.10	80.45	3.0%	0.6%
Japan Malausia	2.73 50.76	3.45	3.83	3.65	3.30	2.87	2.84	3.00	5.7%	0.6% 2.1%
Malaysia	6.17	66.04 12.28	60.84	61.38	69.39 12.40	70.17 15.24	68.99 17.62	70.64 17.18	2.4% -2.5%	6.6%
Myanmar Navy Zaalaad	6.03	3.85	12.13	12.08 4.53	4.80	5.23	4.82	5.05	-2.5%	-1.1%
New Zealand Pakistan	19.88	30.59	4.60 32.18	4.53 32.36	4.60 31.64	5.25 31.37	4.82 31.56	31.63	4.0%	-1.1%
Philippines	0.01	3.22	3.64	3.77	31.04	3.65	3.43	3.88	13.0%	44.7%
South Korea	0.01	0.53	0.58	0.47	0.50	0.34	0.20	0.17	-18.0%	44.770
Taiwan	0.00	0.55	0.38	0.38	0.33	0.34	0.20	0.17	-14.0%	-5.8%
Thailand	18.65	22.07	29.49	31.26	33.86	34.57	30.76	29.53	- 14.0%	-3.8%
										14.7%
Vietnam Others Asia-Pacific	1.34 0.24	7.14 0.26	9.69 6.07	9.84 6.28	10.16 6.97	10.88 7.39	11.39 9.00	11.96 9.36	5.0% 4.0%	25.6%
	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Americas	852.98	870.27	959.90	1,041.15	1,050.58	1,109.74	1,140.08	1,123.62	-1.4%	1.7%
Argentina Bolivia	40.93 4.80	47.62 12.24	42.19 14.66	40.75 18.26	38.64 20.76	38.79 21.85	40.03 19.42	41.99 18.64	4.9% -4.0%	0.2% 8.9%
Brazil Canada	7.24 176.94	11.01 183.84	14.90 157.94	19.38 154.68	21.41 155.46	23.00 164.08	23.71 165.96	24.00 173.82	1.3% 4.7%	7.8% -0.1%
Chile	170.94	165.64	157.94	1.23	0.97	0.79	105.90	175.82	4.7%	-0.1%
Colombia	6.51	7.30	1.84	1.25	11.31	11.81	10.81	1.25	-6.8%	-2.7%
Cuba	0.54	0.70	11.24	0.98	1.01			10.07	-0.8%	2.8%
Ecuador	0.54	0.70	0.51	0.98 0.61	0.69	1.14 0.71	1.18 0.67	0.71	7.0%	5.0%
										0.404
Mexico Peru	39.82	45.87	50.79	48.63 14.30	48.29	44.45	40.99	37.55 16.95	-8.4%	-0.4%
	0.59	1.94 31.60	9.09 4 2 7 4	14.30	14.83	15.70	15.13 38.73		12.0%	23.4%
Trinidad and Tobago	14.54	31.60	42.74	40.95	41.13	40.91	38.73 750.73	38.59	-0.4% z 2%	6.3%
United States	533.06	502.78	590.11	665.95	672.69	723.05	759.33	735.06	-3.2%	2.0%
Venezuela	26.06	23.10	22.85	24.24	23.36	23.44	23.10	23.79	3.0%	-0.6%
Others Americas	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-0.7%	-2.5%

(\*) Data source: the original data are from IEA Extended Balances • OECD/International Energy Agency, 2017. Data have been converted by Eni using a unified gross calorific value of 39 MJ/cm.

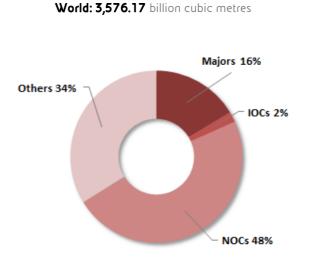
Production

#### Cluster of Companies (\*)

#### 2000

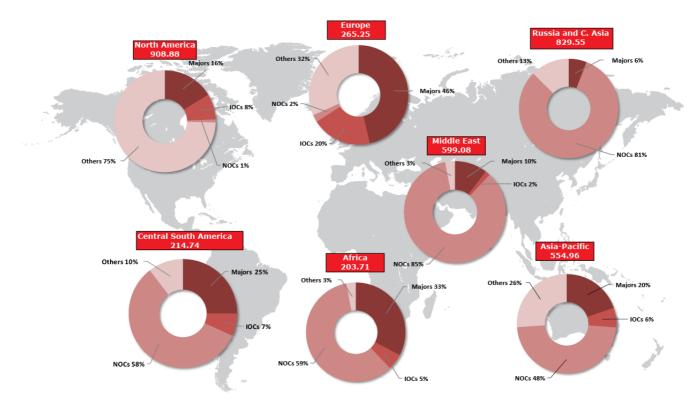






#### 2016

(billion cubic metres)



(\*) Majors: ExxonMobil, BP, Shell, Chevron, Total, Eni, Statoil, ConocoPhillips, Anadarko, Marathon Oil, Apache.

**IOCs:** BG, BHP Billiton,OMV, Repsol, Woodside Petroleum.

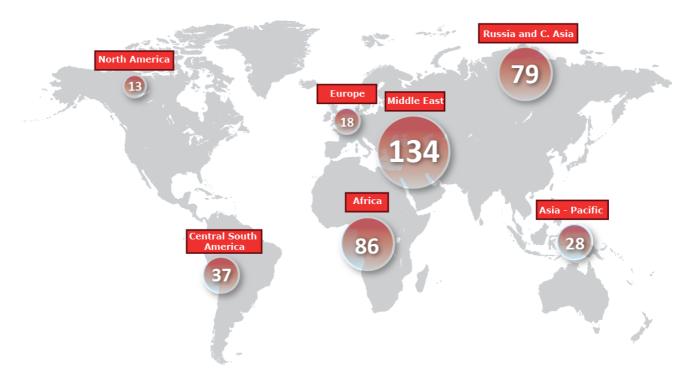
**NOCs:** ADNOC, Bahrain NOC, Bashneft, CNOOC, CNPC-PetroChina, CPC Taiwan, Dubai Petroleum, Ecopetrol, EGPC, Gazprom, INOC, Israel NOC, KazMunaiGaz, KNOC, KPC, Lybian NOC, Lukoil, MEDCO Energy, MOGE, Morocco NOC, Mubadala - Abu Dhabi, NIOC, NNPC, Novatek, Oil India, ONGC, Pakistan Oil Field, Pakistan Petroleum, PDO, PdVSA, Pemex, Pertamina, Petrobras, Petronas, PetroVietnam, PGNiG, PTTEP, QP, Rosneft, Saudi Aramco, Sinopec, SOCAR Azerbaijan, Sonangol, Sonatrach, Surgutneftegas, Syria Petroleum, Tatneft, Turkmengas, Uzbekneftegas, YPF.

### Areas and Aggregates (\*)

(years)

	2000	2005	2010	2012	2013	2014	2015	2016
Europe	26	20	18	18	18	19	18	18
Russia and Central Asia	20 76	20 69	77	77	75	78	79	79
Middle East	302	240	168	152	143	140	134	134
Africa	99	76	70	82	87	87	88	86
Asia - Pacific	41	36	33	33	31	30	30	28
Americas	17	17	19	18	19	19	17	17
- North America	9	77	14	13	14	14	12	13
- Central South America	54	39	37	36	36	36	37	37
World	64	62	60	59	58	58	57	57
European Union	14	12	10	11	11	11	11	11
MENA	218	176	138	129	126	124	120	119
OECD	7	5	4	4	3	3	3	3
NON OECD	109	97	91	90	88	88	87	87
OPEC	249	217	171	156	152	147	141	139
NON OPEC	38	35	36	37	37	37	36	36

#### Reserves/Production Ratio (2016) World: 57 years



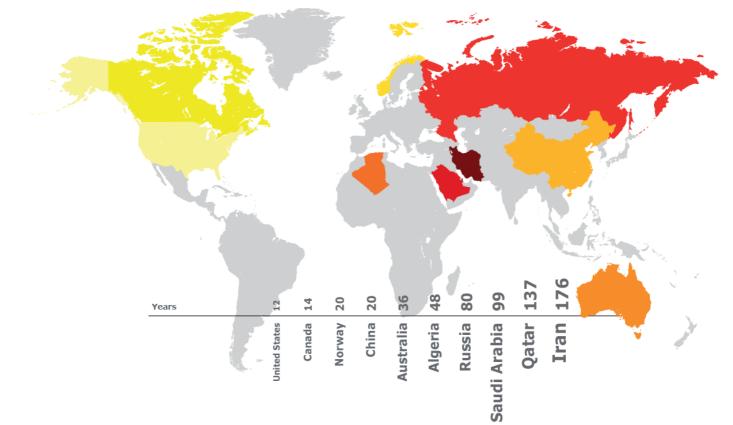
(\*) Data source: Eni's calculations. The original data are from Enerdata Global Energy Market & CO2 Data, IEA Extended Balances OECD/International Energy Agency, 2017 and other official data sources.

### The World Top 10 Producers Ranked by Reserves/Production Ratio (\*)

(years)

	2000	2005	2010	2012	2013	2014	2015	2016
Iran	437	277	228	214	215	193	180	176
Qatar	556	539	197	164	142	144	140	137
Saudi Arabia	172	126	112	104	104	102	101	99
Russia	78	73	71	76	75	79	80	80
Algeria	54	50	52	52	55	54	53	48
Australia	65	65	71	68	61	51	48	36
China	47	34	23	21	20	19	20	20
Norway	70	35	24	22	23	22	20	20
Canada	10	9	11	11	13	14	15	14
United States	9	12	15	13	14	14	11	12





(\*) Data source: Eni's calculations. The original data are from Enerdata *Global Energy Market & CO<sub>2</sub> Data, IEA Extended Balances* OECD/International Energy Agency, 2017 and other official data sources.

#### Countries (\*)

(years)

	2000	2005	2010	2012	2013	2014	2015	2016
Europe	26	20	18	18	18	19	18	18
Austria	14	13	9	7	8	8	7	7
Croatia	18	13	9	8	8	8	6	6
Denmark	16	11	12	15	18	18	16	16
France	4	6	6	19	26	585	383	401
Germany	14	10	7	6	6	6	6	6
Hungary	11	8	5	5	5	5	5	4
Ireland	30	45	94	123	144	205	235	10
ltaly (**)	12	10	8	7	7	8	7	7
Netherlands	27	21	16	16	13	14	18	18
Norway	70	35	24	22	23	22	20	20
Poland	30	23	16	16	15	14	14	14
Romania	15	12	11	12	11	10	10	11
Serbia and Montenegro	34	35	23	14	13	12	12	12
Slovakia	43	39	49	33	39	48	50	51
Slovenia	0	0	140	488	325	325	325	195
Spain	29	20	55	58	59	142	54	61
Turkey	6	9	9	11	11	14	17	17
Ukraine	58	50	53	52	50	53	53	53
United Kingdom	6	5	4	6	6	5	5	4
	2000	2005	2010	2012	2013	2014	2015	2016

Russia and Central Asia	76	69	77	77	75	78	79	79
Russia	78	73	71	76	75	79	80	80
Azerbaijan	234	230	79	74	71	67	67	68
Georgia	15	55	155	193	107	49	44	100
Kazakhstan	202	101	66	57	53	51	48	47
Kyrgyzstan	31	40	44	34	15	16	17	19
Tajikistan	26	38	45	92	135	160	125	128
Turkmenistan	59	44	227	149	130	127	121	127
Uzbekistan	32	30	28	27	28	27	26	25

	2000	2005	2010	2012	2013	2014	2015	2016
Middle East	302	240	168	152	143	140	134	134
Bahrain	13	9	7	7	7	6	6	6
Iran	437	277	228	214	215	193	180	176
Iraq	1,013	1,788	632	461	464	480	467	543
Israel	4,809	29	67	82	36	29	26	51
Jordan	28	28	37	42	45	52	50	58
Kuwait	166	131	156	118	112	122	108	106
Oman	80	31	18	16	21	22	21	21
Qatar	556	539	197	164	142	144	140	137
Saudi Arabia	172	126	112	104	104	102	101	99
Syria	44	48	33	46	56	60	69	76
United Arab Emirates	163	127	123	116	115	116	105	104
Yemen			76	61	45	48	164	409

(\*) Data source: Eni's calculations. The original data are from Enerdata *Global Energy Market & CO<sub>2</sub> Data, IEA Extended Balances* OECD/International Energy Agency, 2017 and other official data sources.

(\*\*) The original data are from Italian Ministry for Economic Development.

#### Countries (\*)

(years)

	2000	2005	2010	2012	2013	2014	2015	2016
Africa	99	76	70	82	87	87	88	86
Algeria	54	50	52	52	55	54	53	48
Angola	484	426	430	371	304	427	411	165
Cameroon			501	569	1013	516	435	432
Côte d'Ivoire	19	21	17	15	12	12	11	10
Egypt	83	38	40	41	47	52	56	60
Gabon	271	206	87	70	84	76	68	68
Ghana							99	99
Libya	229	135	91	130	121	124	133	133
Morocco	66	75	56	25	10	10	13	14
Mozambique		27	23	752	740	683	580	580
Nigeria	338	219	161	128	141	124	124	136
Senegal		645	392	48	45	43	41	41
South Africa	10	14	8	13	6	11	2	2
Tanzania		70	48	38	38	41	42	42
Tunisia	35	16	18	19	19	21	22	24
Others Africa		147	29	29	28	29	27	26

	2000	2005	2010	2012	2013	2014	2015	2016
Asia - Pacific	41	36	33	33	31	30	30	28
Australia	65	65	71	68	61	51	48	36
Bangladesh	35	32	18	22	19	18	15	15
Brunei	32	28	25	22	22	22	23	23
China	47	34	23	21	20	19	20	20
India	30	38	24	35	41	45	50	49
Indonesia	36	34	34	36	36	35	35	33
Japan	15	11	10	9	10	11	11	10
Malaysia	43	36	38	42	38	38	40	40
Myanmar	79	56	60	58	40	32	27	27
New Zealand	9	16	11	11	11	12	12	10
Pakistan	34	28	25	24	24	23	23	22
Philippines		31	24	21	22	20	21	18
South Korea		6	2	2	2	3	5	6
Taiwan	8	8	13	9	10	9	9	11
Thailand	19	14	10	8	7	6	7	7
Vietnam	127	31	24	22	21	19	18	17
Others Asia-Pacific	423	390	60	58	47	44	35	36

	2000	2005	2010	2012	2013	2014	2015	2016
Americas	17	17	19	18	19	19	17	17
Argentina	19	9	9	8	8	9	9	9
Bolivia	141	58	19	17	14	14	16	17
Brazil	31	28	28	24	21	20	18	16
Canada	10	9	11	11	13	14	15	14
Chile	9	7	4	5	7	8	6	4
Colombia	20	15	14	15	14	11	11	11
Cuba	33	24	14	11	11	9	8	7
Ecuador		27	14	10	9	15	16	15
Mexico	21	9	7	7	7	7	6	6
Peru	416	174	39	30	29	26	26	27
Trinidad and Tobago	38	17	9	9	8	8	8	7
United States	9	12	15	13	14	14	11	12
Venezuela	160	187	242	230	239	240	247	241
Others Americas	0	76	72	77	80	80	78	79

(\*) Data source: Eni's calculations. The original data are from Enerdata *Global Energy Market & CO<sub>2</sub> Data, IEA Extended Balances* OECD/International Energy Agency, 2017 and other official data sources.

### Areas and Aggregates<sup>(\*)</sup>

(billion cubic metres)

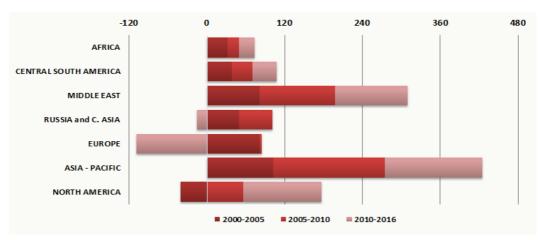
	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Europe	591.14	672.50	676.14	598.91	589.13	531.28	538.33	567.20	5.4%	-0.3%
Russia and Central Asia	460.68	510.39	561.74	578.64	574.83	577.01	553.65	545.97	-1.4%	1.1%
Middle East	173.44	255.03	371.38	408.09	422.85	448.03	473.28	482.90	2.0%	6.6%
Africa	56.28	87.99	105.19	119.48	119.62	122.51	129.15	129.68	0.4%	5.4%
Asia - Pacific	306.19	408.28	580.75	647.51	681.39	698.04	695.29	730.70	5.1%	5.6%
Americas	883.22	881.12	969.04	1,038.39	1,064.72	1,096.27	1,122.16	1,127.14	0.4%	1.5%
- North America	741.83	701.09	757.00	, 808.70	, 826.17	, 853.95	, 874.97	, <i>877.70</i>	0.3%	1.1%
- Central South America	141.39	180.03	212.04	229.69	238.55	242.31	247.19	249.44	0.9%	3.6%
World	2,470.95	2,815.31	3,264.23	3,391.03	3,452.53	3,473.14	3,511.86	3,583.59	2.0%	2.4%
European Union	472.27	530.85	532.98	468.90	461.71	409.43	426.51	459.33	7.7%	-0.2%
MENA	219.00	325.08	455.52	501.36	516.71	542.37	571.61	581.81	1.8%	6.3%
OECD	1,386.98	1,447.93	1,579.13	1,604.03	1,632.13	1,606.01	1,637.93	1,686.55	3.0%	1.2%
NON OECD	1,083.97	1,367.38	1,685.10	1,787.00	1,820.40	1,867.13	1,873.93	1,897.04	1.2%	3.6%
OPEC	211.59	291.98	393.78	444.67	453.41	483.11	507.67	513.80	1.2%	5.7%
NON OPEC	2,259.36	2,523.33	2,870.45	2,946.36	2,999.12	2,990.03	3,004.18	3,069.79	2.2%	1.9%

### World Natural Gas Consumption (2016)



3,583.59 billion cubic metres

#### World Natural Gas Consumption Growth (2000-2016) 1,112.64 billion cubic metres



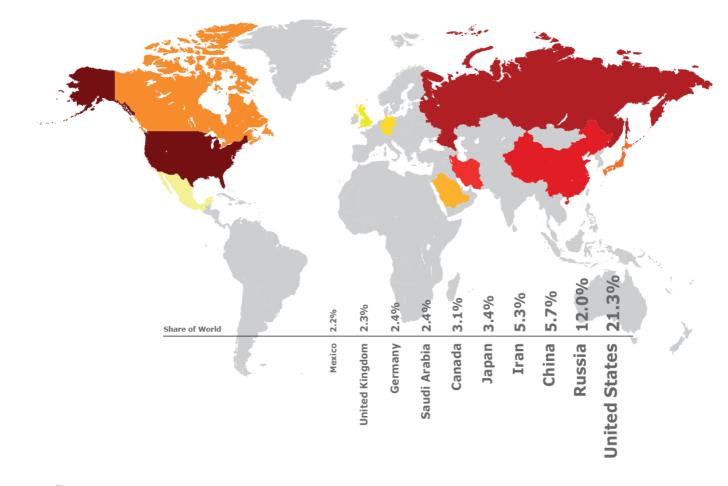
(\*) Data source: Eni's calculations. The original data are from *IEA Extended Balances* • OECD/International Energy Agency, 2017 and, for Italy, from Italian Ministry for Economic Development. Data have been converted by Eni using a unified gross calorific value of 39 MJ/cm.

### The World Top 10 Consumers (\*)

(billion cubic metres)

	2000	2005	2010	2012	2013	2014	2015	2016	∆ y/y (2016-2015	CAGR (2016-2000)
United States	653.26	604.94	663.21	709.52	723.42	748.51	771.14	764.90	-0.8%	1.0%
Russia	380.47	417.04	457.44	461.70	460.59	459.67	434.43	429.96	-1.0%	0.8%
China	24.75	46.26	106.60	147.25	167.59	183.30	189.14	205.38	8.6%	14.1%
Iran	62.77	99.99	145.68	153.08	154.21	174.01	185.23	189.09	2.1%	7.1%
Japan	78.32	84.18	102.62	125.63	126.81	127.22	119.33	121.36	1.7%	2.8%
Canada	88.56	96.15	93.78	99.18	102.75	105.44	103.82	112.80	8.6%	1.5%
Saudi Arabia	36.71	54.82	71.44	79.00	79.84	82.93	85.01	87.47	2.9%	5.6%
Germany	85.70	92.77	90.53	83.27	87.19	75.58	77.71	87.28	12.3%	0.1%
United Kingdom	104.24	101.94	101.44	79.34	78.34	71.65	73.09	83.00	13.6%	-1.4%
Mexico	42.32	54.99	64.69	70.74	74.15	72.18	77.12	80.00	3.7%	4.1%
The World Top 10	1,557.11	1,653.08	1,897.42	2,008.71	2,054.88	2,100.50	2,116.02	2,161.24	2.1%	2.1%
Rest of the World	913.84	1,162.22	1,366.80	1,382.32	1,397.66	1,372.63	1,395.84	1,422.35	1.9%	2.8%
World	2,470.95	2,815.31	3,264.23	3,391.03	3,452.53	3,473.14	3,511.86	3,583.59	2.0%	2.4%

### The World Top 10 (2016)



(\*) Data source: the original data are from *IEA Extended Balances* • OECD/International Energy Agency, 2017. Data have been converted by Eni using a unified gross calorific value of 39 MJ/cm.

#### Countries (\*)

(billion cubic metres)

(billion cubic metre	S)									
	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015	CAGR (2016-2000)
Europe	591.14	672.50	676.14	598.91	589.13	531.28	538.33	567.20	5.4%	-0.3%
Albania	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.08	158.1%	13.7%
Austria	7.85	9.64	9.69	8.74	8.42	7.69	8.20	8.55	4.3%	0.5%
Belarus	17.01	20.21	21.65	20.20	20.38	20.23	18.93	18.67	-1.4%	0.6%
Belgium	15.94	17.58	19.97	17.15	17.28	15.13	16.66	17.02	2.2%	0.4%
Bosnia Herzegovina	0.24	0.36	0.24	0.25	0.19	0.18	0.21	0.21	-0.9%	-0.8%
Bulgaria	3.50	3.34	2.74	2.92	2.86	2.82	3.09	3.18	2.8%	-0.6%
Croatia	2.64	2.83	3.14	2.88	2.72	2.41	2.48	2.35	-5.5%	-0.7%
Czech Republic	8.95	9.19	9.62	8.18	8.28	7.37	7.73	8.37	8.2%	-0.4%
Denmark Esta siz	5.31	5.25	5.27	4.16	3.95	3.34	3.40	3.42	0.5%	-2.7%
Estonia Finland	0.79 4.09	0.95 4.30	0.67 4.58	0.65 3.58	0.66 3.41	0.52 3.00	0.47 2.67	0.51 2.45	9.7% -8.1%	-2.7% -3.2%
France	42.66	48.93	50.74	45.58	46.52	38.87	41.79	45.67	9.3%	0.4%
Germany	85.70	92.77	90.53	83.27	87.19	75.58	77.71	87.28	12.3%	0.1%
Greece	2.03	2.81	3.86	4.37	3.86	2.96	3.19	4.16	30.4%	4.6%
Hungary	11.52	14.42	11.71	9.99	9.19	8.33	8.93	9.58	7.2%	-1.1%
Ireland	4.10	4.14	5.59	4.80	4.57	4.44	4.48	5.00	11.6%	1.2%
Italy	69.10	84.26	81.17	73.18	68.44	60.48	65.96	69.27	5.0%	0.0%
Latvia	1.30	1.62	1.74	1.44	1.44	1.29	1.31	1.10	-16.0%	-1.0%
Lithuania	2.46	2.95	2.97	3.17	2.58	2.46	2.47	2.21	-10.4%	-0.7%
Luxembourg	0.80	1.40	1.43	1.25	1.06	1.01	0.92	0.85	-7.8%	0.3%
Macedonia	0.06	0.07	0.11	0.14	0.15	0.13	0.13	0.20	50.1%	7.3%
Moldova	2.54	2.85	2.76	2.67	2.07	2.45	2.54	2.56	0.9%	0.1%
Netherlands	41.74	42.13	46.76	39.06	39.74	34.39	34.49	35.99	4.3%	-0.9%
Norway	4.94	4.86	9.25	5.48	6.84	5.89	6.43	6.66	3.6%	1.9%
Poland	11.88	14.59	15.27	16.32	16.38	15.99	16.43	17.45	6.2%	2.4%
Portugal	2.43	4.47	5.35	4.69	4.48	4.14	4.86	5.13	5.6%	4.8%
Romania	16.32	16.61	12.87	12.85	11.73	11.15	10.64	10.48	-1.5%	-2.7%
Serbia	1.83	2.32	2.21	2.00	2.23	1.92	2.09	2.27	8.6%	1.4%
Slovakia Slovenia	6.89 0.98	7.02 1.11	5.97 1.03	5.21 0.85	5.44 0.83	4.50 0.75	4.63 0.79	4.65 0.84	0.4% 6.1%	-2.4% -1.0%
Spain	18.15	35.59	37.13	34.08	31.20	28.23	29.27	29.86	2.0%	3.2%
Sweden	0.93	1.00	1.75	1.20	1.14	0.95	0.86	0.98	13.1%	0.3%
Switzerland	2.90	3.32	3.59	3.49	3.68	3.18	3.40	3.57	5.1%	1.3%
Turkey	15.07	27.18	37.44	44.44	44.79	47.95	46.97	45.62	-2.9%	7.2%
Ukraine	74.27	80.46	65.89	51.32	47.06	39.89	31.08	28.03	-9.8%	-5.9%
United Kingdom	104.24	101.94	101.44	79.34	78.34	71.65	73.09	83.00	13.6%	-1.4%
	2000	2005	2010	2012	2013	2014	2015	2016	∆ y/y (2016-2015)	CAGR (2016-2000)
	(60.60	510.70	563.74	570.64	57/07	577.01		5/507	2.444	1.704
Russia and Central Asia	460.68	<b>510.39</b>	<b>561.74</b>	<b>578.64</b>	<b>574.83</b> 460.59	577.01	553.65	<b>545.97</b>	-1.4%	1.1%
Russia Armenia	380.47 1.34	417.04 1.60	457.44 1.54	461.70 2.30	400.59	459.67 2.24	434.43 2.10	429.96 1.84	-1.0% -12.6%	0.8% 2.0%
Azerbaijan	5.76	9.66	9.36	10.79	10.79	11.51	11.43	10.68	-6.5%	3.9%
Georgia	1.14	1.27	1.21	1.97	1.66	2.19	2.40	1.97	-18.2%	3.5%
Kazakhstan	7.84	14.86	26.62	26.63	30.31	30.96	32.75	31.18	-4.8%	9.0%
Kyrgyzstan	0.68	0.74	0.29	0.43	0.33	0.27	0.27	0.27	-1.0%	-5.6%
Tajikistan	0.75	0.64	0.19	0.14	0.00	0.00	0.00	0.00	-2.6%	-28.0%
Turkmenistan	13.00	17.00	20.68	23.49	24.11	24.47	25.46	26.37	3.5%	4.5%
Uzbekistan	49.70	47.60	44.40	51.20	44.81	45.69	44.79	43.69	-2.5%	-0.8%
	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Middle East	173.44	255.03	371.38	408.09	422.85	448.03	473.28	482.90	2.0%	6.6%
Bahrain	8.17	10.04	12.61	12.72	13.88	14.55	14.51	14.39	-0.8%	3.6%
Iran	62.77	99.99	145.68	153.08	154.21	174.01	185.23	189.09	2.1%	7.1%
Iraq	3.07	1.77	5.00	6.85	6.81	6.58	6.77	7.04	4.0%	5.3%
Israel	0.01	1.57	5.25	2.51	6.85	7.51	8.21	9.39	14.4%	54.0%
Jordan	0.25	1.65	2.73	0.79	1.08	0.36	2.32	3.29	41.9%	17.4%
Kuwait	9.35	11.98	14.15	17.70	18.01	17.87	20.37	21.22	4.2%	5.3%
Lebanon	0.00	0.00	0.25	0.00	0.00 23.78	0.00	0.00	0.00 25.04	1 10/	8.9%
Oman Qatar	6.43 11.30	8.87 16.43	17.78 27.35	21.70 42.75	23.78 47.01	23.42 51.03	25.33 51.92	25.04 51.81	-1.1% -0.2%	8.9% 10.0%
Saudi Arabia	36.71	54.82	71.44	79.00	79.84	82.93	85.01	87.47	2.9%	5.6%
Syria	5.51	5.90	9.31	6.23	5.12	4.74	4.16	3.74	- 10.0%	-2.4%
United Arab Emirates	29.88	42.01	58.86	63.96	65.21	64.07	68.49	69.24	1.1%	5.4%
Yemen	0.00	0.00	0.98	0.79	1.05	0.97	0.98	1.17	20.0%	

(\*) Data source: the original data are from *IEA Extended Balances* • OECD/International Energy Agency, 2017 and, for Italy, from Italian Ministry for Economic Development. Data have been converted by Eni using a unified gross calorific value of 39 MJ/cm.

#### Countries (\*)

(billion cubic metres)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Africa	56.28	87.99	105.16	119.48	119.62	122.51	129.15	129.68	0.4%	5.4%
Algeria	20.08	24.48	27.81	33.41	34.11	38.48	41.05	38.58	-6.0%	4.2%
Angola	0.56	0.63	0.72	0.74	0.40	0.30	0.75	0.89	18.6%	3.0%
Cameroon	0.00	0.00	0.31	0.27	0.15	0.30	0.35	0.35	-0.1%	
Congo	0.00	0.02	0.10	0.21	0.22	0.23	0.24	0.24	0.1%	
Côte d'Ivoire	1.51	1.49	1.58	1.70	1.95	1.97	2.01	2.01	0.0%	1.8%
Egypt	17.22	35.76	42.71	46.67	45.28	42.58	43.86	46.56	6.2%	6.4%
Gabon	0.12	0.15	0.32	0.37	0.31	0.34	0.37	0.37	-0.1%	7.1%
Ghana	0.00	0.00	0.42	0.42	0.31	0.64	1.27	1.27	0.0%	
Libya	4.95	5.68	6.88	5.58	6.92	5.79	6.18	6.53	5.6%	1.7%
Morocco	0.05	0.45	0.68	1.27	1.23	1.20	1.21	1.23	1.7%	22.9%
Mozambique	0.00	0.02	0.08	0.09	0.17	0.47	0.91	0.91	0.0%	53.1%
Nigeria	6.87	10.75	10.53	15.05	14.92	17.03	17.78	17.58	-1.1%	6.1%
Senegal	0.00	0.02	0.02	0.03	0.04	0.04	0.04	0.05	13.1%	30.8%
South Africa	1.67	3.29	4.62	4.82	4.89	4.60	5.07	5.07	0.0%	7.2%
Tanzania	0.00	0.40	0.77	0.97	0.97	0.91	0.87	0.87	0.1%	
Tunisia	3.26	3.69	6.06	6.34	6.32	6.29	6.03	6.00	-0.5%	3.9%
Others Africa	0.00	1.16	1.54	1.54	1.42	1.34	1.16	1.16	0.0%	51.8%

	2000	2005	2010	2012	2013	2014	2015	2016	∆ y/y (2016-2015)	CAGR (2016-2000)
	706 10	(00.00	500 75	<i>c (</i> <b>7 c 7</b>	601.70	600 Q (	605.00	770 70	5.30/	5.694
Asia - Pacific	306.19	408.28	580.75	647.51	681.39	698.04	695.29	730.70	5.1%	5.6%
Australia	22.99	22.63	33.92	34.07	36.09	37.81	38.43	42.65	11.0%	3.9%
Bangladesh	8.41	12.51	20.53	21.74	22.58	23.94	25.34	25.21	-0.5%	7.1%
Brunei	2.21	2.19	3.19	3.71	2.93	3.53	2.55	2.98	16.9%	1.9%
China	24.75	46.26	106.60	147.25	167.59	183.30	189.14	205.38	8.6%	14.1%
Hong Kong	2.92	2.61	3.74	2.74	2.58	2.48	3.16	3.25	2.7%	0.7%
India	27.51	37.94	64.88	58.37	53.06	51.56	51.55	56.32	9.2%	4.6%
Indonesia	31.68	34.91	46.30	41.75	43.55	43.66	45.16	44.87	-0.6%	2.2%
Japan	78.32	84.18	102.62	125.63	126.81	127.22	119.33	121.36	1.7%	2.8%
Malaysia	29.49	38.01	37.21	38.66	45.49	45.75	44.77	46.02	2.8%	2.8%
Myanmar	1.43	2.73	1.53	1.86	2.19	3.46	3.61	4.89	35.3%	8.0%
New Zealand	6.03	3.85	4.45	4.58	4.75	5.24	4.88	5.02	2.9%	-1.1%
Pakistan	19.88	30.59	32.17	32.37	31.62	31.40	31.59	31.63	0.1%	2.9%
Philippines	0.01	3.22	3.64	3.77	3.47	3.65	3.43	3.88	13.0%	44.7%
Singapore	1.33	6.64	8.60	9.42	10.60	10.97	11.02	11.57	5.0%	14.4%
South Korea	20.29	32.65	46.08	53.64	56.79	51.45	46.93	49.30	5.1%	5.7%
Taiwan	6.63	10.57	15.85	15.80	15.66	16.28	17.64	19.35	9.7%	6.9%
Thailand	20.71	30.93	39.32	41.98	45.14	45.13	45.02	44.72	-0.7%	4.9%
Vietnam	1.34	5.60	9.69	9.84	10.16	10.88	11.39	11.96	5.0%	14.7%
Others Asia - Pacific	0.24	0.26	0.44	0.32	0.33	0.33	0.34	0.35	3.2%	2.2%

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Americas	883.22	881.12	969.04	1,038.39	1,064.72	1,096.27	1,122.16	1,127.14	0.4%	1.5%
Argentina	36.30	42.72	45.30	49.71	50.01	50.35	51.22	52.18	1.9%	2.3%
Bolivia	2.79	2.35	2.98	3.53	3.67	3.99	3.74	4.25	13.6%	2.7%
Brazil	9.44	19.95	27.46	32.48	38.26	42.19	41.99	35.66	-15.1%	8.7%
Canada	88.56	96.15	93.78	99.18	102.75	105.44	103.82	112.80	8.6%	1.5%
Chile	6.21	8.11	5.33	5.11	4.84	4.32	4.75	5.25	10.7%	-1.0%
Colombia	6.51	7.30	9.82	9.44	9.67	10.15	10.48	10.49	0.1%	3.0%
Cuba	0.54	0.70	1.02	0.98	1.01	1.14	1.18	1.18	0.0%	5.0%
Dominican Republic	0.00	0.20	0.76	1.04	1.07	1.05	1.06	0.97	-8.4%	
Ecuador	0.00	0.33	0.51	0.61	0.69	0.71	0.67	0.71	7.0%	
Mexico	42.32	54.99	64.69	70.74	74.15	72.18	77.12	80.00	3.7%	4.1%
Peru	0.59	1.94	6.56	8.14	7.66	9.57	9.41	10.99	16.8%	20.1%
Trinidad and Tobago	10.22	17.53	21.89	21.15	21.40	21.50	21.25	23.21	9.2%	5.3%
United States	653.26	604.94	663.21	709.52	723.42	748.51	771.14	764.90	-0.8%	1.0%
Uruguay	0.04	0.11	0.08	0.06	0.06	0.05	0.05	0.06	10.6%	3.2%
Venezuela	26.06	23.10	24.85	25.92	25.28	24.31	23.47	23.64	0.7%	-0.6%
Others Americas	0.38	0.71	0.80	0.78	0.78	0.79	0.80	0.85	5.8%	5.2%

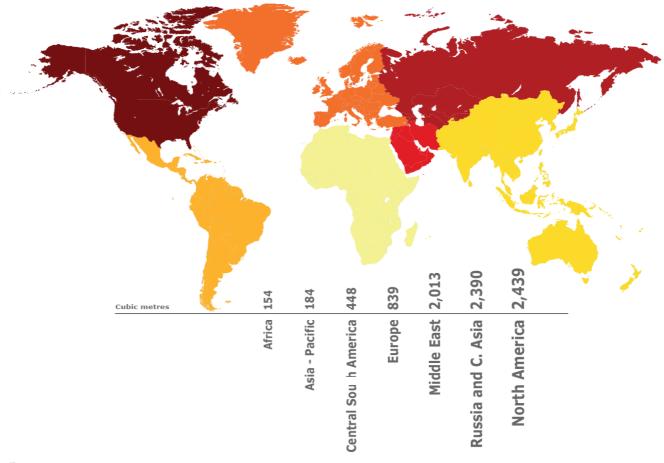
(\*) Data source: the original data are from *IEA Extended Balances* • OECD/International Energy Agency, 2017. Data have been converted by Eni using a unified gross calorific value of 39 MJ/cm.

### Areas and Aggregates (\*)

(cubic metres)

	2000	2005	2010	2012	2013	2014	2015	2016
Europe	923	1,032	1,020	898	881	792	799	839
Russia and Central Asia	2,118	2,345	2,536	2,585	2,554	2,550	2,435	2,390
Middle East	1,033	1,358	1,740	1,833	1,863	, 1,937	2,009	, 2,013
Africa	. 99	137	145	157	153	153	157	154
Asia - Pacific	91	115	155	169	176	179	176	184
Americas	1,121	1,055	1,098	1,154	1,172	1,196	1,213	1,207
- North America	2,367	2,133	2,200	2,315	2,347	2,408	2,449	2,439
- Central South America	298	381	414	435	446	447	450	448
bhoW	430	462	505	513	517	514	515	520
European Union	971	1,073	1,062	931	915	810	842	903
MENA	704	949	1,196	1,265	1,279	1,318	1,364	1,363
OECD	1,212	1,220	1,284	1,288	1,303	1,274	1,292	1,321
NON OECD	236	278	322	333	336	340	337	338
OPEC	638	788	942	1,015	1,011	1,054	1,083	1,073
NON OPEC	417	441	475	478	481	475	473	478

# Per Capita Consumption (2016) World: 520 cubic metres



(\*) Data source: Eni's calculations. The original data are from IEA Extended Balances OECD/International Energy Agency, 2017, Italian Ministry for Economic Development and IHS Global Insight.

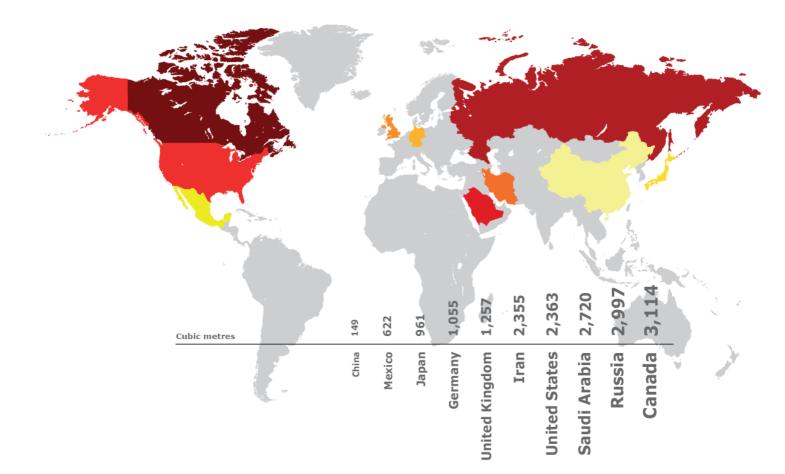
#### World Gas and Renewables Review 2017

### The World Top 10 Consumers Ranked by Per Capita Consumption (\*)

(cubic metres)

	2000	2005	2010	2012	2013	2014	2015	2016
Canada	2,890	2,986	2,762	2,858	2,927	2,971	2,898	3,114
Russia	2,599	2,904	3,195	3,222	3,213	3,205	3,028	2,997
Saudi Arabia	1,716	2,216	2,543	2,678	2,644	2,685	2,695	2,720
United States	2,310	2,041	2,139	2,255	2,283	2,345	2,399	2,363
Iran	949	1,420	1,954	2,002	1,991	2,219	2,334	2,355
United Kingdom	1,770	1,687	1,616	1,245	1,222	1,109	1,122	1,257
Germany	1,052	1,141	1,128	1,035	1,081	933	951	1,055
Japan	623	663	806	988	999	1,003	943	961
Mexico	412	501	545	579	599	576	607	622
China	19	35	79	109	123	134	137	149

### The World Top 10 (2016)



(\*) Data source: Eni's calculations. The original data are from IEA Extended Balances OECD/International Energy Agency, 2017 and IHS Global Insight.

#### Countries (\*)

(cubic metres)

	2000	2005	2010	2012	2013	2014	2015	2016
Europe	923	1,032	1,020	898	881	792	799	839
Albania	4	4	5	5	6	10	11	29
Austria	975	1,171	1,154	1,033	992	902	960	998
Belarus	1,709	2,096	2,281	2,129	2,146	2,129	1,994	1,969
Belgium	1,553	1,665	1,827	1,548	1,549	1,347	1,474	1,497
Bosnia Herzegovina	63	94	62	65	51	47	55	55
Bulgaria	437	435	370	400	394	391	433	448
Croatia	595	646	727	671	637	566	586	555
Czech Republic	871	898	915	778	788	701	733	792
Denmark	994	968	950	742	703	592	600	601
Estonia	564	704	504	491	501	395	355	390
Finland	790	820	853	661	625	547	485	443
France	718	799	806	717	729	606	649	706
Germany	1,052	1,141	1,128	1,035	1,081	933	951	1,055
Greece	186	254	345	393	349	269	291	381
Hungary	1,126	1,429	1,169	1,003	926	842	909	975
Ireland	1,067	984	1,212	1,028	979	950	955	1,060
Italy	1,209	1,437	1,362	1,225	1,145	1,011	1,103	1,158
Latvia	549	727	834	709	714	648	665	563
Lithuania	706	883	952	1,049	871	844	857	775
Luxembourg	1,836	3,064	2,810	2,354	1,948	1,807	1,617	1,468
Macedonia	32	37	54	65	73	63	64	96
Moldova	696	792	774	751	583	689	715	722
Netherlands	2,626	2,580	2,812	2,332	2,364	2,039	2,038	2,119
Norway	1,101	1,050	1,891	1,093	1,346	1,144	1,233	1,263
Poland	309	379	396	423	424	414	426	452
Portugal	236	427	506	446	428	398	469	498
Romania	737	776	634	644	593	567	546	541
Serbia	243	312	303	278	311	269	294	321
Slovakia	1,279	1,303	1,104	961	1,003	830	853	856
Slovenia	495	555	501	411	400	361	383	406
Spain	445	812	797	731	672	610	635	648
Sweden	104	111	186	126	118	98	88	99
Switzerland	405	448	458	435	453	388	410	426
Turkey	238	401	518	594	588	619	597	573
Ukraine	1,524	1,719	1,444	1,132	1,042	886	693	628
United Kingdom	1,770	1,687	1,616	1,245	1,222	1,109	1,122	1,257
	2000	2005	2010	2012	2013	2014	2015	2016
Russia and Central Asia	2,118	2,345	2,536	2,585	2,554	2,550	2,435	2,390
Russia	2,599	2,904	3,195	3,222	3,213	3,205	3,028	2,997
Armenia	434	530	520	772	743	747	696	607
Azerbaijan	709	1,131	1,037	1,164	1,150	1,211	1,189	1,099
	240	.,	295	.,	405	540	.,	,

283 285 475 405 240 542 601 494 Georgia Kazakhstan 524 962 1,632 1,583 1,773 1,782 1,858 1,747 Kyrgyzstan 138 144 54 75 57 46 46 45 94 25 18 0 0 0 Tajikistan 121 0 4,610 4,739 4,848 Turkmenistan 2,889 3,580 4,102 4,540 4,602 Uzbekistan 2,027 1,836 1,601 1,791 1,543 1,551 1,498 1,442

(\*) Data source: Eni's calculations. The original data are from *IEA Extended Balances* ° OECD/International Energy Agency, 2017, Italian Ministry for Economic Development and IHS Global Insight.

World Gas and Renewables Review 2017

### Countries (\*)

(cubic metres)

	2000	2005	2010	2012	2013	2014	2015	2016
Middle East	1,033	1,358	1,740	1,833	1,863	1,937	2,009	2,013
Bahrain	12,286	11,290	10,159	9,786	10,551	10,887	10,574	10,099
Iran	, 949	, 1,420	, 1,954	, 2,002	, 1,991	, 2,219	, 2,334	, 2,355
Iraq	130	66	162	208	200	187	186	187
Israel	2	237	708	326	876	945	1,019	1,147
Jordan	53	309	419	112	150	48	305	425
Kuwait	4,561	5,263	4,719	5,212	5,006	4,723	5,176	5,235
Lebanon	0	0	58	0	0	0	0	0
Oman	2,871	3,540	6,038	6,121	6,087	5,530	5,641	5,381
Qatar	19,071	18,993	15,370	20,264	20,889	21,491	20,922	20,161
Saudi Arabia	1,716	2,216	2,543	2,678	2,644	2,685	2,695	2,720
Syria	337	325	449	312	265	252	225	201
United Arab Emirates	9,795	9,373	7,066	7,145	7,213	7,051	7,480	7,472
Yemen	0	0	41	32	41	37	36	43

	2000	2005	2010	2012	2013	2014	2015	2016
Africa	99	137	145	157	153	153	157	154
Algeria	644	736	772	892	893	988	1,035	956
Angola	34	32	31	30	15	11	27	31
Cameroon	0	0	15	13	7	13	15	15
Congo	0	7	25	50	50	52	52	51
Côte d'Ivoire	91	81	78	79	89	87	87	85
Egypt	252	477	521	545	517	475	479	499
Gabon	99	106	207	228	184	197	209	204
Ghana	0	0	17	16	12	24	46	45
Libya	927	979	1,098	888	1,104	925	973	1,031
Morocco	2	15	21	38	36	35	35	35
Mozambique	0	1	3	3	6	17	32	31
Nigeria	56	77	66	89	86	96	98	94
Senegal	0	2	2	2	3	3	3	3
South Africa	37	68	90	91	92	85	93	92
Tanzania	0	10	17	20	19	17	16	16
Tunisia	336	365	570	582	574	565	535	526
Others Africa	0	8	9	9	8	7	6	6

(\*) Data source: Eni's calculations. The original data are from IEA Extended Balances OECD/International Energy Agency, 2017 and IHS Global Insight.

#### Countries (\*)

(cubic metres)

	2000	2005	2010	2012	2013	2014	2015	2016
Asia - Pacific	91	115	155	169	176	179	176	184
Australia	1,203	1,116	1,530	1,487	1,551	1,601	1,604	1,755
	64	87	,	,	,	,	,	,
Bangladesh			135	140	143	150	157	155
Brunei	6,677	6,058	8,119	9,143	7,123	8,456	6,023	6,945
China	19	35	79	109	123	134	137	149
Hong Kong	431	381	534	386	360	343	434	442
India	26	33	53	46	41	40	39	42
Indonesia	150	154	192	168	173	172	175	172
Japan	623	663	806	988	999	1,003	943	961
Malaysia	1,272	1,481	1,323	1,325	1,531	1,514	1,457	1,476
Myanmar	30	55	30	35	41	65	67	90
New Zealand	1,563	931	1,018	1,025	1,051	1,147	1,057	1 <i>,</i> 077
Pakistan	144	199	189	182	174	169	167	164
Philippines	0	37	39	39	35	36	34	38
Singapore	341	1,479	1,696	1,788	1,977	2,013	1,990	2,057
South Korea	439	686	939	1,081	1,139	1,027	933	976
Taiwan	299	465	685	679	671	696	752	823
Thailand	329	473	585	619	662	660	656	649
Vietnam	17	66	110	109	111	118	122	126
Others Asia - Pacific	7	6	9	6	6	6	6	6

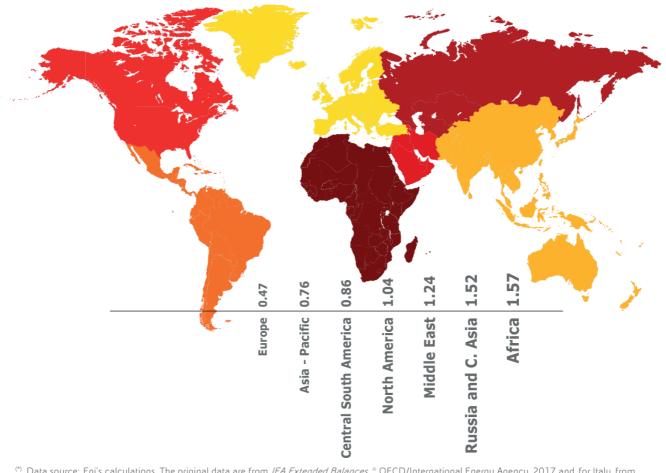
	2000	2005	2010	2012	2013	2014	2015	2016
Americas	1,121	1,055	1,098	1,154	1,172	1,196	1,213	1,207
Argentina	980	1,091	1,099	1,181	1,176	1,171	1,180	1,190
Bolivia	335	258	301	344	353	377	349	390
Brazil	54	106	138	160	187	205	202	170
Canada	2,890	2,986	2,762	2,858	2,927	2,971	2,898	3,114
Chile	409	504	313	294	276	243	265	290
Colombia	161	169	214	201	204	212	217	216
Cuba	49	63	90	86	89	100	104	104
Dominican Republic	0	21	77	103	104	101	101	91
Ecuador	0	24	34	40	44	45	41	44
Mexico	412	501	545	579	599	576	607	622
Peru	23	70	223	270	251	309	300	346
Trinidad and Tobago	8,056	13,520	16,484	15,763	15,875	15,877	15,624	17,003
United States	2,310	2,041	2,139	2,255	2,283	2,345	2,399	2,363
Uruguay	11	32	23	18	17	16	16	18
Venezuela	1,065	863	857	868	835	792	754	750
Others Americas	52	94	105	102	102	104	106	111

(\*) Data source: Eni's calculations. The original data are from IEA Extended Balances OECD/International Energy Agency, 2017 and IHS Global Insight.

#### Areas and Aggregates (\*)

	2000	2005	2010	2012	2013	2014	2015	2016
Europe	0.55	0.50	0.48	0.50	0.50	0.51	0.50	0.47
Russia and Central Asia	1.47	1.49	1.41	1.43	1.48	1.44	1.49	1.52
Middle East	1.13	1.19	1.27	1.29	1.32	1.28	1.25	1.24
Africa	2.21	2.12	1.98	1.76	1.65	1.62	1.52	1.57
Asia - Pacific	0.94	0.91	0.83	0.75	0.75	0.75	0.76	0.76
Americas	0.97	0.99	0.99	1.00	0.99	1.01	1.02	1.00
- North America	0.96	0.98	0.99	1.01	1.00	1.04	1.06	1.04
- Central South America	1.01	1.02	1.00	0.96	0.93	0.92	0.87	0.86
World	1.00	1.00	0.99	1.00	1.00	1.01	1.01	1.00
European Union	0.53	0.43	0.36	0.34	0.34	0.34	0.30	0.27
MENA	1.39	1.41	1.39	1.36	1.36	1.31	1.27	1.28
OECD	0.78	0.75	0.73	0.75	0.74	0.78	0.79	0.76
NON OECD	1.27	1.27	1.24	1.22	1.23	1.20	1.21	1.21
OPEC	1.41	1.41	1.44	1.41	1.42	1.38	1.36	1.38
NON OPEC	0.96	0.96	0.93	0.94	0.94	0.95	0.95	0.93

#### Production/Consumption Ratio (2016)

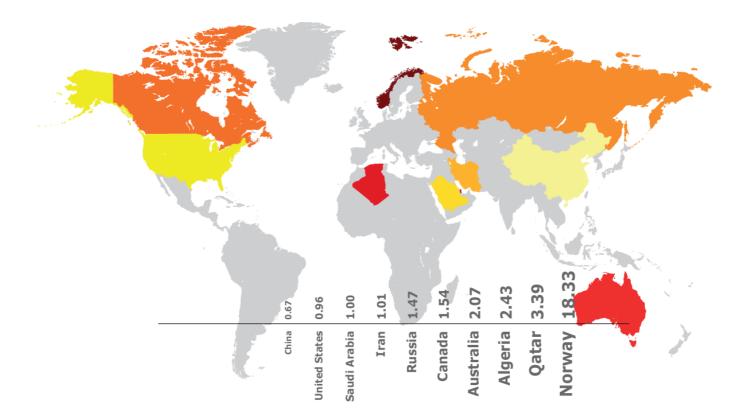


(\*) Data source: Eni's calculations. The original data are from *IEA Extended Balances* • OECD/International Energy Agency, 2017 and, for Italy, from Italian Ministry for Economic Development.

#### The World Top 10 Producers Ranked by Production/Consumption Ratio (\*)

	2000	2005	2010	2012	2013	2014	2015	2016
Norway	11.17	18.43	12.28	21.92	16.67	19.23	18.95	18.33
Qatar	2.30	2.89	4.68	3.58	3.69	3.33	3.35	3.39
Algeria	4.15	3.68	3.09	2.59	2.41	2.18	2.08	2.43
Australia	1.48	1.65	1.56	1.60	1.72	1.67	1.75	2.07
Canada	2.00	1.91	1.68	1.56	1.51	1.56	1.60	1.54
Russia	1.48	1.48	1.41	1.40	1.44	1.38	1.44	1.47
Iran	0.95	1.00	1.00	1.03	1.03	1.01	1.00	1.01
Saudi Arabia	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
United States	0.82	0.83	0.89	0.94	0.93	0.97	0.98	0.96
China	1.10	1.06	0.90	0.75	0.72	0.71	0.71	0.67

The World Top 10 (2016)



(\*) Data source: Eni's calculations. The original data are from IEA Extended Balances ° OECD/International Energy Agency, 2017.

#### Countries (\*)

	2000	2005	2010	2012	2013	2014	2015	2016
Europe	0.55	0.50	0.48	0.50	0.50	0.51	0.50	0.47
Albania	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Austria	0.24	0.16	0.17	0.20	0.17	0.17	0.15	0.13
Belarus	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Bulgaria	0.00	0.14	0.03	0.13	0.10	0.07	0.03	0.03
Croatia	0.61	0.79	0.84	0.68	0.66	0.71	0.71	0.69
Czech Republic	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03
Denmark	1.67	2.13	1.66	1.48	1.29	1.48	1.45	1.41
France	0.04	0.02	0.02	0.01	0.01	0.00	0.00	0.00
Germany	0.22	0.18	0.15	0.14	0.12	0.11	0.10	0.08
Greece	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Hungary	0.26	0.19	0.23	0.21	0.20	0.21	0.18	0.18
Ireland	0.28	0.13	0.05	0.04	0.04	0.03	0.03	0.58
Italy	0.24	0.14	0.10	0.11	0.11	0.12	0.10	0.08
Netherlands	1.49	1.59	1.62	1.75	1.85	1.74	1.35	1.20
Norway	11.17	18.43	12.28	21.92	16.67	19.23	18.95	18.33
Poland	0.33	0.32	0.29	0.29	0.28	0.28	0.27	0.24
Romania	0.80	0.70	0.80	0.81	0.87	0.94	0.98	0.89
Serbia	0.41	0.12	0.17	0.25	0.23	0.28	0.26	0.24
Slovakia	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02
Slovenia	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.01
Spain	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Turkey	0.04	0.03	0.02	0.01	0.01	0.01	0.01	0.01
Ukraine	0.24	0.26	0.28	0.36	0.41	0.45	0.57	0.63
United Kingdom	1.12	0.93	0.61	0.53	0.50	0.55	0.58	0.51
	2000	2005	2010	2012	2013	2014	2015	2016
	2000	2005	2010	2012	2013	2011	2010	2010
Russia and Central Asia	1.47	1.49	1.41	1.43	1.48	1.44	1.49	1.52
<b>Russia and Central Asia</b> Russia								
	1.47	1.49	1.41	1.43	1.48	1.44	1.49	1.52
Russia	<b>1.47</b> 1.48	<b>1.49</b> 1.48	<b>1.41</b> 1.41	<b>1.43</b> 1.40	<b>1.48</b> 1.44	<b>1.44</b> 1.38	<b>1.49</b> 1.44	<b>1.52</b> 1.47
Russia Azerbaijan	<b>1.47</b> 1.48 0.95	<b>1.49</b> 1.48 0.57	<mark>1.41</mark> 1.41 1.78	<b>1.43</b> 1.40 1.64	<b>1.48</b> 1.44 1.70	<b>1.44</b> 1.38 1.68	<b>1.49</b> 1.44 1.69	<b>1.52</b> 1.47 1.75
Russia Azerbaijan Georgia	<b>1.47</b> 1.48 0.95 0.06	<b>1.49</b> 1.48 0.57 0.01	<b>1.41</b> 1.41 1.78 0.01	<b>1.43</b> 1.40 1.64 0.00	<b>1.48</b> 1.44 1.70 0.00	<mark>1.44</mark> 1.38 1.68 0.00	<b>1.49</b> 1.44 1.69 0.00	<b>1.52</b> 1.47 1.75 0.00
Russia Azerbaijan Georgia Kazakhstan	<b>1.47</b> 1.48 0.95 0.06 1.16	<b>1.49</b> 1.48 0.57 0.01 1.27	<b>1.41</b> 1.41 1.78 0.01 1.10	<b>1.43</b> 1.40 1.64 0.00 1.28	<b>1.48</b> 1.44 1.70 0.00 1.21	1.44 1.38 1.68 0.00 1.20	<b>1.49</b> 1.44 1.69 0.00 1.21	<b>1.52</b> 1.47 1.75 0.00 1.30
Russia Azerbaijan Georgia Kazakhstan Kyrgyzstan	<b>1.47</b> 1.48 0.95 0.06 1.16 0.05	<b>1.49</b> 1.48 0.57 0.01 1.27 0.03	1.41 1.41 1.78 0.01 1.10 0.08	<b>1.43</b> 1.40 1.64 0.00 1.28 0.07	1.48 1.44 1.70 0.00 1.21 0.10	1.44 1.38 1.68 0.00 1.20 0.12	1.49 1.44 1.69 0.00 1.21 0.11	<b>1.52</b> 1.47 1.75 0.00 1.30 0.10
Russia Azerbaijan Georgia Kazakhstan Kyrgyzstan Tajikistan	1.47 1.48 0.95 0.06 1.16 0.05 0.05	1.49 1.48 0.57 0.01 1.27 0.03 0.04	<b>1.41</b> 1.41 1.78 0.01 1.10 0.08 0.12	<b>1.43</b> 1.40 1.64 0.00 1.28 0.07 0.08	<b>1.48</b> 1.44 1.70 0.00 1.21 0.10 1.00	1.44 1.38 1.68 0.00 1.20 0.12 1.00	1.49 1.44 1.69 0.00 1.21 0.11 1.00	<b>1.52</b> 1.47 1.75 0.00 1.30 0.10 1.00
Russia Azerbaijan Georgia Kazakhstan Kyrgyzstan Tajikistan Turkmenistan	<b>1.47</b> 1.48 0.95 0.06 1.16 0.05 0.05 3.51	1.49 1.48 0.57 0.01 1.27 0.03 0.04 3.60	<b>1.41</b> 1.41 1.78 0.01 1.10 0.08 0.12 2.13	<b>1.43</b> 1.40 1.64 0.00 1.28 0.07 0.08 2.86	<b>1.48</b> 1.44 1.70 0.00 1.21 0.10 1.00 3.16	1.44 1.38 1.68 0.00 1.20 0.12 1.00 3.18	1.49 1.44 1.69 0.00 1.21 0.11 1.00 3.19	<b>1.52</b> 1.47 1.75 0.00 1.30 0.10 1.00 2.94
Russia Azerbaijan Georgia Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan	1.47 1.48 0.95 0.06 1.16 0.05 0.05 3.51 1.10 2000	1.49 1.48 0.57 0.01 1.27 0.03 0.04 3.60 1.23 2005	1.41 1.41 1.78 0.01 1.10 0.08 0.12 2.13 1.32 2010	1.43 1.40 1.64 0.00 1.28 0.07 0.08 2.86 1.19 2012	1.48 1.44 1.70 0.00 1.21 0.10 1.00 3.16 1.29 2013	1.44 1.38 1.68 0.00 1.20 0.12 1.00 3.18 1.31 2014	1.49 1.44 1.69 0.00 1.21 0.11 1.00 3.19 1.35 2015	1.52 1.47 1.75 0.00 1.30 0.10 1.00 2.94 1.41 2016
Russia Azerbaijan Georgia Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan <b>Middle East</b>	1.47 1.48 0.95 0.06 1.16 0.05 0.05 3.51 1.10 2000 1.13	1.49 1.48 0.57 0.01 1.27 0.03 0.04 3.60 1.23 2005	1.41 1.41 1.78 0.01 1.10 0.08 0.12 2.13 1.32 2010 1.27	1.43 1.40 1.64 0.00 1.28 0.07 0.08 2.86 1.19 2012 1.29	1.48 1.44 1.70 0.00 1.21 0.10 1.00 3.16 1.29 2013	1.44 1.38 1.68 0.00 1.20 0.12 1.00 3.18 1.31 2014 1.28	1.49 1.44 1.69 0.00 1.21 0.11 1.00 3.19 1.35 2015	1.52 1.47 1.75 0.00 1.30 0.10 1.00 2.94 1.41 2016 1.24
Russia Azerbaijan Georgia Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan <b>Middle East</b> Bahrain	1.47 1.48 0.95 0.06 1.16 0.05 0.05 3.51 1.10 2000 1.13 1.00	1.49 1.48 0.57 0.01 1.27 0.03 0.04 3.60 1.23 2005 1.19 0.99	1.41 1.41 1.78 0.01 1.10 0.08 0.12 2.13 1.32 2010 1.27 1.00	1.43 1.40 1.64 0.00 1.28 0.07 0.08 2.86 1.19 2012 2012 1.29 1.00	1.48 1.44 1.70 0.00 1.21 0.10 1.00 3.16 1.29 2013 1.32 1.32	1.44 1.38 1.68 0.00 1.20 0.12 1.00 3.18 1.31 2014 1.28 1.00	1.49 1.44 1.69 0.00 1.21 0.11 1.00 3.19 1.35 2015 2015 1.25 1.00	1.52 1.47 1.75 0.00 1.30 0.10 1.00 2.94 1.41 2016 1.24 1.00
Russia Azerbaijan Georgia Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan Middle East Bahrain Iran	1.47 1.48 0.95 0.06 1.16 0.05 0.05 3.51 1.10 2000 1.13 1.00 0.95	1.49 1.48 0.57 0.01 1.27 0.03 0.04 3.60 1.23 2005 1.19 0.99 1.00	1.41 1.41 1.78 0.01 1.10 0.08 0.12 2.13 1.32 2010 1.27 1.00 1.00 1.00	1.43 1.40 1.64 0.00 1.28 0.07 0.08 2.86 1.19 2012 2012 1.29 1.00 1.03	1.48 1.44 1.70 0.00 1.21 0.10 1.00 3.16 1.29 2013 1.29 2013	1.44 1.38 1.68 0.00 1.20 0.12 1.00 3.18 1.31 2014 1.28 1.00 1.01	1.49 1.44 1.69 0.00 1.21 0.11 1.00 3.19 1.35 2015 <b>1.25</b> 1.00 1.00 1.00	1.52 1.47 1.75 0.00 1.30 0.10 1.00 2.94 1.41 2016 1.24 1.00 1.01
Russia Azerbaijan Georgia Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan Middle East Bahrain Iran Iraq	1.47 1.48 0.95 0.06 1.16 0.05 0.05 3.51 1.10 2000 1.13 1.00 0.95 1.00	1.49 1.48 0.57 0.01 1.27 0.03 0.04 3.60 1.23 2005 1.19 0.99 1.00 1.00 1.00	1.41 1.41 1.78 0.01 1.10 0.08 0.12 2.13 1.32 2010 1.27 1.00 1.00 1.00	1.43 1.40 1.64 0.00 1.28 0.07 0.08 2.86 1.19 2012 1.29 1.00 1.03 1.00	1.48 1.44 1.70 0.00 1.21 0.10 1.00 3.16 1.29 2013 1.29 2013 1.32 1.00 1.03 1.00	1.44 1.38 1.68 0.00 1.20 0.12 1.00 3.18 1.31 2014 1.28 1.00 1.01 1.00	1.49 1.44 1.69 0.00 1.21 0.11 1.00 3.19 1.35 2015 2015 1.25 1.00 1.00 1.00	1.52 1.47 1.75 0.00 1.30 0.10 1.00 2.94 1.41 2016 1.24 1.00 1.01 1.00
Russia Azerbaijan Georgia Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan Middle East Bahrain Iran Iraq Israel	1.47 1.48 0.95 0.06 1.16 0.05 0.05 3.51 1.10 2000 1.13 1.00 0.95 1.00 0.95 1.00 1.00	1.49 1.48 0.57 0.01 1.27 0.03 0.04 3.60 1.23 2005 1.19 0.99 1.00 1.00 1.00 1.00	1.41 1.41 1.78 0.01 1.10 0.08 0.12 2.13 1.32 2010 1.27 1.00 1.00 1.00 0.61	1.43 1.40 1.64 0.00 1.28 0.07 0.08 2.86 1.19 2012 1.29 1.00 1.03 1.00 0.98	1.48 1.44 1.70 0.00 1.21 0.10 1.00 3.16 1.29 2013 1.32 1.00 1.03 1.00 0.92	1.44 1.38 1.68 0.00 1.20 0.12 1.00 3.18 1.31 2014 1.28 1.00 1.01 1.00 0.98	1.49 1.44 1.69 0.00 1.21 0.11 1.00 3.19 1.35 <b>2015</b> <b>2015</b> <b>1.25</b> 1.00 1.00 1.00 1.00 0.98	1.52 1.47 1.75 0.00 1.30 0.10 1.00 2.94 1.41 2016 1.24 1.00 1.01 1.00 0.96
Russia Azerbaijan Georgia Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan Middle East Bahrain Iran Iraq Israel Jordan	1.47 1.48 0.95 0.06 1.16 0.05 0.05 3.51 1.10 2000 1.13 1.00 0.95 1.00 1.00 1.00 1.00	1.49 1.48 0.57 0.01 1.27 0.03 0.04 3.60 1.23 2005 1.19 0.99 1.00 1.00 1.00 0.13	1.41 1.41 1.78 0.01 1.10 0.08 0.12 2.13 1.32 2010 1.27 1.00 1.00 1.00 0.61 0.06	1.43 1.40 1.64 0.00 1.28 0.07 0.08 2.86 1.19 2012 1.29 1.00 1.03 1.00 0.98 0.18	1.48 1.44 1.70 0.00 1.21 0.10 1.00 3.16 1.29 2013 1.32 1.00 1.03 1.00 0.92 0.12	1.44 1.38 1.68 0.00 1.20 0.12 1.00 3.18 1.31 2014 1.28 1.00 1.01 1.00 0.98 0.32	1.49 1.44 1.69 0.00 1.21 0.11 1.00 3.19 1.35 <b>2015</b> <b>2015</b> <b>1.25</b> 1.00 1.00 1.00 1.00 0.98 0.05	1.52 1.47 1.75 0.00 1.30 0.10 1.00 2.94 1.41 2016 1.24 1.00 1.01 1.00 0.96 0.03
Russia Azerbaijan Georgia Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan Middle East Bahrain Iran Iraq Israel Jordan Kuwait	1.47 1.48 0.95 0.06 1.16 0.05 0.05 3.51 1.10 2000 1.13 1.00 0.95 1.00 1.00 1.00 1.00 1.00	1.49 1.48 0.57 0.01 1.27 0.03 0.04 3.60 1.23 2005 1.19 0.99 1.00 1.00 1.00 0.13 1.00	1.41 1.41 1.78 0.01 1.10 0.08 0.12 2.13 1.32 2010 1.27 1.00 1.00 1.00 1.00 0.61 0.06 0.81	1.43 1.40 1.64 0.00 1.28 0.07 0.08 2.86 1.19 2012 1.29 1.00 1.03 1.00 0.98 0.18 0.85	1.48 1.44 1.70 0.00 1.21 0.10 1.00 3.16 1.29 2013 1.29 2013 1.00 1.03 1.00 0.92 0.12 0.88	1.44 1.38 1.68 0.00 1.20 0.12 1.00 3.18 1.31 2014 1.28 1.00 1.01 1.00 0.98 0.32 0.82	1.49 1.44 1.69 0.00 1.21 0.11 1.00 3.19 1.35 <b>2015</b> <b>2015</b> <b>1.25</b> 1.00 1.00 1.00 1.00 0.98 0.05 0.81	1.52 1.47 1.75 0.00 1.30 0.10 1.00 2.94 1.41 2016 1.24 1.00 1.01 1.00 0.96 0.03 0.79
Russia Azerbaijan Georgia Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan Middle East Bahrain Iran Iraq Israel Jordan Kuwait Oman	1.47 1.48 0.95 0.06 1.16 0.05 0.05 3.51 1.10 2000 1.13 1.00 0.95 1.00 1.15 1.00 1.00 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.16 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.00	1.49 1.48 0.57 0.01 1.27 0.03 0.04 3.60 1.23 2005 1.19 0.99 1.00 1.00 1.00 0.13 1.00 2.41	1.41 1.41 1.78 0.01 1.10 0.08 0.12 2.13 1.32 2010 1.27 1.00 1.00 1.00 1.00 0.61 0.06 0.81 1.59	1.43 1.40 1.64 0.00 1.28 0.07 0.08 2.86 1.19 2012 1.29 1.00 1.03 1.00 0.98 0.18 0.85 1.44	1.48 1.44 1.70 0.00 1.21 0.10 1.00 3.16 1.29 2013 1.29 2013 1.00 1.03 1.00 0.92 0.12 0.88 1.42	1.44 1.38 1.68 0.00 1.20 0.12 1.00 3.18 1.31 2014 1.28 1.00 1.01 1.00 0.98 0.32 0.82 1.38	1.49 1.44 1.69 0.00 1.21 0.11 1.00 3.19 1.35 2015 1.25 1.00 1.00 1.00 1.00 0.98 0.05 0.81 1.33	1.52 1.47 1.75 0.00 1.30 0.10 1.00 2.94 1.41 <b>2016</b> <b>1.24</b> 1.00 1.01 1.00 0.96 0.03 0.79 1.35
Russia Azerbaijan Georgia Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan Middle East Bahrain Iran Iraq Israel Jordan Kuwait	1.47 1.48 0.95 0.06 1.16 0.05 0.05 3.51 1.10 2000 1.13 1.00 0.95 1.00 1.00 1.00 1.00 1.00	1.49 1.48 0.57 0.01 1.27 0.03 0.04 3.60 1.23 2005 1.19 0.99 1.00 1.00 1.00 0.13 1.00	1.41 1.41 1.78 0.01 1.10 0.08 0.12 2.13 1.32 2010 1.27 1.00 1.00 1.00 1.00 0.61 0.06 0.81	1.43 1.40 1.64 0.00 1.28 0.07 0.08 2.86 1.19 2012 1.29 1.00 1.03 1.00 0.98 0.18 0.85	1.48 1.44 1.70 0.00 1.21 0.10 1.00 3.16 1.29 2013 1.29 2013 1.00 1.03 1.00 0.92 0.12 0.88 1.42 3.69	1.44 1.38 1.68 0.00 1.20 0.12 1.00 3.18 1.31 2014 1.28 1.00 1.01 1.00 0.98 0.32 0.82 1.38 3.33	1.49 1.44 1.69 0.00 1.21 0.11 1.00 3.19 1.35 <b>2015</b> <b>2015</b> <b>1.25</b> 1.00 1.00 1.00 1.00 0.98 0.05 0.81	1.52 1.47 1.75 0.00 1.30 0.10 1.00 2.94 1.41 2016 1.24 1.00 1.01 1.00 0.96 0.03 0.79
Russia Azerbaijan Georgia Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan Middle East Bahrain Iran Iraq Israel Jordan Kuwait Oman Qatar	1.47 1.48 0.95 0.06 1.16 0.05 0.05 3.51 1.10 2000 1.13 1.00 0.95 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.49 1.48 0.57 0.01 1.27 0.03 0.04 3.60 1.23 2005 1.19 0.99 1.00 1.00 1.00 1.00 0.13 1.00 2.41 2.89	1.41 1.41 1.78 0.01 1.10 0.08 0.12 2.13 1.32 2010 1.27 1.00 1.00 1.00 1.00 0.61 0.06 0.81 1.59 4.68	1.43 1.40 1.64 0.00 1.28 0.07 0.08 2.86 1.19 2012 1.29 1.00 1.03 1.00 0.98 0.18 0.85 1.44 3.58	1.48 1.44 1.70 0.00 1.21 0.10 1.00 3.16 1.29 2013 1.29 2013 1.00 1.03 1.00 0.92 0.12 0.88 1.42	1.44 1.38 1.68 0.00 1.20 0.12 1.00 3.18 1.31 2014 1.28 1.00 1.01 1.00 0.98 0.32 0.82 1.38	1.49 1.44 1.69 0.00 1.21 0.11 1.00 3.19 1.35 2015 2015 1.25 1.00 1.00 1.00 1.00 0.98 0.05 0.81 1.33 3.35	1.52 1.47 1.75 0.00 1.30 0.10 1.00 2.94 1.41 <b>2016</b> <b>1.24</b> 1.00 1.01 1.00 0.96 0.03 0.79 1.35 3.39
Russia Azerbaijan Georgia Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan Middle East Bahrain Iran Iraq Israel Jordan Kuwait Oman Qatar Saudi Arabia	1.47 1.48 0.95 0.06 1.16 0.05 0.05 3.51 1.10 2000 1.13 1.00 0.95 1.00	1.49 1.48 0.57 0.01 1.27 0.03 0.04 3.60 1.23 2005 1.19 0.99 1.00 1.00 1.00 1.00 0.13 1.00 2.41 2.89 1.00	1.41 1.41 1.78 0.01 1.10 0.08 0.12 2.13 1.32 2010 1.27 1.00 1.00 1.00 1.00 1.00 0.61 0.06 0.81 1.59 4.68 1.00	1.43 1.40 1.64 0.00 1.28 0.07 0.08 2.86 1.19 2012 1.29 1.00 1.03 1.00 0.98 0.18 0.85 1.44 3.58 1.00	1.48 1.44 1.70 0.00 1.21 0.10 1.00 3.16 1.29 2013 1.29 2013 1.32 1.00 1.03 1.00 0.92 0.12 0.88 1.42 3.69 1.00	1.44 1.38 1.68 0.00 1.20 0.12 1.00 3.18 1.31 2014 1.28 1.00 1.01 1.00 0.98 0.32 0.82 1.38 3.33 1.00	1.49 1.44 1.69 0.00 1.21 0.11 1.00 3.19 1.35 2015 1.25 1.00 1.00 1.00 1.00 1.00 0.98 0.05 0.81 1.33 3.35 1.00	1.52 1.47 1.75 0.00 1.30 0.10 1.00 2.94 1.41 <b>2016</b> <b>1.24</b> 1.00 1.01 1.00 0.96 0.03 0.79 1.35 3.39 1.00

(\*) Data source: Eni's calculations. The original data are from *IEA Extended Balances* ° OECD/International Energy Agency, 2017 and, for Italy, from Italian Ministry for Economic Development.

#### Countries (\*)

	2000	2005	2010	2012	2013	2014	2015	2016
Africa	2.21	2.12	1.98	1.76	1.65	1.62	1.52	1.57
Algeria	4.15	3.68	3.09	2.59	2.41	2.18	2.08	2.43
Angola	1.00	1.00	1.00	1.00	2.27	2.39	1.00	2.10
Cameroon			1.00	1.00	1.00	1.00	1.00	1.00
Congo		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Côte d'Ivoire	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Egypt	1.00	1.42	1.30	1.13	1.03	0.99	0.85	0.80
Gabon	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ghana			0.00	0.00	0.00	0.04	0.44	0.44
Libya	1.16	1.94	2.38	2.13	1.80	2.10	1.83	1.74
Morocco	1.00	0.09	0.08	0.06	0.08	0.08	0.07	0.06
Mozambique	1.00	104.68	39.54	42.04	23.03	8.73	5.37	5.37
Nigeria	1.77	2.19	3.01	2.67	2.43	2.43	2.39	2.28
Senegal	1.00	1.00	1.02	1.50	1.14	1.14	1.14	1.00
South Africa	1.00	0.65	0.33	0.24	0.25	0.23	0.24	0.24
Tanzania		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Tunisia	0.69	0.64	0.61	0.53	0.53	0.49	0.50	0.44
Others Africa	1.00	1.00	4.26	4.02	4.48	4.49	5.20	5.20

	2000	2005	2010	2012	2013	2014	2015	2016
Asia - Pacific	0.94	0.91	0.83	0.75	0.75	0.75	0.76	0.76
Australia	1.48	1.65	1.56	1.60	1.72	1.67	1.75	2.07
Bangladesh	1.05	1.03	0.97	0.96	1.00	0.97	0.99	1.00
Brunei	5.12	5.44	3.84	3.38	4.15	3.35	4.40	3.66
China	1.10	1.06	0.90	0.75	0.72	0.71	0.71	0.67
India	1.00	0.82	0.79	0.68	0.65	0.64	0.61	0.55
Indonesia	2.30	2.24	1.93	1.92	1.83	1.79	1.73	1.79
Japan	0.03	0.04	0.04	0.03	0.03	0.02	0.02	0.02
Malaysia	1.72	1.74	1.64	1.59	1.53	1.53	1.54	1.53
Myanmar	4.32	4.50	7.92	6.48	5.66	4.40	4.87	3.51
New Zealand	1.00	1.00	1.03	0.99	1.01	1.00	0.99	1.00
Pakistan	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Philippines	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
South Korea	0.00	0.02	0.01	0.01	0.01	0.01	0.00	0.00
Taiwan	0.11	0.05	0.02	0.02	0.02	0.02	0.02	0.01
Thailand	0.90	0.71	0.75	0.74	0.75	0.77	0.68	0.66
Vietnam	1.00	1.28	1.00	1.00	1.00	1.00	1.00	1.00
Others Asia - Pacific	1.00	1.00	13.89	19.76	21.34	22.50	26.61	26.83

	2000	2005	2010	2012	2013	2014	2015	2016
Americas	0.97	0.99	0.99	1.00	0.99	1.01	1.02	1.00
Argentina	1.13	1.11	0.93	0.82	0.77	0.77	0.78	0.80
Bolivia	1.72	5.21	4.92	5.18	5.65	5.48	5.19	4.39
Brazil	0.77	0.55	0.54	0.60	0.56	0.55	0.56	0.67
Canada	2.00	1.91	1.68	1.56	1.51	1.56	1.60	1.54
Chile	0.31	0.24	0.35	0.24	0.20	0.18	0.21	0.23
Colombia	1.00	1.00	1.15	1.18	1.17	1.16	1.03	0.96
Cuba	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ecuador		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Mexico	0.94	0.83	0.79	0.69	0.65	0.62	0.53	0.47
Peru	1.00	1.00	1.39	1.76	1.94	1.64	1.61	1.54
Trinidad and Tobago	1.42	1.80	1.95	1.94	1.92	1.90	1.82	1.66
United States	0.82	0.83	0.89	0.94	0.93	0.97	0.98	0.96
Venezuela	1.00	1.00	0.92	0.93	0.92	0.96	0.98	1.01
Others Americas	0.10	0.04	0.03	0.03	0.03	0.03	0.03	0.03

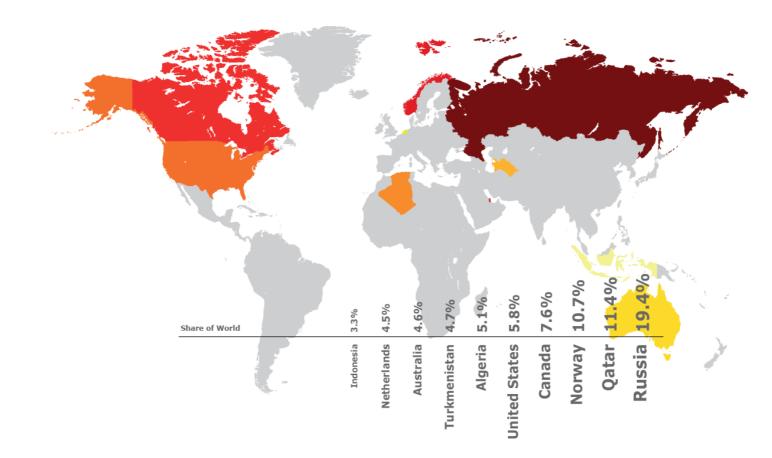
(\*) Data source: Eni's calculations. The original data are from IEA Extended Balances ° OECD/International Energy Agency, 2017.

#### The World Top 10 Exporters(\*)

(billion cubic metres)

183.88	189.42						
		207.66	185.80	196.76	209.92	6.7%	0.7%
100.62							14.2%
							5.3%
94.40	87.69		77.96				-1.1%
31.19	44.24	43.00	41.36	48.23	63.20	31.0%	15.1%
58.02	53.09	48.07	45.26	44.13	55.12	24.9%	-0.9%
23.32	43.59	52.08	53.29	55.84	51.15	-8.4%	2.9%
24.92	26.31	32.78	32.42	34.93	49.30	41.1%	9.8%
50.88	51.63	57.18	50.21	43.56	48.34	11.0%	2.0%
42.92	38.55	36.06	34.69	32.94	35.58	8.0%	-0.9%
714.49	759.71	792.39	747.19	772.74	833.79	7.9%	2.7%
255.22	252.40	257.11	264.55	267.60	248.01	-7.3%	5.6%
<b>969.7</b> 1	1,012.12	1,049.50	1,011.74	1,040.33	1,081. <b>79</b>	4.0%	3.3%
	31.19 58.02 23.32 24.92 50.88 42.92 <b>714.49</b> 255.22	104.35       114.72         94.40       87.69         31.19       44.24         58.02       53.09         23.32       43.59         24.92       26.31         50.88       51.63         42.92       38.55         714.49       759.71         255.22       252.40	104.35         114.72         107.17           94.40         87.69         82.12           31.19         44.24         43.00           58.02         53.09         48.07           23.32         43.59         52.08           24.92         26.31         32.78           50.88         51.63         57.18           42.92         38.55         36.06           714.49         759.71         792.39           255.22         252.40         257.11	104.35       114.72       107.17       107.40         94.40       87.69       82.12       77.96         31.19       44.24       43.00       41.36         58.02       53.09       48.07       45.26         23.32       43.59       52.08       53.29         24.92       26.31       32.78       32.42         50.88       51.63       57.18       50.21         42.92       38.55       36.06       34.69 <b>714.49 759.71 792.39 747.19</b> 255.22       252.40       257.11       264.55	104.35114.72107.17107.40115.4194.4087.6982.1277.9678.7231.1944.2443.0041.3648.2358.0253.0948.0745.2644.1323.3243.5952.0853.2955.8424.9226.3132.7832.4234.9350.8851.6357.1850.2143.5642.9238.5536.0634.6932.94714.49759.71792.39747.19772.74255.22252.40257.11264.55267.60	104.35       114.72       107.17       107.40       115.41       115.44         94.40       87.69       82.12       77.96       78.72       82.04         31.19       44.24       43.00       41.36       48.23       63.20         58.02       53.09       48.07       45.26       44.13       55.12         23.32       43.59       52.08       53.29       55.84       51.15         24.92       26.31       32.78       32.42       34.93       49.30         50.88       51.63       57.18       50.21       43.56       48.34         42.92       38.55       36.06       34.69       32.94       35.58         714.49       759.71       792.39       747.19       772.74       833.79         255.22       252.40       257.11       264.55       267.60       248.01	104.35       114.72       107.17       107.40       115.41       115.44       0.0%         94.40       87.69       82.12       77.96       78.72       82.04       4.2%         31.19       44.24       43.00       41.36       48.23       63.20       31.0%         58.02       53.09       48.07       45.26       44.13       55.12       24.9%         23.32       43.59       52.08       53.29       55.84       51.15       -8.4%         24.92       26.31       32.78       32.42       34.93       49.30       41.1%         50.88       51.63       57.18       50.21       43.56       48.34       11.0%         42.92       38.55       36.06       34.69       32.94       35.58       8.0%         714.49       759.71       792.39       747.19       772.74       833.79       7.9%         255.22       252.40       257.11       264.55       267.60       248.01       -7.3%

The World Top 10 (2016)



(\*) Data source: the original data are from *IEA Extended Balances* ° OECD/International Energy Agency, 2017. Data have been converted by Eni using a unified gross calorific value of 39 MJ/cm.

#### Countries (\*)

(billion cubic metres)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015	CAGR (2016-2000)
Europe										
Austria	0.02	1.05	4.86	6.25	3.88	2.48	5.30	6.80	28.3%	44.9%
Belgium	0.00	0.00	3.28	1.29	0.94	0.86	1.72	0.69	-59.9%	
Croatia	0.00	0.44	0.47	0.25	0.36	0.43	0.36	0.36	-0.1%	
Czech Republic	0.00	0.08	0.16	0.01	0.01	0.00	0.00	0.00		-100.0%
Denmark	3.44	5.98	3.77	3.19	2.35	2.23	2.35	2.26	-3.6%	-2.6%
France	0.81	1.08	3.05	6.49	5.38	7.58	5.80	3.98	-31.4%	10.4%
Germany	5.03	20.23	20.46	17.01	21.95	22.26	32.49	22.99	-29.2%	10.0%
Hungary	0.08	0.00	0.22	0.82	1.44	0.74	0.55	1.06	94.9%	17.8%
Italy	0.05	0.39	0.14	0.14	0.22	0.23	0.22	0.21	-4.1%	9.4%
Netherlands	35.38	44.58	50.88	51.63	57.18	50.21	43.56	48.34	11.0%	2.0%
Norway	50.26	84.64	104.35	114.72	107.17	107.40	115.41	115.44	0.0%	5.3%
Poland	0.04	0.04	0.04	0.00	0.09	0.07	0.05	0.85	1476.4%	21.1%
Slovakia	0.00	0.37	0.00	0.05	0.01	0.00	0.00	0.00		
Spain	0.00	0.00	1.20	2.90	6.05	8.53	5.26	4.14	-21.3%	
Turkey	0.00	0.00	0.64	0.60	0.67	0.62	0.61	0.66	8.1%	
Ukraine	2.87	2.66	0.01	0.00	0.00	0.00	0.00	0.00		-100.0%
United Kingdom	13.51	8.88	16.28	13.29	10.12	10.70	14.34	10.55	-26.4%	-1.5%
	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015	CAGR (2016-2000)
Russia and Central Asia										
Russia	186.76	199.68	183.88	189.42	207.66	185.80	196.76	209.92	6.7%	0.7%
Azerbaijan	0.00	0.00	620	663	7 32	810	816	806	-1.2%	

Azerbaijan	0.00	0.00	6.20	6.63	7.32	8.10	8.16	8.06	-1.2%	
Kazakhstan	5.22	15.43	6.23	10.73	10.21	10.50	12.71	14.26	12.2%	6.5%
Turkmenistan	32.57	44.20	23.32	43.59	52.08	53.29	55.84	51.15	-8.4%	2.9%
Uzbekistan	6.66	12.05	13.99	9.91	13.11	14.28	15.62	17.75	13.6%	6.3%

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Middle East										
Iran	0.00	4.78	8.57	9.40	9.37	9.78	9.15	9.15	0.0%	
Oman	4.37	12.50	12.58	11.61	12.06	10.98	10.51	11.04	5.0%	6.0%
Qatar	14.69	31.12	100.62	110.48	126.27	118.79	122.21	123.71	1.2%	14.2%
United Arab Emirates	6.95	7.14	7.64	7.17	6.95	7.64	7.34	7.42	1.0%	0.4%
Yemen	0.00	0.00	5.44	7.02	9.57	9.04	1.95	0.00	-100.0%	

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Africa										
Algeria	63.23	65.70	58.02	53.09	48.07	45.26	44.13	55.12	24.9%	-0.9%
Angola	0.00	0.00	0.00	0.00	0.51	0.42	0.00	0.97		
Egypt	0.00	15.08	12.64	6.04	2.02	0.32	0.25	0.49	96.7%	
Libya	0.78	5.33	9.50	6.30	5.55	6.34	5.12	4.83	-5.7%	12.1%
Mozambique	0.00	2.21	3.12	3.67	3.66	3.67	3.97	3.97	0.0%	
Nigeria	5.27	12.83	21.18	25.09	21.29	24.30	24.78	22.55	-9.0%	9.5%
Others Africa	0.00	0.00	5.03	4.67	4.96	4.67	4.88	4.88	0.0%	

(\*) Data source: the original data are from *IEA Extended Balances* ° OECD/International Energy Agency, 2017 and, for Italy, from Italian Ministry for Economic Development. Data have been converted by Eni using a unified gross calorific value of 39 MJ/cm.

#### World Gas and Renewables Review 2017

#### Countries (\*)

(billion cubic metres)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Asia - Pacific										
Australia	11.05	14.77	24.92	26.31	32.78	32.42	34.93	49.30	41.1%	9.8%
Brunei	9.10	9.73	9.05	8.81	9.21	8.33	8.57	7.91	-7.7%	-0.9%
China	2.39	2.96	4.02	2.88	2.74	2.60	3.24	3.42	5.7%	2.3%
Indonesia	41.27	43.30	42.92	38.55	36.06	34.69	32.94	35.58	8.0%	-0.9%
Malaysia	21.27	29.63	32.00	32.10	34.09	34.54	33.54	32.45	-3.2%	2.7%
Myanmar	4.75	9.56	10.60	10.22	10.21	11.78	14.00	12.29	-12.3%	6.1%
Others Asia - Pacific	0.00	0.00	5.79	5.96	6.68	7.12	8.71	9.06	4.0%	

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Americas										
Argentina	4.63	6.63	0.46	0.10	0.08	0.06	0.06	0.06	-0.5%	-23.6%
Bolivia	2.00	9.89	11.68	14.74	17.09	17.86	15.67	14.39	-8.2%	13.1%
Canada	98.61	104.24	94.40	87.69	82.12	77.96	78.72	82.04	4.2%	-1.1%
Chile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37		
Colombia	0.00	0.00	1.43	1.72	1.65	1.67	0.33	0.01	-96.0%	
Mexico	0.25	0.25	0.94	0.01	0.04	0.05	0.03	0.02	-21.2%	-13.8%
Peru	0.00	0.00	2.54	6.16	7.17	6.13	5.72	5.96	4.1%	
Trinidad and Tobago	4.32	14.07	20.84	19.81	19.73	19.40	17.48	15.38	-12.0%	8.3%
United States	6.65	19.91	31.19	44.24	43.00	41.36	48.23	63.20	31.0%	15.1%
Venezuela	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52		
Others Americas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

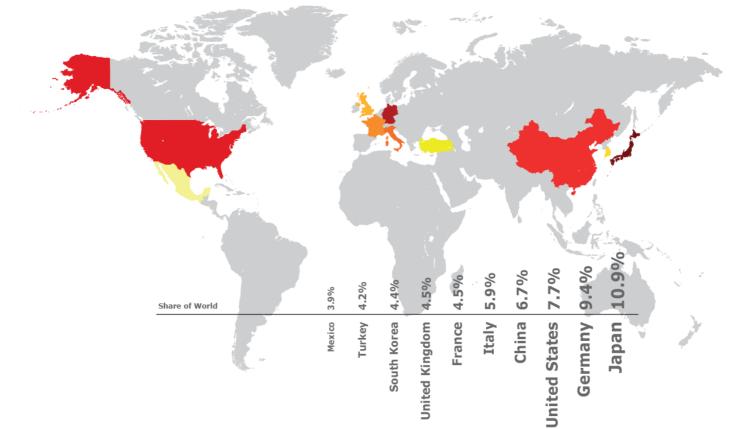
(\*) Data source: the original data are from *IEA Extended Balances* • OECD/International Energy Agency, 2017. Data have been converted by Eni using a unified gross calorific value of 39 MJ/cm.

#### The World Top 10 Importers(\*)

(billion cubic metres)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Japan	75.74	80.86	98.77	121.74	123.69	124.37	116.50	118.33	1.6%	2.8%
Germany	72.85	94.10	93.98	88.36	97.73	89.86	102.47	101.64	-0.8%	2.1%
United States	104.69	120.31	103.66	86.72	79.59	74.27	75.01	82.78	10.4%	-1.5%
China	0.00	0.00	15.02	39.74	49.70	55.99	58.03	72.19	24.4%	
Italy	56.11	71.76	73.61	66.15	60.53	54.46	59.84	63.77	6.6%	0.8%
France	43.48	49.64	50.22	50.53	50.71	47.87	47.05	49.20	4.6%	0.8%
United Kingdom	2.40	16.00	54.69	50.72	49.39	42.89	44.87	49.09	9.4%	20.8%
South Korea	20.36	31.14	46.86	51.11	56.85	52.50	46.45	47.27	1.8%	5.4%
Turkey	14.37	26.40	37.35	45.10	44.46	48.37	47.56	45.50	-4.3%	7.5%
Mexico	2.87	9.16	15.08	22.54	26.23	28.18	35.99	42.12	17.0%	18.3%
The World Top 10	392.89	499.37	589.24	622.70	638.87	618.77	633.77	671.88	6.0%	3.4%
Rest of the World	244.70	346.03	393.31	403.23	401.82	387.14	401.70	409.54	2.0%	3.3%
World	637.60	845.40	982.55	1,025.94	1,040.69	1,005.90	1,035.48	1,081.42	4.4%	3.4%





(\*) Data source: the original data are from *IEA Extended Balances* • OECD/International Energy Agency, 2017 and, for Italy, from Italian Ministry for Economic Development. Data have been converted by Eni using a unified gross calorific value of 39 MJ/cm.

#### Countries (\*)

(billion cubic metres)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Europe										
Austria	6.35	9.58	12.15	13.87	10.17	9.92	11.25	14.14	25.7%	5.1%
Belarus	16.95	19.92	21.36	20.05	20.06	19.85	18.61	18.46	-0.8%	0.5%
Belgium	15.84	17.67	23.31	18.20	18.31	16.17	18.27	17.81	-2.5%	0.7%
Bosnia Herzegovina	0.24	0.36	0.24	0.25	0.19	0.18	0.21	0.21	-0.9%	-0.8%
Bulgaria	3.27	2.93	2.54	2.44	2.65	2.65	3.00	3.09	2.9%	-0.3%
Croatia	1.08	1.10	1.04	1.31	1.23	1.12	1.04	1.09	5.7%	0.1%
Czech Republic	8.92	9.07	8.32	7.28	8.31	7.10	7.35	8.01	8.9%	-0.7%
Denmark	0.00	0.00	0.16	0.98	1.44	0.67	0.70	0.73	3.5%	
Estonia	0.79	0.95	0.67	0.65	0.66	0.52	0.47	0.51	9.7%	-2.7%
Finland	4.09	4.30	4.58	3.58	3.41	3.00	2.67	2.45	-8.1%	-3.2%
France	43.48	49.64	50.22	50.53	50.71	47.87	47.05	49.20	4.6%	0.8%
Germany	72.85	94.10	93.98	88.36	97.73	89.86	102.47	101.64	-0.8%	2.1%
Greece	2.01	2.78	3.85	4.38	3.86	2.94	3.19	4.13	29.5%	4.6%
Hungary	8.76	11.70	9.44	8.04	8.07	8.87	6.77	8.62	27.3%	-0.1%
Ireland	2.95	3.59	5.34	4.58	4.42	4.28	4.32	2.03	-53.1%	-2.3%
Italy	56.11	71.76	73.61	66.15	60.53	54.46	59.84	63.77	6.6%	0.8%
Latvia	1.33	1.71	1.08	1.64	1.66	0.93	1.29	1.10	-14.8%	-1.2%
Lithuania	2.46	2.97	2.96	3.17	2.58	2.57	2.55	2.25	-11.7%	-0.6%
Luxembourg	0.80	1.40	1.43	1.25	1.06	1.01	0.92	0.85	-7.8%	0.3%
Macedonia	0.06	0.07	0.11	0.14	0.15	0.13	0.13	0.20	50.0%	7.4%
Moldova	2.53	2.85	2.76	2.67	2.07	2.45	2.54	2.56	1.0%	0.1%
Netherlands	14.88	19.61	22.01	22.30	23.07	24.89	32.38	35.66	10.1%	5.6%
Poland	7.92	10.22	10.63	11.98	12.25	11.58	11.92	14.53	21.9%	3.9%
Portugal	2.43	4.64	5.37	4.68	4.55	4.14	4.85	5.08	4.8%	4.7%
Romania	3.23	5.00	2.17	2.74	1.39	0.55	0.19	1.16	500.0%	-6.2%
Serbia	1.08	2.05	1.87	1.70	1.79	1.32	1.65	1.72	4.2%	2.9%
Slovakia	6.81	7.21	5.97	4.72	5.20	4.72	4.40	4.31	-1.9%	-2.8%
Slovenia	0.98	1.10	1.02	0.84	0.82	0.74	0.79	0.84	5.9%	-1.0%
Spain	18.45	36.08	38.11	36.38	36.83	37.75	33.61	33.63	0.0%	3.8%
Sweden	0.93	1.00	1.75	1.20	1.14	0.95	0.86	0.98	13.1%	0.3%
Switzerland	2.90	3.32	3.59	3.49	3.68	3.18	3.40	3.57	5.1%	1.3%
Turkey	14.37	26.40	37.35	45.10	44.46	48.37	47.56	45.50	-4.3%	7.5%
Ukraine	59.24	60.22	35.25	31.72	26.95	18.75	15.85	10.51	-33.7%	- 10.2%
United Kingdom	2.40	16.00	54.69	50.72	49.39	42.89	44.87	49.09	9.4%	20.8%

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Russia and Central Asia										
Russia	12.55	7.40	4.17	7.88	8.03	8.42	8.62	8.76	1.5%	-2.2%
Armenia	1.34	1.60	1.63	2.30	2.22	2.24	2.26	1.96	-13.1%	2.4%
Azerbaijan	0.28	4.53	0.00	0.00	0.00	0.00	0.00	0.00		
Georgia	1.07	1.25	1.20	1.96	1.65	2.18	2.49	1.96	-21.3%	3.9%
Kazakhstan	4.22	11.23	3.51	4.35	5.16	4.17	5.83	4.76	-18.4%	0.7%
Kyrgyzstan	0.65	0.71	0.27	0.40	0.29	0.24	0.24	0.24	0.0%	-6.0%
Tajikistan	0.71	0.61	0.17	0.13	0.00	0.00	0.00	0.00		
Uzbekistan	1.57	1.07	0.00	0.00	0.00	0.00	0.00	0.00		

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Middle East										
Iran	3.32	5.22	9.08	4.71	5.42	7.59	8.64	6.93	-19.8%	4.7%
Israel	0.00	0.00	2.07	0.06	0.57	0.12	0.16	0.35	122.7%	
Jordan	0.00	1.44	2.57	0.64	0.95	0.24	2.20	3.19	45.0%	
Kuwait	0.00	0.00	2.72	2.58	2.12	3.22	3.90	4.36	12.0%	
Oman	0.00	0.00	2.02	2.07	2.07	2.09	2.11	2.35	11.4%	
United Arab Emirates	0.00	1.36	16.96	18.68	19.41	19.31	17.70	17.95	1.4%	

	2000	2005	2010	2012	2013	2014	2015	2016	∆ y/y (2016-2015)	CAGR (2016-2000)
Africa										
Egypt	0.00	0.00	0.00	0.00	0.46	0.94	6.79	9.74	43.4%	
Ghana	0.00	0.00	0.42	0.42	0.31	0.61	0.71	0.71	0.0%	
Morocco	0.00	0.41	0.63	1.19	1.14	1.10	1.13	1.16	2.4%	
South Africa	0.00	1.16	3.12	3.67	3.66	3.55	3.85	3.85	0.0%	
Tunisia	1.01	1.31	2.39	2.96	2.95	3.21	3.03	3.33	10.0%	7.7%
Others Africa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.6%	

(\*) Data source: the original data are from *IEA Extended Balances* ° OECD/International Energy Agency, 2017 and, for Italy, from Italian Ministry for Economic Development. Data have been converted by Eni using a unified gross calorific value of 39 MJ/cm.

#### Countries (\*)

(billion cubic metres)

	2000	2005	2010	2012	2013	2014	2015	2016	∆ y/y (2016-2015)	CAGR (2016-2000)
Asia - Pacific										
Australia	0.00	0.00	5.79	5.96	6.68	7.11	6.13	6.91	12.8%	
China	0.00	0.00	15.02	39.74	49.70	55.99	58.03	72.19	24.4%	
Hong Kong	2.92	2.61	3.74	2.74	2.58	2.48	3.16	3.25	2.7%	0.7%
India	0.00	7.00	13.64	18.60	18.42	18.77	20.31	25.39	25.0%	
Japan	75.74	80.86	98.77	121.74	123.69	124.37	116.50	118.33	1.6%	2.8%
Malaysia	0.00	1.60	8.36	9.38	10.20	10.13	9.32	7.83	-16.0%	
Singapore	1.33	6.64	8.60	9.42	10.60	11.07	11.12	11.57	4.0%	14.4%
South Korea	20.36	31.14	46.86	51.11	56.85	52.50	46.45	47.27	1.8%	5.4%
Taiwan	6.17	9.96	15.44	16.13	16.23	17.09	18.30	19.07	4.2%	7.3%
Thailand	2.06	8.86	9.82	10.72	11.29	10.56	14.26	15.19	6.5%	13.3%
Others Asia - Pacific	0.00	0.00	0.15	0.00	0.04	0.06	0.06	0.06	0.2%	

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Americas										
Argentina	0.00	1.73	3.58	9.07	11.45	11.63	11.25	10.25	-8.9%	
Brazil	2.20	8.94	12.57	13.10	16.85	19.19	18.29	11.65	-36.3%	11.0%
Canada	1.58	9.34	22.39	31.10	26.20	21.48	19.44	20.39	4.9%	17.3%
Chile	4.38	6.29	3.59	3.93	3.90	3.48	3.74	4.39	17.5%	0.0%
Colombia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43		
Dominican Republic	0.00	0.23	0.77	1.09	1.04	1.02	1.08	0.97	-10.1%	
Mexico	2.87	9.16	15.08	22.54	26.23	28.18	35.99	42.12	17.0%	18.3%
United States	104.69	120.31	103.66	86.72	79.59	74.27	75.01	82.78	10.4%	-1.5%
Uruguay	0.04	0.11	0.08	0.06	0.06	0.05	0.05	0.06	10.6%	3.2%
Venezuela	0.00	0.00	2.00	1.69	1.93	0.87	0.37	0.37	0.0%	
Others Americas	0.34	0.68	0.77	0.75	0.75	0.77	0.78	0.82	6.0%	5.7%

(\*) Data source: the original data are from *IEA Extended Balances* • OECD/International Energy Agency, 2017. Data have been converted by Eni using a unified gross calorific value of 39 MJ/cm.

#### Imports by Country of Origin - Pipeline and LNG 2016 (\*)

(billion cubic metres)

Anial															EURO																	
Ander in the series of the	Turkey Ukraine United	Switzerland Turkey	veden	ain	ovenia	ovak epublic	erbia	omania	ortugal	oland	etherlands	oldova	acedonia	6.m		eland	ń.	ĥuŝun	rece	ermany	ance	nland	tonia	enmark	zech epublic	oatia	ulgaria	osnia erzegovina	elgium	elarus	ustria	Exporters
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Neighean beam in the series of the series		2.74						0.02		2.07	2.52						1.09				0.57			0.20		0.5.0		,	0.76			-
underware       5.7       0.0       0.4       2.7       0.7       0.7       0.7       0.8		0.11			0.03			0.02																		0.50						
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and       -14       -	0.09 4			3 62							10.01		1	22 0.5										0.40	0.00							
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Andia       722       164       0.1       10       8.2       0.4       0.5       4.3       0.5       1.3       0.7       0.2       0.4       0.5       1.3       0.7       0.2       0.2       0.5						0.52					5.64					2.00	0.07		0.04										263			
heads       72       164       0.1       10       0.2       1.0       1.0       1.0       1.0       0.2       0.0       1.0       1.0       1.0       0.0       1.0       1.0       1.0       0.0       1.0       0.0       1.0       1.0       1.0       0.0       0.0       0.0       1						0.72					5.04					2.00												,	2.45			anited Kingdom
name       72       844       9.1       9.10       8.2       9.2       9.4       9.5																																ussia and Central Asia
tabiling solubility of the series of the se	24.54	24.54			0.26	3.81	1.81	1.20		10.90	12.61	2.95	0.20	07 0.2	1.13			8.19	2.63	47.35	9.05	2.49	0.52		8.12		1 3.10	0.21		2 18.64	7.22	
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Marian       0.0       6.16       0.71       5.03       0.09       2.46       18.42         Agaia       0.0       0.99       2.46       18.20       0.92       0.92       18.20       0.92       0.93       18.20       0.93       0.93       1.93       0.93       1.93       0.93       1.93       0.93       1.93       0.93       4.93       0.93       4.93	0.92 10	0.92		2.57					0.41	1.02							5.52				1.01							)	1.09			Qatar
Arica       0.00       0.09       2.46       18.42         Angola       0.01       0.09       2.46       18.42         Angola         0.09       2.46       18.42         Egypt           0.09       2.46       0.09         Egypt             0.09       2.46       0.09         Edyption Groups             0.09       0.14       0.90       4.69         Asia-Pactic   <																																United Arab Emirates
Angain       0.00       6.16       0.71       5.05       0.00       0.99       2.46       18.42         Angalo             0.09																																Yemen
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Angola       0.09         Egyat       Egyatorial Guinea         Ubga       180       0.90       0.14       0.90       469         Nataria       180       0.90       0.14       0.90       469         Nataria       180       0.90       0.14       0.90       469         Nataria       180       0.90       0.14       0.90       469         Autaria       180	( 20 (	( 20		10/2					276		0.00		<u>_</u>	0.0			5.07		0.71		6.16							,	0.00			
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Asir-Pacific Australia Buna China Indonesia Indonesia Malaysia Magamar Papua New Guinea South Korea	1.38 0	1.70		1.00					0.00		0.17						0.00				100											
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OTALBYCOUNTRY 14.43 18.64 18.28 0.21 3.10 1.11 8.12 0.68 0.52 2.49 46.44 101.65 4.07 8.62 17.44 2.00 1.13 2.28 0.80 0.20 2.95 41.74 14.68 4.95 1.22 1.81 4.38 0.86 32.41 0.92	46.33 10.72 48	3.66 46.33	0.92	32.41	0.86	4.38	1.81	1.22	4.95	14.68	41.74	2.95	0 0.20	28 0.8	1.13	2.00	17.44	8.62	4.07	101.65	46.44	2.49	0.52	0.68	8.12	1.11	3.10	3 0.21	18.28	3 18.64	14.43	OTAL BY COUNTRY

(\*) Data source: IEA Natural Gas Information, 2017 and, for Italy, Italian Ministry for Economic Development.

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0.12	0.07 0.93 0.17		0.15 0.32 3.47 0.09 5.53 0.15	5 108
	0.57 2.10 2.22 16.15	6.23	6.70 14.62 16.36 0.13 0.86 15.42 7.80 0.65 6.68 0.08 0.08	
		1.15 3.24	0.08 0.34 0.17 0.08	
	0.09		0.44 0.09 0.09 0.09 0.09 0.08 0.09 0.05 0.13	0.18 1.0 0.7
	0.60 0.17 0.17		1.71 0.74 0.15 0.18 0.08	
	1.48 0.42 0.98	1.25 0.73	0.43 323 2.48 0.64 0.62	2 0.60 0.75 0.01 0.71 2330
	0.09 0.35 0.35	0.36	11.01 1.42 32.30 1.75 6.35 0.09 0.08 5.56 0.42 1.78 0.39	
	0.08 0.09		3.34 3.85 9.14 6.39 7.43 5.80 2.20	33
		0.09	357 0.08 21.37 1.39 5.08 3.20 4.00	
			2.60 5.64 0.19 1.69 0.09	9 10.12 0.0
				006 00 5.43 9.39 148
				82.46 82.41 0.36 0.3 003 0.0
	0.36 0.49 0.16 0.08	0.45	0.32 0.08 0.17 0.15 0.15 0.64 0.08 0.08 0.06	256 5.1
	0.23 0.09 0.08		0.49 0.49 0.66	0.49 0.30 2025 0.75 0.08 38.61 62.94
1.97	0.38	0.00 1.28 3.95 0.00	7.19 1.00 0.08 0.62 0.15	0.06 0.46 0.40 0.35 41.3
8.93 1.99 1.97 4.75 0.24	6.87 0.36 3.98 4.48 2.22 18.42	0.00 10.00 0.73 1.15 3.95 3.24 0.00	7.19 72.45 3.34 23.92 116.47 7.78 11.87 44.20 17.95	5 16.28 0.06 10.26 11.53 20.58 4.38 0.49 1.00 0.01 43.11 84.96 0.06 0.35 0.85 1,039.6

#### Imports by Country of Origin - Pipeline 2016 (\*)

(billion cubic metres)

and and any and any																		EURO	OPE																
and a set of the	Importers> Exporters ↓	Austria	Belarus	Belgium	Bosnia Herzegovin	Bulgaria	Croatia	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy			Luxembour 9	Macedonia	Moldova	Netherlands	Poland	Portugal	Romania	Serbia	Slovakia	Slovenia	Spain	Sweden	Switzerland	Turkey	Ukraine	United Kinadom
nyanya sa basis basi	Europe																																		
and and a set of the set	Austria																0.63												0.57						
<pre> man being be</pre>	Belgium											1.79																							1.3
<pre> mark of the second of th</pre>	Croatia																0.38																		
with the second secon	Czech Republic																							0.01											
aname 0.0 </td <td>Denmark</td> <td></td> <td>0.07</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.76</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.92</td> <td></td> <td></td> <td></td> <td></td>	Denmark																0.07						0.76								0.92				
maximum       100       <	France			0.0	3																									0.70		0.35			
and matrix is in the series of the serie	Germany			0.7	6				0.20			0.57					1.89						2.52	2.67								2.74			
anama in the series of the	Hungary						0.50	)																		0.02									
original $32$ $02$	Italy																												0.03			0.11			
and mage       01       04	Netherlands			8.2	3							5.03	25.41				2.67															0.46			4.
min       2.3       2.4       0.2       54       0.2       0.4       0.2       2.4       0.	Norway			5.7	4			0.00	0.49			18.89	27.36				0.98			0.51			18.60							2.65					31
and magned       2.7       2.0       0.7       5.4       0.2       1.0       0.2       0.1       0.2	Portugal																													0.00					
and regione	Spain											0.45																							
and exact water       and exact water <th< td=""><td>Turkey</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.64</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	Turkey													0.64																					
assisted       22       184       0.2       3.0       0.12       0.2       2.49       0.5       7.35       2.5       0.19       2.10       0.20       2.95       1.21       1.08       1.20       1.21       1.21       0.21       0.21       0.21       0.21       0.21       0.21       1.21       1.20       1.21 <td< td=""><td>United Kingdom</td><td></td><td></td><td>2.4</td><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>2.00</td><td>0.07</td><td></td><td></td><td></td><td></td><td></td><td>5.64</td><td></td><td></td><td></td><td></td><td>0.52</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	United Kingdom			2.4	3											2.00	0.07						5.64					0.52							
ension       543         usakitali       sinterest set set set set set set set set set	Russia and Central Asia																																		
saturalises       subset       subset </td <td>Russia</td> <td>7.22</td> <td>18.64</td> <td></td> <td>0.2</td> <td>1 3.10</td> <td>)</td> <td>8.12</td> <td></td> <td>0.52</td> <td>2.49</td> <td>9.05</td> <td>47.35</td> <td>2.63</td> <td>8.19</td> <td></td> <td>26.79</td> <td>1.13</td> <td>1.07</td> <td>0.20</td> <td>0.20</td> <td>2.95</td> <td>12.61</td> <td>10.88</td> <td></td> <td>1.20</td> <td>1.81</td> <td>3.81</td> <td>0.26</td> <td></td> <td></td> <td></td> <td>24.54</td> <td></td> <td></td>	Russia	7.22	18.64		0.2	1 3.10	)	8.12		0.52	2.49	9.05	47.35	2.63	8.19		26.79	1.13	1.07	0.20	0.20	2.95	12.61	10.88		1.20	1.81	3.81	0.26				24.54		
and metaling       see	Azerbaijan																																6.48		
abiand       set       set <t< td=""><td>Kazakhstan</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Kazakhstan																																		
an       70         def effect       70         def effect       100       27       154         gen       100       00       27       154         gend       484       1910       00       27       154         gend       484       1910       100       1910	Turkmenistan																																		
def Ext       70         an       100       00       27       544         frag       48       1910       00       27       544         grag       484       44       1910       00       27       1544         grag       484       1910       00       27       1544       100       1	Uzbekistan																																		
and       370         state       1910       0.0       2.7       154         by a b 44       444       444       1910 <t< td=""><td>Others FSU</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Others FSU																																		
see       19.0       00       27       15.4         gena       48.4       48.4       10.0       1	Middle East																																		
ince       19.10       0.00       2.27       15.44         byse       48.4       19.10       10.00       10.00       10.00         isePacific       10.00       10.00       10.00       10.00       10.00         isePacific       10.00       10.00       10.00       10.00       10.00       10.00         isePacific       10.00       10.00       10.00       10.00       10.00       10.00       10.00         isePacific       10.00       10.00       10.00       10.00       10.00       10.00       10.00       10.00         isePacific       10.00       10.00       10.00       10.00       10.00       10.00       10.00       10.00	Iran																																7.70		
geria       19.10       0.00       2.27       15.4         bys       4.84       4.84       10.00 <td>Qatar</td> <td></td>	Qatar																																		
by a constrained in the second of the sec	Africa																																		
geria ia Pacific in a donesia alaguia alaguia gerinia netess regerinia okvia anada okvia anada the texico inter States texico	Algeria																19.10			0.00					2.27					15.44					
ia-Pacific hina donesia lalagia laggia gammar mericas regentina olivia anada nolivia anada hite tesco test	Libya																4.84																		
hina idonesia alagia gyannar refecs rgentna ofivia anada hile lexico ned States	Nigeria																																		
donesia alagia gammar refesto anada hile texico nited States	Asia-Pacific																																		
alaysia yammar refe <b>ss</b> anada anada hile texico nited States	China																																		
yamar refes rgentina anada hile texico nted States tems/Non Specified 7.22 0.61 1.69 1.55 0.43 1.91 0.09 1.08 0.05 0.01 1072	Indonesia																																		
nericas           rgentina           olivia           anada           hile           texico           nited States	Malaysia																																		
rgentina anada hile lexico nited States thers/Non Specified 7.22 0.61 1.69 1.55 0.43 1.91 0.09 1.08 0.05 0.01 1072	Myanmar																																		
olivia anada hile texico nited States	Americas																																		
anada hile lexico nited States thers/Non Specified 7.22 0.61 1.69 1.55 0.43 1.91 0.09 1.08 0.05 0.01 1072	Argentina																																		
hile lexico nited States thers/Non Specified 7.22 0.61 1.69 1.55 0.43 1.91 0.09 1.08 0.05 0.01 1072	Bolivia																																		
lexico nited States thers/Non Specified 7.22 0.61 1.69 1.55 0.43 1.91 0.09 1.08 0.05 0.01 1072	Canada																																		
nited States thers/Non Specified 7.22 0.61 1.69 1.55 0.43 1.91 0.09 1.08 0.05 0.01 10.72	Chile																																		
thers/Non Specified 7.22 0.61 1.69 1.55 0.43 1.91 0.09 1.08 0.05 0.01 10.72	Mexico																																		
	United States																																		
TAL BY COUNTRY 1443 1864 17.19 0.21 3.10 1.11 8.12 0.68 0.52 2.49 37.47 101.65 3.28 8.62 2.00 59.33 1.13 1.07 0.80 0.20 2.95 40.13 13.55 3.35 1.22 1.81 4.38 0.86 18.78 0.92 3.66 38.73 10.72	Others/Non Specified	7.22					0.61	I				1.69	1.55		0.43		1.91			0.09					1.08			0.05	0.01					10.72	
	TOTAL BY COUNTRY	14.43	18.64	17.19	0.21	3.10	1.11	8.12	0.68	0.52	2.49	37.47	101.65	3.28	8.62	2.00	59.33	1.13	1.07	0.80	0.20	2.95 4	0.13	13.55	3.35	1.22	1.81	4.38	0.86	18.78	0.92	3.66	38.73	10.72	37.4

(\*) Data source: IEA Natural Gas Information, 2017 and, for Italy, Italian Ministry for Economic Development.

RUSSIA AI	ND CEN	ITRAL A	SIA	MI	DDLE I	EAST			AFRICA	Ą				ASIA-PA	CIFIC						AME	RICAS				
						rab	atic of Jo							ת										_	ē	2 2
Russia Armenia	Georgia	Kazakhstan	Kyrgyzstan	-	an	United Arab Emirates	Democratic Republic of the Congo	Ghana	Morocco	South Africa Tunisia	ers	Australia	China Hood Kood	Malaysia	Singapore	Thailand	Uthers Asia - Pacific	Argentina	zi	Canada	Colombia	Mexico	ted	Uruguay	Venezuela	TOTAL BY COUNTRY
Russia Armeni	Geo	Kaz	kyr	Iran	Oman	E	Der Rep the	Ghê	Wo	Sou	Others Africa	Aus	China	Mal	Sing	Tha	Cth Asia Pao	Arg	Brazil	Car	Col	Me	United States	Uru	Ver	<u>6</u>
																										1.20
																										3.18
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																										1.75
																										1.07 11.34
																										0.51
																										0.14
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1.87	7	293	0.24									_						_							_	200.02
1.07	,	2.95	0.21																							6.48
8.93																										8.93
		0.18		6.53									37.40													44.11
		1.64																								1.64
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													3	.34	2 7.43											3.34 13.65
														0.2	2 7.45											1.31
													4.00		1.01	12.38										16.38
																								0.06		0.06
																		5.43	9.39							14.82
																							82.43	5		82.43
																		0.36	>				0.07			0.36
																				20.25		37.98	0.03	)		0.03 58.24
																				20.20		J7.90				J0.24
	1.97						0.00			3.95	0.00	7.19					0.06				0.40				0.35	39.27
8.93 1.99	1.97	4.75	0.24	6.87	2.22	14.93	0.00	0.73	1.15 3	5.95 3.2	4 0.00	7.19	41.40 3.3	34 6.22	8.74	12.38	0.06	5.79	9.39	20.25	0.40	37.98	82.46	0.06	0.35	747.56

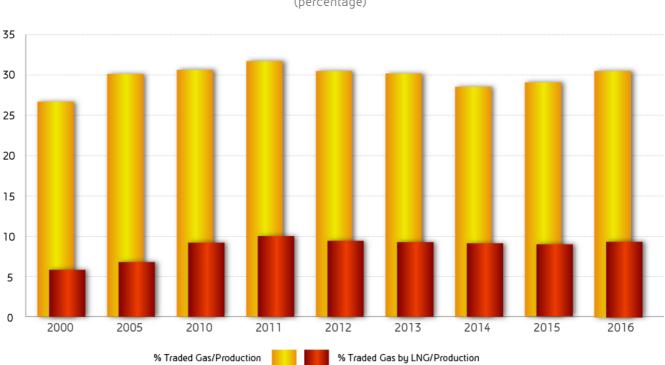
#### Imports by Country of Origin - LNG 2016 (\*)

(billion cubic metres)

						EUROF	PE						MIDDLE	EAST		AFRICA			A	SIA-PA	CIFIC							A	MERICA	S					
Importers> Exporters	Belgium	France	Greece	ltaly	Lithuania	Netherlands	Poland	Portugal	Spain	Turkey	United Kingdom	Israel	Jordan	Kuwait	United Arab Emirates	Egypt	China	India	Japan	Malaysia	Singapore	South Korea	Taiwan	Thailand	Argentina	Brazil	Canada	Chile	Dominican Republic	Mexico	United States	Colombia	Jamaica Others	Americas	TOTAL BU COUNTRU
Europe																																			
Belgium							0.01			0.09	0.10																								0.1
France										0.09									0.54									0.09							0.1
Netherlands							0.00			0.09																									0.0
Norway			0.08		1.22	121	0.08		077	0.09	0.24			0.09	0.09	0.26	0.27	0.08				0.08	0.09		0.27	0.09	0.08	0.18	0.08		0.09			0.09	5.
United Kingdom															0.18							0.09			0.08									0.04	0.4
Russia and Central Asia																																			
Russia							0.03										0.34		10.60			252	1.42												14.9
Middle East																																			
Oman													0.07	0.93	0.17		0.15	0.32	3.47	0.09		5.53	0.15												10.
Qatar	1.09	1.01		5.52			1.02	0.41	2.57	0.92	10.06		0.57	2.10	1.23	6.23	6.70	14.62	16.36	0.13	0.86	15.42	7.80	3.90	0.96	0.65		0.08							100
United Arab Emirates																		0.65	6.68		0.08		0.08												7.
Africa																																			
Algeria	0.00	6.16	0.71	0.19		0.09		0.19	2.98	4.28	0.43							0.08	0.34			0.17	0.08		0.20					0.08					15
Angola									0.09					0.09				0.44	0.09		0.09	0.09				0.18									1
Egypt										0.10	0.01		0.08		0.08		0.09	0.08	0.09	0.05	0.13														0.
Equatorial Guinea													0.60	0.17	0.17	0.08		1.71	074		0.15	0.18	0.08			0.08		0.08		0.09				0.04	4.
Nigeria		1.80		0.09		0.14		0.90	4.69	1.38	0.04		1.48	0.42	0.98	1.25	0.43	3.23	2.48			0.64	0.62		0.60	0.75				071			0.01		22
Asia-Pacific																																			
Australia													0.09	0.35	0.35	0.36	11.01	1.42	32.30		175	6.35	0.09		0.09					0.34					54.
Brunei																	0.08		5.56	0.42		178	0.39												8.
Indonesia														0.08	0.09		3.85		9.14	0.17		5.80	2.20							0.24					21
Malaysia																0.09	3.57	0.08	21.37		0.08	5.08	3.20												33
Papua New Guinea																	2.60		5.64			0.19	1.69												10
South Korea																			0.09																0.
Americas																																			
Canada																															0.03				0.
Peru				0.11					1.79								0.32	0.08	0.17			0.15								2.56					5.
Trinidad and Tobago						0.17					0.11	0.36				0.45	0.15	0.64		0.08			0.06								2.38	0.09		0.68	13.
United States								0.10	0.08	0.24			0.23	0.09	0.08		0.49	0.49	0.66						0.49	0.30		0.75	0.08	0.63					4.
Others/Non Specified													0.38			1.28	1.00		0.08	0.62		0.15			0.46										3.
TOTAL BY COUNTRY	1.10	8.97	0.79	5.91	1.22	1.61	1.14	1.60	13.63	7.61	10.98	0.36	3.98	4.48	3.49	10.00	31.05	23.92	116.47	1.56	3.14	44.20	17.95	3.90	4.47	2.14	0.33	4.38	1.00	5.13	2.50	0.09	0.01 0	).85	339.

(\*) Data source: IEA Natural Gas Information, 2017 and, for Italy, Italian Ministry for Economic Development.

	Traded Gas by LNG/ Total Traded Gas (%)	Traded Gas by Pipeline/ Total Traded Gas (%)	Traded Gas/Production (%)	Traded Gas by LNG/Production (%)	Traded Gas by Pipeline/Production (%)
2000	21.70	78.30	26.19	5.68	20.51
2005	22.64	77.36	30.14	6.82	23.31
2010	30.38	69.62	30.54	9.28	21.26
2011	32.06	67.94	31.29	10.03	21.25
2012	30.97	69.03	30.46	9.43	21.03
2013	30.61	69.39	30.18	9.24	20.94
2014	32.03	67.97	28.81	9.23	19.58
2015	31.45	68.55	29.31	9.22	20.09
2016	31.31	68.69	30.41	9.52	20.89



#### **Traded Gas on Production**

(percentage)

#### Liquefaction Capacity – Countries (\*)

(billion cubic metres)

	2000	2005	2010	2012	2013	2014	2015	2016
Europe			5.6	5.6	5.6	5.6	5.6	5.6
Norway			5.6	5.6	5.6	5.6	5.6	5.6
Russia and Central Asia			13.0	14.1	14.1	14.1	14.1	14.1
Russia			13.0	14.1	14.1	14.1	14.1	14.1
Middle East	33.7	47.5	113.8	136.3	136.3	136.3	137.1	137.1
Oman	7.1	10.2	14.8	14.8	14.8	14.8	14.8	14.8
Qatar	19.1	29.8	83.4	104.8	104.8	104.8	105.6	105.6
United Arab Emirates	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
Yemen			8.0	9.1	9.1	9.1	9.1	9.1
Africa	42.0	55.0	81.7	78.3	76.1	81.5	83.0	83.0
Algeria	31.8	28.1	27.9	26.6	27.4	29.6	31.1	31.1
Angola					3.9	7.1	7.1	7.1
Egypt		11.1	16.6	16.6	9.8	9.8	9.8	9.8
Equatorial Guinea			5.0	5.0	5.0	5.0	5.0	5.0
Libya	2.2	2.2	2.2					
Nigeria	8.1	13.6	30.1	30.1	30.1	30.1	30.1	30.1
Asia - Pacific	83.1	88.7	114.1	117.5	115.9	117.7	130.4	153.6
Australia	10.4	16.1	28.2	33.0	35.2	35.2	44.9	68.7
Brunei	9.8	9.8	10.1	10.1	10.1	10.1	10.1	10.0
Indonesia	41.3	32.0	42.3	39.5	35.8	31.6	30.4	28.6
Malaysia	21.6	30.8	33.7	34.9	34.9	34.9	34.9	36.2
Papua New Guinea						6.0	10.1	10.1
Americas	6.1	15.6	26.0	28.7	28.7	28.7	28.7	36.0
United States	2.0	2.0	2.0	2.0	2.0	2.0	2.0	9.3
Peru			3.3	6.0	6.0	6.0	6.0	6.0
Trinidad and Tobago	4.1	13.6	20.6	20.7	20.6	20.6	20.6	20.7
World	164.9	206.8	354.2	380.5	376.7	384.0	398.9	429.4

#### Regasification Capacity - Countries (\*\*)

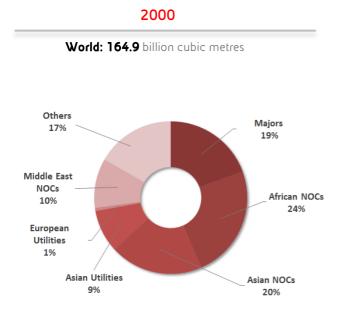
(billion cubic metres)

	2000	2005	2010	2012	2013	2014	2015	2016
Europe	46.4	73.2	168.9	196.9	199.1	203.0	201.0	211.8
Belgium	4.5	4.5	9.0	9.0	9.0	9.0	9.0	9.0
France	15.5	15.5	19.6	24.2	24.2	24.2	22.3	28.0
Greece Italy	1.3 3.5	1.3 3.5	5.4 11.5	5.4 11.5	5.4 11.6	5.4 15.3	5.4 15.3	5.4 15.3
Lithuania	5.5	5.5	11.5	11.5	11.0	0.3	4.0	4.0
Malta						0.5	4.0	4.0
Netherlands				12.7	12.7	12.7	12.7	12.7
Poland				12.7	12.7	12.7	0.3	5.0
Portugal		5.6	5.6	6.3	8.3	8.3	8.3	8.3
Spain	15.2	34.2	62.4	63.6	63.6	63.6	63.6	63.6
Turkey	6.3	6.3	12.3	12.3	12.3	12.3	12.3	12.7
United Kingdom		2.3	43.2	52.0	52.0	52.0	47.9	47.9
Middle East			5.5	9.3	11.8	13.3	17.1	25.4
Israel					2.5	2.7	2.7	2.7
Jordan							3.1	5.2
Kuwait			5.2	5.2	5.2	6.4	6.6	6.6
United Arab Emirates			0.3	4.1	4.1	4.1	4.7	10.9
Africa							4.8	10.3
Egypt							4.8	10.3
Asia - Pacific	276.9	344.2	399.3	435.0	470.0	501.9	525.5	546.0
China			17.6	32.9	43.7	56.4	62.3	67.9
India		9.4	18.4	19.0	29.6	34.1	34.1	36.3
Indonesia		- ( - <b>-</b>	- <i>i</i> - <i>i</i>	2.7	4.1	5.4	10.1	11.1
Japan	225.4	241.3	249.4	256.1	259.3	260.8	265.5	271.2
Malaysia					3.5	5.2	5.2 4.7	5.2 6.2
Pakistan					3.6	7.9	4.7 8.2	6.2 8.2
Singapore South Korea	45.6	82.8	94.8	98.4	5.6 98.4	7.9 104.3	8.2 107.7	8.2 110.1
Taiwan	45.0 5.9	10.7	94.8 19.1	98.4 19.1	21.0	21.0	21.0	22.8
Thailand	5.9	10.7	19.1	6.8	6.8	6.8	6.8	6.8
Americas	11.5	34.5	188.9	232.2	233.9	240.0	242.8	244.0
Argentina	11.0	01.0	4.1	10.3	10.3	10.3	10.3	10.3
Brazil			7.7	7.7	7.7	13.8	14.9	14.9
Canada			10.3	10.3	10.3	10.3	10.3	10.3
Chile			5.3	5.7	5.7	5.7	7.3	7.5
Colombia								0.7
Dominican Republic		2.6	2.6	3.9	3.9	3.9	3.9	3.9
Jamaica								0.4
Mexico			15.5	19.5	20.7	20.7	20.7	20.7
United States (***)	11.5	31.9	143.4	174.9	175.3	175.3	175.3	175.3
World	334.8	451.9	762.6	873.4	914.7	958.2	991.1	1,037.5

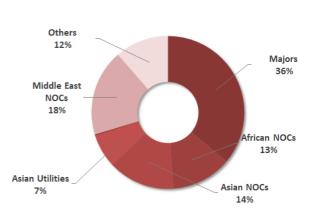
<sup>(\*)</sup> Nominal Capacity. Data source: Wood Mackenzie*LNG Tool.* <sup>(\*\*)</sup> Data source: Wood Mackenzie*LNG Tool.* <sup>(\*\*\*)</sup> The United States includes Puerto Rico.

#### LNG - Liquefaction and Regasification Capacity

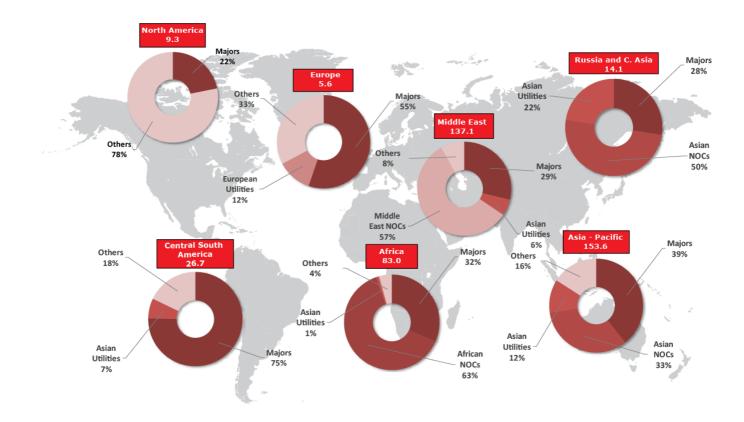
#### Liquefaction Capacity - Cluster of Companies



# 2016 World: 429.4 billion cubic metres



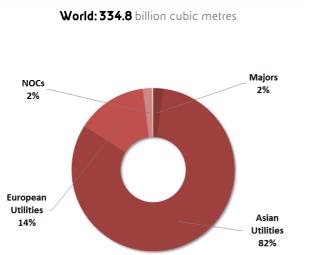
2016



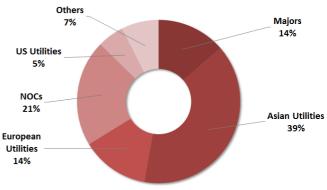
Majors: BP, Chevron, ConocoPhillips, Eni, ExxonMobil, Marathon, Shell, Statoil, Total. African NOCs: EGAS (Egyptian Natural Gas Holding Co.), EGPC (Egyptian General Petroleum Corporation), GEPetrol/Sonagas, National Lybian Oil Company (NOC), NNPC, Sonangol, Sonatrach. Asian NOCs: CNOOC, Gazprom, MRDC (Mineral Resources Dev. Co), Pertamina, Petronas, Sinopec. Asian Utilities: Chubu Electric, Hyunday, JILCO, Kansai Electric, KOGAS, Kyushu, LNG Japan Corporation, Marubeni, Mitsubishi, Mitsui, Osaka Gas, SK Corp., Tokyo Gas & Tokyo Electric. European Utilities: Gas Natural Fenosa, Engie. Middle East NOCs: ADNOC, Yemen Gas Co.

#### **Regasification Capacity – Cluster of Companies**

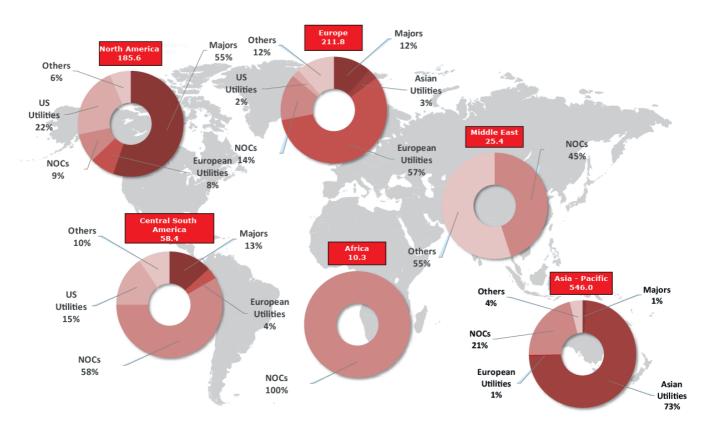
2000



2016
World: 1,037.5 billion cubic metres



2016

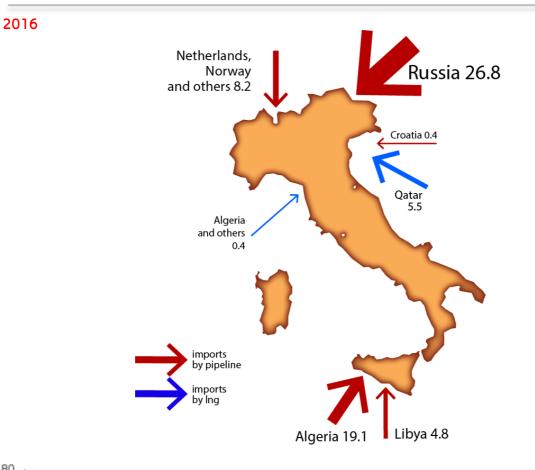


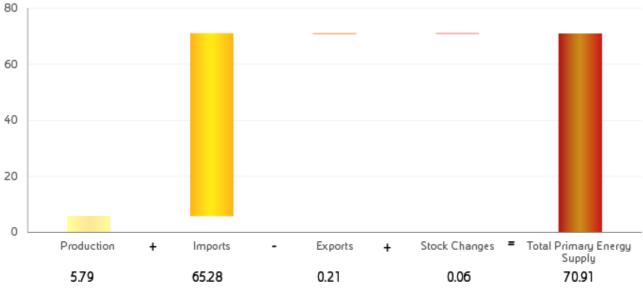
Majors: Anadarko, Apache, BP, Chevron, ConocoPhillips, Eni, ExxonMobil, Marathon Oil, Shell, Statoil, Total. NOCs: BPCL (Bharat Petroleum Corporation Limited), CFE, CNOOC, CPC, Egas, Enap, Enarsa, Gazprom, IOC (Indian Oil Corporation), Jordan Ministry of Energy & Mineral Resources, Kuwait National Petroleum Corp, Oman Oil, ONGC, Pertamina, Petrobras, PetroChina, Petronas, PTT, Qatar Petroleum, Sinopec, Sonangol, Sonatrach. Asian Utilities: Chubu Electric Power, Chugoku Electric Power, Egegaz, GAIL, Hiroshima Gas, Hokkaido Gas, HongKong & China Gas, HongKong Electric, Kansai Electric Power, KOGAS, K-Power, Kyushu Electric Power, Maharashtra Utility, Mitsui, Nippon Gas, NTPC, Oita Gas, Okinawa Electric Power, Osaka Gas, Perusahaan Gas Negara, Saibu Gas, Shenergy, Shikoku Electric Power, Shizouka Gas, Singapore LNG Corp, Toho Gas, Tokyo Electric Power, Tokyo Gas. European Utilities: Botas, Centrica, CPSA, Depa, DONG Energy, E.On, EconGas, EdF, Enagas, Enel, Engie, Essent, EVE, Gas Natural Fenosa, Gasunie, Iberdrola, Iren, RWE, SNAM, Union Fenosa Gas. US Utilities: AES, Cheniere, Dominion, Dow Chemical, El Paso, Excelerate Energy, Freeport LNG Development LP, Sempra Energy, Southern Union.

#### Italy <sup>(\*)</sup>

(billion cubic metres)

	2000	2005	2010	2012	2013	2014	2015	2016
Production	16.63	12.07	8.41	8.61	7.74	7.15	6.77	5.79
Imports	57.45	73.46	75.35	67.73	61.97	55.76	61.20	65.28
Exports	0.05	0.40	0.14	0.14	0.23	0.24	0.22	0.21
Stock Changes	-3.29	1.13	-0.52	-1.28	0.60	-0.76	-0.23	0.06
Total Primary Energy Supply	70.75	86.27	83.10	74.92	70.07	61.91	67.52	70.91





(\*) Data source: Italian Ministry for Economic Development. Gas volumes are quoted in Italian calorific value of 38.1 MJ/cm.

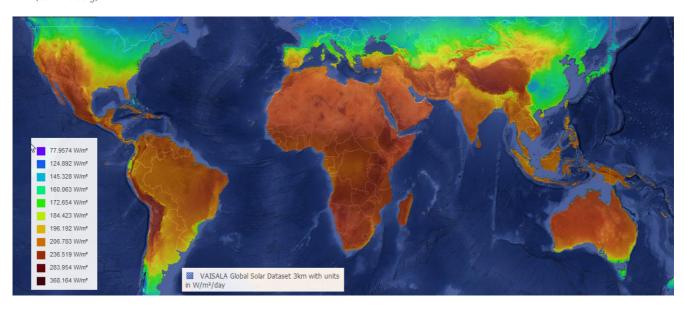
World Gas and Renewables Review 2017

# renewables

Solar Phothovoltaic Concentrated Solar Power Wind Biofuels

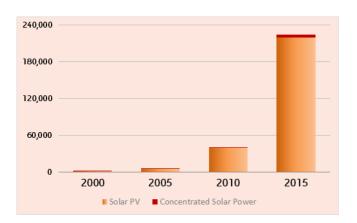
World Gas and Renewables Review 2017

#### Solar Resources Map (Global Horizontal Irradiance) (\*) (W/m<sup>2</sup>/day)



#### Solar Power Capacity

(MW)



#### Solar Power Generation

(GWh)

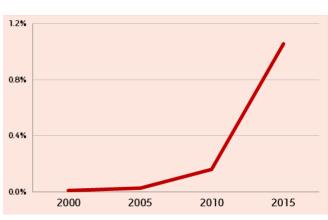


#### **Capacity Factor**

(hours per year - world average)



#### Share of Solar on Total Power Generation



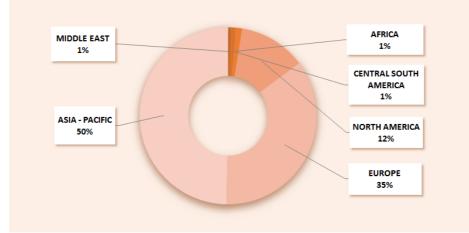
(\*) Source: IRENA: Global Atlas, Map Data: "Vaisala Global Solar Dataset, 2017", "2017 Google Hybrid Map".

#### Areas and Aggregates (\*)

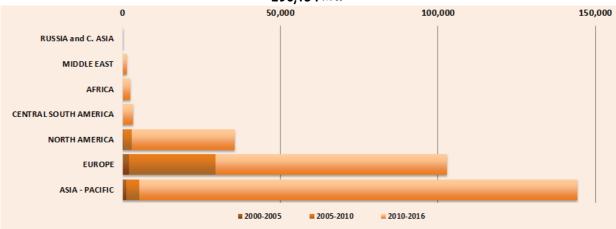
(MW)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Europe	201	2,336	29,682	70,012	81,017	88,788	97,427	103,114	5.8%	47.7%
Russia and Central Asia		_/	0	1	6	18	146	180	23.0%	
Middle East		1	83	277	510	805	1,004	1,377	37.2%	
Africa	23	52	228	420	705	1,541	1,705	2,547	49.4%	34.3%
Asia - Pacific	404	1,657	5,848	19,164	40,064	63,945	93,396	144,734	55.0%	44.4%
Americas	200	536	3,261	9,697	13,445	17,566	26,397	39,031	47.9%	39.1%
- North America	183	510	3,130	9,347	12,969	16,721	24,201	35,697	47.5%	39.0%
- Central South America	17	26	131	350	476	845	2,196	3,334	51.9%	39.2%
World	828	4,582	39,103	99,571	135,746	172,662	220,073	290,982	32.2%	1.8%
European Union	179	2,298	29,538	69,175	79,470	86,822	94,872	99,575	5.0%	48.4%
MENA	7	13	116	317	554	862	1,129	1,699	50.5%	41.2%
OECD	757	4,349	37,543	88,202	110,167	132,908	161,201	189,721	17.7%	41.2%
NON OECD	71	233	1,560	11,369	25,579	39,754	58,872	101,261	72.0%	57.4%
OPEC		2	24	72	128	183	250	541	116.8%	
NON OPEC	828	4,580	39,079	99,499	135,618	172,480	219,824	290,441	32.1%	44.2%

#### World Solar Photovoltaic Power Capacity (2016) 290,982 MW



World Solar Photovoltaic Power Capacity Growth (2000-2016) 290,154 MW



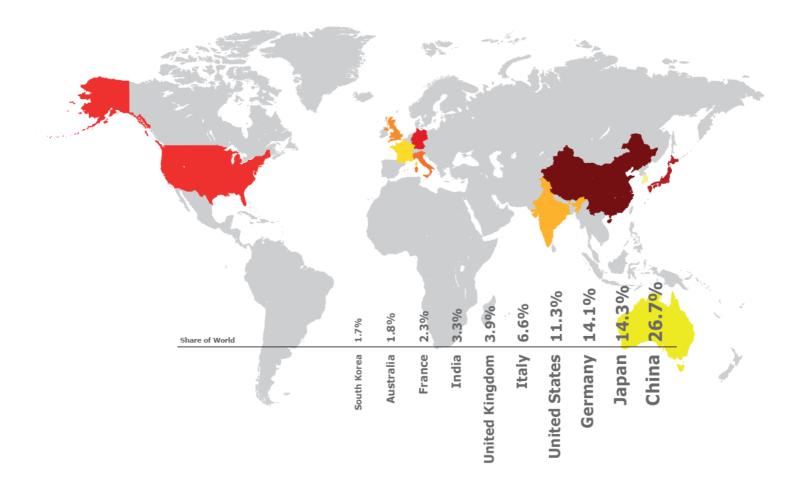
(\*) Data source: Eni's calculations on IRENA (2017), Renewable Energy Statistics 2017, The International Renewable Energy Agency, Abu Dhabi, data.

#### The World Top 10 (\*)

(MW)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
China	42	141	958	7,018	17,748	28,388	43,538	77,788	78.7%	60.0%
Japan	330	1,422	3,618	6,632	13,643	23,300	33,300	41,600	24.9%	35.3%
Germany	114	2,056	17,552	32,641	36,335	38,234	39,786	40,986	3.0%	44.5%
United States	176	493	2,909	8,137	11,759	14,878	21,684	32,954	52.0%	38.7%
Italy	19	34	3,592	16,785	18,185	18,594	18,892	19,245	1.9%	54.1%
United Kingdom	2	11	96	1,756	2,873	5,424	9,187	11,250	22.5%	71.5%
India		4	37	1,277	2,269	3,144	5,271	9,658	83.2%	
France	7	13	1,044	3,965	4,652	5,654	6,755	6,767	0.2%	53.7%
Australia	25	52	399	2,432	3,255	4,004	4,357	5,202	19.4%	39.6%
South Korea	4	14	650	959	1,467	2,481	3,615	5,000	38.3%	56.2%
The World Top 10	719	4,241	30,855	81,602	112,186	144,101	186,385	250,449	34.4%	44.2%
Rest of the World	109	342	8,248	17,969	23,560	28,561	33,689	40,533	20.3%	44.7%
World	828	4,582	39,103	99,571	135,746	172,662	220,073	290,982	32.2%	44.2%

#### The World Top 10 (2016)



#### Countries (\*)

(MW)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Europe	201	2,336	29,682	70,012	81,017	88,788	97,427	103,114	5.8%	47.7%
Albania		0	0	1	1	1	1	1	11.1%	
Austria	5	30	154	363	626	785	937	1,073	14.5%	39.9%
Belarus					1	4	13	51	288.5%	
Belgium		2	904	2,581	2,922	3,027	3,122	3,292	5.4%	
Bosnia Herzegovina		0	1	2	2	4	11	13	19.3%	
Bulgaria			25	1,013	1,020	1,026	1,029	1,032	0.3%	
Croatia				4	19	33	48	50	3.1%	
Cyprus		1	7	17	35	64	76	82	7.9%	
Czech Republic	0	1	1,727	2,022	2,064	2,068	2,075	2,073	-0.1%	86.1%
Denmark	1	3	7	399	571	607	782	790	1.1%	51.7%
Estonia			0	0	0	0	6	8	33.3%	
Finland	2	4	7	8	9	11	15	20	33.3%	15.5%
France	7	13	1,044	3,965	4,652	5,654	6,755	6,767	0.2%	53.7%
Macedonia			0	4	7	15	17	17	0.0%	
Germany	114	2,056	17,552	32,641	36,335	38,234	39,786	40,986	3.0%	44.5%
Greece		1	202	1,536	2,579	2,596	2,604	2,611	0.3%	
Hungary		0	2	12	35	77	168	225	33.9%	
Ireland		0	1	1	1	2	2	2	10.0%	
Italy	19	34	3,592	16,785	18,185	18,594	18,892	19,245	1.9%	54.1%
Latvia				0	0	0	2	3	66.7%	
Lithuania			0	7	68	69	69	71	2.9%	
Luxembourg		24	29	75	95	110	116	120	3.4%	
Malta		0	2	16	28	55	74	82	10.1%	
Moldova					0	1	1	2	90.0%	
Montenegro			0	0	0	1	3	3	14.8%	
Netherlands	13	51	90	369	746	1,048	1,515	1,955	29.0%	36.8%
Norway	6	7	9	10	11	13	15	25	65.8%	9.4%
Poland				1	2	27	108	199	84.3%	
Portugal	1	2	134	238	296	415	447	460	2.9%	46.7%
Romania			0	41	761	1,293	1,326	1,372	3.5%	
Serbia		0	0	0	3	6	12	, 12	0.0%	
Slovakia			19	513	533	533	533	540	1.3%	
Slovenia			12	142	187	223	238	257	7.9%	
Spain	12	60	3,921	4,646	4,785	4,787	4,856	4,871	0.3%	45.6%
Sweden	3	4	11	24	43	60	104	140	34.6%	27.1%
Switzerland	16	28	125	437	756	1,061	1,394	1,644	17.9%	33.6%
Turkey	0	2	6	12	18	40	249	833	234.3%	75.8%
Ukraine	2	-	3	371	748	819	839	938	11.8%	, 5.070
United Kingdom	2	11	96	1,756	2,873	5,424	9,187	11,250	22.5%	71.5%

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Russia and Central Asia			0	1	6	18	146	180	23.0%	
Russia				0	1	7	62	87	40.5%	
Armenia			0	0	0	1	2	2	0.0%	
Azerbaijan			0	1	3	4	24	30	25.8%	
Kazakhstan					1	5	57	57	0.4%	
Uzbekistan					1	1	1	3	200.0%	

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Middle East		1	83	277	510	805	1,004	1,377	37.2%	
Bahrain			0	0	0	5	5	5	0.0%	
Iran								15		
Iraq					30	37	37	37	0.0%	
Israel		٦	70	237	420	670	766	816	6.5%	
Jordan		0	1	1	3	9	26	295	1034.6%	
Kuwait					0	2	3	31	853.1%	
Lebanon			0	1	2	4	10	11	13.7%	
Oman					1	1	1	1	0.0%	
Qatar				3	3	5	5	6	22.4%	
Saudi Arabia				19	25	36	48	48	0.0%	
United Arab Emirates			11	13	23	29	32	38	18.8%	
Yemen			1	1	2	5	60	61	1.7%	
Others Middle East				1	1	3	12	14	16.7%	

CACD

Countries (\*)

(MW)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Africa	23	52	228	420	705	1,541	1,705	2,547	49.4%	34.3%
Algeria						1	49	219	346.2%	
Angola		1	7	10	11	12	13	13	3.9%	
Benin	0	0	0	1	1	1	5	5	0.0%	27.7%
Cameroon		0	1	3	4	б	7	9	21.6%	
Congo Rep				0	0	0	1	1	0.0%	
Egypt	0	1	15	15	15	15	25	39	56.0%	45.2%
Ethiopia	1	3	5	11	23	33	58	70	20.9%	29.6%
Ghana			1	5	8	8	8	28	266.7%	
Guinea			1	1	1	1	2	2	5.9%	
Kenya	4	9	11	16	20	22	24	26	8.5%	12.5%
Libya		1	4	5	5	5	5	5	0.0%	
Madagascar		0	2	3	5	7	9	11	22.2%	
Mauritania				0	18	18	18	35	92.2%	
Morocco	7	10	14	15	15	20	20	22	10.6%	7.7%
Mozambique				2	5	7	10	13	30.0%	
Namibia	1	2	4	11	13	16	27	32	18.8%	24.1%
Niger	1	1	2	4	5	б	7	8	14.3%	18.9%
Nigeria				15	15	16	17	18	8.2%	
Rwanda			0	0	0	9	9	9	2.2%	
Senegal	1	2	3	6	7	10	11	54	390.9%	28.3%
Somalia					0	1	1	1	0.0%	
South Africa	8	14	23	72	280	1,034	1,039	1,549	49.1%	39.2%
Sudan				5	5	5	8	9	15.8%	
Tanzania		2	4	5	8	9	9	11	17.8%	
Tunisia			0	5	9	17	27	38	42.6%	
Uganda	0	3	15	17	19	20	22	34	54.5%	37.8%
Zambia		1	1	1	2	2	3	3	20.0%	
Zimbabwe		1	2	3	4	4	б	7	19.7%	
Others Africa	1	3	113	192	209	240	267	278	3.9%	48.4%

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Asia - Pacific	404	1,657	5,848	19,164	40,064	63,945	93,396	144,734	55.0%	44.4%
Afghanistan					1	1	1	1	0.0%	
Australia	25	52	399	2,432	3,255	4,004	4,357	5,202	19.4%	39.6%
Bangladesh		3	39	76	110	141	173	191	10.2%	
Brunei			1	1	1	1	1	1	0.0%	
China	42	141	958	7,018	17,748	28,388	43,538	77,788	78.7%	60.0%
India		4	37	1,277	2,269	3,144	5,271	9,658	83.2%	
Indonesia			0	4	9	9	9	80	788.9%	
Japan	330	1,422	3,618	6,632	13,643	23,300	33,300	41,600	24.9%	35.3%
Malaysia			13	32	138	203	262	333	26.9%	
Mongolia		0	5	5	5	5	5	5	2.0%	
Myanmar			0	2	5	8	12	16	32.2%	
Nepal	1	4	11	20	25	32	32	32	0.0%	24.2%
New Zealand			3	4	7	19	38	48	26.6%	
Pakistan			9	46	100	165	230	410	78.6%	
Philippines		1	1	1	1	22	132	765	480.0%	
Singapore			4	10	15	33	60	126	111.2%	
South Korea	4	14	650	959	1,467	2,481	3,615	5,000	38.3%	56.2%
Sri Lanka	1	9	13	16	5	15	30	30	0.0%	25.3%
Taiwan	0	1	22	223	392	620	842	1,210	43.7%	80.0%
Thailand			49	377	824	1,299	1,420	2,149	51.4%	
Vietnam						4	4	7	75.0%	
Others Asia - Pacific	1	5	16	31	44	52	66	83	26.3%	29.1%

#### Countries (\*)

(MW)

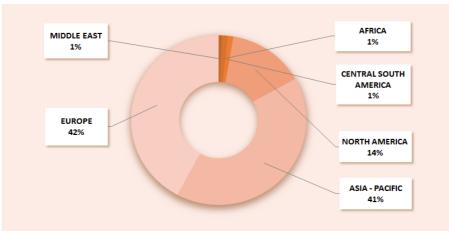
	2000	2005	2010	2012	2013	2014	2015	2016	∆ y/y (2016-2015)	CAGR (2016-2000)
Americas	200	536	3,261	9,697	13,445	17,566	26,397	39,031	47.9%	39.1%
Argentina			-1	6	8	8	9	9	0.0%	
Barbados		0	1	2	3	7	9	19	111.1%	
Belize		0	1				8			
	0	1	3	4	4 6	5 11	-	8	0.0%	26 70/
Bolivia	0	I	5	4	-		13	13	0.0%	26.3%
Brazil	7		1	2	5	15	23	23	0.4%	( = = = )
Canada	7	17	221	1,210	1,210	1,843	2,517	2,743	9.0%	45.2%
Chile	2		2	2	15	218	848	1,603	89.0%	
Costa Rica	0	1	2	3	4	5	6	6	0.0%	29.7%
Cuba				1	11	22	24	27	11.3%	
Dominican Republic					I (	5	13	23	78.7%	
Ecuador			-	0	4	28	27	28	0.4%	
El Salvador	0	1	2	3	5	7	16	19	13.5%	38.6%
Guatemala	0	0	1	2	3	10	93	93	0.0%	53.3%
Haiti		_		1	1	1	1	1	20.0%	
Honduras	2	3	4	5	5	5	393	414	5.3%	41.5%
Jamaica		0	1	2	2	4	6	26	317.5%	
Mexico	14	16	29	53	67	99	170	370	117.6%	22.7%
Nicaragua	0	1	4	б	7	9	10	10	0.0%	33.6%
Panama	0	1	2	3	4	6	49	92	87.0%	46.7%
Peru				80	80	96	96	96	0.0%	
Suriname			0	0	1	6	6	6	0.0%	
Trinidad and Tobago	0	2	3	3	3	3	3	3	0.0%	22.6%
Uruguay			0	1	2	4	65	86	32.8%	
United States	176	493	2,909	8,137	11,759	14,878	21,684	32,954	52.0%	38.7%
Venezuela			2	2	2	3	5	3	-24.4%	
Others Americas	0	1	76	165	234	268	303	357	18.0%	55.7%

#### Areas and Aggregates (\*)

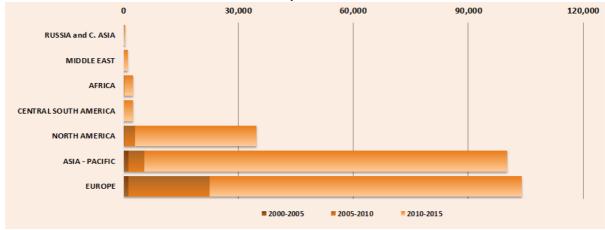
(GWh)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015) <sup>**</sup>	CAGR (2016-2000) <sup>**</sup>
Europe	129	1,481	22,600	68,015	82,000	93,630	104,163		11.2%	56.2%
Russia and Central Asia					2	164	388		136.6%	
Middle East			70	370	541	899	1,172		30.4%	
Africa	3	7	222	268	336	1,421	2,607		83.5%	57.0%
Asia - Pacific	614	1,884	6,085	20,135	40,546	68,646	100,714		46.7%	40.5%
Americas	232	601	3,413	10,404	16,974	25,357	37,513		47.9%	40.4%
- North America	199	541	3,317	10,067	16,357	24,035	34,986	53,163	52.0%	41.8%
- Central South America	33	60	96	337	617	1,322	2,527		91.1%	33.5%
World	978	3,973	32,390	99,192	140,399	190,117	246,557		29.7%	44.6%
European Union	118	1,460	22,506	67,379	80,918	92,320	102,328		10.8%	57.0%
MENA			277	612	794	1,171	1,524		30.1%	
OECD	725	3,616	30,993	87,947	116,184	147,561	183,270	218,282	19.1%	42.9%
NON OECD	253	357	1,397	11,245	24,215	42,556	63,287		48.7%	44.5%
OPEC			1	7	58	84	156		85.7%	
NON OPEC	978	3,973	32,389	99,185	140,341	190,033	246,401		29.7%	44.6%

#### World Solar Photovoltaic Power Generation (2015) 246,557 GWh



World Solar Photovoltaic Power Generation Growth (2000-2015) 245,579 GWh

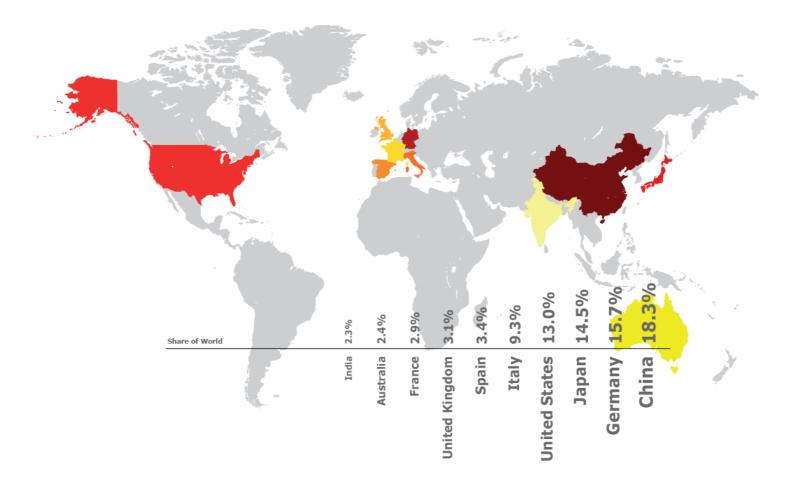


<sup>(\*)</sup> Data source: Eni's calculations on *IEA Extended Balances* ° OECD/International Energy Agency, 2017 data.
<sup>(\*\*)</sup> When 2016 data is missing, the figure refers to the latest available years.

# The World Top 10<sup>(\*)</sup> (GWh)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015) <sup>**</sup>	CAGR (2016-2000) <sup>**</sup>
China	22	84	699	6,350	15,451	29,195	45,225		54.9%	66.3%
Germany	60	1,282	11,729	26,380	31,010	36,056	38,726	38,171	-1.4%	49.7%
Japan	347	1,493	3,800	6,963	14,279	24,506	35,858	43,846	22.3%	35.3%
United States	183	524	3,063	9,186	14,858	21,915	32,091	50,103	56.1%	42.0%
Italy	18	31	1,906	18,862	21,589	22,306	22,942	22,899	-0.2%	56.3%
Spain	18	41	6,425	8,193	8,327	8,218	8,266	8,137	-1.6%	46.5%
United Kingdom	1	8	41	1,352	2,008	4,040	7,561	10,292	36.1%	78.1%
France	5	11	620	4,016	4,735	5,913	7,259	8,257	13.7%	58.9%
Australia	38	78	422	2,557	3,823	4,854	5,963	6,832	14.6%	38.3%
India		3	113	2,099	3,433	4,909	5,636		14.8%	
The World Top 10	692	3,555	28,818	85,958	119,513	161,912	209,527		29.4%	46.4%
Rest of the World	286	418	3,572	13,234	20,886	28,205	37,030		31.3%	35.5%
World	978	3,973	32,390	99,192	140,399	190,117	246,557		29.7%	44.6%

#### The World Top 10 (2015)



(\*) Data source: IEA Extended Balances © OECD/International Energy Agency, 2017.

 $^{(\ast\ast)}$  When 2016 data is missing, the figure refers to the latest available years.

#### Countries (\*)

(GWh)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015) <sup>**</sup>	CAGR (2016-2000) <sup>**</sup>
Europe	129	1,481	22,600	68,015	82,000	93,630	104,163		11.2%	56.2%
Austria	3	21	89	337	582	785	937	1,037	10.7%	44.1%
Belarus						1	8		700.0%	
Belgium		1	560	2,148	2,644	2,883	3,065	2,940	-4.1%	
Bulgaria			15	814	1,361	1,252	1,383		10.5%	
Croatia				2	11	35	57		62.9%	
Cyprus		1	7	22	47	84	126		50.0%	
Czech Republic			616	2,149	2,033	2,123	2,264	2,132	-5.8%	
Denmark	1	2	б	104	518	596	604	744	23.2%	51.2%
Finland	2	3	5	б	б	8	9	14	55.6%	12.9%
France	5	11	620	4,016	4,735	5,913	7,259	8,257	13.7%	58.9%
Macedonia				3	9	14	23		64.3%	
Germany	60	1,282	11,729	26,380	31,010	36,056	38,726	38,171	-1.4%	49.7%
Greece		1	158	1,694	3,648	3,792	3,900	3,930	0.8%	
Hungary			1	8	25	56	123	200	62.6%	
reland				1	1	1	2	5	150.0%	
Italy	18	31	1,906	18,862	21,589	22,306	22,942	22,899	-0.2%	56.3%
Latvia			,	,	,	,	,	, 1		
Lithuania				2	45	73	73		0.0%	
Luxembourg		18	21	38	74	95	104	98	-5.8%	
Malta			1	17	29	68	93		36.8%	
Voldova				.,	-	1	2		100.0%	
Netherlands	8	35	56	226	487	785	1,122	1,555	38.6%	39.0%
Poland	0	55	50	1	10,	7	57	124	117.5%	55.676
Portugal	1	3	211	393	479	, 627	796	818	2.8%	52.1%
Romania	1	5	211	8	420	1,616	1,982	010	22.6%	J2.170
Serbia			0	0		6	1,902	12	0.0%	
Slovakia			17	424	588	597	506	532	5.1%	
Slovania			17	163	215	257	274	267		
	10	( ]							-2.6%	16 50
Spain Swister	18 1	41	6,425	8,193 19	8,327	8,218	8,266 97	8,137	-1.6%	46.5%
Sweden		2	9		35	47		143	47.4%	36.4%
Switzerland	11	21	94	300	500	842	1,119	1,300	16.2%	34.8%
Turkey					57.0	17	194	972	401.0%	
Ukraine			<i>(</i> <b>-</b>	333	570	429	477		11.2%	
United Kingdom	1	8	41	1,352	2,008	4,040	7,561	10,292	36.1%	78.1%
	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015) <sup>**</sup>	CAGR (2016-2000) <sup>**</sup>
Russia and Central Asia					2	164	388		136.6%	
Russia						160	335	446	33.1%	
Armenia							1			
Azerbaijan					1	3	5		66.7%	
Kazakhstan					1	1	47		4600%	
	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015) <sup>**</sup>	CAGR (2016-2000) <sup>**</sup>
									(2010-2013)	(2010-2000)
Middle East Iran			70	370	541	899	<b>1,172</b> 1		30.4%	
Israel			70	369	494	840	1,115	1,714	53.7%	
			70	505	777	040		1,7 14	55.7%	
lordan							2			

(\*) Data source: *IEA Extended Balances* © OECD/International Energy Agency, 2017.

(\*\*) When 2016 data is missing, the figure refers to the latest available years.

0.0%

-8.6%

1 1 1 46 58 53

1

Saudi Arabia

#### Countries (\*)

(GWh)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2015-2014)	CAGR (2015-2000)
Africa	3	7	222	268	336	1,421	2,607		83.5%	57.0%
Algeria							58			
Benin							5			
Egypt			206	237	242	247	253		2.4%	
Gabon				3	2	2	2		0.0%	
Ghana					3	4	3		-25.0%	
Kenya				1	1	1	1		0.0%	
Niger		2	3	0	4	4	4		0.0%	
Senegal	2	4	3	4	4	4	4		0.0%	4.7%
South Africa					46	1,086	2,183		101.0%	
Tanzania			7	13	15	18	21		16.7%	
Tunisia			1	5	11	25	41		64.0%	
Others Africa	1	1	2	5	8	30	32		6.7%	26.0%

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015) <sup>**</sup>	CAGR (2016-2000) <sup>**</sup>
Asia - Pacific	614	1,884	6,085	20,135	40,546	68,646	100,714		46.7%	40.5%
Australia	38	78	422	2,557	3,823	4,854	5,963	6,832	14.6%	38.3%
Bangladesh					136	145	154		6.2%	
Brunei				2	2	2	2		0.0%	
China	22	84	699	6,350	15,451	29,195	45,225		54.9%	66.3%
Hong Kong					1	1	1		0.0%	
India		3	113	2,099	3,433	4,909	5,636		14.8%	
Indonesia			1	3	5	7	5		-28.6%	
Japan	347	1,493	3,800	6,963	14,279	24,506	35,858	43,846	22.3%	35.3%
Malaysia				47	141	227	273		20.3%	
New Zealand			4	5	7	17	34	52	52.9%	
Philippines		2	1	1	1	17	139		717.6%	
Singapore			5	13	17	36	64		77.8%	
South Korea	5	15	772	1,103	1,605	2,557	3,880	5,140	32.5%	54.3%
Sri Lanka	8	14	17	19	20	20	21		5.0%	6.6%
Taiwan		1	23	276	338	552	876		58.7%	
Thailand			20	493	1,080	1,385	2,378		71.7%	
Others Asia - Pacific	194	194	208	204	207	216	205		-5.1%	0.4%

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015) <sup>**</sup>	CAGR (2016-2000) <sup>**</sup>
Americas	232	601	3,413	10,404	16,974	25,357	37,513		47.9%	40.4%
Argentina				8	15	16	15		-6.3%	
Bolivia			3	3	3	б	11		83.3%	
Brazil					5	16	59		268.8%	
Canada	16	17	254	881	1,499	2,120	2,895	3,060	5.7%	38.9%
Chile					8	480	1,261	2,550	102.2%	
Costa Rica				2	3	3	3		0.0%	
Cuba				5	9	20	33		65.0%	
Dominican Republic					77	142	225		58.5%	
Ecuador					4	16	36		125.0%	
Guatemala						7	149		2028.6%	
Mexico	7	9	31	69	106	221	246	418	69.9%	29.1%
Panama						1	16		1500.0%	
Peru				60	197	199	230		15.6%	
Uruguay						4	49		1125.0%	
United States	183	524	3,063	9,186	14,858	21,915	32,091	50,103	56.1%	42.0%
Others Americas	26	51	62	190	190	191	194	,	1.6%	14.3%

(\*) Data source: IEA Extended Balances © OECD/International Energy Agency, 2017.

(\*\*) When 2016 data is missing, the figure refers to the latest available years.

#### Areas and Aggregates (\*)

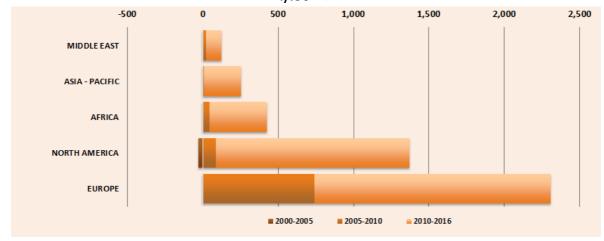
(MW)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2010)
Europe			739	2,007	2,308	2,309	2,309	2,309	0.0%	20.9%
Middle East			23	23	123	123	123	124	0.1%	31.9%
Africa			45	65	65	65	375	425	13.3%	45.3%
Asia - Pacific		0	6	19	76	251	251	253	1.0%	88.2%
Americas	419	388	473	476	1,286	1,667	1,758	1,758	0.0%	24.5%
- North America	419	388	473	476	1,286	1,667	1,758	1,758	0.0%	24.5%
World	419	388	1,286	2,591	3,859	4,416	4,816	4,869	1.1%	24.8%
European Union			739	2,007	2,307	2,308	2,308	2,308	0.0%	20.9%
MENA			68	88	188	188	348	349	0.0%	31.2%
OECD	419	388	1,221	2,492	3,604	3,986	4,077	4,079	0.1%	22.3%
NON OECD			65	99	255	430	740	790	6.8%	51.6%
OPEC			42	42	142	142	142	142	0.1%	22.4%
NON OPEC	419	388	1,244	2,549	3,716	4,273	4,674	4,727	1.1%	24.9%

#### World Concentrated Solar Power Capacity (2016) 4,869 MW



World Concentrated Solar Power Capacity Growth (2000-2016) 4,450 MW



(\*) Data source: Eni's calculations on IRENA (2017), Renewable Energy Statistics 2017, The International Renewable Energy Agency, Abu Dhabi, data.

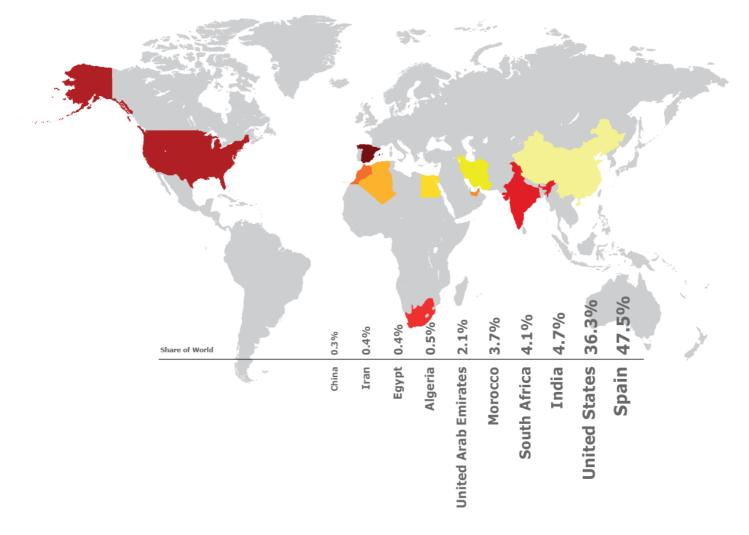
#### World Gas and Renewables Review 2017

#### The World Top 10 (\*)

(MW)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2010)
Spain			732	2,000	2,300	2,300	2,300	2,300	0.0%	21.0%
United States	419	388	473	476	1,286	1,667	1,758	1,758	0.0%	24.5%
India				4	54	229	229	229	0.0%	
South Africa			0	0	0	0	150	200	33.3%	255.0%
Morocco			20	20	20	20	180	180	0.0%	44.2%
United Arab Emirates					100	100	100	100	0.1%	
Algeria			25	25	25	25	25	25	0.0%	0.0%
Egypt				20	20	20	20	20	0.0%	
Iran			17	17	17	17	17	17	0.0%	0.0%
China			3	8	14	14	14	14	0.0%	31.4%
The World Top 10	419	388	1,270	2,570	3,836	4,392	4,793	4,843	1.0%	25.0%
Rest of the World		0	16	21	23	24	24	26	11.0%	8.8%
World	419	388	1,286	2,591	3,859	4,416	4,816	4,869	1.1%	24.8%

#### The World Top 10 (2016)



#### Countries (\*)

(MW)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2010)
Europe			739	2,007	2,308	2,309	2,309	2,309	0.0%	20.9%
Germany			2	2	2	2	2	2	0.0%	0.0%
Italy			5	5	5	6	6	6	0.0%	4.4%
Spain			732	2,000	2,300	2,300	2,300	2,300	0.0%	21.0%
Turkey				-	1	1	1	1	0.0%	

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2010)
Middle East			23	23	123	123	123	124	0.1%	31.9%
Iran			17	17	17	17	17	17	0.0%	0.0%
Israel			б	б	б	б	б	б	0.0%	0.0%
United Arab Emirates					100	100	100	100	0.1%	

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2010)
Africa			45	65	65	65	375	425	13.3%	45.3%
Algeria			25	25	25	25	25	25	0.0%	0.0%
Egypt				20	20	20	20	20	0.0%	
Morocco			20	20	20	20	180	180	0.0%	44.2%
South Africa					0	0	150	200	33.3%	

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2010)
Asia - Pacific		0	6	19	76	251	251	253	1.0%	88.2%
Australia		0	3	3	3	3	3	6	86.7%	11.0%
China			3	8	14	14	14	14	0.0%	31.4%
India				4	54	229	229	229	0.0%	
Thailand				5	5	5	5	5	0.0%	

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2010)
Americas	419	388	473	476	1,286	1,667	1,758	1,758	0.0%	24.5%
United States	419	388	473	476	1,286	1,667	1,758	1,758	0.0%	24.5%

## Areas and Aggregates (\*)

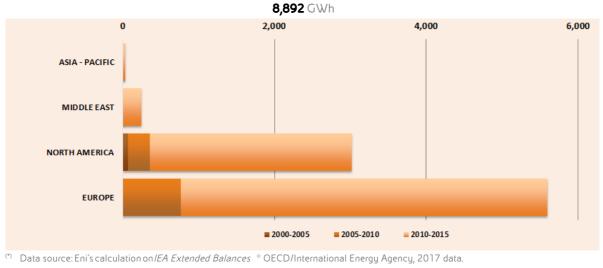
(GWh)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015) <sup>**</sup>	CAGR (2016-2000) <sup>**</sup>
Europe			761	3,775	4,770	5,455	5,593	5,506	-1.6%	
Middle East					54	243	243		0.0%	
Africa							6			
Asia - Pacific		1	6	11	29	38	32		-15.8%	
Americas	526	596	879	959	1,014	2,688	3,544	5,533	56.1%	15.8%
- North America	526	596	879	959	1,014	2,688	3,544	5,533	56.1%	15.8%
World	526	597	1,646	4,745	5,867	8,424	9,418		11.8%	21.2%
European Union			761	3,775	4,770	5,455	5,593		2.5%	
MENA					54	243	249		2.5%	
OECD	526	597	1,644	4,736	5,787	8,147	9,142	11,045	20.8%	21.0%
NON OECD			2	9	80	277	276		-0.4%	
OPEC					54	243	243		0.0%	
NON OPEC	526	597	1,646	4,745	5,813	8,181	9,175		12.2%	21.0%







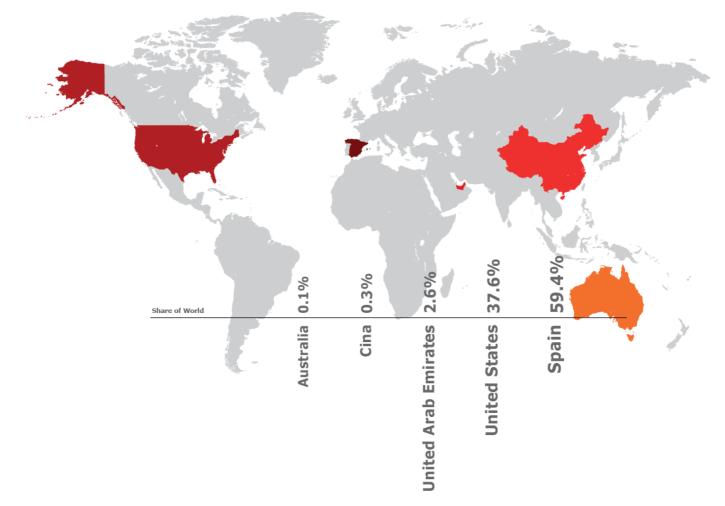


<sup>(\*\*)</sup> When 2016 data is missing, the figure refers to the latest available years.

# The World Top 5 <sup>(\*)</sup> (GWh)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015) <sup>**</sup>	CAGR (2016-2000) <sup>**</sup>
United States	526	596	879	959	1,014	2,688	3,544	5,533	56.1%	15.8%
Spain			761	3,775	4,770	5,455	5,593	5,506	-1.6%	
United Arab Emirates					54	243	243		0.0%	
China			2	9	26	34	27		-20.6%	
Australia		1	4	2	3	4	5	6	25.0%	
The World Top 5	526	597	1,646	4,745	5,867	8,424	9,412		11.7%	21.2%
Rest of the World							6			
World	526	597	1,646	4,745	5,867	8,424	9,418		11.8%	21.2%

### The World Top 5 (2015)



(\*) Data source: IEA Extended Balances © OECD/International Energy Agency, 2017.

 $^{(**)}$  When 2016 data is missing, the figure refers to the latest available years.

### Countries (\*)

(GWh)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Europe			761	3,775	4,770	5,455	5,593	5,506	-1.6%	
Spain			761	3,775	4,770	5,455	5,593	5,506	-1.6%	

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2015-2014)	CAGR (2015-2000)
Middle East					54	243	243		0.0%	
United Arab Emirates					54	243	243		0.0%	

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2015-2014)	CAGR (2015-2000)
Africa							6			
Могоссо							б			

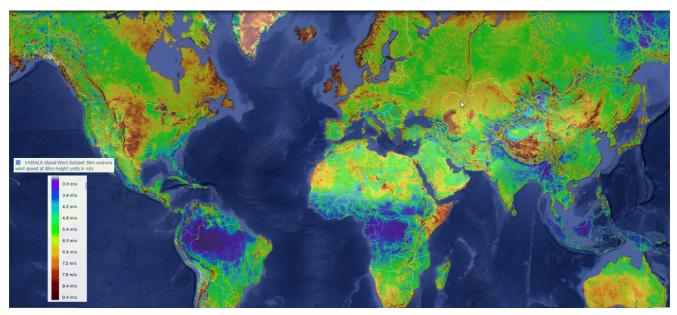
	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015) <sup>**</sup>	CAGR (2016-2000) <sup>**</sup>
Asia - Pacific		1	6	11	29	38	32		-15.8%	
Australia		1	4	2	3	4	5	6	20.0%	
China			2	9	26	34	27		-20.6%	

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Americas	526	5 <b>9</b> 6	879	959	1,014	2,688	3,544	5,533	56.1%	15.8%
United States	526	596	879	959	1,014	2,688	3,544	5,533	56.1%	15.8%

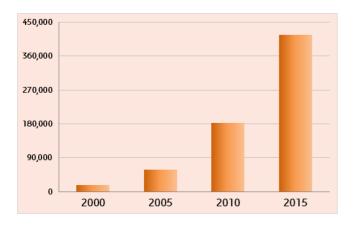
(\*) Data source: IEA Extended Balances © OECD/International Energy Agency, 2017.

 $^{\scriptscriptstyle(**)}$  When 2016 data is missing, the figure refers to the latest available years.

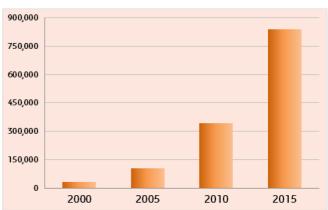
#### Wind Resources Map (Average Wind Speed)<sup>(\*)</sup> (m/s)





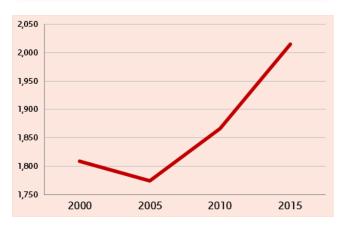


#### Wind Power Generation (GWh)

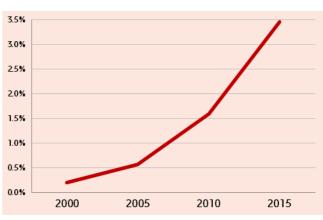


## **Capacity Factor**

(hours per year - world average)



### Share of Wind on Total Power Generation



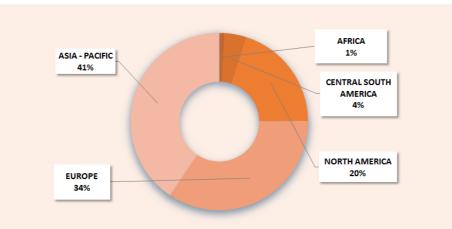
(\*) Source: IRENA: Global Atlas, Map Data: "Vaisala Global Wind Dataset, 2017", "2017 Google Hybrid Map".

## Areas and Aggregates (\*)

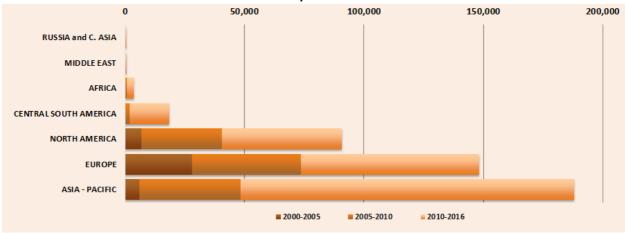
(MW)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Europe	12,776	40,779	86,437	109,541	122,060	134,220	147,544	161,093	9.2%	17.2%
Russia and Central Asia	3	13	78	79	. 84	132	152	247	62.3%	31.7%
Middle East	12	55	102	107	110	130	247	322	30.5%	22.7%
Africa	133	247	894	1,158	1,772	2,432	3,353	3,862	15.2%	23.4%
Asia - Pacific	1,829	7,839	50,277	88,771	105,202	128,716	165,535	189,803	14.7%	33.7%
Americas	2,576	9,604	45,112	72,378	74,773	85,049	99,004	111,787	12.9%	26.6%
- North America	2,469	9,383	43,102	66,876	67,774	73,926	83,787	93,212	11.2%	25.5%
- Central South America	107	221	2,009	5,501	6,998	11,122	15,216	18,574	22.1%	38.0%
World	17,330	58,535	182,900	272,035	304,000	350,677	415,833	467,113	12.3%	1.8%
European Union	12,736	40,399	84,566	106,320	118,073	129,087	141,483	153,717	8.6%	16.8%
MENA	145	283	958	1,122	1,392	1,757	2,081	2,261	8.7%	18.7%
OECD	15,466	52,121	134,046	181,360	194,777	213,973	238,332	262,792	10.3%	19.4%
NON OECD	1,864	6,414	48,854	90,675	109,223	136,704	177,501	204,321	15.1%	34.1%
OPEC	11	50	98	134	171	204	204	218	7.1%	20.7%
NON OPEC	17,319	58,486	182,802	271,901	303,829	350,474	415,629	466,894	12.3%	22.9%

#### World Wind Power Capacity (2016) 467,113 MW



#### World Wind Power Capacity Growth (2000-2016) 449,783 MW



(\*) Data source: Eni's calculation on IRENA (2017), Renewable Energy Statistics 2017, The International Renewable Energy Agency, Abu Dhabi, data.

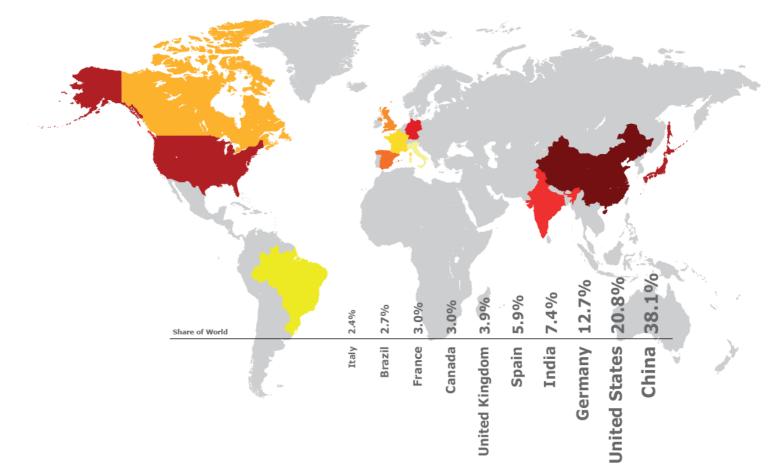
#### World Gas and Renewables Review 2017

## The World Top 10 (\*)

(MW)

	2000	2005	2010	2012	2013	2014	2015	2016	∆ y/y (2016-2015)	CAGR (2016-2000)
China	341	1,269	31,468	63,129	76,771	96,619	129,638	148,983	14.9%	46.2%
United States	2,377	8,706	39,135	59,075	59,973	64,232	72,573	81,312	12.0%	24.7%
Germany	6,097	18,375	27,180	31,304	34,660	39,193	44,670	49,747	11.4%	14.0%
India	1,267	4,430	13,065	18,421	20,150	22,465	25,088	28,875	15.1%	21.6%
Spain	2,206	9,918	20,693	22,789	22,958	22,975	22,943	22,992	0.2%	15.8%
United Kingdom	435	1,565	5,401	8,899	11,212	13,037	14,291	15,200	6.4%	24.9%
Canada	92	677	3,967	7,801	7,801	9,694	11,214	11,900	6.1%	35.5%
France	38	690	5,912	7,517	8,202	9,068	10,217	11,681	14.3%	43.0%
Brazil	22	29	927	2,508	3,456	5,962	8,726	10,740	23.1%	47.2%
Italy	363	1,635	5,794	8,102	8,542	8,683	9,137	9,257	1.3%	22.4%
The World Top 10	13,238	47,294	153,542	229,545	253,725	291,928	348,497	390,686	12.1%	23.6%
Rest of the world	4,092	11,242	29,358	42,490	50,275	58,749	67,336	76,427	13.5%	20.1%
World	17,330	58,535	182,900	272,035	304,000	350,677	415,833	467,113	12.3%	22.9%

### The World Top 10 (2016)



(\*) Data source: IRENA (2017), Renewable Energy Statistics 2017, The International Renewable Energy Agency, Abu Dhabi.

#### Countries (\*)

(MW)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Europe	12,776	40,779	86,437	109,541	122,060	134,220	147,544	161,093	9.2%	17.2%
Austria	50	778	981	1,316	1,645	2,110	2,489	2,632	5.7%	28.1%
Belarus		1	2	2	2	3	43	68	58.3%	
Belgium	14	167	912	1,370	1,792	1,930	2,176	2,260	3.9%	37.4%
Bulgaria		8	488	677	683	700	700	700	0.0%	
Croatia		6	79	180	254	339	418	418	0.0%	
Cyprus			82	147	147	147	158	158	0.0%	
Czech Republic	1	22	213	258	262	278	281	281	-0.2%	42.2%
Denmark	2,390	3,127	3,802	4,163	4,810	4,887	5,076	5,242	3.3%	5.0%
Estonia		31	108	266	248	275	300	303	1.0%	
Finland	38	82	197	257	447	627	1,005	1,630	62.2%	26.5%
France	38	690	5,912	7,517	8,202	9,068	10,217	11,681	14.3%	43.0%
Macedonia						37	37	37	0.0%	
Germany	6,097	18,375	27,180	31,304	34,660	39,193	44,670	49,747	11.4%	14.0%
Greece	226	491	1,298	1,753	1,809	1,978	2,091	2,374	13.5%	15.8%
Hungary		17	293	325	329	329	329	329	0.0%	
Iceland					2	3	3	3	0.0%	
Ireland	119	517	1,374	1,764	1,941	2,211	2,440	3,046	24.8%	22.5%
Italy	363	1,635	5,794	8,102	8,542	8,683	9,137	9,257	1.3%	22.4%
Latvia	2	26	30	59	67	69	69	69	0.0%	24.8%
Lithuania		1	133	275	279	288	436	493	13.1%	
Luxembourg	14	35	44	58	58	58	64	64	0.0%	10.0%
Moldova					1	1	1	1	0.0%	
Netherlands	447	1,224	2,237	2,433	2,713	2,865	3,391	4,206	24.0%	15.0%
Norway	13	265	425	705	818	863	867	883	1.8%	30.2%
Poland	4	121	1,108	2,564	3,429	3,836	4,886	5,807	18.9%	57.6%
Portugal	83	1,064	3,796	4,412	4,610	4,856	4,937	5,303	7.4%	29.7%
Romania		ı	389	1,822	2,773	3,244	3,130	3,182	1.7%	
Serbia				1	1	1	10	10	0.0%	
Slovakia		5	3	3	5	3	4	4	0.0%	
Slovenia					4	4	5	5	0.0%	
Spain	2,206	9,918	20,693	22,789	22,958	22,975	22,943	22,992	0.2%	15.8%
Sweden	209	493	2,019	3,607	4,194	5,097	5,840	6,333	8.4%	23.8%
Switzerland	3	12	42	49	60	60	60	76	25.8%	22.3%
Turkey	19	21	1,320	2,261	2,759	3,630	4,503	5,751	27.7%	42.9%
Ukraine	5	77	77	194	334	514	514	525	2.2%	33.8%
United Kingdom	435	1,565	5,401	8,899	11,212	13,037	14,291	15,200	6.4%	24.9%
Others Europe	0	4	б	10	10	22	22	22	0.0%	34.0%

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Russia and Central Asia	3	13	78	79	84	132	152	247	62.3%	31.7%
Russia	3	10	10	10	10	10	11	11	0.0%	8.4%
Armenia		3	3	3	3	3	3	3	0.0%	
Azerbaijan			65	65	66	66	66	114	71.6%	
Georgia								21		
Kazakhstan				2	6	53	72	98	36.8%	

	2000	2005	2010	2012	2013	2014	2015	2016	∆ y/y (2016-2015)	CAGR (2016-2000)
Middle East	12	55	102	107	110	130	247	322	30.5%	22.7%
Bahrain			1	1	1	1	1	1	0.0%	
Iran	11	48	93	98	98	117	117	117	0.0%	16.1%
Israel		6	6	6	6	6	6	6	0.0%	
Jordan	1	1	1	1	1	1	118	184	55.7%	35.7%
Kuwait								10		
Lebanon				1	2	3	3	3	0.0%	
Syria			1	1	1	1	1	1	0.0%	
United Arab Emirates					٦	1	1	0	-100.0%	

(\*) Data source: IRENA (2017), Renewable Energy Statistics 2017, The International Renewable Energy Agency, Abu Dhabi.

## Countries (\*)

(MW)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000)
Africa	133	247	894	1,158	1,772	2,432	3,353	3,862	15.2%	23.49
Algeria			0	0	0	10	10	10	0.0%	
Chad								1		
gypt	69	145	550	550	550	550	750	750	0.0%	16.19
thiopia				81	171	171	324	324	0.0%	
lenya		0	б	б	6	б	26	26	0.0%	
Madagascar			0	0	0	0	0	0	0.0%	
Mauritania				0	4	4	34	34	0.0%	
lorocco	54	64	253	292	532	834	834	934	12.0%	19.5
lamibia ligeria		0 2	0 2	0 2	0 2	0 3	0 3	0 3	0.0% 0.0%	
omalia		2	2	2	2	2	3	3	0.0%	
outh Africa		3	10	10	257	569	1,079	1,473	36.5%	
unisia	10	19	53	173	200	233	240	245	2.1%	22.1
Others Africa	0	13	20	41	47	48	48	58	19.4%	
	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015)	CAGR (2016-2000
sia - Pacific	1,829	7,839	50,277	88,771	105,202	128,716	165,535	189,803	14.7%	33.7
ustralia	33	740	1,864	2,561	3,221	3,797	4,234	4,327	2.2%	35.6
angladesh		7 40	1,804	2,501	3,221	2	4,2.54	4,327	2.2%	55.0
	741	1 260				2 96,619				165
hina	341	1,269	31,468	63,129	76,771	,	129,638	148,983	14.9%	46.2
idia	1,267	4,430	13,065	18,421	20,150	22,465	25,088	28,875	15.1%	21.6
donesia			0	1	1	1	1	7	490.9%	
pan	136	1,050	2,334	2,614	2,661	2,794	3,038	3,234	6.5%	21.9
ongolia			1	1	51	51	51	51	0.0%	
ew Zealand	36	168	524	623	623	683	683	690	1.0%	20.3
akistan			6	56	106	256	308	591	91.8%	
hilippines		33	33	33	33	337	427	427	0.0%	
outh Korea	6	99	382	488	560	612	869	1,089	25.2%	38.4
ri Lanka	3	3	33	76	82	132	127	127	0.0%	26.3
aiwan	3	24	476	571	614	637	647	682	5.5%	41.6
hailand			6	112	223	225	234	507	116.8%	
ietnam			31	31	53	53	135	159	17.8%	
thers Asia-Pacific	4	23	52	52	52	53	53	53	0.0%	17.2
	2000	2005	2010	2012	2013	2014	2015	2016	∆ y/y (2016-2015)	CAGR (2016-2000
	2576	0.604	(5.110	70 770	- /	05.040	22.02.0	111707		
mericas	2,576	9,604	45,112	72,378	74,773	85,049	<b>99,004</b>	111,787	12.9%	26.6
rgentina	14	28	28	137	192	217 3	279	279	0.0%	20.6
olivia	22	20	0	0	0		3	27	743.8%	
razil	22	29	927	2,508	3,456	5,962	8,726	10,740	23.1%	47.2
anada	92	677	3,967	7,801	7,801	9,694	11,214	11,900	6.1%	35.5
hile		2	163	202	301	731	904	1,298	43.6%	
olombia		20	20	20	20	20	20	20	0.0%	
osta Rica	43	69	120	148	148	197	278	319	14.7%	13.4
uba	1	2	7	12	12	12	12	12	0.0%	21.8
ominican Rep			0	86	86	86	86	86	0.0%	
cuador			2	2	19	21	21	21	0.0%	
iuatemala				100	100	100	76	76	0.0%	
londuras		~ ~	70	102	102	126	152	175	15.1%	
imaica		21	39	39	39	39	39	99 7 5 7 7	154.5%	_
1exico	17	18	519	1,815	2,122	2,569	2,805	3,527	25.7%	39.6
etherlands Antilles			11	11	11	11	11	11	0.0%	
licaragua			63	146	147	186	186	186	0.0%	
anama	-	_	_	_	20	55	253	270	6.9%	
eru	1	1	1	1	1	143	240	240	0.0%	44.
uerto Rico			1	101	125	125	125	125	0.0%	
Inited States	2,377	8,706	39,135	59,075	59,973	64,232	72,573	81,312	12.0%	24.
lruguay			41	53	59	481	857	920	7.4%	
enezuela				30	50	50	50	50	0.0%	
Others Americas	11	32	69	90	90	90	95	95	0.0%	14.7

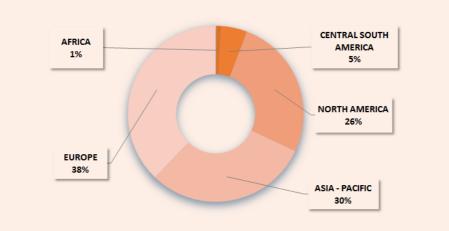
(\*) Data source: IRENA (2017), Renewable Energy Statistics 2017, The International Renewable Energy Agency, Abu Dhabi.

## Areas and Aggregates (\*)

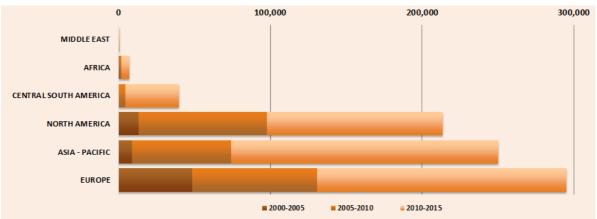
(GWh)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015) <sup>**</sup>	CAGR (2016-2000) <sup>**</sup>
Europe	22,298	71,058	153,242	213,808	246,928	265,167	317,391		19.7%	19.4%
Russia and Central Asia	2	7	12	12	15	115	288		150.4%	39.3%
Middle East	40	85	174	216	385	366	351		-4.1%	15.6%
Africa	232	818	2,370	2,512	3,683	5,362	7,509		40.0%	26.1%
Asia - Pacific	2,614	11,747	, 76,950	, 142,568	192,666	215,438	252,893		17.4%	35.6%
Americas	6,163	20,166	108,586	164,708	202,054	231,342	259,596		12.2%	28.3%
- North America	, 5,914	19,448	103,872	153,232	187,676	206,430	219,438	257,059	17.1%	26.6%
- Central South America	249	718	4,714	11,476	14,378	24,912	40,158	,	61.2%	40.3%
World	31,349	103,881	341,334	523,824	645,731	717,790	838,028		16.8%	24.5%
European Union	22,225	70,453	149,357	206,018	236,749	253,109	301,870		19.3%	19.0%
MENA	264	885	2,470	2,400	3,556	4,241	4,682		10.4%	21.1%
OECD	28,505	93,801	267,439	376,821	442,570	481,259	547,413	588,897	7.6%	20.8%
NON OECD	2,844	10,080	73,895	147,003	203,161	236,531	290,615	,	22.9%	36.1%
OPEC	37	71	170	214	433	438	343		-21.7%	16.0%
NON OPEC	31,312	103,810	341,164	523,610	645,298	717,352	837,685		16.8%	24.5%

#### World Wind Power Generation (2015) 838,028 GWh



#### World Wind Power Generation Growth (2000-2015) 806,679 GWh



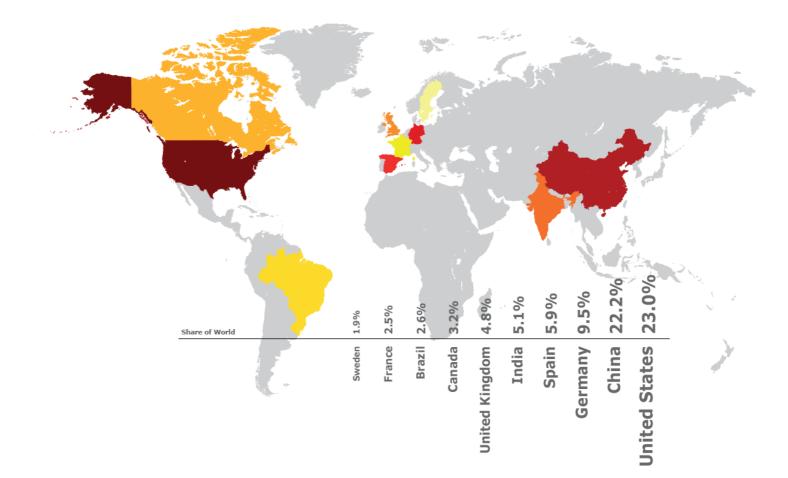
<sup>(\*)</sup> Data source: Eni's calculations on *IEA Extended Balances* ° OECD/International Energy Agency, 2017 data.
<sup>(\*\*)</sup> When 2016 data is missing, the figure refers to the latest available years.

## The World Top 10 (\*)

(GWh)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015) <sup>**</sup>	CAGR (2016-2000) <sup>**</sup>
United States	5,650	17,881	95,148	141,922	169,713	183,892	192,992	229,299	18.8%	26.0%
China	615	2,028	44,622	95,978	141,197	156,078	185,766		19.0%	46.3%
Germany	9,352	27,229	37,793	50,670	51,708	57,357	79,206	77,412	-2.3%	14.1%
Spain	4,727	21,176	44,271	49,472	55,646	52,013	49,325	48,914	-0.8%	15.7%
India	1,684	6,211	19,657	30,115	33,168	37,346	42,790		14.6%	24.1%
United Kingdom	947	2,904	10,255	19,835	28,396	31,966	40,310	37,507	-7.0%	25.9%
Canada	264	1,567	8,724	11,310	17,963	22,538	26,446	27,760	5.0%	33.8%
Brazil	2	93	2,177	5,050	6,579	12,211	21,626		77.1%	85.8%
France	48	962	9,945	14,913	16,033	17,249	21,249	20,952	-1.4%	46.2%
Sweden	457	936	3,502	7,165	9,842	11,234	16,268	15,426	-5.2%	24.6%
The World Top 10	23,746	80,987	276,094	426,430	530,245	581,884	675,978		16.2%	25.0%
Rest of the World	7,603	22,894	65,240	97,394	115,486	135,906	162,050		19.2%	22.6%
World	31,349	103,881	341,334	523,824	645,731	717,790	838,028		16.8%	24.5%

## The World Top 10 (2016)



(\*) Data source: *IEA Extended Balances* ° OECD/International Energy Agency, 2017.

(\*\*) When 2016 data is missing, the figure refers to the latest available years.

#### Countries (\*)

(GWh)

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015) <sup>**</sup>	CAGR (2016-2000) <sup>**</sup>
Europe	22,298	71,058	153,242	213,808	246,928	265,167	317,391		19.7%	19.4%
Austria	67	1,331	2,064	2,462	3,153	3,846	4,840	5,241	8.3%	31.3%
Belarus		1	-,	6	8	11	26	-,- · ·	136.4%	0.11070
Belgium	16	227	1,292	2,751	3,665	4,615	5,574	5,187	-6.9%	43.5%
Bulgaria		5	, 681	, 1,221	, 1,374	, 1,331	1,452	,	9.1%	
Croatia		10	139	329	517	730	796		9.0%	
Cyprus			31	185	231	182	221		21.4%	
Czech Republic	1	21	335	416	481	477	573	497	-13.3%	47.4%
Denmark	4,241	6,614	7,809	10,270	11,123	13,079	14,133	12,782	-9.6%	7.1%
Estonia		54	277	434	529	604	715	612	-14.4%	
Finland	78	170	294	494	774	1,107	2,327	3,068	31.8%	25.8%
France	48	962	9,945	14,913	16,033	17,249	21,249	20,952	-1.4%	46.2%
Macedonia						71	121		70.4%	
Germany	9,352	27,229	37,793	50,670	51,708	57,357	79,206	77,412	-2.3%	14.1%
Greece	451	1,266	2,714	3,850	4,139	3,689	4,621	5,146	11.4%	16.4%
Hungary		10	534	770	718	657	693	684	-1.3%	
Iceland					3	8	11	9	-18.2%	
Ireland	244	1,112	2,815	4,010	4,542	5,140	6,573	6,151	-6.4%	22.3%
Italy	563	2,344	9,126	13,407	14,897	15,178	14,844	17,619	18.7%	24.0%
Latvia	4	47	49	114	120	141	147	128	-12.9%	24.2%
Lithuania		2	224	540	603	639	810		26.8%	
Luxembourg	27	52	55	77	83	80	102	107	4.9%	9.0%
Moldova					1	1	2		100.0%	
Netherlands	829	2,067	3,994	4,981	5,627	5,797	7,550	8,142	7.8%	15.3%
Norway	31	499	879	1,548	1,881	2,216	2,515	2,116	-15.9%	30.2%
Poland	5	135	1,664	4,747	6,004	7,676	10,858	12,585	15.9%	63.1%
Portugal	168	1,773	9,182	10,259	12,014	12,111	11,608	12,474	7.5%	30.9%
Romania			306	2,640	4,520	6,201	7,063		13.9%	
Slovakia		6	6	б	6	б	6	6	0.0%	
Slovenia					4	4	6	б	0.0%	
Spain	4,727	21,176	44,271	49,472	55,646	52,013	49,325	48,914	-0.8%	15.7%
Sweden	457	936	3,502	7,165	9,842	11,234	16,268	15,426	-5.2%	24.6%
Switzerland	3	8	37	88	90	101	110	108	-1.8%	25.1%
Turkey	33	59	2,916	5,860	7,557	8,520	11,652	15,492	33.0%	46.9%
Ukraine	6	38	51	288	639	1,130	1,084		-4.1%	41.4%
United Kingdom	947	2,904	10,255	19,835	28,396	31,966	40,310	37,507	-7.0%	25.9%
Others Europe			1							

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015) <sup>**</sup>	CAGR (2016-2000) <sup>**</sup>
Russia and Central Asia	2	7	12	12	15	115	288		150.4%	39.3%
Russia	2	7	4	5	5	96	148	147	-0.7%	30.8%
Armenia			7	4	4	4	3		-25.0%	
Azerbaijan			1	0	1	2	5		150.0%	
Kazakhstan				3	5	13	132		915.4%	

	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015) <sup>**</sup>	CAGR (2016-2000) <sup>**</sup>
Middle East	40	85	174	216	385	366	351		-4.1%	15.6%
Iran	37	71	163	207	376	358	221		-38.3%	12.7%
lsrael		11	8	6	6	6	7	7	0.0%	
Jordan	3	3	3	3	3	2	123		6,050%	28.1%

(\*) Data source: *IEA Extended Balances* © OECD/International Energy Agency, 2017.

(\*\*) When 2016 data is missing, the figure refers to the latest available years.

## Countries (\*)

(GWh)

	2000	2005	2010	2012	2013	2014	2015	∆y/y 2016 (2015-2014)	CAGR (2015-2000)
Africa	232	818	2,370	2,512	3,683	5,362	7,509	40.0%	26.1%
Algeria							19		
Egypt	137	552	1,498	1,260	1,332	1,444	1,345	-6.9%	16.4%
Ethiopia				192	356	499	759	52.1%	
Kenya			18	15	18	38	57	50.0%	
Morocco	64	206	659	728	1,481	1,924	2,519	30.9%	27.7%
South Africa		12	34	37	37	860	2,270	164.0%	
Tunisia	23	42	139	196	358	507	448	-11.6%	21.9%
Others Africa	8	6	22	84	101	90	92	2.2%	17.7%

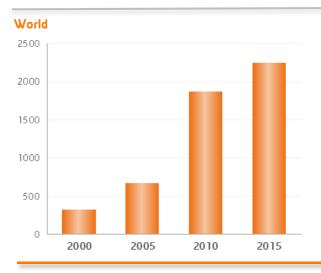
	2000	2005	2010	2012	2013	2014	2015	2016	∆y/y (2016-2015) <sup>**</sup>	CAGR (2016-2000) <sup>**</sup>
Asia - Pacific	2,614	11,747	76,950	142,568	192,666	215,438	252,893		17.4%	35.6%
Australia	58	885	5,052	6,970	7,960	10,252	11,467	12,098	5.5%	39.6%
Bangladesh	50	005	5,052	0,970	4	4	4	12,050	0.0%	59.0%
5	615	2 0 2 0	((622	05.079						(670)
China	615	2,028	44,622	95,978	141,197	156,078	185,766		19.0%	46.3%
Hong Kong			I	2	2	2	2		0.0%	
India	1,684	6,211	19,657	30,115	33,168	37,346	42,790		14.6%	24.1%
Indonesia			4	5			4			
Japan	108	1,751	3,962	4,722	4,286	5,038	5,160	5,203	0.8%	27.4%
Mongolia					85	170	170		0.0%	
Nepal						6	6		0.0%	
New Zealand	120	614	1,637	2,080	2,024	2,214	2,356	2,326	-1.3%	20.4%
Pakistan			0	0	397	802	840		4.7%	
Philippines		17	62	75	66	152	748		392.1%	
South Korea	17	130	817	917	1,149	1,146	1,201	1,683	40.1%	33.3%
Sri Lanka	3	2	53	147	235	272	343		26.1%	37.2%
Taiwan	1	91	976	1,262	1,640	1,500	1,525		1.7%	63.0%
Thailand			0	141	305	305	329		7.9%	
Viet Nam			50	87	87	87	121		39.1%	
Others Asia-Pacific	8	18	57	67	61	64	61		-4.7%	14.5%

	2000	2005	2010	2012	2013	2014	2015	2016	∆ y/y (2016-2015) <sup>**</sup>	CAGR (2016-2000) <sup>**</sup>
Americas	6,163	20,166	108,586	164,708	202,054	231,342	259,596		12.2%	28.3%
Argentina	35	75	25	369	461	619	599		-3.2%	20.8%
Bolivia					1	8	12		50.0%	
Brazil	2	93	2,177	5,050	6,579	12,211	21,626		77.1%	85.8%
Canada	264	1,567	8,724	11,310	17,963	22,538	26,446	27,760	5.0%	33.8%
Chile		7	332	409	554	1,443	2,115	2,278	7.7%	
Colombia		49	39	55	58	58	58		0.0%	
Costa Rica	183	204	359	528	485	735	1,080		46.9%	12.6%
Cuba			10	17	17	17	17		0.0%	
Dominican Rep				240	608	608	725		19.2%	
Ecuador			3	2	57	80	99		23.8%	
Guatemala							107			
Honduras				338	310	398	665		67.1%	
Jamaica		50	53	107	115	119	125		5.0%	
Mexico	19	19	1,239	3,688	4,185	6,426	8,745	10,378	18.7%	48.3%
Nicaragua				330	562	846	865		2.2%	
Panama					2	116	419		261.2%	
Peru	1	1	1	1	1	257	595		131.5%	53.1%
United States	5,650	17,881	95,148	141,922	169,713	183,892	192,992	229,299	18.8%	26.0%
Uruguay			68	111	144	733	2,065		181.7%	
Others Americas	9	220	245	231	239	238	241		1.3%	24.5%

<sup>(\*)</sup> Data source: *IEA Extended Balances* OECD/International Energy Agency, 2017.
 <sup>(\*\*)</sup> When 2016 data is missing, the figure refers to the latest available years.

#### Total Biofuels (\*)

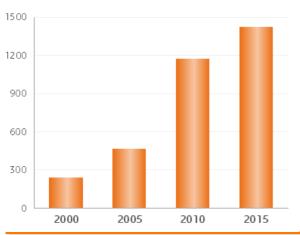
(thousand barrels/day)



### Biogasoline (\*)

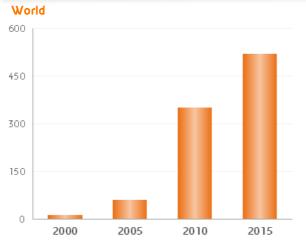
(thousand barrels/day)

#### World

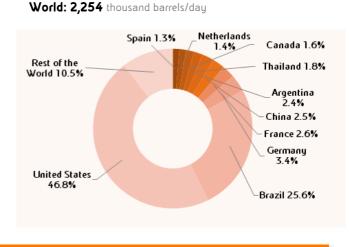


### Biodiesel <sup>(\*)</sup>

(thousand barrels/day)

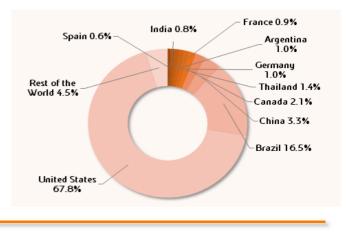


2015



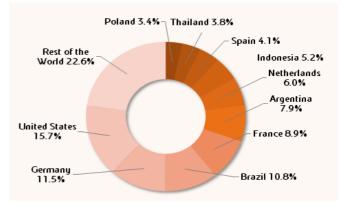
2015

#### World: 1,424 thousand barrels/day



### 2015

World: 520 thousand barrels/day



(\*) Data source: IEA Extended Balances ° OECD/International Energy Agency, 2017. Total Biofuels include biogasoline, biodiesel and other biofuels (among others, ethanol used pure in Brazil "Hydrous" and vegetable oil used pure in Germany).

#### World Gas and Renewables Review 2017



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