



# O&G GR

volume 1

World Oil Review 2018



# World Oil Review 2018





Energy industry issues keep attracting everyone's attention as never before. We are living in a time of profound changes and increasing challenges in the industries of oil, gas and renewables.

Our 17<sup>th</sup> **World Oil, Gas and Renewables Review** tries to provide more clarity on these trends. Same as last year, the analysis is split in two volumes. This first volume, the **World Oil Review**, is devoted to oil with a special focus on the evolution of crude oil quality and the refining industry. In autumn we will publish the second volume, the **World Gas and Renewables Review**, focused on natural gas and renewables sources (solar, wind and biofuels).

The main highlights of this oil review are the following:

- Oil demand is reflecting an unabated trend of growth. In 2017, it grew by 1.7%, above the five-year average of 1.5% recorded in 2012-2016. In ten years, global liquid consumption, jumped from 87 mln boe/d to more than 97 mln boe/d. Notwithstanding a positive contribution to demand growth also came from OECD countries in 2017, their weight on total consumption has declined from 58% in 2007 to 48% nowadays. It is a material geographical shift that will have a great impact on future trends, crude oil flows and geopolitics.
- At the same time, emerging countries with a larger use of oil in chemicals, transportation and industry increased their consumption by 37% in the past ten years, that is 13 mln boe/d, the equivalent of the entire oil demand of the European Union.
- On the supply side, the United States continues to be the main game-changer. While world production remained nearly flat with respect to last year, the United States delivered one of the biggest increases in non-OPEC area production and confirms its leadership amongst producers, a position it first reached in 2014. It is an incredible result taking into account that in ten years the US increased its liquid output by 90%, thanks to tight oil production, and now US production is at an all-time high.
- OPEC that accounts for 42% of overall supply, contracted its production in 2017 due to the implementation of cuts agreed in November 2016. The OPEC cuts along with the output decline in some countries drove a decrease in Medium & Sour volumes (-3%). On the other side, recovery in Libyan and US tight oil production led to an increase in Light & Sweet crudes (+5%).
- In the last ten years Light oil production grew by 17%, an unforeseeable trend before the development of tight oil, with important implications on the world of refineries and price differentials.

The energy world is changing and is changing fast. I hope this statistical review might be your compass within the intricate dynamics of the energy markets, helping you in understanding more deeply the main trends of one of the most fascinating, complex and essential industries.

**Claudio Descalzi**

Chief Executive Officer  
and General Manager





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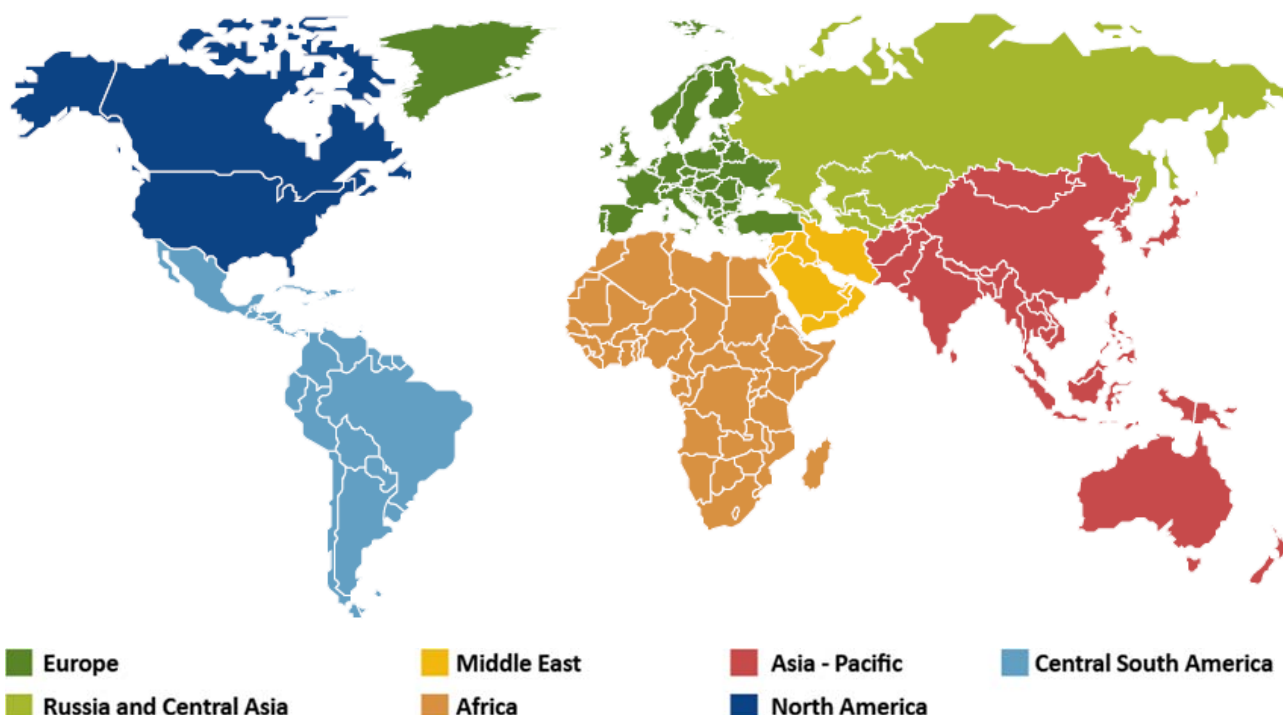
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### List of Countries:

- **Europe:** Albania, Austria, Belarus, Belgium, Bosnia Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Gibraltar, Greece, Hungary, Iceland, Ireland, Italy, Kosovo, 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, Sierra Leone, 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, Latvia, 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, Equatorial Guinea, Gabon, 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 the Scenarios, Strategic Options & Investor Relations Department.

## Notes and Methods

The sources of the data are: CME, DECC, EIA DOE, Enerdata, ICE, ICIS Consulting, International Energy Agency, IHS Global Insight, Italian Ministry for Economic Development, Norwegian Petroleum Directorate, Oil & Gas Journal, OPEC, PIRA, PIW, Wood MacKenzie and other official sources.

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

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

Blank spaces in the tables indicate that the figure was not available, zero indicates a figure that is not significant (except for the chapters **"Production Quality"** where "zero" is used for both not available and not significant figures). 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.

## Supply and Demand

## Trade and Prices

The difference between the Consumption and the Production of oil is given by the change in stocks, the processing gains obtained in refining and the amount of biofuels which is not included in Production.

In all the chapters, the list of the "The world top 10..." 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"**, 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"**, 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.

## Production Quality

In the chapter **"Production Quality"** figures for total oil production in each area or country do not coincide with the figures in the **"Production"** chapter of the Review. This is due to the exclusion of natural gas liquids and extra heavy crude from the figures for the first (except for Venezuela). Moreover, it has not been possible to allocate or define total production. In some countries the 'Ultra Light' category also includes, in total or in part, the production of condensates. For Canada the production includes syncrude.

API degree is used universally to express a crude's relative density. The arbitrary formula used to obtain it is:  $API\ gravity = (141.5/SG\ at\ 60^{\circ}F) - 131.5$ , where SG is the specific gravity of the fluid. Lighter the crude, higher the API gravity. The API scale was designed so that most values would fall between 10 and 70 API gravity degrees. Fresh water has an API density of 10.

Atmospheric distillates yields are obtained according to TBP (True Boiling Point) technique, ASTM D2892 procedure. Figures are expressed in mass percentage.

For the definition of the qualitative parameters for single crudes, the data of "Eni-R&M Division - San Donato Research Center - Downstream Products Technologies" have been used, wherever possible. Quality levels, indicating API gravity and sulphur content, are defined as follows.

### Quality levels - API gravity and sulphur content

|                                 |  |
|---------------------------------|--|
| <b>Ultra Light</b>              | API level equal to or greater than 50° and a low sulphur content   |
| <b>Light &amp; Sweet</b>        | API level equal to or greater than 35° and less than 50°, sulphur content less 0.5%                                      |
| <b>Light &amp; Medium Sour</b>  | API level equal to or greater than 35° and less than 50°, sulphur content equal to or greater than 0.5% and less than 1% |
| <b>Light &amp; Sour</b>         | API level equal to or greater than 35° and less than 50°, sulphur content equal to or greater than 1%                    |
| <b>Medium &amp; Sweet</b>       | API level equal to or greater than 26° and less than 35°, sulphur content less 0.5%                                      |
| <b>Medium &amp; Medium Sour</b> | API level equal to or greater than 26° and less than 35°, sulphur content equal to or greater than 0.5% and less than 1% |
| <b>Medium &amp; Sour</b>        | API level equal to or greater than 26° and less than 35°, sulphur content equal to or greater than 1%                    |
| <b>Heavy &amp; Sweet</b>        | API level equal to or greater than 10° and less than 26°, sulphur content less 0.5%                                      |
| <b>Heavy &amp; Medium Sour</b>  | API level equal to or greater than 10° and less than 26°, sulphur content equal to or greater than 0.5% and less than 1% |
| <b>Heavy &amp; Sour</b>         | API level equal to or greater than 10° and less than 26°, sulphur content equal to or greater than 1%                    |

## Refining Industry

The **"Refining Capacity"** set of tabulations provides the following information:

- Refineries: includes asphalt and lube oriented units, when dedicated topping capacity is present. Condensate refineries are included.
- Primary Capacity: represents a pro rated annual average of available capacity, excluding turnarounds.
- Conversion Capacity (FCC eqv.): sum of conversion capacity, converted to "Catcracking (FCC) equivalent" capacity. "FCC equivalent" capacity equals 1; other conversion capacities can be higher or lower than 1 (the equivalent factors are reported below in the next table).
- Complexity Capacity - FCC eqv.: ratio of Conversion Capacity (converted to FCC equivalent) over Primary Capacity, calculated on a weight basis. The higher is the complexity index, the higher is the capability of a refinery to produce high equivalent quality and value products.
- Complexity Ratio - NCI (Nelson Complexity Index): is another measure of secondary conversion capacity in comparison to the primary distillation capacity. The units are rated in terms of their costs relative to the primary distillation unit. The higher is the index the higher is the capability of a refinery to produce high quality and value products.

The equivalent factors for the FCC equivalent calculation, reported below, change according to the type and the configuration of the conversion unit and are from ICIS Consulting. The factors for the Nelson calculation are standard factors, modified as necessary by Eni. Oxygenates and Aromatics are excluded.

| Conversion type             |      |       | Conversion type             |      |       |
|-----------------------------|------|-------|-----------------------------|------|-------|
| Alkylation                  | 0.00 | 10.00 | Hydrodesulf-diesel          | 0.00 | 2.50  |
| Alkylation-hydrofluoric     | 0.00 | 10.00 | Hydrodesulf-gasoline        | 0.00 | 2.50  |
| Alkylation-sulfonic         | 0.00 | 10.00 | Hydrodesulf-kero            | 0.00 | 2.50  |
| Asphalt                     | 0.25 | 1.50  | Hydrodesulf-mid-distillates | 0.00 | 2.50  |
| Coking-delayed              | 1.35 | 6.00  | Hydrodesulf-naphta          | 0.00 | 2.50  |
| Coking-f/d                  | 1.35 | 6.00  | Hydrodesulf-residue         | 0.20 | 2.50  |
| Coking-fluid                | 1.35 | 6.00  | Hydrodesulf-gvgo            | 0.05 | 2.50  |
| Coking-fxc                  | 1.35 | 6.00  | Isomerization-c4            | 0.00 | 15.00 |
| Condensate distillation     | 0.00 | 1.00  | Isomerization-ln            | 0.00 | 15.00 |
| Crude                       | 0.00 | 1.00  | Lube                        | 0.50 | 60.00 |
| Deasphalting                | 0.00 | 1.50  | Polymerization              | 0.00 | 10.00 |
| Deasphalting-c3             | 0.00 | 1.50  | Reforming-aromax            | 0.00 | 5.00  |
| Deasphalting-c4             | 0.00 | 1.50  | Reforming-btx               | 0.00 | 5.00  |
| Deep catcracking            | 1.10 | 6.00  | Reforming-cc                | 0.00 | 5.00  |
| Distillate dewaxing         | 0.10 | 85.00 | Reforming-cyclic            | 0.00 | 5.00  |
| Fluid cat-cracking          | 1.00 | 6.00  | Reforming-lpg feed          | 0.00 | 5.00  |
| Fluid catcracking-residue   | 1.90 | 6.00  | Reforming-sr                | 0.00 | 5.00  |
| Heavy residual gasification | 1.30 | 12.00 | Thermal cat-cracking        | 0.80 | 2.75  |
| Hydrocracking-distillates   | 1.30 | 6.00  | Thermal cracking            | 0.65 | 2.75  |
| Hydrocracking-mild          | 0.30 | 6.00  | Vacuum                      | 0.00 | 2.00  |
| Hydrocracking-residue       | 0.40 | 6.00  | Visbreaking                 | 0.25 | 2.75  |





# Oil - Supply and Demand

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Reserves

Production

Reserves/Production Ratio

Consumption

Per Capita Consumption

Production/Consumption Ratio

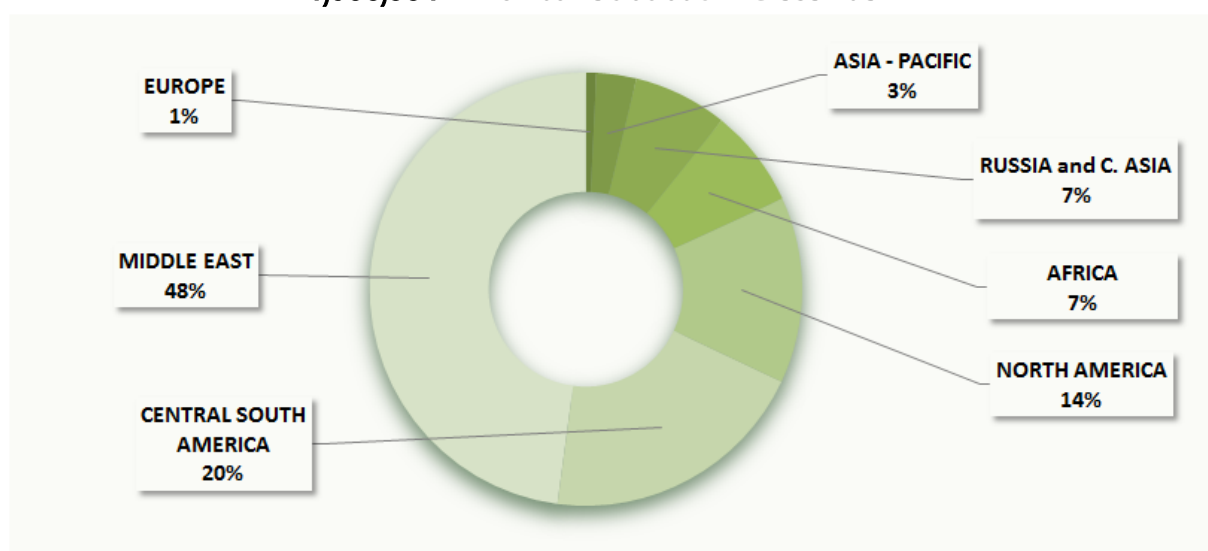
### Areas and Aggregates (\*)

(million barrels as at 31<sup>st</sup>)

|                         | 2000             | 2005             | 2010             | 2015             | 2016             | 2017             | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|-------------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------------|---------------------|
| Europe                  | 19,429           | 16,121           | 12,865           | 11,621           | 12,856           | 12,976           | 0.9%                 | -2.3%               |
| Russia and Central Asia | 56,384           | 77,228           | 98,283           | 118,284          | 118,284          | 118,284          | 0.0%                 | 4.5%                |
| Middle East             | 692,991          | 751,691          | 794,599          | 802,851          | 807,666          | 804,575          | -0.4%                | 0.9%                |
| Africa                  | 92,882           | 110,900          | 124,346          | 124,081          | 124,452          | 123,313          | -0.9%                | 1.7%                |
| Asia - Pacific          | 47,686           | 42,926           | 45,542           | 49,643           | 49,972           | 50,083           | 0.2%                 | 0.3%                |
| Americas                | 330,973          | 319,986          | 535,571          | 545,933          | 570,017          | 570,773          | 0.1%                 | 3.3%                |
| - North America         | 205,021          | 203,063          | 200,029          | 206,742          | 233,141          | 233,337          | 0.1%                 | 0.8%                |
| - Central South America | 125,953          | 116,923          | 335,542          | 339,191          | 336,877          | 337,436          | 0.2%                 | 6.0%                |
| <b>World</b>            | <b>1,240,345</b> | <b>1,318,851</b> | <b>1,611,207</b> | <b>1,652,413</b> | <b>1,683,247</b> | <b>1,680,004</b> | <b>-0.2%</b>         | <b>1.8%</b>         |
| European Union          | 8,776            | 7,236            | 6,025            | 5,328            | 5,096            | 5,146            | 1.0%                 | -3.1%               |
| MENA                    | 743,680          | 809,686          | 858,722          | 868,240          | 873,055          | 869,964          | -0.4%                | 0.9%                |
| OECD                    | 255,828          | 234,619          | 225,869          | 230,780          | 255,925          | 256,241          | 0.1%                 | 0.0%                |
| NON OECD                | 984,517          | 1,084,232        | 1,385,338        | 1,421,633        | 1,427,322        | 1,423,763        | -0.2%                | 2.2%                |
| OPEC                    | 849,573          | 927,596          | 1,196,272        | 1,211,302        | 1,217,880        | 1,214,209        | -0.3%                | 2.1%                |
| NON OPEC                | 390,772          | 391,255          | 414,935          | 441,111          | 465,367          | 465,795          | 0.1%                 | 1.0%                |

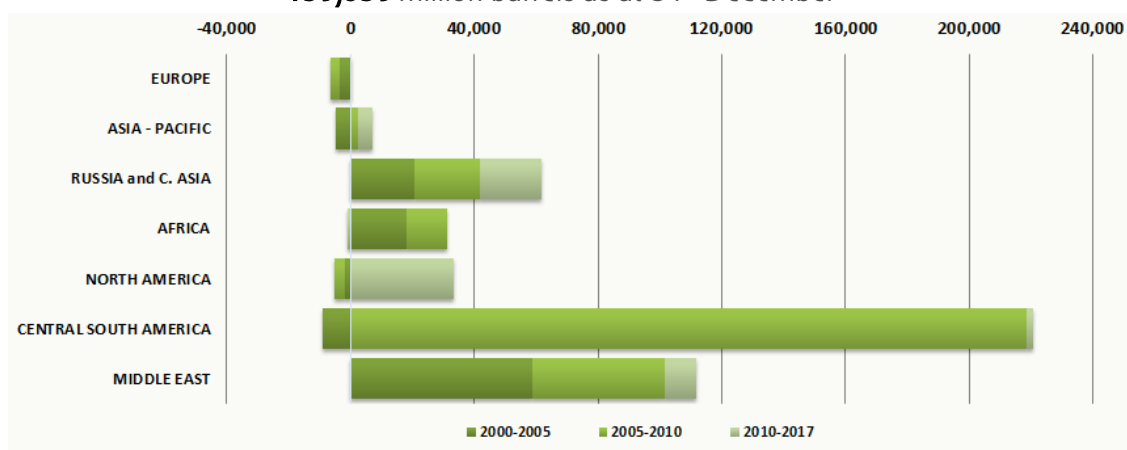
### World Oil Reserves (2017)

**1,680,004** million barrels as at 31<sup>st</sup> December



### World Oil Reserves Growth (2000-2017)

**439,659** million barrels as at 31<sup>st</sup> December



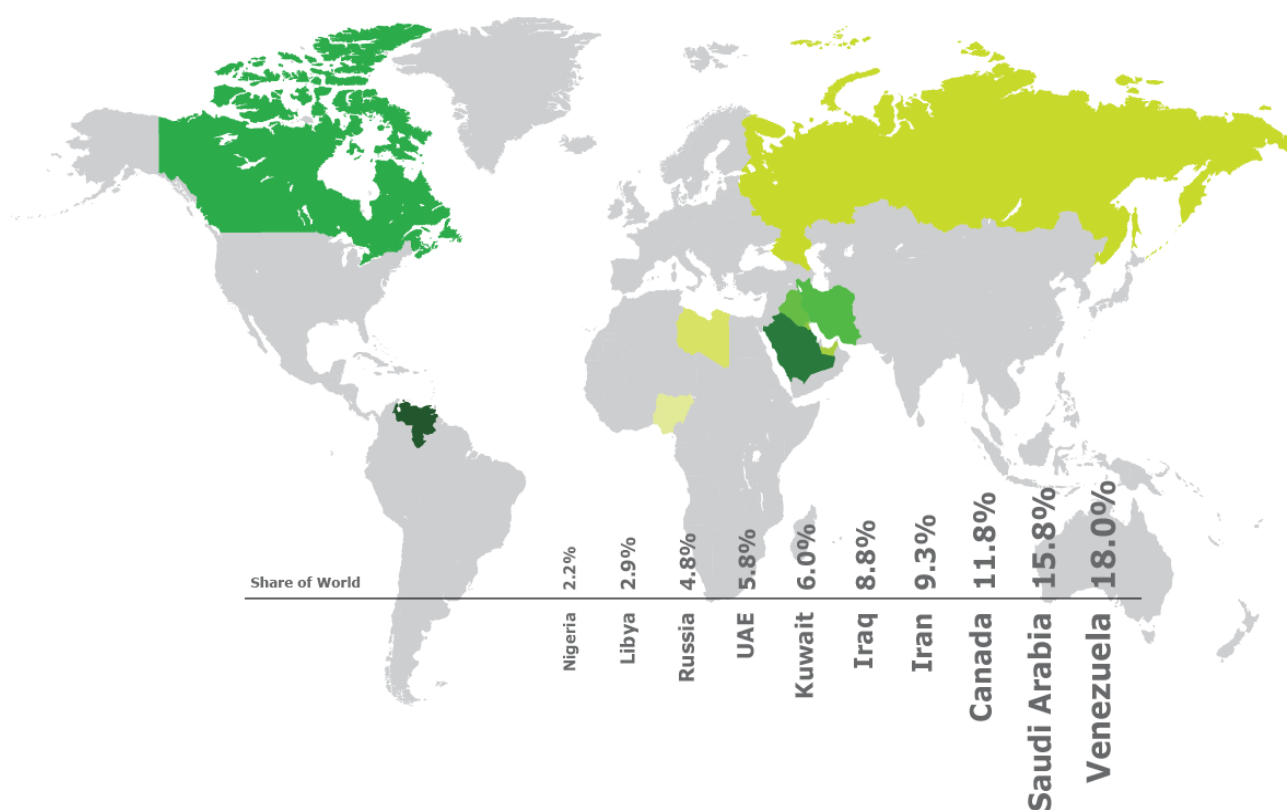
(\*) Data source: Eni's estimates on Enerdata *Global Energy Market & CO<sub>2</sub> Data* and other official data sources.

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

(million barrels as at 31<sup>th</sup> December)

|                         | 2000             | 2005             | 2010             | 2015             | 2016             | 2017             | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|-------------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------------|---------------------|
| Venezuela               | 76,848           | 80,012           | 296,501          | 300,878          | 302,250          | 302,809          | 0.2%                 | 8.4%                |
| Saudi Arabia            | 262,766          | 264,211          | 264,516          | 266,455          | 266,208          | 266,260          | 0.0%                 | 0.1%                |
| Canada                  | 181,504          | 180,044          | 174,848          | 171,512          | 197,928          | 197,928          | 0.0%                 | 0.5%                |
| Iran                    | 99,530           | 136,270          | 151,170          | 158,400          | 157,200          | 155,600          | -1.0%                | 2.7%                |
| Iraq                    | 112,500          | 115,000          | 143,100          | 142,503          | 148,766          | 147,223          | -1.0%                | 1.6%                |
| Kuwait                  | 96,500           | 101,500          | 101,500          | 101,500          | 101,500          | 101,500          | 0.0%                 | 0.3%                |
| United Arab Emirates    | 97,800           | 97,800           | 97,800           | 97,800           | 97,800           | 97,800           | 0.0%                 | 0.0%                |
| Russia                  | 48,573           | 60,000           | 60,000           | 80,000           | 80,000           | 80,000           | 0.0%                 | 3.0%                |
| Libya                   | 36,000           | 41,464           | 47,097           | 48,363           | 48,363           | 48,363           | 0.0%                 | 1.8%                |
| Nigeria                 | 29,000           | 36,220           | 37,200           | 37,062           | 37,453           | 37,453           | 0.0%                 | 1.5%                |
| <b>The World Top 10</b> | <b>1,041,021</b> | <b>1,112,521</b> | <b>1,373,732</b> | <b>1,404,473</b> | <b>1,437,468</b> | <b>1,434,936</b> | <b>-0.2%</b>         | <b>1.9%</b>         |
| Rest of the world       | 199,325          | 206,330          | 237,475          | 247,940          | 245,780          | 245,069          | -0.3%                | 1.2%                |
| <b>World</b>            | <b>1,240,345</b> | <b>1,318,851</b> | <b>1,611,207</b> | <b>1,652,413</b> | <b>1,683,247</b> | <b>1,680,004</b> | <b>-0.2%</b>         | <b>1.8%</b>         |

### The World Top 10 (2017)



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

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

(million barrels as at 31<sup>st</sup> December)

|                | 2000          | 2005          | 2010          | 2015          | 2016          | 2017          | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|----------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------------|---------------------|
| <b>Europe</b>  | <b>19,429</b> | <b>16,121</b> | <b>12,865</b> | <b>11,621</b> | <b>12,856</b> | <b>12,976</b> | <b>0.9%</b>          | <b>-2.3%</b>        |
| Albania        | 176           | 200           | 204           | 178           | 177           | 177           | 0.0%                 | 0.1%                |
| Austria        | 92            | 63            | 51            | 49            | 49            | 49            | 0.0%                 | -3.7%               |
| Belarus        | 211           | 200           | 203           | 205           | 204           | 204           | 0.0%                 | -0.2%               |
| Bulgaria       | 16            | 15            | 15            | 16            | 15            | 15            | 0.0%                 | -0.2%               |
| Croatia        | 98            | 70            | 73            | 74            | 73            | 73            | 0.0%                 | -1.7%               |
| Czech Republic | 16            | 15            | 15            | 16            | 16            | 16            | 0.0%                 | -0.2%               |
| Denmark        | 1,113         | 1,277         | 899           | 491           | 440           | 440           | 0.0%                 | -5.3%               |
| France         | 155           | 159           | 93            | 88            | 88            | 88            | 0.0%                 | -3.3%               |
| Germany        | 405           | 370           | 283           | 263           | 262           | 262           | 0.0%                 | -2.5%               |
| Greece         | 11            | 7             | 10            | 10            | 10            | 10            | 0.0%                 | -0.2%               |
| Hungary        | 117           | 104           | 28            | 28            | 28            | 28            | 0.0%                 | -8.1%               |
| Italy (**)     | 577           | 443           | 559           | 595           | 521           | 571           | 9.6%                 | -0.1%               |
| Lithuania      | 13            | 12            | 12            | 12            | 12            | 12            | 0.0%                 | -0.2%               |
| Netherlands    | 114           | 107           | 318           | 141           | 113           | 113           | 0.0%                 | 0.0%                |
| Norway         | 9,447         | 7,705         | 5,670         | 5,139         | 6,611         | 6,681         | 1.1%                 | -2.0%               |
| Poland         | 123           | 97            | 99            | 163           | 162           | 162           | 0.0%                 | 1.7%                |
| Romania        | 1,170         | 458           | 600           | 600           | 600           | 600           | 0.0%                 | -3.9%               |
| Serbia         | 83            | 79            | 80            | 81            | 81            | 81            | 0.0%                 | -0.2%               |
| Slovakia       | 10            | 9             | 9             | 9             | 9             | 9             | 0.0%                 | -0.2%               |
| Spain          | 22            | 159           | 154           | 156           | 155           | 155           | 0.0%                 | 12.0%               |
| Turkey         | 315           | 303           | 277           | 280           | 279           | 279           | 0.0%                 | -0.7%               |
| Ukraine        | 421           | 399           | 405           | 410           | 408           | 408           | 0.0%                 | -0.2%               |
| United Kingdom | 4,725         | 3,870         | 2,805         | 2,618         | 2,542         | 2,542         | 0.0%                 | -3.6%               |

|                                | 2000          | 2005          | 2010          | 2015           | 2016           | 2017           | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|--------------------------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------------|---------------------|
| <b>Russia and Central Asia</b> | <b>56,384</b> | <b>77,228</b> | <b>98,283</b> | <b>118,284</b> | <b>118,284</b> | <b>118,284</b> | <b>0.0%</b>          | <b>4.5%</b>         |
| Russia                         | 48,573        | 60,000        | 60,000        | 80,000         | 80,000         | 80,000         | 0.0%                 | 3.0%                |
| Azerbaijan                     | 1,178         | 7,000         | 7,000         | 7,000          | 7,000          | 7,000          | 0.0%                 | 11.1%               |
| Georgia                        | 37            | 35            | 36            | 36             | 36             | 36             | 0.0%                 | -0.2%               |
| Kazakhstan                     | 5,400         | 9,000         | 30,000        | 30,000         | 30,000         | 30,000         | 0.0%                 | 10.6%               |
| Kyrgyzstan                     | 43            | 40            | 41            | 41             | 41             | 41             | 0.0%                 | -0.2%               |
| Tajikistan                     | 13            | 12            | 12            | 12             | 12             | 12             | 0.0%                 | -0.2%               |
| Turkmenistan                   | 546           | 546           | 600           | 600            | 600            | 600            | 0.0%                 | 0.6%                |
| Uzbekistan                     | 594           | 594           | 594           | 594            | 594            | 594            | 0.0%                 | 0.0%                |

|                      | 2000           | 2005           | 2010           | 2015           | 2016           | 2017           | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------------|---------------------|
| <b>Middle East</b>   | <b>692,991</b> | <b>751,691</b> | <b>794,599</b> | <b>802,851</b> | <b>807,666</b> | <b>804,575</b> | <b>-0.4%</b>         | <b>0.9%</b>         |
| Bahrain              | 160            | 126            | 128            | 130            | 129            | 129            | 0.0%                 | -1.3%               |
| Iran                 | 99,530         | 136,270        | 151,170        | 158,400        | 157,200        | 155,600        | -1.0%                | 2.7%                |
| Iraq                 | 112,500        | 115,000        | 143,100        | 142,503        | 148,766        | 147,223        | -1.0%                | 1.6%                |
| Israel               | 4              | 2              | 2              | 12             | 12             | 12             | 0.0%                 | 6.5%                |
| Jordan               | 1              | 1              | 1              | 1              | 1              | 1              | 0.0%                 | 0.4%                |
| Kuwait               | 96,500         | 101,500        | 101,500        | 101,500        | 101,500        | 101,500        | 0.0%                 | 0.3%                |
| Oman                 | 5,848          | 5,572          | 5,500          | 5,306          | 5,306          | 5,306          | 0.0%                 | -0.6%               |
| Qatar                | 13,157         | 25,288         | 25,382         | 25,244         | 25,244         | 25,244         | 0.0%                 | 3.9%                |
| Saudi Arabia         | 262,766        | 264,211        | 264,516        | 266,455        | 266,208        | 266,260        | 0.0%                 | 0.1%                |
| Syria                | 2,325          | 3,000          | 2,500          | 2,500          | 2,500          | 2,500          | 0.0%                 | 0.4%                |
| United Arab Emirates | 97,800         | 97,800         | 97,800         | 97,800         | 97,800         | 97,800         | 0.0%                 | 0.0%                |
| Yemen                | 2,400          | 2,921          | 3,000          | 3,000          | 3,000          | 3,000          | 0.0%                 | 1.3%                |

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

(\*\*) The original data are from Italian Ministry for Economic Development. They have been converted by Eni considering 1 ton of oil equal to 7.3 barrels.



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

(million barrels as at 31<sup>st</sup> December)

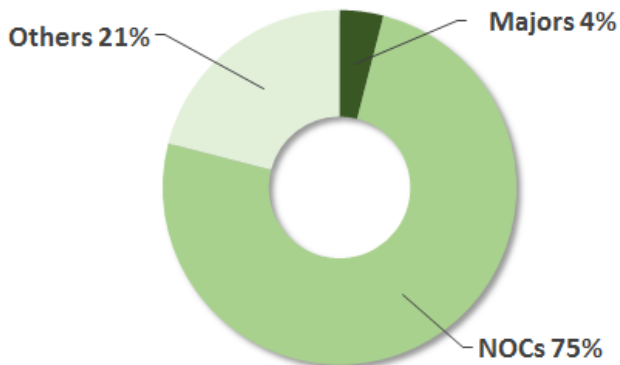
|                       | 2000           | 2005           | 2010           | 2015           | 2016           | 2017           | Δ y/y<br>(2017-2016)         | CAGR<br>(2017-2000)         |
|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------------------|-----------------------------|
| <b>Africa</b>         | <b>92,882</b>  | <b>110,900</b> | <b>124,346</b> | <b>124,081</b> | <b>124,452</b> | <b>123,313</b> | <b>-0.9%</b>                 | <b>1.7%</b>                 |
| Algeria               | 11,314         | 12,270         | 12,200         | 12,200         | 12,200         | 12,200         | 0.0%                         | 0.4%                        |
| Angola                | 5,972          | 9,035          | 9,500          | 9,524          | 9,523          | 8,384          | -12.0%                       | 2.0%                        |
| Benin                 | 9              | 8              | 8              | 8              | 8              | 8              | 0.0%                         | -0.2%                       |
| Cameroon              | 426            | 404            | 205            | 207            | 206            | 206            | 0.0%                         | -4.2%                       |
| Chad                  | 900            | 1,500          | 1,500          | 1,500          | 1,500          | 1,500          | 0.0%                         | 3.1%                        |
| Congo                 | 1,650          | 1,506          | 1,600          | 1,600          | 1,600          | 1,600          | 0.0%                         | -0.2%                       |
| Côte d'Ivoire         | 107            | 101            | 103            | 104            | 103            | 103            | 0.0%                         | -0.2%                       |
| Dem. Rep. Congo       | 199            | 189            | 185            | 187            | 186            | 186            | 0.0%                         | -0.4%                       |
| Egypt                 | 2,948          | 3,700          | 4,400          | 4,400          | 4,400          | 4,400          | 0.0%                         | 2.4%                        |
| Equatorial Guinea     | 1,200          | 1,200          | 1,100          | 1,100          | 1,100          | 1,100          | 0.0%                         | -0.5%                       |
| Gabon                 | 2,420          | 2,146          | 2,000          | 2,000          | 2,000          | 2,000          | 0.0%                         | -1.1%                       |
| Ghana                 | 18             | 17             | 677            | 684            | 681            | 681            | 0.0%                         | 23.8%                       |
| Libya                 | 36,000         | 41,464         | 47,097         | 48,363         | 48,363         | 48,363         | 0.0%                         | 1.8%                        |
| Mauritania            | 0              | 0              | 103            | 21             | 21             | 21             | 0.0%                         |                             |
| Morocco               | 2              | 1              | 1              | 1              | 1              | 1              | 0.0%                         | -4.2%                       |
| Niger                 | 0              | 0              | 0              | 147            | 147            | 147            | 0.0%                         |                             |
| Nigeria               | 29,000         | 36,220         | 37,200         | 37,062         | 37,453         | 37,453         | 0.0%                         | 1.5%                        |
| Sierra Leone          | 0              | 0              | 0              | 440            | 440            | 440            | 0.0%                         |                             |
| South Africa          | 30             | 16             | 15             | 16             | 15             | 15             | 0.0%                         | -3.8%                       |
| Sudan                 | 262            | 563            | 5,000          | 1,500          | 1,500          | 1,500          | 0.0%                         | 10.8%                       |
| Tunisia               | 425            | 560            | 425            | 425            | 425            | 425            | 0.0%                         | 0.0%                        |
| Uganda                | 0              | 0              | 1,026          | 2,593          | 2,580          | 2,580          | 0.0%                         |                             |
|                       | <b>2000</b>    | <b>2005</b>    | <b>2010</b>    | <b>2015</b>    | <b>2016</b>    | <b>2017</b>    | <b>Δ y/y<br/>(2017-2016)</b> | <b>CAGR<br/>(2017-2000)</b> |
| <b>Asia - Pacific</b> | <b>47,686</b>  | <b>42,926</b>  | <b>45,542</b>  | <b>49,643</b>  | <b>49,972</b>  | <b>50,083</b>  | <b>0.2%</b>                  | <b>0.3%</b>                 |
| Australia             | 4,944          | 3,718          | 3,831          | 3,985          | 3,985          | 3,985          | 0.0%                         | -1.3%                       |
| Bangladesh            | 61             | 28             | 29             | 29             | 29             | 29             | 0.0%                         | -4.3%                       |
| Brunei                | 1,230          | 1,105          | 1,100          | 1,100          | 1,100          | 1,100          | 0.0%                         | -0.7%                       |
| China                 | 24,000         | 18,250         | 20,350         | 25,061         | 25,519         | 25,526         | 0.0%                         | 0.4%                        |
| India                 | 5,290          | 5,919          | 4,818          | 4,535          | 4,409          | 4,409          | 0.0%                         | -1.1%                       |
| Indonesia             | 5,123          | 4,188          | 3,990          | 3,230          | 3,230          | 3,310          | 2.5%                         | -2.5%                       |
| Japan                 | 63             | 60             | 45             | 46             | 45             | 45             | 0.0%                         | -1.9%                       |
| Malaysia              | 3,390          | 5,290          | 5,799          | 5,907          | 5,907          | 5,907          | 0.0%                         | 3.3%                        |
| Mongolia              | 15             | 15             | 15             | 257            | 257            | 257            | 0.0%                         | 18.3%                       |
| Myanmar               | 53             | 50             | 51             | 52             | 52             | 52             | 0.0%                         | -0.2%                       |
| New Zealand           | 135            | 53             | 116            | 84             | 84             | 84             | 0.0%                         | -2.8%                       |
| Pakistan              | 222            | 292            | 321            | 257            | 256            | 256            | 0.0%                         | 0.8%                        |
| Papua New Guinea      | 384            | 242            | 90             | 160            | 159            | 183            | 15.3%                        | -4.3%                       |
| Philippines           | 308            | 140            | 143            | 143            | 142            | 142            | 0.0%                         | -4.4%                       |
| Taiwan                | 4              | 2              | 2              | 2              | 2              | 2              | 0.0%                         | -4.2%                       |
| Thailand              | 515            | 453            | 442            | 396            | 396            | 396            | 0.0%                         | -1.5%                       |
| Vietnam               | 1,950          | 3,119          | 4,400          | 4,400          | 4,400          | 4,400          | 0.0%                         | 4.9%                        |
|                       | <b>2000</b>    | <b>2005</b>    | <b>2010</b>    | <b>2015</b>    | <b>2016</b>    | <b>2017</b>    | <b>Δ y/y<br/>(2017-2016)</b> | <b>CAGR<br/>(2017-2000)</b> |
| <b>Americas</b>       | <b>330,973</b> | <b>319,986</b> | <b>535,571</b> | <b>545,933</b> | <b>570,017</b> | <b>570,773</b> | <b>0.1%</b>                  | <b>3.3%</b>                 |
| Argentina             | 2,974          | 2,180          | 2,524          | 2,395          | 2,395          | 2,395          | 0.0%                         | -1.3%                       |
| Barbados              | 3              | 3              | 2              | 2              | 2              | 2              | 0.0%                         | -2.5%                       |
| Belize                | 0              | 0              | 7              | 7              | 7              | 7              | 0.0%                         |                             |
| Bolivia               | 423            | 445            | 477            | 218            | 217            | 217            | 0.0%                         | -3.9%                       |
| Brazil                | 8,465          | 11,773         | 13,987         | 13,034         | 12,634         | 12,634         | 0.0%                         | 2.4%                        |
| Canada                | 181,504        | 180,044        | 174,848        | 171,512        | 197,928        | 197,928        | 0.0%                         | 0.5%                        |
| Chile                 | 160            | 151            | 154            | 156            | 155            | 155            | 0.0%                         | -0.2%                       |
| Colombia              | 1,972          | 1,453          | 1,900          | 2,308          | 2,002          | 2,002          | 0.0%                         | 0.1%                        |
| Cuba                  | 302            | 757            | 127            | 129            | 128            | 128            | 0.0%                         | -4.9%                       |
| Ecuador               | 4,566          | 5,180          | 7,206          | 8,273          | 8,273          | 8,273          | 0.0%                         | 3.6%                        |
| Guatemala             | 145            | 93             | 85             | 86             | 86             | 86             | 0.0%                         | -3.1%                       |
| Mexico                | 28,260         | 12,882         | 10,420         | 9,711          | 7,219          | 7,219          | 0.0%                         | -7.7%                       |
| Peru                  | 906            | 1,078          | 1,240          | 1,187          | 1,187          | 1,187          | 0.0%                         | 1.6%                        |
| Suriname              | 79             | 112            | 81             | 80             | 79             | 79             | 0.0%                         | 0.0%                        |
| Trinidad and Tobago   | 851            | 803            | 830            | 728            | 243            | 243            | 0.0%                         | -7.1%                       |
| United States         | 23,517         | 23,019         | 25,181         | 35,230         | 35,213         | 35,410         | 0.6%                         | 2.4%                        |
| Venezuela             | 76,848         | 80,012         | 296,501        | 300,878        | 302,250        | 302,809        | 0.2%                         | 8.4%                        |

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

### Cluster of Companies(\*)

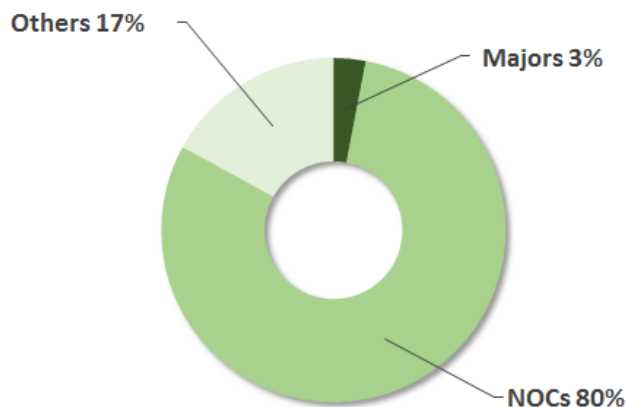
2000

World: 1,240,345 million barrels as at 31<sup>st</sup> December



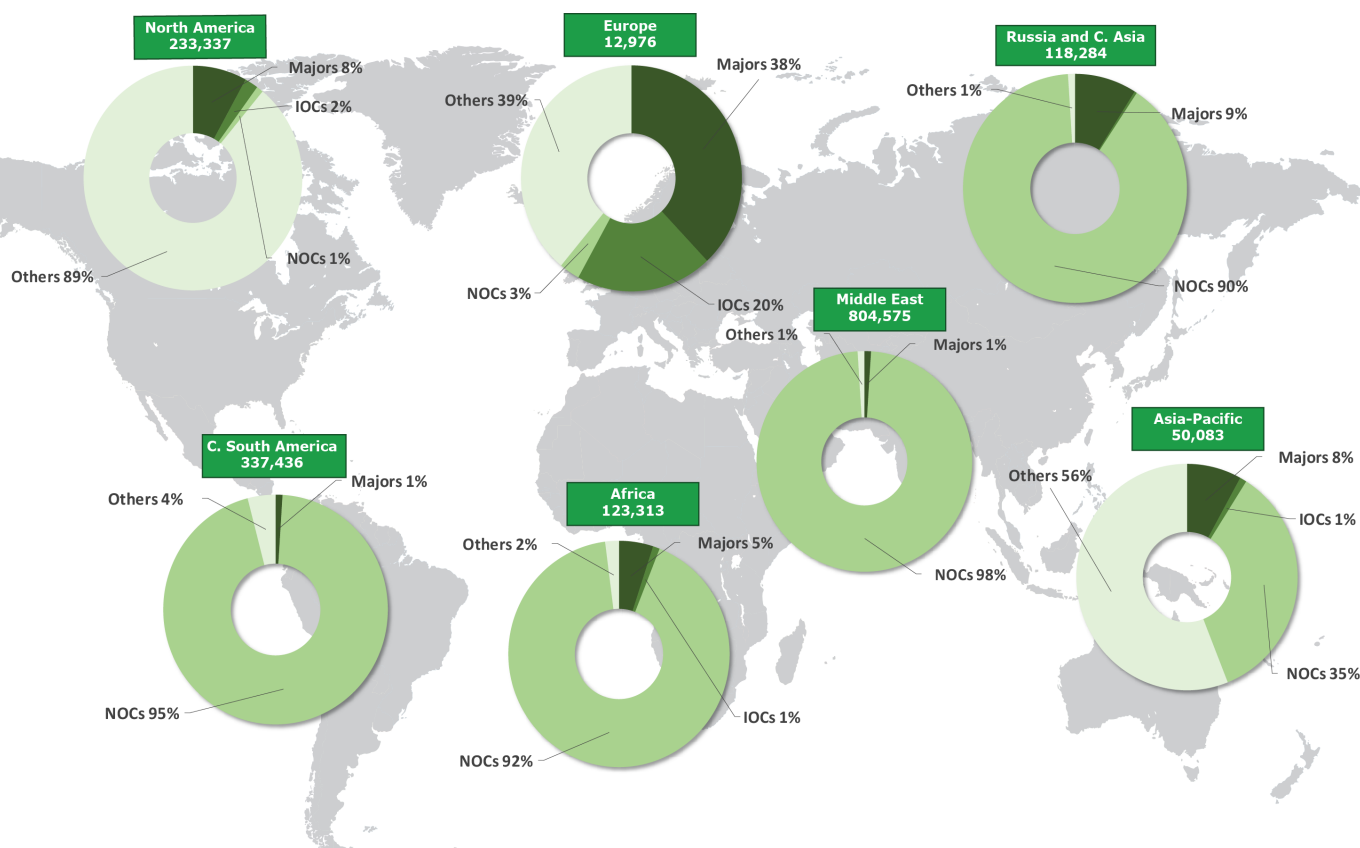
2017

World: 1,680,004 million barrels as at 31<sup>st</sup> December



2017

(million barrels as at 31<sup>st</sup> December)



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

**IOCs:** BG, BHP Biliton, 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, Lukoil, Lybian NOC, 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, Turkmenogas, Uzbekneftegas, YPF.

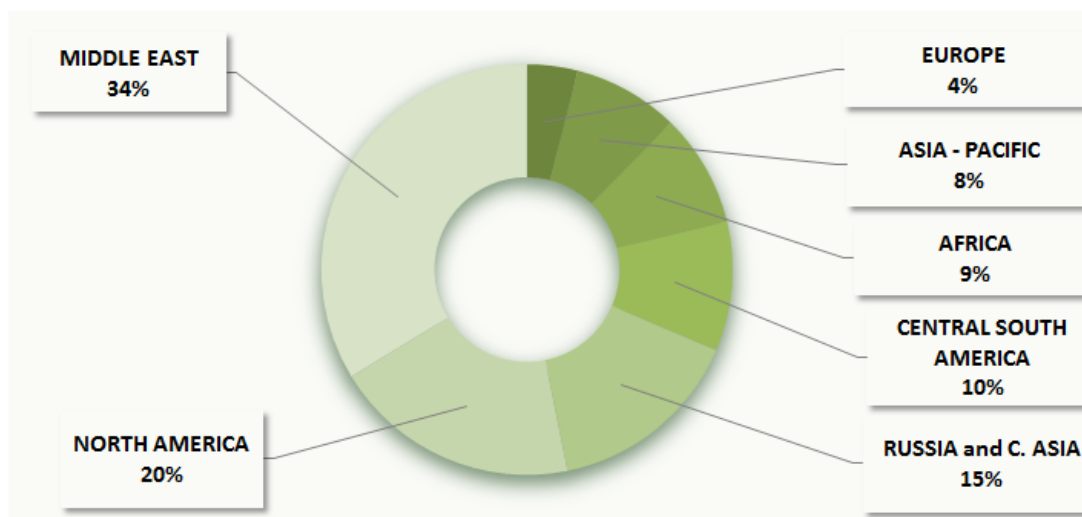
### Areas and Aggregates (\*)

Crude and non conventional oil, natural gas liquids  
(thousand barrels/day)

|                         | 2000          | 2005          | 2010          | 2015          | 2016          | 2017          | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|-------------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------------|---------------------|
| Europe                  | 7,098         | 5,961         | 4,403         | 3,705         | 3,737         | 3,691         | -1.2%                | -3.8%               |
| Russia and Central Asia | 7,864         | 11,700        | 13,412        | 13,970        | 14,153        | 14,278        | 0.9%                 | 3.6%                |
| Middle East             | 23,510        | 25,588        | 25,366        | 29,846        | 31,678        | 31,247        | -1.4%                | 1.7%                |
| Africa                  | 7,814         | 9,906         | 10,264        | 8,380         | 7,854         | 8,263         | 5.2%                 | 0.3%                |
| Asia - Pacific          | 7,929         | 8,003         | 8,380         | 8,313         | 7,992         | 7,723         | -3.4%                | -0.2%               |
| Americas                | 20,994        | 21,012        | 21,390        | 27,771        | 26,938        | 27,454        | 1.9%                 | 1.6%                |
| - North America         | 10,726        | 10,118        | 11,084        | 17,371        | 17,006        | 18,008        | 5.9%                 | 3.1%                |
| - Central South America | 10,268        | 10,894        | 10,306        | 10,400        | 9,932         | 9,446         | -4.9%                | -0.5%               |
| <b>World</b>            | <b>75,209</b> | <b>82,171</b> | <b>83,217</b> | <b>91,984</b> | <b>92,351</b> | <b>92,656</b> | <b>0.3%</b>          | <b>1.2%</b>         |
| European Union          | 3,570         | 2,802         | 2,074         | 1,575         | 1,567         | 1,553         | -0.9%                | -4.8%               |
| MENA                    | 27,206        | 29,962        | 29,531        | 32,626        | 34,426        | 34,335        | -0.3%                | 1.4%                |
| OECD                    | 21,859        | 20,177        | 18,862        | 23,913        | 23,421        | 24,120        | 3.0%                 | 0.6%                |
| NON OECD                | 53,350        | 61,994        | 64,354        | 68,070        | 68,930        | 68,536        | -0.6%                | 1.5%                |
| OPEC                    | 31,189        | 35,464        | 35,152        | 38,411        | 39,586        | 39,217        | -0.9%                | 1.4%                |
| NON OPEC                | 44,020        | 46,707        | 48,065        | 53,572        | 52,765        | 53,439        | 1.3%                 | 1.1%                |

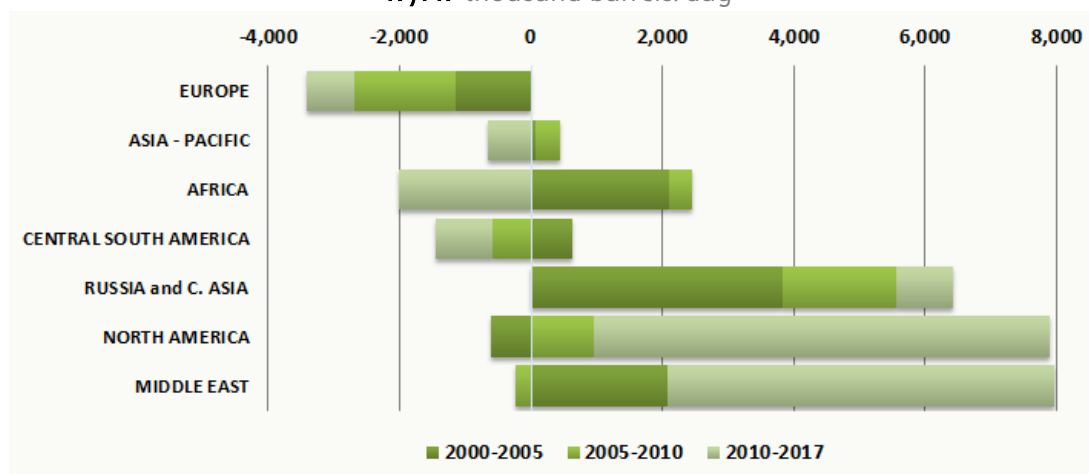
### World Oil Production (2017)

92,656 thousand barrels/day



### World Oil Production Growth (2000-2017)

17,447 thousand barrels/day



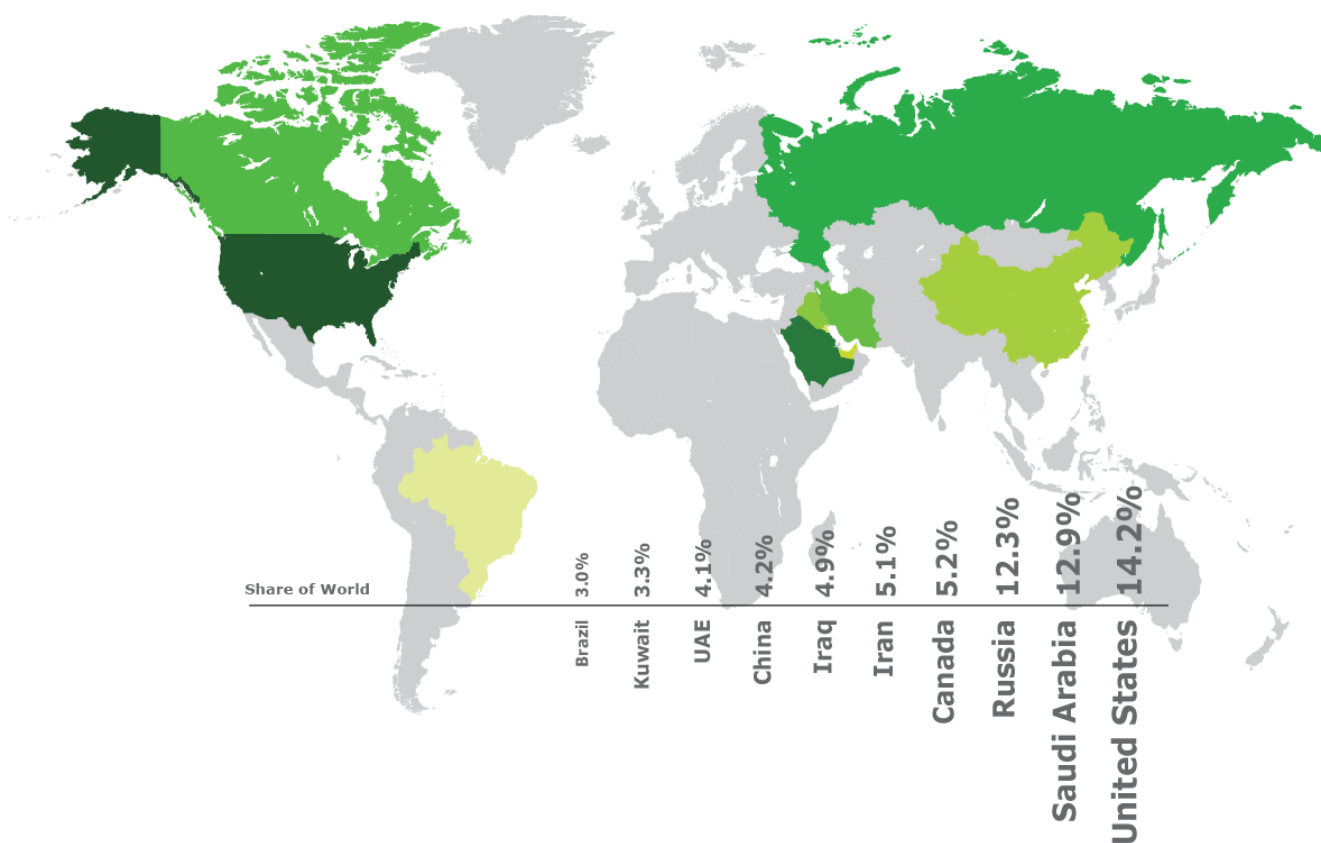
(\*) Data source: Eni's calculations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

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

Crude and non conventional oil, natural gas liquids  
(thousand barrels/day)

|                         | 2000          | 2005          | 2010          | 2015          | 2016          | 2017          | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|-------------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------------|---------------------|
| United States           | 8,005         | 7,077         | 7,752         | 12,986        | 12,535        | 13,191        | 5.2%                 | 3.0%                |
| Saudi Arabia            | 9,348         | 10,927        | 9,971         | 12,047        | 12,440        | 11,964        | -3.8%                | 1.5%                |
| Russia                  | 6,527         | 9,636         | 10,390        | 11,087        | 11,341        | 11,357        | 0.1%                 | 3.3%                |
| Canada                  | 2,722         | 3,041         | 3,332         | 4,385         | 4,471         | 4,816         | 7.7%                 | 3.4%                |
| Iran                    | 3,760         | 4,225         | 4,215         | 3,578         | 4,382         | 4,707         | 7.4%                 | 1.3%                |
| Iraq                    | 2,582         | 1,833         | 2,430         | 4,088         | 4,508         | 4,568         | 1.3%                 | 3.4%                |
| China                   | 3,261         | 3,596         | 4,031         | 4,271         | 3,981         | 3,871         | -2.8%                | 1.0%                |
| United Arab Emirates    | 2,622         | 2,994         | 2,831         | 3,782         | 3,888         | 3,770         | -3.0%                | 2.2%                |
| Kuwait                  | 2,160         | 2,548         | 2,498         | 3,097         | 3,194         | 3,014         | -5.6%                | 2.0%                |
| Brazil                  | 1,268         | 1,702         | 2,144         | 2,531         | 2,613         | 2,738         | 4.8%                 | 4.6%                |
| <b>The World Top 10</b> | <b>42,254</b> | <b>47,580</b> | <b>49,593</b> | <b>61,852</b> | <b>63,352</b> | <b>63,998</b> | <b>1.0%</b>          | <b>2.5%</b>         |
| Rest of the World       | 32,955        | 34,591        | 33,624        | 30,131        | 28,999        | 28,658        | -1.2%                | -0.8%               |
| <b>World</b>            | <b>75,209</b> | <b>82,171</b> | <b>83,217</b> | <b>91,984</b> | <b>92,351</b> | <b>92,656</b> | <b>0.3%</b>          | <b>1.2%</b>         |

### The World Top 10 (2017)



(\*) Data source: *Monthly Oil Data Services* © OECD/International Energy Agency, 2018.



### Countries (\*)

Crude and non conventional oil, natural gas liquids  
(thousand barrels/day)

|                | 2000         | 2005         | 2010         | 2015         | 2016         | 2017         | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|----------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------------|---------------------|
| <b>Europe</b>  | <b>7,098</b> | <b>5,961</b> | <b>4,403</b> | <b>3,705</b> | <b>3,737</b> | <b>3,691</b> | <b>-1.2%</b>         | <b>-3.8%</b>        |
| Albania        | 6            | 8            | 13           | 25           | 23           | 21           | -6.2%                | 8.0%                |
| Austria        | 20           | 19           | 25           | 20           | 18           | 18           | 0.0%                 | -0.5%               |
| Belarus        | 37           | 36           | 34           | 33           | 33           | 32           | -2.0%                | -0.8%               |
| Bulgaria       | 1            | 1            | 1            | 1            | 1            | 1            | 0.0%                 | 4.2%                |
| Croatia        | 28           | 21           | 18           | 14           | 15           | 15           | 1.0%                 | -3.6%               |
| Czech Republic | 8            | 12           | 6            | 4            | 4            | 4            | 11.1%                | -3.1%               |
| Denmark        | 363          | 388          | 255          | 156          | 141          | 137          | -2.9%                | -5.6%               |
| Estonia        | 5            | 5            | 10           | 16           | 14           | 18           | 29.9%                | 8.4%                |
| France         | 44           | 36           | 31           | 24           | 23           | 23           | -0.5%                | -3.8%               |
| Germany        | 86           | 113          | 76           | 71           | 71           | 69           | -2.7%                | -1.2%               |
| Greece         | 6            | 2            | 2            | 1            | 3            | 3            | -11.5%               | -4.3%               |
| Hungary        | 39           | 37           | 25           | 21           | 22           | 23           | 4.3%                 | -2.9%               |
| Italy          | 78           | 124          | 108          | 109          | 74           | 79           | 6.6%                 | 0.1%                |
| Netherlands    | 49           | 47           | 36           | 42           | 29           | 27           | -6.2%                | -3.4%               |
| Norway         | 3,331        | 2,962        | 2,138        | 1,948        | 1,995        | 1,969        | -1.3%                | -3.0%               |
| Poland         | 15           | 28           | 19           | 31           | 32           | 32           | 1.0%                 | 4.7%                |
| Portugal       | 0            | 0            | 0            | 1            | 2            | 1            | -4.5%                |                     |
| Romania        | 131          | 113          | 89           | 81           | 78           | 74           | -4.2%                | -3.3%               |
| Serbia         | 20           | 13           | 18           | 21           | 20           | 19           | -3.9%                | -0.2%               |
| Slovakia       | 1            | 7            | 5            | 4            | 2            | 4            | 66.9%                | 7.4%                |
| Spain          | 5            | 3            | 3            | 10           | 6            | 8            | 19.9%                | 3.0%                |
| Turkey         | 53           | 44           | 48           | 48           | 49           | 49           | -0.5%                | -0.4%               |
| Ukraine        | 82           | 97           | 79           | 54           | 50           | 48           | -4.3%                | -3.0%               |
| United Kingdom | 2,694        | 1,845        | 1,366        | 970          | 1,032        | 1,015        | -1.6%                | -5.6%               |

|                                | 2000         | 2005          | 2010          | 2015          | 2016          | 2017          | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|--------------------------------|--------------|---------------|---------------|---------------|---------------|---------------|----------------------|---------------------|
| <b>Russia and Central Asia</b> | <b>7,864</b> | <b>11,700</b> | <b>13,412</b> | <b>13,970</b> | <b>14,153</b> | <b>14,278</b> | <b>0.9%</b>          | <b>3.6%</b>         |
| Russia                         | 6,527        | 9,636         | 10,390        | 11,087        | 11,341        | 11,357        | 0.1%                 | 3.3%                |
| Azerbaijan                     | 282          | 449           | 1,042         | 849           | 829           | 783           | -5.5%                | 6.2%                |
| Georgia                        | 2            | 1             | 1             | 1             | 0             | 0             | -9.6%                | -9.3%               |
| Kazakhstan                     | 718          | 1,293         | 1,694         | 1,695         | 1,666         | 1,840         | 10.4%                | 5.7%                |
| Kyrgyzstan                     | 2            | 2             | 1             | 1             | 1             | 1             | -9.5%                | -2.4%               |
| Turkmenistan                   | 158          | 201           | 196           | 273           | 253           | 238           | -6.2%                | 2.4%                |
| Uzbekistan                     | 175          | 118           | 88            | 64            | 62            | 59            | -5.4%                | -6.2%               |

|                      | 2000          | 2005          | 2010          | 2015          | 2016          | 2017          | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|----------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------------|---------------------|
| <b>Middle East</b>   | <b>23,510</b> | <b>25,588</b> | <b>25,366</b> | <b>29,846</b> | <b>31,678</b> | <b>31,247</b> | <b>-1.4%</b>         | <b>1.7%</b>         |
| Bahrain              | 198           | 198           | 192           | 213           | 212           | 219           | 3.0%                 | 0.6%                |
| Iran                 | 3,760         | 4,225         | 4,215         | 3,578         | 4,382         | 4,707         | 7.4%                 | 1.3%                |
| Iraq                 | 2,582         | 1,833         | 2,430         | 4,088         | 4,508         | 4,568         | 1.3%                 | 3.4%                |
| Kuwait               | 2,160         | 2,548         | 2,498         | 3,097         | 3,194         | 3,014         | -5.6%                | 2.0%                |
| Oman                 | 958           | 777           | 871           | 989           | 1,012         | 978           | -3.3%                | 0.1%                |
| Qatar                | 860           | 1,216         | 1,668         | 1,993         | 2,001         | 1,977         | -1.2%                | 5.0%                |
| Saudi Arabia         | 9,348         | 10,927        | 9,971         | 12,047        | 12,440        | 11,964        | -3.8%                | 1.5%                |
| Syria                | 573           | 448           | 385           | 27            | 25            | 25            | -2.3%                | -16.9%              |
| United Arab Emirates | 2,622         | 2,994         | 2,831         | 3,782         | 3,888         | 3,770         | -3.0%                | 2.2%                |
| Yemen                | 450           | 421           | 306           | 32            | 16            | 25            | 53.7%                | -15.6%              |

(\*) Data source: *Monthly Oil Data Services* © OECD/International Energy Agency, 2018.

### Countries (\*)

Crude and non conventional oil, natural gas liquids  
(thousand barrels/day)

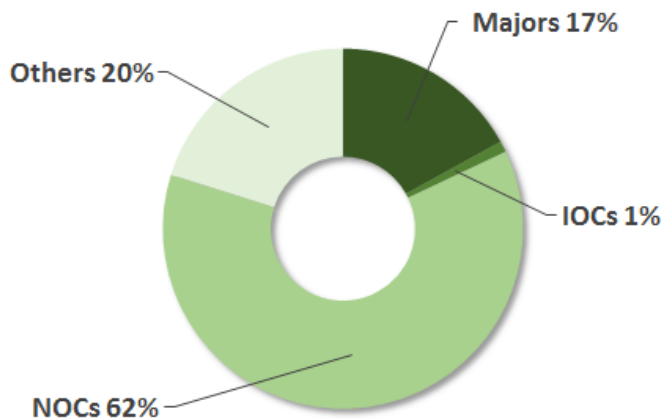
|                       | 2000          | 2005          | 2010          | 2015          | 2016          | 2017          | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------------|---------------------|
| <b>Africa</b>         | <b>7,814</b>  | <b>9,906</b>  | <b>10,264</b> | <b>8,380</b>  | <b>7,854</b>  | <b>8,263</b>  | <b>5.2%</b>          | <b>0.3%</b>         |
| Algeria               | 1,436         | 1,931         | 1,720         | 1,590         | 1,604         | 1,530         | -4.6%                | 0.4%                |
| Angola                | 745           | 1,245         | 1,820         | 1,830         | 1,783         | 1,738         | -2.5%                | 5.1%                |
| Cameroon              | 114           | 89            | 64            | 95            | 90            | 75            | -16.7%               | -2.4%               |
| Chad                  | 0             | 170           | 120           | 129           | 120           | 121           | 0.5%                 |                     |
| Congo                 | 265           | 247           | 314           | 248           | 251           | 293           | 16.7%                | 0.6%                |
| Côte d'Ivoire         | 7             | 40            | 39            | 27            | 43            | 51            | 19.9%                | 12.4%               |
| Dem. Rep. Congo       | 23            | 25            | 25            | 22            | 21            | 20            | -4.9%                | -0.9%               |
| Egypt                 | 711           | 649           | 700           | 697           | 665           | 640           | -3.9%                | -0.6%               |
| Equatorial Guinea     | 144           | 380           | 311           | 276           | 231           | 212           | -8.6%                | 2.3%                |
| Gabon                 | 276           | 270           | 249           | 230           | 227           | 200           | -11.7%               | -1.9%               |
| Ghana                 | 7             | 6             | 7             | 106           | 92            | 167           | 82.4%                | 20.5%               |
| Libya                 | 1,471         | 1,721         | 1,661         | 437           | 426           | 872           | 104.8%               | -3.0%               |
| Mauritania            | 0             | 0             | 9             | 5             | 4             | 4             | -9.6%                |                     |
| Morocco               | 0             | 1             | 0             | 0             | 0             | 0             | 0.0%                 | -1.3%               |
| Niger                 | 0             | 0             | 0             | 17            | 17            | 17            | 0.0%                 |                     |
| Nigeria               | 2,160         | 2,546         | 2,535         | 2,258         | 1,926         | 2,000         | 3.9%                 | -0.5%               |
| South Africa          | 199           | 208           | 141           | 106           | 103           | 101           | -1.4%                | -3.9%               |
| Sudan                 | 177           | 305           | 465           | 253           | 198           | 176           | -11.3%               | 0.0%                |
| Tunisia               | 78            | 73            | 83            | 55            | 52            | 46            | -12.1%               | -3.0%               |
|                       | 2000          | 2005          | 2010          | 2015          | 2016          | 2017          | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
| <b>Asia - Pacific</b> | <b>7,929</b>  | <b>8,003</b>  | <b>8,380</b>  | <b>8,313</b>  | <b>7,992</b>  | <b>7,723</b>  | <b>-3.4%</b>         | <b>-0.2%</b>        |
| Australia             | 802           | 545           | 553           | 377           | 351           | 320           | -8.7%                | -5.3%               |
| Bangladesh            | 4             | 6             | 5             | 4             | 4             | 4             | -4.9%                | -0.7%               |
| Brunei                | 195           | 206           | 169           | 127           | 121           | 110           | -8.7%                | -3.3%               |
| China                 | 3,261         | 3,596         | 4,031         | 4,271         | 3,981         | 3,871         | -2.8%                | 1.0%                |
| East Timor            | 0             | 100           | 88            | 60            | 49            | 40            | -18.2%               |                     |
| India                 | 770           | 771           | 893           | 861           | 848           | 857           | 1.0%                 | 0.6%                |
| Indonesia             | 1,447         | 1,086         | 993           | 822           | 877           | 847           | -3.5%                | -3.1%               |
| Japan                 | 17            | 18            | 18            | 12            | 11            | 11            | -0.8%                | -2.6%               |
| Malaysia              | 711           | 794           | 717           | 701           | 708           | 695           | -1.8%                | -0.1%               |
| Mongolia              | 0             | 1             | 6             | 24            | 23            | 22            | -4.9%                | 32.7%               |
| Myanmar               | 12            | 22            | 19            | 13            | 12            | 12            | -2.1%                | -0.2%               |
| New Zealand           | 45            | 37            | 60            | 48            | 40            | 37            | -8.6%                | -1.1%               |
| Pakistan              | 58            | 66            | 66            | 106           | 104           | 97            | -6.8%                | 3.1%                |
| Papua New Guinea      | 64            | 54            | 31            | 58            | 56            | 51            | -8.7%                | -1.3%               |
| Philippines           | 1             | 23            | 20            | 17            | 17            | 15            | -9.5%                | 17.8%               |
| South Korea           | 13            | 10            | 21            | 22            | 24            | 25            | 7.1%                 | 4.0%                |
| Taiwan                | 1             | 1             | 0             | 0             | 0             | 0             |                      | -100.0%             |
| Thailand              | 194           | 297           | 383           | 452           | 457           | 432           | -5.5%                | 4.8%                |
| Vietnam               | 333           | 372           | 308           | 338           | 309           | 277           | -10.4%               | -1.1%               |
|                       | 2000          | 2005          | 2010          | 2015          | 2016          | 2017          | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
| <b>Americas</b>       | <b>20,994</b> | <b>21,012</b> | <b>21,390</b> | <b>27,771</b> | <b>26,938</b> | <b>27,454</b> | <b>1.9%</b>          | <b>1.6%</b>         |
| Argentina             | 863           | 831           | 712           | 629           | 608           | 576           | -5.1%                | -2.3%               |
| Barbados              | 1             | 1             | 1             | 1             | 1             | 1             | 10.5%                | -2.6%               |
| Bolivia               | 39            | 58            | 51            | 74            | 70            | 68            | -3.7%                | 3.3%                |
| Brazil                | 1,268         | 1,702         | 2,144         | 2,531         | 2,613         | 2,738         | 4.8%                 | 4.6%                |
| Canada                | 2,722         | 3,041         | 3,332         | 4,385         | 4,471         | 4,816         | 7.7%                 | 3.4%                |
| Chile                 | 9             | 8             | 13            | 6             | 5             | 6             | 8.8%                 | -2.7%               |
| Colombia              | 688           | 528           | 788           | 1,009         | 883           | 856           | -3.1%                | 1.3%                |
| Cuba                  | 51            | 54            | 56            | 55            | 51            | 47            | -6.7%                | -0.5%               |
| Ecuador               | 404           | 534           | 468           | 541           | 547           | 531           | -3.0%                | 1.6%                |
| Guatemala             | 21            | 18            | 12            | 10            | 9             | 8             | -9.4%                | -5.5%               |
| Mexico                | 3,452         | 3,768         | 2,961         | 2,602         | 2,467         | 2,233         | -9.5%                | -2.5%               |
| Peru                  | 104           | 116           | 156           | 150           | 134           | 133           | -0.7%                | 1.5%                |
| Suriname              | 10            | 12            | 21            | 19            | 18            | 18            | -4.9%                | 3.4%                |
| Trinidad and Tobago   | 138           | 171           | 148           | 109           | 97            | 99            | 2.1%                 | -2.0%               |
| United States         | 8,005         | 7,077         | 7,752         | 12,986        | 12,535        | 13,191        | 5.2%                 | 3.0%                |
| Venezuela             | 3,220         | 3,093         | 2,775         | 2,665         | 2,429         | 2,133         | -12.2%               | -2.4%               |

(\*) Data source: *Monthly Oil Data Services* © OECD/International Energy Agency, 2018.

### Cluster of Companies<sup>(\*)</sup>

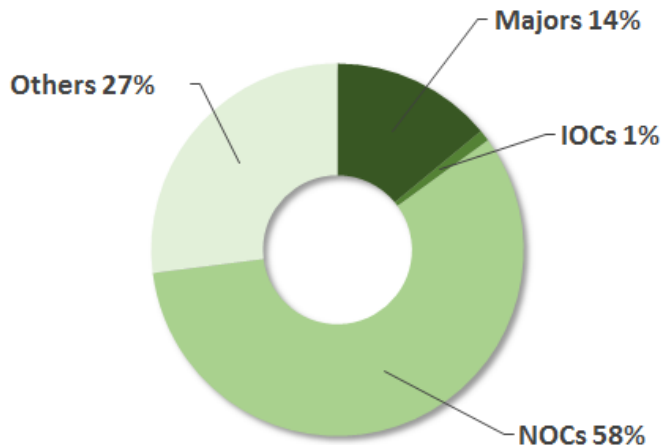
2000

World: 75,209 thousand barrels/day



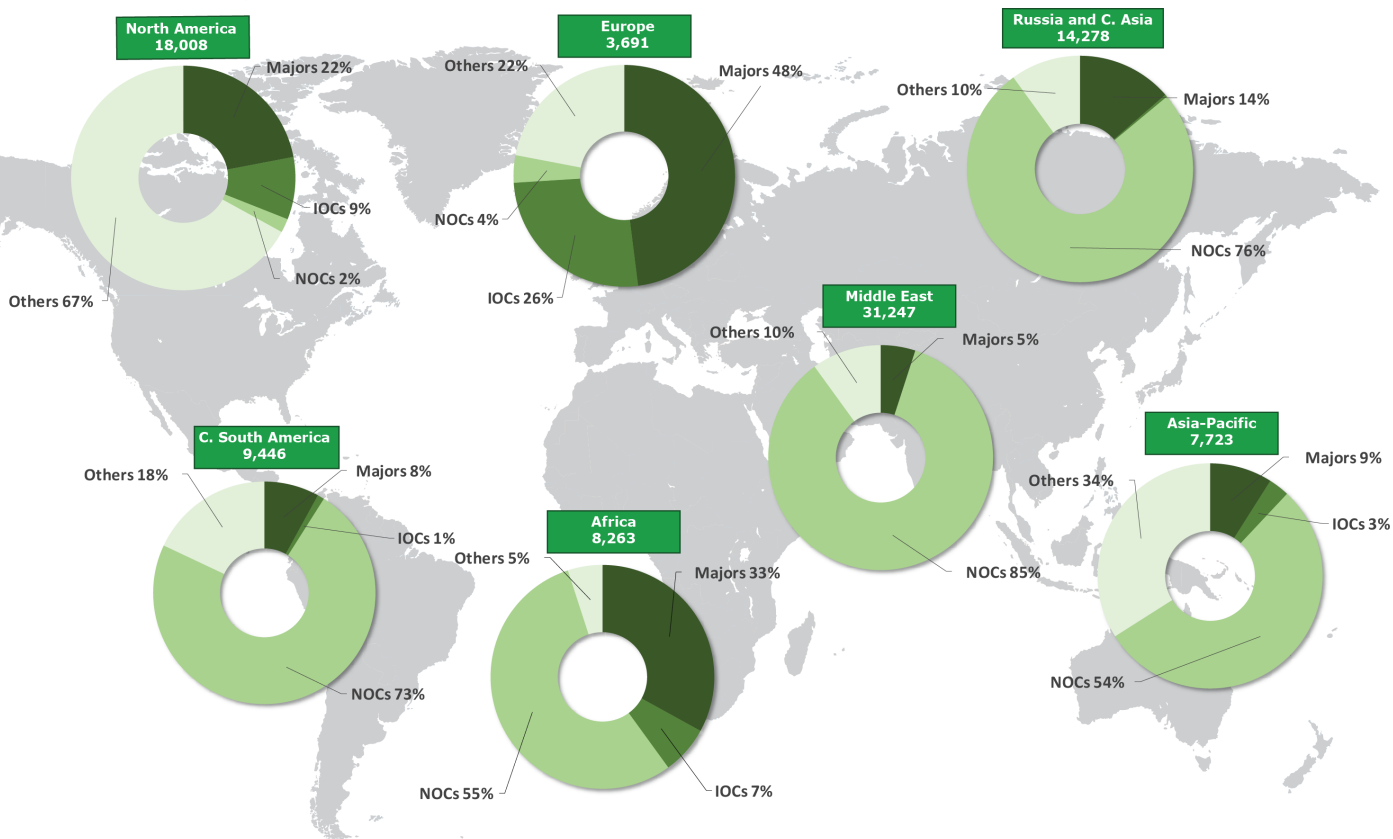
2017

World: 92,656 thousand barrels/day



2017

(thousand barrels/day)



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

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

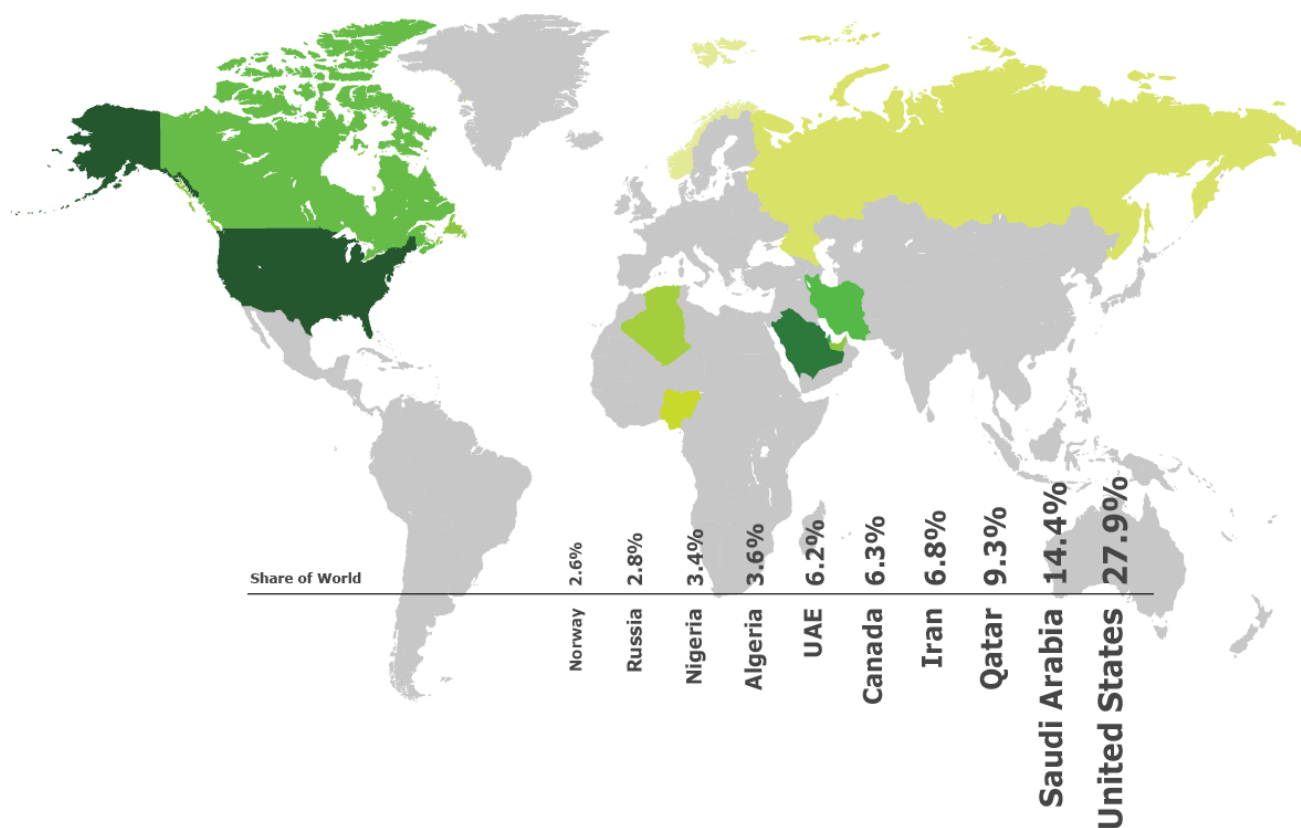
**NOCs:** ADNOC, Bahrain NOC, Bashneft, CNOOC, CNPC-PetroChina, CPC Taiwan, Dubai Petroleum, Ecopetrol, EGPC, Gazprom, INOC, Israel NOC, KazMunaiGaz, KNOC, KPC, Lukoil, Lybian NOC, MEDCO Energy, MOGE, Morocco NOC, Mubadala - Abu Dhabi, NIOC, NNPC, Novatek, Oil India, ONGC, Pakistan Oil Field, Pakistan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

### The World Top 10 Natural Gas Liquids Producers (\*)

(thousand barrels/day)

|                         | 2000         | 2005         | 2010          | 2015          | 2016          | 2017          | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|-------------------------|--------------|--------------|---------------|---------------|---------------|---------------|----------------------|---------------------|
| United States           | 1,911        | 1,717        | 2,074         | 3,342         | 3,509         | 3,736         | 6.5%                 | 4.0%                |
| Saudi Arabia            | 1,011        | 1,493        | 1,710         | 1,805         | 1,940         | 1,924         | -0.9%                | 3.9%                |
| Qatar                   | 173          | 442          | 898           | 1,192         | 1,198         | 1,242         | 3.7%                 | 12.3%               |
| Iran                    | 75           | 346          | 510           | 732           | 830           | 908           | 9.4%                 | 15.8%               |
| Canada                  | 706          | 668          | 608           | 708           | 792           | 847           | 7.0%                 | 1.1%                |
| United Arab Emirates    | 384          | 536          | 520           | 836           | 838           | 837           | -0.1%                | 4.7%                |
| Algeria                 | 630          | 603          | 515           | 481           | 494           | 483           | -2.2%                | -1.6%               |
| Nigeria                 | 121          | 141          | 464           | 471           | 444           | 458           | 3.1%                 | 8.1%                |
| Russia                  | 50           | 145          | 251           | 368           | 377           | 377           | 0.1%                 | 12.6%               |
| Norway                  | 124          | 272          | 267           | 338           | 347           | 351           | 1.4%                 | 6.3%                |
| <b>The World Top 10</b> | <b>5,185</b> | <b>6,365</b> | <b>7,816</b>  | <b>10,272</b> | <b>10,769</b> | <b>11,164</b> | <b>3.7%</b>          | <b>4.6%</b>         |
| Rest of the world       | 1,878        | 2,136        | 2,403         | 2,240         | 2,229         | 2,229         | 0.0%                 | 1.0%                |
| <b>World</b>            | <b>7,063</b> | <b>8,501</b> | <b>10,219</b> | <b>12,512</b> | <b>12,998</b> | <b>13,393</b> | <b>3.0%</b>          | <b>3.8%</b>         |

### The World Top 10 (2017)



(\*) Data source: *Monthly Oil Data Services* © OECD/International Energy Agency, 2018.

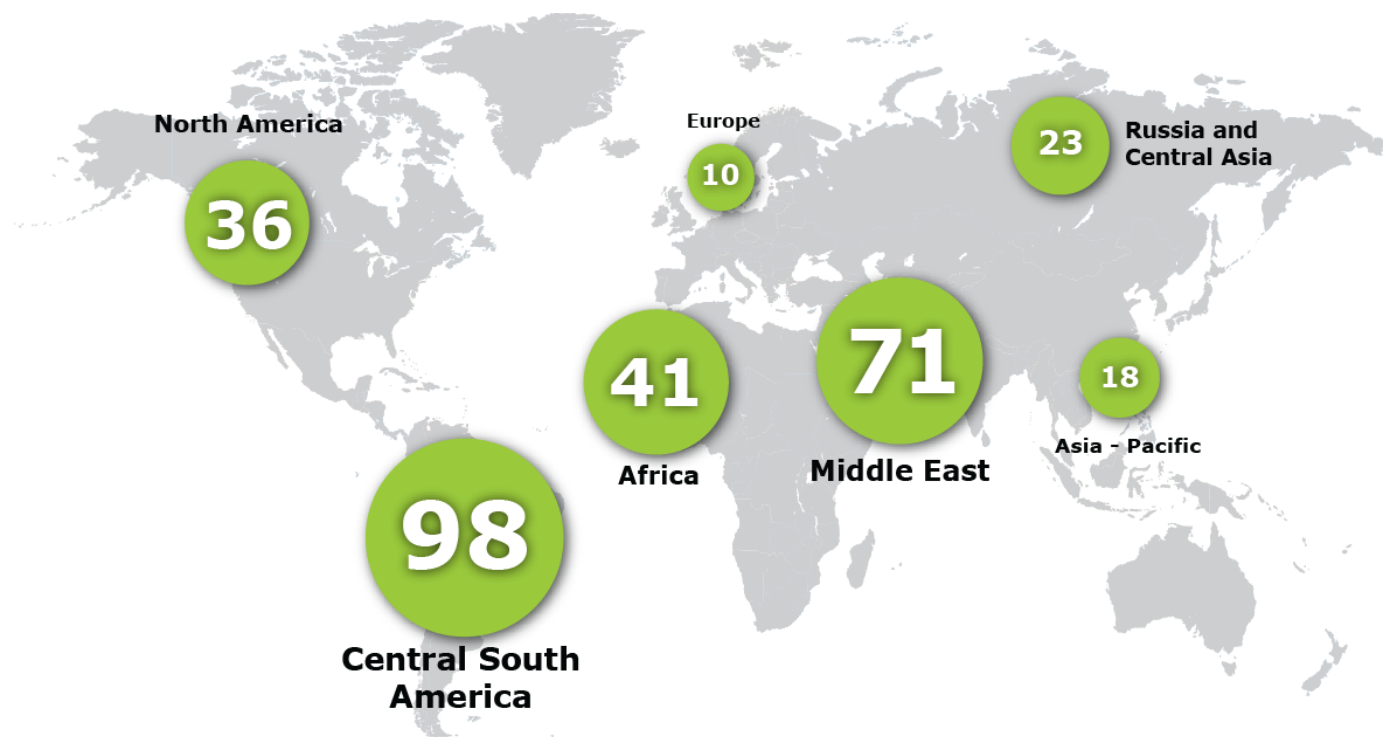
### Areas and Aggregates (\*)

(years)

|                         | 2000      | 2005      | 2010      | 2015      | 2016      | 2017      |
|-------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Europe                  | 7         | 7         | 8         | 9         | 9         | 10        |
| Russia and Central Asia | 20        | 18        | 20        | 23        | 23        | 23        |
| Middle East             | 81        | 80        | 86        | 74        | 70        | 71        |
| Africa                  | 33        | 31        | 33        | 41        | 43        | 41        |
| Asia - Pacific          | 16        | 15        | 15        | 16        | 17        | 18        |
| Americas                | 43        | 42        | 69        | 54        | 58        | 57        |
| - North America         | 52        | 55        | 49        | 33        | 38        | 36        |
| - Central South America | 34        | 29        | 89        | 89        | 93        | 98        |
| <b>World</b>            | <b>45</b> | <b>44</b> | <b>53</b> | <b>49</b> | <b>50</b> | <b>50</b> |
| European Union          | 7         | 7         | 8         | 9         | 9         | 9         |
| MENA                    | 75        | 74        | 80        | 73        | 69        | 69        |
| OECD                    | 32        | 32        | 33        | 26        | 30        | 29        |
| NON OECD                | 51        | 48        | 59        | 57        | 57        | 57        |
| OPEC                    | 75        | 72        | 93        | 86        | 84        | 85        |
| NON OPEC                | 24        | 23        | 24        | 23        | 24        | 24        |

### Reserves/Production Ratio (2017)

World: 50 years



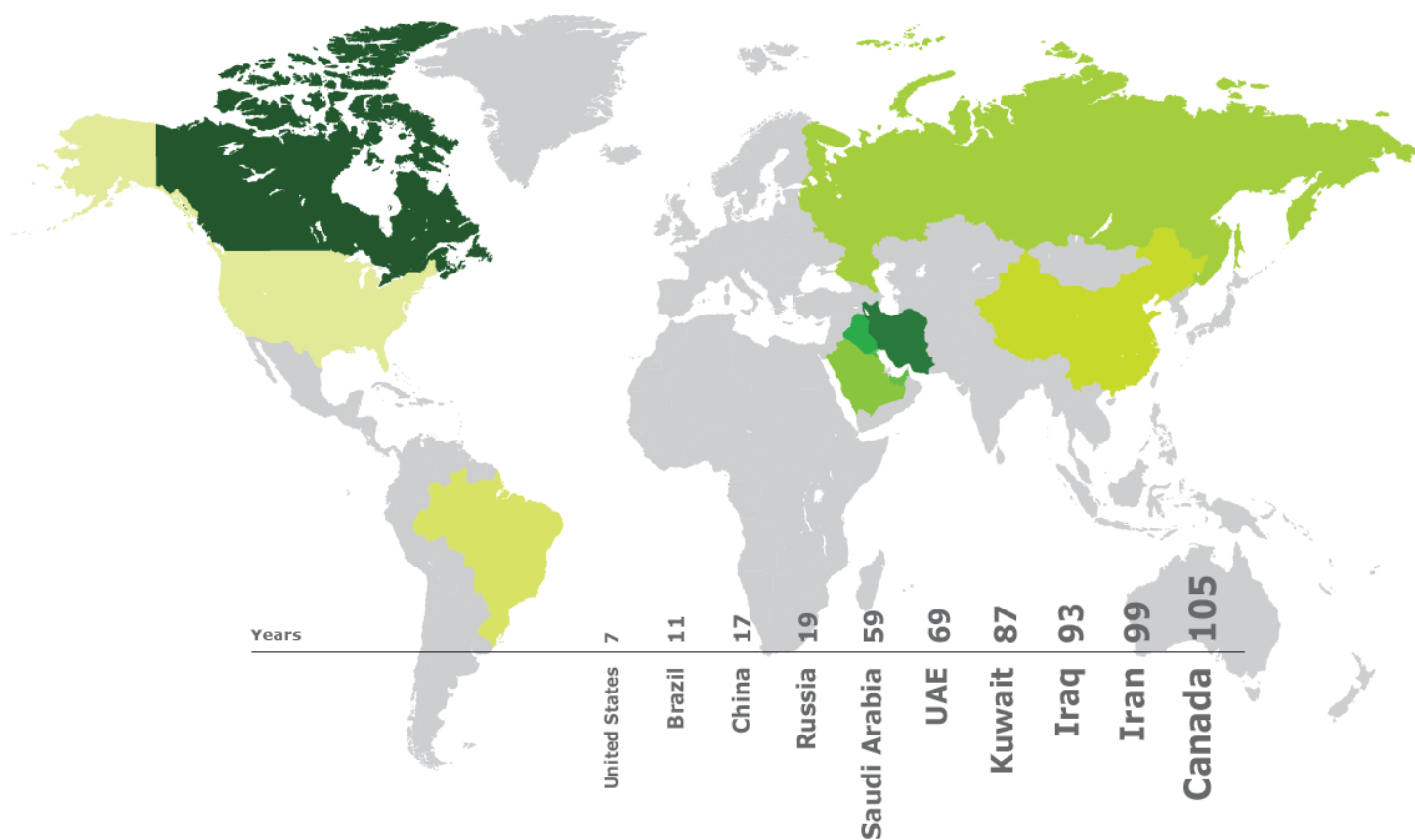
(\*) Data source: Eni's calculations on Enerdata *Global Energy & CO<sub>2</sub> Data, Monthly Oil Data Services* °OECD/International Energy Agency, 2018 and other official data sources.

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

(years)

|                      | 2000 | 2005 | 2010 | 2015 | 2016 | 2017 |
|----------------------|------|------|------|------|------|------|
| Canada               | 183  | 162  | 144  | 107  | 121  | 113  |
| Kuwait               | 122  | 109  | 111  | 90   | 87   | 92   |
| Iran                 | 73   | 88   | 98   | 121  | 98   | 91   |
| Iraq                 | 119  | 172  | 161  | 95   | 90   | 88   |
| United Arab Emirates | 102  | 89   | 95   | 71   | 69   | 71   |
| Saudi Arabia         | 77   | 66   | 73   | 61   | 59   | 61   |
| Russia               | 20   | 17   | 16   | 20   | 19   | 19   |
| China                | 20   | 14   | 14   | 16   | 18   | 18   |
| Brazil               | 18   | 19   | 18   | 14   | 13   | 13   |
| United States        | 8    | 9    | 9    | 7    | 8    | 7    |

### The World Top 10 (2017)



<sup>(\*)</sup> Data source: Eni's calculations on Enerdata *Global Energy & CO<sub>2</sub> Data, Monthly Oil Data Services* ©OECD/International Energy Agency, 2018 and other official data sources.

### Countries (\*)

(years)

|                | 2000     | 2005     | 2010     | 2015     | 2016     | 2017      |
|----------------|----------|----------|----------|----------|----------|-----------|
| <b>Europe</b>  | <b>7</b> | <b>7</b> | <b>8</b> | <b>9</b> | <b>9</b> | <b>10</b> |
| Albania        | 84       | 68       | 44       | 20       | 21       | 23        |
| Austria        | 13       | 9        | 6        | 7        | 7        | 7         |
| Belarus        | 16       | 15       | 16       | 17       | 17       | 18        |
| Bulgaria       | 88       | 41       | 42       | 43       | 42       | 42        |
| Croatia        | 9        | 9        | 11       | 14       | 13       | 13        |
| Czech Republic | 6        | 4        | 7        | 11       | 11       | 10        |
| Denmark        | 8        | 9        | 10       | 9        | 9        | 9         |
| France         | 10       | 12       | 8        | 10       | 11       | 11        |
| Germany        | 13       | 9        | 10       | 10       | 10       | 10        |
| Greece         | 5        | 11       | 12       | 23       | 9        | 10        |
| Hungary        | 8        | 8        | 3        | 4        | 3        | 3         |
| Italy (**)     | 20       | 10       | 14       | 15       | 19       | 20        |
| Netherlands    | 6        | 6        | 24       | 9        | 11       | 11        |
| Norway         | 8        | 7        | 7        | 7        | 9        | 9         |
| Poland         | 23       | 9        | 14       | 15       | 14       | 14        |
| Romania        | 24       | 11       | 18       | 20       | 21       | 22        |
| Serbia         | 11       | 16       | 12       | 11       | 11       | 12        |
| Slovakia       | 22       | 3        | 5        | 7        | 11       | 6         |
| Spain          | 13       | 131      | 131      | 43       | 66       | 55        |
| Turkey         | 16       | 19       | 16       | 16       | 15       | 16        |
| Ukraine        | 14       | 11       | 14       | 21       | 22       | 23        |
| United Kingdom | 5        | 6        | 6        | 7        | 7        | 7         |

|                                | 2000      | 2005      | 2010      | 2015      | 2016      | 2017      |
|--------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>Russia and Central Asia</b> | <b>20</b> | <b>18</b> | <b>20</b> | <b>23</b> | <b>23</b> | <b>23</b> |
| Russia                         | 20        | 17        | 16        | 20        | 19        | 19        |
| Azerbaijan                     | 11        | 43        | 18        | 23        | 23        | 24        |
| Georgia                        | 47        | 73        | 117       | 195       | 215       | 237       |
| Kazakhstan                     | 21        | 19        | 49        | 48        | 49        | 45        |
| Kyrgyzstan                     | 78        | 51        | 124       | 93        | 103       | 114       |
| Tajikistan                     | 88        | 100       | 168       |           |           |           |
| Turkmenistan                   | 9         | 7         | 8         | 6         | 6         | 7         |
| Uzbekistan                     | 9         | 14        | 18        | 25        | 26        | 28        |

(\*) Data source: Eni's calculations on Enerdata *Global Energy & CO<sub>2</sub> Data, Monthly Oil Data Services* ° OECD/International Energy Agency, 2018 and other official data sources.

(\*\*) The original data are from Italian Ministry for Economic Development and *Monthly Oil Data Services* ° OECD/International Energy Agency, 2018.



### Countries (\*)

(years)

|                      | 2000      | 2005      | 2010      | 2015      | 2016      | 2017      |
|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>Middle East</b>   | <b>81</b> | <b>80</b> | <b>86</b> | <b>74</b> | <b>70</b> | <b>71</b> |
| Bahrain              | 2         | 2         | 2         | 2         | 2         | 2         |
| Iran                 | 73        | 88        | 98        | 121       | 98        | 91        |
| Iraq                 | 119       | 172       | 161       | 95        | 90        | 88        |
| Kuwait               | 122       | 109       | 111       | 90        | 87        | 92        |
| Oman                 | 17        | 20        | 17        | 15        | 14        | 15        |
| Qatar                | 42        | 57        | 42        | 35        | 35        | 35        |
| Saudi Arabia         | 77        | 66        | 73        | 61        | 59        | 61        |
| Syria                | 11        | 18        | 18        | 257       | 272       | 278       |
| United Arab Emirates | 102       | 89        | 95        | 71        | 69        | 71        |
| Yemen                | 15        | 19        | 27        | 257       | 505       | 329       |

|                   | 2000      | 2005      | 2010      | 2015      | 2016      | 2017      |
|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>Africa</b>     | <b>33</b> | <b>31</b> | <b>33</b> | <b>41</b> | <b>43</b> | <b>41</b> |
| Algeria           | 22        | 17        | 19        | 21        | 21        | 22        |
| Angola            | 22        | 20        | 14        | 14        | 15        | 13        |
| Cameroon          | 10        | 12        | 9         | 6         | 6         | 8         |
| Chad              |           | 24        | 34        | 32        | 34        | 34        |
| Congo             | 17        | 17        | 14        | 18        | 17        | 15        |
| Côte d'Ivoire     | 42        | 7         | 7         | 11        | 7         | 6         |
| Dem. Rep. Congo   | 24        | 21        | 20        | 23        | 25        | 26        |
| Egypt             | 11        | 16        | 17        | 17        | 18        | 19        |
| Equatorial Guinea | 23        | 9         | 10        | 11        | 13        | 14        |
| Gabon             | 24        | 22        | 22        | 24        | 24        | 27        |
| Ghana             | 7         | 8         | 271       | 18        | 20        | 11        |
| Libya             | 67        | 66        | 78        | 303       | 311       | 152       |
| Mauritania        |           |           | 30        | 12        | 14        | 15        |
| Morocco           | 21        | 4         | 13        | 13        | 13        | 13        |
| Niger             |           |           |           | 24        | 24        | 24        |
| Nigeria           | 37        | 39        | 40        | 45        | 53        | 51        |
| Sudan             | 4         | 5         | 29        | 16        | 21        | 23        |
| Tunisia           | 15        | 21        | 14        | 21        | 22        | 25        |

(\*) Data source: Eni's calculations on Enerdata *Global Energy & CO<sub>2</sub> Data, Monthly Oil Data Services* ©OECD/International Energy Agency, 2018 and other official data sources.

### Countries (\*)

(years)

|                       | 2000      | 2005      | 2010      | 2015      | 2016      | 2017      |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>Asia - Pacific</b> | <b>16</b> | <b>15</b> | <b>15</b> | <b>16</b> | <b>17</b> | <b>18</b> |
| Australia             | 17        | 19        | 19        | 29        | 31        | 34        |
| Bangladesh            | 42        | 13        | 16        | 20        | 21        | 22        |
| Brunei                | 17        | 15        | 18        | 24        | 25        | 27        |
| China                 | 20        | 14        | 14        | 16        | 18        | 18        |
| India                 | 19        | 21        | 15        | 14        | 14        | 14        |
| Indonesia             | 10        | 11        | 11        | 11        | 10        | 11        |
| Japan                 | 10        | 9         | 7         | 10        | 11        | 11        |
| Malaysia              | 13        | 18        | 22        | 23        | 23        | 23        |
| Mongolia              | 224       | 74        | 7         | 29        | 30        | 32        |
| Myanmar               | 12        | 6         | 7         | 11        | 12        | 12        |
| New Zealand           | 8         | 4         | 5         | 5         | 6         | 6         |
| Pakistan              | 11        | 12        | 13        | 7         | 7         | 7         |
| Papua New Guinea      | 16        | 12        | 8         | 8         | 8         | 10        |
| Philippines           |           | 17        | 20        | 22        | 23        | 26        |
| Taiwan                | 12        | 12        |           |           |           |           |
| Thailand              | 7         | 4         | 3         | 2         | 2         | 3         |
| Vietnam               | 16        | 23        | 39        | 36        | 39        | 43        |

|                     | 2000      | 2005      | 2010      | 2015      | 2016      | 2017      |
|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>Americas</b>     | <b>43</b> | <b>42</b> | <b>69</b> | <b>54</b> | <b>58</b> | <b>57</b> |
| Argentina           | 9         | 7         | 10        | 10        | 11        | 11        |
| Barbados            | 9         | 8         | 6         | 9         | 10        | 9         |
| Bolivia             | 30        | 21        | 26        | 8         | 8         | 9         |
| Brazil              | 18        | 19        | 18        | 14        | 13        | 13        |
| Canada              | 183       | 162       | 144       | 107       | 121       | 113       |
| Chile               | 48        | 54        | 32        | 72        | 82        | 75        |
| Colombia            | 8         | 8         | 7         | 6         | 6         | 6         |
| Cuba                | 16        | 38        | 6         | 6         | 7         | 7         |
| Ecuador             | 31        | 27        | 42        | 42        | 41        | 43        |
| Guatemala           | 19        | 14        | 19        | 24        | 27        | 29        |
| Mexico              | 22        | 9         | 10        | 10        | 8         | 9         |
| Peru                | 24        | 25        | 22        | 22        | 24        | 24        |
| Suriname            | 22        | 26        | 11        | 11        | 12        | 12        |
| Trinidad and Tobago | 17        | 13        | 15        | 18        | 7         | 7         |
| United States       | 8         | 9         | 9         | 7         | 8         | 7         |
| Venezuela           | 65        | 71        | 293       | 309       | 341       | 389       |

(\*) Data source: Eni's calculations on Enerdata *Global Energy & CO<sub>2</sub> Data, Monthly Oil Data Services* ©OECD/International Energy Agency, 2018 and other official data sources.

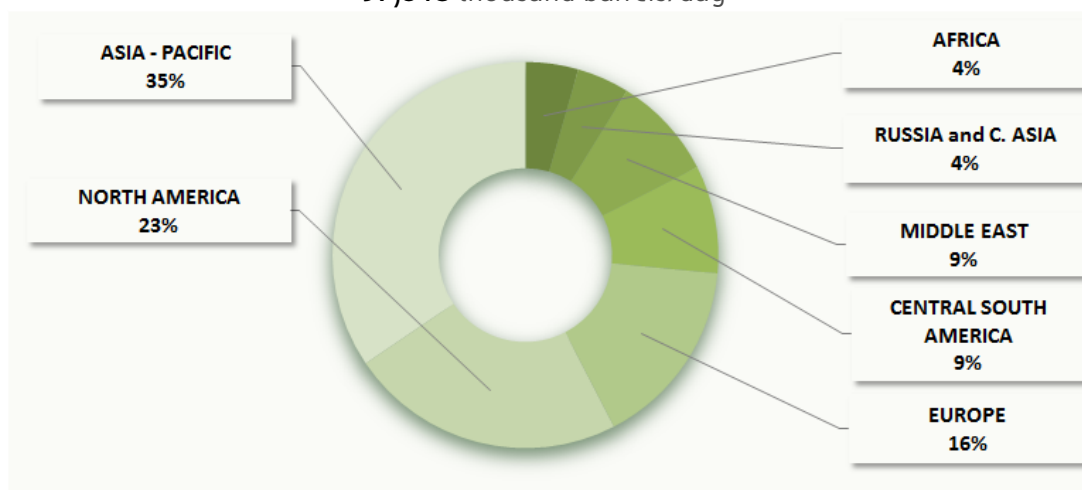
### Areas and Aggregates (\*)

(thousand barrels/day)

|                         | 2000          | 2005          | 2010          | 2015          | 2016          | 2017          | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|-------------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------------|---------------------|
| Europe                  | 16,474        | 17,136        | 15,967        | 14,951        | 15,192        | 15,550        | 2.4%                 | -0.3%               |
| Russia and Central Asia | 3,243         | 3,303         | 3,528         | 4,154         | 4,253         | 4,293         | 0.9%                 | 1.7%                |
| Middle East             | 5,011         | 6,206         | 7,558         | 8,572         | 8,474         | 8,477         | 0.0%                 | 3.1%                |
| Africa                  | 2,466         | 2,928         | 3,609         | 4,257         | 4,289         | 4,324         | 0.8%                 | 3.4%                |
| Asia - Pacific          | 20,885        | 24,178        | 27,480        | 31,818        | 32,667        | 33,729        | 3.3%                 | 2.9%                |
| Americas                | 29,060        | 30,904        | 30,422        | 31,264        | 31,303        | 31,442        | 0.4%                 | 0.5%                |
| - North America         | 22,007        | 23,506        | 21,858        | 22,212        | 22,378        | 22,602        | 1.0%                 | 0.2%                |
| - Central South America | 7,053         | 7,398         | 8,564         | 9,051         | 8,925         | 8,841         | -0.9%                | 1.3%                |
| <b>World</b>            | <b>77,139</b> | <b>84,654</b> | <b>88,564</b> | <b>95,017</b> | <b>96,178</b> | <b>97,815</b> | <b>1.7%</b>          | <b>1.4%</b>         |
| European Union          | 14,748        | 15,254        | 14,067        | 12,973        | 13,154        | 13,450        | 2.2%                 | -0.5%               |
| MENA                    | 6,265         | 7,663         | 9,323         | 10,529        | 10,456        | 10,433        | -0.2%                | 3.0%                |
| OECD                    | 48,457        | 50,405        | 47,059        | 46,442        | 46,906        | 47,402        | 1.1%                 | -0.1%               |
| NON OECD                | 28,682        | 34,249        | 41,505        | 48,575        | 49,272        | 50,413        | 2.3%                 | 3.4%                |
| OPEC                    | 5,760         | 7,225         | 9,063         | 10,309        | 10,038        | 10,020        | -0.2%                | 3.3%                |
| NON OPEC                | 71,379        | 77,428        | 79,501        | 84,708        | 86,140        | 87,796        | 1.9%                 | 1.2%                |

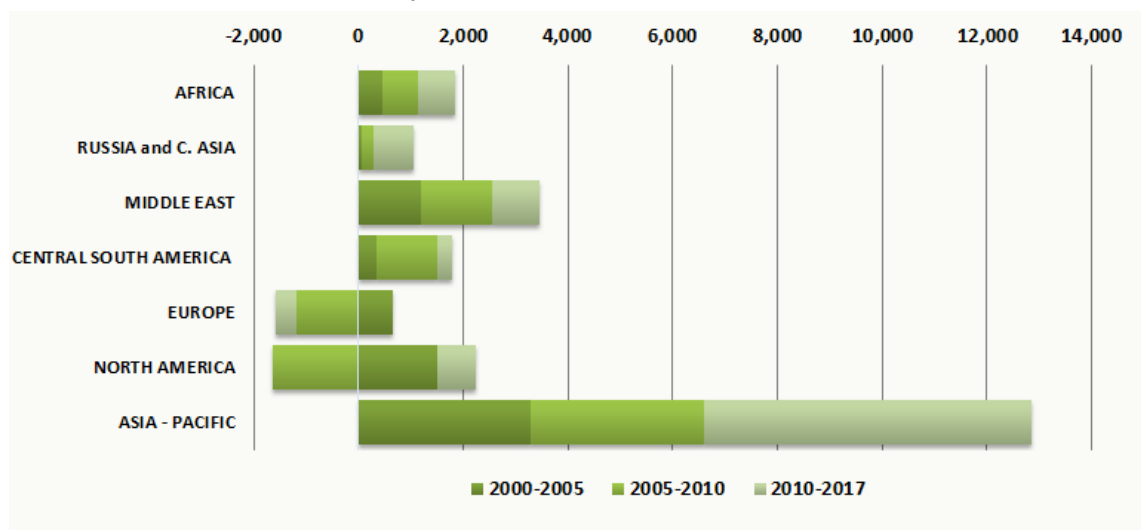
### World Oil Consumption (2017)

97,815 thousand barrels/day



### World Oil Consumption Growth (2000-2017)

20,676 thousand barrels/day

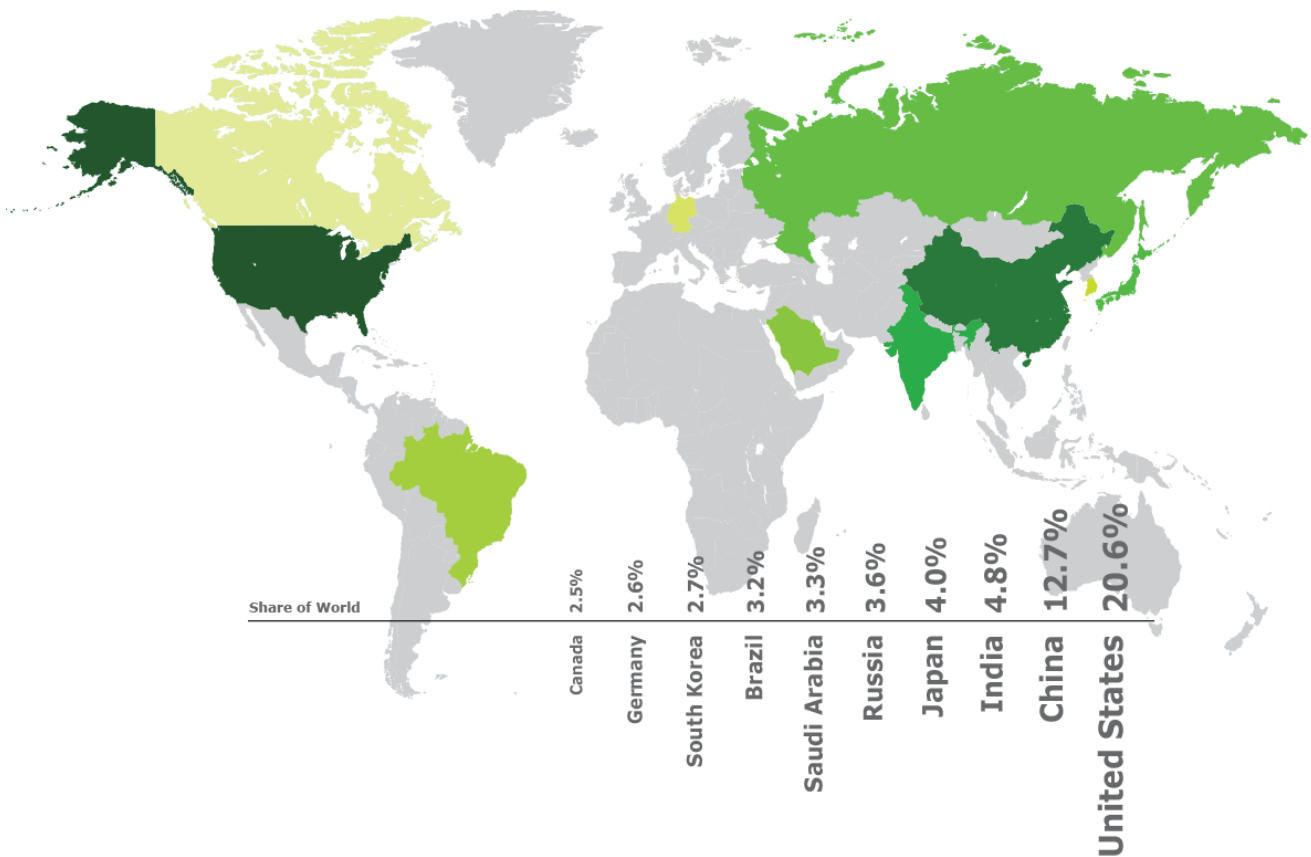


(\*) Data source: Eni's calculations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

### The World Top 10 Consumers (\*) (thousand barrels/day)

|                         | 2000          | 2005          | 2010          | 2015          | 2016          | 2017          | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|-------------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------------|---------------------|
| United States           | 19,999        | 21,168        | 19,476        | 19,840        | 19,999        | 20,188        | 0.9%                 | 0.1%                |
| China                   | 4,651         | 6,772         | 9,031         | 11,562        | 11,809        | 12,445        | 5.4%                 | 6.0%                |
| India                   | 2,336         | 2,632         | 3,297         | 4,241         | 4,560         | 4,679         | 2.6%                 | 4.2%                |
| Japan                   | 5,357         | 5,164         | 4,328         | 4,120         | 4,026         | 3,942         | -2.1%                | -1.8%               |
| Russia                  | 2,678         | 2,732         | 2,947         | 3,450         | 3,533         | 3,557         | 0.7%                 | 1.7%                |
| Saudi Arabia            | 1,571         | 1,941         | 2,674         | 3,415         | 3,264         | 3,221         | -1.3%                | 4.3%                |
| Brazil                  | 2,135         | 2,173         | 2,774         | 3,177         | 3,074         | 3,088         | 0.4%                 | 2.2%                |
| South Korea             | 2,135         | 2,191         | 2,269         | 2,473         | 2,630         | 2,654         | 0.9%                 | 1.3%                |
| Germany                 | 2,767         | 2,624         | 2,467         | 2,368         | 2,410         | 2,504         | 3.9%                 | -0.6%               |
| Canada                  | 2,008         | 2,338         | 2,382         | 2,372         | 2,379         | 2,414         | 1.5%                 | 1.1%                |
| <b>The World Top 10</b> | <b>45,636</b> | <b>49,735</b> | <b>51,644</b> | <b>57,018</b> | <b>57,684</b> | <b>58,692</b> | <b>1.7%</b>          | <b>1.5%</b>         |
| Rest of the World       | 31,503        | 34,918        | 36,920        | 37,999        | 38,494        | 39,123        | 1.6%                 | 1.3%                |
| <b>World</b>            | <b>77,139</b> | <b>84,654</b> | <b>88,564</b> | <b>95,017</b> | <b>96,178</b> | <b>97,815</b> | <b>1.7%</b>          | <b>1.4%</b>         |

### The World Top 10 (2017)



(\*) Data source: *Monthly Oil Data Services* © OECD/International Energy Agency, 2018.

### Countries (\*)

(thousand barrels/day)

|                    | 2000          | 2005          | 2010          | 2015          | 2016          | 2017          | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------------|---------------------|
| <b>Europe</b>      | <b>16,474</b> | <b>17,136</b> | <b>15,967</b> | <b>14,951</b> | <b>15,192</b> | <b>15,550</b> | <b>2.4%</b>          | <b>-0.3%</b>        |
| Albania            | 21            | 29            | 26            | 26            | 29            | 29            | 0.3%                 | 2.0%                |
| Austria            | 250           | 299           | 278           | 263           | 267           | 268           | 0.0%                 | 0.4%                |
| Belarus            | 119           | 148           | 151           | 139           | 137           | 137           | 0.0%                 | 0.8%                |
| Belgium            | 610           | 665           | 659           | 650           | 662           | 652           | -1.6%                | 0.4%                |
| Bosnia Herzegovina | 23            | 23            | 34            | 31            | 32            | 33            | 2.8%                 | 2.1%                |
| Bulgaria           | 86            | 99            | 84            | 95            | 96            | 97            | 1.0%                 | 0.7%                |
| Croatia            | 82            | 94            | 78            | 69            | 72            | 73            | 1.4%                 | -0.7%               |
| Cyprus             | 50            | 57            | 57            | 48            | 49            | 50            | 1.0%                 | 0.0%                |
| Czech Republic     | 170           | 213           | 202           | 196           | 180           | 216           | 19.8%                | 1.4%                |
| Denmark            | 210           | 183           | 167           | 154           | 158           | 159           | 0.2%                 | -1.6%               |
| Estonia            | 21            | 26            | 26            | 28            | 29            | 29            | -0.7%                | 1.9%                |
| Finland            | 213           | 221           | 214           | 199           | 201           | 196           | -2.3%                | -0.5%               |
| France             | 2,001         | 1,990         | 1,821         | 1,692         | 1,657         | 1,706         | 3.0%                 | -0.9%               |
| Germany            | 2,767         | 2,624         | 2,467         | 2,368         | 2,410         | 2,504         | 3.9%                 | -0.6%               |
| Gibraltar          | 53            | 79            | 83            | 74            | 78            | 81            | 4.6%                 | 2.6%                |
| Greece             | 399           | 424           | 370           | 295           | 300           | 303           | 1.1%                 | -1.6%               |
| Hungary            | 143           | 155           | 149           | 156           | 157           | 171           | 8.6%                 | 1.0%                |
| Iceland            | 16            | 17            | 15            | 17            | 20            | 21            | 5.7%                 | 1.6%                |
| Ireland            | 172           | 197           | 164           | 146           | 152           | 154           | 1.3%                 | -0.7%               |
| Italy              | 1,854         | 1,781         | 1,544         | 1,274         | 1,253         | 1,283         | 2.4%                 | -2.1%               |
| Kosovo             | 7             | 10            | 11            | 14            | 14            | 14            | 1.8%                 | 4.1%                |
| Latvia             | 28            | 36            | 37            | 37            | 38            | 38            | 1.4%                 | 1.8%                |
| Lithuania          | 59            | 59            | 56            | 57            | 58            | 60            | 2.6%                 | 0.1%                |
| Luxembourg         | 48            | 65            | 60            | 56            | 56            | 58            | 3.3%                 | 1.1%                |
| Macedonia          | 19            | 18            | 18            | 20            | 21            | 22            | 2.5%                 | 0.9%                |
| Malta              | 29            | 32            | 47            | 43            | 45            | 46            | 1.7%                 | 2.8%                |
| Moldova            | 13            | 14            | 17            | 18            | 18            | 18            | 2.2%                 | 2.0%                |
| Montenegro         | 2             | 6             | 7             | 6             | 6             | 6             | 3.0%                 | 7.1%                |
| Netherlands        | 929           | 1,086         | 1,026         | 962           | 973           | 964           | -0.9%                | 0.2%                |
| Norway             | 209           | 222           | 229           | 230           | 228           | 228           | 0.3%                 | 0.5%                |
| Poland             | 411           | 471           | 568           | 533           | 578           | 638           | 10.4%                | 2.6%                |
| Portugal           | 333           | 337           | 274           | 238           | 234           | 238           | 2.1%                 | -1.9%               |
| Romania            | 206           | 224           | 176           | 190           | 197           | 208           | 5.7%                 | 0.0%                |
| Serbia             | 29            | 83            | 81            | 71            | 76            | 77            | 1.8%                 | 5.9%                |
| Slovakia           | 67            | 78            | 84            | 79            | 84            | 89            | 5.6%                 | 1.7%                |
| Slovenia           | 50            | 54            | 55            | 49            | 52            | 52            | -0.2%                | 0.3%                |
| Spain              | 1,433         | 1,607         | 1,441         | 1,247         | 1,287         | 1,296         | 0.7%                 | -0.6%               |
| Sweden             | 362           | 360           | 336           | 304           | 322           | 323           | 0.5%                 | -0.7%               |
| Switzerland        | 270           | 267           | 261           | 227           | 217           | 224           | 3.1%                 | -1.1%               |
| Turkey             | 667           | 659           | 675           | 885           | 939           | 979           | 4.3%                 | 2.3%                |
| Ukraine            | 278           | 307           | 293           | 220           | 224           | 229           | 2.3%                 | -1.1%               |
| United Kingdom     | 1,765         | 1,819         | 1,626         | 1,547         | 1,586         | 1,579         | -0.4%                | -0.7%               |

|                                | 2000         | 2005         | 2010         | 2015         | 2016         | 2017         | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|--------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------------|---------------------|
| <b>Russia and Central Asia</b> | <b>3,243</b> | <b>3,303</b> | <b>3,528</b> | <b>4,154</b> | <b>4,253</b> | <b>4,293</b> | <b>0.9%</b>          | <b>1.7%</b>         |
| Russia                         | 2,678        | 2,732        | 2,947        | 3,450        | 3,533        | 3,557        | 0.7%                 | 1.7%                |
| Armenia                        | 6            | 9            | 9            | 7            | 8            | 8            | 2.7%                 | 1.1%                |
| Azerbaijan                     | 106          | 104          | 74           | 96           | 95           | 96           | 1.3%                 | -0.6%               |
| Georgia                        | 18           | 17           | 22           | 26           | 27           | 28           | 2.8%                 | 2.6%                |
| Kazakhstan                     | 206          | 198          | 233          | 308          | 310          | 312          | 0.8%                 | 2.5%                |
| Kyrgyzstan                     | 15           | 14           | 27           | 36           | 37           | 38           | 2.0%                 | 5.4%                |
| Tajikistan                     | 3            | 6            | 11           | 23           | 24           | 25           | 4.6%                 | 13.3%               |
| Turkmenistan                   | 104          | 120          | 126          | 151          | 160          | 166          | 4.1%                 | 2.8%                |
| Uzbekistan                     | 106          | 103          | 80           | 57           | 60           | 63           | 4.7%                 | -3.0%               |

(\*) Data source: *Monthly Oil Data Services* © OECD/International Energy Agency, 2018.

### Countries (\*)

(thousand barrels/day)

|                      | 2000         | 2005         | 2010         | 2015         | 2016         | 2017         | $\Delta$ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------------------------|---------------------|
| <b>Middle East</b>   | <b>5,011</b> | <b>6,206</b> | <b>7,558</b> | <b>8,572</b> | <b>8,474</b> | <b>8,477</b> | <b>0.0%</b>                 | <b>3.1%</b>         |
| Bahrain              | 34           | 64           | 62           | 64           | 65           | 66           | 1.4%                        | 3.9%                |
| Iran                 | 1,419        | 1,723        | 1,861        | 1,836        | 1,817        | 1,831        | 0.7%                        | 1.5%                |
| Iraq                 | 471          | 575          | 655          | 815          | 827          | 856          | 3.5%                        | 3.6%                |
| Israel               | 252          | 233          | 251          | 201          | 200          | 213          | 6.4%                        | -1.0%               |
| Jordan               | 101          | 112          | 102          | 134          | 138          | 143          | 3.6%                        | 2.1%                |
| Kuwait               | 216          | 327          | 450          | 434          | 430          | 426          | -1.0%                       | 4.1%                |
| Lebanon              | 93           | 97           | 120          | 151          | 154          | 158          | 2.4%                        | 3.1%                |
| Oman                 | 64           | 72           | 127          | 187          | 192          | 195          | 1.5%                        | 6.8%                |
| Qatar                | 48           | 89           | 182          | 252          | 265          | 241          | -8.9%                       | 9.9%                |
| Saudi Arabia         | 1,571        | 1,941        | 2,674        | 3,415        | 3,264        | 3,221        | -1.3%                       | 4.3%                |
| Syria                | 228          | 324          | 299          | 136          | 131          | 129          | -1.7%                       | -3.3%               |
| United Arab Emirates | 416          | 511          | 629          | 837          | 886          | 897          | 1.2%                        | 4.6%                |
| Yemen                | 98           | 139          | 146          | 110          | 105          | 102          | -2.9%                       | 0.2%                |

|                 | 2000         | 2005         | 2010         | 2015         | 2016         | 2017         | $\Delta$ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------------------------|---------------------|
| <b>Africa</b>   | <b>2,466</b> | <b>2,928</b> | <b>3,609</b> | <b>4,257</b> | <b>4,289</b> | <b>4,324</b> | <b>0.8%</b>                 | <b>3.4%</b>         |
| Algeria         | 240          | 271          | 351          | 480          | 455          | 448          | -1.5%                       | 3.7%                |
| Angola          | 37           | 42           | 103          | 145          | 150          | 153          | 2.2%                        | 8.7%                |
| Benin           | 10           | 19           | 35           | 36           | 37           | 39           | 5.2%                        | 8.1%                |
| Cameroon        | 21           | 22           | 34           | 43           | 44           | 46           | 3.2%                        | 4.6%                |
| Congo           | 4            | 6            | 12           | 17           | 17           | 18           | 2.9%                        | 8.8%                |
| Côte d'Ivoire   | 27           | 24           | 24           | 45           | 49           | 51           | 4.1%                        | 3.9%                |
| Dem. Rep. Congo | 8            | 13           | 16           | 21           | 21           | 22           | 4.4%                        | 6.1%                |
| Egypt           | 539          | 638          | 766          | 858          | 888          | 854          | -3.9%                       | 2.7%                |
| Ethiopia        | 23           | 33           | 45           | 70           | 74           | 76           | 3.3%                        | 7.3%                |
| Gabon           | 14           | 15           | 19           | 22           | 22           | 23           | 4.8%                        | 3.2%                |
| Ghana           | 39           | 49           | 72           | 87           | 91           | 95           | 4.3%                        | 5.4%                |
| Kenya           | 61           | 62           | 84           | 104          | 109          | 113          | 3.4%                        | 3.7%                |
| Libya           | 244          | 264          | 304          | 246          | 257          | 262          | 1.7%                        | 0.4%                |
| Morocco         | 147          | 193          | 257          | 271          | 279          | 288          | 3.4%                        | 4.1%                |
| Mozambique      | 10           | 11           | 16           | 24           | 24           | 25           | 4.5%                        | 5.6%                |
| Nigeria         | 224          | 300          | 331          | 441          | 421          | 448          | 6.5%                        | 4.2%                |
| Senegal         | 31           | 36           | 38           | 45           | 48           | 50           | 3.9%                        | 2.7%                |
| South Africa    | 431          | 496          | 585          | 642          | 623          | 615          | -1.3%                       | 2.1%                |
| Sudan           | 43           | 77           | 112          | 123          | 126          | 130          | 2.8%                        | 6.7%                |
| Tanzania        | 18           | 30           | 35           | 68           | 72           | 74           | 3.5%                        | 8.8%                |
| Tunisia         | 84           | 91           | 88           | 102          | 103          | 105          | 1.6%                        | 1.3%                |
| Zambia          | 11           | 14           | 13           | 22           | 23           | 24           | 3.7%                        | 4.9%                |
| Zimbabwe        | 23           | 14           | 13           | 27           | 27           | 26           | -2.7%                       | 0.8%                |
| Others Africa   | 178          | 207          | 256          | 318          | 328          | 340          | 3.6%                        | 3.9%                |

(\*) Data source: *Monthly Oil Data Services* © OECD/International Energy Agency, 2018.

### Countries (\*)

(thousand barrels/day)

|                       | 2000          | 2005          | 2010          | 2015          | 2016          | 2017          | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------------|---------------------|
| <b>Asia - Pacific</b> | <b>20,885</b> | <b>24,178</b> | <b>27,480</b> | <b>31,818</b> | <b>32,667</b> | <b>33,729</b> | <b>3.3%</b>          | <b>2.9%</b>         |
| Australia             | 872           | 962           | 1,035         | 1,106         | 1,100         | 1,176         | 7.0%                 | 1.8%                |
| Bangladesh            | 66            | 80            | 80            | 111           | 119           | 124           | 4.2%                 | 3.8%                |
| Brunei                | 13            | 14            | 16            | 17            | 17            | 17            | 1.8%                 | 1.8%                |
| China                 | 4,651         | 6,772         | 9,031         | 11,562        | 11,809        | 12,445        | 5.4%                 | 6.0%                |
| Hong Kong             | 250           | 290           | 416           | 371           | 378           | 430           | 13.7%                | 3.2%                |
| India                 | 2,336         | 2,632         | 3,297         | 4,241         | 4,560         | 4,679         | 2.6%                 | 4.2%                |
| Indonesia             | 1,152         | 1,342         | 1,518         | 1,549         | 1,551         | 1,601         | 3.2%                 | 2.0%                |
| Japan                 | 5,357         | 5,164         | 4,328         | 4,120         | 4,026         | 3,942         | -2.1%                | -1.8%               |
| Malaysia              | 445           | 509           | 586           | 688           | 702           | 731           | 4.2%                 | 3.0%                |
| Myanmar               | 37            | 42            | 24            | 118           | 124           | 129           | 3.8%                 | 7.6%                |
| Nepal                 | 15            | 16            | 22            | 26            | 27            | 28            | 3.1%                 | 3.6%                |
| New Zealand           | 134           | 153           | 153           | 161           | 168           | 176           | 5.0%                 | 1.6%                |
| North Korea           | 20            | 18            | 17            | 19            | 17            | 17            | 0.1%                 | -0.8%               |
| Pakistan              | 374           | 336           | 403           | 507           | 546           | 559           | 2.3%                 | 2.4%                |
| Philippines           | 350           | 312           | 314           | 401           | 423           | 451           | 6.7%                 | 1.5%                |
| Singapore             | 729           | 859           | 1,164         | 1,258         | 1,300         | 1,329         | 2.2%                 | 3.6%                |
| South Korea           | 2,135         | 2,191         | 2,269         | 2,473         | 2,630         | 2,654         | 0.9%                 | 1.3%                |
| Sri Lanka             | 76            | 96            | 88            | 110           | 115           | 119           | 4.0%                 | 2.7%                |
| Taiwan                | 868           | 991           | 1,025         | 1,002         | 1,006         | 1,017         | 1.1%                 | 0.9%                |
| Thailand              | 748           | 1,008         | 1,128         | 1,359         | 1,391         | 1,416         | 1.8%                 | 3.8%                |
| Vietnam               | 165           | 263           | 395           | 410           | 432           | 453           | 4.8%                 | 6.1%                |
| Others Asia - Pacific | 93            | 126           | 173           | 207           | 228           | 236           | 3.4%                 | 5.6%                |

|                      | 2000          | 2005          | 2010          | 2015          | 2016          | 2017          | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|----------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------------|---------------------|
| <b>Americas</b>      | <b>29,060</b> | <b>30,904</b> | <b>30,422</b> | <b>31,264</b> | <b>31,303</b> | <b>31,442</b> | <b>0.4%</b>          | <b>0.5%</b>         |
| Argentina            | 549           | 570           | 690           | 771           | 762           | 760           | -0.3%                | 1.9%                |
| Bolivia              | 40            | 47            | 63            | 88            | 91            | 93            | 2.0%                 | 5.1%                |
| Brazil               | 2,135         | 2,173         | 2,774         | 3,177         | 3,074         | 3,088         | 0.4%                 | 2.2%                |
| Canada               | 2,008         | 2,338         | 2,382         | 2,372         | 2,379         | 2,414         | 1.5%                 | 1.1%                |
| Chile                | 240           | 272           | 322           | 332           | 337           | 344           | 2.0%                 | 2.1%                |
| Colombia             | 270           | 263           | 267           | 314           | 366           | 367           | 0.3%                 | 1.8%                |
| Costa Rica           | 37            | 43            | 49            | 52            | 54            | 55            | 2.0%                 | 2.4%                |
| Cuba                 | 196           | 178           | 214           | 195           | 198           | 200           | 1.1%                 | 0.1%                |
| Dominican Republic   | 123           | 119           | 123           | 125           | 129           | 131           | 2.1%                 | 0.4%                |
| Ecuador              | 147           | 193           | 248           | 277           | 274           | 269           | -2.0%                | 3.6%                |
| El Salvador          | 37            | 45            | 44            | 50            | 50            | 51            | 0.9%                 | 1.8%                |
| Guatemala            | 61            | 72            | 71            | 89            | 91            | 93            | 2.3%                 | 2.5%                |
| Haiti                | 10            | 14            | 14            | 22            | 22            | 23            | 1.4%                 | 4.9%                |
| Honduras             | 28            | 43            | 46            | 61            | 61            | 62            | 0.5%                 | 4.7%                |
| Jamaica              | 66            | 70            | 50            | 53            | 54            | 53            | -0.6%                | -1.2%               |
| Mexico               | 2,062         | 2,069         | 2,094         | 2,006         | 2,027         | 1,925         | -5.0%                | -0.4%               |
| Netherlands Antilles | 74            | 79            | 73            | 61            | 63            | 64            | 2.0%                 | -0.8%               |
| Nicaragua            | 24            | 27            | 29            | 36            | 37            | 38            | 1.9%                 | 2.7%                |
| Panama               | 84            | 87            | 125           | 142           | 146           | 151           | 3.4%                 | 3.5%                |
| Paraguay             | 23            | 25            | 35            | 45            | 46            | 47            | 2.3%                 | 4.4%                |
| Peru                 | 163           | 160           | 202           | 236           | 252           | 256           | 1.2%                 | 2.7%                |
| Trinidad and Tobago  | 29            | 47            | 47            | 50            | 50            | 50            | 0.5%                 | 3.2%                |
| United States        | 19,999        | 21,168        | 19,476        | 19,840        | 19,999        | 20,188        | 0.9%                 | 0.1%                |
| Uruguay              | 43            | 43            | 52            | 53            | 53            | 54            | 1.0%                 | 1.4%                |
| Venezuela            | 497           | 647           | 807           | 672           | 540           | 519           | -3.8%                | 0.3%                |
| Others Americas      | 113           | 112           | 126           | 145           | 146           | 148           | 1.4%                 | 1.6%                |

(\*) Data source: *Monthly Oil Data Services* © OECD/International Energy Agency, 2018.

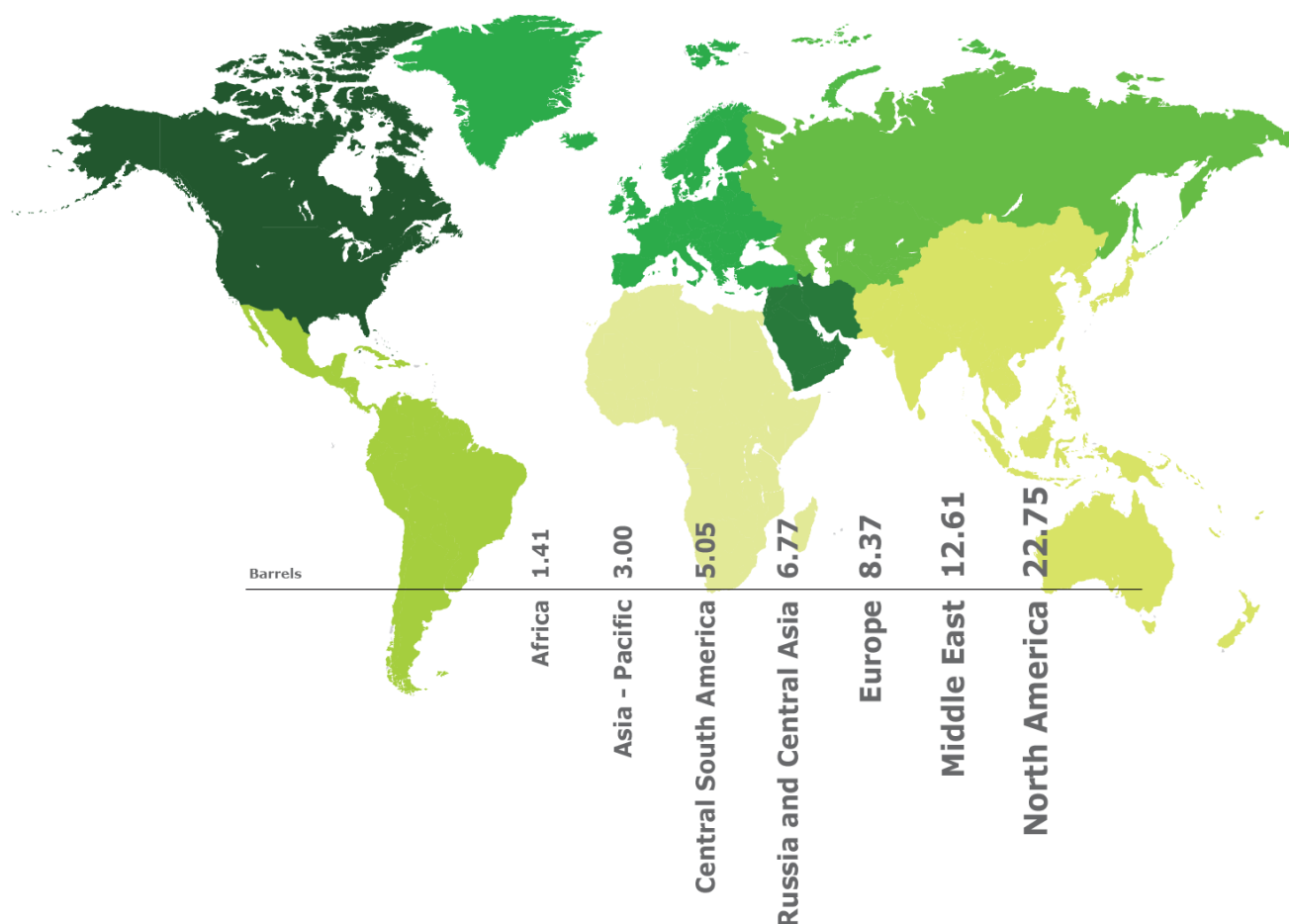


### Areas and Aggregates<sup>(\*)</sup>

(barrels)

|                         | 2000        | 2005        | 2010        | 2015        | 2016        | 2017        |
|-------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Europe                  | 9.37        | 9.59        | 8.78        | 8.10        | 8.20        | 8.37        |
| Russia and Central Asia | 5.43        | 5.52        | 5.79        | 6.62        | 6.74        | 6.77        |
| Middle East             | 10.90       | 12.07       | 12.91       | 13.21       | 12.83       | 12.61       |
| Africa                  | 1.22        | 1.28        | 1.40        | 1.46        | 1.44        | 1.41        |
| Asia - Pacific          | 2.22        | 2.42        | 2.62        | 2.88        | 2.94        | 3.00        |
| Americas                | 12.74       | 12.77       | 11.88       | 11.61       | 11.52       | 11.46       |
| - North America         | 25.63       | 26.10       | 23.19       | 22.69       | 22.70       | 22.75       |
| - Central South America | 4.96        | 4.87        | 5.29        | 5.28        | 5.15        | 5.05        |
| <b>World</b>            | <b>4.58</b> | <b>4.72</b> | <b>4.64</b> | <b>4.70</b> | <b>4.70</b> | <b>4.73</b> |
| European Union          | 11.05       | 11.25       | 10.20       | 9.33        | 9.44        | 9.63        |
| MENA                    | 7.31        | 8.13        | 8.88        | 9.09        | 8.87        | 8.70        |
| OECD                    | 15.31       | 15.38       | 13.85       | 13.27       | 13.32       | 13.38       |
| NON OECD                | 2.10        | 2.34        | 2.65        | 2.91        | 2.91        | 2.94        |
| OPEC                    | 6.40        | 7.18        | 7.99        | 8.09        | 7.71        | 7.53        |
| NON OPEC                | 4.48        | 4.57        | 4.43        | 4.47        | 4.50        | 4.54        |

### Per Capita Consumption (2017)

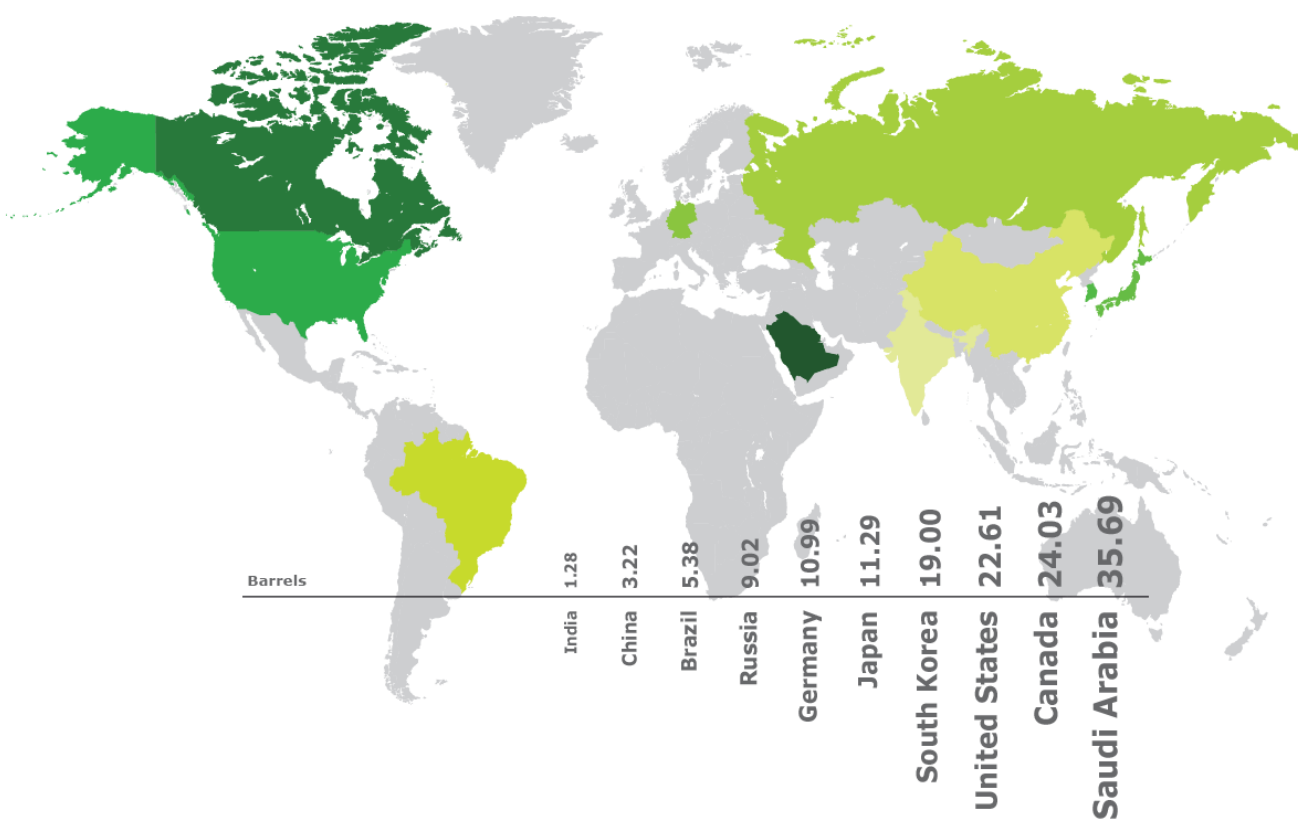


<sup>(\*)</sup> Data source: Eni's calculations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 and IHS Global Insight data.

The World Top 10 Consumers Ranked by Per Capita Consumption<sup>(\*)</sup>  
(barrels)

|               | 2000  | 2005  | 2010  | 2015  | 2016  | 2017  |
|---------------|-------|-------|-------|-------|-------|-------|
| Saudi Arabia  | 27.62 | 29.64 | 35.59 | 39.50 | 36.91 | 35.69 |
| Canada        | 23.91 | 26.50 | 25.60 | 24.18 | 23.98 | 24.03 |
| United States | 25.81 | 26.06 | 22.92 | 22.53 | 22.55 | 22.61 |
| South Korea   | 16.45 | 16.42 | 16.71 | 17.84 | 18.90 | 19.00 |
| Japan         | 15.33 | 14.69 | 12.29 | 11.75 | 11.50 | 11.29 |
| Germany       | 12.40 | 11.78 | 11.22 | 10.58 | 10.66 | 10.99 |
| Russia        | 6.68  | 6.94  | 7.52  | 8.75  | 8.96  | 9.02  |
| Brazil        | 4.45  | 4.24  | 5.15  | 5.63  | 5.40  | 5.38  |
| China         | 1.32  | 1.87  | 2.42  | 3.02  | 3.07  | 3.22  |
| India         | 0.81  | 0.84  | 0.98  | 1.18  | 1.26  | 1.28  |

The World Top 10 (2017)



<sup>(\*)</sup> Data source: Eni's calculations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 and IHS Global Insight data.

### Countries (\*)

(barrels)

|                    | 2000        | 2005        | 2010        | 2015        | 2016        | 2017        |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Europe</b>      | <b>9.37</b> | <b>9.59</b> | <b>8.78</b> | <b>8.10</b> | <b>8.20</b> | <b>8.37</b> |
| Albania            | 2.49        | 3.48        | 3.20        | 3.33        | 3.70        | 3.71        |
| Austria            | 11.31       | 13.22       | 12.05       | 11.04       | 11.21       | 11.18       |
| Belarus            | 4.38        | 5.60        | 5.82        | 5.33        | 5.27        | 5.28        |
| Belgium            | 21.65       | 23.03       | 21.99       | 21.00       | 21.29       | 20.82       |
| Bosnia Herzegovina | 2.21        | 2.25        | 3.32        | 3.21        | 3.29        | 3.39        |
| Bulgaria           | 3.91        | 4.72        | 4.16        | 4.83        | 4.90        | 4.98        |
| Croatia            | 6.78        | 7.83        | 6.57        | 5.96        | 6.27        | 6.39        |
| Cyprus             | 19.30       | 20.09       | 18.72       | 15.02       | 15.30       | 15.32       |
| Czech Republic     | 6.03        | 7.58        | 7.00        | 6.75        | 6.21        | 7.43        |
| Denmark            | 14.35       | 12.35       | 11.00       | 9.91        | 10.11       | 10.09       |
| Estonia            | 5.48        | 7.00        | 7.26        | 7.90        | 8.10        | 8.07        |
| Finland            | 14.99       | 15.32       | 14.57       | 13.22       | 13.31       | 12.96       |
| France             | 12.25       | 11.86       | 10.55       | 9.58        | 9.35        | 9.59        |
| Germany            | 12.40       | 11.78       | 11.22       | 10.58       | 10.66       | 10.99       |
| Greece             | 13.07       | 13.69       | 11.80       | 9.61        | 9.78        | 9.91        |
| Hungary            | 5.11        | 5.60        | 5.49        | 5.81        | 5.88        | 6.41        |
| Iceland            | 20.82       | 21.19       | 16.74       | 19.11       | 21.74       | 22.80       |
| Ireland            | 16.31       | 17.04       | 12.96       | 11.32       | 11.72       | 11.79       |
| Italy              | 11.81       | 11.05       | 9.44        | 7.81        | 7.69        | 7.89        |
| Kosovo             | 1.50        | 2.06        | 2.35        | 2.82        | 2.65        | 2.66        |
| Latvia             | 4.29        | 5.82        | 6.45        | 6.72        | 6.98        | 7.15        |
| Lithuania          | 6.12        | 6.46        | 6.51        | 7.10        | 7.33        | 7.57        |
| Luxembourg         | 40.17       | 51.69       | 43.17       | 36.20       | 35.55       | 36.20       |
| Macedonia          | 3.35        | 3.17        | 3.20        | 3.60        | 3.72        | 3.81        |
| Malta              | 26.31       | 28.68       | 40.81       | 36.66       | 38.32       | 38.83       |
| Moldova            | 1.33        | 1.46        | 1.71        | 1.82        | 1.86        | 1.90        |
| Montenegro         | 1.19        | 3.49        | 3.84        | 3.65        | 3.68        | 3.78        |
| Netherlands        | 21.29       | 24.21       | 22.46       | 20.72       | 20.91       | 20.66       |
| Norway             | 16.95       | 17.46       | 17.09       | 16.17       | 15.81       | 15.71       |
| Poland             | 3.89        | 4.48        | 5.41        | 5.08        | 5.52        | 6.10        |
| Portugal           | 11.74       | 11.64       | 9.38        | 8.33        | 8.22        | 8.42        |
| Romania            | 3.41        | 3.81        | 3.15        | 3.48        | 3.63        | 3.86        |
| Serbia             | 1.43        | 4.09        | 4.04        | 3.64        | 3.93        | 4.01        |
| Slovakia           | 4.53        | 5.31        | 5.64        | 5.30        | 5.65        | 5.96        |
| Slovenia           | 9.18        | 9.82        | 9.90        | 8.68        | 9.19        | 9.16        |
| Spain              | 12.79       | 13.32       | 11.24       | 9.81        | 10.14       | 10.21       |
| Sweden             | 14.88       | 14.52       | 13.05       | 11.37       | 11.93       | 11.90       |
| Switzerland        | 13.75       | 13.13       | 12.15       | 9.95        | 9.44        | 9.65        |
| Turkey             | 3.85        | 3.54        | 3.41        | 4.13        | 4.31        | 4.43        |
| Ukraine            | 2.09        | 2.40        | 2.35        | 1.79        | 1.83        | 1.88        |
| United Kingdom     | 10.93       | 11.01       | 9.37        | 8.63        | 8.80        | 8.71        |

|                                | 2000        | 2005        | 2010        | 2015        | 2016        | 2017        |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Russia and Central Asia</b> | <b>5.43</b> | <b>5.52</b> | <b>5.79</b> | <b>6.62</b> | <b>6.74</b> | <b>6.77</b> |
| Russia                         | 6.68        | 6.94        | 7.52        | 8.75        | 8.96        | 9.02        |
| Armenia                        | 0.76        | 1.10        | 1.15        | 0.91        | 0.94        | 0.96        |
| Azerbaijan                     | 4.78        | 4.44        | 2.99        | 3.66        | 3.57        | 3.58        |
| Georgia                        | 1.40        | 1.41        | 1.93        | 2.44        | 2.54        | 2.63        |
| Kazakhstan                     | 5.00        | 4.66        | 5.18        | 6.34        | 6.28        | 6.26        |
| Kyrgyzstan                     | 1.14        | 1.00        | 1.79        | 2.25        | 2.26        | 2.28        |
| Tajikistan                     | 0.18        | 0.31        | 0.52        | 0.96        | 1.00        | 1.02        |
| Turkmenistan                   | 8.43        | 9.21        | 9.03        | 9.89        | 10.28       | 10.52       |
| Uzbekistan                     | 1.55        | 1.41        | 1.02        | 0.67        | 0.70        | 0.72        |

(\*) Data source: Eni's calculations of *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 and IHS Global Insight data.

### Countries (\*)

(barrels)

|                      | 2000         | 2005         | 2010         | 2015         | 2016         | 2017         |
|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>Middle East</b>   | <b>10.90</b> | <b>12.07</b> | <b>12.91</b> | <b>13.21</b> | <b>12.83</b> | <b>12.61</b> |
| Bahrain              | 18.86        | 26.26        | 18.33        | 17.04        | 16.62        | 16.09        |
| Iran                 | 7.83         | 8.93         | 9.11         | 8.45         | 8.26         | 8.23         |
| Iraq                 | 7.30         | 7.78         | 7.77         | 8.24         | 8.12         | 8.16         |
| Israel               | 15.29        | 12.90        | 12.35        | 9.08         | 8.91         | 9.33         |
| Jordan               | 7.21         | 7.13         | 5.16         | 5.32         | 5.32         | 5.38         |
| Kuwait               | 38.41        | 52.48        | 54.73        | 40.29        | 38.74        | 37.59        |
| Lebanon              | 10.55        | 8.85         | 10.08        | 9.43         | 9.37         | 9.47         |
| Oman                 | 10.22        | 10.47        | 15.21        | 16.28        | 15.81        | 15.32        |
| Qatar                | 29.78        | 37.46        | 37.33        | 37.11        | 37.60        | 33.37        |
| Saudi Arabia         | 27.62        | 29.64        | 35.59        | 39.50        | 36.91        | 35.69        |
| Syria                | 5.07         | 6.46         | 5.19         | 2.64         | 2.59         | 2.57         |
| United Arab Emirates | 48.09        | 40.69        | 27.76        | 33.35        | 34.88        | 34.82        |
| Yemen                | 2.01         | 2.46         | 2.26         | 1.49         | 1.40         | 1.32         |

|                 | 2000        | 2005        | 2010        | 2015        | 2016        | 2017        |
|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Africa</b>   | <b>1.22</b> | <b>1.28</b> | <b>1.40</b> | <b>1.46</b> | <b>1.44</b> | <b>1.41</b> |
| Algeria         | 2.81        | 2.97        | 3.54        | 4.40        | 4.09        | 3.96        |
| Angola          | 0.82        | 0.78        | 1.61        | 1.91        | 1.90        | 1.88        |
| Benin           | 0.56        | 0.87        | 1.38        | 1.24        | 1.25        | 1.28        |
| Cameroon        | 0.51        | 0.47        | 0.63        | 0.68        | 0.69        | 0.69        |
| Congo           | 0.47        | 0.64        | 1.03        | 1.21        | 1.22        | 1.22        |
| Côte d'Ivoire   | 0.59        | 0.48        | 0.43        | 0.71        | 0.76        | 0.77        |
| Dem. Rep. Congo | 0.06        | 0.08        | 0.09        | 0.10        | 0.10        | 0.10        |
| Egypt           | 2.81        | 3.03        | 3.32        | 3.34        | 3.39        | 3.19        |
| Ethiopia        | 0.13        | 0.16        | 0.19        | 0.26        | 0.27        | 0.27        |
| Gabon           | 4.09        | 3.96        | 4.55        | 4.58        | 4.56        | 4.67        |
| Ghana           | 0.75        | 0.84        | 1.07        | 1.16        | 1.18        | 1.20        |
| Kenya           | 0.71        | 0.62        | 0.74        | 0.80        | 0.82        | 0.83        |
| Libya           | 16.61       | 16.63       | 17.99       | 14.43       | 14.92       | 14.99       |
| Morocco         | 1.86        | 2.31        | 2.89        | 2.84        | 2.89        | 2.94        |
| Mozambique      | 0.20        | 0.19        | 0.24        | 0.32        | 0.30        | 0.30        |
| Nigeria         | 0.67        | 0.79        | 0.76        | 0.89        | 0.83        | 0.86        |
| Senegal         | 1.16        | 1.18        | 1.07        | 1.10        | 1.13        | 1.14        |
| South Africa    | 3.44        | 3.71        | 4.14        | 4.23        | 4.06        | 3.96        |
| Sudan           | 0.46        | 0.73        | 0.94        | 1.21        | 1.21        | 1.22        |
| Tanzania        | 0.19        | 0.28        | 0.27        | 0.46        | 0.47        | 0.47        |
| Tunisia         | 3.18        | 3.30        | 3.02        | 3.30        | 3.30        | 3.32        |
| Zambia          | 0.37        | 0.43        | 0.34        | 0.50        | 0.51        | 0.51        |
| Zimbabwe        | 0.69        | 0.40        | 0.33        | 0.62        | 0.61        | 0.58        |

(\*) Data source: Eni's calculations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 and IHS Global Insight data.

### Countries (\*)

(barrels)

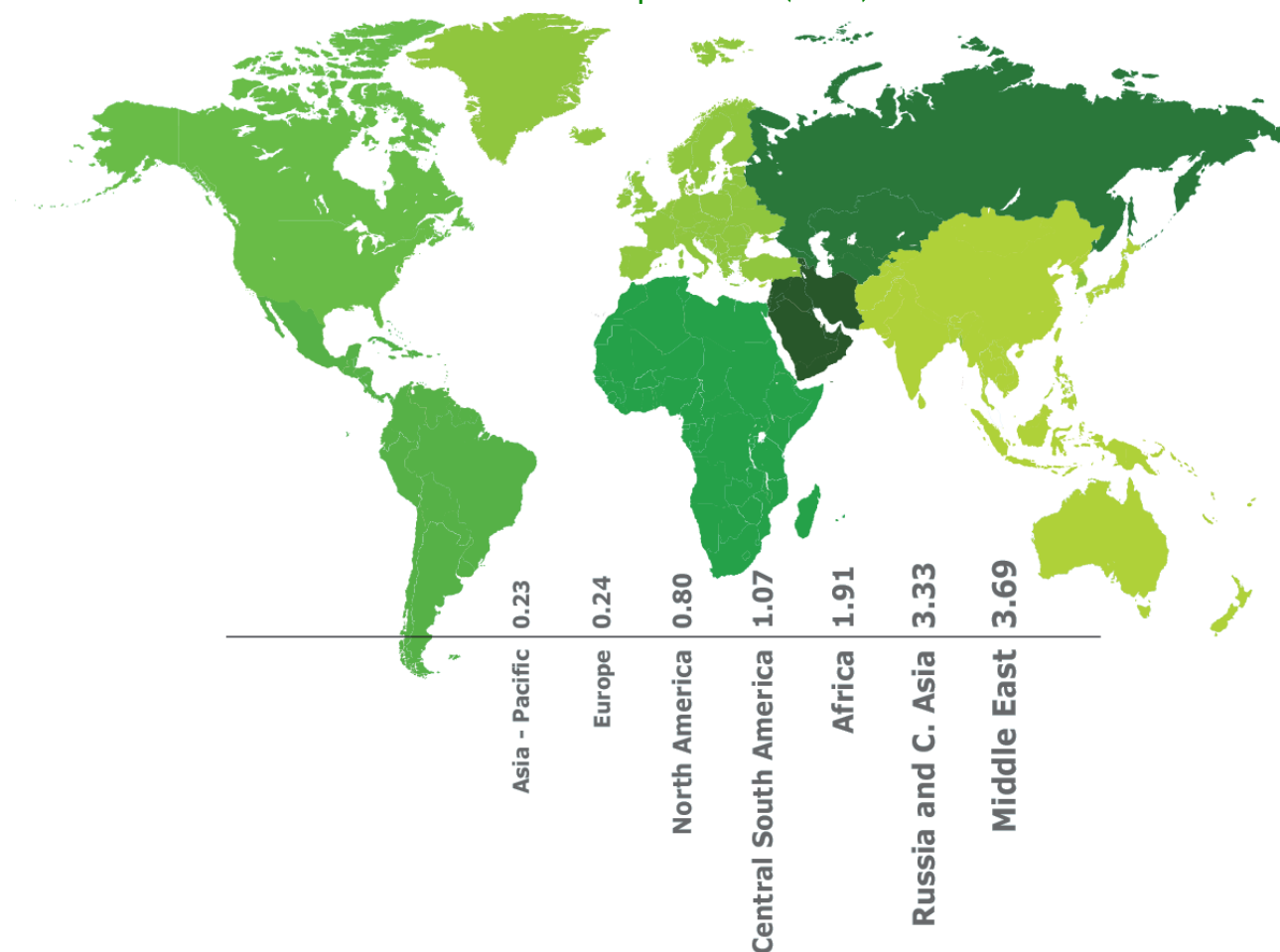
|                       | 2000         | 2005         | 2010         | 2015         | 2016         | 2017         |
|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>Asia - Pacific</b> | <b>2.22</b>  | <b>2.42</b>  | <b>2.62</b>  | <b>2.88</b>  | <b>2.94</b>  | <b>3.00</b>  |
| Australia             | 16.69        | 17.36        | 17.07        | 16.96        | 16.64        | 17.56        |
| Bangladesh            | 0.18         | 0.20         | 0.19         | 0.25         | 0.27         | 0.27         |
| Brunei                | 13.97        | 13.62        | 15.43        | 15.05        | 14.52        | 14.59        |
| China                 | 1.32         | 1.87         | 2.42         | 3.02         | 3.07         | 3.22         |
| Hong Kong             | 13.69        | 15.51        | 21.61        | 18.70        | 18.89        | 21.29        |
| India                 | 0.81         | 0.84         | 0.98         | 1.18         | 1.26         | 1.28         |
| Indonesia             | 1.99         | 2.16         | 2.28         | 2.19         | 2.17         | 2.21         |
| Japan                 | 15.33        | 14.69        | 12.29        | 11.75        | 11.50        | 11.29        |
| Malaysia              | 7.01         | 7.24         | 7.61         | 8.18         | 8.21         | 8.44         |
| Myanmar               | 0.29         | 0.32         | 0.17         | 0.82         | 0.86         | 0.88         |
| Nepal                 | 0.23         | 0.23         | 0.30         | 0.34         | 0.34         | 0.34         |
| New Zealand           | 12.67        | 13.48        | 12.76        | 12.72        | 13.13        | 13.66        |
| North Korea           | 0.32         | 0.28         | 0.25         | 0.28         | 0.25         | 0.25         |
| Pakistan              | 0.98         | 0.80         | 0.86         | 0.98         | 1.03         | 1.03         |
| Philippines           | 1.64         | 1.32         | 1.22         | 1.44         | 1.49         | 1.57         |
| Singapore             | 67.99        | 69.79        | 83.70        | 82.94        | 84.38        | 84.95        |
| South Korea           | 16.45        | 16.42        | 16.71        | 17.84        | 18.90        | 19.00        |
| Sri Lanka             | 1.47         | 1.79         | 1.58         | 1.94         | 2.01         | 2.09         |
| Taiwan                | 14.51        | 16.01        | 16.20        | 15.58        | 15.58        | 15.71        |
| Thailand              | 4.33         | 5.62         | 6.12         | 7.22         | 7.37         | 7.49         |
| Vietnam               | 0.75         | 1.14         | 1.63         | 1.60         | 1.67         | 1.73         |
|                       | <b>2000</b>  | <b>2005</b>  | <b>2010</b>  | <b>2015</b>  | <b>2016</b>  | <b>2017</b>  |
| <b>Americas</b>       | <b>12.74</b> | <b>12.77</b> | <b>11.88</b> | <b>11.61</b> | <b>11.52</b> | <b>11.46</b> |
| Argentina             | 5.41         | 5.31         | 6.11         | 6.48         | 6.34         | 6.26         |
| Bolivia               | 1.76         | 1.87         | 2.32         | 3.01         | 3.06         | 3.08         |
| Brazil                | 4.45         | 4.24         | 5.15         | 5.63         | 5.40         | 5.38         |
| Canada                | 23.91        | 26.50        | 25.60        | 24.18        | 23.98        | 24.03        |
| Chile                 | 5.74         | 6.16         | 6.92         | 6.82         | 6.88         | 6.96         |
| Colombia              | 2.44         | 2.21         | 2.12         | 2.38         | 2.75         | 2.73         |
| Costa Rica            | 3.42         | 3.73         | 3.90         | 3.93         | 4.03         | 4.07         |
| Cuba                  | 6.42         | 5.75         | 6.88         | 6.21         | 6.31         | 6.37         |
| Dominican Republic    | 5.26         | 4.71         | 4.52         | 4.32         | 4.41         | 4.46         |
| Ecuador               | 4.26         | 5.14         | 6.06         | 6.26         | 6.11         | 5.90         |
| El Salvador           | 2.32         | 2.71         | 2.58         | 2.87         | 2.90         | 2.91         |
| Guatemala             | 1.91         | 2.01         | 1.76         | 1.99         | 2.01         | 2.01         |
| Haiti                 | 0.43         | 0.56         | 0.52         | 0.76         | 0.76         | 0.76         |
| Honduras              | 1.58         | 2.12         | 2.04         | 2.47         | 2.46         | 2.43         |
| Jamaica               | 9.01         | 9.33         | 6.50         | 6.72         | 6.78         | 6.72         |
| Mexico                | 7.40         | 6.96         | 6.52         | 5.82         | 5.80         | 5.44         |
| Netherlands Antilles  | 165.53       | 178.84       | 146.88       | 113.69       | 116.01       | 117.24       |
| Nicaragua             | 1.73         | 1.82         | 1.82         | 2.14         | 2.20         | 2.22         |
| Panama                | 10.16        | 9.50         | 12.48        | 13.08        | 13.18        | 13.41        |
| Paraguay              | 1.57         | 1.55         | 2.08         | 2.45         | 2.51         | 2.53         |
| Peru                  | 2.30         | 2.12         | 2.51         | 2.74         | 2.90         | 2.90         |
| Trinidad and Tobago   | 8.42         | 13.34        | 12.92        | 13.48        | 13.27        | 13.29        |
| United States         | 25.81        | 26.06        | 22.92        | 22.53        | 22.55        | 22.61        |
| Uruguay               | 4.70         | 4.70         | 5.66         | 5.64         | 5.65         | 5.68         |
| Venezuela             | 7.41         | 8.81         | 10.14        | 7.88         | 6.25         | 5.93         |

(\*) Data source: Eni's calculations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 and IHS Global Insight data.

### Areas and Aggregates (\*)

|                         | 2000        | 2005        | 2010        | 2015        | 2016        | 2017        |
|-------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Europe                  | 0.43        | 0.35        | 0.28        | 0.25        | 0.25        | 0.24        |
| Russia and Central Asia | 2.42        | 3.54        | 3.80        | 3.36        | 3.33        | 3.33        |
| Middle East             | 4.69        | 4.12        | 3.36        | 3.48        | 3.74        | 3.69        |
| Africa                  | 3.17        | 3.38        | 2.84        | 1.97        | 1.83        | 1.91        |
| Asia - Pacific          | 0.38        | 0.33        | 0.30        | 0.26        | 0.24        | 0.23        |
| Americas                | 0.72        | 0.68        | 0.70        | 0.89        | 0.86        | 0.87        |
| - North America         | 0.49        | 0.43        | 0.51        | 0.78        | 0.76        | 0.80        |
| - Central South America | 1.46        | 1.47        | 1.20        | 1.15        | 1.11        | 1.07        |
| <b>World</b>            | <b>0.97</b> | <b>0.97</b> | <b>0.94</b> | <b>0.97</b> | <b>0.96</b> | <b>0.95</b> |
| European Union          | 0.24        | 0.18        | 0.15        | 0.12        | 0.12        | 0.12        |
| MENA                    | 4.34        | 3.91        | 3.17        | 3.10        | 3.29        | 3.29        |
| OECD                    | 0.45        | 0.40        | 0.40        | 0.51        | 0.50        | 0.51        |
| NON OECD                | 1.86        | 1.81        | 1.55        | 1.40        | 1.40        | 1.36        |
| OPEC                    | 5.42        | 4.91        | 3.88        | 3.73        | 3.94        | 3.91        |
| NON OPEC                | 0.62        | 0.60        | 0.60        | 0.63        | 0.61        | 0.61        |

### Production/Consumption Ratio (2017)

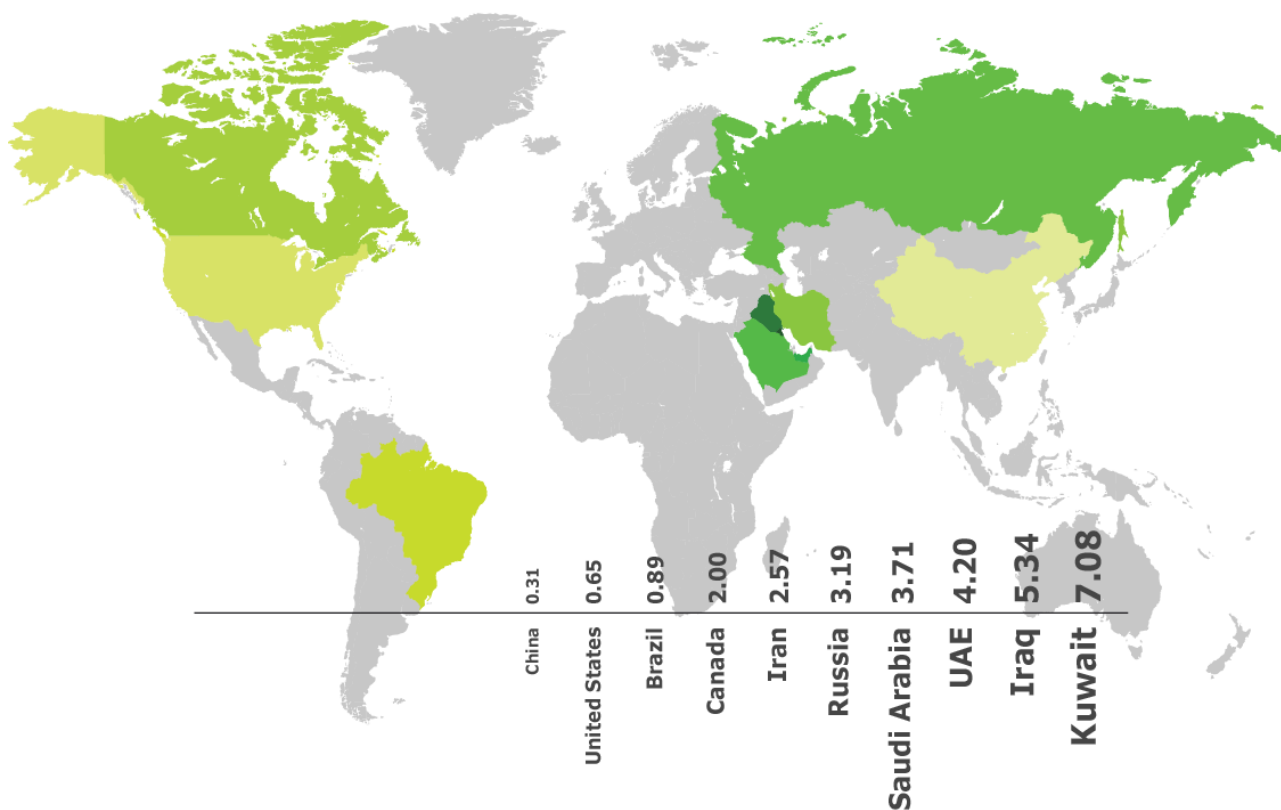


(\*) Data source: Eni's calculations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

The World Top 10 Producers Ranked by Production/Consumption Ratio<sup>(\*)</sup>

|                      | 2000  | 2005 | 2010 | 2015 | 2016 | 2017 |
|----------------------|-------|------|------|------|------|------|
| Kuwait               | 10.01 | 7.78 | 5.56 | 7.13 | 7.42 | 7.08 |
| Iraq                 | 5.48  | 3.19 | 3.71 | 5.01 | 5.45 | 5.34 |
| United Arab Emirates | 6.31  | 5.87 | 4.50 | 4.52 | 4.39 | 4.20 |
| Saudi Arabia         | 5.95  | 5.63 | 3.73 | 3.53 | 3.81 | 3.71 |
| Russia               | 2.44  | 3.53 | 3.53 | 3.21 | 3.21 | 3.19 |
| Iran                 | 2.65  | 2.45 | 2.26 | 1.95 | 2.41 | 2.57 |
| Canada               | 1.36  | 1.30 | 1.40 | 1.85 | 1.88 | 2.00 |
| Brazil               | 0.59  | 0.78 | 0.77 | 0.80 | 0.85 | 0.89 |
| United States        | 0.40  | 0.33 | 0.40 | 0.65 | 0.63 | 0.65 |
| China                | 0.70  | 0.53 | 0.45 | 0.37 | 0.34 | 0.31 |

The World Top 10 (2017)



<sup>(\*)</sup> Data source: Eni's calculations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.



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

|                | 2000        | 2005        | 2010        | 2015        | 2016        | 2017        |
|----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Europe</b>  | <b>0.43</b> | <b>0.35</b> | <b>0.28</b> | <b>0.25</b> | <b>0.25</b> | <b>0.24</b> |
| Albania        | 0.27        | 0.28        | 0.49        | 0.95        | 0.78        | 0.73        |
| Austria        | 0.08        | 0.06        | 0.09        | 0.08        | 0.07        | 0.07        |
| Belarus        | 0.31        | 0.24        | 0.23        | 0.24        | 0.24        | 0.23        |
| Bulgaria       | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        | 0.01        |
| Croatia        | 0.34        | 0.23        | 0.23        | 0.20        | 0.21        | 0.21        |
| Czech Republic | 0.04        | 0.05        | 0.03        | 0.02        | 0.02        | 0.02        |
| Denmark        | 1.73        | 2.12        | 1.52        | 1.01        | 0.89        | 0.86        |
| Estonia        | 0.22        | 0.18        | 0.38        | 0.56        | 0.49        | 0.64        |
| France         | 0.02        | 0.02        | 0.02        | 0.01        | 0.01        | 0.01        |
| Germany        | 0.03        | 0.04        | 0.03        | 0.03        | 0.03        | 0.03        |
| Greece         | 0.01        | 0.00        | 0.01        | 0.00        | 0.01        | 0.01        |
| Hungary        | 0.27        | 0.24        | 0.17        | 0.14        | 0.14        | 0.14        |
| Italy          | 0.04        | 0.07        | 0.07        | 0.09        | 0.06        | 0.06        |
| Netherlands    | 0.05        | 0.04        | 0.03        | 0.04        | 0.03        | 0.03        |
| Norway         | 15.94       | 13.37       | 9.34        | 8.45        | 8.76        | 8.62        |
| Poland         | 0.04        | 0.06        | 0.03        | 0.06        | 0.05        | 0.05        |
| Portugal       | 0.00        | 0.00        | 0.00        | 0.00        | 0.01        | 0.01        |
| Romania        | 0.64        | 0.51        | 0.51        | 0.43        | 0.39        | 0.36        |
| Serbia         | 0.68        | 0.16        | 0.22        | 0.29        | 0.26        | 0.25        |
| Slovakia       | 0.02        | 0.09        | 0.06        | 0.05        | 0.03        | 0.04        |
| Spain          | 0.00        | 0.00        | 0.00        | 0.01        | 0.01        | 0.01        |
| Turkey         | 0.08        | 0.07        | 0.07        | 0.05        | 0.05        | 0.05        |
| Ukraine        | 0.29        | 0.31        | 0.27        | 0.25        | 0.22        | 0.21        |
| United Kingdom | 1.53        | 1.01        | 0.84        | 0.63        | 0.65        | 0.64        |

|                                | 2000        | 2005        | 2010        | 2015        | 2016        | 2017        |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Russia and Central Asia</b> | <b>2.42</b> | <b>3.54</b> | <b>3.80</b> | <b>3.36</b> | <b>3.33</b> | <b>3.33</b> |
| Russia                         | 2.44        | 3.53        | 3.53        | 3.21        | 3.21        | 3.19        |
| Azerbaijan                     | 2.65        | 4.32        | 14.07       | 8.81        | 8.72        | 8.13        |
| Georgia                        | 0.12        | 0.08        | 0.04        | 0.02        | 0.02        | 0.01        |
| Kazakhstan                     | 3.48        | 6.52        | 7.28        | 5.50        | 5.38        | 5.90        |
| Kyrgyzstan                     | 0.10        | 0.16        | 0.03        | 0.03        | 0.03        | 0.03        |
| Tajikistan                     | 0.13        | 0.06        | 0.02        | 0.00        | 0.00        | 0.00        |
| Turkmenistan                   | 1.52        | 1.68        | 1.56        | 1.81        | 1.59        | 1.43        |
| Uzbekistan                     | 1.65        | 1.15        | 1.11        | 1.13        | 1.04        | 0.94        |

|                      | 2000        | 2005        | 2010        | 2015        | 2016        | 2017        |
|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Middle East</b>   | <b>4.69</b> | <b>4.12</b> | <b>3.36</b> | <b>3.48</b> | <b>3.74</b> | <b>3.69</b> |
| Bahrain              | 5.75        | 3.10        | 3.08        | 3.32        | 3.27        | 3.32        |
| Iran                 | 2.65        | 2.45        | 2.26        | 1.95        | 2.41        | 2.57        |
| Iraq                 | 5.48        | 3.19        | 3.71        | 5.01        | 5.45        | 5.34        |
| Kuwait               | 10.01       | 7.78        | 5.56        | 7.13        | 7.42        | 7.08        |
| Oman                 | 15.08       | 10.79       | 6.87        | 5.28        | 5.28        | 5.03        |
| Qatar                | 17.80       | 13.70       | 9.17        | 7.90        | 7.56        | 8.20        |
| Saudi Arabia         | 5.95        | 5.63        | 3.73        | 3.53        | 3.81        | 3.71        |
| Syria                | 2.51        | 1.38        | 1.29        | 0.20        | 0.19        | 0.19        |
| United Arab Emirates | 6.31        | 5.87        | 4.50        | 4.52        | 4.39        | 4.20        |
| Yemen                | 4.57        | 3.04        | 2.09        | 0.29        | 0.15        | 0.24        |

<sup>(\*)</sup> Data source: Eni's calculations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

### Countries(\*)

|                 | 2000        | 2005        | 2010        | 2015        | 2016        | 2017        |
|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Africa</b>   | <b>3.17</b> | <b>3.38</b> | <b>2.84</b> | <b>1.97</b> | <b>1.83</b> | <b>1.91</b> |
| Algeria         | 5.99        | 7.14        | 4.91        | 3.31        | 3.53        | 3.42        |
| Angola          | 20.11       | 29.63       | 17.63       | 12.58       | 11.89       | 11.35       |
| Cameroon        | 5.33        | 3.99        | 1.86        | 2.23        | 2.03        | 1.64        |
| Congo           | 63.44       | 38.14       | 25.41       | 15.00       | 14.67       | 16.63       |
| Côte d'Ivoire   | 0.26        | 1.66        | 1.63        | 0.60        | 0.87        | 1.00        |
| Dem. Rep. Congo | 2.91        | 1.96        | 1.60        | 1.03        | 1.00        | 0.91        |
| Egypt           | 1.32        | 1.02        | 0.91        | 0.81        | 0.75        | 0.75        |
| Gabon           | 20.07       | 18.06       | 12.84       | 10.46       | 10.15       | 8.55        |
| Ghana           | 0.18        | 0.12        | 0.10        | 1.21        | 1.01        | 1.76        |
| Libya           | 6.04        | 6.52        | 5.47        | 1.77        | 1.66        | 3.33        |
| Morocco         | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        |
| Nigeria         | 9.66        | 8.48        | 7.67        | 5.12        | 4.58        | 4.47        |
| South Africa    | 0.46        | 0.42        | 0.24        | 0.16        | 0.16        | 0.16        |
| Sudan           | 4.12        | 3.97        | 4.15        | 2.05        | 1.57        | 1.36        |
| Tunisia         | 0.92        | 0.80        | 0.94        | 0.54        | 0.51        | 0.44        |

|                       | 2000        | 2005        | 2010        | 2015        | 2016        | 2017        |
|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Asia - Pacific</b> | <b>0.38</b> | <b>0.33</b> | <b>0.30</b> | <b>0.26</b> | <b>0.24</b> | <b>0.23</b> |
| Australia             | 0.92        | 0.57        | 0.53        | 0.34        | 0.32        | 0.27        |
| Bangladesh            | 0.06        | 0.08        | 0.06        | 0.03        | 0.03        | 0.03        |
| Brunei                | 15.29       | 15.09       | 10.29       | 7.36        | 7.18        | 6.44        |
| China                 | 0.70        | 0.53        | 0.45        | 0.37        | 0.34        | 0.31        |
| India                 | 0.33        | 0.29        | 0.27        | 0.20        | 0.19        | 0.18        |
| Indonesia             | 1.26        | 0.81        | 0.65        | 0.53        | 0.57        | 0.53        |
| Malaysia              | 1.60        | 1.56        | 1.22        | 1.02        | 1.01        | 0.95        |
| Myanmar               | 0.00        | 0.01        | 0.25        | 0.20        | 0.19        | 0.17        |
| New Zealand           | 0.33        | 0.24        | 0.39        | 0.30        | 0.24        | 0.21        |
| Pakistan              | 0.15        | 0.19        | 0.16        | 0.21        | 0.19        | 0.17        |
| Philippines           | 0.00        | 0.07        | 0.06        | 0.04        | 0.04        | 0.03        |
| South Korea           | 0.01        | 0.00        | 0.01        | 0.01        | 0.01        | 0.01        |
| Thailand              | 0.26        | 0.29        | 0.34        | 0.33        | 0.33        | 0.30        |
| Vietnam               | 2.02        | 1.41        | 0.78        | 0.83        | 0.72        | 0.61        |

|                     | 2000        | 2005        | 2010        | 2015        | 2016        | 2017        |
|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Americas</b>     | <b>0.72</b> | <b>0.68</b> | <b>0.70</b> | <b>0.89</b> | <b>0.86</b> | <b>0.87</b> |
| Argentina           | 1.57        | 1.46        | 1.03        | 0.82        | 0.80        | 0.76        |
| Bolivia             | 0.97        | 1.24        | 0.81        | 0.84        | 0.77        | 0.73        |
| Brazil              | 0.59        | 0.78        | 0.77        | 0.80        | 0.85        | 0.89        |
| Canada              | 1.36        | 1.30        | 1.40        | 1.85        | 1.88        | 2.00        |
| Chile               | 0.04        | 0.03        | 0.04        | 0.02        | 0.02        | 0.02        |
| Colombia            | 2.55        | 2.01        | 2.95        | 3.21        | 2.41        | 2.33        |
| Cuba                | 0.26        | 0.31        | 0.26        | 0.28        | 0.26        | 0.24        |
| Ecuador             | 2.74        | 2.76        | 1.89        | 1.95        | 2.00        | 1.98        |
| Guatemala           | 0.34        | 0.26        | 0.17        | 0.11        | 0.10        | 0.09        |
| Mexico              | 1.67        | 1.82        | 1.41        | 1.30        | 1.22        | 1.16        |
| Peru                | 0.64        | 0.73        | 0.77        | 0.63        | 0.53        | 0.52        |
| Trinidad and Tobago | 4.72        | 3.60        | 3.16        | 2.16        | 1.95        | 1.98        |
| United States       | 0.40        | 0.33        | 0.40        | 0.65        | 0.63        | 0.65        |
| Venezuela           | 6.47        | 4.78        | 3.44        | 3.96        | 4.50        | 4.11        |

(\*) Data source: Eni's calculations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.



# Oil - Trade and Prices

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Regional Crude Balances

Exports

Imports

Crude Future Price and Open Interests

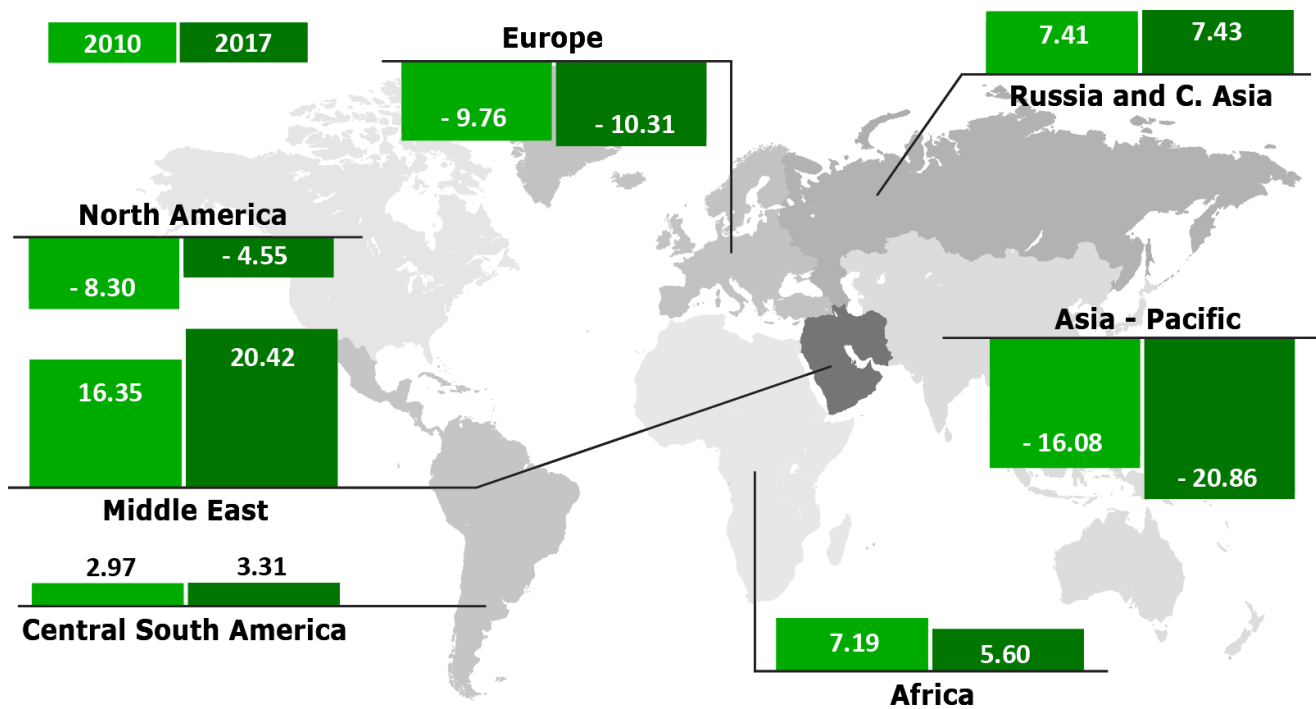
### Crude Surplus Deficit by Area<sup>(\*)</sup>

(thousand barrels/day)

|                         | 2000          | 2005       | 2010        | 2015         | 2016         | 2017         | Δ<br>(2017-2016) | Δ<br>(2017-2000) |
|-------------------------|---------------|------------|-------------|--------------|--------------|--------------|------------------|------------------|
| Europe                  | -7,984        | -10,188    | -9,757      | -10,128      | -9,933       | -10,314      | -380             | -2,329           |
| Russia and Central Asia | 3,546         | 6,628      | 7,411       | 7,082        | 7,332        | 7,434        | 102              | 3,888            |
| Middle East             | 15,858        | 17,252     | 16,351      | 19,725       | 20,975       | 20,420       | -555             | 4,562            |
| Africa                  | 4,591         | 6,632      | 7,186       | 5,663        | 5,229        | 5,596        | 368              | 1,006            |
| Asia - Pacific          | -10,830       | -13,436    | -16,082     | -19,178      | -20,252      | -20,861      | -610             | -10,031          |
| Americas                | -6,330        | -6,691     | -5,323      | -852         | -1,425       | -1,244       | 181              | 5,085            |
| - North America         | -9,137        | -9,737     | -8,297      | -4,469       | -4,829       | -4,554       | 275              | 4,583            |
| - Central South America | 2,807         | 3,046      | 2,974       | 3,618        | 3,404        | 3,310        | -94              | 503              |
| <b>World</b>            | <b>-1,150</b> | <b>197</b> | <b>-214</b> | <b>2,313</b> | <b>1,926</b> | <b>1,031</b> | <b>-895</b>      | <b>2,181</b>     |

### Crude Surplus Deficit by Area (2010 and 2017)

(million barrels/day)



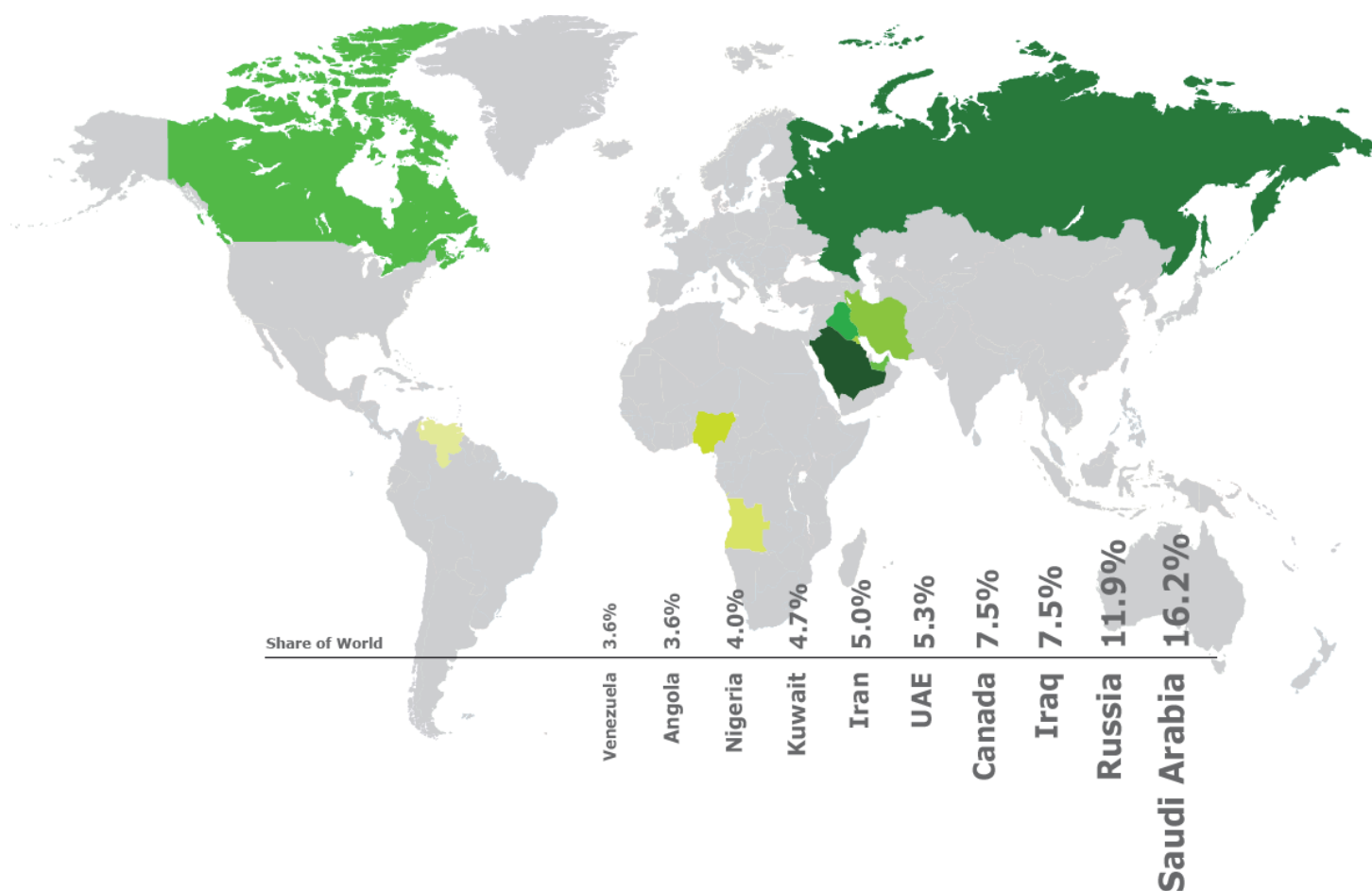
<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 and ICIS Consulting data.

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

Crude and non conventional oil  
(thousand barrels/day)

|                      | 2000          | 2005          | 2010          | 2015          | 2016          | 2017          | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|----------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------------|---------------------|
| Saudi Arabia         | 6,251         | 7,470         | 5,792         | 7,390         | 7,899         | 7,178         | -9.1%                | 0.8%                |
| Russia               | 2,916         | 5,100         | 4,912         | 4,937         | 5,190         | 5,257         | 1.3%                 | 3.5%                |
| Iraq                 | 2,063         | 1,400         | 1,892         | 3,003         | 3,199         | 3,324         | 3.9%                 | 2.8%                |
| Canada               | 1,380         | 1,578         | 1,948         | 3,029         | 3,104         | 3,318         | 6.9%                 | 5.3%                |
| United Arab Emirates | 1,940         | 2,184         | 2,225         | 2,593         | 2,447         | 2,363         | -3.4%                | 1.2%                |
| Iran                 | 2,289         | 2,417         | 2,269         | 1,128         | 1,670         | 2,223         | 33.1%                | -0.2%               |
| Kuwait               | 1,218         | 1,660         | 1,380         | 1,964         | 2,128         | 2,096         | -1.5%                | 3.2%                |
| Nigeria              | 2,163         | 2,313         | 2,369         | 2,114         | 1,769         | 1,783         | 0.8%                 | -1.1%               |
| Angola               | 753           | 1,202         | 1,720         | 1,727         | 1,672         | 1,587         | -5.1%                | 4.5%                |
| Venezuela            | 2,015         | 2,290         | 1,820         | 1,872         | 1,741         | 1,581         | -9.2%                | -1.4%               |
| Rest of the World    | 15,555        | 15,858        | 14,783        | 12,546        | 12,778        | 13,568        | 6.2%                 | -0.8%               |
| <b>World</b>         | <b>38,543</b> | <b>43,471</b> | <b>41,110</b> | <b>42,303</b> | <b>43,598</b> | <b>44,278</b> | <b>1.6%</b>          | <b>0.8%</b>         |

The World Top 10 (2017)



(\*) Data source: Eni's estimates on Enerdata *Global Energy & CO<sub>2</sub> Data, Monthly Oil Data Services* °OECD/International Energy Agency, 2018 and other official data sources.

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

Crude and non conventional oil  
(thousand barrels/day)

|                | 2000  | 2005  | 2010  | 2015  | 2016  | 2017  | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|----------------|-------|-------|-------|-------|-------|-------|----------------------|---------------------|
| <b>Europe</b>  |       |       |       |       |       |       |                      |                     |
| Albania        | 0     | 0     | 9     | 18    | 14    | 21    | 55.5%                |                     |
| Austria        | 1     | 0     | 0     | 0     | 0     | 0     |                      | -100.0%             |
| Belarus        | 7     | 27    | 0     | 32    | 32    | 32    | 0.2%                 | 9.4%                |
| Croatia        | 1     | 0     | 0     | 0     | 0     | 0     |                      | -100.0%             |
| Czech Republic | 2     | 1     | 0     | 1     | 1     | 0     | -14.3%               | -8.6%               |
| Denmark        | 275   | 273   | 154   | 90    | 78    | 82    | 5.6%                 | -6.9%               |
| Germany        | 64    | 14    | 14    | 7     | 2     | 0     | -100.0%              | -100.0%             |
| Greece         | 0     | 18    | 17    | 2     | 3     | 3     | 4.5%                 |                     |
| Hungary        | 0     | 7     | 0     | 2     | 1     | 3     | 159.6%               |                     |
| Ireland        | 0     | 0     | 2     | 0     | 0     | 6     |                      |                     |
| Italy          | 0     | 15    | 6     | 14    | 12    | 15    | 18.5%                |                     |
| Lithuania      | 6     | 3     | 2     | 1     | 1     | 1     | 0.0%                 | -10.0%              |
| Netherlands    | 4     | 21    | 10    | 6     | 7     | 8     | 25.7%                | 4.9%                |
| Norway         | 2,875 | 2,316 | 1,586 | 1,223 | 1,363 | 1,348 | -1.1%                | -4.4%               |
| Poland         | 3     | 5     | 4     | 5     | 4     | 4     | -1.8%                | 3.2%                |
| Romania        | 0     | 0     | 2     | 1     | 1     | 1     | 29.8%                |                     |
| Slovakia       | 0     | 1     | 0     | 1     | 0     | 1     | 685.7%               | 9.4%                |
| Sweden         | 0     | 0     | 0     | 0     | 0     | 16    |                      |                     |
| Ukraine        | 5     | 2     | 0     | 0     | 0     | 0     |                      | -100.0%             |
| United Kingdom | 1,719 | 978   | 733   | 589   | 616   | 686   | 11.4%                | -5.3%               |

|                                | 2000  | 2005  | 2010  | 2015  | 2016  | 2017  | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|--------------------------------|-------|-------|-------|-------|-------|-------|----------------------|---------------------|
| <b>Russia and Central Asia</b> |       |       |       |       |       |       |                      |                     |
| Azerbaijan                     | 113   | 286   | 853   | 657   | 650   | 609   | -6.3%                | 10.4%               |
| Georgia                        | 2     | 1     | 1     | 3     | 0     | 0     | 15.8%                | -7.3%               |
| Kazakhstan                     | 588   | 1,093 | 1,386 | 1,272 | 1,265 | 1,390 | 9.9%                 | 5.2%                |
| Russia                         | 2,916 | 5,100 | 4,912 | 4,937 | 5,190 | 5,257 | 1.3%                 | 3.5%                |
| Turkmenistan                   | 32    | 50    | 26    | 69    | 73    | 73    | 0.0%                 | 5.0%                |

|                      | 2000  | 2005  | 2010  | 2015  | 2016  | 2017  | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|----------------------|-------|-------|-------|-------|-------|-------|----------------------|---------------------|
| <b>Middle East</b>   |       |       |       |       |       |       |                      |                     |
| Iran                 | 2,289 | 2,417 | 2,269 | 1,128 | 1,670 | 2,223 | 33.1%                | -0.2%               |
| Iraq                 | 2,063 | 1,400 | 1,892 | 3,003 | 3,199 | 3,324 | 3.9%                 | 2.8%                |
| Kuwait               | 1,218 | 1,660 | 1,380 | 1,964 | 2,128 | 2,096 | -1.5%                | 3.2%                |
| Oman                 | 895   | 718   | 745   | 844   | 882   | 806   | -8.6%                | -0.6%               |
| Qatar                | 607   | 697   | 650   | 580   | 595   | 548   | -7.8%                | -0.6%               |
| Saudi Arabia         | 6,251 | 7,470 | 5,792 | 7,390 | 7,899 | 7,178 | -9.1%                | 0.8%                |
| Syria                | 331   | 208   | 163   | 0     | 0     | 0     |                      | -100.0%             |
| United Arab Emirates | 1,940 | 2,184 | 2,225 | 2,593 | 2,447 | 2,363 | -3.4%                | 1.2%                |
| Yemen                | 368   | 296   | 183   | 9     | 0     | 0     |                      | -100.0%             |

<sup>(\*)</sup> Data source: Eni's estimates on Enerdata *Global Energy & CO<sub>2</sub> Data, Monthly Oil Data Services* °OECD/International Energy Agency, 2018 and other official data sources.



Countries<sup>(\*)</sup>Crude and non conventional oil  
(thousand barrels/day)

|                   | 2000  | 2005  | 2010  | 2015  | 2016  | 2017  | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|-------------------|-------|-------|-------|-------|-------|-------|----------------------|---------------------|
| <b>Africa</b>     |       |       |       |       |       |       |                      |                     |
| Algeria           | 449   | 974   | 714   | 523   | 546   | 521   | -4.6%                | 0.9%                |
| Angola            | 753   | 1,202 | 1,720 | 1,727 | 1,672 | 1,587 | -5.1%                | 4.5%                |
| Cameroon          | 113   | 82    | 56    | 96    | 93    | 78    | -16.7%               | -2.2%               |
| Chad              | 0     | 174   | 122   | 73    | 73    | 121   | 65.1%                |                     |
| Congo             | 249   | 228   | 291   | 221   | 203   | 239   | 17.9%                | -0.2%               |
| Côte d'Ivoire     | 7     | 40    | 38    | 27    | 27    | 27    | 0.0%                 | 8.4%                |
| Dem. Rep. Congo   | 24    | 25    | 22    | 21    | 20    | 18    | -12.0%               | -1.8%               |
| Egypt             | 197   | 41    | 188   | 247   | 261   | 219   | -15.8%               | 0.6%                |
| Equatorial Guinea | 114   | 329   | 253   | 271   | 262   | 231   | -12.0%               | 4.2%                |
| Gabon             | 264   | 253   | 243   | 214   | 213   | 191   | -10.3%               | -1.9%               |
| Ghana             | 0     | 0     | 0     | 104   | 74    | 136   | 82.4%                |                     |
| Libya             | 997   | 1,336 | 1,345 | 299   | 305   | 305   | 0.0%                 | -6.7%               |
| Mauritania        | 0     | 0     | 8     | 5     | 6     | 4     | -32.8%               |                     |
| Mozambique        | 0     | 0     | 1     | 0     | 0     | 0     |                      |                     |
| Nigeria           | 2,163 | 2,313 | 2,369 | 2,114 | 1,769 | 1,783 | 0.8%                 | -1.1%               |
| South Africa      | 4     | 0     | 0     | 0     | 0     | 0     |                      | -100.0%             |
| Sudan             | 132   | 236   | 362   | 20    | 19    | 19    | 0.0%                 | -10.8%              |
| Tunisia           | 61    | 59    | 77    | 38    | 37    | 32    | -13.8%               | -3.8%               |

|                       | 2000 | 2005 | 2010 | 2015 | 2016 | 2017 | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|-----------------------|------|------|------|------|------|------|----------------------|---------------------|
| <b>Asia - Pacific</b> |      |      |      |      |      |      |                      |                     |
| Australia             | 380  | 226  | 311  | 219  | 198  | 178  | -10.1%               | -4.4%               |
| Brunei                | 183  | 198  | 148  | 116  | 108  | 97   | -10.2%               | -3.6%               |
| China                 | 207  | 162  | 61   | 57   | 59   | 98   | 66.2%                | -4.3%               |
| Indonesia             | 610  | 433  | 323  | 315  | 343  | 375  | 9.1%                 | -2.8%               |
| Malaysia              | 347  | 382  | 345  | 324  | 328  | 322  | -2.1%                | -0.4%               |
| Mongolia              | 0    | 1    | 6    | 22   | 22   | 22   | 0.9%                 | 32.7%               |
| Myanmar               | 2    | 7    | 0    | 2    | 2    | 12   | 587.8%               | 11.4%               |
| New Zealand           | 24   | 12   | 47   | 34   | 31   | 26   | -13.7%               | 0.7%                |
| Pakistan              | 9    | 0    | 0    | 13   | 9    | 0    | -100.0%              | -100.0%             |
| Papua New Guinea      | 73   | 47   | 9    | 0    | 0    | 51   |                      | -2.1%               |
| Philippines           | 0    | 15   | 19   | 16   | 15   | 0    | -100.0%              |                     |
| Singapore             | 0    | 3    | 9    | 15   | 15   | 0    | -100.0%              |                     |
| Thailand              | 9    | 66   | 29   | 1    | 31   | 32   | 5.6%                 | 7.5%                |
| Vietnam               | 308  | 361  | 161  | 190  | 137  | 123  | -10.5%               | -5.3%               |

<sup>(\*)</sup>Data source: Eni's estimates on Enerdata *Global Energy & CO<sub>2</sub> Data, Monthly Oil Data Services* ©OECD/International Energy Agency, 2018 and other official data sources.

Countries<sup>(\*)</sup>Crude and non conventional oil  
(thousand barrels/day)

|                     | 2000  | 2005  | 2010  | 2015  | 2016  | 2017  | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|---------------------|-------|-------|-------|-------|-------|-------|----------------------|---------------------|
| <b>Americas</b>     |       |       |       |       |       |       |                      |                     |
| Argentina           | 278   | 149   | 56    | 37    | 45    | 27    | -40.1%               | -12.8%              |
| Barbados            | 1     | 1     | 1     | 1     | 1     | 1     | -6.0%                | -1.8%               |
| Bolivia             | 4     | 4     | 0     | 1     | 1     | 1     | 38.7%                | -7.2%               |
| Brazil              | 19    | 275   | 632   | 737   | 849   | 1,070 | 26.1%                | 26.9%               |
| Canada              | 1,380 | 1,578 | 1,948 | 3,029 | 3,104 | 3,318 | 6.9%                 | 5.3%                |
| Colombia            | 385   | 229   | 470   | 726   | 578   | 553   | -4.4%                | 2.2%                |
| Ecuador             | 239   | 344   | 326   | 390   | 374   | 362   | -3.0%                | 2.5%                |
| Guatemala           | 19    | 16    | 10    | 9     | 7     | 7     | -9.4%                | -5.9%               |
| Mexico              | 1,831 | 2,002 | 1,446 | 1,235 | 1,265 | 1,252 | -1.0%                | -2.2%               |
| Peru                | 14    | 13    | 19    | 8     | 2     | 0     | -100.0%              | -100.0%             |
| Suriname            | 2     | 0     | 0     | 0     | 0     | 18    |                      | 12.7%               |
| Trinidad and Tobago | 52    | 72    | 45    | 31    | 28    | 27    | -2.8%                | -3.8%               |
| United States       | 50    | 32    | 42    | 465   | 591   | 1,118 | 89.2%                | 20.1%               |
| Venezuela           | 2,015 | 2,290 | 1,820 | 1,872 | 1,741 | 1,581 | -9.2%                | -1.4%               |

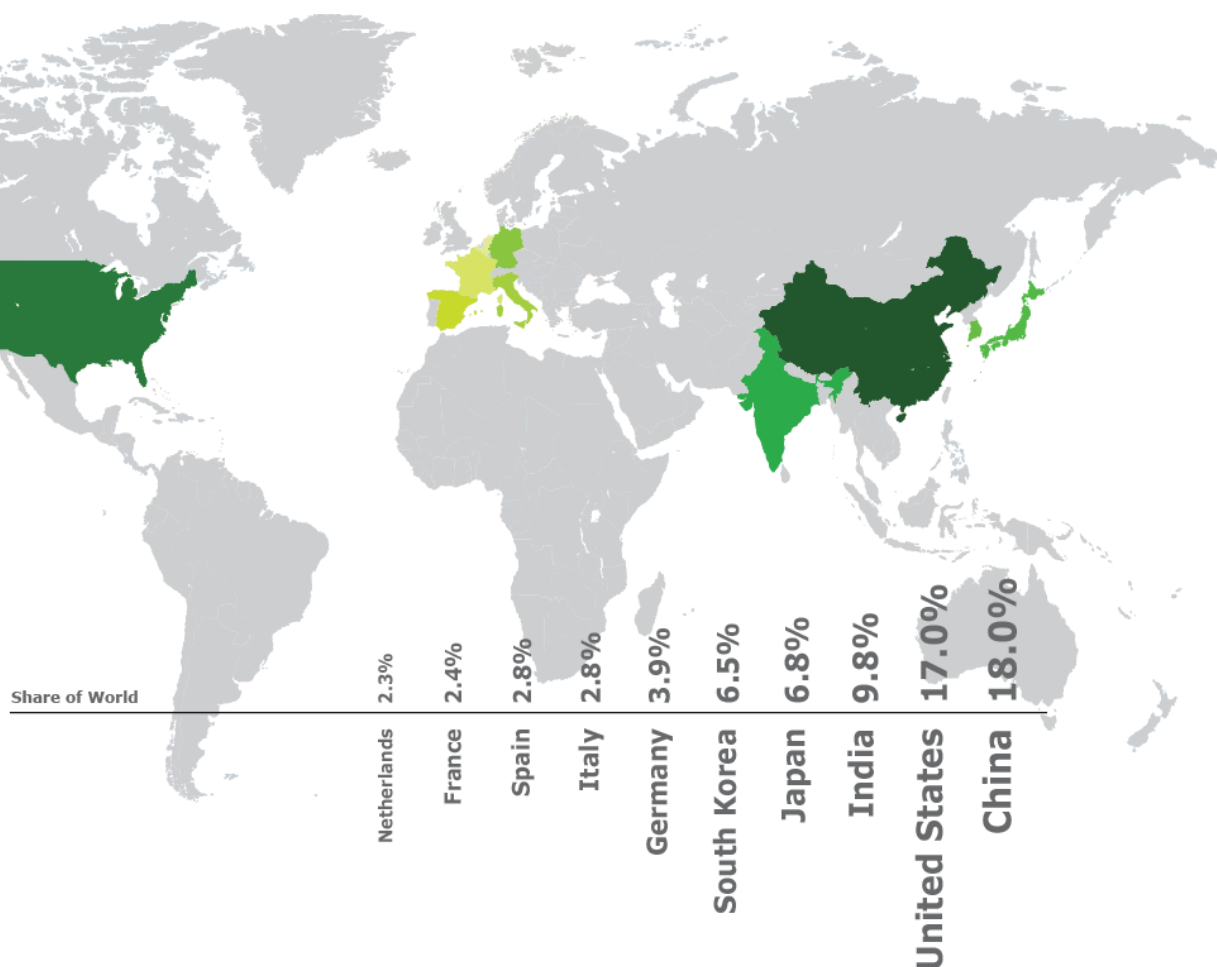
<sup>(\*)</sup>Data source: Eni's estimates on Enerdata *Global Energy & CO<sub>2</sub> Data, Monthly Oil Data Services* ©OECD/International Energy Agency, 2018 and other official data sources.

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

Crude and non conventional oil  
(thousand barrels/day)

|                   | 2000          | 2005          | 2010          | 2015          | 2016          | 2017          | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------------|---------------------|
| China             | 1,409         | 2,543         | 4,767         | 6,728         | 7,642         | 8,413         | 10.1%                | 11.1%               |
| United States     | 9,071         | 10,126        | 9,213         | 7,363         | 7,850         | 7,912         | 0.8%                 | -0.8%               |
| India             | 1,510         | 2,026         | 3,335         | 4,135         | 4,361         | 4,550         | 4.3%                 | 6.7%                |
| Japan             | 4,205         | 4,093         | 3,436         | 3,203         | 3,137         | 3,158         | 0.6%                 | -1.7%               |
| South Korea       | 2,437         | 2,309         | 2,355         | 2,755         | 2,905         | 3,012         | 3.7%                 | 1.3%                |
| Germany           | 2,074         | 2,246         | 1,865         | 1,825         | 1,825         | 1,815         | -0.6%                | -0.8%               |
| Italy             | 1,673         | 1,790         | 1,570         | 1,251         | 1,218         | 1,327         | 9.0%                 | -1.4%               |
| Spain             | 1,150         | 1,191         | 1,049         | 1,295         | 1,283         | 1,318         | 2.7%                 | 0.8%                |
| France            | 1,698         | 1,685         | 1,283         | 1,135         | 1,085         | 1,132         | 4.3%                 | -2.4%               |
| Netherlands       | 1,093         | 1,046         | 1,023         | 1,046         | 1,083         | 1,081         | -0.2%                | -0.1%               |
| Rest of the World | 12,239        | 13,890        | 12,493        | 12,421        | 12,470        | 12,948        | 3.8%                 | 0.3%                |
| <b>World</b>      | <b>38,559</b> | <b>42,946</b> | <b>42,388</b> | <b>43,156</b> | <b>44,858</b> | <b>46,666</b> | <b>4.0%</b>          | <b>1.1%</b>         |

### The World Top 10 (2017)



<sup>(\*)</sup> Data source: Eni's estimates on Enerdata *Global Energy & CO<sub>2</sub> Data, Monthly Oil Data Services* °OECD/International Energy Agency, 2018 and other official data sources.

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

Crude and non conventional oil  
(thousand barrels/day)

|                    | 2000  | 2005  | 2010  | 2015  | 2016  | 2017  | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|--------------------|-------|-------|-------|-------|-------|-------|----------------------|---------------------|
| <b>Europe</b>      |       |       |       |       |       |       |                      |                     |
| Austria            | 143   | 157   | 135   | 162   | 147   | 144   | -1.6%                | 0.1%                |
| Belarus            | 240   | 386   | 295   | 458   | 363   | 362   | -0.1%                | 2.4%                |
| Belgium            | 678   | 639   | 668   | 642   | 637   | 682   | 7.0%                 | 0.0%                |
| Bosnia-Herzegovina | 11    | 3     | 23    | 19    | 19    | 22    | 16.5%                | 4.4%                |
| Bulgaria           | 106   | 121   | 109   | 122   | 124   | 141   | 13.2%                | 1.7%                |
| Croatia            | 80    | 81    | 72    | 47    | 51    | 57    | 12.3%                | -1.9%               |
| Cyprus             | 23    | 0     | 0     | 0     | 0     | 0     |                      | -100.0%             |
| Czech Republic     | 114   | 155   | 155   | 143   | 107   | 156   | 46.7%                | 1.9%                |
| Denmark            | 82    | 54    | 54    | 83    | 77    | 96    | 25.3%                | 0.9%                |
| Finland            | 217   | 191   | 215   | 203   | 221   | 237   | 6.9%                 | 0.5%                |
| France             | 1,698 | 1,685 | 1,283 | 1,135 | 1,085 | 1,132 | 4.3%                 | -2.4%               |
| Germany            | 2,074 | 2,246 | 1,865 | 1,825 | 1,825 | 1,815 | -0.6%                | -0.8%               |
| Greece             | 387   | 374   | 403   | 442   | 469   | 473   | 0.9%                 | 1.2%                |
| Hungary            | 116   | 129   | 115   | 124   | 120   | 119   | -0.7%                | 0.2%                |
| Ireland            | 59    | 65    | 61    | 73    | 64    | 64    | 0.5%                 | 0.5%                |
| Italy              | 1,673 | 1,790 | 1,570 | 1,251 | 1,218 | 1,327 | 9.0%                 | -1.4%               |
| Lithuania          | 95    | 179   | 180   | 170   | 186   | 197   | 5.5%                 | 4.4%                |
| Macedonia          | 16    | 20    | 17    | 0     | 0     | 0     |                      | -100.0%             |
| Netherlands        | 1,093 | 1,046 | 1,023 | 1,046 | 1,083 | 1,081 | -0.2%                | -0.1%               |
| Norway             | 18    | 16    | 11    | 22    | 11    | 36    | 241.2%               | 4.1%                |
| Poland             | 360   | 358   | 454   | 530   | 491   | 493   | 0.3%                 | 1.9%                |
| Portugal           | 235   | 261   | 220   | 282   | 269   | 284   | 5.4%                 | 1.1%                |
| Romania            | 98    | 179   | 120   | 136   | 153   | 159   | 3.8%                 | 2.9%                |
| Serbia             | 6     | 62    | 38    | 37    | 45    | 45    | 2.0%                 | 13.0%               |
| Slovakia           | 107   | 110   | 109   | 118   | 117   | 112   | -4.1%                | 0.3%                |
| Slovenia           | 2     | 0     | 0     | 0     | 0     | 0     |                      | -100.0%             |
| Spain              | 1,150 | 1,191 | 1,049 | 1,295 | 1,283 | 1,318 | 2.7%                 | 0.8%                |
| Sweden             | 419   | 402   | 397   | 402   | 394   | 397   | 0.9%                 | -0.3%               |
| Switzerland        | 92    | 95    | 90    | 56    | 59    | 57    | -2.8%                | -2.8%               |
| Turkey             | 433   | 468   | 339   | 501   | 499   | 515   | 3.2%                 | 1.0%                |
| Ukraine            | 116   | 292   | 155   | 5     | 10    | 20    | 97.1%                | -9.9%               |
| United Kingdom     | 845   | 1,044 | 953   | 847   | 792   | 885   | 11.7%                | 0.3%                |

|                                | 2000 | 2005 | 2010 | 2015 | 2016 | 2017 | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|--------------------------------|------|------|------|------|------|------|----------------------|---------------------|
| <b>Russia and Central Asia</b> |      |      |      |      |      |      |                      |                     |
| Georgia                        | 0    | 0    | 0    | 3    | 1    | 0    | -100.0%              |                     |
| Kazakhstan                     | 20   | 75   | 120  | 1    | 1    | 3    | 100.0%               | -10.7%              |
| Kyrgyzstan                     | 0    | 0    | 0    | 4    | 5    | 5    | 0.0%                 | 15.0%               |
| Russia                         | 119  | 49   | 0    | 58   | 16   | 16   | 0.0%                 | -11.2%              |

|                    | 2000 | 2005 | 2010 | 2015 | 2016 | 2017 | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|--------------------|------|------|------|------|------|------|----------------------|---------------------|
| <b>Middle East</b> |      |      |      |      |      |      |                      |                     |
| Bahrain            | 71   | 80   | 85   | 66   | 65   | 56   | -13.5%               | -1.4%               |
| Iran               | 13   | 42   | 13   | 0    | 0    | 0    |                      | -100.0%             |
| Israel             | 211  | 204  | 221  | 234  | 216  | 216  | 0.0%                 | 0.1%                |
| Jordan             | 74   | 90   | 68   | 68   | 58   | 64   | 11.1%                | -0.8%               |
| Syria              | 0    | 0    | 0    | 88   | 90   | 16   | -82.0%               |                     |
| Yemen              | 16   | 0    | 0    | 0    | 0    | 0    |                      | -100.0%             |

<sup>(\*)</sup> Data source: Eni's estimates on Enerdata *Global Energy & CO<sub>2</sub> Data, Monthly Oil Data Services* °OECD/International Energy Agency, 2018 and other official data sources.

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

Crude and non conventional oil  
(thousand barrels/day)

|               | 2000 | 2005 | 2010 | 2015 | 2016 | 2017 | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|---------------|------|------|------|------|------|------|----------------------|---------------------|
| <b>Africa</b> |      |      |      |      |      |      |                      |                     |
| Algeria       | 6    | 6    | 7    | 6    | 5    | 4    | -15.0%               | -2.4%               |
| Cameroon      | 31   | 30   | 34   | 36   | 38   | 0    | -100.0%              | -100.0%             |
| Côte d'Ivoire | 59   | 76   | 59   | 62   | 66   | 66   | 0.0%                 | 0.7%                |
| Egypt         | 0    | 50   | 73   | 64   | 136  | 142  | 4.8%                 |                     |
| Ghana         | 26   | 39   | 33   | 6    | 29   | 0    | -100.0%              | -100.0%             |
| Kenya         | 49   | 35   | 31   | 13   | 10   | 10   | 2.2%                 | -8.9%               |
| Madagascar    | 9    | 10   | 0    | 0    | 0    | 0    |                      | -100.0%             |
| Morocco       | 143  | 144  | 109  | 56   | 0    | 0    |                      | -100.0%             |
| Senegal       | 18   | 20   | 13   | 18   | 21   | 18   | -14.2%               | 0.1%                |
| Sierra Leone  | 4    | 3    | 3    | 4    | 4    | 4    | -9.2%                | 0.1%                |
| Somalia       | 2    | 0    | 0    | 0    | 0    | 0    |                      | -100.0%             |
| South Africa  | 459  | 474  | 380  | 414  | 437  | 383  | -12.2%               | -1.1%               |
| Sudan         | 0    | 0    | 0    | 9    | 22   | 22   | 0.0%                 |                     |
| Tunisia       | 24   | 23   | 4    | 19   | 19   | 0    | -100.0%              | -100.0%             |
| Zambia        | 1    | 8    | 13   | 13   | 10   | 10   | 0.0%                 | 18.2%               |

|                       | 2000  | 2005  | 2010  | 2015  | 2016  | 2017  | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|-----------------------|-------|-------|-------|-------|-------|-------|----------------------|---------------------|
| <b>Asia - Pacific</b> |       |       |       |       |       |       |                      |                     |
| Australia             | 372   | 379   | 469   | 315   | 330   | 331   | 0.4%                 | -0.7%               |
| Bangladesh            | 26    | 22    | 26    | 22    | 27    | 30    | 12.9%                | 0.8%                |
| China                 | 1,409 | 2,543 | 4,767 | 6,728 | 7,642 | 8,413 | 10.1%                | 11.1%               |
| India                 | 1,510 | 2,026 | 3,335 | 4,135 | 4,361 | 4,550 | 4.3%                 | 6.7%                |
| Indonesia             | 224   | 332   | 284   | 383   | 416   | 441   | 5.9%                 | 4.1%                |
| Japan                 | 4,205 | 4,093 | 3,436 | 3,203 | 3,137 | 3,158 | 0.6%                 | -1.7%               |
| Malaysia              | 148   | 164   | 159   | 171   | 188   | 193   | 2.7%                 | 1.6%                |
| Myanmar               | 13    | 0     | 0     | 0     | 0     | 0     |                      | -100.0%             |
| New Zealand           | 90    | 90    | 98    | 102   | 107   | 105   | -1.1%                | 1.0%                |
| North Korea           | 8     | 10    | 11    | 11    | 11    | 10    | -5.9%                | 1.7%                |
| Pakistan              | 144   | 176   | 136   | 172   | 175   | 205   | 17.3%                | 2.1%                |
| Papua New Guinea      | 0     | 18    | 20    | 13    | 27    | 0     | -100.0%              |                     |
| Philippines           | 314   | 215   | 184   | 213   | 215   | 204   | -5.3%                | -2.5%               |
| Singapore             | 842   | 1,180 | 934   | 789   | 841   | 1,000 | 18.9%                | 1.0%                |
| South Korea           | 2,437 | 2,309 | 2,355 | 2,755 | 2,905 | 3,012 | 3.7%                 | 1.3%                |
| Sri-Lanka             | 47    | 40    | 36    | 34    | 32    | 38    | 18.5%                | -1.2%               |
| Taiwan                | 743   | 1,045 | 876   | 841   | 859   | 852   | -0.7%                | 0.8%                |
| Thailand              | 676   | 828   | 849   | 891   | 870   | 1,003 | 15.3%                | 2.3%                |

<sup>(\*)</sup> Data source: Eni's estimates on Enerdata *Global Energy & CO<sub>2</sub> Data, Monthly Oil Data Services* °OECD/International Energy Agency, 2018 and other official data sources.

Countries<sup>(\*)</sup>Crude and non conventional oil  
(thousand barrels/day)

|                     | 2000  | 2005   | 2010  | 2015  | 2016  | 2017  | Δ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|---------------------|-------|--------|-------|-------|-------|-------|----------------------|---------------------|
| <b>Americas</b>     |       |        |       |       |       |       |                      |                     |
| Argentina           | 26    | 4      | 0     | 16    | 15    | 0     | -100.0%              | -100.0%             |
| Brazil              | 399   | 343    | 339   | 298   | 155   | 172   | 11.0%                | -4.8%               |
| Canada              | 912   | 928    | 770   | 570   | 806   | 839   | 4.1%                 | -0.5%               |
| Chile               | 193   | 204    | 158   | 169   | 169   | 175   | 4.0%                 | -0.6%               |
| Colombia            | 4     | 7      | 0     | 0     | 0     | 0     |                      | -100.0%             |
| Costa Rica          | 1     | 11     | 10    | 0     | 0     | 0     |                      | -100.0%             |
| Cuba                | 29    | 39     | 107   | 99    | 58    | 62    | 7.5%                 | 4.5%                |
| Dominican Republic  | 41    | 42     | 27    | 16    | 23    | 28    | 19.2%                | -2.2%               |
| El Salvador         | 19    | 20     | 15    | 0     | 0     | 0     |                      | -100.0%             |
| Guatemala           | 17    | 5      | 0     | 0     | 0     | 0     |                      | -100.0%             |
| Jamaica             | 21    | 9      | 23    | 24    | 22    | 24    | 10.6%                | 0.7%                |
| Nicaragua           | 16    | 15     | 15    | 15    | 12    | 16    | 30.4%                | -0.2%               |
| Netherland Antilles | 222   | 232    | 89    | 185   | 190   | 190   | -0.1%                | -0.9%               |
| Panama              | 44    | 0      | 0     | 0     | 0     | 0     |                      | -100.0%             |
| Paraguay            | 2     | 1      | 0     | 0     | 0     | 0     |                      | -100.0%             |
| Peru                | 62    | 98     | 97    | 87    | 107   | 109   | 1.5%                 | 3.3%                |
| Trinidad and Tobago | 97    | 92     | 68    | 78    | 101   | 88    | -12.9%               | -0.6%               |
| United States       | 9,071 | 10,126 | 9,213 | 7,363 | 7,850 | 7,912 | 0.8%                 | -0.8%               |
| Uruguay             | 35    | 41     | 39    | 40    | 41    | 40    | -2.1%                | 0.8%                |

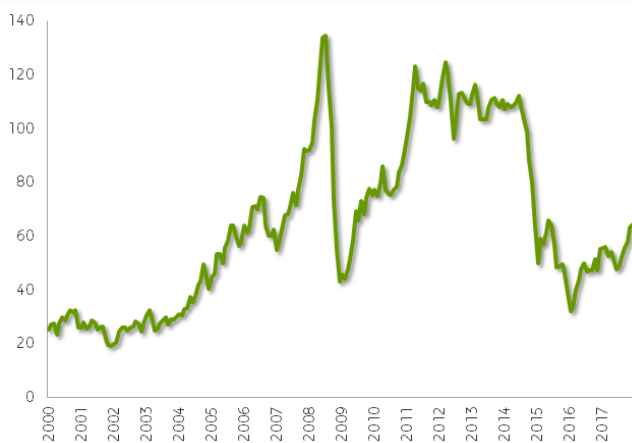
<sup>(\*)</sup> Data source: Eni's estimates on Enerdata *Global Energy & CO<sub>2</sub> Data, Monthly Oil Data Services* °OECD/International Energy Agency, 2018 and other official data sources.

### Crude Future Prices and Open Interests<sup>(\*)</sup>

|                                | 2000    | 2005    | 2010      | 2015      | 2016      | 2017      | $\Delta$ y/y<br>(2017-2016) | CAGR<br>(2017-2000) |
|--------------------------------|---------|---------|-----------|-----------|-----------|-----------|-----------------------------|---------------------|
| <b>Crude Future Prices</b>     |         |         |           |           |           |           |                             |                     |
| (US\$/barrel)                  |         |         |           |           |           |           |                             |                     |
| ICE Brent                      | 28.5    | 55.3    | 80.3      | 53.6      | 45.1      | 54.7      | 21.3%                       | 3.9%                |
| CME WTI                        | 30.3    | 56.7    | 79.6      | 48.8      | 43.5      | 50.9      | 17.0%                       | 3.1%                |
| <b>Total Open Interests</b>    |         |         |           |           |           |           |                             |                     |
| (no. contracts - daily totals) |         |         |           |           |           |           |                             |                     |
| ICE Brent                      | 267,667 | 350,337 | 813,445   | 1,922,243 | 2,195,065 | 2,401,096 | 9.4%                        | 13.8%               |
| CME WTI                        | 469,685 | 819,675 | 1,341,531 | 1,679,710 | 1,818,925 | 2,282,425 | 25.5%                       | 9.7%                |

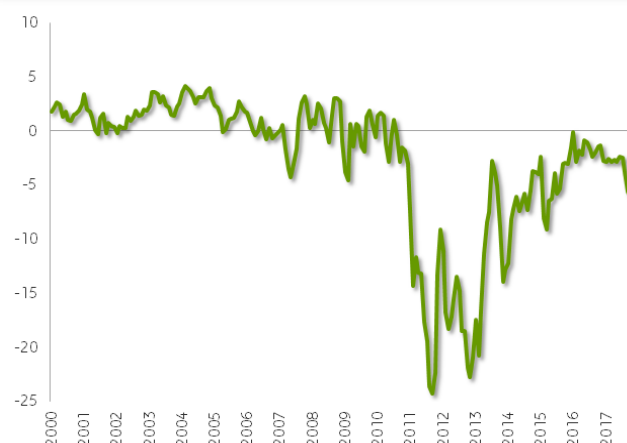
### ICE Brent Price 1 Month<sup>(\*)</sup>

(US\$/barrel)



### WTI vs Brent 1 Month Differential<sup>(\*)</sup>

(US\$/barrel)



### ICE Brent Total Open Interests<sup>(\*)</sup>

(no. contracts - daily totals)



### CME WTI Total Open Interests<sup>(\*)</sup>

(no. contracts - daily totals)



<sup>(\*)</sup> Data source: ICE London and CME New York.







### Crude Production by Quality (Gravity and Sulphur Content) (\*)

(thousand barrels/day)

|                               | 2000          | 2005          | 2010          | 2015          | 2016          | 2017          | Share of total |       |
|-------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|-------|
|                               |               |               |               |               |               |               | 2000           | 2017  |
| <b>World (A)</b>              | <b>68,664</b> | <b>74,805</b> | <b>75,009</b> | <b>81,758</b> | <b>81,709</b> | <b>81,697</b> |                |       |
| Ultra Light                   | 1,464         | 1,944         | 2,463         | 3,430         | 3,419         | 3,399         | 2.1%           | 4.2%  |
| Light & Sweet                 | 15,423        | 14,383        | 14,534        | 15,381        | 14,931        | 15,628        | 22.5%          | 19.1% |
| Light & Medium Sour           | 2,885         | 3,139         | 3,681         | 4,076         | 4,096         | 4,188         | 4.2%           | 5.1%  |
| Light & Sour                  | 2,401         | 2,288         | 2,218         | 2,521         | 2,535         | 2,659         | 3.5%           | 3.3%  |
| Medium & Sweet                | 6,958         | 8,079         | 7,610         | 8,326         | 7,583         | 7,791         | 10.1%          | 9.5%  |
| Medium & Medium Sour          | 2,431         | 2,744         | 2,938         | 3,228         | 3,327         | 3,309         | 3.5%           | 4.1%  |
| Medium & Sour                 | 27,925        | 31,249        | 30,410        | 32,546        | 34,005        | 32,897        | 40.7%          | 40.3% |
| Heavy & Sweet                 | 1,315         | 1,613         | 2,304         | 2,220         | 2,209         | 2,030         | 1.9%           | 2.5%  |
| Heavy & Medium Sour           | 1,517         | 1,902         | 2,297         | 2,042         | 1,706         | 1,778         | 2.2%           | 2.2%  |
| Heavy & Sour                  | 5,456         | 6,434         | 5,702         | 7,213         | 7,107         | 7,212         | 7.9%           | 8.8%  |
| Unassigned production: (B)    | 890           | 1,030         | 853           | 777           | 791           | 806           | 1.3%           | 1.0%  |
| % Unassigned production (B/A) | 1.3           | 1.4           | 1.1           | 1.0           | 1.0           | 1.0           |                |       |

### Crude Production by Gravity(\*)

(thousand barrels/day)

|                       | 2000          | 2005          | 2010          | 2015          | 2016          | 2017          | Share of total |       |
|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|-------|
|                       |               |               |               |               |               |               | 2000           | 2017  |
| <b>World</b>          | <b>68,664</b> | <b>74,805</b> | <b>75,009</b> | <b>81,758</b> | <b>81,709</b> | <b>81,697</b> |                |       |
| Light                 | 22,173        | 21,754        | 22,895        | 25,407        | 24,982        | 25,874        | 32.3%          | 31.7% |
| Medium                | 37,313        | 42,072        | 40,958        | 44,100        | 44,915        | 43,997        | 54.3%          | 53.9% |
| Heavy                 | 8,288         | 9,949         | 10,303        | 11,474        | 11,021        | 11,020        | 12.1%          | 13.5% |
| Unassigned production | 890           | 1,030         | 853           | 777           | 791           | 806           | 1.3%           | 1.0%  |

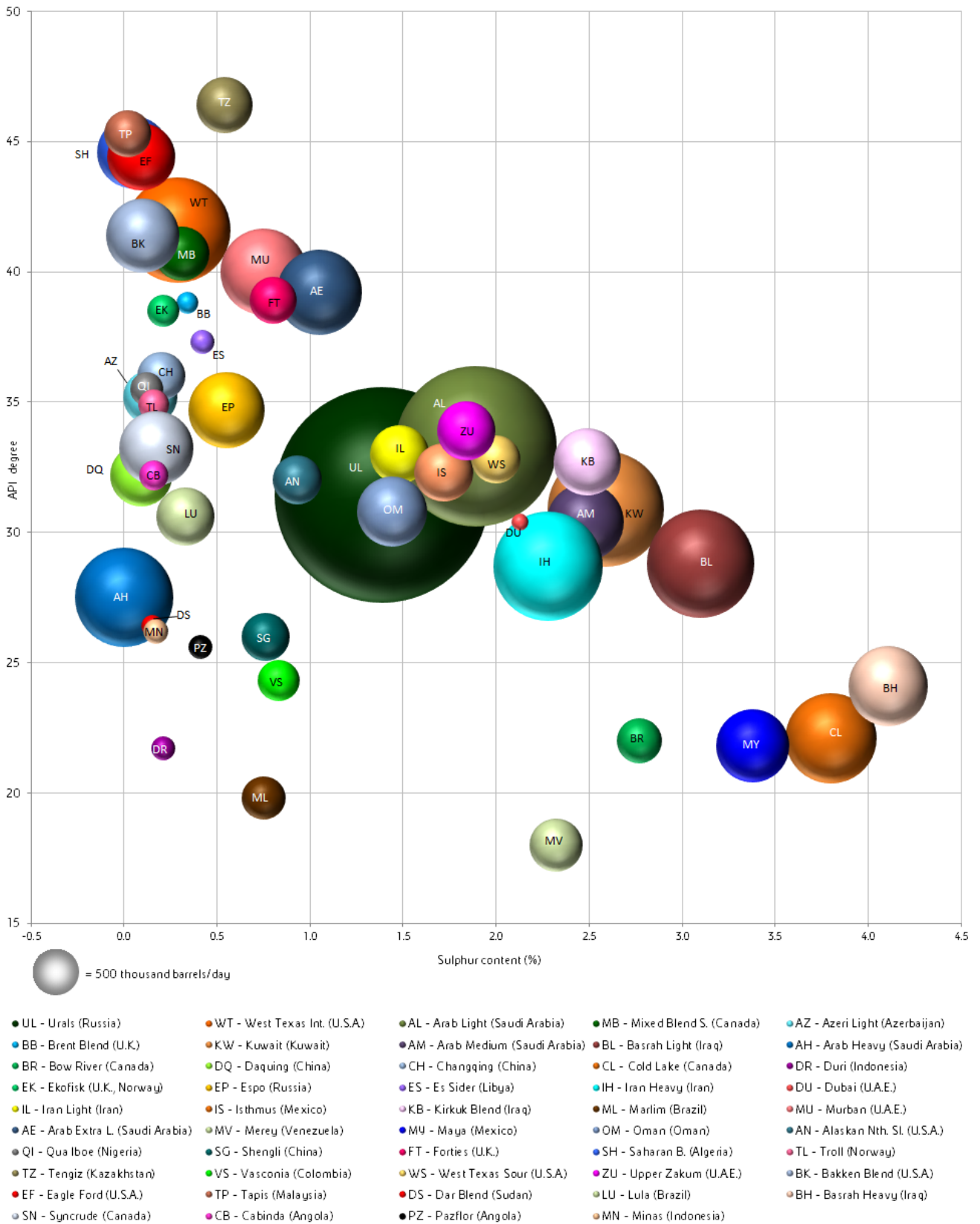
### Crude Production by Sulphur Content(\*)

(thousand barrels/day)

|                       | 2000          | 2005          | 2010          | 2015          | 2016          | 2017          | Share of total |       |
|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|-------|
|                       |               |               |               |               |               |               | 2000           | 2017  |
| <b>World</b>          | <b>68,664</b> | <b>74,805</b> | <b>75,009</b> | <b>81,758</b> | <b>81,709</b> | <b>81,697</b> |                |       |
| Sweet                 | 25,159        | 26,019        | 26,910        | 29,356        | 28,142        | 28,847        | 36.6%          | 35.3% |
| Medium Sour           | 6,833         | 7,785         | 8,916         | 9,346         | 9,129         | 9,276         | 10.0%          | 11.4% |
| Sour                  | 35,781        | 39,971        | 38,330        | 42,279        | 43,647        | 42,768        | 52.1%          | 52.4% |
| Unassigned production | 890           | 1,030         | 853           | 777           | 791           | 806           | 1.3%           | 1.0%  |

(\*) Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

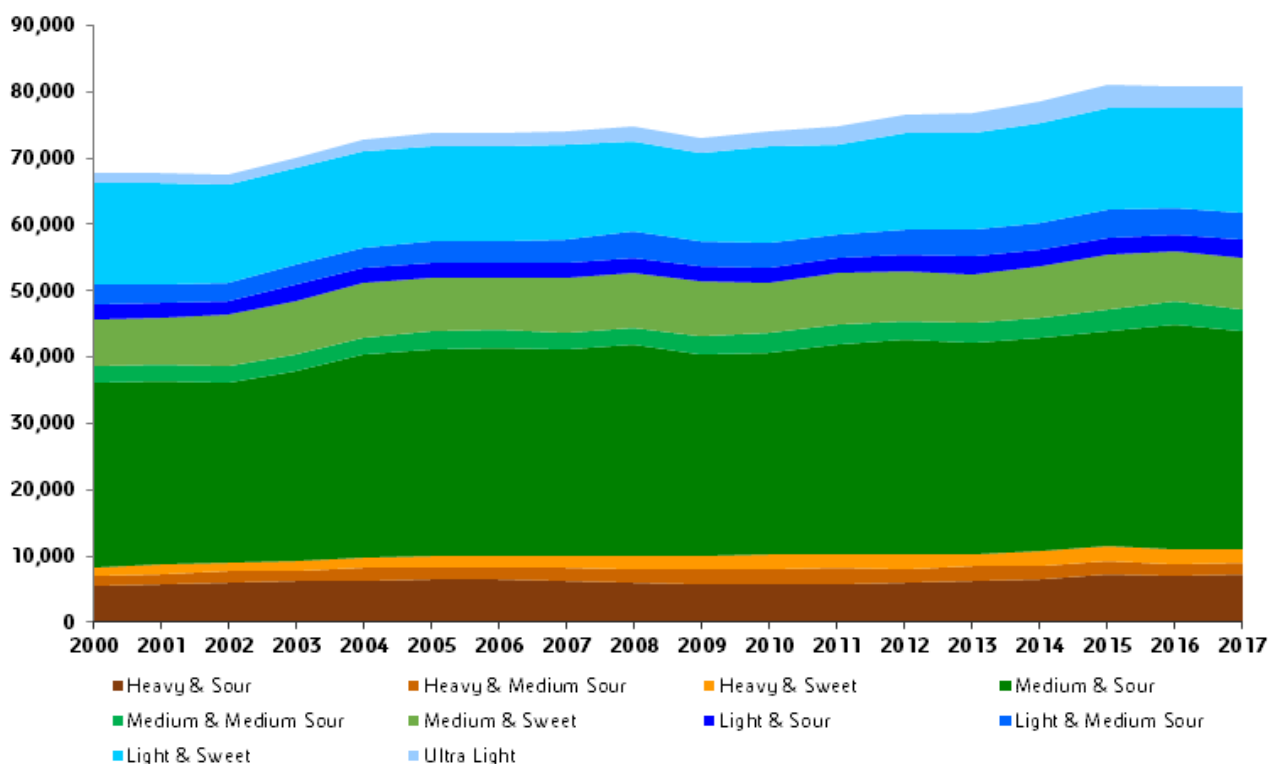
Quality and Production Volume of Main 2017 Crudes (\*)  
(thousand barrels/day)



(\*) Data source: Eni.

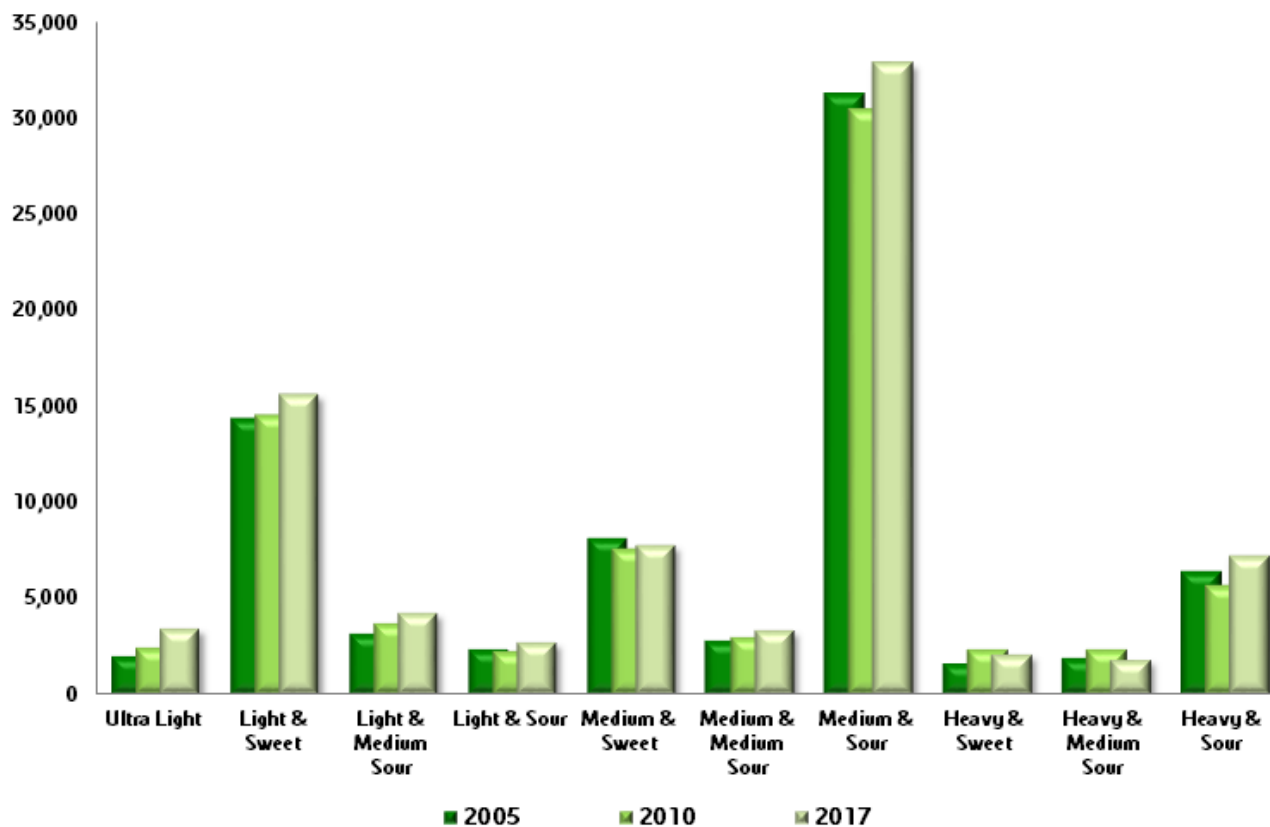
## Crude Production by Quality<sup>(\*)</sup>

(thousand barrels/day)



## Crude Production by Quality<sup>(\*)</sup>

(selected years, thousand barrels/day)



<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

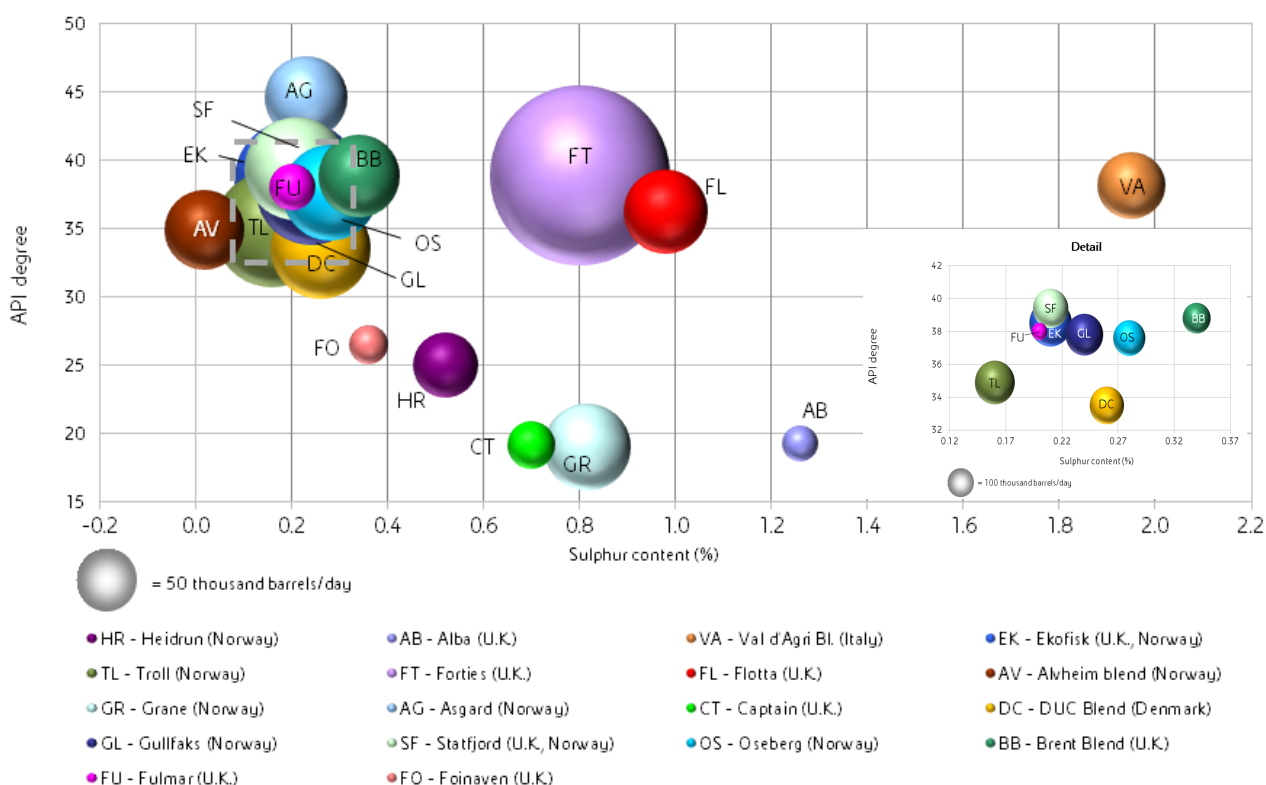
### Crude Production by Quality<sup>(\*)</sup>

(thousand barrels/day)

|                               | 2000         | 2005         | 2010         | 2015         | 2016         | 2017         | Share of total |       |
|-------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|-------|
|                               |              |              |              |              |              |              | 2000           | 2017  |
| <b>Europe (A)</b>             | <b>6,753</b> | <b>5,586</b> | <b>4,129</b> | <b>3,502</b> | <b>3,526</b> | <b>3,466</b> |                |       |
| Ultra Light                   | 124          | 272          | 267          | 338          | 347          | 351          | 1.8%           | 9.8%  |
| Light & Sweet                 | 4,437        | 3,218        | 1,745        | 1,535        | 1,497        | 1,346        | 65.7%          | 42.5% |
| Light & Medium Sour           | 45           | 133          | 649          | 472          | 526          | 577          | 0.7%           | 14.9% |
| Light & Sour                  | 20           | 88           | 68           | 77           | 51           | 62           | 0.3%           | 1.4%  |
| Medium & Sweet                | 1,026        | 891          | 552          | 428          | 483          | 476          | 15.2%          | 13.7% |
| Medium & Medium Sour          |              |              |              |              |              |              |                |       |
| Medium & Sour                 | 172          | 1            | 29           | 15           | 6            | 0            | 2.5%           | 0.2%  |
| Heavy & Sweet                 | 17           | 36           | 80           | 31           | 35           | 70           | 0.3%           | 1.0%  |
| Heavy & Medium Sour           | 307          | 398          | 275          | 163          | 157          | 182          | 4.5%           | 4.5%  |
| Heavy & Sour                  | 99           | 79           | 58           | 40           | 39           | 32           | 1.5%           | 1.1%  |
| Unassigned production (B)     | 506          | 470          | 405          | 404          | 385          | 371          | 7.5%           | 10.9% |
| % Unassigned production (B/A) | 7.5          | 8.4          | 9.8          | 11.5         | 10.9         | 10.7         |                |       |

### Quality and Production Volume of Main Crudes 2017<sup>(\*\*)</sup>

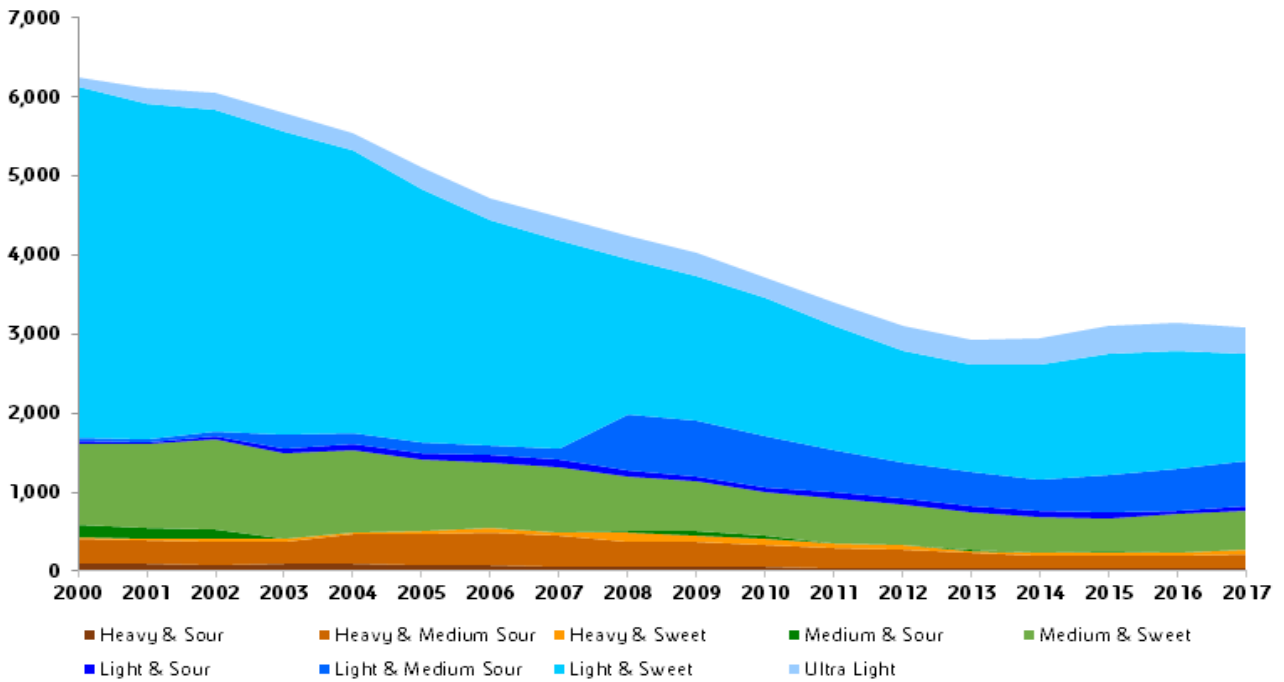
(thousand barrels/day)



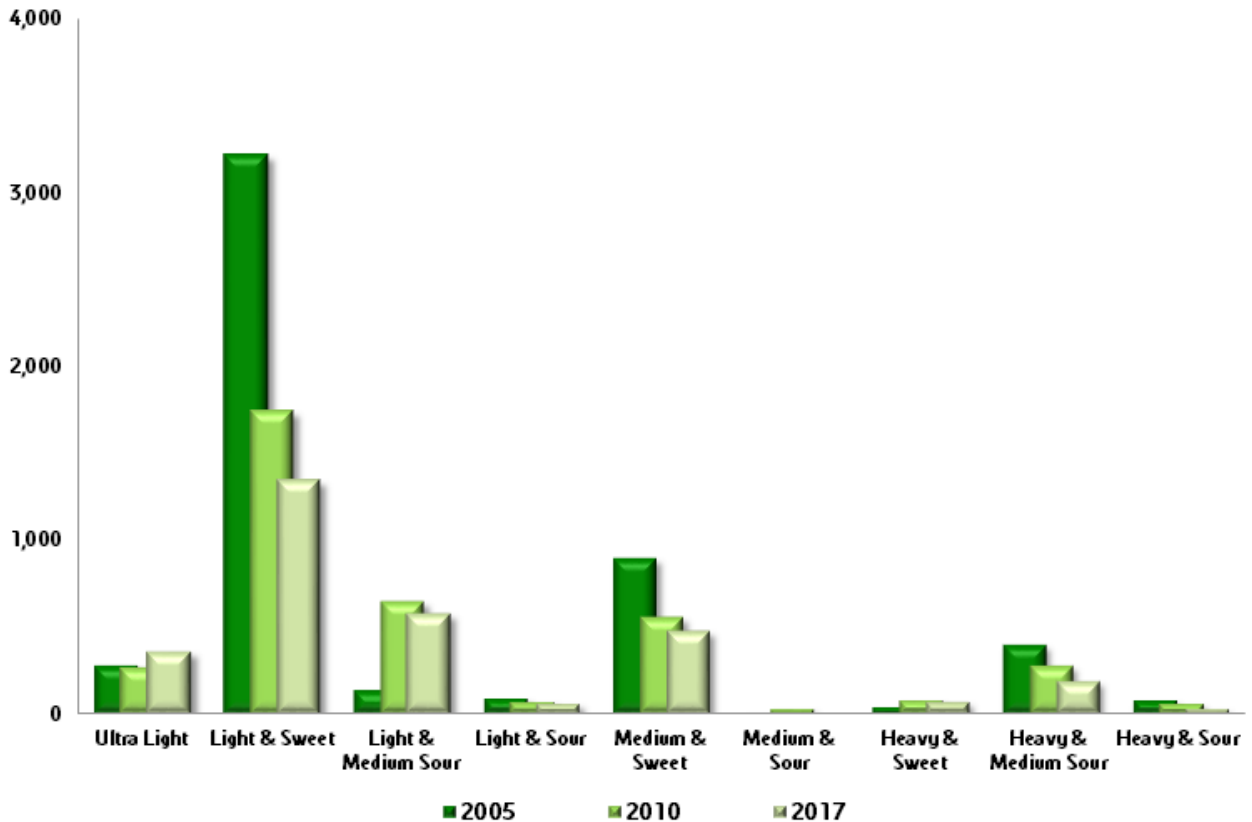
<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

<sup>(\*\*)</sup> Data source: Eni.

**Crude Production by Quality<sup>(\*)</sup>**  
(thousand barrels/day)



**Crude Production by Quality<sup>(\*)</sup>**  
(selected years, thousand barrels/day)



<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2016 data.

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

(thousand barrels/day)

|                       | 2000         | 2005         | 2010         | 2015         | 2016         | 2017         | Share of total |       |
|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|-------|
|                       |              |              |              |              |              |              | 2000           | 2017  |
| <b>Denmark</b>        | <b>363</b>   | <b>388</b>   | <b>255</b>   | <b>156</b>   | <b>141</b>   | <b>137</b>   |                |       |
| Light & Sweet         | 131          | 121          | 24           | 8            | 9            | 7            | 36.1%          | 5.1%  |
| Medium & Sweet        | 232          | 267          | 231          | 148          | 132          | 130          | 63.9%          | 94.9% |
| <b>Italy</b>          | <b>74</b>    | <b>114</b>   | <b>96</b>    | <b>100</b>   | <b>71</b>    | <b>78</b>    |                |       |
| Light & Sweet         | 31           | 4            | 6            | 1            | 0            | 0            | 41.3%          | 0.0%  |
| Light & Sour          | 20           | 88           | 68           | 77           | 51           | 62           | 27.6%          | 79.9% |
| Medium & Sour         | 1.6          | 1.3          |              |              |              |              | 2.2%           |       |
| Heavy & Sour          | 21           | 21           | 21           | 23           | 20           | 16           | 29.0%          | 20.0% |
| <b>Norway</b>         | <b>3,331</b> | <b>2,962</b> | <b>2,138</b> | <b>1,948</b> | <b>1,995</b> | <b>1,969</b> |                |       |
| Ultra Light           | 124          | 272          | 267          | 338          | 347          | 351          | 3.7%           | 17.9% |
| Light & Sweet         | 2,465        | 1,913        | 1,316        | 1,207        | 1,183        | 1,136        | 74.0%          | 57.7% |
| Light & Medium Sour   |              |              | 31           | 13           | 14           | 11           |                | 0.6%  |
| Medium & Sweet        | 560          | 459          | 273          | 249          | 312          | 317          | 16.8%          | 16.1% |
| Medium & Sour         |              |              | 29           | 15           | 6            |              |                |       |
| Heavy & Medium Sour   | 182          | 318          | 221          | 126          | 133          | 153          | 5.5%           | 7.8%  |
| <b>United Kingdom</b> | <b>2,480</b> | <b>1,652</b> | <b>1,235</b> | <b>894</b>   | <b>934</b>   | <b>912</b>   |                |       |
| Light & Sweet         | 1,811        | 1,180        | 398          | 319          | 304          | 202          | 73.0%          | 22.2% |
| Light & Medium Sour   | 45           | 133          | 618          | 459          | 512          | 566          | 1.8%           | 62.1% |
| Medium & Sweet        | 234          | 165          | 48           | 31           | 40           | 29           | 9.4%           | 3.2%  |
| Medium & Sour         | 170          |              |              |              |              |              | 6.9%           |       |
| Heavy & Sweet         | 17           | 36           | 80           | 31           | 35           | 70           | 0.7%           | 7.7%  |
| Heavy & Medium Sour   | 125          | 80           | 54           | 37           | 24           | 29           | 5.0%           | 3.2%  |
| Heavy & Sour          | 78           | 58           | 37           | 17           | 19           | 16           | 3.1%           | 1.8%  |

<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

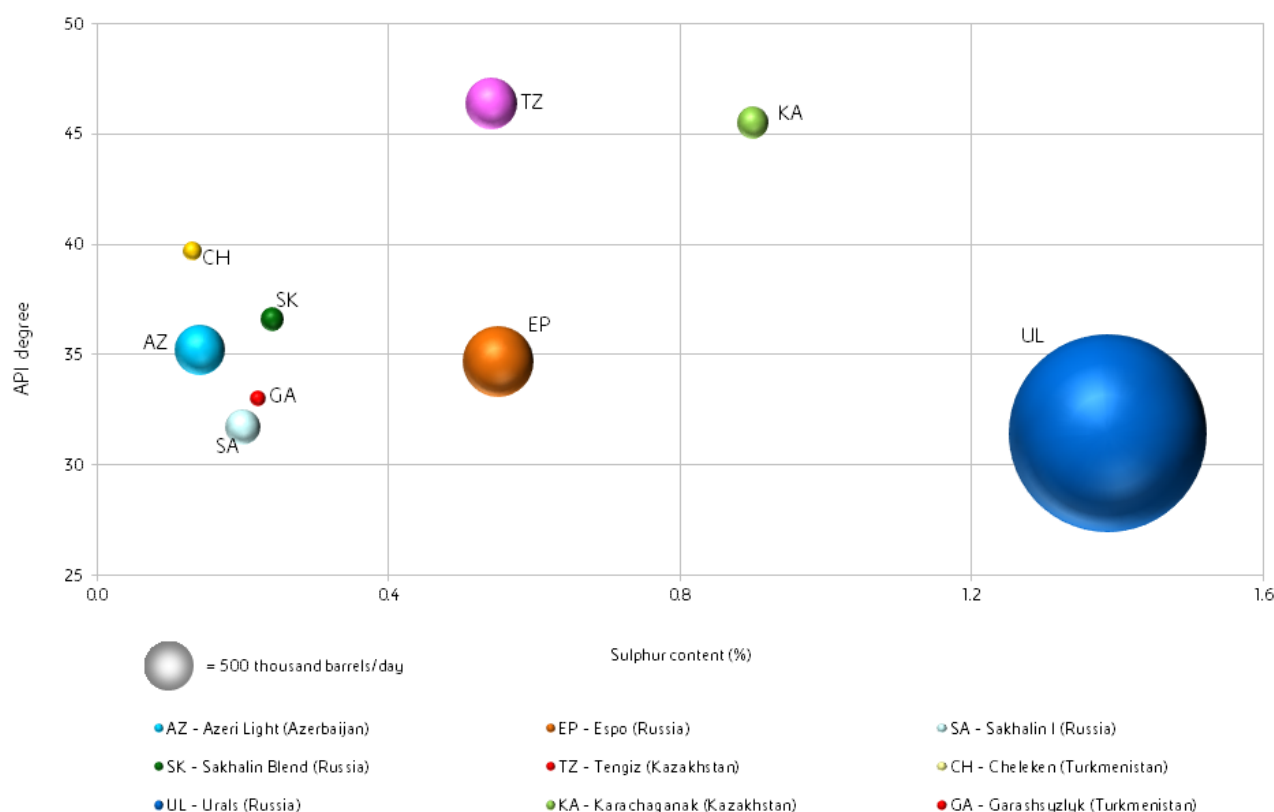
### Crude Production by Quality<sup>(\*)</sup>

(thousand barrels/day)

|                                    | 2000         | 2005          | 2010          | 2015          | 2016          | 2017          | Share of total |       |
|------------------------------------|--------------|---------------|---------------|---------------|---------------|---------------|----------------|-------|
|                                    |              |               |               |               |               |               | 2000           | 2017  |
| <b>Russia and Central Asia (A)</b> | <b>7,771</b> | <b>11,664</b> | <b>13,373</b> | <b>13,931</b> | <b>14,114</b> | <b>14,241</b> |                |       |
| Ultra Light                        | 77           | 177           | 268           | 396           | 405           | 405           | 1.0%           | 2.8%  |
| Light & Sweet                      | 308          | 322           | 1,938         | 1,089         | 1,050         | 1,009         | 4.0%           | 7.1%  |
| Light & Medium Sour                | 708          | 1,281         | 1,196         | 1,708         | 1,656         | 1,818         | 9.1%           | 12.8% |
| Light & Sour                       | 64           | 58            | 33            | 18            | 15            | 17            | 0.8%           | 0.1%  |
| Medium & Sweet                     | 265          | 462           | 212           | 350           | 380           | 406           | 3.4%           | 2.8%  |
| Medium & Medium Sour               | 2            | 3             | 319           | 1,069         | 1,106         | 1,165         | 0.0%           | 8.2%  |
| Medium & Sour                      | 6,328        | 9,352         | 9,395         | 9,295         | 9,497         | 9,417         | 81.4%          | 66.1% |
| Heavy & Sweet                      | 15           | 6             | 10            | 5             | 5             | 3             | 0.2%           | 0.0%  |
| Heavy & Medium Sour                |              |               |               |               |               |               |                |       |
| Heavy & Sour                       |              |               |               |               |               |               |                |       |
| Unassigned production (B)          | 4            | 4             | 2             | 2             | 1             | 1             | 0.1%           | 0.0%  |
| % Unassigned production (B/A)      | 0.1          | 0.0           | 0.0           | 0.0           | 0.0           | 0.0           |                |       |

### Quality and Production Volume of Main Crudes 2017<sup>(\*\*)</sup>

(thousand barrels/day)

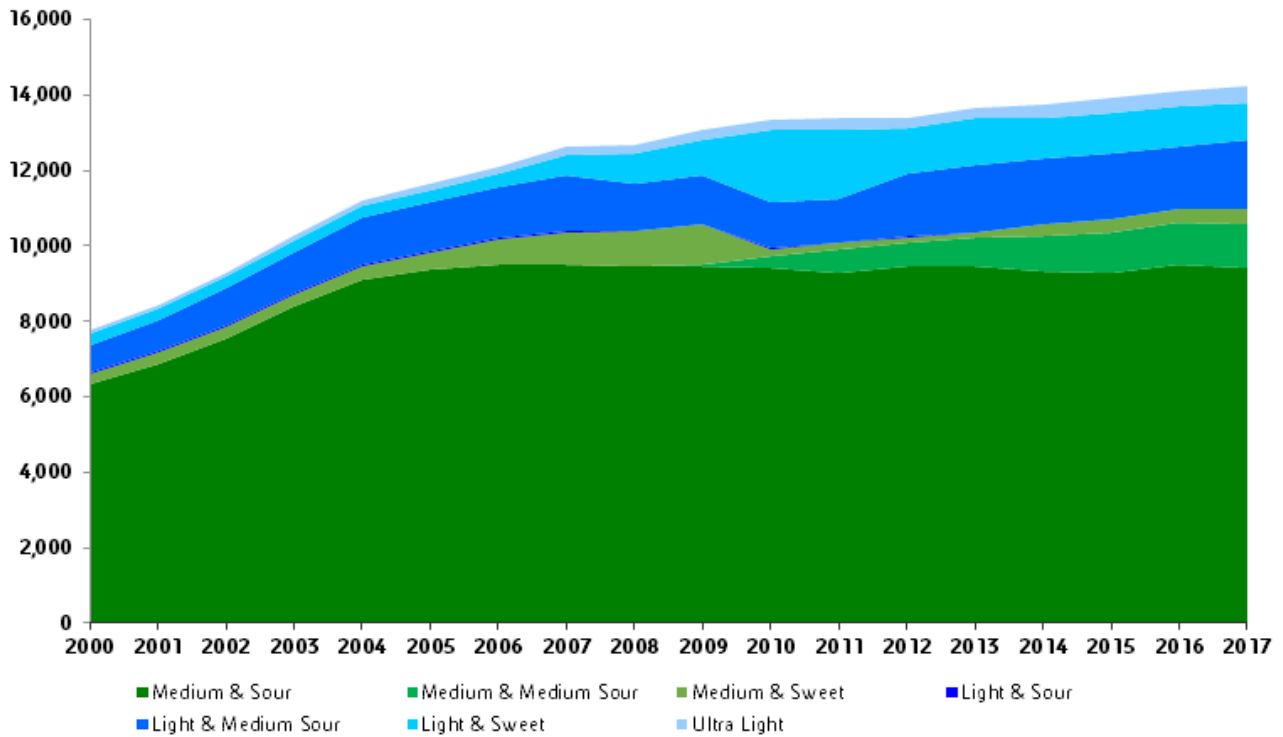


<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

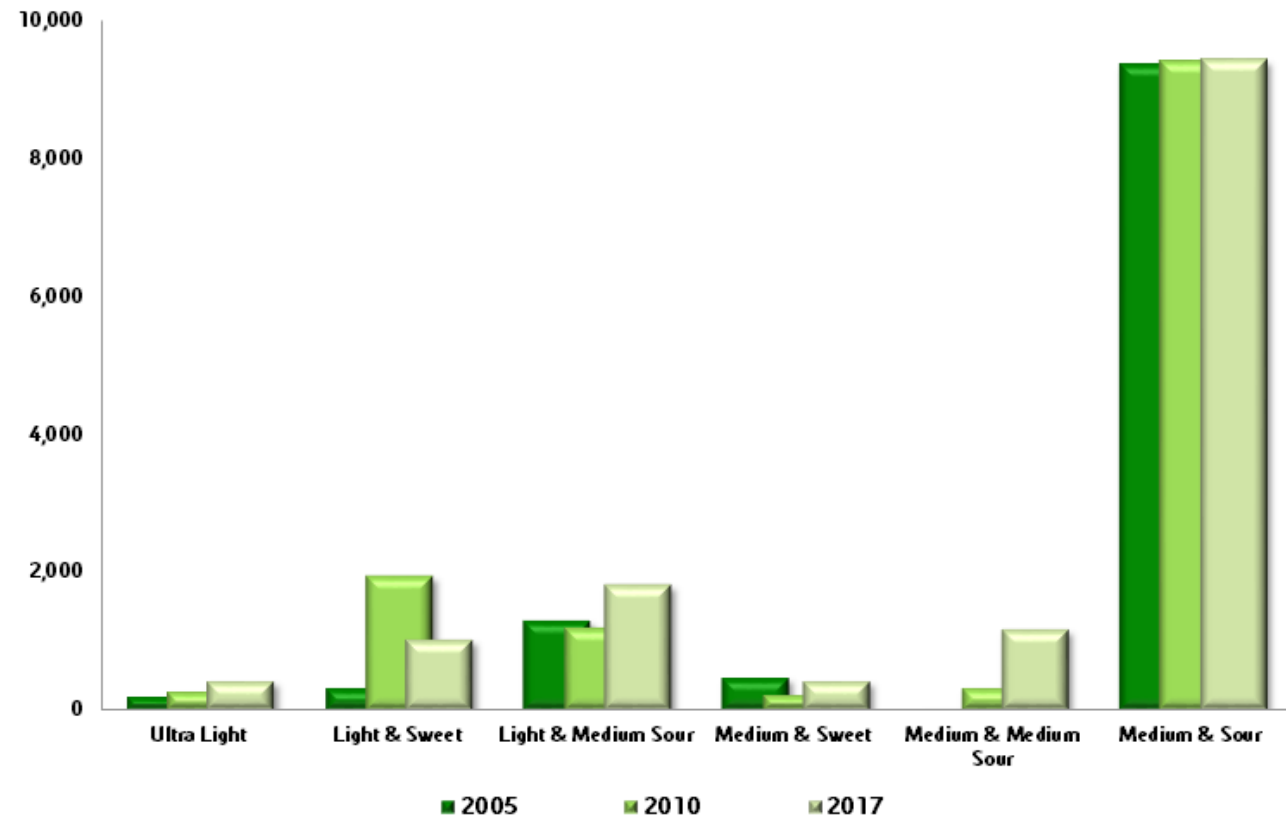
<sup>(\*\*)</sup> Data source: Eni.



**Crude Production by Quality<sup>(\*)</sup>**  
(thousand barrels/day)



**Crude Production by Quality<sup>(\*)</sup>**  
(selected years, thousand barrels/day)



<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

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

(thousand barrels/day)

|                      | 2000         | 2005         | 2010          | 2015          | 2016          | 2017          | Share of total |       |
|----------------------|--------------|--------------|---------------|---------------|---------------|---------------|----------------|-------|
|                      |              |              |               |               |               |               | 2000           | 2017  |
| <b>Azerbaijan</b>    | <b>281</b>   | <b>448</b>   | <b>1,041</b>  | <b>848</b>    | <b>828</b>    | <b>782</b>    |                |       |
| Light & Sweet        | 149          | 145          | 1,012         | 820           | 802           | 757           | 53.0%          | 96.8% |
| Medium & Sweet       | 132          | 303          | 29            | 28            | 26            | 25            | 47.0%          | 3.2%  |
| <b>Kazakhstan</b>    | <b>718</b>   | <b>1,293</b> | <b>1,694</b>  | <b>1,695</b>  | <b>1,666</b>  | <b>1,840</b>  |                |       |
| Ultra Light          | 10           | 12           | 6             | 19            | 18            | 22            | 1.4%           | 1.2%  |
| Light & Sweet        |              |              | 564           |               |               |               |                |       |
| Light & Medium Sour  | 708          | 1,281        | 1,124         | 1,676         | 1,648         | 1,818         | 98.6%          | 98.8% |
| <b>Russia</b>        | <b>6,527</b> | <b>9,636</b> | <b>10,390</b> | <b>11,087</b> | <b>11,341</b> | <b>11,357</b> |                |       |
| Ultra Light          | 50           | 145          | 251           | 368           | 377           | 377           | 0.8%           | 3.3%  |
| Light & Sweet        | 148          | 139          | 261           | 109           | 118           | 124           | 2.3%           | 1.1%  |
| Light & Medium Sour  |              |              | 72            | 32            | 8             |               |                |       |
| Medium & Sweet       |              |              | 96            | 215           | 237           | 276           |                | 2.4%  |
| Medium & Medium Sour |              |              | 318           | 1,069         | 1,104         | 1,164         |                | 10.2% |
| Medium & Sour        | 6,328        | 9,352        | 9,392         | 9,294         | 9,497         | 9,417         | 97.0%          | 82.9% |
| <b>Turkmenistan</b>  | <b>158</b>   | <b>201</b>   | <b>196</b>    | <b>273</b>    | <b>253</b>    | <b>238</b>    |                |       |
| Ultra Light          |              | 4            | 1             | 3             | 3             | 2             |                | 0.8%  |
| Light & Sweet        | 10           | 33           | 99            | 159           | 129           | 127           | 6.5%           | 53.6% |
| Medium & Sweet       | 133          | 159          | 87            | 107           | 117           | 105           | 84.0%          | 44.2% |
| Heavy & Sweet        | 15           | 6            | 10            | 5             | 5             | 3             | 9.4%           | 1.4%  |
| <b>Uzbekistan</b>    | <b>83</b>    | <b>82</b>    | <b>50</b>     | <b>26</b>     | <b>24</b>     | <b>23</b>     |                |       |
| Ultra Light          | 16           | 16           | 10            | 6             | 6             | 3             | 19.7%          | 14.8% |
| Light & Sweet        |              | 5            | 2             | 1             | 1             | 1             |                | 3.9%  |
| Light & Sour         | 64           | 58           | 33            | 18            | 15            | 17            | 77.7%          | 75.0% |
| Medium & Medium Sour | 2            | 3            | 1             | 0             | 2             | 1             | 2.5%           | 6.3%  |
| Medium & Sour        |              |              | 3             | 1             |               |               |                |       |

<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

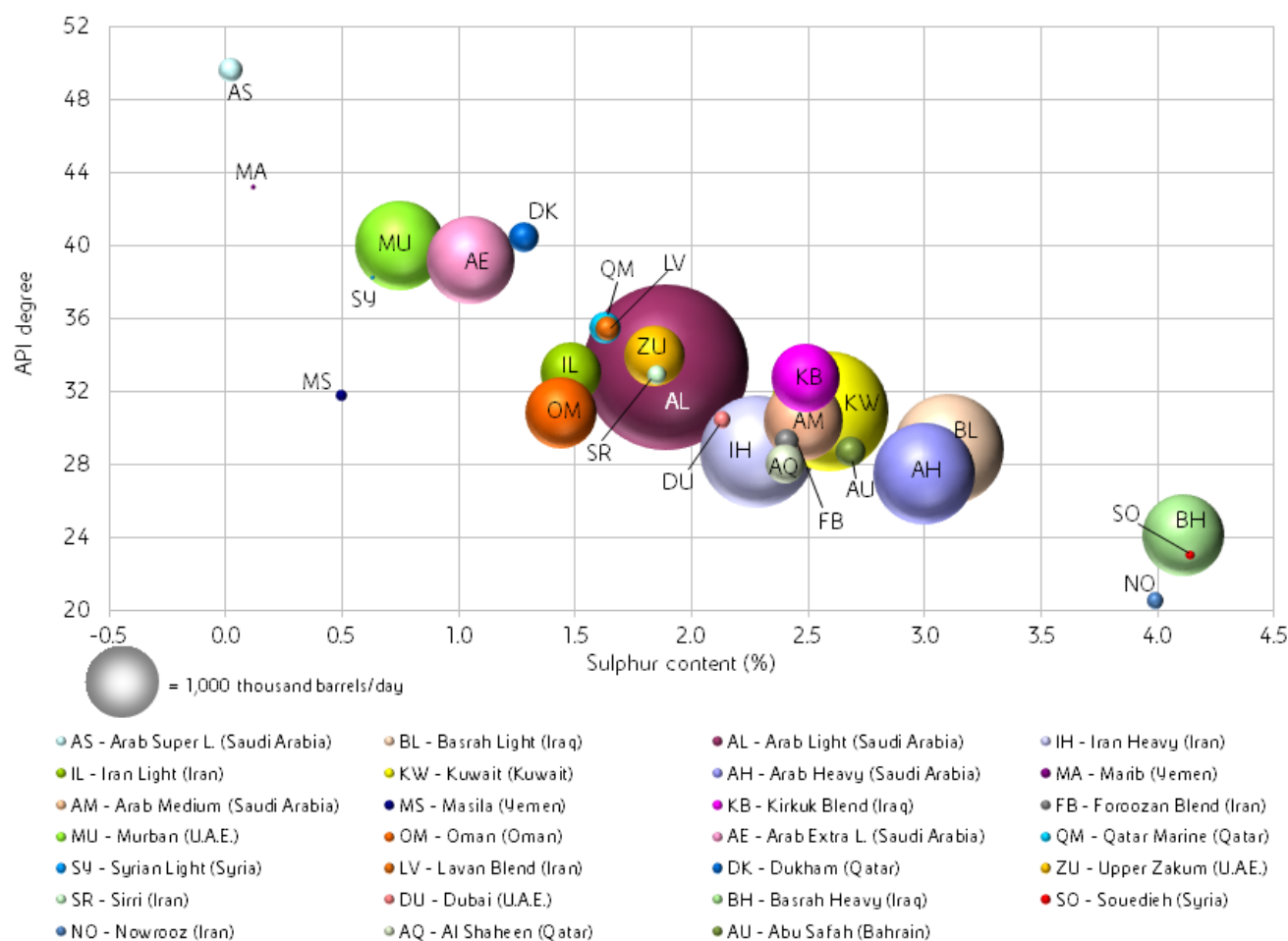
### Crude Production by Quality<sup>(\*)</sup>

(thousand barrels/day)

|                      | 2000          | 2005          | 2010          | 2015          | 2016          | 2017          | Share of total |       |
|----------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|-------|
|                      |               |               |               |               |               |               | 2000           | 2017  |
| <b>Middle East</b>   | <b>21,796</b> | <b>22,918</b> | <b>22,170</b> | <b>25,816</b> | <b>27,407</b> | <b>26,933</b> |                |       |
| Ultra Light          | 173           | 442           | 898           | 1,192         | 1,198         | 1,242         | 0.8%           | 4.6%  |
| Light & Sweet        | 352           | 251           | 176           | 128           | 121           | 112           | 1.6%           | 0.4%  |
| Light & Medium Sour  | 1,551         | 1,502         | 1,391         | 1,564         | 1,605         | 1,512         | 7.1%           | 5.6%  |
| Light & Sour         | 2,294         | 2,122         | 2,049         | 2,371         | 2,448         | 2,563         | 10.5%          | 9.5%  |
| Medium & Sweet       |               |               |               |               |               |               |                |       |
| Medium & Medium Sour | 258           | 272           | 164           | 16            | 13            | 22            | 1.2%           | 0.1%  |
| Medium & Sour        | 16,704        | 17,727        | 16,888        | 19,300        | 20,681        | 20,080        | 76.6%          | 74.6% |
| Heavy & Sweet        |               |               |               |               |               |               |                |       |
| Heavy & Medium Sour  |               |               |               |               |               |               |                |       |
| Heavy & Sour         | 464           | 603           | 605           | 1,245         | 1,341         | 1,403         | 2.1%           | 5.2%  |

### Quality and Production Volume of Main Crudes 2017<sup>(\*\*)</sup>

(thousand barrels/day)

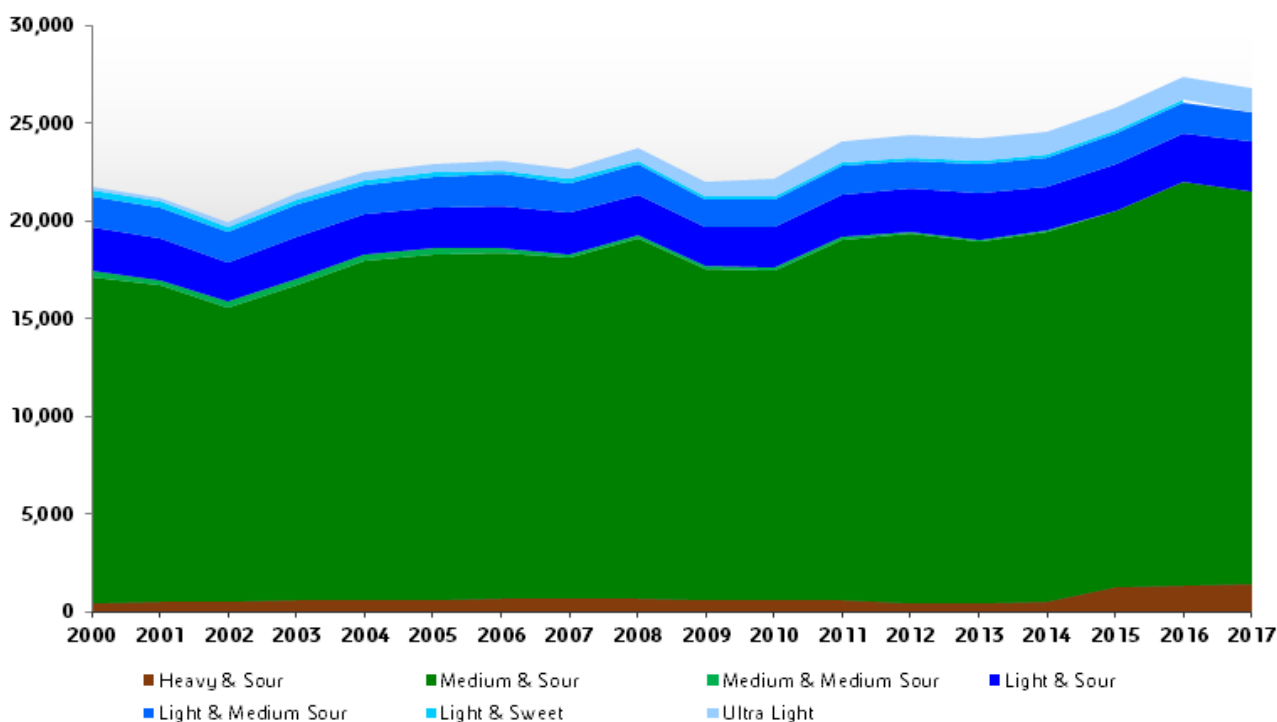


<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

<sup>(\*\*)</sup> Data source: Eni.

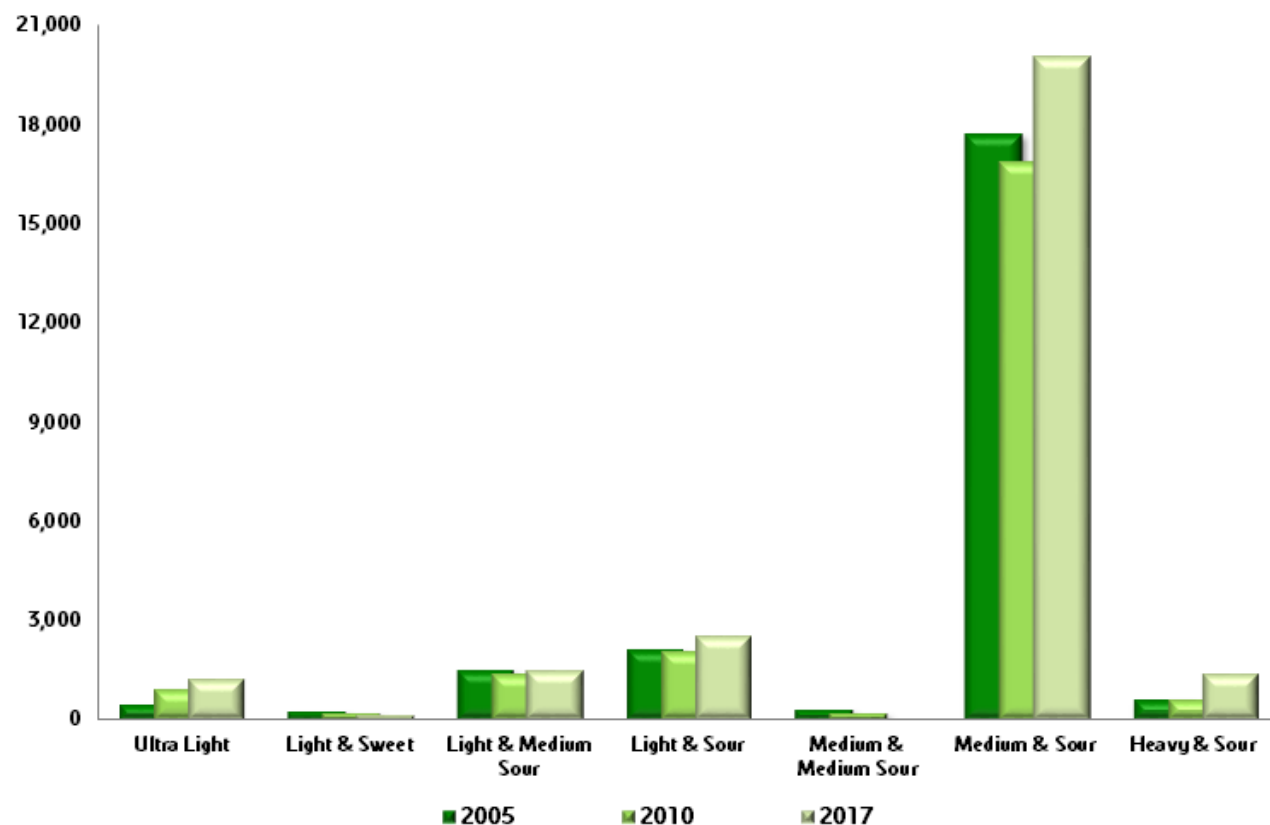
Crude Production by Quality<sup>(\*)</sup>

(thousand barrels/day)



Crude Production by Quality<sup>(\*)</sup>

(selected years, thousand barrels/day)



<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

Countries<sup>(\*)</sup>

(thousand barrels/day)

|                             | 2000  | 2005  | 2010  | 2015   | 2016   | 2017  | Share of total |        |
|-----------------------------|-------|-------|-------|--------|--------|-------|----------------|--------|
|                             |       |       |       |        |        |       | 2000           | 2017   |
| <b>Bahrain</b>              | 187   | 187   | 182   | 202    | 202    | 200   |                |        |
| Medium & Sour               | 187   | 187   | 182   | 202    | 202    | 200   | 100.0%         | 100.0% |
| <b>Iran</b>                 | 3,685 | 3,879 | 3,705 | 2,846  | 3,552  | 3,799 |                |        |
| Light & Sour                |       |       |       |        |        | 104   |                | 2.7%   |
| Medium & Sour               | 3,685 | 3,771 | 3,558 | 2,729  | 3,433  | 3,571 | 100.0%         | 94.0%  |
| Heavy & Sour                |       | 108   | 147   | 117    | 120    | 124   |                | 3.3%   |
| <b>Iraq</b>                 | 2,567 | 1,813 | 2,364 | 4,002  | 4,418  | 4,473 |                |        |
| Medium & Sour               | 2,567 | 1,813 | 2,364 | 2,956  | 3,210  | 3,208 | 100.0%         | 71.7%  |
| Heavy & Sour                |       |       |       | 1,047  | 1,208  | 1,265 |                | 28.3%  |
| <b>Kuwait</b>               | 2,045 | 2,423 | 2,298 | 2,787  | 2,884  | 2,707 |                |        |
| Medium & Sour               | 1,889 | 2,268 | 2,157 | 2,751  | 2,884  | 2,707 | 92.4%          | 100.0% |
| Heavy & Sour                | 156   | 155   | 140   | 35     |        |       | 7.6%           |        |
| <b>Oman</b>                 | 956   | 774   | 865   | 982    | 1,004  | 971   |                |        |
| Medium & Sour               | 956   | 774   | 865   | 982    | 1,004  | 971   | 100.0%         | 100.0% |
| <b>Qatar</b>                | 860   | 1,216 | 1,636 | 1,844  | 1,848  | 1,852 |                |        |
| Ultra Light                 | 173   | 442   | 898   | 1,192  | 1,198  | 1,242 | 20.1%          | 67.1%  |
| Light & Sour                | 584   | 556   | 452   | 356    | 354    | 334   | 67.9%          | 18.1%  |
| Medium & Sour               | 104   | 218   | 286   | 296    | 296    | 275   | 12.0%          | 14.9%  |
| <b>Saudi Arabia</b>         | 8,278 | 9,353 | 8,177 | 10,160 | 10,416 | 9,958 |                |        |
| Light & Sweet               | 162   | 115   | 56    | 115    | 118    | 109   | 2.0%           | 1.1%   |
| Light & Sour                | 1,269 | 1,076 | 1,101 | 1,331  | 1,397  | 1,459 | 15.3%          | 14.7%  |
| Medium & Sour               | 6,690 | 8,007 | 6,879 | 8,677  | 8,902  | 8,390 | 80.8%          | 84.3%  |
| Heavy & Sour                | 156   | 155   | 140   | 35     |        |       | 1.9%           |        |
| <b>Syria</b>                | 545   | 413   | 350   | 19     | 17     | 17    |                |        |
| Light & Medium Sour         | 393   | 228   | 172   | 9      | 4      | 3     | 72.2%          | 17.2%  |
| Heavy & Sour                | 151   | 185   | 178   | 10     | 13     | 14    | 27.8%          | 82.8%  |
| <b>United Arab Emirates</b> | 2,238 | 2,458 | 2,311 | 2,946  | 3,050  | 2,933 |                |        |
| Light & Medium Sour         | 1,157 | 1,273 | 1,219 | 1,555  | 1,601  | 1,509 | 51.7%          | 51.5%  |
| Light & Sour                | 441   | 490   | 495   | 684    | 696    | 666   | 19.7%          | 22.7%  |
| Medium & Medium Sour        | 12    | 7     |       |        |        |       | 0.5%           |        |
| Medium & Sour               | 628   | 688   | 597   | 707    | 752    | 757   | 28.0%          | 25.8%  |
| <b>Yemen</b>                | 437   | 400   | 284   | 28     | 16     | 25    |                |        |
| Light & Sweet               | 190   | 135   | 120   | 12     | 3      | 3     | 43.5%          | 13.3%  |
| Medium & Medium Sour        | 247   | 265   | 164   | 16     | 13     | 22    | 56.5%          | 86.7%  |

(\*) Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

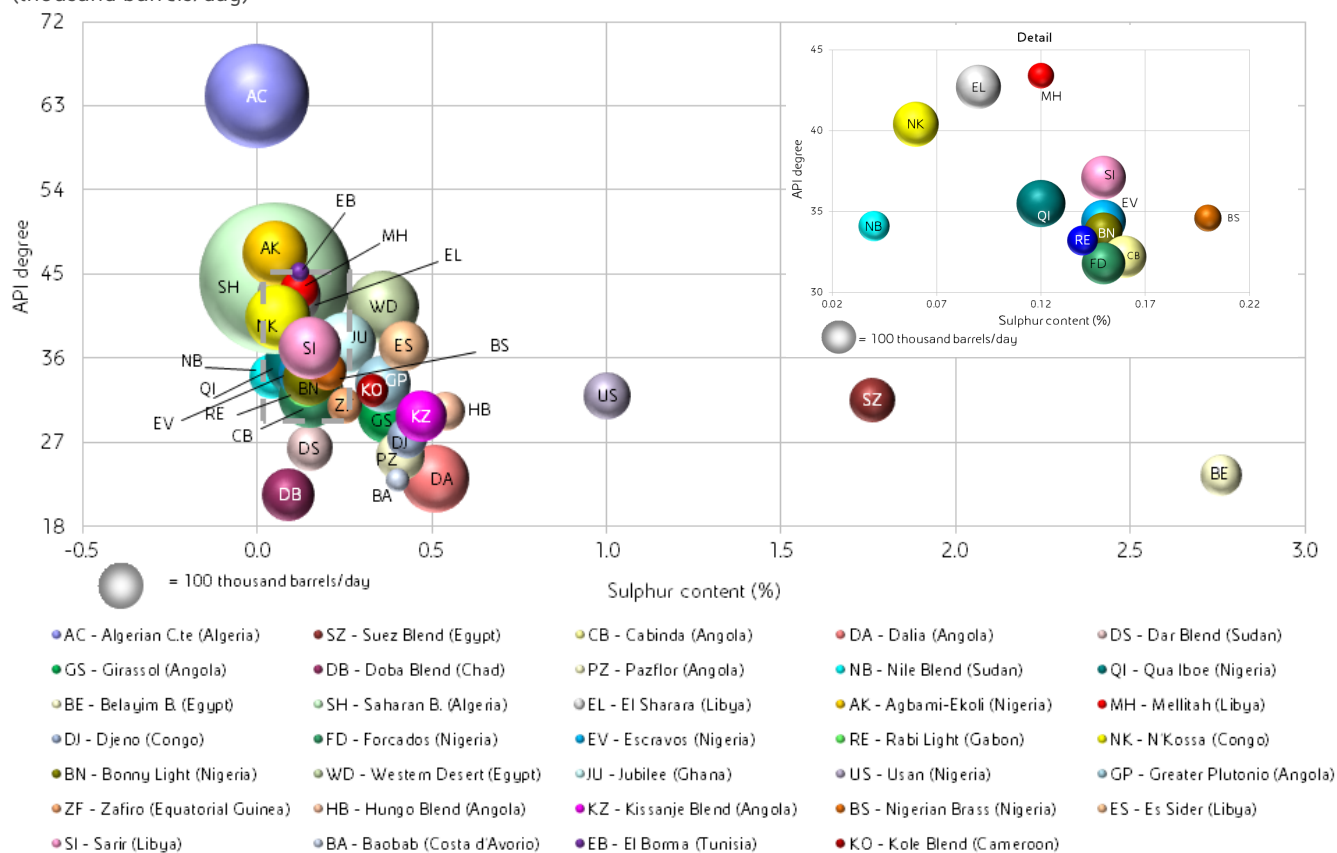
### Crude Production by Quality<sup>(\*)</sup>

(thousand barrels/day)

|                               | 2000         | 2005         | 2010         | 2015         | 2016         | 2017         | Share of total |       |
|-------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|-------|
|                               |              |              |              |              |              |              | 2000           | 2017  |
| <b>Africa (A)</b>             | <b>7,538</b> | <b>9,573</b> | <b>9,897</b> | <b>8,097</b> | <b>7,569</b> | <b>7,950</b> |                |       |
| Ultra Light                   | 630          | 603          | 589          | 581          | 583          | 569          | 8.4%           | 7.2%  |
| Light & Sweet                 | 4,166        | 4,911        | 4,987        | 3,453        | 3,351        | 3,774        | 55.3%          | 47.5% |
| Light & Medium Sour           |              |              | 77           | 17           | 9            | 15           |                | 0.2%  |
| Light & Sour                  | 21           | 20           | 32           | 23           | 22           | 18           | 0.3%           | 0.2%  |
| Medium & Sweet                | 1,871        | 2,770        | 2,611        | 2,391        | 2,110        | 2,268        | 24.8%          | 28.5% |
| Medium & Medium Sour          | 23           | 293          | 186          | 308          | 294          | 258          | 0.3%           | 3.2%  |
| Medium & Sour                 | 710          | 520          | 516          | 513          | 570          | 465          | 9.4%           | 5.8%  |
| Heavy & Sweet                 | 38           | 225          | 445          | 481          | 410          | 279          | 0.5%           | 3.5%  |
| Heavy & Medium Sour           | 61           | 56           | 320          | 219          | 201          | 213          | 0.8%           | 2.7%  |
| Heavy & Sour                  |              | 159          | 131          | 92           |              | 72           |                | 0.9%  |
| Unassigned production (B)     | 16           | 16           | 4            | 20           | 20           | 19           | 0.2%           | 0.2%  |
| % Unassigned production (B/A) | 0.2          | 0.2          | 0.0          | 0.2          | 0.3          | 0.2          |                |       |

### Quality and Production Volume of Main Crudes 2017<sup>(\*\*)</sup>

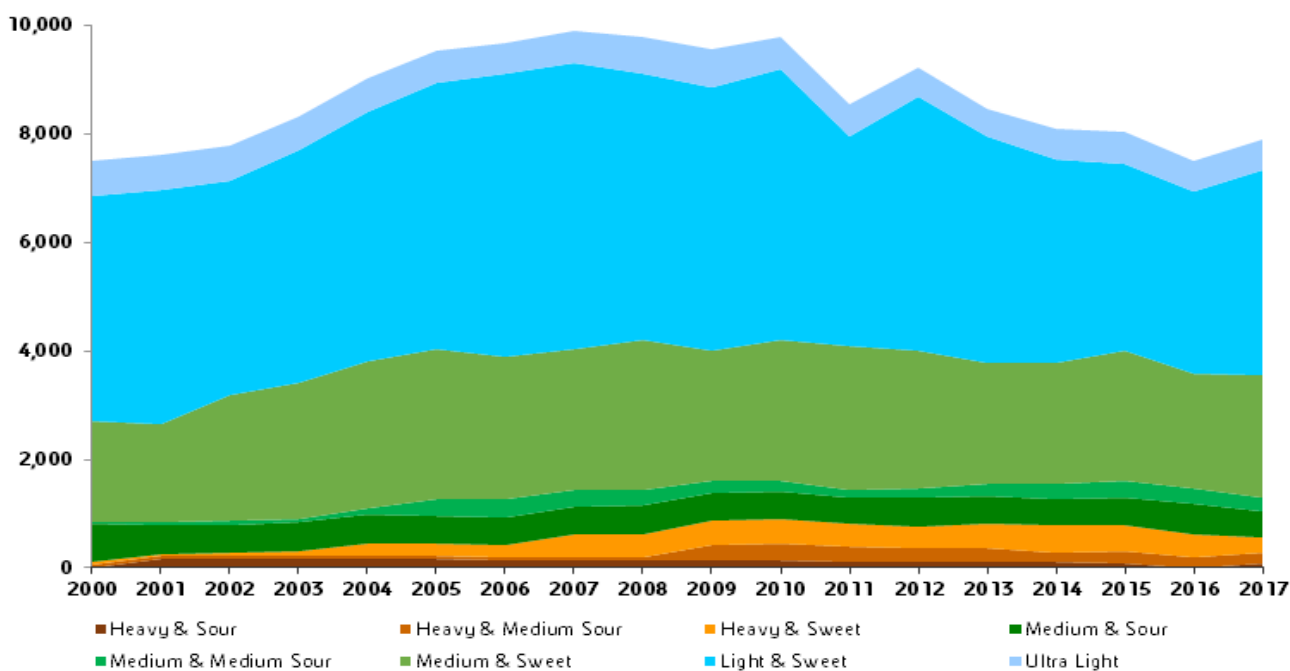
(thousand barrels/day)



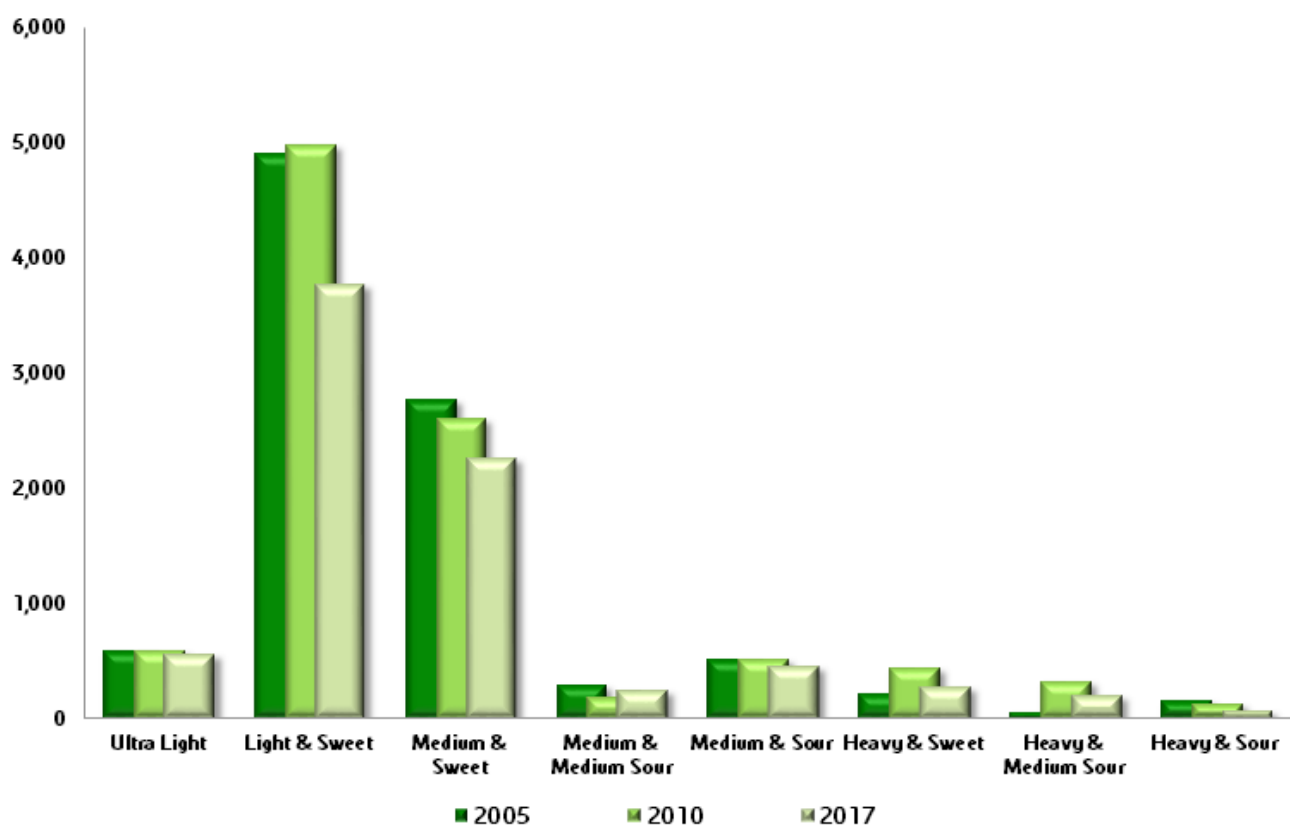
<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

<sup>(\*\*)</sup> Data source: Eni.

**Crude Production by Quality<sup>(\*)</sup>**  
(thousand barrels/day)



**Crude Production by Quality<sup>(\*)</sup>**  
(selected years, thousand barrels/day)



<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

Countries<sup>(\*)</sup>  
(thousand barrels/day)

|                         | 2000         | 2005         | 2010         | 2015         | 2016         | 2017         | Share of total |        |
|-------------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|--------|
|                         |              |              |              |              |              |              | 2000           | 2017   |
| <b>Algeria</b>          | <b>1,436</b> | <b>1,931</b> | <b>1,720</b> | <b>1,590</b> | <b>1,604</b> | <b>1,530</b> |                |        |
| Ultra Light             | 630          | 603          | 515          | 481          | 494          | 483          | 43.9%          | 31.6%  |
| Light & Sweet           | 806          | 1,327        | 1,205        | 1,109        | 1,111        | 1,047        | 56.1%          | 68.4%  |
| <b>Angola</b>           | <b>745</b>   | <b>1,228</b> | <b>1,750</b> | <b>1,760</b> | <b>1,708</b> | <b>1,642</b> |                |        |
| Light & Sweet           | 355          | 280          | 356          | 248          | 245          | 203          | 47.6%          | 12.3%  |
| Medium & Sweet          | 329          | 657          | 910          | 827          | 888          | 905          | 44.2%          | 55.1%  |
| Medium & Medium Sour    |              | 235          | 165          | 299          | 248          | 215          |                | 13.1%  |
| Heavy & Sweet           |              |              |              | 166          | 127          | 106          |                | 6.5%   |
| Heavy & Medium Sour     | 61           | 56           | 320          | 219          | 201          | 213          | 8.2%           | 13.0%  |
| <b>Cameroon</b>         | <b>114</b>   | <b>89</b>    | <b>64</b>    | <b>95</b>    | <b>90</b>    | <b>75</b>    |                |        |
| Medium & Sweet          | 76           | 53           | 37           | 64           | 54           | 46           | 66.8%          | 61.9%  |
| Heavy & Sweet           | 38           | 37           | 27           | 31           | 36           | 29           | 33.2%          | 38.1%  |
| <b>Chad</b>             |              | <b>170</b>   | <b>120</b>   | <b>129</b>   | <b>120</b>   | <b>121</b>   |                |        |
| Heavy & Sweet           |              | 170          | 120          | 129          | 120          | 121          |                | 100.0% |
| <b>Congo</b>            | <b>256</b>   | <b>239</b>   | <b>307</b>   | <b>231</b>   | <b>234</b>   | <b>276</b>   |                |        |
| Light & Sweet           | 131          | 121          | 180          | 110          | 150          | 205          | 51.2%          | 74.3%  |
| Medium & Sweet          | 125          | 118          | 127          | 121          | 84           | 71           | 48.8%          | 25.7%  |
| <b>Cote d'Ivoire</b>    | <b>7</b>     | <b>40</b>    | <b>39</b>    | <b>27</b>    | <b>43</b>    | <b>51</b>    |                |        |
| Medium & Sweet          | 7            | 22           | 15           | 10           | 21           | 28           | 100.0%         | 54.9%  |
| Heavy & Sweet           |              | 18           | 24           | 17           | 21           | 23           |                | 45.1%  |
| <b>Dem. Rep. Congo</b>  | <b>23</b>    | <b>25</b>    | <b>25</b>    | <b>22</b>    | <b>21</b>    | <b>20</b>    |                |        |
| Medium & Sweet          | 23           | 25           | 25           | 22           | 21           | 20           | 100.0%         | 100.0% |
| <b>Egypt</b>            | <b>689</b>   | <b>618</b>   | <b>663</b>   | <b>660</b>   | <b>629</b>   | <b>605</b>   |                |        |
| Light & Sweet           | 122          | 153          | 199          | 245          | 240          | 233          | 17.7%          | 38.5%  |
| Medium & Sour           | 567          | 306          | 334          | 324          | 389          | 300          | 82.3%          | 49.5%  |
| Heavy & Sour            |              | 159          | 131          | 92           |              | 72           |                | 11.9%  |
| <b>Equatoria Guinea</b> | <b>144</b>   | <b>380</b>   | <b>311</b>   | <b>276</b>   | <b>231</b>   | <b>212</b>   |                |        |
| Ultra Light             |              |              | 74           | 100          | 90           | 86           |                | 40.8%  |
| Light & Sweet           | 12           | 75           | 0            |              |              |              | 8.2%           |        |
| Medium & Sweet          | 128          | 263          | 237          | 176          | 103          | 89           | 88.3%          | 41.9%  |
| Medium & Medium Sour    | 5            | 42           | 0            |              | 39           | 37           | 3.4%           | 17.3%  |

<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.



### Countries<sup>(\*)</sup> (thousand barrels/day)

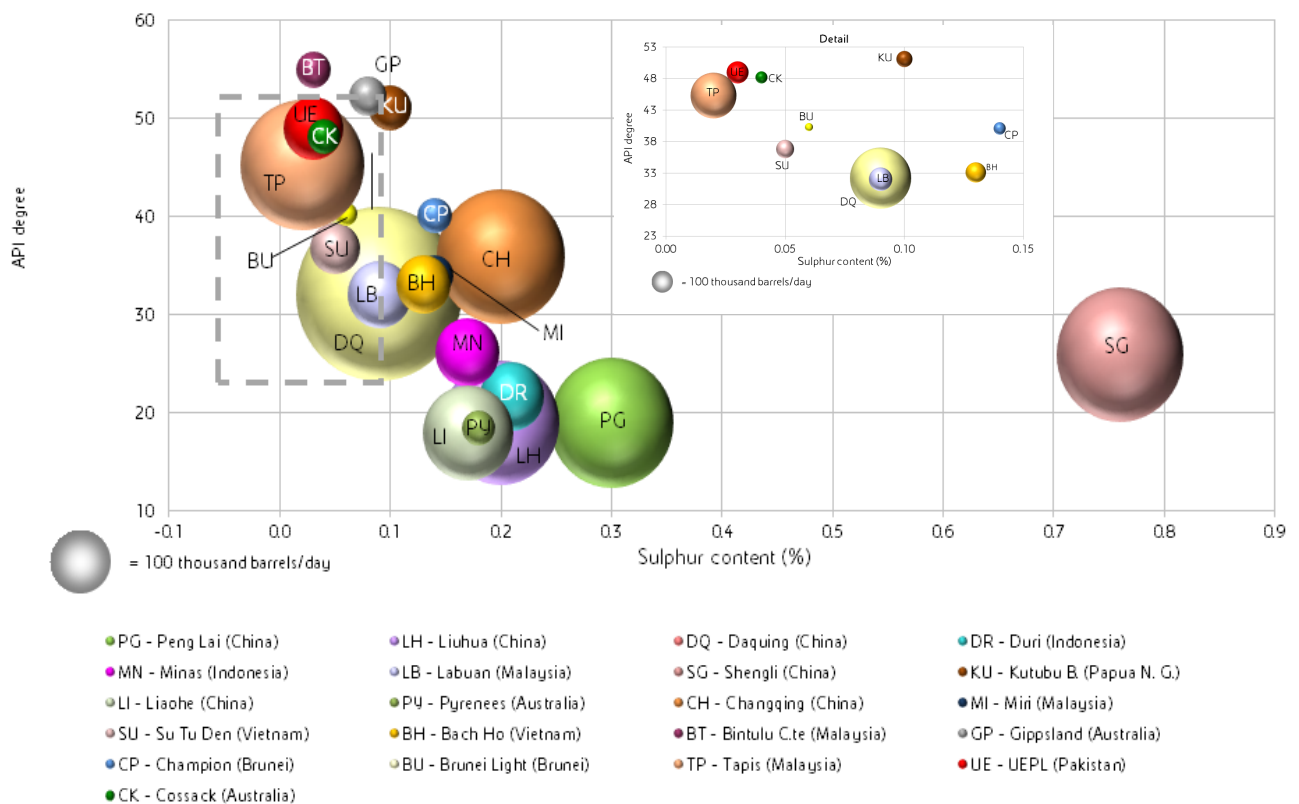
|                      | 2000         | 2005         | 2010         | 2015         | 2016         | 2017         | Share of total |        |
|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|--------|
|                      |              |              |              |              |              |              | 2000           | 2017   |
| <b>Gabon</b>         | <b>276</b>   | <b>270</b>   | <b>249</b>   | <b>230</b>   | <b>227</b>   | <b>200</b>   |                |        |
| Light & Sweet        |              | 77           | 97           |              |              |              |                |        |
| Medium & Sweet       | 191          | 69           | 43           | 115          | 118          | 108          | 69.3%          | 53.8%  |
| Medium & Sour        | 85           | 124          | 108          | 114          | 109          | 93           | 30.7%          | 46.2%  |
| <b>Ghana</b>         | <b>7</b>     | <b>6</b>     | <b>7</b>     | <b>106</b>   | <b>92</b>    | <b>167</b>   |                |        |
| Light & Sweet        | 7            | 6            | 7            | 106          | 92           | 167          | 100.0%         | 100.0% |
| <b>Libya</b>         | <b>1,411</b> | <b>1,640</b> | <b>1,550</b> | <b>402</b>   | <b>391</b>   | <b>827</b>   |                |        |
| Light & Sweet        | 1,353        | 1,549        | 1,400        | 315          | 316          | 743          | 95.9%          | 89.8%  |
| Light & Medium Sour  |              |              | 77           | 17           | 9            | 15           |                | 1.8%   |
| Medium & Sour        | 58           | 90           | 73           | 70           | 66           | 70           | 4.1%           | 8.4%   |
| <b>Mauritania</b>    |              |              | <b>9</b>     | <b>5</b>     | <b>4</b>     | <b>4</b>     |                |        |
| Medium & Medium Sour |              |              | 9            | 5            | 4            | 4            |                | 100.0% |
| <b>Nigeria</b>       | <b>2,160</b> | <b>2,546</b> | <b>2,535</b> | <b>2,243</b> | <b>1,911</b> | <b>1,986</b> |                |        |
| Light & Sweet        | 1,344        | 1,287        | 1,509        | 1,303        | 1,181        | 1,159        | 62.2%          | 58.4%  |
| Medium & Sweet       | 816          | 1,259        | 1,012        | 940          | 730          | 826          | 37.8%          | 41.6%  |
| Heavy & Sweet        |              |              | 14           |              |              |              |                |        |
| <b>Sudan</b>         | <b>177</b>   | <b>305</b>   | <b>465</b>   | <b>253</b>   | <b>198</b>   | <b>176</b>   |                |        |
| Medium & Sweet       | 177          | 305          | 205          | 115          | 92           | 176          | 100.0%         | 100.0% |
| Heavy & Sweet        |              |              | 259          | 138          | 107          |              |                |        |
| <b>Tunisia</b>       | <b>76</b>    | <b>71</b>    | <b>79</b>    | <b>49</b>    | <b>46</b>    | <b>40</b>    |                |        |
| Light & Sweet        | 36           | 35           | 34           | 18           | 16           | 17           | 47.7%          | 43.3%  |
| Light & Sour         | 21           | 20           | 32           | 23           | 22           | 18           | 28.0%          | 45.2%  |
| Medium & Medium Sour | 18           | 16           | 12           | 4            | 3            | 2            | 24.3%          | 4.3%   |
| Medium & Sour        |              |              |              | 4            | 5            | 3            |                | 7.2%   |

<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

### Crude Production by Quality<sup>(\*)</sup> (thousand barrels/day)

|                               | 2000         | 2005         | 2010         | 2015         | 2016         | 2017         | Share of total |       |
|-------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|-------|
|                               |              |              |              |              |              |              | 2000           | 2017  |
| <b>Asia - Pacific (A)</b>     | <b>7,608</b> | <b>7,630</b> | <b>7,922</b> | <b>7,797</b> | <b>7,466</b> | <b>7,166</b> |                |       |
| Ultra Light                   | 397          | 266          | 295          | 255          | 210          | 189          | 5.2%           | 2.6%  |
| Light & Sweet                 | 2,783        | 3,091        | 2,792        | 2,589        | 2,992        | 2,957        | 36.6%          | 41.3% |
| Light & Medium Sour           | 31           | 33           |              |              |              | 25           | 0.4%           | 0.3%  |
| Light & Sour                  |              |              | 35           | 32           |              |              |                |       |
| Medium & Sweet                | 2,913        | 2,545        | 2,730        | 2,897        | 2,209        | 2,043        | 38.3%          | 28.5% |
| Medium & Medium Sour          | 517          | 536          | 554          | 532          | 462          | 452          | 6.8%           | 6.3%  |
| Medium & Sour                 | 17           | 19           | 19           | 17           | 41           | 14           | 0.2%           | 0.2%  |
| Heavy & Sweet                 | 925          | 1,081        | 1,442        | 1,412        | 1,492        | 1,429        | 12.2%          | 19.9% |
| Heavy & Medium Sour           |              |              |              |              |              |              |                |       |
| Heavy & Sour                  |              |              |              |              |              |              |                |       |
| Unassigned production (B)     | 26           | 59           | 55           | 63           | 59           | 56           | 0.3%           | 0.8%  |
| % Unassigned production (B/A) | 0.3          | 0.8          | 0.7          | 0.8          | 0.8          | 0.8          |                |       |

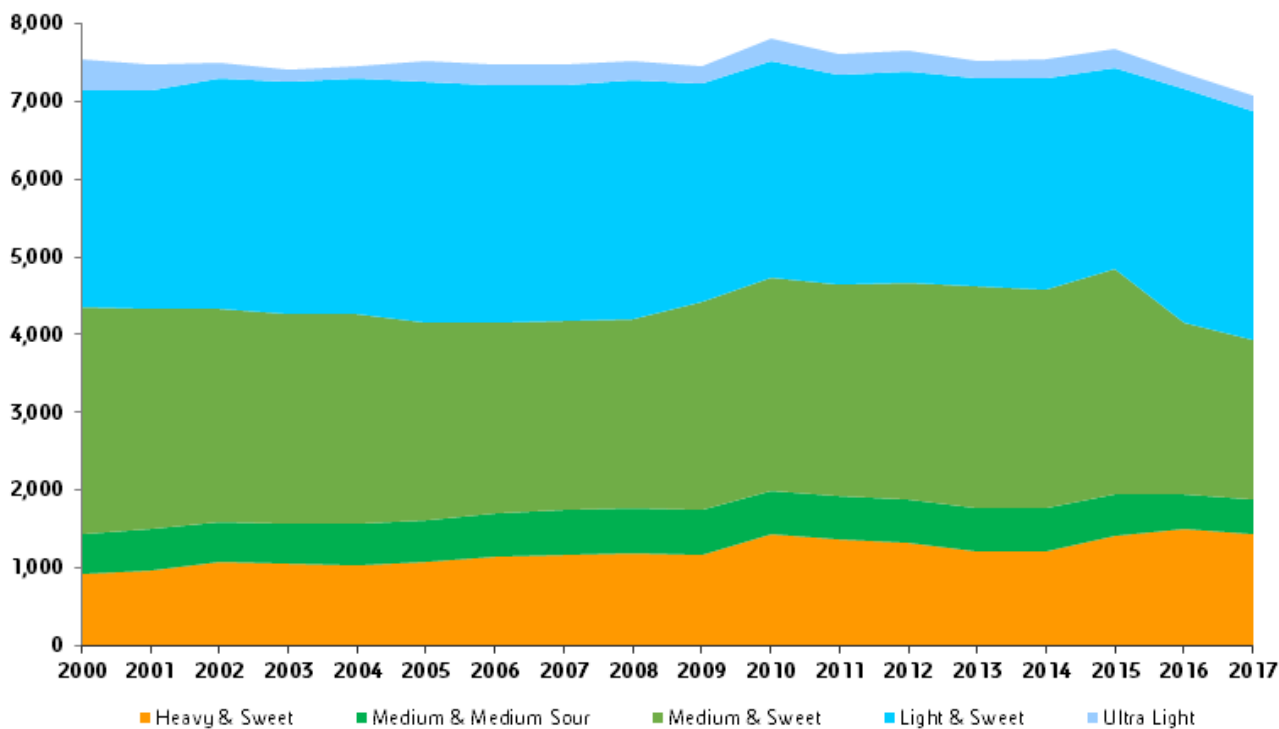
### Quality and Production Volume of Main Crudes 2017<sup>(\*\*)</sup> (thousand barrels/day)



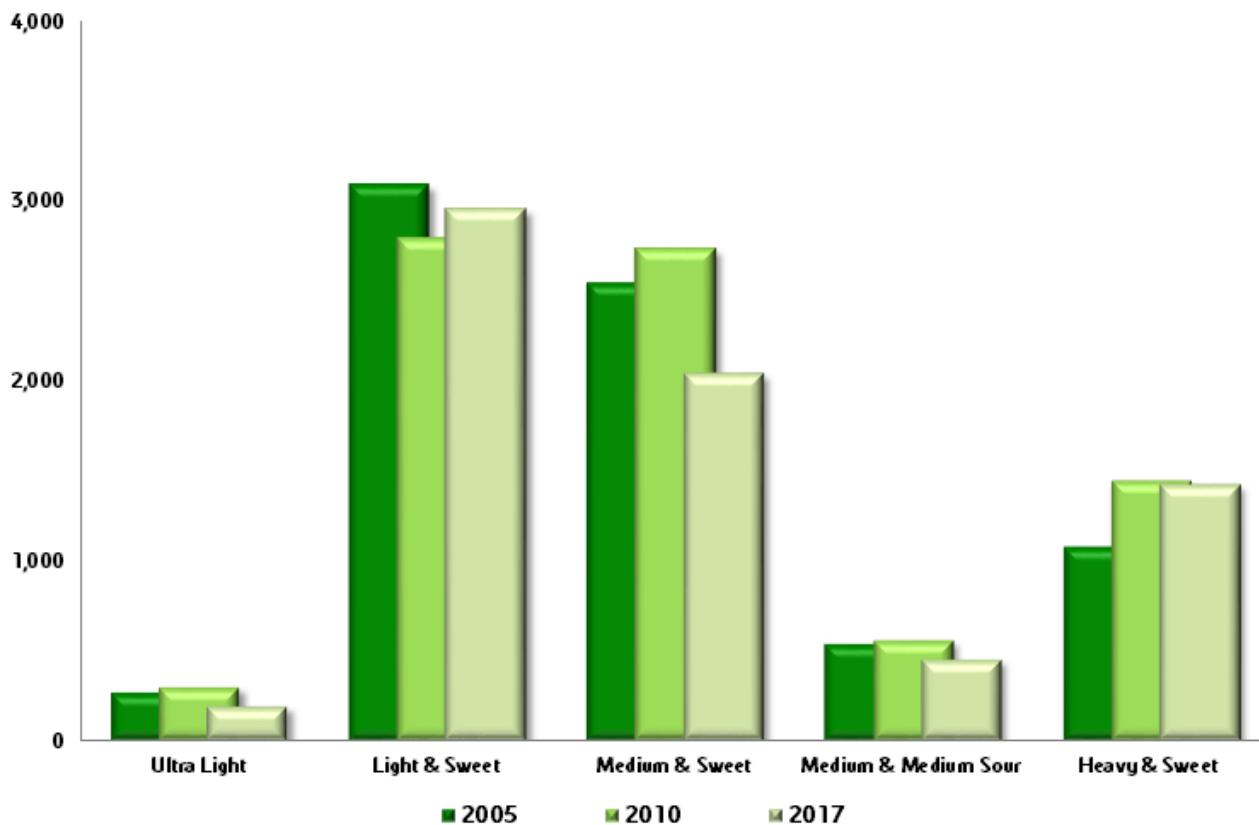
<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

<sup>(\*\*)</sup> Data source: Eni.

Crude Production by Quality<sup>(\*)</sup>  
(thousand barrels/day)



Crude Production by Quality<sup>(\*)</sup>  
(selected years, thousand barrels/day)



<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

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

(thousand barrels/day)

|                      | 2000         | 2005         | 2010         | 2015         | 2016         | 2017         | Share of total |        |
|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|--------|
|                      |              |              |              |              |              |              | 2000           | 2017   |
| <b>Australia</b>     | <b>721</b>   | <b>456</b>   | <b>479</b>   | <b>322</b>   | <b>290</b>   | <b>263</b>   |                |        |
| Ultra Light          | 311          | 50           | 85           | 68           | 60           | 54           | 43.1%          | 20.5%  |
| Light & Sweet        | 372          | 364          | 220          | 163          | 149          | 145          | 51.6%          | 55.2%  |
| Heavy & Sweet        | 38           | 42           | 174          | 91           | 81           | 64           | 5.3%           | 24.3%  |
| <b>Brunei</b>        | <b>195</b>   | <b>206</b>   | <b>169</b>   | <b>127</b>   | <b>121</b>   | <b>113</b>   |                |        |
| Ultra Light          | 16           | 18           | 16           | 11           | 12           | 13           | 8.2%           | 11.1%  |
| Light & Sweet        | 118          | 149          | 118          | 14           | 14           | 43           | 60.6%          | 37.7%  |
| Medium & Sweet       | 6            | 3            | 35           | 101          | 95           | 58           | 3.1%           | 51.2%  |
| Heavy & Sweet        | 55           | 36           |              |              |              |              | 28.1%          |        |
| <b>China</b>         | <b>3,259</b> | <b>3,594</b> | <b>4,020</b> | <b>4,222</b> | <b>3,931</b> | <b>3,789</b> |                |        |
| Light & Sweet        | 249          | 394          | 318          | 273          | 711          | 697          | 7.6%           | 18.4%  |
| Light & Medium Sour  | 31           | 33           |              |              |              | 25           | 1.0%           | 0.7%   |
| Light & Sour         |              |              | 35           | 32           |              |              |                |        |
| Medium & Sweet       | 1,997        | 1,915        | 2,107        | 2,250        | 1,489        | 1,417        | 61.3%          | 37.4%  |
| Medium & Medium Sour | 517          | 536          | 554          | 532          | 462          | 452          | 15.9%          | 11.9%  |
| Medium & Sour        | 17           | 19           | 19           | 17           | 41           | 14           | 0.5%           | 0.4%   |
| Heavy & Sweet        | 448          | 696          | 986          | 1,118        | 1,227        | 1,184        | 13.8%          | 31.2%  |
| <b>East Timor</b>    |              | <b>100</b>   | <b>88</b>    | <b>60</b>    | <b>49</b>    | <b>40</b>    |                |        |
| Ultra light          |              | 100          | 88           | 60           | 49           | 40           |                | 100.0% |
| <b>India</b>         | <b>659</b>   | <b>656</b>   | <b>768</b>   | <b>753</b>   | <b>734</b>   | <b>733</b>   |                |        |
| Light & Sweet        | 552          | 562          | 673          | 666          | 650          | 644          | 83.8%          | 87.9%  |
| Medium & Sweet       | 40           | 27           | 23           | 20           | 19           | 20           | 6.1%           | 2.7%   |
| Heavy & Sweet        | 67           | 67           | 72           | 67           | 65           | 69           | 10.2%          | 9.4%   |
| <b>Indonesia</b>     | <b>1,443</b> | <b>1,075</b> | <b>949</b>   | <b>777</b>   | <b>832</b>   | <b>801</b>   |                |        |
| Ultra Light          | 29           | 45           | 42           | 25           | 1            | 0            | 2.0%           | 0.1%   |
| Light & Sweet        | 604          | 460          | 453          | 370          | 389          | 379          | 41.9%          | 47.3%  |
| Medium & Sweet       | 494          | 330          | 244          | 246          | 324          | 309          | 34.2%          | 38.6%  |
| Heavy & Sweet        | 316          | 240          | 209          | 136          | 119          | 112          | 21.9%          | 14.0%  |
| <b>Malaysia</b>      | <b>704</b>   | <b>779</b>   | <b>702</b>   | <b>686</b>   | <b>693</b>   | <b>680</b>   |                |        |
| Ultra Light          | 41           | 53           | 64           | 32           | 32           | 32           | 5.8%           | 4.7%   |
| Light & Sweet        | 559          | 655          | 481          | 500          | 502          | 498          | 79.4%          | 73.2%  |
| Medium & Sweet       | 104          | 72           | 157          | 154          | 160          | 150          | 14.7%          | 22.1%  |

<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

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

(thousand barrels/day)

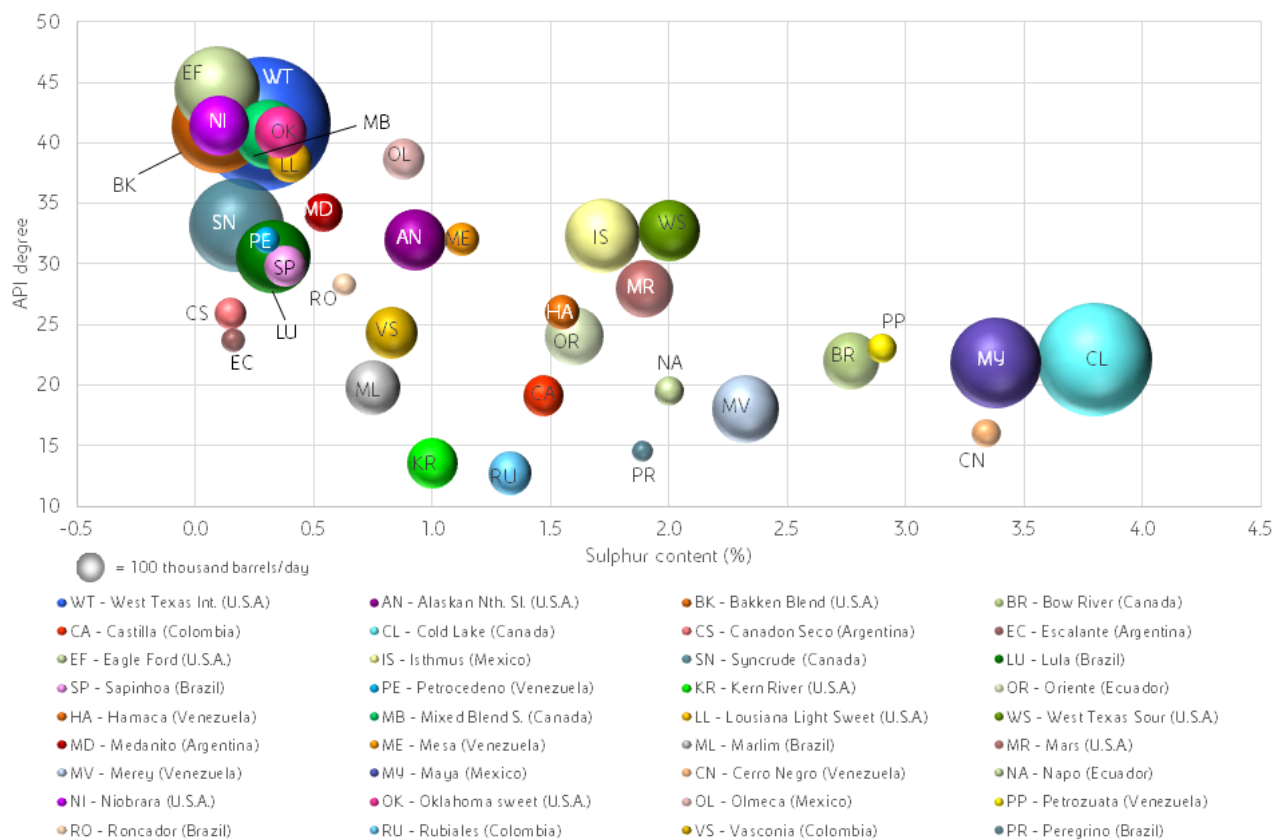
|                         | 2000       | 2005       | 2010       | 2015       | 2016       | 2017       | Share of total |        |
|-------------------------|------------|------------|------------|------------|------------|------------|----------------|--------|
|                         |            |            |            |            |            |            | 2000           | 2017   |
| <b>New Zealand</b>      | <b>35</b>  | <b>31</b>  | <b>55</b>  | <b>41</b>  | <b>35</b>  | <b>31</b>  |                |        |
| Light & Sweet           | 35         | 31         | 38         | 34         | 28         | 26         | 100.0%         | 83.0%  |
| Medium & Sweet          |            |            | 16         | 7          | 7          | 5          |                | 17.0%  |
| <b>Pakistan</b>         | <b>58</b>  | <b>66</b>  | <b>66</b>  | <b>106</b> | <b>104</b> | <b>97</b>  |                |        |
| Light & Sweet           | 58         | 66         | 66         | 106        | 104        | 97         | 100.0%         | 100.0% |
| <b>Papua New Guinea</b> | <b>64</b>  | <b>54</b>  | <b>31</b>  | <b>58</b>  | <b>56</b>  | <b>50</b>  |                |        |
| Ultra Light             |            |            |            | 58         | 56         | 50         |                | 100.0% |
| Light & Sweet           | 64         | 54         | 31         |            |            |            | 100.0%         |        |
| <b>Thailand</b>         | <b>120</b> | <b>196</b> | <b>242</b> | <b>248</b> | <b>258</b> | <b>240</b> |                |        |
| Light & Sweet           | 120        | 196        | 242        | 248        | 258        | 240        | 100.0%         | 100.0% |
| <b>Vietnam</b>          | <b>325</b> | <b>358</b> | <b>299</b> | <b>333</b> | <b>304</b> | <b>272</b> |                |        |
| Light & Sweet           | 52         | 161        | 151        | 215        | 188        | 189        | 16.1%          | 69.4%  |
| Medium & Sweet          | 272        | 198        | 148        | 118        | 116        | 83         | 83.9%          | 30.6%  |

<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

### Crude Production by Quality<sup>(\*)</sup> (thousand barrels/day)

|                               | 2000          | 2005          | 2010          | 2015          | 2016          | 2017          | Share of total |       |
|-------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|-------|
|                               |               |               |               |               |               |               | 2000           | 2017  |
| <b>Americas (A)</b>           | <b>17,198</b> | <b>17,433</b> | <b>17,518</b> | <b>22,615</b> | <b>21,628</b> | <b>21,941</b> |                |       |
| Ultra Light                   | 64            | 183           | 145           | 668           | 676           | 642           | 0.4%           | 2.9%  |
| Light & Sweet                 | 3,377         | 2,710         | 2,974         | 6,587         | 5,920         | 6,429         | 19.6%          | 29.3% |
| Light & Medium Sour           | 551           | 190           | 368           | 315           | 300           | 242           | 3.2%           | 1.1%  |
| Light & Sour                  |               |               |               |               |               |               |                |       |
| Medium & Sweet                | 883           | 1,411         | 1,504         | 2,260         | 2,401         | 2,598         | 5.1%           | 11.8% |
| Medium & Medium Sour          | 1,630         | 1,641         | 1,714         | 1,304         | 1,452         | 1,413         | 9.5%           | 6.4%  |
| Medium & Sour                 | 3,994         | 3,629         | 3,564         | 3,406         | 3,210         | 2,922         | 23.2%          | 13.3% |
| Heavy & Sweet                 | 320           | 265           | 328           | 292           | 266           | 248           | 1.9%           | 1.1%  |
| Heavy & Medium Sour           | 1,149         | 1,448         | 1,702         | 1,659         | 1,348         | 1,383         | 6.7%           | 6.3%  |
| Heavy & Sour                  | 4,893         | 5,593         | 4,908         | 5,837         | 5,727         | 5,705         | 28.4%          | 26.0% |
| Unassigned production (B)     | 338           | 363           | 311           | 288           | 326           | 358           | 2.0%           | 1.6%  |
| % Unassigned production (B/A) | 2.0           | 2.1           | 1.8           | 1.3           | 1.5           | 1.6           |                |       |

### Quality and Production Volume of Main Crudes 2017<sup>(\*\*)</sup> (selected years, thousand barrels/day)

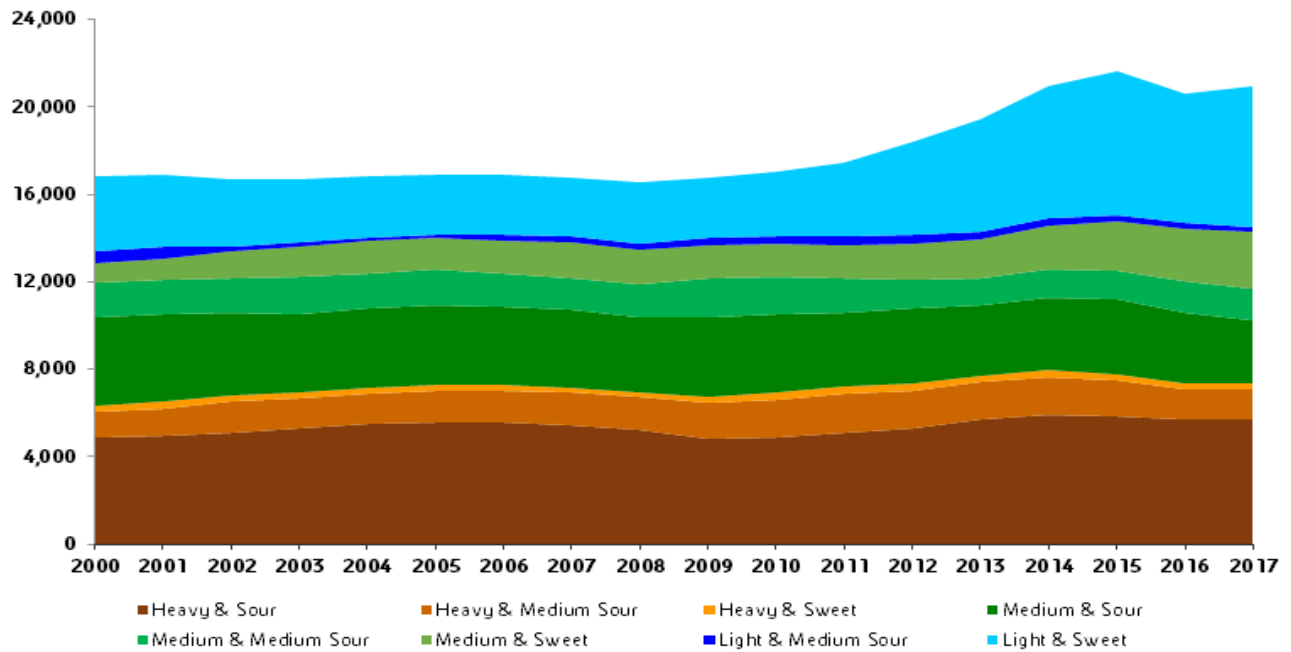


<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

<sup>(\*\*)</sup> Data source: Eni.

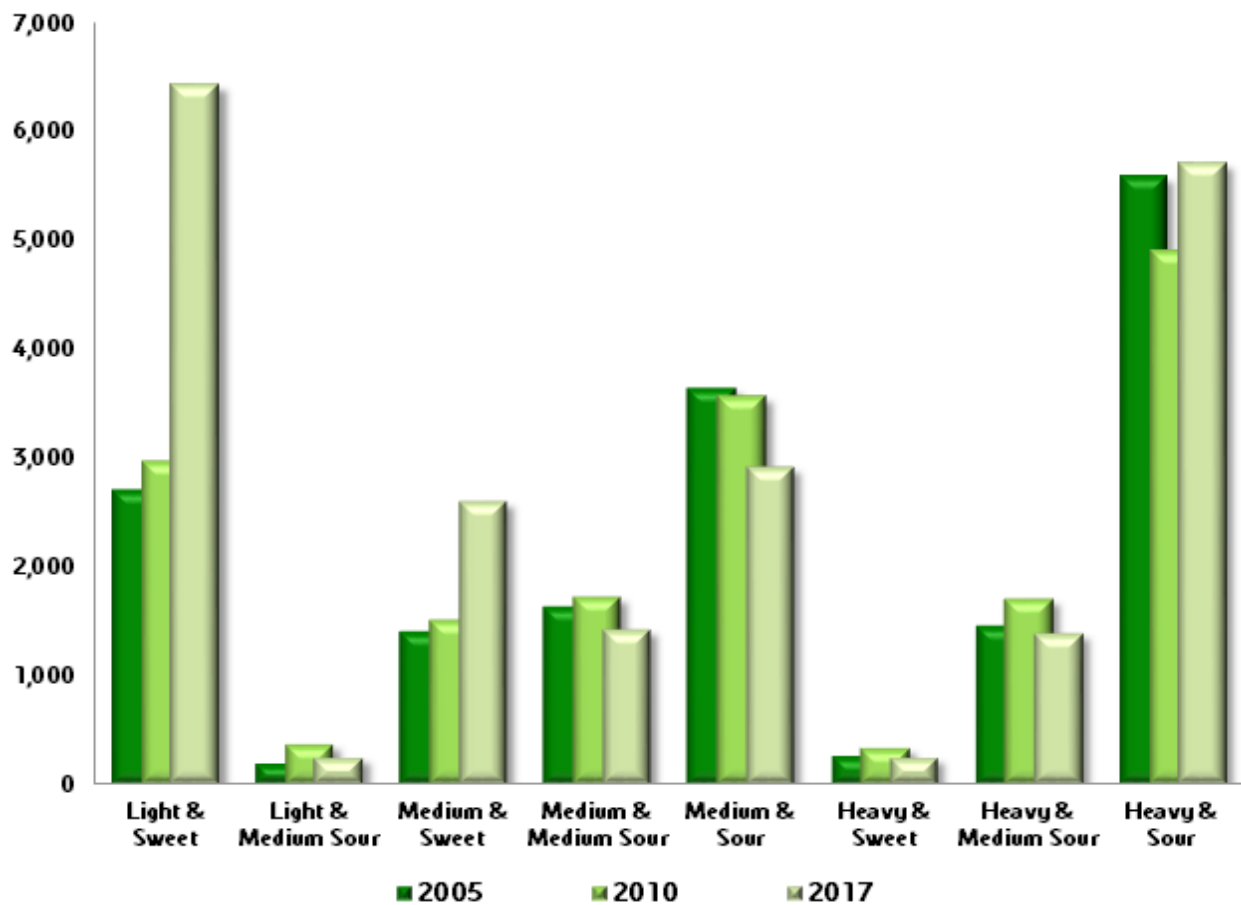
## Crude Production by Quality<sup>(\*)</sup>

(thousand barrels/day)



## Crude Production by Quality<sup>(\*)</sup>

(selected years, thousand barrels/day)



<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.

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

(thousand barrels/day)

|  | 2000         | 2005         | 2010         | 2015         | 2016         | 2017         | Share of total |              |
|--|--------------|--------------|--------------|--------------|--------------|--------------|----------------|--------------|
|  |              |              |              |              |              |              | 2000           | 2017         |
| <b>Argentina</b>   | <b>801</b>   | <b>702</b>   | <b>589</b>   | <b>532</b>   | <b>511</b>   | <b>479</b>   |                |              |
| Ultra light  |              | 40           | 22           | 21           | 22           | 22           |                | 4.5%         |
| Light & Sweet  | 120          | 99           | 85           | 77           | 73           | 69           | 15.0%          | 14.3%        |
| Medium & Sweet   |              |              |              | 17           | 21           | 26           |                | 5.4%         |
| Medium & Medium Sour   | 360          | 298          | 255          | 213          | 199          | 180          | 45.0%          | 37.6%        |
| Heavy & Sweet  | 320          | 265          | 227          | 205          | 196          | 183          | 40.0%          | 38.2%        |
| <b>Brazil</b>  | <b>1,231</b> | <b>1,634</b> | <b>2,055</b> | <b>2,436</b> | <b>2,436</b> | <b>2,510</b> |                |              |
| Light & Sweet  |              |              |              | 6            | 17           | 13           |                | 0.5%         |
| Light & Medium Sour  | 47           | 46           | 48           | 38           | 34           | 32           | 3.8%           | 1.3%         |
| Medium & Sweet   |              |              | 20           | 666          | 872          | 969          |                | 38.6%        |
| Medium & Medium Sour   | 269          | 448          | 581          | 323          | 364          | 316          | 21.8%          | 12.6%        |
| Heavy & Sweet  |              |              | 100          | 87           | 71           | 65           |                | 2.6%         |
| Heavy & Medium Sour  | 915          | 1,139        | 1,286        | 1,221        | 1,001        | 1,046        | 74.4%          | 41.7%        |
| Heavy & Sour   |              |              | 19           | 95           | 77           | 68           |                | 2.7%         |
| <b>Canada</b>  | <b>2,015</b> | <b>2,372</b> | <b>2,724</b> | <b>3,678</b> | <b>3,679</b> | <b>3,974</b> |                |              |
| Light & Sweet  | 832          | 728          | 681          | 670          | 579          | 594          | 41.3%          | 14.9%        |
| Medium & Sweet   | 334          | 674          | 939          | 1,046        | 1,045        | 1,154        | 16.6%          | 29.0%        |
| Medium & Medium Sour   |              |              |              | 127          | 169          | 176          |                | 4.4%         |
| Heavy & Sour   | 849          | 970          | 1,104        | 1,835        | 1,886        | 2,050        | 42.1%          | 51.6%        |
| <i>Memo: Syncrude production is included in Medium &amp; Sweet</i> | <i>334</i>   | <i>568</i>   | <i>818</i>   | <i>1,001</i> | <i>1,004</i> | <i>1,111</i> | <i>16.6%</i>   | <i>28.0%</i> |
| <i>Memo: bitumen production is included in Heavy &amp; Sour</i>    | <i>288</i>   | <i>445</i>   | <i>680</i>   | <i>1,406</i> | <i>1,485</i> | <i>1,647</i> | <i>14.3%</i>   | <i>41.4%</i> |
| <b>Colombia</b>  | <b>684</b>   | <b>526</b>   | <b>786</b>   | <b>1,006</b> | <b>880</b>   | <b>853</b>   |                |              |
| Light & Sweet  | 340          | 135          | 51           | 49           | 53           | 49           | 49.7%          | 5.7%         |
| Medium & Sweet   | 105          | 74           | 61           | 42           |              |              | 15.3%          |              |
| Medium & Medium Sour   |              |              |              |              | 36           | 32           |                | 3.8%         |
| Heavy & Medium Sour  | 234          | 309          | 416          | 438          | 347          | 337          | 34.1%          | 39.5%        |
| Heavy & Sour   | 6            | 8            | 258          | 476          | 443          | 434          | 0.9%           | 50.9%        |

<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.



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

(thousand barrels/day)

|                      |              |              |              |              |              |              | Share of total |        |
|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|--------|
|                      | 2000         | 2005         | 2010         | 2015         | 2016         | 2017         | 2000           | 2017   |
| <b>Ecuador</b>       | <b>401</b>   | <b>532</b>   | <b>466</b>   | <b>541</b>   | <b>547</b>   | <b>531</b>   |                |        |
| Heavy & Sour         | 401          | 532          | 466          | 541          | 547          | 531          | 100.0%         | 100.0% |
| <b>Mexico</b>        | <b>3,012</b> | <b>3,333</b> | <b>2,577</b> | <b>2,267</b> | <b>2,154</b> | <b>1,948</b> |                |        |
| Light & Medium Sour  | 504          | 144          | 320          | 277          | 266          | 210          | 16.7%          | 10.8%  |
| Medium & Sour        | 733          | 802          | 834          | 838          | 785          | 689          | 24.3%          | 35.4%  |
| Heavy & Sour         | 1,775        | 2,387        | 1,422        | 1,152        | 1,103        | 1,049        | 58.9%          | 53.8%  |
| <b>United States</b> | <b>5,822</b> | <b>5,184</b> | <b>5,475</b> | <b>9,408</b> | <b>8,857</b> | <b>9,321</b> |                |        |
| Ultra light          | 21           | 11           | 28           | 553          | 569          | 517          | 0.4%           | 5.5%   |
| Light & Sweet        | 2,085        | 1,747        | 2,157        | 5,785        | 5,198        | 5,704        | 35.8%          | 61.2%  |
| Medium & Sweet       | 444          | 507          | 370          | 380          | 365          | 367          | 7.6%           | 3.9%   |
| Medium & Medium Sour | 1,001        | 895          | 878          | 641          | 683          | 707          | 17.2%          | 7.6%   |
| Medium & Sour        | 1,472        | 1,398        | 1,501        | 1,531        | 1,544        | 1,536        | 25.3%          | 16.5%  |
| Heavy & Sour         | 800          | 625          | 542          | 518          | 497          | 490          | 13.7%          | 5.3%   |
| <b>Venezuela</b>     | <b>2,894</b> | <b>2,788</b> | <b>2,535</b> | <b>2,460</b> | <b>2,239</b> | <b>1,966</b> |                |        |
| Ultra light          | 43           | 131          | 96           | 94           | 86           | 104          | 1.5%           | 5.3%   |
| Medium & Sweet       |              | 156          | 114          | 109          | 98           | 83           |                | 4.2%   |
| Medium & Sour        | 1,789        | 1,429        | 1,228        | 1,037        | 881          | 697          | 61.8%          | 35.5%  |
| Heavy & Sour         | 1,062        | 1,071        | 1,097        | 1,220        | 1,173        | 1,083        | 36.7%          | 55.1%  |

<sup>(\*)</sup> Data source: Eni's elaborations on *Monthly Oil Data Services* © OECD/International Energy Agency, 2018 data.



# Oil – Refining Industry

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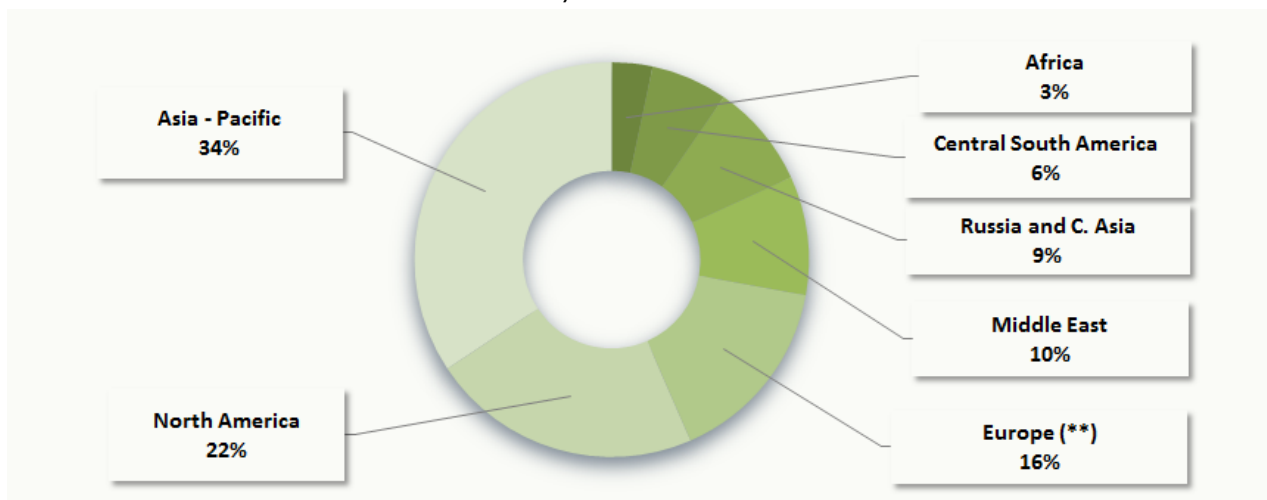
Refining Capacity

### Areas and Aggregates (\*)

|                         | 2000             |                            |                            |  |                               |            | 2005             |                            |                            |  |                               |            |
|-------------------------|------------------|----------------------------|----------------------------|--|-------------------------------|------------|------------------|----------------------------|----------------------------|--|-------------------------------|------------|
|                         | Refineries (no.) | Primary Capacity (m.mt/yr) | Primary Capacity (kbbbl/d) | Conversion Capacity (FCC eqv.) (m.mt/yr) | Complexity Ratio FCC eqv. (%) | NCI        | Refineries (no.) | Primary Capacity (m.mt/yr) | Primary Capacity (kbbbl/d) | Conversion Capacity (FCC eqv.) (m.mt/yr) | Complexity Ratio FCC eqv. (%) | NCI        |
| Europe (**)             | 148              | 852                        | 17,058                     | 268                                      | 31                            | 8.3        | 137              | 873                        | 17,476                     | 298                                      | 34                            | 8.7        |
| Russia and Central Asia | 58               | 404                        | 8,133                      | 55                                       | 14                            | 5.8        | 61               | 370                        | 7,448                      | 63                                       | 17                            | 6.7        |
| Middle East             | 46               | 325                        | 6,527                      | 52                                       | 16                            | 5.4        | 47               | 361                        | 7,324                      | 61                                       | 17                            | 5.5        |
| Africa                  | 47               | 142                        | 2,837                      | 16                                       | 11                            | 4.9        | 46               | 158                        | 3,154                      | 26                                       | 17                            | 5.6        |
| Asia - Pacific          | 235              | 1116                       | 22,369                     | 397                                      | 36                            | 7.0        | 260              | 1,234                      | 24,724                     | 551                                      | 45                            | 7.4        |
| Americas                | 256              | 1313                       | 26,272                     | 787                                      | 60                            | 9.9        | 253              | 1,358                      | 27,184                     | 855                                      | 63                            | 10.2       |
| - North America         | 182              | 997                        | 19,947                     | 659                                      | 66                            | 10.8       | 175              | 1,034                      | 20,696                     | 709                                      | 69                            | 11.1       |
| - Central South America | 74               | 316                        | 6,325                      | 128                                      | 41                            | 7.1        | 78               | 324                        | 6,488                      | 146                                      | 45                            | 7.3        |
| <b>World</b>            | <b>790</b>       | <b>4,153</b>               | <b>83,196</b>              | <b>1,575</b>                             | <b>38</b>                     | <b>7.9</b> | <b>804</b>       | <b>4,355</b>               | <b>87,310</b>              | <b>1,855</b>                             | <b>43</b>                     | <b>8.2</b> |

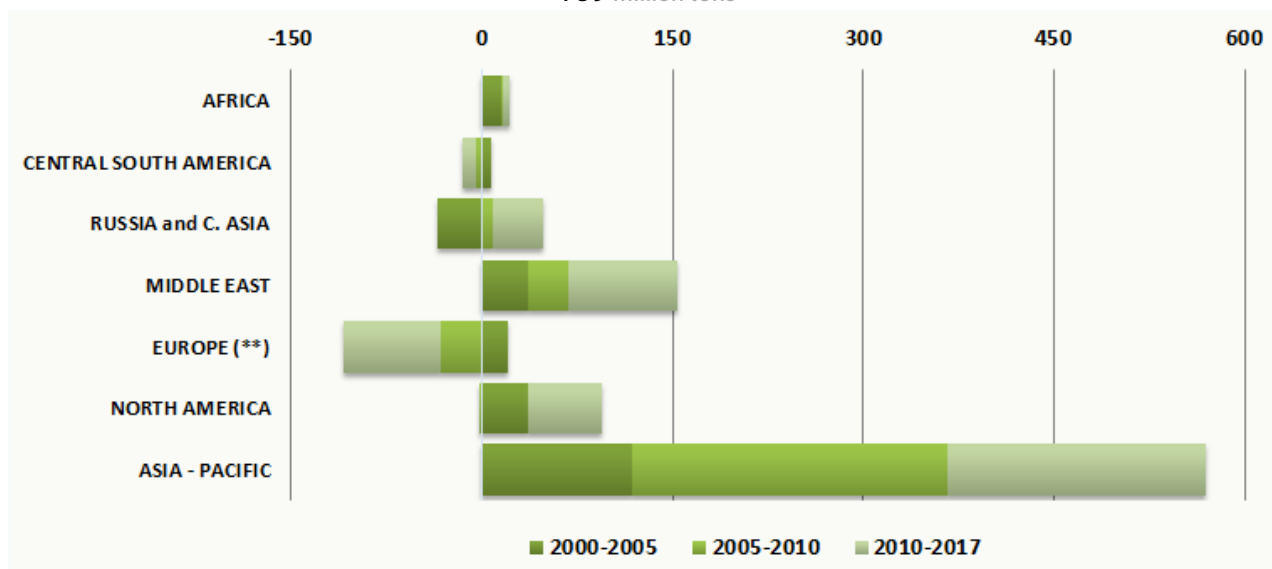
### World Primary Capacity (2017)

4,911 million tons



### World Primary Capacity Growth (2000-2017)

759 million tons

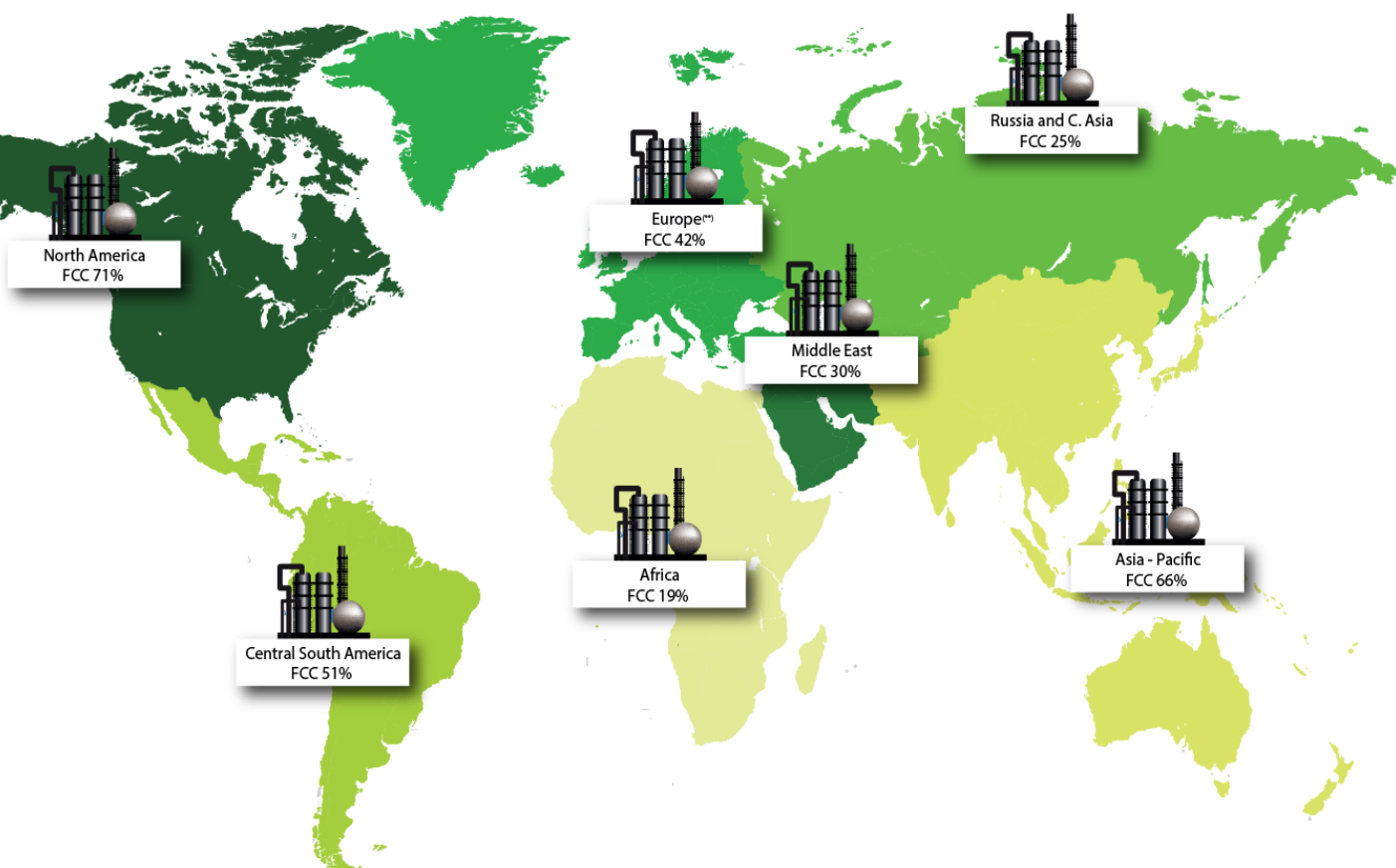


(\*) Data source: Eni's calculations on Icis Consulting data.

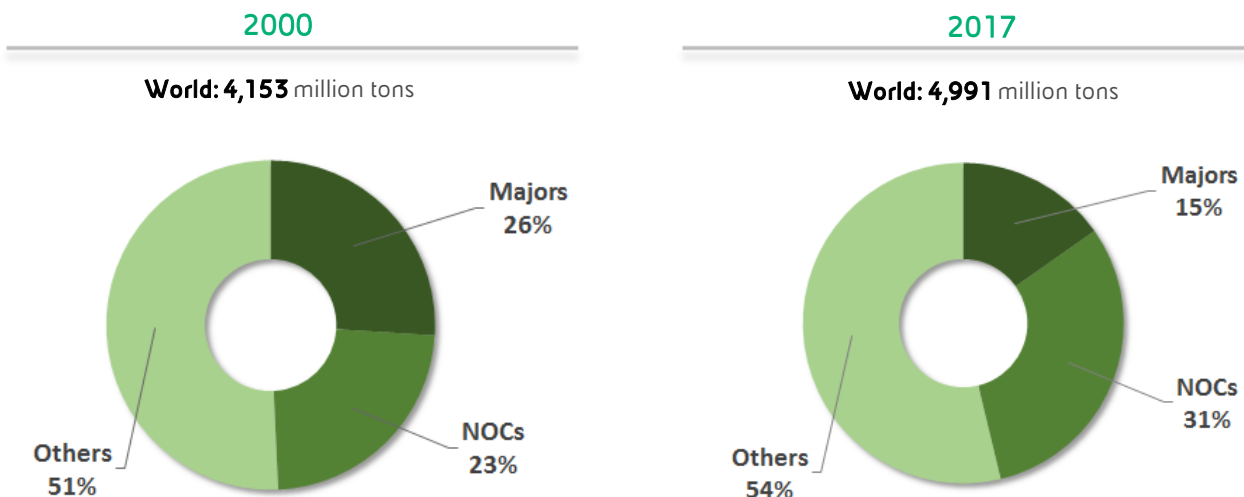
(\*\*) Belarus and Ukraine aren't included in Europe but in Russia and Central Asia.

| 2010             |                           |                          |   |                  |            | 2017             |                           |                          |   |                  |            |                         |
|------------------|---------------------------|--------------------------|---|------------------|------------|------------------|---------------------------|--------------------------|---|------------------|------------|-------------------------|
| Refineries (no.) | Primary Capacity (mmtons) | Primary Capacity (kbb/d) | Conversion Capacity (FCC eqv.) (mmtons) | Complexity Ratio |            | Refineries (no.) | Primary Capacity (mmtons) | Primary Capacity (kbb/d) | Conversion Capacity (FCC eqv.) (mmtons) | Complexity Ratio |            |                         |
|                  |                           |                          |   | FCC eqv. (%)     | NCI        |                  |                           |                          |   | FCC eqv. (%)     | NCI        |                         |
| 128              | 840                       | 16,807                   | 309                                     | 37               | 8.9        | 111              | 765                       | 15,295                   | 319                                     | 42               | 9.3        | Europe (**)             |
| 67               | 379                       | 7,619                    | 66                                      | 18               | 6.9        | 73               | 419                       | 8,445                    | 104                                     | 25               | 7.7        | Russia and Central Asia |
| 57               | 394                       | 8,006                    | 79                                      | 20               | 6.0        | 60               | 478                       | 9,736                    | 141                                     | 30               | 7.2        | Middle East             |
| 46               | 159                       | 3,191                    | 27                                      | 17               | 5.7        | 49               | 164                       | 3,296                    | 32                                      | 19               | 5.9        | Africa                  |
| 298              | 1,482                     | 29,720                   | 794                                     | 54               | 8.3        | 331              | 1,686                     | 33,868                   | 1,105                                   | 66               | 9.7        | Asia - Pacific          |
| 242              | 1,353                     | 27,075                   | 873                                     | 65               | 10.5       | 239              | 1,400                     | 28,054                   | 932                                     | 67               | 10.7       | Americas                |
| 167              | 1,033                     | 20,676                   | 721                                     | 70               | 11.5       | 164              | 1,091                     | 21,866                   | 774                                     | 71               | 11.5       | North America -         |
| 75               | 319                       | 6,399                    | 153                                     | 48               | 7.4        | 75               | 309                       | 6,188                    | 158                                     | 51               | 7.8        | Central South America - |
| <b>838</b>       | <b>4,606</b>              | <b>92,418</b>            | <b>2,148</b>                            | <b>47</b>        | <b>8.7</b> | <b>863</b>       | <b>4,911</b>              | <b>98,694</b>            | <b>2,633</b>                            | <b>54</b>        | <b>9.3</b> | <b>World</b>            |

### 2017 Complexity ratio (FCC eqv. %)

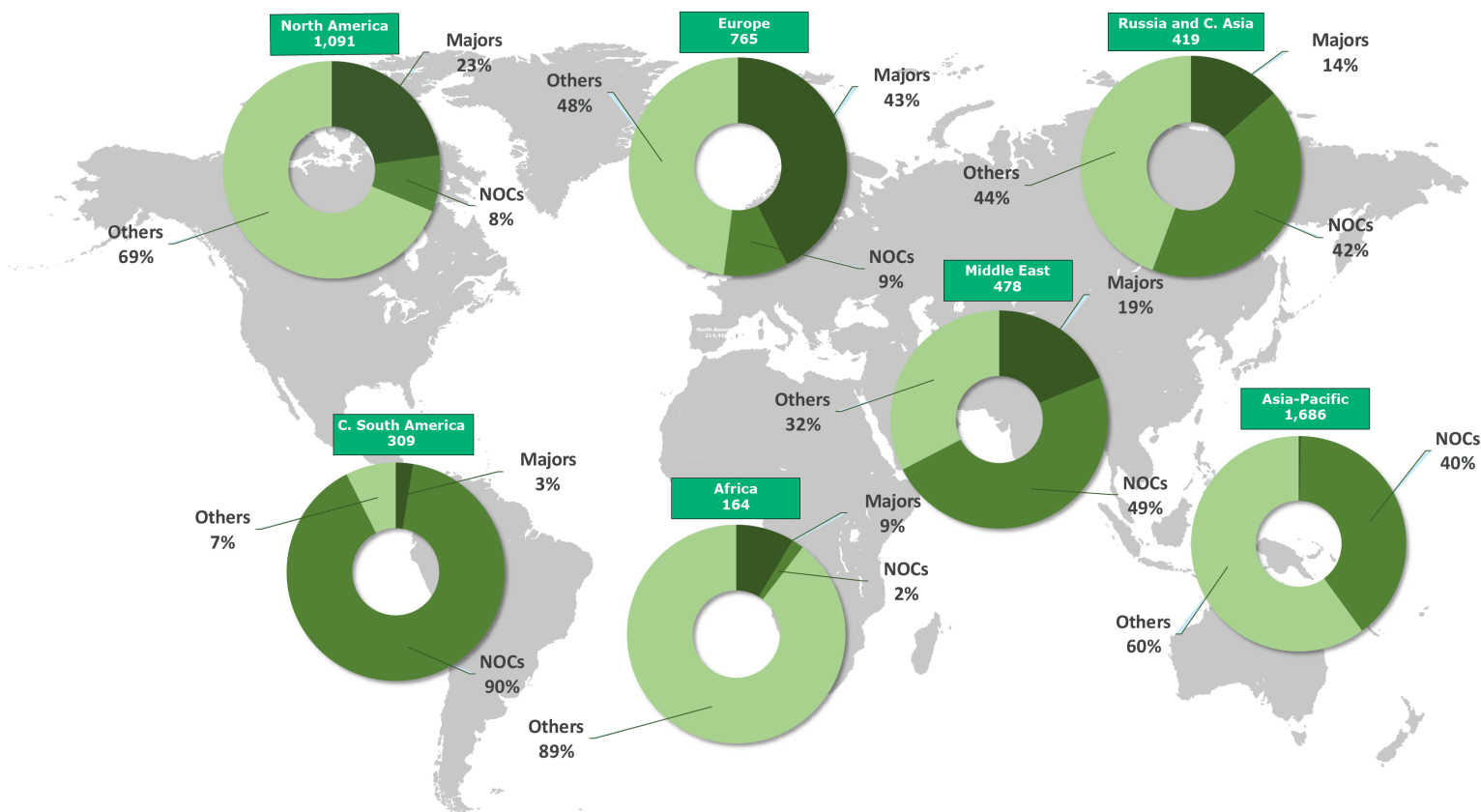


### Primary Capacity by Cluster of Companies(\*)



### 2017

(million tons)



(\*) **Majors:** ExxonMobil, BP, Shell, Chevron, Total, Eni, Statoil.

**NOCs:** CNOOC, Gazprom, Indian Oil Corporation, KNOC, Kuwait Petroleum Corp., Lukoil, Mitsui, NIORDC, ONGC, PdVSA, Pemex, Pertamina, Petrobras, PetroChina, Petronas, PTT, Reliance, Rosneft, Saudi Aramco, Sinopec.



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# O&G<sub>TR</sub>

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