

YPF SOCIEDAD ANONIMA  
Form 20-F  
April 24, 2018  
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**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

**FORM 20-F**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)**  
**OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the fiscal year ended December 31, 2017**

**Commission file number: 1-12102**

**YPF Sociedad Anónima**  
**(Exact name of registrant as specified in its charter)**

**Republic of Argentina**  
**(Jurisdiction of incorporation or organization)**

**Macacha Güemes 515**

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**C1106BKK Ciudad Autónoma de Buenos Aires, Argentina**

**(Address of principal executive offices)**

**Diego M. Pando**

**Tel: (011-54-11) 5441-1276**

**Facsimile Number: (011-54-11) 5441-3726**

**Macacha Güemes 515**

**C1106BKK Ciudad Autónoma de Buenos Aires, Argentina**

**(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)**

**Securities registered or to be registered pursuant to Section 12(b) of the Act:**

<b>Title of Each Class</b>	<b>Name of Each Exchange on Which Registered</b>
<b>American Depositary Shares, each representing one Class D</b>	
<b>Share, par value 10 pesos per share Class D Shares</b>	<b>New York Stock Exchange New York Stock Exchange*</b>

\* Listed not for trading but only in connection with the registration of American Depositary Shares.  
**Securities registered or to be registered pursuant to Section 12(g) of the Act: None**

**Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None**

The number of outstanding shares of each class of stock of YPF Sociedad Anónima as of December 31, 2017 was:

Class A Shares	3,764
Class B Shares	7,624
Class C Shares	40,422
Class D Shares	393,260,983
	393,312,793

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Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes No

Note Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or an emerging growth company. See definition of accelerated filer, large accelerated filer and emerging growth company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP

International Financial Reporting Standards as issued  
by the International Accounting Standards Board:

Other

If Other has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow. Item 17 Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act) Yes No

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### **Conversion Table**

1 ton = 1 metric ton = 1,000 kilograms = 2,204 pounds

1 barrel = 42 U.S. gallons

1 ton of oil = approximately 7.3 barrels (assuming a specific gravity of 34 degrees API (American Petroleum Institute))

1 barrel of oil equivalent = 5,615 cubic feet of gas = 1 barrel of oil, condensate or natural gas liquids

1 barrel of oil, condensate or natural gas liquids = 0.159 cubic meters

1 kilometer = 0.63 miles

1 million Btu = 252 termies

1 cubic meter of gas = 35.3147 cubic feet of gas

1 cubic meter of gas = 10 termies

1,000 acres = approximately 4 square kilometers

### **References**

YPF Sociedad Anónima is a stock corporation organized under the laws of the Republic of Argentina ( Argentina ). As used in this annual report, YPF, the Company, we, our and us refer to YPF Sociedad Anónima and its controlled companies or, if the context requires, its predecessor companies. YPF Sociedad Anónima refers to YPF Sociedad Anónima only. Repsol refers to Repsol S.A., its affiliates and consolidated companies. We maintain our financial books and records and publish our financial statements in Argentine pesos. In this annual report, references to pesos or Ps. are to Argentine pesos, and references to dollars, U.S. dollars or U.S.\$ are to United States dollars.

### **Disclosure of Certain Information**

In this annual report, references to Audited Consolidated Financial Statements are to YPF's audited consolidated statement of financial position as of December 31, 2017, 2016 and 2015, YPF's audited consolidated statements of comprehensive income for the years ended December 31, 2017, 2016 and 2015, YPF's audited consolidated statements of cash flows for the years ended December 31, 2017, 2016 and 2015, YPF's audited consolidated statements of changes in shareholders' equity for the years ended December 31, 2017, 2016 and 2015 and the related notes thereto.

Unless otherwise indicated, the information contained in this annual report reflects:

for the subsidiaries that were consolidated using the global integration method at the date or for the periods indicated, 100% of the assets, liabilities and results of operations of such subsidiaries without excluding minority interests, and

for those joint operations whose results were consolidated using the proportional integration method, a *pro rata* amount of the assets, liabilities and results of operations for such joint operations at the date or for the periods indicated.

For information regarding consolidation, see Notes 2.a and 2.b.5 to the Audited Consolidated Financial Statements.

Certain monetary amounts and other figures included in this annual report have been subject to rounding adjustments. Any discrepancies in any tables between the totals and the sums of the amounts are due to rounding.

### **Forward-Looking Statements**

This annual report, including any documents incorporated by reference, contains statements that we believe constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements may include statements regarding the intent, belief or current expectations of us and our management, including statements with respect to trends affecting our financial condition, financial ratios, results of operations, business, strategy, geographic concentration, reserves, future hydrocarbon production volumes and the Company's ability to satisfy our long-term sales commitments from future supplies available to the Company, our ability to pay dividends in the future and to service our outstanding debt, dates or periods in which production is scheduled or expected to come on-stream, as well as our plans with respect to capital expenditures, business, strategy, geographic concentration, cost savings, investments and dividends payout policies. These statements are not a guarantee of future performance and are subject to material risks, uncertainties, changes and other factors which may be beyond our control or may be difficult to predict. Accordingly, our future financial condition, prices, financial ratios, results of operations, business, strategy, geographic concentration, production volumes, reserves, capital expenditures, cost savings, WACC (weighted average cost of capital) investments and ability to meet our long-term sales commitments or pay dividends or service our outstanding debt could differ materially from those expressed or implied in any such forward-looking statements. Such factors include, but are not limited to, currency fluctuations, inflation, the domestic and international prices for crude oil and its derivatives, the ability to realize cost

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reductions and operating efficiencies without unduly disrupting business operations, replacement of hydrocarbon reserves, environmental, regulatory and legal considerations, including the imposition of further government restrictions on the Company's business, changes in our business strategy and operations, our ability to find partners or raise funding under our current control, the ability to maintain the Company's concessions, and general economic and business conditions in Argentina, as well as those factors described in the filings made by YPF and its affiliates with the Securities and Exchange Commission, in particular, those described in Item 3. Key Information Risk Factors and Item 5. Operating and Financial Review and Prospects. YPF does not undertake to publicly update or revise these forward-looking statements even if experience or future changes make it clear that the projected results or condition expressed or implied therein will not be realized.

## **Oil and Gas Terms**

Oil and gas reserves definitions used in this annual report are in accordance with Regulations S-X and S-K, as amended by the U.S. Securities and Exchange Commission's (SEC) final rule, Modernization of Oil and Gas Reporting (Release Nos. 33-8995; 34-59192; FR-78; File No. S7-15-08; December 31, 2008) and relevant guidance notes and letters issued by the SEC's Staff.

The reported reserves contained in this annual report include only our proved reserves and do not include probable reserves or possible reserves.

The following terms have the meanings shown below unless the context indicates otherwise:

***acreage*** : The total area, expressed in acres or km<sup>2</sup>, over which YPF has interests in exploration or production. Net acreage is YPF's interest in the relevant exploration or production area.

***basin*** : A depression in the crust of the Earth formed by plate tectonic activity in which sediments accumulate. Continued sediment accumulation can cause further depression or subsidence.

***block*** : Areas defined by concession contracts or operating contracts signed by YPF.

***concession contracts*** : A grant of access for a defined area and time period that transfers certain entitlements to produce hydrocarbons from the host country to an enterprise. The company holding the concession generally has rights and responsibilities for the exploration, development, production and sale of hydrocarbons, and typically, an obligation to make payments at the signing of the concession and once production begins pursuant to applicable laws and regulations.

***crude oil*** : Crude oil with respect to YPF's production and reserves includes condensate.

***field*** : One or more reservoirs grouped by or related to the same general geologic structural feature or stratigraphic condition.

***formation*** : The fundamental unit of lithostratigraphy. A body of rock that is sufficiently distinctive and continuous that it can be mapped.

***gas*** : Natural gas.

***hydrocarbons*** : Crude oil, natural gas liquids and natural gas.

***surface conditions*** : Represents the pressure and temperature conditions at which volumes of oil, gas, condensate and natural gas liquids are measured for reporting purposes. It is also referred to as standard conditions. For YPF these conditions are 14.7 psi for pressure and 60 degrees Fahrenheit for temperature. All volume units expressed in this report are at surface conditions.

**Table of Contents****Abbreviations:**

bbbl	Barrels.
bbbl/d	Barrels per day.
bcf	Billion cubic feet.
bcf/d	Billion cubic feet per day.
bcm	Billion cubic meters.
bcm/d	Billion cubic meters per day.
boe	Barrels of oil equivalent.
boe/d	Barrels of oil equivalent per day.
cm	Cubic meter.
cm/d	Cubic meters per day.
dam <sup>3</sup>	Cubic decameters (thousand cubic meters).
GWh	Gigawatt hours.
HP	Horsepower.
km	Kilometers.
km <sup>2</sup>	Square kilometers.
liquids	Crude oil, condensate and natural gas liquids.
LNG	Liquefied natural gas.
LPG	Liquefied petroleum gas.
m	Thousand.
mbbbl	Thousand barrels.
mbbbl/d	Thousand barrels per day.
mcf	Thousand cubic feet.
mcf/d	Thousand cubic feet per day.
mcm	Thousand cubic meters.
mcm/d	Thousand cubic meters per day.
mboe	Thousand barrels of oil equivalent.
mboe/d	Thousand barrels of oil equivalent per day.
mm	Million.
mmbbl	Million barrels.
mmbbl/d	Million barrels per day.
mmboe	Million barrels of oil equivalent.
mmboe/d	Million barrels of oil equivalent per day.
mmBtu	Million British thermal units.
mmcf	Million cubic feet.
mmcf/d	Million cubic feet per day.
mmcm	Million cubic meters.
mmcm/d	Million cubic meters per day.
mtn	Thousand tons.
MW	Megawatts.
NGL	Natural gas liquids.
psi	Pound per square inch.
WTI	West Texas Intermediate.



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Not applicable.

**ITEM 2. Offer Statistics and Expected Timetable**

Not applicable.

**ITEM 3. Key Information  
Selected Financial Data**

The following tables present our selected financial data. This information should be read in conjunction with our Audited Consolidated Financial Statements, and the information under Item 5. Operating and Financial Review and Prospects included elsewhere in this annual report.

Our Audited Consolidated Financial Statements are prepared in accordance with International Financial Reporting Standards ( IFRS ) as issued by the International Accounting Standards Board ( IASB ).

In this annual report, except as otherwise specified, references to \$, U.S.\$ and dollars are to U.S. dollars, and references to Ps. and pesos are to Argentine pesos. Solely for the convenience of the reader, peso amounts as of and for the year ended December 31, 2017 have been translated into U.S. dollars at the exchange rate quoted by the Argentine Central Bank (*Banco Central de la República Argentina*) (the Central Bank ) on December 31, 2017 of Ps. 18.77 to U.S.\$1.00, unless otherwise specified. The exchange rate quoted by the Central Bank on April 19, 2018 was Ps. 20.16 to U.S.\$1.00. The U.S. dollar equivalent information should not be construed to imply that the peso amounts represent, or could have been or could be converted into U.S. dollars at such rates or any other rate. See Exchange Rates.

The financial data contained in this annual report as of and for the years ended December 31, 2017, 2016 and 2015 has been derived from our Audited Consolidated Financial Statements included in this annual report. The financial data contained in this annual report as of December 31, 2014 and 2013 and for the years ended December 31, 2014 and 2013 have been derived from our audited consolidated financial statements as of and for the years ended December 31, 2014 and 2013 not included in this annual report.

**As of and for the year ended December 31,**  
**2017      2016      2015      2014      2013**  
**(in millions of pesos, except for per share**

**and per ADS data)**

**Consolidated Statement of Comprehensive Income  
Data<sup>(1)</sup> :**

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Revenues <sup>(2)</sup>	252,813	210,100	156,136	141,942	90,113
Gross profit	41,001	32,796	36,599	37,450	22,019
Administrative expenses	(8,736)	(7,126)	(5,586)	(4,530)	(2,686)
Selling expenses	(17,954)	(15,212)	(11,099)	(10,114)	(7,571)
Exploration expenses	(2,456)	(3,155)	(2,473)	(2,034)	(829)
Recovery / (Impairment) of property, plant and equipment and intangible assets	5,032	(34,943)	(2,535)		
Other net operating results	(814)	3,394	1,682	(1,030)	227
Operating profit (loss)	16,073	(24,246)	16,588	19,742	11,160
Income from equity interests in associates and joint ventures	1,428	588	318	558	353
Net financial results	(8,798)	(6,146)	12,157	1,772	2,835
Net profit / (loss) before income tax	8,703	(29,804)	29,063	22,072	14,348
Income tax	3,969	1,425	(24,637)	(13,223)	(9,269)
Net profit / (loss) for the year	12,672	(28,379)	4,426	8,849	5,079
Total other comprehensive income for the year	21,917	27,414	43,758	16,276	12,031
Total comprehensive income / (loss) for the year	34,589	(965)	48,184	25,125	17,110
<b>Earnings and dividends per share and per ADS</b>					
Earnings per share and per ADS <sup>(4)</sup>	31.43	(72.13)	11.68	22.95	13.05
Dividends per share and per ADS (in pesos)	1.82	2.26	1.28	1.18	0.83
Dividends per share and per ADS <sup>(5)</sup> (in U.S. dollars)	0.10	0.15	0.14	0.14	0.13
<b>Consolidated Statement of Financial Position Data</b>					



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**As of and for the year ended December 31,**  
**2017      2016      2015      2014      2013**  
**(in millions of pesos, except for per share**

	<b>and per ADS data)</b>				
Cash and cash equivalents	28,738	10,757	15,387	9,758	10,713
Working capital <sup>(3)</sup>	19,564	4,760	(2,818)	(11,266)	1,706
Total assets	505,718	421,139	363,453	208,554	135,595
Total loans <sup>(6)</sup>	191,063	154,345	105,751	49,305	31,890
Shareholders' equity <sup>(7)</sup>	152,533	118,661	120,461	72,781	48,240
<b>Other Consolidated Financial Data</b>					
Depreciation of property, plant and equipment and amortization of intangible assets	54,350	45,469	27,008	20,405	11,433
Cash used in acquisition of property, plant and equipment and intangible assets	59,618	64,160	63,774	50,213	27,639

- (1) The consolidated financial statements reflect the effect of the application on the functional and reporting currency. See Note 2.b.1 to the Audited Consolidated Financial Statements.
- (2) Revenues are net of payments on account of fuel transfer taxes and turnover taxes. Customs duties on hydrocarbon exports are disclosed in taxes, charges and contributions, as indicated in Note 21 to the Audited Consolidated Financial Statements. Royalties with respect to our production are accounted for as a cost of production and are not deducted in determining revenues. See Note 2.b.15 to the Audited Consolidated Financial Statements.
- (3) Working capital consists of consolidated total current assets minus consolidated total current liabilities as of December 31, 2017, 2016, 2015, 2014 and 2013.
- (4) Information has been calculated as detailed in Note 26 to the Audited Consolidated Financial Statements. Each ADS represents one Class D share.
- (5) Amounts expressed in U.S. dollars are based on the exchange rate as of the date of the dividend payment.
- (6) Total loans include non-current loans of Ps. 151,727 million, Ps. 127,568 million, Ps. 77,934 million, Ps. 36,030 million and Ps. 23,076 million as of December 31, 2017, 2016, 2015, 2014 and 2013, respectively, and current loans of Ps. 39,336 million, Ps. 26,777 million, Ps. 27,817 million, Ps. 13,275 million and Ps. 8,814 million as of December 31, 2017, 2016, 2015, 2014 and 2013, respectively. See Note 16 to the Audited Consolidated Financial Statements.
- (7) Our subscribed share capital as of December 31, 2017 is represented by 393,312,793 shares of common stock and divided into four classes of shares, with a par value of Ps. 10 and one vote per share. These shares are fully subscribed, paid-in and authorized for stock exchange listing. See Item 6. Directors, Senior Management and Employees' Compensation of members of our Board of Directors and Supervisory Committee, Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers and Note 2.b.10.iii to the Audited Consolidated Financial Statements in relation to shares purchased by YPF and allocated to our employees as part of our employee compensation plans.

For information regarding macroeconomic conditions such as exchange rates and inflation rates that affected our results of operations, see Item 3. Key Information Selected Financial Data Exchange Rates and Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations Macroeconomic conditions. In addition, for an explanation of our results of operations, see Item 5. Operating and Financial Review and Prospects Principal Income Statement Line Items Results of Operations.

*Exchange Rates*

From April 1, 1991 until the end of 2001, the Convertibility Law (Law No. 23,928) established a fixed exchange rate which required the Central Bank to sell U.S. dollars at one peso per U.S. dollar. On January 6, 2002, the Argentine congress enacted the Public Emergency and Foreign Exchange System Reform Law (Law No. 25,561, the Public Emergency Law ), formally putting an end to the Convertibility Law regime and abandoning the U.S. dollar-peso parity. The Public Emergency Law, which had been periodically extended and expired on December 31, 2017, by virtue of Law No. 27,200, had granted the National Executive Office the

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power to set the exchange rate between the peso and foreign currencies and to issue regulations related to the foreign exchange market. Following a brief period during which the Argentine government established a temporary dual exchange rate system pursuant to the Public Emergency Law, the peso has been allowed to float freely against other currencies since February 2002, although the government has the power to intervene by buying and selling foreign currency for its own account, a practice in which it engages on a regular basis. The annual rate of devaluation of the peso was approximately 18.4% from December 31, 2016 to December 31, 2017, based on the period-end exchange rates for U.S. dollars as of December 31, 2017 and 2016. See Risk Factors Risks Relating to Argentina Our business is highly dependent upon economic conditions in Argentina.

The following table sets forth the annual high, low, average and period-end exchange rates for U.S. dollars for the periods indicated, expressed in nominal pesos per U.S. dollar, based on rates quoted by the Central Bank. The Federal Reserve Bank of New York does not report a noon buying rate for Argentine pesos.

	<i>Low</i>	<i>High</i>	<i>Average</i> <sup>(1)</sup>	<i>Period End</i> <i>(pesos per U.S. dollar)</i>
<b>Year ended December 31,</b>				
2013	4.92	6.52	5.54	6.52
2014	6.54	8.56	8.23	8.55
2015	8.73	13.76	9.39	13.01
2016	13.07	16.04	14.78	15.85
2017	15.17	18.83	16.76	18.77
<b>Month</b>				
October 2017	17.33	17.51	17.40	17.40
November 2017	17.33	17.67	17.49	17.38
December 2017	17.26	18.83	17.70	18.77
January 2018	18.42	19.65	19.03	19.65
February 2018	19.47	20.16	19.84	20.12
March 2018	20.14	20.39	20.24	20.14
April 2018 <sup>(2)</sup>	20.15	20.22	20.18	20.16

Source: Central Bank

(1) Calculated using the average of the exchange rates on the last day of each month during the period (for annual periods), and the average of the exchange rates on each day during the period (for monthly periods).

(2) Through April 19, 2018.

No representation is made that peso amounts have been, could have been or could be converted into U.S. dollars at the foregoing rates on any of the dates indicated.

**Exchange Regulations**

Prior to December 1989, the Argentine foreign exchange market was subject to exchange controls. From December 1989 until April 1991, Argentina had a freely floating exchange rate for all foreign currency transactions, and the transfer of dividend payments in foreign currency abroad and the repatriation of capital were permitted without prior approval of the Central Bank. From April 1, 1991, when the Convertibility Law became effective, until December 21, 2001, when the Central Bank closed the foreign exchange market, the Argentine peso was freely convertible into U.S. dollars.

On December 3, 2001, the Argentine government imposed a number of monetary and currency exchange control measures through Decree 1570/01, which included restrictions on the free disposition of funds deposited with banks and tight restrictions on transferring funds abroad (including the transfer of funds to pay dividends) without the Central Bank's prior authorization subject to specific exceptions for transfers related to foreign trade.

In June 2003, the Argentine government set restrictions on capital flows that came into Argentina, which mainly consisted of a prohibition against the transfer abroad of any funds until 180 days after their entry into the country.

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On June 9, 2005, by means of Decree No. 616/2005, the Argentine Executive Branch established that (a) all inflows of funds into the domestic foreign exchange market arising from foreign debts incurred by individuals or entities of the private sector, excluding foreign trade financing and primary issuances of debt securities admitted to public offering and authorized to be listed and/or traded on self-regulatory markets; and (b) all inflows of funds of non-residents channeled through the local foreign exchange market to be applied to: holdings of local currency, acquisition of all types of financial assets or liabilities in the financial or non-financial private sector, to the exclusion of direct foreign investment and primary issuances of debt securities and shares admitted to public offering and authorized to be listed and/or traded in self-regulatory markets, and investments in Government securities acquired in secondary markets must meet the following requirements: (i) the funds entering the country may only be transferred out of the local foreign exchange market at the expiration of a term of 365 calendar days counted as beginning on the date the funds were received in Argentina; (ii) the proceeds of the foreign exchange settlement of the funds received in Argentina must be credited to an account in the local banking system; (iii) a registered, non-transferable and non-interest bearing deposit equivalent to 30% of the amount involved in the relevant transaction is to be maintained for a term of 365 calendar days in the conditions prescribed by the regulations (the Mandatory Deposit ); and (iv) the Mandatory Deposit is to be made in US dollars and held in a financial institution in Argentina. The Mandatory Deposit shall not accrue interest nor any other type of benefits and it shall not be used to secure credit facilities of any type. There are various exceptions to the requirements of Decree No. 616/2005, including but not limited to, those detailed below.

However, Resolution No. 3/2015 issued by the Ministry of Budget and Public Finances reduced the Mandatory Deposit percentage created by Decree No. 616/2005 from 30% to 0% and reduced the period in which the incoming funds must remain in Argentina from 365 calendar days to 120 calendar days. Moreover, in January 2017, the Ministry of Treasury reduced the holding period of the Mandatory Deposit from 120 calendar days to 0 calendar days. As a result of these two changes to the regulations, the Mandatory Deposit is currently not required.

On August 8, 2016, the Central Bank of the Argentine Republic ( BCRA or Central Bank ) established a new exchange rate regime through Communication A 6037, substantially modifying existing exchange regulations and facilitating access to the Free Single Exchange Market (Mercado Unico Libre de Cambios MULC ). On May 19, 2017, the Central Bank issued Communication A 6244 which, effective as of July 1, 2017, significantly modified and relaxed all the regulations that regulated the operation of the MULC. By virtue of this last Communication, all the rules that regulated the exchange operations were replaced by this new regulation, including among others- the exchange rate transaction, the general position of changes, the provisions adopted by Decree No. 616 / 05, and maintaining the validity of the norms related to information regimes, surveys or follow-ups related to such topics.

Recently, through Communication A 6401 of December 26, 2017, the Central Bank replaced the information regimes and surveys established by Communications A 3602 and A 4237 with a unified regime, applicable from the corresponding information as of December 31, 2017.

The information required will be used exclusively for statistical purposes, framed in the provisions of the Law on Statistics and Census No. 17.622. According to the new regime, individuals and legal entities, assets and other universal residents are subject (for example: trusts, joint ventures, business collaboration groups, cooperation consortiums or other plurilateral associative contracts), which are not included in the category of General Government according to the definition of the Sixth Edition of the Balance of Payments Manual of the International Monetary Fund.

Three sample levels are contemplated, whose participants will be determined each calendar year based on: 1) the sum of the flows of external assets and liabilities during the previous calendar year; and 2) the balance of holdings of external assets and liabilities at the end of the previous calendar year: a) Main sample: any individual or legal entity for which the sum of the flows of external assets and liabilities during the previous calendar year, or the balance of

external assets and liabilities at the end of that calendar year reaches or exceeds the equivalent of U.S.\$ 50 million; b) Secondary sample: any individual or legal entity for which the sum of the flows of external assets and liabilities during the previous calendar year, or the balance of external assets and liabilities at the end of that calendar year, is between the equivalent of U.S.\$ 10 million and U.S.\$ 50 million; and c) Complementary sample: any individual or legal entity for which the sum of the flows of external assets and liabilities during the previous calendar year, or the balance of external assets and liabilities at the end of that calendar year is between the equivalent of U.S.\$ 1 million and U.S.\$ 10 million. For the rest of the individuals or legal entities, the declaration will be optional. In the three samples, an annual declaration must be presented and, in the first case, an advance for each of the quarters. External assets and liabilities must be reported according to the following classification: (i) shares and equity interests; (ii) non-negotiable debt instruments; (iii) negotiable debt instruments; (iv) financial derivatives; and (v) land, structures and real estate.

As a result, as of the date of this annual report, the Argentine government has eliminated the restrictions on access to the MULC and there are no limitations for the repatriation of investments by non-residents, without prejudice to the fact that new exchange control policies could be established in the future.

Additionally, Decree No. 893 dated November 1, 2017, in order to improve the competitiveness of Argentine exports, make financing conditions more flexible and improve financial predictability, repealed the mandatory entry and settlement of export currencies, as well as the obligation to negotiate the currencies so that the exporter could have access to the collection of export refunds. In accordance with the aforementioned decree, Communication A 3636 of the Central Bank dated November 10, 2017 repealed the sections and other provisions related to the entry and settlement of foreign currency from exports.

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For more information regarding current foreign exchange restrictions and control regulations, you should seek advice from your legal advisors and read the applicable rules mentioned herein, as well as their amendments and complementary regulations, which are available at the website: <http://www.infoleg.gob.ar/>, or the Central Bank's website: [www.bcra.gov.ar](http://www.bcra.gov.ar), as applicable. Information contained on these websites is not part of, and shall not be deemed to be incorporated into, this annual report.

## **Risk Factors**

*The risks and uncertainties described below are those known by us as of the date of this report. However, such risks and uncertainties may not be the only ones that we could face. Additional risks and uncertainties that are unknown to us or that we currently think are immaterial also may impair our business operations.*

### **Risks Relating to Argentina**

***The Argentine Republic owns 51% of the shares of the Company.***

The Argentine Republic owns 51% of the shares of the Company (see Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government The Expropriation Law ), and consequently, the federal government is able to determine all matters requiring approval by a majority of shareholders, including the election of a majority of directors. We cannot assure you that the decisions taken by our controlling shareholder would not differ from your interests as a shareholder. In addition, according to the Argentine Constitution, presidential elections take place every four years. Accordingly, changes in government or its policies may occur. We cannot assure you if and when any such changes may occur, nor the impact they may have on our business.

***Our business is largely dependent upon economic conditions in Argentina.***

Most of our operations, properties and customers are located in Argentina, and, as a result, our business is to a large extent dependent upon economic conditions prevailing in Argentina. The changes in economic, political and regulatory conditions in Argentina and measures taken by the Argentine government have had and are expected to continue to have a significant impact on us. You should make your own assessment about Argentina and prevailing conditions in the country before taking an investment decision in us.

The Argentine economy has experienced significant volatility in past decades, including numerous periods of low or negative growth and high and variable levels of inflation and currency devaluation. No assurances can be given that the rate of growth experienced over past years will be achieved in subsequent years or that the national economy will not suffer recession. If economic conditions in Argentina were to slow down, or contract, if inflation were to accelerate further, or if the Argentine government's measures to attract or retain foreign investment and international financing in the future are unsuccessful, such developments could adversely affect Argentina's economic growth and in turn affect our financial health and results of operations.

Argentina has confronted and continues to confront inflationary pressures. According to inflation data published by the National Statistics Institute (*Instituto Nacional de Estadística y Censos*) ( INDEC ), in 2017 the Argentine alternative consumer price index ( CPI ) and the wholesale price index increased by 24.8% and 18.8%, respectively.

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Argentine economic conditions are dependent on a variety of factors, including, but not limited to, the following:

domestic production, international demand and prices for Argentina's principal commodity exports;

stability and competitiveness of the Argentine peso against foreign currencies;

competitiveness and efficiency of domestic industries and services;

levels of consumer consumption;

foreign and domestic investment and financing; and

the rate of inflation.

The Argentine economy is also sensitive to local political developments. Despite significant measures taken by the Argentine government that was elected on December 10, 2015, such as the elimination of exchange restrictions, the partial adjustment of gas and electricity prices and the elimination or reduction of export taxes for certain products, Argentina's economy continues to face challenges. Inflation remains a challenge for Argentina given its persistent nature in recent years. The Macri administration has announced its intention to reduce the primary fiscal deficit as a percentage of GDP over time and also reduce the Government's reliance on Central Bank financing. If, despite the measures adopted by the Macri administration, these measures fail to address Argentina's structural inflationary imbalances, the current levels of inflation may continue and have an adverse effect on Argentina's economy and, indirectly, our business, financial condition and results of operations. Inflation can also lead to an increase in the Republic's debt and have an adverse effect on the Republic's ability to service its debt, principally in the medium and long term when most inflation-indexed debt matures. In addition, weaker fiscal results could have a material adverse effect on the Government's ability to access long term financing, which, in turn, could adversely affect Argentina's economy and financial condition. Furthermore, considering the Government's current macroeconomic program, which has been and is also expected to require domestic and international financing, in the future, the Argentine Republic may not be able or willing to access international or domestic capital markets, and the Republic's ability to service its outstanding public debt could be adversely affected, and consequently adversely affect Argentina's economic and our financial health and results of operations. See Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations Macroeconomic conditions.

Argentina's economy is also vulnerable to adverse developments affecting its principal trading partners. A deterioration of economic conditions in Brazil, Argentina's main trading partner, and a deterioration of the economies of Argentina's other major trading partners, such as China or the United States, could have a material adverse impact on Argentina's balance of trade and adversely affect Argentina's economic growth and may consequently adversely affect our financial health and results of operations. Furthermore, a significant devaluation of the currencies of our trading partners or trade competitors may adversely affect the competitiveness of Argentina and consequently adversely affect Argentina's economic and our financial health and results of operations.



In 2005, Argentina restructured a substantial portion of its bond indebtedness with approximately 76% of its bondholders, and in 2006 it settled all of its debt with the International Monetary Fund ( IMF ). In June 2010, Argentina restructured additional defaulted bond indebtedness that was not swapped in 2005. As a result of the 2005 and 2010 debt swaps, over 92% of the bond indebtedness on which Argentina had defaulted in 2002 has been restructured ( Exchange Bonds ).

Certain holders of bonds that were not swapped in the debt restructuring sued Argentina for payment ( Holdout Bondholders ). After several years, in February 2016, Argentina negotiated and reached agreements in principle with respect to a substantial number of the Holdout Bondholders. On April 22, 2016, Argentina issued U.S.\$16.5 billion of new debt securities in the international capital markets, and applied U.S.\$9.3 billion to satisfy settlement payments on agreements with holders of approximately U.S.\$8.2 billion principal amount of defaulted bonds. The District Court ordered the vacatur of all *pari passu* injunctions upon confirmation of such payments. For additional information related to the evolution of the Argentine economy see Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations Macroeconomic conditions.

***Certain risks are inherent in any investment in a company operating in an emerging market such as Argentina.***

Argentina is an emerging market economy, and investing in emerging markets generally carries risks. These risks include political, social and economic instability that may affect Argentina's economic results which can stem from many factors, including the following:

high interest rates;

abrupt changes in currency values;

high levels of inflation;

exchange and capital controls;

wage and price controls;

regulations to import equipment and other necessities relevant for operations;

changes in governmental economic or tax policies; and

political and social tensions.

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In particular, we continue to actively manage our schedule of work, contracting, procurement and supply-chain activities to effectively manage costs. However, price levels for capital and exploratory costs and operating expenses associated with the production of crude oil and natural gas can be subject to external factors beyond our control including, among other things, the general level of inflation, commodity prices and prices charged by the industry's material and service providers, which can be affected by the volatility of the industry's own supply and demand for such materials and services. In the past, we and the oil and gas industry generally experienced an increase in certain costs that exceeded the general trend of inflation.

Any of these factors, as well as volatility in the capital and foreign exchange markets, may adversely affect our financial condition and results of operations or the liquidity, trading markets and value of our securities.

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***The Argentine economy has been adversely affected by economic developments in other markets.***

Financial and securities markets in Argentina, and also the Argentine economy, are influenced by economic and market conditions in other markets worldwide. Argentina's economy remains vulnerable to external shocks, including those relating to a potential trade war between China and the United States. Although economic conditions vary from country to country, investors' reactions to events occurring in one country sometimes demonstrate a contagion effect in which an entire region or class of investment is disfavored by international investors. Consequently, there can be no assurance that the Argentine financial system and securities markets will not continue to be adversely affected by events in developed countries' economies or events in other emerging markets, which could in turn, adversely affect the Argentine economy and, indirectly, our business, financial condition and results of operations, and the market value of our ADSs.

***The implementation of new export duties, other taxes and import regulations could adversely affect our results.***

Although the Argentine government recently eliminated export taxes to hydrocarbon products, including crude oil, in the past, the Argentine government established export taxes on certain hydrocarbon products. See Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government Market Regulation.

We cannot assure you that taxes and import regulations of this nature will not be reinstated or modified in the future or that other new taxes or import regulations will not be imposed.

***We may be exposed to fluctuations in foreign exchange rates.***

Our results of operations are exposed to currency fluctuations, and any devaluation of the peso against the U.S. dollar and other hard currencies may adversely affect our business and results of operations. The value of the peso has fluctuated significantly in the past, such as in January 2014 when the Argentine peso declined approximately 23% against the U.S. dollar and in December 2015 when the Argentine peso declined approximately 40% against the U.S. dollar. The peso may fluctuate in the future. See Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations Macroeconomic conditions for additional information. The main effects of the devaluation of the Argentine peso on our net income are related to the accounting treatment of (i) deferred income tax related mainly to fixed assets, which we expect would have a negative effect; (ii) current income tax, which we expect would have a positive effect; (iii) increased depreciation and amortization resulting from the remeasurement in pesos of our fixed and intangible assets; (iv) exchange rate differences as a result of our exposure to the peso, which we expect would have a positive effect due to the fact that our functional currency is the U.S. dollar and (v) higher revenues because domestic prices in Argentina for our main products are based on international prices (See Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations Macroeconomic conditions. ). In addition, regarding our financial position the majority of our debt is denominated in currencies other than the peso; consequently, a devaluation of the peso against such currencies will increase the amount of pesos we need to cope with in the terms of loans.

We are unable to predict whether, and to what extent, the value of the peso may further depreciate or appreciate against the U.S. dollar and how any such fluctuations could affect our business.

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**Table of Contents*****Variations in interest rates and exchange rate on our current and/or future financing arrangements may result in significant increases in our borrowing costs.***

Under our financing arrangements, we are permitted to borrow funds to finance the purchase of assets, incur capital expenditures, repay other obligations and finance working capital. As of December 31, 2017, approximately 22% of our total debt is sensitive to changes in interest rates, mainly those prevailing in the domestic market. See Item 11. Quantitative and Qualitative Disclosures about Market Risk Interest rate exposure. Consequently, variations in interest rates could result in significant changes in the amount required to cover our debt service obligations and in our interest expense, thus affecting our results and financial condition. In addition, interest and principal amounts payable pursuant to debt obligations denominated in or indexed to U.S. dollars are subject to variations in the Argentine peso/U.S. dollar exchange rate that could result in a significant increase in peso terms in the amount of the interest and principal payments in respect of such debt obligations.

***We could be subject to exchange and capital controls.***

In the past, Argentina imposed exchange controls and transfer restrictions substantially limiting the ability of companies to retain foreign currency or make payments abroad. Beginning in 2011, additional foreign exchange controls have been imposed that restrict or limit purchases of foreign currency and transfers of foreign currency abroad. Since 2011, oil and gas companies (including YPF), among other entities, were required to repatriate 100% of their foreign currency export receivables. See Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government Repatriation of Foreign Currency. In December 2015, the new administration eliminated certain exchange controls imposed by the previous administration, such as (i) the requirement that foreign currency be deposited and exchanged in Argentina in respect of finance transactions outside Argentina, and (ii) the requirement that 30% of funds in U.S. dollars held in Argentina be frozen pursuant to Decree No. 616/05. Following these changes, the peso fell to Ps. 12.99 per U.S.\$1.00, as of December 31, 2015, a decrease of approximately 52% compared to December 31, 2014. Between December 16, 2015 and December 31, 2015, the peso decreased approximately 40% against the U.S. dollar. As of April 19, 2018, the peso fell to Ps. 20.16 per U.S.\$1.00, an increase of approximately 7.4% compared to December 31, 2017. There can be no assurance that future regulatory changes related to exchange and capital controls will not adversely affect our financial condition or results of operations, our ability to meet our obligations denominated in foreign currency or our ability to execute our financing and capital expenditure plans.

***Our access to international capital markets and the market price of our shares are influenced by the perception of risk in Argentina and other emerging economies.***

International investors consider Argentina to be an emerging market. Economic and market conditions in other emerging market countries, especially those in Latin America, influence the market for securities issued by Argentine companies. Volatility in securities markets in Latin America and in other emerging market countries may have a negative impact on the trading value of our securities and on our ability and the terms on which we are able to access international capital markets. Moreover, regulatory and policy developments in Argentina that occurred in recent years, including the enactment of the Expropriation Law, as well as the litigation of the Argentine government with Holdout Bondholders have led to considerable volatility in the market price of our shares and ADSs. See Our business is largely dependent upon economic conditions in Argentina. We cannot assure that the perception of risk in Argentina and other emerging markets may not have a material adverse effect on our ability to raise capital, including our ability to refinance our debt at maturity, which would negatively affect our investments plans and consequently our financial condition and results of operations, and also have a negatively impact on the trading values of our debt or equity securities. We can give no assurance as to potential adverse impact of the factors discussed above on our financial condition and/or results of operations. See Item 4. Information on the Company History and Development of YPF.

## **Risks Relating to Our Business**

### *We are exposed to the effects of fluctuations in the prices of oil, gas and refined products.*

Most of our revenue in Argentina is derived from sales of refined products (mainly gasoline and diesel) and, to a lesser extent, natural gas. International prices for oil and oil products are volatile and, since the recent liberalization of the domestic market, the prices of our oil products, are strongly influenced by conditions and expectations of world supply and demand, among other factors. Volatility and uncertainty in international prices for crude oil, oil products will most likely continue.

After the above mentioned recent liberalization of the domestic market, our pricing policy of fuels depends on several factors such as international crude oil prices, international refining spreads, processing and distribution costs, biofuel prices, exchange currencies, local demand and supply, competition, stocks, local taxation, and domestic margins for our products, among others. Notwithstanding our expectation to substantially maintain our domestic prices with reference to those in international markets (see Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations Macroeconomic conditions ), we cannot assure you that other factors that are also considered into account in our pricing policy as mentioned before, lead us not to completely reflect import parity prices in our domestic prices, thus affecting our business, results of operations and financial condition. In addition, substantial or extended declines in international crude oil prices or its derivatives, , may also have a material adverse effect on our business, results of operations and financial condition.

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In terms of investments, we budget capital expenditures related to exploration, development, refining and distribution activities by considering, among other things, current and expected local and international market prices for our hydrocarbon products. The Argentine government has adopted a policy geared towards the convergence between domestic prices for crude oil and related products and international benchmark prices for such products. This convergence finally occurred during the second semester of 2017 (see Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations Macroeconomic conditions ). The international price of crude oil has fluctuated significantly in the past and if crude oil prices in the domestic market drop for an extended period (or if prices for certain products do not match cost increases), this could cause reduce the economic viability of our drilling projects. These reductions could lead to changes to our development plans, which could lead to the loss of proved developed reserves and proved undeveloped reserves, and could also adversely affect our ability to improve our hydrocarbon recovery rates, find new reserves, develop unconventional resources and carry out certain of our other capital expenditure plans. In turn, this change in conditions could have an adverse effect on our financial condition and results of operations. Additionally, they could also have an impact on our operating assumptions and estimates and, as a result, affect the recovery value of certain assets.

Furthermore, we may be required to further write down the carrying value of our properties if estimated oil prices decline or if we have substantial downward adjustments to our estimated proved reserves, increases in our operating costs, increases in the discount rate of return, among others. See additionally Item 5. Operating and Financing Review and Prospects Critical Accounting Policies for information regarding our sensitivity analysis related to impairment. In addition, if a reduction in our capital expenditures materializes, including the capital expenditures of our domestic competitors, it would likely have a negative impact on the number of active drilling rigs, workovers and pulling equipment in Argentina, including related services, thus affecting the number of active workers in the industry. We are unable to predict whether, and to what extent, the potential consequences of such measures could affect our business, have an impact on our production and consequently affect our financial condition and results of operations.

***Our domestic operations are subject to extensive regulation.***

The Argentine oil and gas industry is subject to government regulation and control. As a result, our business is to a large extent dependent upon regulatory and political conditions prevailing in Argentina and our results of operations may be adversely affected by regulatory and political changes in Argentina.

In addition, until recently domestic prices for crude oil and certain oil products were not closely co-related or linked to those prevailing in international market. The Argentine government has adopted a policy geared towards the convergence between domestic prices for crude oil and related products and international benchmark prices for such products. This convergence finally occurred during the second semester of 2017 (see Limitations on local pricing in Argentina may adversely affect our results of operations and Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations Macroeconomic conditions ). Therefore, we may face risks and challenges relating to government regulation and control of the energy sector, including those set forth below and elsewhere in these risk factors:

limitations on our ability to increase local prices or to reflect the effects of higher domestic taxes, increases in production costs or increases in international prices of crude oil and other hydrocarbon fuels and exchange rate fluctuations on our domestic prices. See Limitations on local pricing in Argentina may adversely affect our results of operations ;

new export duties, similar taxes or regulations on imports;

limitations on hydrocarbon export volumes, driven mainly by the requirement to satisfy domestic demand;

in connection with the Argentine government's policy to provide absolute priority to domestic demand, regulatory orders to supply natural gas and other hydrocarbon products to the domestic retail market in excess of previously contracted amounts. See Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government Market Regulation Natural gas ;

in connection with the former and current incentive programs established by the Argentine government for the oil and gas industry, such as the Natural Gas Additional Injection Stimulus Program and the Investment in Natural Gas Production from Non-Conventional Reservoirs Stimulus Program ( Gas Plan ) (see A significant percentage of our cash flow from operations is derived from counterparties that are governmental entities ) and cash collection of balances with the Argentine government;

legislation and regulatory initiatives relating to hydraulic stimulation and other drilling activities for unconventional oil and gas hydrocarbons, which could increase our cost of doing business or cause delays and adversely affect our operations;

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restrictions on imports of products which could affect our ability to meet our delivery commitments or growth plans, as the case may be; and

the implementation or imposition of stricter quality requirements for petroleum products in Argentina. In past years, the Argentine government has made certain changes in regulations and policies governing the energy sector to give absolute priority to domestic supply at stable prices in order to sustain economic recovery. As a result of the above-mentioned changes, for example, on days during which a gas shortage occurs, exports of natural gas (which are also affected by other government curtailment orders) and the provision of gas supplies to industries, electricity generation plants and service stations selling compressed natural gas are interrupted for priority to be given to residential consumers at lower prices. The Expropriation Law has declared achieving self-sufficiency in the supply of hydrocarbons as well as in the exploitation, industrialization, transportation and sale of hydrocarbons, a national public interest and a priority for Argentina. In addition, its stated goal is to guarantee socially equitable economic development, the creation of jobs, the increase of the competitiveness of various economic sectors and the equitable and sustainable growth of the Argentine provinces and regions. See Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government The Expropriation Law, and Risks Relating to Argentina The Argentine Republic owns 51% of the shares of the Company. Moreover, we cannot assure you that changes in applicable laws and regulations, or adverse judicial or administrative interpretations of such laws and regulations, will not adversely affect our results of operations. See Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government.

***Limitations on local pricing in Argentina may adversely affect our results of operations.***

In the past, due to regulatory, economic and government policy factors, our domestic gasoline, diesel, natural gas and other fuel prices have differed substantially from prevailing international and regional market prices for such products, and our ability to increase prices in connection with international price increases or domestic cost increases, including those resulting from the peso devaluation, has been limited from time to time. In January 2017, the Argentine government adopted a policy geared towards the convergence between domestic prices for crude oil and related products and international benchmark prices for such products and in October 2017 eliminated the price-setting system for domestically-consumed fuel, which led to the current free float of fuel prices. (see Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations Macroeconomic conditions ). After the above mentioned recent liberalization of the domestic market, our pricing policy of fuels depends on several factors such as international crude oil prices, international refining spreads, processing and distribution costs, biofuel prices, exchange currencies, local demand and supply, competition, stocks, local taxation, and domestic margins for our products, among others. Notwithstanding our expectation to substantially maintain our domestic prices with reference to those in international markets (see Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations Macroeconomic conditions ), we cannot assure that we will be successful in implementing this policy, as a result of different factors (such as, among others, strong competition or new regulatory or potential legal limitations).

Regarding natural gas markets, revenues we obtain as a result of selling natural gas in Argentina (including amounts received through the Gas Plan, see Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government Market Regulation Natural gas ) are subject to government regulations and could be negatively affected, principally considering the evolution of gas prices for residential consumers which in turn are still subject to subsidies. In addition, a new stimulus program for natural gas production from non-conventional reservoirs was created (see Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government MINEM Resolution No. 46/2017 ). The prices that we are able to obtain for our hydrocarbon products affect the viability of investments in new exploration, development and refining and, as a result, the timing and amount of our projected capital expenditures for such purposes. We budget capital



expenditures by taking into account, among other things, market prices for our hydrocarbon products. For additional information on domestic pricing for our products, see Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government Market Regulation.

***A significant percentage of our cash flow from operations is derived from counterparties that are governmental entities.***

In the normal course of business, and considering that we are the primary oil and gas company in Argentina, our portfolio of clients and suppliers includes both private sector and governmental entities. All material transactions and balances with related parties as of December 31, 2017 are set forth in Note 31 to the Audited Consolidated Financial Statements, including those related to the Natural Gas Additional Injection Stimulus Program. As of December 31, 2017, the accounts receivable balance corresponding to the Natural Gas Additional Injection Stimulus Program reflects twelve months of accrued, unpaid payments, representing Ps. 13.4 billion. As of the date of this annual report, we have not received additional payments related to amounts accrued and unpaid as of December 31, 2017 under such programs. See additionally Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government MINEM Resolution No. 97/2018. . If certain governmental counterparties were (i) not able to pay or redeem such accrued amounts in cash or cash equivalents, or (ii) only able to make such payments or redemptions through delivery of financial instruments which may delay collection of working capital payments in excess of our estimates, our financial condition and results of operations could be adversely affected.

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*We are subject to direct and indirect import and export restrictions, which have affected our results of operations and caused us to declare force majeure under certain of our export contracts.*

The Argentine Hydrocarbons Law No. 17,319, allows for hydrocarbon exports as long as they are not required for the domestic market and are sold at reasonable prices. In the case of natural gas, Law No. 24,076 and related regulations require that the needs of the domestic market be taken into account when authorizing long-term natural gas exports.

During the last several years, the Argentine authorities have adopted a number of measures that have resulted in restrictions on exports of natural gas from Argentina. Due to the foregoing, we have been obliged to sell a part of our natural gas production previously destined for the export market in the local Argentine market and have not been able to meet our contractual gas export commitments in whole or, in some cases, in part, leading to disputes with our export clients and forcing us to declare force majeure under our export sales agreements. We believe that the measures mentioned above constitute force majeure events, although no assurance can be given that this position will prevail.

See Item 4. Information on the Company Exploration and Production Delivery commitments Natural gas supply contracts, Item 4. Information on the Company Exploration and Production The Argentine natural gas market, and Item 8. Financial Information Legal Proceedings.

Crude oil exports, as well as the export of most of our hydrocarbon products, currently required prior authorization from the Argentine Secretariat of Energy pursuant to the regime established under S.E. Resolution No. 241-E/17, as amended and supplemented by other regulation. Oil companies seeking to export crude oil or LPG must first demonstrate that the local demand for such product is satisfied or that an offer to sell the product to local purchasers has been made and rejected. Oil refineries seeking to export diesel must also first demonstrate that the local demand for diesel is duly satisfied.

In addition, on March 21, 2017, Decree No. 192/2017 was published in the Official Gazette of the Republic of Argentina, which created the Oil and its Byproducts Import Operations Registry (the Registry), and set forth that the MINEM (through the Secretariat of Hydrocarbon Resources) would be responsible controlling the Registry. The Registry involved import operations of: (i) crude oil and (ii) certain other specific byproducts listed in section 2 of the decree. By means of this regulation, any company that wished to perform such import operations was obligated to register such operation in the Registry and to obtain authorization from MINEM before the import took place.. According to this decree, MINEM had to set the methodology applicable to issue import authorizations, which will be based in the following criteria: (a) lack of crude oil with the same characteristics offered in the domestic market; (b) lack of additional treatment capacity in domestic refineries with domestic crude oil; and (c) lack of byproducts listed in section 2 of the decree offered in the domestic market. This regime exempted any import by CAMMESA in order to supply power plants with the main purpose of technical supply to the Inter-connection Argentinean System (Sistema Argentino de Interconexión or SADI). On November 24, 2017, Decree No. 962/2017 was published in the Official Gazette amending Decree No. 192/2017 by providing that the Registry would be in effect until December 31, 2017. Decree No. 962/2017 provided that the need for the Registry was temporary and therefore, since December 31, 2017, the import operations related to crude oil, gasoline, and diesel oil included in Decree No. 192/2017 are no longer subject to registration.

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We are unable to predict how long these restrictions will be in place, or whether any further measures will be adopted that adversely affect our ability to export or import gas, crude oil and diesel or other products and, accordingly, our results of operations.

***Our reserves and production are likely to decline.***

Most of our existing oil and gas producing fields in Argentina are mature and, as a result, our reserves and production are likely to decline as reserves are depleted. Our production decreased in 2017 compared to 2016 by 3.9% and our reserves replacement ratio (increases in reserves in the year, net divided by the production of the year) was 9% in 2017, compared to 46% in 2016.

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We face certain challenges in order to replace our proved reserves with other categories of hydrocarbons. However, the continuous comprehensive technical review of our oil and gas fields allows us to identify opportunities to rejuvenate mature fields and optimize new field developments in Argentine basins with the aim of achieving results similar to those achieved by mature fields in other regions of the world (which have achieved substantially higher recovery factors with the application of new technology). Additionally, we have been completing the renewal of most of our concessions, allowing us to develop certain strategic projects related to water-flooding, enhanced oil recovery and unconventional resources, which represent an important opportunity not only for us but also for Argentina. We expect that unconventional development will require higher investment in future years, principally in connection with the Vaca Muerta formation. These investments are expected to yield economies of scale, de risk undeveloped acreage and to significantly increase recovery rates from this resource play. Other resource plays, unconventional prospects, exist in Argentina and have positioned the country amongst the most attractive in terms of worldwide unconventional resource potential. Nevertheless, the financial viability of these investments and reserve recovery efforts will generally depend on the prevailing economic and regulatory conditions in Argentina, as well as the market prices of hydrocarbon products, and are also subject to material risks inherent to the oil and gas industry and may prove unsuccessful. See Our business plan includes future drilling activities for unconventional oil and gas reserves, such as shale oil and gas extraction, and if we are unable to successfully acquire and use the necessary new technologies and other support as well as obtain financing and venture partners, our business may be adversely affected.

***Our oil and natural gas reserves are estimates.***

Our oil and gas proved reserves are estimated using geological and engineering data to determine with reasonable certainty whether the crude oil or natural gas in known reservoirs is recoverable under existing economic and operating conditions. The accuracy of proved reserve estimates depends on a number of factors, assumptions and variables, some of which are beyond our control. Factors susceptible to our control include drilling, testing and production after the date of the estimates, which may require substantial revisions to reserves estimates; the quality of available geological, technical and economic data used by us and our interpretation thereof; the production performance of our reservoirs and our recovery rates, both of which depend in significant part on available technologies as well as our ability to implement such technologies and the relevant know-how; the selection of third parties with which we enter into business; and the accuracy of our estimates of initial hydrocarbons in place, which may prove to be incorrect or require substantial revisions. Factors mainly beyond our control include changes in prevailing oil and natural gas prices, which could have an effect on the quantities of our proved reserves (since the estimates of reserves are calculated under existing economic conditions when such estimates are made); changes in the prevailing tax rules, other government regulations and contractual conditions after the date estimates are made (which could make reserves no longer economically viable to exploit); and certain actions of third parties, including the operators of fields in which we have an interest.

Information on net proved reserves as of December 31, 2017, 2016 and 2015 was calculated in accordance with SEC rules and FASB's ASC 932, as amended. Accordingly, crude oil prices used to determine reserves were calculated each month, for crude oils of different quality produced by us.

As previously discussed, the Argentine government has adopted a policy geared towards the convergence between domestic prices for crude oil and related products and international benchmark prices for such products. This convergence finally occurred during the second semester of 2017. See Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations Macroeconomic conditions . Accordingly, for calculations of our net proved reserves as of December 31, 2017, we considered the realized prices for crude oil in the domestic market, taking into account the unweighted average price for each month within the twelve-month period ending December 31, 2017.

The international price of crude oil has fluctuated significantly in the past. If these prices decrease significantly in the future, our future calculations of estimated proved reserves would be based on lower prices. This could result in our having to remove non-economic reserves from our proved reserves in future periods. Holding all other factors constant, if commodity reference prices used in our year-end reserve estimates were decreased by 10% for crude oil, our total proved reserves as of December 31, 2017 would decrease by approximately 12.3%. Furthermore, holding all other factors constant, if costs used in our year-end reserve estimates were increased by 10% for crude oil and natural gas, our total proved reserves as of December 31, 2017 would decrease by approximately 11.7%. In addition, as a result of the prices used to calculate the present value of future net revenues from our proved reserves, in accordance with SEC rules, which are similar to the calculation of proved reserves described above, the present value of future net revenues from our proved reserves will not necessarily be the same as the current market value of our estimated crude oil and natural gas reserves.

As a result of the foregoing, measures of reserves are not precise and are subject to revision. Any downward revision in our estimated quantities of proved reserves could adversely impact our financial results by leading to increased depreciation, depletion and amortization charges or impairment, which could reduce earnings and shareholders' equity. See We are exposed to the effects of fluctuations in the prices of oil, gas and oil products

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**Table of Contents*****Oil and gas activities are subject to significant economic, environmental and operational risks.***

Oil and gas exploration and production activities are subject to particular economic and industry-specific operational risks, some of which are beyond our control, such as production, equipment and transportation risks, as well as natural hazards and other uncertainties, including those relating to the physical characteristics of onshore and offshore oil or natural gas fields. Our operations may be curtailed, delayed or cancelled due to bad weather conditions, mechanical difficulties, shortages or delays in the delivery of equipment, compliance with governmental requirements, fire, explosions, blow-outs, pipe failure, abnormally pressured formations, and environmental hazards, such as oil spills, gas leaks, ruptures or discharges of toxic gases. In addition, we operate in politically sensitive areas where the native population has interests that from time to time may conflict with our production or development objectives. If these risks materialize, we may suffer substantial operational losses and disruptions to our operations and harm to our reputation. Additionally, if any operational incident occurs that affects local communities and ethnic communities in nearby areas, we will need to incur in additional costs and expenses in order to return affected areas to normality and to compensate for any damages we may cause. These additional costs may have a negative impact on the profitability of the projects we may decide to undertake. Drilling may be unprofitable, not only with respect to dry wells, but also with respect to wells that are productive but do not produce sufficient revenues to return a profit after drilling, operating and other costs are taken into account.

Furthermore, historically our results have been subject to seasonal fluctuations during the year, particularly as a result of increased demand for natural gas during the colder winter months. In the fourth quarter of 2017, an unusually lower natural gas demand forced us to reduce natural gas output. We could be subject to seasonal fluctuations in our sales volumes and consequently our level of natural gas production could be negatively affected. (See Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations Seasonality. )

***Our business plan includes future drilling activities for unconventional oil and gas reserves, such as shale oil and gas extraction, and if we are unable to successfully acquire and use the necessary new technologies and other support as well as obtain financing and venture partners, our business may be adversely affected.***

Our ability to execute and carry out our business plan depends upon our ability to obtain financing at a reasonable cost and on reasonable terms. We have identified drilling locations and prospects for future drilling opportunities of unconventional oil and gas reserves, such as the shale oil and gas in the Vaca Muerta formation. These drilling locations and prospects represent a part of our future drilling plans. Our ability to drill and develop these locations depends on a number of factors, including seasonal conditions, regulatory approvals, negotiation of agreements with third parties, commodity prices, costs, access to and availability of equipment, services and personnel and drilling results. In addition, the drilling and exploitation of unconventional oil and gas reserves depends on our ability to acquire the necessary technology and hire personnel and other support needed for extraction or obtain financing and venture partners to develop such activities. Furthermore, in order to implement our business plan, including the development of our oil and natural gas exploration activities and the development of refining capacity sufficient to process increasing production volumes, we will need to raise significant amounts of debt capital in the financial and capital markets. We cannot guarantee that we will be able to obtain the necessary financing or obtain financing in the international or local financial markets at reasonable cost and on reasonable terms to implement our new business plan or that we would be able to successfully develop our oil and natural gas reserves and resources (mainly those related to our unconventional oil and gas business plan). Because of these uncertainties, we cannot give any assurance as to the timing of these activities or that they will ultimately result in the realization of proved reserves or meet our expectations for success, which could adversely affect our production levels, financial condition and results of operations.



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***We may not have sufficient insurance to cover all the operating hazards to which we are subject.***

As discussed under Oil and gas activities are subject to significant economic, environmental and operational risks and We may incur significant costs and liabilities related to environmental, health and safety matters, our exploration and production operations are subject to extensive economic, operational, regulatory and legal risks. We maintain insurance covering us against certain risks inherent in the oil and gas industry in line with industry practice, including loss of or damage to property and equipment, control-of well incidents, loss of production or income incidents, removal of debris, sudden and accidental seepage pollution, contamination and clean up and third-party liability claims, including personal injury and loss of life, among other business risks. However, our insurance coverage is subject to deductibles and limits that in certain cases may be materially exceeded by our liabilities. In addition, certain of our insurance policies contain exclusions that could leave us with limited coverage in certain events. See Item 4. Information on the Company Insurance. In addition, we may not be able to maintain adequate insurance at rates or on terms that we consider reasonable or acceptable or be able to obtain insurance against certain risks that materialize in the future. If we experience an incident against which we are not insured, or the costs of which materially exceed our coverage, it could have a material adverse effect on our business, financial condition and results of operations.

***Argentine oil and gas production concessions and exploration permits are subject to certain conditions and may be cancelled or not renewed.***

As modified by Law No. 27,007, the Hydrocarbons Law provides for oil and gas concessions to remain in effect for 25 years as from the date of their award, 35 years for unconventional concessions and 30 years for offshore concessions. It further provides that concession terms may be extended for periods of up to 10 years each. The authority to extend the terms of current and new permits, concessions and contracts has been vested in the governments of the provinces in which the relevant area is located (and the federal government in respect of offshore areas beyond 12 nautical miles). In order to be eligible for an extension of a concession, under the modifications of Law No. 27,007, concessionaires must (i) have complied with their obligations, (ii) be producing hydrocarbons in the concession under consideration and (iii) submit an investment plan for the development of such areas as requested by the competent authorities up to a year prior to the termination of each term of the concession. Under the Hydrocarbons Law, non-compliance with the obligations and standards set out therein may also result in the imposition of fines and in the case of material breaches, following the expiration of applicable cure periods, the revocation of the concession or permit.

We cannot provide assurances that any of our concessions will be extended as a result of the consideration by the relevant authorities of the investment plans we would submit in the future for the development of the areas as of the date of requesting the extension periods for our relevant areas, or other requirements will not be imposed on us in order to obtain extensions as of the date of expiration. Additional royalty payments of 3%, up to a maximum of 18%, are provided for in extensions under Law No. 27,007. The termination of, or failure to obtain the extension of, a concession or permit, or its revocation, could have a material adverse effect on our business and results of operations.

***Our acquisition of exploratory acreage and crude oil and natural gas reserves is subject to heavy competition.***

We face intense competition in bidding for crude oil and natural gas production areas, especially those areas with the most attractive crude oil and natural gas reserves. As a result, the conditions under which we are able to access new exploratory or productive areas could be adversely affected. In addition, fewer offerings of exploratory acreages available to be bid upon could affect our future results.

***We may incur significant costs and liabilities related to environmental, health and safety matters.***



Operations in the oil and gas industry in which we participate, including those related to our mining and use of sand for purposes of our oil and gas operations, are subject to a wide range of environmental, health and safety laws and regulations in the countries in which we operate. These laws and regulations have a substantial impact on our operations and those of our subsidiaries, and could result in material adverse effects on our financial position and results of operation. In addition, we or YPF Holdings, our wholly-owned subsidiary, may have certain environmental liabilities through certain subsidiaries. See We may be responsible for significant costs and liabilities depending on the outcome of the reorganization proceedings involving our YPF Holdings subsidiaries and the alter ego claims. A number of events related to environmental, health and safety matters, including changes in applicable laws and regulations, adverse judicial or administrative interpretations of such laws and regulations, changes in enforcement policy, the occurrence of new litigation or development of pending litigation, and the development of information concerning these matters, could result in new or increased liabilities, capital expenditures, reserves, losses and other impacts that could have a material adverse effect on our financial condition and results of operations. In addition, the Company's sand mining operations and hydraulic stimulation may result in silica-related health issues and litigation that could have a material adverse effect on the Company in the future. See Item 8. Financial Information Legal Proceedings and Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government Argentine Environmental Regulations.

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Environmental, health and safety regulation and jurisprudence in Argentina is developing at a rapid pace and no assurance can be provided that such developments will not increase our cost of doing business and liabilities, including with respect to drilling and exploitation of our unconventional oil and gas reserves. In addition, due to concern over the risk of climate change, a number of countries have adopted, or are considering the adoption of, new regulatory requirements to reduce greenhouse gas emissions, such as carbon taxes, increased efficiency standards or the adoption of cap and trade regimes. Argentina recently issued new rules which began to phase-in more stringent regulations to lower the amount of sulfur contained in diesel and gasoline fuels that will result in an increase in our investments and relative costs for such production in following years, thus potentially affecting our results of operations depending on the future prices of fuels. Furthermore, if additional requirements were adopted in Argentina, these requirements could make our products more expensive as well as shift hydrocarbon demand toward relatively lower-carbon sources such as renewable energies.

Furthermore, water is an essential component of both the drilling and hydraulic fracturing processes. Consequently, the Company regularly disposes of the fluids produced from oil and gas production operations directly or through the use of third party vendors. Increased regulation or limitations to the use of water for our operations, or increased scrutiny or limitations on the injection of produced water through injection wells (which could also result in increased litigation), could adversely affect our operation and our financial condition.

***We may be responsible for significant costs and liabilities depending on the outcome of the reorganization proceedings involving our YPF Holdings subsidiaries and the alter ego claims.***

As discussed in Note 27 to the Audited Consolidated Financial Statements, on June 17, 2016, Maxus Energy Corporation, Tierra Solutions Inc., Maxus International Energy Company, Maxus (US) Exploration Company and Gateway Coal Company (collectively, the Maxus Entities ), subsidiaries of YPF Holdings, Inc., filed for reorganization proceedings in Wilmington, Delaware under Chapter 11 of the U.S. Bankruptcy Code. In conjunction with those proceedings, the Maxus Entities entered into an agreement with YPF along with its subsidiaries YPF Holdings Inc., CLH Holdings Inc., YPF International S.A. and YPF Services USA Corp (collectively, the YPF Entities ) to settle any and all claims held by Maxus against the YPF Entities, including any alter ego claims, all of which claims the YPF Entities believe are without merit, and to release the YPF entities of any and all claims held by the Maxus Entities (the Agreement ).

The Agreement provided for a payment of U.S.\$130 million to the Maxus Entities ( Settlement Payment ) and for the provision of a U.S.\$63.1 million debtor-in-possession loan ( DIP Loan ) by YPF Holdings Inc.

However, on March 28, 2017 the Maxus Entities and the Creditors Committee submitted an alternative restructuring plan (the Alternative Plan ) which does not include the Agreement with the YPF Entities. Under the Alternative Plan, a Liquidating Trust may submit alter ego claims and any other claim belonging to the insolvent s estate against the Company and the YPF Entities. The liquidating trust would be financed by Occidental Chemical Corporation in its capacity as creditor of the Maxus Entities. As YPF did not approve such Alternative Plan and the Alternative Plan did not contemplate the implementation of the originally submitted Agreements, on April 10, 2017 YPF Holdings, Inc. sent a note giving notice that this situation constituted an event of default under the loan granted under the Agreement with YPF and the YPF Entities.

Together with the approval of the financing offered by Occidental ( Pospetition DIP Facility ) under the Alternative Plan, the Judge ordered the repayment of the outstanding amounts (approximately US\$12.2 million) under the terms of the DIP Loan, which were subsequently received.

On May 22, 2017, the Bankruptcy Court of the Delaware District issued an order confirming the Alternative Plan submitted by the Creditors Committee and the Maxus Entities. The effective date of the Alternative Plan was July 14, 2017, as the conditions set forth in Article XII.B of the Alternative Plan were met. On July 14, 2017, a Liquidating Trust was also created. The Liquidating Trust stated to the Bankruptcy Court that it intends to file claims in 2018.

Depending on the final outcome of these matters, including the alter ego claims, our financial condition and results of operation could be materially and adversely affected. See Item 8. Financial Information Legal Proceedings.

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***We face risks relating to certain legal proceedings.***

As described under Item 8. Financial Information Legal Proceedings, we are party to a number of labor, commercial, civil, tax, criminal, environmental and administrative proceedings that, either alone or in combination with other proceedings, could, if resolved in whole or in part adversely to us, result in the imposition of material costs, fines, judgments or other losses. While we believe that we have provisioned such risks appropriately based on the opinions and advice of our external legal advisors and in accordance with applicable accounting rules, certain loss contingencies, particularly those relating to environmental matters, are subject to change as new information develops and it is possible that losses resulting from such risks, if proceedings are decided in whole or in part adversely to us, could significantly exceed any accruals we have provided.

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In addition, we may be subject to undisclosed liabilities related to labor, commercial, civil, tax, criminal or environmental contingencies incurred by businesses we acquire as part of our growth strategy, that we may not be able to identify or that may not be adequately indemnified under our acquisition agreements with the sellers of such businesses, in which case our business, financial condition and results of operation may be materially and adversely affected.

***Our business depends to a significant extent on our production and refining facilities and logistics network.***

Our oil and natural gas field facilities, refineries and logistics network are our principal production facilities and distribution network on which a significant portion of our revenues depends. Although we insure our properties on terms we consider prudent and have adopted and maintain safety measures, any significant damage to, accident or other production stoppage at our facilities or network could materially and adversely affect our production capabilities, financial condition and results of operations.

For instance, on April 2, 2013, our facilities in the La Plata refinery were hit by a severe and unprecedented storm, recording over 400 mm of rainfall. The rainfall set a new record for the area and disrupted refinery systems, causing a fire that affected the Coke A and Topping C units in the refinery. This incident temporarily affected the crude processing capacity of the refinery, which had to be stopped entirely during certain days.

In addition, on March 21, 2014, a fire occurred at the Cerro Divisadero crude oil treatment plant, located 20 kilometers from the town of Bardas Blancas in the province of Mendoza. The Cerro Divisadero plant, which has six tanks, four of which are for processing and two are for dispatch of treated crude oil, concentrates the production of ten fields in the Malargue area. This constitutes a daily production of approximately 9,200 barrels of oil as of the date of the incident. The new oil treatment plant was put into production in December 2016.

***We could be subject to organized labor action.***

Our operations have been affected by organized work disruptions and stoppages in the past and we cannot assure you that we will not experience them in the future, which could adversely affect our business and revenues, especially in the context of activity reduction. Labor demands are commonplace in Argentina's energy sector and unionized workers have blocked access to and damaged our plants in the recent past. Our operations were affected occasionally by labor strikes in recent years. See Oil and gas prices, including the recent decline in global prices for oil and gas, could affect our business and Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations Macroeconomic conditions.

***We may not be able to pay, maintain or increase dividends.***

On April 30, 2015, our shareholders approved a dividend of Ps.503 million (Ps.1.28 per share or ADS), which was paid during July 2015. On April 29, 2016, our shareholders approved a dividend of Ps. 889 million (Ps. 2.26 per share or ADS), which was paid during July 2016. On April 28, 2017, our shareholders approved a dividend of Ps.716 million (Ps.1.82 per share or ADS), which was paid during December 2017. On March 2, 2018, our Board of Directors proposed a dividend of Ps. 1.200 million. Our next shareholder's meeting, to be held on April 27, 2018, will consider this proposal. Notwithstanding the foregoing, our ability to pay, maintain or increase dividends is based on many factors, including our net income, capital expenditures required under our investment plans, future debt service payments, working capital needs, legal or contractual restrictions, and general economic and financial conditions. A change in any of these factors could affect our ability to pay, maintain or increase dividends, and the exact amount of any dividend paid may vary from year to year.

***Our performance is largely dependent on recruiting and retaining key personnel***

Our current and future performance, the successful implementation of our strategy and the operation of our business are dependent upon the contributions of our senior management and our highly skilled team of engineers and other employees. Our ability to continue to rely on these key individuals is dependent on our success attracting, training, motivating and retaining key management and commercial and technical personnel with the necessary skills and experience. There is no assurance that we will be successful in retaining and attracting key personnel and the replacement of any key personnel who were to leave could be difficult and time consuming.

The Expropriation Law provides that the National Executive Office, by itself or through an appointed public entity, shall exercise all the political rights associated with the shares subject to expropriation until the transfer of political and economic rights to the provinces that compose the National Organization of Hydrocarbon Producing States is completed. Consequently, the Argentine government has the majority of votes which allows it to appoint the majority of members of our board of directors at the General Shareholder's meeting. See The Argentine Republic owns 51% of the shares of the Company and Our business is largely dependent upon economic conditions in Argentina. The loss of the experience and services of key personnel or the inability to recruit suitable replacements or additional staff could have a material adverse effect on our business, financial condition and our results of operations.

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*We could be subject to information technology system failures, network disruptions, and breaches in data security which could negatively affect our business, financial position, results of operations, and cash flows.*

As dependence on digital technologies has increased, cyber incidents, including deliberate attacks or unintentional events, have also increased in the world. Computers and telecommunication systems are used to conduct our exploration, development and production activities and have become an integral part of our business. We use these systems to analyze and store financial and operating data and to communicate internally and with outside business partners. Cyber-attacks could compromise our computer and telecommunications systems and result in disruptions to our business operations or the loss of our data. In addition, computers control oil and gas production, processing equipment, and distribution systems and are necessary to deliver our production to market.

Although we have extended our security policy to the industrial systems, reinforcing the defenses in case of denial of service and increasing the monitoring of suspicious activities, our technologies, systems, networks, and those of our business partners have been and may continue to be the target of cyber-attacks or information security breaches, which could lead to disruptions in critical systems (Eg: SCADAs, DCS Systems), unauthorized release of confidential or protected information, corruption of data or other disruptions of our business operations. In addition, certain cyber incidents, such as surveillance, may remain undetected for an extended period.

As cybersecurity threats continue to evolve, we may be required to expend additional resources to continue to modify or enhance our protective measures or to investigate or remediate any cybersecurity or information technology infrastructure vulnerabilities. For example, during the last fiscal year we have increased the budget assigned to cyber security.

The Company's reputation is an important corporate asset. An operating incident, significant cybersecurity disruption or other similar adverse event, may have a negative impact on our reputation, which in turn could make it more difficult for us to compete successfully for new opportunities or could reduce consumer demand for the company's branded products.

In the past we have been the target of many attack attempts and we are exposed to malware infections like other companies in the industry, which did not result in a significant loss. There can be no assurance that the Company will not incur such losses in the future. The Company's risk and exposure to these matters cannot be fully calculated nor mitigated because of, among other things, the evolving nature of these threats.

A cyber-attack involving our information systems and related infrastructure, or those of our business partners, could disrupt our business and negatively impact our operations in a variety of ways, including but not limited to:

unauthorized access to seismic data, reserves information, strategic information, or other sensitive or proprietary information could have a negative impact on our ability to compete for oil and gas resources;

data corruption or operational disruption of production-related infrastructure could result in a loss of production, or accidental discharge;

disruption of our operations, communications, or processing of transactions or the loss of, or damage to, sensitive information, facilities, infrastructure and systems which are essential to our business and operations

which could have a material adverse effect on our business, financial position, results of operations, and cash flows;

a cyber-attack on a service provider could result in supply chain disruptions, which could delay or halt our major development projects;

a cyber-attack on our accounting or accounts payable systems could expose us to liability to employees and third parties if their sensitive personal information is obtained.

***Our derivative risk management activities could result in financial losses.***

As of the date of this annual report, the Company has not entered into any derivative arrangement. Notwithstanding, in case we were to evaluate and decide to enter into contracts of this nature, we could be exposed to adverse variations in the price of the assets underlying the derivative contract, which would in turn affect our results of operations and financial condition. In addition, any failure in the performance of their obligations by our counterparties to any of these agreements could also have a material adverse effect on the Company's results of operations.



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**Table of Contents*****Our actual production could differ materially from our forecasts.***

From time to time, we provide forecasts of expected quantities of future oil and gas production and other financial and operating results. These forecasts are based on a number of estimates and assumptions, including that none of the risks associated with our oil and gas operations summarized in this Item 3. Key Information Risk Factors occur. Production forecasts, specifically, are based on assumptions such as expectations of production from existing wells and the level and outcome of future drilling activity, and the absence of facility or equipment malfunctions, adverse weather effects, or downturns in commodity prices or significant increases in costs, which could make certain drilling activities or production uneconomical. Should any of these estimates prove inaccurate, or should our development plans change, actual production could be materially and adversely affected.

***We have limited control over the day to day activities carried out on properties which we do not operate.***

Some of the properties in which we have an interest are operated by other companies and involve third-party working interest owners. As a result, we have limited ability to influence or control the day to day operations of these companies and third-parties, including their compliance with environmental, safety and other regulations, which, in turn, could have a material adverse effect on our business, financial position, results of operations, cash flows and/or our reputation.

***We could be affected by violations to anticorruption, anti-bribery, anti-money laundering and other national and international regulations.***

We are subject to anticorruption, anti-bribery, anti-money laundering and other national and international regulations. We are required to comply with the regulations of Argentina and various jurisdictions where we conduct operations. Although we have internal policies and procedures designed to ensure compliance with applicable anti-fraud, anti-bribery and anti-corruption laws and sanctions regulations, potential violations of anti-corruption laws could be identified on occasion as part of our compliance and internal control processes. In case such issues arise, we plan to attempt to act promptly to learn relevant facts, conduct appropriate due diligence, and take any appropriate remedial action to address the risk. Given the size of our operations and the complexity of the production chain, there can be no assurance that our internal policies and procedures will be sufficient to prevent or detect all inappropriate practices, fraud or violations of law by our employees, directors, officers, partners, agents and service providers or that such persons will not take actions in violation of our policies and procedures (or otherwise in violation of the relevant anti-corruption laws and sanctions regulations) for which we or they may be ultimately held responsible. Violations of anti-bribery and anti-corruption laws and sanctions regulations could have a material adverse effect on our business, reputation, results of operations and financial condition. In addition, we may be subject to one or more enforcement actions, investigations and proceedings by authorities for alleged infringements of these laws. These proceedings may result in penalties, fines, sanctions or other forms of liability and could have a material adverse effect on our reputation, business, financial condition and results of operations.

**Risks Relating to Our Class D Shares and ADSs*****The market price for our shares and ADSs may be subject to significant volatility***

The market price of our ordinary shares and ADSs may fluctuate significantly due to a number of factors, including, among others, our actual or anticipated results of operations and financial condition; speculation over the impact of the Argentine government as our controlling shareholder on our business and operations, investor perceptions of investments relating to Argentina and political and regulatory developments affecting our industry or the Company. In addition, recent regulatory and policy developments in Argentina, including the passage of the Expropriation Law, as

well as the litigation of the Argentine government with Holdout Bondholders (see Risks Relating to Argentina Our business is largely dependent upon economic conditions in Argentina ), have led to considerable volatility in the market price of our shares and ADSs. For example, the price of our ADSs has varied from U.S.\$54.58 on January 5, 2011 to U.S.\$9.57 on November 16, 2012. The price hit a high closing price of U.S.\$36.99 on July 1, 2014, but subsequently fell to U.S.\$12.83 on January 20, 2016. See Item 9. The Offer and Listing. We cannot assure you that concerns about factors that could affect the market price of our ordinary shares as previously mentioned may have a material adverse effect on the trading values of our securities.

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***Certain strategic transactions require the approval of the holder of our Class A shares or may entail a cash tender offer for all of our outstanding capital stock.***

Under our by-laws, the approval of the Argentine government, the sole holder of our Class A shares, is required to undertake certain strategic transactions, including a merger, an acquisition that results in the purchaser holding 15% or more of our capital stock or an acquisition that results in the purchaser holding a majority of our capital stock, requiring consequently the approval of the National State (the holder of our Class A shares) for such decisions.

In addition, under our by-laws, an acquisition that results in the purchaser holding 15% or more of our capital stock would require such purchaser to make a public cash tender offer for all of our outstanding shares and convertible securities, which could discourage certain investors from acquiring significant stakes in our capital stock. See Item 10. Additional Information Certain Provisions Relating to Acquisitions of Shares.

***Restrictions on the movement of capital out of Argentina may impair your ability to receive dividends and distributions on, and the proceeds of any sale of, the Class D shares underlying the ADSs.***

The government is empowered, for reasons of public emergency, as defined in Article 1 of Law No. 25,561, to establish the system that will determine the exchange rate between the peso and foreign currency and to impose exchange regulations. Although the transfer of funds abroad in order to pay dividends currently does not require Argentine Central Bank approval, restrictions on the movement of capital to and from Argentina may, if imposed, impair or prevent the conversion of dividends, distributions, or the proceeds from any sale of Class D shares, as the case may be, from pesos into U.S. dollars and the remittance of the U.S. dollars abroad.

Under the terms of our deposit agreement with the depositary for the ADSs, the depositary will convert any cash dividend or other cash distribution we pay on the shares underlying the ADSs into U.S. dollars, if it can do so on a reasonable basis and can transfer the U.S. dollars to the United States. If this conversion is not possible for any reason, including regulations of the type described in the preceding paragraph, the deposit agreement allows the depositary to distribute the foreign currency only to those ADR holders to whom it is possible to do so. If the exchange rate fluctuates significantly during a time when the depositary cannot convert the foreign currency, you may lose some or all of the value of the dividend distribution.

***We are traded on more than one market and this may result in price variations; in addition, investors may not be able to easily move shares for trading between such markets.***

Trading in the ADSs or Class D Shares underlying ADSs in the United States and Argentina, respectively, will use different currencies (U.S. dollars on the New York Stock Exchange ( NYSE ) and pesos on the MERVAL), and take place at different times (resulting from different trading platforms, different time zones, different trading days and different public holidays in the United States and Argentina). The trading prices of the Class D Shares underlying ADSs on these two markets may differ due to these and other factors. Any decrease in the price of the Class D Shares underlying ADSs on the MERVAL could cause a decrease in the trading price of the ADSs on the NYSE. Investors could seek to sell or buy the Class D Shares underlying ADSs to take advantage of any price differences between the markets through a practice referred to as arbitrage. Any arbitrage activity could create unexpected volatility in both our share prices on one exchange, and the ADSs available for trading on the other exchange. In addition, holders of ADSs will not be immediately able to surrender their ADSs and withdraw the underlying Class D Shares for trading on the other market without effecting necessary procedures with the depositary. This could result in time delays and additional cost for holders of ADSs.

***Under Argentine law, shareholder rights may be different from other jurisdictions.***

Our corporate affairs are governed by our by-laws and by Argentine corporate law, which differ from the legal principles that would apply if we were incorporated in a jurisdiction in the United States or in other jurisdictions outside Argentina. In addition, rules governing the Argentine securities markets are different and may be subject to different enforcement in Argentina than in other jurisdictions.

***Actual or anticipated sales of a substantial number of Class D shares could decrease the market prices of our Class D shares and the ADSs.***

Sales of a substantial number of Class D shares or ADSs by any present or future relevant shareholder could decrease the trading price of our Class D shares and the ADSs.

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***You may be unable to exercise preemptive, accretion or other rights with respect to the Class D shares underlying your ADSs.***

Holders of ADSs may not be able to exercise the preemptive or accretion rights relating to the shares underlying the ADSs (see Item 10. Additional Information Preemptive and Accretion Rights ) unless a registration statement under the U.S. Securities Act of 1933 (the Securities Act ) is effective with respect to those rights or an exemption from the registration requirements of the Securities Act is available. We are not obligated to file a registration statement with respect to the shares relating to these preemptive rights, and we cannot assure you that we will file any such registration statement. Unless we file a registration statement or an exemption from registration is available, holders may receive only the net proceeds from the sale of their preemptive rights by the depository or, if the preemptive rights cannot be sold, they will be allowed to lapse. As a result, U.S. holders of Class D shares or ADSs may suffer dilution of their interest in our company upon future capital increases.

In addition, under the Argentine Corporations Law, foreign companies that own shares in an Argentine corporation are required to register with the Superintendence of Corporations (*Inspección General de Justicia*) ( IGJ ) in order to exercise certain shareholder rights, including voting rights. If you own our Class D shares directly (rather than in the form of ADSs) and you are a non-Argentine company and you fail to register with IGJ, your ability to exercise your rights as a holder of our Class D shares may be limited.

***You may be unable to exercise voting rights with respect to the Class D shares underlying your ADSs at our shareholders meetings.***

The depository will be treated by us for all purposes as the shareholder with respect to the shares underlying ADSs. A holder of ADRs representing the ADSs being held by the depository will not have direct shareholder rights and may exercise voting rights with respect to the Class D shares represented by the ADSs only in accordance with the deposit agreement relating to the ADSs. There are no provisions under Argentine law or under our by-laws that limit the exercise by ADS holders of their voting rights through the depository with respect to the underlying Class D shares. However, there are practical limitations on the ability of ADS holders to exercise their voting rights due to the additional procedural steps involved in communicating with these holders. For example, holders of our shares will receive notice of shareholders meetings through publication of a notice in an official gazette in Argentina, an Argentine newspaper of general circulation and the bulletin of the Buenos Aires Stock Exchange, and will be able to exercise their voting rights by either attending the meeting in person or voting by proxy. ADS holders, by comparison, will not receive notice directly from us. Instead, in accordance with the deposit agreement, we will provide the notice to the depository. If we ask it to do so, the depository will mail to holders of ADSs the notice of the meeting and a statement as to the manner in which instructions may be given by holders. To exercise their voting rights, ADS holders must then instruct the depository as to voting the Class D shares represented by their ADSs. Due to these procedural steps involving the depository, the process for exercising voting rights may take longer for ADS holders than for holders of Class D shares, and Class D shares represented by ADSs may not be voted as you desire. Class D shares represented by ADSs for which the depository fails to receive timely voting instructions may, if requested by us, be voted as we instruct at the corresponding meeting.

***Shareholders outside of Argentina may face additional investment risk from currency exchange rate fluctuations in connection with their holding of our Class D shares or the ADSs.***

We are an Argentine company and any future payments of dividends on our Class D shares will be denominated in pesos. The peso has historically and recently fluctuated significantly against many major world currencies, including the U.S. dollar. A devaluation of the peso would likely adversely affect the U.S. dollar or other currency equivalent of any dividends paid on our Class D shares and could result in a decline in the value of our Class D shares and the

ADSs as measured in U.S. dollars.

#### **ITEM 4. Information on the Company History and Development of YPF**

##### ***Overview***

YPF is a corporation (*sociedad anónima*), incorporated under the laws of Argentina for a limited term. Our address is Macacha Güemes 515, C1106BKK Ciudad Autónoma de Buenos Aires, Argentina and our telephone number is (011-54-11) 5441-2000. Our legal name is YPF Sociedad Anónima and we conduct our business under the commercial name YPF.

We are Argentina's leading energy company, operating a fully integrated oil and gas chain with leading market positions across the domestic upstream, downstream and gas and power segments. Our upstream operations consist of the exploration, development and production of crude oil, natural gas and LPG. Our downstream operations include the refining, marketing, transportation and distribution of oil and a wide range of petroleum products, petroleum derivatives, petrochemicals, LPG and bio-fuels. Additionally, we are active in the gas separation and natural gas distribution sectors both directly and through our investments in several affiliated companies and in power generation through YPF Energía Eléctrica, our controlled company (see Item 4 Information of the Company Gas and Power YPF in Power Generation. ). In 2017, we had consolidated revenues of Ps. 252,813 million and consolidated net profit of Ps. 12,672 million.

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Beginning in the 1920s and until 1990, both the upstream and downstream segments of the Argentine oil and gas industry were effectively monopolies of the Argentine government. During this period, we and our predecessors were owned by the state, which controlled the exploration and production of oil and natural gas, as well as the refining of crude oil and marketing of refined petroleum products. In August 1989, Argentina enacted laws aimed at the deregulation of the economy and the privatization of Argentina's state-owned companies, including us. Following the enactment of these laws, a series of presidential decrees were promulgated, which required, among other things, us to sell majority interests in our production rights to certain major producing areas and to undertake an internal management and operational restructuring program.

In November 1992, the Argentine government enacted the Privatization Law (Law No. 24,145), which established the procedures for our privatization. In accordance with the Privatization Law, in July 1993, we completed a worldwide offering of 160 million Class D shares that had previously been owned by the Argentine government. As a result of that offering and other transactions, the Argentine government's ownership interest in our capital stock was reduced from 100% to approximately 20% by the end of 1993.

In January 1999, Repsol YPF acquired 52,914,700 Class A shares (14.99% of our shares) which were converted to Class D shares. Additionally, on April 30, 1999, Repsol YPF announced a tender offer to purchase all outstanding Class A, B, C and D shares (the Offer). Pursuant to the Offer, in June 1999, Repsol YPF acquired an additional 82.47% of our outstanding capital stock. Repsol YPF acquired additional stakes in us from minority shareholders and other transactions in 1999 and 2000.

Repsol YPF owned approximately 99% of our capital stock from 2000 until 2008, when Petersen Energía (PEISA) acquired 15% of our capital stock, from Repsol YPF. On May 3, 2011, PEISA exercised an option to acquire, from Repsol YPF, shares or ADSs representing 10.0% of our capital stock and on May 4, 2011, Repsol YPF acknowledged and accepted such exercise. See Legal and Regulatory Framework and Relationship with the Argentine Government The Expropriation Law and Item 7. Major Shareholders and Related Party Transactions, for a detail of our current major shareholders.

On May 3, 2012, the Argentine congress passed the Expropriation Law. Among other matters, the Expropriation Law provided for the expropriation of 51% of the share capital of YPF represented by an identical stake of Class D shares owned, directly or indirectly, by Repsol YPF and its controlled or controlling entities. The shares subject to expropriation, which have been declared of public interest, will be assigned as follows: 51% to the Argentine Republic and 49% to the governments of the provinces that compose the National Organization of Hydrocarbon Producing States. See Item 3. Key Information Risk Factors Risks Relating to Argentina The Argentine Republic owns 51% of the shares of the Company. As of the date of this annual report, the transfer of the shares subject to expropriation between the National Executive Office and the provinces that compose the National Organization of Hydrocarbon Producing States was still pending. According to Article 8 of the Expropriation Law, the distribution of the shares among the provinces that accept their transfer must be conducted in an equitable manner, considering their respective levels of hydrocarbon production and proved reserves. To ensure compliance with its objectives, the Expropriation Law provides that the National Executive Office, by itself or through an appointed public entity, shall exercise all the political rights associated with the shares subject to expropriation until the transfer of political and economic rights to the provinces that compose the National Organization of Hydrocarbon Producing States is completed. In addition, in accordance with Article 9 of the Expropriation Law, each of the Argentine provinces to which shares subject to expropriation are allocated must enter into a shareholder's agreement with the federal government that will provide for the unified exercise of its rights as a shareholder. See Legal and Regulatory Framework and Relationship with the Argentine Government The Expropriation Law, Item 7. Major Shareholders and Related Party Transactions. See Item 3. Key Information Risk Factors Risks Relating to the Argentine Oil and Gas Business and Our Business We face risk relating to certain legal proceedings for a description of the Repsol Agreement relating to compensation for the

expropriation of 51% of the share capital of YPF owned, directly or indirectly, by Repsol.

In addition, on February 25, 2014, the Republic of Argentina and Repsol reached an agreement (the Repsol Agreement ) in relation to compensation for the expropriation of 200,589,525 of YPF's Class D shares pursuant to the Expropriation Law under the Repsol Agreement. Repsol accepted U.S.\$5.0 billion in sovereign bonds from the Republic of Argentina and withdrew judicial and arbitral claims it had filed, including claims against YPF, and waived additional claims. YPF and Repsol also executed a separate agreement (the Repsol Arrangement ) on February 27, 2014, pursuant to which YPF and Repsol each withdrew, subject to certain exclusions, all present and future actions and/or claims based on causes occurring prior to the date of execution of Repsol Arrangement arising from the expropriation of the YPF shares owned by Repsol pursuant to the Expropriation Law, including the intervention and temporary possession for public purposes of YPF's shares. YPF and Repsol agreed to withdraw reciprocal actions and claims with respect to third parties and/or pursued by them and to grant a series of mutual indemnities, which at the time were subject to certain conditions precedent. The Repsol Arrangement entered into force the day after Repsol notified YPF that the Repsol Agreement had entered into force. The Repsol Agreement was ratified on March 28, 2014 at a Repsol general shareholders' meeting and approved by the Argentine congress by Law No. 26,932 enacted by Decree No. 600/2014. On May 8, 2014, YPF was notified of the entry into force of the Repsol Agreement. As of that date, the expropriation pursuant to the Expropriation Law was concluded, and as a result the Republic of Argentina is definitively the owner of 51% of the capital stock of each of YPF and YPF GAS S.A.



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We are strongly committed to the country's energy development and seek to lead the transformation of the industry within the context of industry change at an international level.

In order to achieve our vision of being a company that generates sustainable, profitable and accessible energy for our customers, YPF's strategy is based on the following pillars:

Extract the maximum value from conventional fields

Develop and achieve efficient costs in shale operations

Partner with leading companies worldwide

Expand our power generation capacity in order to become a major player in the sector

Maintain a disciplined corporate portfolio management

Create a new supply chain organization in order to modernize the procurement processes, contracts and associated logistics

Incorporate technology and innovation in all business segments to improve productivity and service to our customers

Implement a transformation program that modernizes the company, enhances efficiency and seeks growth initiatives that support our vision

Reduce the company's specific CO<sub>2</sub> emissions in the upcoming years as part of our commitment to sustainability. The investment plan related to our growth needs to be accompanied by an appropriate financial plan, whereby we intend to reinvest earnings, search for strategic partners and raise debt financing at levels we consider prudent for companies in our industry. Consequently, the financial viability of these investments and hydrocarbon recovery efforts will generally depend, among other factors, on the prevailing economic and regulatory conditions in Argentina, the ability to obtain financing in satisfactory amounts at competitive costs, as well as the market prices of hydrocarbon products. See Item 3. Key Information Risk Factors Risks Relating to Argentina. and Item 5. Factors Affecting Our Operations for additional information regarding 2017 activity.

***Upstream Operations***

As of December 31, 2017, we held interests in 112 oil and gas fields in Argentina. According to the Ministry of Energy and Mining, in 2017 these assets accounted for approximately 49.7% of the country's total production of crude oil, excluding NGLs, and approximately 42.6% of its total natural gas production, including NGLs.

We had proved reserves, as estimated as of December 31, 2017, of approximately 480 mmbbl of oil, including condensates and NGLs, and approximately 2,520 bcf of gas, representing aggregate reserves of approximately 929 mmboe as of such date, compared to approximately 592 mmbbl of oil, including condensates and NGLs, and approximately 2,924 bcf of gas, representing aggregate reserves of approximately 1,113 mmboe as of December 31, 2016.

In 2017, we produced approximately 83 mmbbl of oil (approximately 228 mmbbl/d), including condensates, approximately 18 mmbbl of NGLs (approximately 50 mmbbl/d), and approximately 568 bcf of gas (approximately 1,556 mmcf/d), representing a total production of approximately 203 mmboe (approximately 555 mboe/d), compared to approximately 90 mmbbl of oil (approximately 245 mmbbl/d), including condensates, approximately 19 mmbbl of NGLs (approximately 52 mmbbl/d), and approximately 576 bcf of gas (approximately 1,573 mmcf/d), representing a total production of approximately 211 mmboe (approximately 577 mboe/d) in 2016.

### ***Downstream Operations***

We are Argentina's leading refiner with operations conducted at three wholly-owned refineries with combined annual refining capacity of approximately 116 mmbbl (319.5 mmbbl/d). See Downstream Refining division. We also own a 50% equity interest in Refinería del Norte, S.A. ( Refinor ), an entity jointly controlled with and operated by Petrobras Energía S.A., which has a refining capacity of 26.1 mmbbl/d.

Our retail distribution network for automotive petroleum products as of December 31, 2017 consisted of 1,563 YPF-branded service stations, of which we own 113 directly and through our 100%-owned subsidiary Operadora de Estaciones de Servicios S.A. ( OPESSA ), and we estimate we held approximately 35.3% of all gasoline service stations in Argentina.

We are one of the leading petrochemical producers in Argentina and in the Southern Cone of Latin America, with operations conducted through our Ensenada industrial complex ( CIE ) and Plaza Huincul site. In addition, Profertil S.A. ( Profertil ), a company that we jointly control with Agrium Holdco Spain S.L. ( Agrium ), is one of the leading producers of urea in the Southern Cone.

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***Gas and Power Operations***

We are the largest producer of natural gas in Argentina with total natural gas sales of 14,544.2 mmcm in 2017, accounting for 30.1% of the market.

We participated in three power generation plants with an aggregate installed capacity of 1,367 MW. In addition, as a consequence of Law No. 27,191 related to renewable energy, YPF EE started in 2016 the construction of its renewable generation project, Manantiales Behr Wind Farm, near Comodoro Rivadavia in the Chubut province, in order to supply the percentage of YPF total demand with clean generation that will be required by law in 2018. This project is expected to be finished by 2018 with the generation of 99 MW.

On December 14, 2017, the Board of Directors of the Company approved the terms of a memorandum of understanding signed with GE Energy Financial Services, Inc. ( GE EFS ) and on February 6, 2018, YPF entered into a definitive and binding agreement with EFS Global Energy B.V. ( GE ) and GE Capital Global Energy Investments B.V., companies indirectly controlled by GE EFS, which establishes the conditions for the capitalization of YPF EE. On March 20, 2018, GE EFS Power Investments B.V. ( GE ), a subsidiary of EFS Global Energy B.V. (both corporations indirectly controlled by GE Energy Financial Services, Inc.), subscribed for shares of YPF Energía Eléctrica S.A. ( YPF EE ) in an amount equal to 24.99% of YPF EE s capital stock through a cash contribution of US\$ 275,000,000, plus a contingent payment for up to US\$35,000,000. See Item 4 Information of the Company Gas and Power YPF in Power Generation.

We are the operator of UTE Escobar (a joint venture formed by YPF and ENARSA) and Bahia Blanca Terminal, which operates an LNG Regasification Terminal, LNG Escobar and LNG Bahía Blanca, respectively. See Gas and Power Argentine natural gas supplies. We also distribute natural gas through our subsidiary Metrogas a natural gas distribution company in the capital region and southern suburbs of Buenos Aires, and one of the main distributors in Argentina. During 2017, Metrogas distributed approximately 20.4 mmcm (or 719.7 mmcf) of natural gas per day to 2.3 million customers. See Item 4 Information of the Company Gas and Power Natural Gas Distribution.

For a chart illustrating our organizational structure, including our principal subsidiaries, please see Note 1 to the Audited Consolidated Financial Statements.

The map below illustrates the location of our productive basins, refineries, storage facilities and crude oil and multi-product pipeline networks as of December 31, 2017.

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For a description of our principal capital expenditures and divestitures, see Item 5. Operating and Financial Review and Prospects Liquidity and Capital Resources Capital investments, expenditures and divestitures.

**The Argentine Market**

Argentina is the largest producer of natural gas and the fourth largest producer of crude oil in Central and South America, based on 2016 production, according to the 2017 edition of the BP Statistical Review of World Energy, published in June 2017.

In response to the economic crisis of 2001 and 2002, the Argentine government, pursuant to the Public Emergency Law, established export taxes on certain hydrocarbon products. In subsequent years, in order to satisfy growing domestic demand and abate inflationary pressures, this policy was supplemented by constraints on domestic prices, temporary export restrictions and subsidies on imports of natural gas and diesel. As a result, until 2008, local prices for oil and natural gas products had remained significantly below those prevalent in neighboring countries and international commodity exchanges.

In 2012, Argentina's GDP experienced a slowdown, with GDP increasing 1.9% on an annual basis compared to the preceding year according to the methodology of calculation prevailing until March 2014. On March 27, 2014, the Argentine government announced a new method of calculating GDP using 2004 as the base reference year (as opposed to 1993, which was the base reference year under the prior method of calculating GDP). However, on January 7, 2016 through Decree No. 55/2016, the new leadership of INDEC issued a report declaring a national statistical emergency. INDEC stated that since 2006 its administration has been irregular and due to that they revised the published data from 2005 to 2015. As a result of this revision, the GDP growth rate for 2013 and 2014 was revised from 2.9% to 2.4% and from 0.5% to a decline rate of 2.5%, respectively. As of the date of this annual report, Argentina's provisional GDP growth rate for 2015, the preliminary GDP growth rate for 2016 and the preliminary GDP growth rate for 2017 published by INDEC were positive 2.6%, negative 2.3% and positive 2.9%, respectively.

Driven by economic expansion and stable domestic prices, energy demand has increased significantly during last years, outpacing energy supply (which, in the case of oil, declined). As a result of a high number of power outages caused by the consumption increase, the Ministry of Energy requested that the Executive Branch declare a National Electric System Emergency through December 31, 2017. This decree instructs the Minister of Energy to develop and propose measures and to ensure adequate power supplies. Also the Ministry of Energy and Mining established new seasonal reference prices for power and energy in the Wholesale Electricity Market ( MEM ). See ITEM 4 Legal and Regulatory Framework and Relationship with the Argentine Government Market Regulation Electricity.

In 2003, Argentina's net exports of diesel amounted to approximately 1,349 mcm, while in 2017 its net imports of diesel amounted to approximately 2,131 mcm, according to preliminary information provided by the Argentine Secretariat of Energy. Significant investments in the energy sector are being carried out, and additional investments are expected to be required in order to support continued economic growth, as the industry is currently operating near full capacity.

Demand for diesel in Argentina exceeds domestic production. In addition, prior to the decline in international oil prices, the import prices of refined products have been in general substantially higher than the average domestic sales prices of such products, rendering the import and resale of such products less profitable. As a result, from time to time in the past, service stations experience temporary shortages and are required to suspend or curtail diesel sales.

With regard to the analysis of prior periods, until recently, the applicable domestic prices of petroleum products were established for the short term mainly on the basis of negotiations between Producers and Refiners of the country,

without keeping a direct or specific reference with respect to the international quotations of such products. That is, the domestic market was decoupled from the international market in terms of prices, which was evidenced in certain periods with movements of prices in meanings (or values) substantially different from those observed in the international market. Notwithstanding the foregoing, the local market started a process to achieve an orderly transition towards international prices (which evidenced a substantial reduction since mid-2014), all of which caused a gradual 6% reduction in the prices of sales of Medanito and Escalante crude oil on the local market (2% monthly as of August 2016).

In January 2017, the Producers and Refiners reached a new agreement (the *Transitional Agreement*) for the aforementioned transition, in which a price path was established for the commercialization of oil in the domestic market, with the objective of achieving parity with international markets during the course of 2017. This took place during the last quarter of 2017, taking into account the internalization costs in the domestic market of the referred products, the expected margins and the demand, among other factors. After the completion of the 2017 Transitional Agreement, according to Argentina's Ministry of Energy and Mining, the hydrocarbons market in Argentina became a liberalized market, and oil and fuel prices must be set by the free market and, thus, fluctuate. This decision formally ended the transition to international oil price parity. See *Item 5. Operating and Financial Review and Prospects* Factors Affecting Our Operations *Macroeconomic conditions*

**Table of Contents****Business Organization**

We currently conduct our business according to the following organization:

Upstream segment, which consists of our Exploration and Production activity;

Downstream segment, which consists of our Refining and Marketing and Chemicals activities;

Gas and Power segment, which consists of our Natural Gas Distribution and Electricity Generation activity; and

Central Administration and other segment, which consists of our remaining activities.

For a description related to the activities developed by each business segment see Note 5 to our Audited Consolidated Financial Statements.

Substantially all of our operations, properties and customers are located in Argentina. See Exploration and Production Overview Main properties. Additionally, we market lubricants and specialties in Brazil and Chile, and carry out exploration activities in Chile and Bolivia.

The following table sets forth revenues and operating income for each of our business segments for the years ended December 31, 2017, 2016 and 2015:

	<b>For the year ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
	<b>(in millions of pesos)</b>		
Revenues <sup>(1)</sup>			
Upstream			
Revenues from sales	739	18,745	16,044
Revenue from intersegment sales <sup>(3)</sup>	115,955	95,398	64,243
<b>Total Upstream</b>	<b>116,694</b>	<b>114,143</b>	<b>80,287</b>
Gas and Power			
Revenues from sales	56,805	26,514	14,003
Revenue from intersegment sales	4,075	3,212	2,184
<b>Total Gas and Power</b>	<b>60,880</b>	<b>29,726</b>	<b>16,187</b>
Downstream			
Revenues from sales	195,321	162,538	124,959
Revenue from intersegment sales	988	925	807

Total Downstream	196,309	163,463	125,766
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	<b>For the year ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
	<b>(in millions of pesos)</b>		
<b>Central Administration and Others</b>			
Revenues from sales	2,534	2,303	1,130
Revenue from intersegment sales	7,133	7,447	6,182
<b>Total Central Administration and Others</b>	<b>9,667</b>	<b>9,750</b>	<b>7,312</b>
<b>Less inter-segment sales and fees</b>	<b>(130,737)</b>	<b>(106,982)</b>	<b>(73,416)</b>
<b>Total Revenues</b>	<b>252,813</b>	<b>210,100</b>	<b>156,136</b>
<b>Operating income (Loss) <sup>(2)</sup></b>			
Upstream	3,877	(26,845)	7,535
Gas and Power	3,529	2,008	1,498
Downstream	15,813	3,093	6,948
Central Administration and Others	(4,400)	(1,615)	(2,331)
Consolidation adjustments	(2,476)	(887)	2,938
<b>Total Operating Income (loss)</b>	<b>16,073</b>	<b>(24,246)</b>	<b>16,588</b>

- (1) Revenues are net of payment of a fuel transfer tax and turnover tax. Customs duties on hydrocarbon exports are disclosed in Taxes, charges and contributions, as indicated in Note 21 to the Audited Consolidated Financial Statements. Royalties with respect to our production are accounted for as a cost of production and are not deducted in determining revenues. See Note 2.b.15 to the Audited Consolidated Financial Statements.
- (2) Includes exploration costs in Argentina and the United States and production operations in Argentina and the United States.
- (3) Intersegment revenues of crude oil to Downstream are recorded at transfer prices that reflect our estimate of Argentine market prices.

**Upstream overview**

Development and Exploration Upstream projects represent our integrated vision of optimal field development, identifying each project's reserves category, stage of maturity, risk and strategy.

In addition to development projects for proved reserves, our portfolio of projects is composed of more than 280 new integral development projects, including new Vaca Muerta developments, which gives us the opportunity for considerable growth of our proved reserves. In line with this objective, we are planning a massive pilot phase to develop 13 different clusters in the Non Conventional zone. We also have a portfolio of visualized exploratory opportunities which includes more than 700 cases related to contingent and prospective resources that contemplate potential development in the event of exploratory success.

The international and local situation challenges us to adjust our efficiency and costs to be sustainable. In that context, it is critical that our portfolio of projects and the production and development of initiatives to reduce costs for our operations and investments are properly executed. Part of those initiatives are related to labor efficiency, where we have started to work with labor unions and the Argentine government and entered into addenda to the labor

agreements with various unions during 2016, as well as the Santa Cruz and Chubut agreement during 2017, both aiming for a reduction of development costs. See Item 6. Directors, Senior Management and Employees Employee Matters.

Our business growth objectives, whereby we seek to maximize the productivity and profitability of our portfolio, are based on the following key concepts: the rejuvenation of mature fields, an ongoing focus on gas development and the intensive development of unconventional reservoirs. See Item 3. Key Information Risk Factors.

The projects selected to be pursued and their schedules for completion are periodically determined by a portfolio optimization process, in accordance with our strategic guidelines.

### **Meeting the challenge of the mature oil and gas fields**

Most of our oil and gas producing fields in Argentina are mature, requiring strong commitments to overcome their decline.

During recent years, we have been working in mature areas that present profitable opportunities for increases in the recovery factor by employing techniques including infill wells, extension of secondary recovery, and tertiary recovery testing. We are focused on identifying new opportunities in both infill potential and improved sweep efficiency in our mature fields. These efforts are guided by subsurface modeling conducted by in-house multidisciplinary teams. Furthermore, we place a strong emphasis on surveillance and conformance activities to improve current mature water injection projects. Tertiary recovery is being pursued with polymer and surfactant water-flooding in mature reservoirs in the Golfo de San Jorge, Cuyana and Neuquén basins.

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Continuous technical reviews of our oil and gas fields allow us to identify opportunities to rejuvenate mature fields and optimize new field developments in Argentine basins in order to achieve similar recovery factors that mature fields have already reached in other regions of the world, with the application of new technologies.

We have managed, through the extension of most of our concessions with relatively favorable terms and conditions, to continue with the development of strategic water-flooding and improved oil recovery projects, improving our perspectives of production and reserves. Nevertheless, we cannot assure you that our efforts will achieve the expected results, mainly because of the risks related to our activities (See Item 3. Key Information Risk Factors Risks Relating to the Argentine Oil and Gas Business and Our Business. ).

In addition, we are also focused on producing and developing initiatives related to reducing costs, in operating expenses and capital expenditures.

Nevertheless, the financial viability of these investments and reserve recovery efforts will generally depend on prevailing economic and regulatory conditions in Argentina, as well as the market prices of hydrocarbon products. See Item 3. Key Information Risk Factors. and Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations for additional information regarding 2018 activity.

## **Staying the Path of Unconventional Resources**

During 2017, we continued extending our leadership in this area. We reaffirmed our commitment to the objective of growing our production and reserves through the development of unconventional resources, which we began in 2013. More than 500 wells were drilled with Vaca Muerta shale as the target, mostly in the Loma Campana field in association with Chevron, continuing the massive development that began in 2013. The remaining wells were targeted to continue the development phase in the El Orejano block in association with Dow Chemical, the Narambuena project in association with Chevron, the La Amarga Chica pilot in association with Petronas, the Bandurria Sur pilot in association with SPM Argentina S.A., the Bajada de Añelo pilot in association with Shell, and the Rincon del Mangrullo, Aguada de la Arena and La Ribera pilots where YPF holds 100% of the working interest in those blocks. The purpose of these projects is to determine the potential of Vaca Muerta as a shale oil/gas reservoir.

The development of unconventional resources in the Vaca Muerta formation demands significant capital investment. As we rapidly progress on our learning curve, substantially improving productivity and reducing well cost by 13% in 2017 compared to 2016, we expect to continue yielding substantial savings due to operational optimizations, economies of scale and increasing well productivity through a better understanding of the subsurface and the use of new technologies. In this context, our controlled technological-based company of YPF (Y-TEC) has contributed providing: innovative laboratory and operational techniques and protocols; better understanding of the rocks behavior; improvements in reservoir simulation and modelling tools; drilling and completion products; among others. See Research and Development .

Nevertheless, the financial viability of these investments and resource recovery efforts will depend on the prevailing economic and regulatory conditions, as well as the market prices of hydrocarbons in Argentina. See Item 3. Key Information Risk Factors. and Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations for additional information regarding 2018 activity.

Tight sands in Rincón del Mangrullo and Aguada de la Arena also contributed to the increase of natural gas production and reserves in 2017. 19 wells were drilled in these marine tight sands, increasing gas production to 4.2 mmcm/d.

The important 57 km long evacuation gas pipeline built between Rincón del Mangrullo and the facilities of Loma La Lata, today allows gas evacuation of the tight development of the Rincón del Mangrullo block and the shale pilots in the Rincón del Mangrullo and La Ribera. During 2017, the construction of a 16 inch loop commenced to this gas pipeline that will allow the evacuation of the gas coming from the shale development of these and other areas of this zone.

Since 2016, we have been supplying domestic sand as proppant (to be injected in the hydraulic stimulation that allows for the development of unconventional hydrocarbons) and finalized the sand processing plant.

We are planning a pilot in 2018 using domestic sand from a quarry in Rio Negro (200 km from Añelo city) which we expect will allow to get higher reductions in well cost.

During 2017, we commenced testing of dissolvable plugs, chemical and mechanical diverters, frac sleeves, and different types of stimulation fluids, in connection with the completion of our shale gas/oil wells, seeking improved operational efficiency and well performance. We are continuing to study the data from these tests, analyzing the results of productivity in the medium term. Many of these activities were carried out, and continue to be supported by Y-TEC.

### ***Vaca Muerta Formation***

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**Loma Campana Area:** On July 16, 2013, YPF and Chevron signed an investment project agreement for the joint exploitation of unconventional hydrocarbons in Neuquén Province.

During 2017, 27 horizontal wells were drilled and 30 horizontal wells were put into production, achieving a performance that, on average, met the expectations set by the Type Well. The well design has been gradually changing, from 1,500 m of lateral length and 18 frac stages to 2,500 m of lateral length and 32 frac stages (while the space between frac stages was maintained at 80 m), in order to continue the reduction of the development cost.

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The Cocina target (deeper productive interval within Vaca Muerta formation) was re-incorporated as a productive interval and is expected to double the potential area for drilling. Also, the first infill well to the Cocina was drilled in order to analyze the opportunity to develop this target in areas where only wells to the Organico (productive interval within Vaca Muerta formation) were drilled. We commenced drilling of a longer lateral well of 3,200 m of lateral length in November 2017. This well was successfully drilled and established a national record. Its stimulation is planned for April 2018. Two horizontal wells of 2,000 m targeting Organico and Cocina were drilled and completed in the southeast zone of Loma Campana. Those two wells were successfully stimulated in December 2017 and are expected to start production during the first quarter of 2018. The goal of these activities is data acquisition to incorporate the area into the development plan.

Due to continued improvements in our drilling performance, drilling time was reduced by 21% between 2015 and 2017. An average drilling time of 35 days to drill a 4700 m measured depth ( MD ) well was achieved during 2015, with an improvement to 29 days for a 4800 m MD in 2016 and an improvement to 22 days for a 4800 m MD in 2017. This reduction in drilling time is also reflected in drilling costs of an average well cost reduction of 13% between 2016 and 2017 for a horizontal well of 1500 m lateral length and a reduction in development cost of 8.3% in the same period.

In 2017 we conducted various pilots in an effort to reduce our development cost through economically improving EUR (Estimated Ultimate Recovery) or reducing well cost with a minimal or negligible impact to well EUR. The key pilots that we executed to enable us to achieve this objective were:

**Lateral length:** A 4 well pilot was executed on a single location to understand the impact to well productivity and well cost by increasing well length from 1500m to 2500m.

**Proppant Intensity & Frac Fluid Intensity:** A 4 well Design-of-Experiment (DoE) pilot was conducted on a single location at varying proppant intensities (lbs/ft) and frac fluid intensities (gals/ft) to identify the incremental well productivity obtained per foot of lateral given the incremental cost per additional pound of proppant or gal of fluid, and thereby identify the optimum economic point for these two well design variables.

**Chemical diverter:** A chemical diverter pilot was conducted on a single well of a three well pad to understand what incremental productivity could be achieved if we could improve the perforation cluster efficiency across a given fracture stage.

**Geosteering (technology that allows the drilling of the horizontal section of the well throughout the productive interval without detours):** Two geosteering pilots were executed on two different locations in which two wells were geosteered on a given location and then compared against two wells on the same location which had not been geosteered. The objective was to determine what the incremental productivity gain could be from geosteering within a desired target zone.

Due its geographical location and its potentially expandable treatment capacity, Loma Campana Crude Oil Treatment Plant became the central treatment facility for the Vaca Muerta oil cluster starting in January, 2017.

In addition, in 2017 a 33 Kilovolt electrical power line, a generation power station and a transformer substation were put on line. These facilities allow increasing power and give more reliability to the system as well as facilitating power for neighboring blocks.

Activity in this area in 2017 involved a gross investment of U.S.\$362 million in drilling and completion (D&C) and U.S.\$47 million in production facilities.

**La Amarga Chica Area:** On December 10, 2014, YPF and PETRONAS E&P ARGENTINA S.A., an affiliate of PETRONAS E&P Overseas Ventures Sdn. Bhd ( PEPOV ) of Malaysia, executed a Project Investment Agreement (the Investment Agreement ) aiming to perform joint exploitation of unconventional hydrocarbons in the La Amarga Chica area in the Neuquén province. YPF will be the operator of the area.

The Pilot Plan, comprising 30 wells in three years, started in May 2015. At the end of the first phase, a total of six horizontal and three vertical wells were drilled, with results over performing previous expectations. Based on those positive results, PETRONAS E&P ARGENTINA S.A. agreed to continue co-investing in a second phase of the pilot project. By the end of 2016, four additional horizontal wells from this phase were drilled, reaching a total of nine drilled wells during 2016, with a drilling rig fully dedicated to the project. During 2017, 12 horizontal wells were drilled, completing phase 2 of the project and paving the way for the final phase of the project. Nine of those wells were put into production with the expected performance (the other 3 wells will be put into production

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in 2018). All of the drilled horizontal drains were standardized at 1,500 m long except for 2 wells that reached 2,000 m. An improvement in performance of drilling (time and cost) is still observed, with drilling time and well cost being reduced by 16% and 21%, respectively, between 2016 and 2017. This drilling and completion activity developed during 2017 comprised a total gross investment of U.S.\$132 million, with an additional U.S.\$41 million expended on production facilities.

The development phase of the block is estimated to start in September 2018, incorporating a second drilling rig.

Additionally, both parties in the Investment Agreement ratified their intention to continue with the Pilot in the La Amarga Chica block located in the Province of Neuquén. During the third and final phase of the La Amarga Chica Pilot, both companies are considering the drilling of 10 horizontal wells and the construction of new facilities and installations in order to transport the shale oil production derived from the area. The joint investment commitment for this third Pilot phase amounts to 192.5 million U.S. Dollars. This phase is expected to be completed in the third quarter of 2018, after which both parties will be able to decide on the full development of the block.

During the second half of 2017 the first production battery was put in production with a total gross capacity of 1,000 m<sup>3</sup>/d.

We completed the facilities of the southern sector for water supply on a continuous basis (flexipipe) in order to ensure continuous water supply when fracturing the PADs with multiple wells (drilling practice that allows drilling multiple wells from a single portion of compact land known as PAD). Work associated with the gathering and acquisition of production (internal pipelines and field collectors) in the southern and central parts of the area are being executed. In addition, the center and south triangles were connected by an oil pipeline, reducing oil transportation and associated production delay.

An electrical power line was built to provide more reliability to the system, reducing expenses associated with electrical generator rentals.

By the end of 2017, the total oil production increased to 680 m<sup>3</sup>/d (113% higher than December 2016) with a total of 21 wells in production.

**Bandurria Sur Area:** On July 5, 2017, YPF and SPM Argentina S.A. executed an agreement defining the main terms and conditions for the joint development of a shale oil pilot in two phases. YPF will be the operator of the area.

Prior to the agreement, between 2012 and early 2016, YPF drilled and completed two vertical and two horizontal wells. Currently one vertical and two horizontal wells are in production. Three additional horizontal wells were drilled, one of which being completed by December 2017, with performance exceeding expectations. The objective of these wells is to test productivity in different landing zones within the Vaca Muerta organic-rich section. These wells will be evaluated during the first months of 2018.

The standard design for horizontal wells was 2000 m of lateral length and 25 frac stages.

Additionally, in 2017, the pipeline of dispatch to the PTC LC, the construction of EPF (Early Production Facility) and the point of measurement were completed. These facilities allow for evacuating the production of the pilot without the need to use trucks.

This activity comprised a total investment of U.S.\$35.1 million in D&C and U.S.\$1.7 million in production facilities.



**El Orejano Area:** On September 23, 2013, YPF and Dow Europe Holding B.V. and PBB Polisor S.A. (our current 50% partner in the area) signed an agreement relating to the joint development of an unconventional gas pilot project in the Neuquén Province.

The Project has been in the development phase since July 2016, and three targets are being drilled and produced. Through December 2017, 78 wells have been drilled and 64 wells have been put on line. During 2017, 19 horizontal wells were drilled reducing the well spacing to 300 m at the same landing zone, and 25 wells were put into production, with a gross investment of U.S.\$262.2 million in D&C and U.S.\$24.9 million in production facilities.

Drilling time and well cost were reduced by 37% and 39%, respectively, between 2016 and 2017, with a reduction in development cost of 42.3% in the same period.

February 2017 marked the start up of the UPS2 (Unidad de Separación Primaria 2), with the treatment and the separation capacity being upgraded to 4Mm<sup>3</sup>/d. A 16 inch Loop was built in the gas sale pipeline to Gas Pacífico Sale Point to increase gas transport capacity. A wellhead compression pilot began by the end of 2016 (2900 HP installed) and the central compression is planned for December 2018.

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In 2017, the well lateral length was increased to around 2,100 meters. The maximum length drilled was 2,715 meters. The first 6 wells inline pad were drilled at beginning of 2017 reducing the drilling and completion costs. The performance of these wells exceeded expectations. A space reduction pilot was carried out in the southern area of the block at the higher production performance level. Static and Geomechanic Model generation allowed us to select the development zone based on the petrophysical and geomechanical properties.

Regarding the frac plan, new technologies were evaluated such as mechanical diverters and different slickwater frac designs, in order to achieve better operational efficiency as well as better well performance. In 2018, a pilot is planned using domestic sand in all hydraulic stimulations in order to reduce well cost. In addition, new technologies such as open hole sleeves and high density completion designs are expected to be tested.

By the end of 2017, the total field gas production was 3.9 Mm<sup>3</sup>/d (105% higher than December 2016).

**Rincón del Mangrullo Area:** In the Mulichinco formation at the Rincón del Mangrullo concession, Pampa Energía S.A. ( Pampa Energía ) acquired 50% of the working interest during 2015. By the end of 2017, 88 wells (74 directed wells and 14 horizontal wells) were drilled in these marine tight sands, achieving an average gas production of 4.2 mmcm/d through a pipeline that connects to the Loma La Lata facilities. During 2016, a pilot of 3 horizontal wells was developed in 2 different zones of very low permeability (very tight sand), with results exceeding expectations. These results were encouraging for continued development of horizontal wells.

During 2017, 11 horizontal wells were drilled in a very tight zone and 8 vertical wells in a tight zone with a standard design of 1,000 m lateral length and 7 frac stages for the first one.

Drilling time and well cost were reduced by 18% and 12%, respectively, between 2016 and 2017, with a reduction in development cost of 6% in the same period, with a total investment of U.S.\$80.7 million in D&C, and an additional U.S.\$17 million expended on production facilities.

On the other hand, the Vaca Muerta Formation in this block is 100% owned by YPF. During 2017, one vertical pilot well and three horizontal wells were drilled targeting the Vaca Muerta formation. The objective of the vertical well was data acquisition and landing zone definition. The objective of the horizontal wells was to test productivity in three different landing zones across the Vaca Muerta organic rich section. The three horizontal wells were put into production by the end of September 2017. Two of the wells production levels have exceeded expectations and the other one below expectations while the third has fallen short of meeting expectations.

In the production facilities, a 16 inch Loop of 33 kms long was started in the existing gas sale pipeline to Loma La Lata to increase gas transport capacity.

This activity, developed during 2017, comprised a total investment of U.S.\$34.8 million in D&C and U.S.\$1.8 million in production facilities.

**Aguada de la Arena Area:** On May 13, 2016, YPF and Pampa Energía executed an agreement that subjects them to certain conditions precedent under which, upon closing of the acquisition by Pampa Energía of a controlling stake in Petrobras Argentina S.A ( PESA ). PESA will assign to YPF certain participating interests in two exploitation concessions in areas with gas production and significant gas development potential (tight and shale) located in the Neuquina basin, which shall be operated by YPF. The conditions previously mentioned, and the assignment to YPF of the participating interest were concluded during 2016. As a result, the participating interests acquired were: (i) a 33.33% participating interest in the Río Neuquén block located in the province of Neuquén and the province of Río Negro and (ii) an 80% participating interest in the Aguada de la Arena block located in the province of Neuquén. In

addition, on February 23, 2017, YPF and PetroUruguay S.A. signed a definitive agreement for the transfer of a 20% participating interest in the Aguada de la Arena area. As a result, YPF has increased its participating interest in the Aguada de la Arena area to 100%.

By the end of 2016, 14 wells were operating in the Mulichinco formation.

During 2017, all activity was oriented to the Vaca Muerta formation. One vertical pilot well and three horizontal wells were drilled targeting these formation. The objective of the pilot well was data acquisition and landing zone definition. The horizontal wells targeted three different landing zones across the Vaca Muerta organic rich section.

Total investment in connection therewith was U.S.\$32.3 million in D&C.

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**Bajada de Añelo Area:** In February 23, 2017, YPF and O&G Developments Ltd. S.A. (hereinafter O&G), an affiliate of Shell Compañía Argentina de Petróleo S.A., executed an agreement, through which YPF and O&G agreed on the main terms and conditions for the joint development of a shale oil and shale gas pilot in two phases. O&G will be the operator of the area. On August 15, 2017, the Province of Neuquén authorized the assignments provided for in the Agreement concluded between YPF S.A. and O & G Developments Ltd. S.A., an affiliate of Shell Compañía Argentina de Petróleo S.A., with the objective of carrying out the joint exploitation of hydrocarbons in the Bajada de Añelo area in the Province of Neuquén.

Although there was no drilling and completion activity during 2016, YPF acquired 3D seismic data covering 618 km<sup>2</sup> in this area.

Drilling activity in 2017 started in the southeast corner of the block with one vertical pilot well dedicated to data acquisition (core across the entire Vaca Muerta organic-rich section and complete suite of logs). By the end of 2017, we commenced drilling three horizontal wells, targeting 3 landing zones, were started to drill from the same pad using the skidding methodology.

The foregoing activity in 2017 comprised a total investment of U.S.\$6.6 million.

**La Ribera Area:** This block, located in the center on the Neuquén basin, is 100% owned by YPF. The concession area comprises two separated regions: La Ribera I, covering 21.85 km<sup>2</sup>, and La Ribera II, covering 49.8 km<sup>2</sup>. Two vertical exploratory wells (one in each region) targeting the Vaca Muerta formation were drilled and completed in 2014. Both wells tested gas and condensate. During 2017, two horizontal wells targeting two landing zones in the Vaca Muerta organic-rich section were drilled and completed. These wells were connected in October 2017, and have obtained results in accordance with expectations.

**Chihuido de la Sierra Negra Sudeste Narambuena Area:** During April 2014, YPF and subsidiaries of Chevron Corporation executed a new agreement with the objective of the joint exploration of unconventional hydrocarbons in Neuquén, within the area Chihuido de la Sierra Negra Sudeste Narambuena. During 2015, this activity began with the drilling and completion of two vertical wells that allowed for the defining of the location and landing zone for the horizontal well. This well was drilled at the end of 2015 and the beginning of 2016, covering 1200 m of lateral length at 2400 m of vertical depth, within the younger internal sequence of Vaca Muerta and becoming the first well in the basin with this objective. Subsequently, a third vertical well was drilled to delineate the extension of the play to the eastern sector of the block. By the drilling, completion and testing of these wells, the commitment for the initial phase of the project signed in April 2014 was fulfilled. During the second half of 2016, the joint venture between YPF and subsidiaries of Chevron Corporation continued the exploratory stage by evaluating the long term tests of the horizontal well and third vertical well in this area located in the black oil window of the play.

During 2017, Chevron evaluated the results of the drilled wells, and informed YPF of its interest in continuing to a second phase, which was negotiated during the second half of 2017.

During 2017, Unconventional Regional production was 84.7 mboe/d, representing 15% of YPF's total production.

**1. Non-Operated Areas Development Activities: Aguada Pichana Este:** This block is operated by Total S.A. YPF holds in this block a 27.2% working interest in the Mulichinco Formation, and a 22.50% working interest in the Vaca Muerta Formation.

Tight gas projects: during 2017, we continued tight gas development in different areas of the block and 4 wells were drilled. One of those wells and another three production wells drilled in 2016 were put into production in 2017. One of

the well drilled in 2016 was abandoned and the others produced less than expected.

Shale project: six shale gas wells were drilled in 2017. These wells are part of a 22 well pre-development project that we expect to continue in the following years. Sixteen of these wells are expected to be connected in 2018.

2. **Aguada San Roque block:** This block is operated by Total S.A., and YPF holds a 34.11% working interest.

Shale oil pilot project: two wells were drilled during 2017. These wells are expected to be completed and connected during first quarter of 2018.

3. **Other Blocks:**

**Aguada Pichana Oeste** is operated by PAE, and YPF holds a 30% working interest in this block. One well started drilling operations during November 2017. Drilling pilot activities are planned to continue in 2018.

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**Pampa de las Yeguas I** is operated by EXXON, YPF holds a 50% working interest in this block. One well has been drilled in 2017 and two more wells are expected to be drilled in 2018 as part of a pilot project. Three wells are expected to be connected in 2019.

**La Calera** is operated by Pluspetrol, and YPF holds a 50% working interest. One exploration well was drilled and completed during 2017. This well is expected to be connected during first quarter 2018.

**Lindero Atravesado** is operated by PAE, and YPF holds a 37.5% working interest. During 2017, 19 tight and development wells were drilled to the Lajas Formation. Twelve of these wells were put into production in 2017 with performance being less than expected.

**Main properties**

Our production is concentrated in the following basins in Argentina: Neuquina, Golfo San Jorge, Cuyana, Noroeste and Austral.

Our domestic operations are subject to certain risks. See Item 3. Key Information Risk Factors.

In 2017, 2016 and 2015, we finalized agreements related to the acquisition and development of properties that are part of our core business. In connection with those agreements, see Notes 3 and 29.b to the Audited Consolidated Financial Statements.

In addition, in connection with the extension of concessions, see Note 29.a to the Audited Consolidated Financial Statements.

The following table sets forth information with regard to our developed and undeveloped acreage by geographic area as of December 31, 2017:

	As of December 31, 2017			
	Developed <sup>(1)</sup>		Undeveloped <sup>(2)</sup>	
	Gross <sup>(3)</sup>	Net <sup>(4)</sup>	Gross <sup>(3)</sup>	Net <sup>(4)</sup>
	(thousands of acres)			
South America	1,221	941	32,535	18,007
Argentina	1,221	941	31,990	17,684
Rest of South America <sup>(5)</sup>			545	323
Total	1,221	941	32,535	18,007

(1) Developed acreage is spaced or assignable to productive wells.

(2) Undeveloped acreage encompasses those leased acres on which wells have not been drilled or completed to a point that would permit the production of economic quantities of oil or gas regardless of whether such acreage contains proved reserves.

(3) A gross acre is an acre in which we own a working interest.

(4) Net acreage equals gross acreage after deducting third-party interests.

- (5) Relates to Colombia, Bolivia and Chile. In the case of Colombia, YPF and its partners notified the Colombian National Hydrocarbons Agency ( ANH ) of the decision to relinquish the COR 12 and COR 33 blocks. In Bolivia, YPF s net undeveloped surface acreage totaled 147,000 acres. Finally, in Chile, YPF s net undeveloped surface acreage totaled 3,000 acres needed to finish the testing of one exploration well.

Except for the information provided in the next paragraph, as of December 31, 2017, none of our exploration permits considered as a whole, which include undeveloped acreage, will expire in 2018 in accordance with the Hydrocarbons Law and complementary provincial laws. In addition, according to Law No. 27,007 that amended the Hydrocarbons Law, all national offshore permits and offshore hydrocarbon production concessions that did not have association agreements with ENARSA as of the date of the new law reverted and were transferred to the Argentine Secretariat of Energy. Permits and concessions granted prior to Law No. 25,943 will be exempt from this provision. In September 2015, the National Executive Office and YPF began negotiating the conversion of association agreements signed with ENARSA. On December 29, 2017 YPF filed a note before the Ministry of Energy confirming its willingness to negotiate the conversion of association agreement related to the Area identified as ENARSA 1 . In the same note, YPF informed that it communicated its decision not to convert the association agreements related such Areas to the Operators of Areas ENARSA 2 and ENARSA 3 .. As of the date of this annual report, negotiations related to Area ENARSA 1 are ongoing. YPF currently participates in three offshore blocks in association with ENARSA, which represent approximately 55% of our net

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exploratory undeveloped acreage. We cannot guarantee that as a result of such negotiations we would not decide to relinquish to the Argentine Secretariat of Energy part or all of the acreage included in our current association with ENARSA. With the exception of the above, none of our exploration permits are regulated by Law No. 27,007. See Legal and Regulatory Framework and Relationship with the Argentine Government Law No. 27,007, amending the Hydrocarbons Law Exploration and Production.

However, as a result of the expiration in 2018 of the First, Second or Third Exploration Terms of certain of our exploration permits (according to the original terms of the Hydrocarbons Law, which applied to our existing exploration permits), we would be required to relinquish a fixed portion of the acreage related to each such expiring permit, as set forth in the Hydrocarbons Law, as long as exploitable quantities of oil or gas are not discovered in such areas (in which case we may seek to obtain a declaration of their commercial viability from the relevant authorities, and the related areas would then be subject to exploitation concessions). Additionally, and depending on the circumstances that could arise in each case (for instance, the state of exploratory activity in a certain area), we could request an extension of the expiration of the exploration permit, which would be subject to the approval of the respective governing authority. As a result, if no discoveries are made in 2018, we would be required to relinquish approximately 2,600 km<sup>2</sup> of exploratory undeveloped acreage (approximately 6% of our 43,400 km<sup>2</sup> of net exploratory undeveloped acreage as of December 31, 2017) during 2018.

Additionally, based on information available as of the date of this annual report, if we fail to make any discoveries or to engage in new activity that could extend the expirations of the exploration permits, we could be required or could decide to relinquish a maximum of approximately 7,200 km<sup>2</sup> of exploratory undeveloped acreage (approximately 17% of our 43,400 km<sup>2</sup> of net exploratory undeveloped acreage as of December 31, 2017) during 2019 and 2020.

According to the Hydrocarbons Law, we are entitled to decide, according to our best interest, which acreage related to each exploration permit to keep if we remain within the required relinquishment percentage. Therefore, the areas to be relinquished consist usually of acreage where drilling has not been successful and are considered non-core lease acreage.

Except as described above, we do not have any material undeveloped acreage related to our production concessions expiring in the near term.

See Legal and Regulatory Framework and Relationship with the Argentine Government Law No. 27,007, amending the Hydrocarbons Law for a description of new terms that apply to new production concessions or exploration permits, other than those already governed by previous laws.

**Argentine Exploration Permits and Exploitation Concessions**

Based on 2016 production, Argentina is the largest producer of natural gas and the fourth largest producer of crude oil in Central and South America, according to the 2017 edition of the BP Statistical Review of World Energy published in June 2017. Oil has historically accounted for the majority of the country's hydrocarbon production and consumption, although the relative share of natural gas has increased rapidly in recent years. As of the date of this annual report, a total of 24 sedimentary basins were re-evaluated in the country, in the line with (*Plan Exploratorio Argentina*). The total surface area of the continent represents approximately 408 million acres and the total offshore surface area includes 194 million acres on the South Atlantic shelf within the 200-meter line. Of the total 602 million acres of the sedimentary basins, a significant part still needs to be evaluated through exploratory and study drilling.

The following table shows our gross and net interests in productive oil and gas wells in Argentina by basin, as of December 31, 2017:



<i>Basin</i>	<i>Wells<sup>(1)</sup></i>			
	<i>Oil</i>		<i>Gas</i>	
	<i>Gross</i>	<i>Net</i>	<i>Gross</i>	<i>Net</i>
Onshore	12.791	11.456	2.004	1.432
Neuquina	4.664	3.845	1.828	1.286
Golfo San Jorge	7.231	6.784	64	64
Cuyana	777	712	0	0
Noroeste	9	5	54	23
Austral	110	110	58	58
Offshore			24	12
<b>Total</b>	<b>12.791</b>	<b>11.456</b>	<b>2.028</b>	<b>1.444</b>

- (1) A gross well is a well in which we own a working interest. A net well is deemed to exist when the sum of fractional ownership working interests in gross wells equals one. The number of net wells is the sum of the fractional working interests owned in gross wells expressed as whole numbers and fractions of whole numbers. Gross and net wells include one oil well and three gas wells with multiple completions.

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As of December 31, 2017, we held 133 exploration permits and production concessions in Argentina. We directly operate 98 of them, including 17 exploration permits and 81 production concessions.

Exploration permits. As of December 31, 2017, we held 21 exploration permits in Argentina, 18 of which were onshore exploration permits and 3 of which were offshore exploration permits. We had 100% ownership of 8 onshore permits, and our participating interests in the remainder varied between 50% and 80%. Our participating interests in the 3 offshore permits varied between 30 % and 35%.

Production concessions. As of December 31, 2017, we had 112 production concessions in Argentina. We had a 100% ownership interest in 67 production concessions, and our participating interests in the remaining 45 production concessions varied between 7% and 98%.

In addition, we have 36 crude oil treatment plants and 10 pumping plants where oil is processed and stored. The purpose of these plants is to receive and treat oil from different fields prior to shipment to our refineries and/or commercialization to third parties, as applicable. See Item 3. Key Information Risk Factors Risks Relating to the Argentine Oil and Gas Business and Our Business Our business depends to a significant extent on our production and refining facilities and logistics network.

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In connection with our principal properties, see Exploration & Production Activity in Argentina. Production for each of the last three fiscal years by geographic area and by field containing 15% or more of our total proved reserves are set forth under Oil and gas production, production prices and production costs.

Approximately 92% of our proved crude oil reserves in Argentina are concentrated in the Neuquina (49%) and Golfo San Jorge (43%) basins, and approximately 87% of our proved gas reserves in Argentina are concentrated in the Neuquina (79%), and Golfo San Jorge (8%) basins.

**Joint ventures and contractual arrangements in Argentina**

As of December 31, 2017, we participated in 11 exploration and 37 production joint ventures and contractual arrangements (26 of which were not operated by us) in Argentina. Our interests in these joint ventures and contractual arrangements ranged from 7% to 98%, and our obligations to share exploration and development costs varied under these agreements. In addition, under the terms of some of these joint ventures, we have agreed to indemnify our joint venture partners in the event that our rights with respect to such areas are restricted or affected in such a way that the purpose of the joint venture cannot be achieved. For a list of the main exploration and production joint ventures in which we participated as of December 31, 2017, see Note 24 to the Audited Consolidated Financial Statements. We are also a party to a number of other contractual arrangements that arose through the renegotiation of service contracts and risk contracts and their conversion in exploitation concessions and exploration permits, respectively.

**Oil and Gas Reserves**

Proved oil and gas reserves are those quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible (from a given date forward, from known reservoirs, and under existing economic conditions, operating methods and government regulations) prior to the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether deterministic or probabilistic methods are used for the estimation. The project to extract the hydrocarbons must have commenced or the operator must be reasonably certain that it will commence the project within reasonable time. In some cases, substantial investments in new wells and related facilities may be required to recover proved reserves.

Information on net proved reserves as of December 31, 2017, 2016 and 2015 was calculated in accordance with the SEC rules and Financial Accounting Standards Board ( FASB ) Accounting Standards Codification ( ASC ) 932, as amended. Accordingly, crude oil prices used to determine reserves were calculated each month for crude oils of different quality produced by the Company. Consequently, to calculate our net proved reserves as of December 31, 2017, the Company considered the realized prices for crude oil in the domestic market (which were higher than those that had prevailed in the international market), taking into account the unweighted average price for each month within the twelve-month period ended December 31, 2017. Additionally, since there are no benchmark market natural gas prices available in Argentina, the Company used average realized gas prices during the year to determine its gas reserves.

Notwithstanding the foregoing, commodity prices have declined significantly since 2014. See Item 3. Key Information Risk Factors Risks Relating to the Argentine Oil and Gas Business and Our Business Our oil and natural gas reserves are estimates and Item 3. Key Information Risk Factors Risks Relating to the Argentine Oil and Gas Business and Our Business Our reserves and production are likely to decline.

Net reserves are defined as that portion of the gross reserves attributable to the interest of YPF after deducting interests owned by third parties. In determining net reserves, the Company excludes from its reported reserves

royalties due to others, whether payable in cash or in kind, where the royalty owner has a direct interest in the underlying production and is able to make lifting and sales arrangements independently. By contrast, to the extent that royalty payments required to be made to a third party, whether payable in cash or in kind, are a financial obligation, or are substantially equivalent to a production or severance tax, the related reserves are not excluded from the reported reserves despite the fact that such payments are referred to as royalties under local rules. The same methodology is followed in reporting our production amounts.

Gas reserves exclude the gaseous equivalent of liquids expected to be removed from the gas on concessions and leases, at field facilities and at gas processing plants. These liquids are included in net proved reserves of NGLs.

**Table of Contents*****Technology used in establishing proved reserves additions***

YPF's estimated proved reserves as of December 31, 2017 are based on estimates generated through the integration of available and appropriate data, utilizing well-established technologies that have been demonstrated in the field to yield repeatable and consistent results. Data used in these integrated assessments include information obtained directly from the subsurface via wellbore, such as well logs, reservoir core samples, fluid samples, static and dynamic pressure information, production test data, and surveillance and performance information. The data utilized also include subsurface information obtained through indirect measurements, including high quality 2-D and 3-D seismic data, calibrated with available well control. Where applicable, geological outcrop information was also utilized. The tools used to interpret and integrate all this data included both proprietary and commercial software for reservoir modeling, simulation and data analysis. In some circumstances, where appropriate analog reservoir models are available, reservoir parameters from these analog models were used to increase the reliability of our reserves estimates.

For further information on the estimation process of our proved reserves, see Internal controls on reserves and reserves audits.

***Net Proved Developed and Undeveloped Reserves as of December 31, 2017***

The following table sets forth our estimated net proved developed and undeveloped reserves of crude oil, NGLs and natural gas at December 31, 2017.

	Oil <sup>(1)</sup> (mmbbl)	NGL (mmbbl)	Natural Gas (bcf)	Total <sup>(2)</sup> (mmboe)
<b><i>Proved Developed Reserves</i></b>				
<b>Consolidated Entities</b>				
South America				
Argentina	286	47	1,850	663
North America				
United States				
Total Consolidated Entities	286	47	1,850	663
<b>Equity-Accounted Entities</b>				
South America				
Argentina				
North America				
United States				
Total Equity-Accounted Entities				
<b>Total Proved Developed Reserves</b>	<b>286</b>	<b>47</b>	<b>1,850</b>	<b>663</b>

<b><i>Proved Undeveloped Reserves</i></b>	Oil <sup>(1)</sup> (mmbbl)	NGL (mmbbl)	Natural Gas (bcf)	Total <sup>(2)</sup>
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(mmboe)

<b>Consolidated Entities</b>				
South America				
Argentina	136	11	670	266
North America				
United States				
Total Consolidated Entities	136	11	670	266
<b>Equity-Accounted Entities</b>				
South America				
Argentina				
North America				
United States				
Total Equity-Accounted Entities				
<b>Total Proved Undeveloped Reserves</b>	<b>136</b>	<b>11</b>	<b>670</b>	<b>266</b>

	<b>Oil <sup>(1)</sup></b>	<b>NGL</b>	<b>Natural Gas</b>	<b>Total</b>
	<b>(mmbbl)</b>	<b>(mmbbl)</b>	<b>(bcf)</b>	<b><sup>(2)</sup></b>
				<b>(mmboe)</b>
<b>Total Proved Reserves <sup>(2) (3)</sup></b>				
<b>Consolidated Entities</b>				
Developed Reserves	286	47	1,850	663
Undeveloped Reserves	136	11	670	266
Total Consolidated Entities	422	58	2,520	929
<b>Equity-accounted entities</b>				
Developed Reserves				
Undeveloped Reserves				
Total Equity-Accounted Entities				
<b>Total Proved Reserves</b>	<b>422</b>	<b>58</b>	<b>2,520</b>	<b>929</b>

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- (1) Includes crude oil (oil and condensate).
- (2) Volumes of natural gas in the table above and elsewhere in this annual report have been converted to barrels of oil equivalent at 5,615 cubic feet per barrel.
- (3) Proved crude oil and NGL reserves of consolidated entities include an estimated approximately 61 mmbbl of crude oil and 6 mmbl of NGLs in respect of royalty payments which, as described above, are a financial obligation or are substantially equivalent to a production or similar tax. Proved natural gas reserves of consolidated entities include an estimated approximately 289 bcf in respect of such payments. Equity-accounted entities reserves in respect of royalty payments that are a financial obligation or are substantially equivalent to a production or similar tax are not material.

For information regarding changes in our estimated proved reserves during 2017, 2016 and 2015, see Note 35 to the Audited Consolidated Financial Statements.

The paragraphs below explain in further detail the most significant changes in our proved undeveloped reserves during 2017, 2016 and 2015.

### **Changes in our proved undeveloped reserves during 2017**

YPF had estimated a volume of net proved undeveloped reserves of 266 mmboe at December 31, 2017, which represented approximately 29% of the 929 mmboe total reported proved reserves as of such date. This compares to estimated net proved undeveloped reserves of 298 mmboe as of December 31, 2016 (approximately 27% of the 1,113 mmboe total reported proved reserves as of such date).

The 11% total net decrease in net proved undeveloped reserves in 2017 is mainly attributable to:

Ongoing successful development activities related to proved undeveloped reserves projects, which allowed a transfer of approximately 82 mmboe to proved developed reserves. Main contributions are related to Development Wells (62 mmboe) mainly in Neuquina basin, Improved Recovery Projects (9,5 mmboe) mainly in Golfo San Jorge and Neuquina basins, and Gas Compression Projects (9,5 mmboe) in Austral and Neuquina basins.

New economic conditions with lower gas and oil average prices and higher operating costs affected scheduled projects economics, resulting in a 20 mmboe Proved Undeveloped Reserves reduction mainly from oil fields of Neuquina basin (-16 mmboe) and Golfo San Jorge basin (-3 mmboe).

Some primary and improved recovery oil projects development schedule was modified or canceled, resulting in a 2,5 mmboe proved undeveloped reserves reduction, mainly in Neuquina and Golfo San Jorge basins.

This was partially offset by:

Extensions and discoveries, which added 54 mmboe (219 mmscf of Gas and 12 mmbbl of Oil) of proved undeveloped reserves mainly from Neuquina and Austral basins.

New improved recovery projects, adding approximately 21 mmboe of proved undeveloped secondary recovery reserves. Most important additions belong to Golfo San Jorge and Neuquina basins.

New project studies in Golfo San Jorge and Neuquina basins added approximately 5 mmboe of proved undeveloped reserves.

The extension of Rincón del Mangrullo and Magallanes fields' concessions resulted in approximately 4 mmboe reserves addition in proved undeveloped reserves.

YPF's total capital expenditure to continue the development of reserves was approximately U.S.\$ 1,113 million during 2017, of which U.S.\$ 693 million was allocated to projects related to proved undeveloped reserves.

As of December 31, 2017, we did not have material amounts of proved undeveloped reserves in individual fields or countries that have remained undeveloped for five years or more after being disclosed as proved undeveloped reserves.



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***Changes in our proved undeveloped reserves during 2016***

YPF had estimated a volume of net proved undeveloped reserves of 298 mmboe at December 31, 2016, which represented approximately 27% of the 1,113 mmboe total reported proved reserves as of such date. This compares to estimated net proved undeveloped reserves of 337 mmboe as of December 31, 2015 (approximately 27% of the 1,226 mmboe total reported proved reserves as of such date).

The approximately 11% net decrease in net proved undeveloped reserves in 2016 is mainly attributable to:

Ongoing successful development activities related to proved undeveloped reserves projects, which allowed a transfer of approximately 116 mmboe to proved developed reserves. Main contributions are related to development wells (75 mmboe), mainly in the Neuquina basin, improved recovery projects (14 mmboe), mainly in the Golfo San Jorge and Neuquina basins, and gas compression projects in the Neuquina basin (12 mmboe).

New economic conditions with lower average oil prices that affected the economics of scheduled projects, resulting in a reduction of proved undeveloped reserves of 45 mmboe, mainly from the oil fields of the Golfo San Jorge basin (-16 mmboe), the Neuquina basin (-14 mmboe) and the Austral basin (-12 mmboe).

In the Golfo San Jorge basin, the development schedules of several primary and improved recovery oil projects were modified or canceled, resulting in a reduction of proved undeveloped reserves of 20 mmboe.

This was partially offset by:

Extensions and discoveries, which added 80 mmboe (242 mmcf of gas and 29 mmbbl of oil) of proved undeveloped reserves, mainly from the Neuquina basin.

New project studies, which added approximately 12 mmboe of proved undeveloped reserves, mainly from the Neuquina basin.

New improved recovery projects, adding approximately 30 mmboe of proved undeveloped secondary recovery reserves. The most important additions belong to the Golfo San Jorge and Neuquina basins. The acquisition of interests in the Rio Neuquen gas field located in the Neuquina basin resulted in the addition of approximately 11 mmboe of proved undeveloped reserves.

YPF's total capital expenditure to continue the development of reserves was approximately U.S.\$2,930 million during 2016, of which U.S.\$ 1,214 million was allocated to projects related to proved undeveloped reserves.

As of December 31, 2016, we did not have material amounts of proved undeveloped reserves in individual fields or countries that have remained undeveloped for five years or more after being disclosed as proved undeveloped reserves.

*Changes in our proved undeveloped reserves during 2015*

YPF had estimated a volume of net proved undeveloped reserves of 337 mmboe at December 31, 2015, which represented approximately 27% of the 1,226 mmboe total reported proved reserves as of such date. This compares to estimated net proved undeveloped reserves of 307 mmboe as of December 31, 2014 (approximately 25% of the 1,212 mmboe total reported proved reserves as of such date).

The approximately 10% net increase in net proved undeveloped reserves in 2015 is mainly attributable to:

Extensions and discoveries, which added 93 mmboe (24.5 mmbbl of crude oil, 7.3 mmbbl of NGL and 341.8 bcf of natural gas) of proved reserves, mainly in the Neuquina basin.

New project studies and revisions of gas and oil development projects, which added approximately 18 mmboe (7.5 mmbbl of crude oil, 0.9 mmbbl of NGL and 52.4 bcf of natural gas) of proved undeveloped reserves. The main contributions came from fields in the Neuquina, Golfo San Jorge, and Austral basins.

New improved recovery projects, which added approximately 10 mmbbl of proved undeveloped secondary recovery reserves of crude oil. The most important additions belong to the Golfo San Jorge, Neuquina and Cuyana Basins.

This was partially offset by:

Ongoing successful development activities related to proved undeveloped reserves projects, which allowed a transfer of approximately 77 mmboe (29 mmbbl of crude oil, 10.2 mmbbl of NGL and 212 bcf of natural gas) to proved developed reserves. The main contributions are related to development wells (51 mmboe), gas compression projects (15 mmboe) and improved recovery projects (8 mmboe).

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A new joint venture agreement for the Rincón del Mangrullo field resulted in a reduction of approximately 8 mmboe (0.3 mmbbl of crude oil, 1.6 mmbbl of NGL and 34.7 bcf of natural gas) of proved undeveloped reserves, due to a change in YPF's working interest in this area.

YPF's total capital expenditure to continue the development of reserves was approximately U.S.\$4,592 million during 2015, of which U.S.\$1,557 million was allocated to projects related to proved undeveloped reserves.

As of December 31, 2015, we did not have material amounts of proved undeveloped reserves in individual fields or countries that have remained undeveloped for five years or more after being disclosed as proved undeveloped reserves.

**Internal controls on reserves and reserves audits**

All of our oil and gas reserves held in consolidated companies have been estimated by our petroleum engineers. In order to meet the high standard of reasonable certainty, reserves estimates are stated taking into consideration additional guidance as to reservoir economic producibility requirements, acceptable proved area extensions, drive mechanisms and improved recovery methods, marketability under existing economic and operating conditions and project maturity.

Where applicable, the volumetric method is used to determine the original quantities of petroleum in place. Estimates are made by using various types of logs, core analysis and other available data. Formation tops, gross thickness and representative values for net pay thickness, porosity and interstitial fluid saturations are used to prepare structural maps to delineate each reservoir and isopachous maps to determine reservoir volume. Where adequate data is available and where circumstances are justified, material-balance and other engineering methods are used to estimate the original hydrocarbon in place.

Estimates of ultimate recovery are obtained by applying recovery factors to the original quantities of petroleum in place. These factors are based on the drive mechanisms inherent in the reservoir, analysis of the fluid and rock properties, the structural position of the reservoir and its production history. In some instances, comparisons are made with similar production reservoirs in the areas where more complete data is available.

Where adequate data is available and where circumstances are justified, material-balance and other engineering methods are used to estimate ultimate recovery. In these instances, reservoir performance parameters such as cumulative production, production rate, reservoir pressure, gas to oil ratio behavior and water production are considered in estimating ultimate recovery.

In certain cases where the above methods could not be used, proved reserves are estimated by analogy to similar reservoirs where more complete data are available.

To control the quality of reserves booking, a process has been established that is integrated into the internal control system of YPF. This process to manage reserves booking is centrally controlled and has the following components:

- (a) The Reserves Audit ( RA ) is separate and independent from the Upstream segment. RA's activity is overseen by YPF's Audit Committee, which is also responsible for supervising the procedures and systems used in the recording of and internal control over the Company's hydrocarbon reserves. The primary objectives of the RA are to ensure that YPF's proved reserves estimates and disclosure are in compliance with the rules of the SEC, the FASB, and the Sarbanes-Oxley Act, and to review annual changes in reserves estimates and the reporting of

YPF's proved reserves. The RA is responsible for preparing the information to be publicly disclosed concerning YPF's reported proved reserves of crude oil, NGLs, and natural gas. In addition, the RA is also responsible for providing training to personnel involved in the reserves estimation and reporting process within YPF. The RA is managed by and staffed with individuals that have an average of more than 20 years of technical experience in the petroleum industry, including in the classification and categorization of reserves under the SEC guidelines. The RA staff includes several individuals who hold advanced degrees in either engineering or geology, as well as individuals who hold bachelor's degrees in various technical studies. Several members of the RA are registered with or affiliated to the relevant professional bodies in their fields of expertise.

- (b) The Reserves Auditor, who has headed the RA since July 2017, is responsible for overseeing the preparation of the reserves estimates and reserves audits conducted by third party engineers. The current director has over 35 years of experience in geology and geophysics, reserves estimates, project development, finance and general accounting regulations. Prior to becoming the Reserves Auditor, he was the General Manager in E&D and before that he worked as the Director for Exploration in YPF.

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He holds a degree in geology from the National University of Patagonia, and postgraduate courses at IAE Austral University. Consistent with our internal control system requirements, the Reserves Auditor's compensation is not affected by changes in reported reserves.

- (c) A quarterly internal review by the RA of changes in proved reserves submitted by the Upstream business segment and associated with properties where technical, operational or commercial issues have arisen.
  - (d) A Quality Reserve Coordinator ( QRC ) is assigned to each Upstream business segment of YPF to ensure that there are effective controls in the proved reserves estimation and approval process of the estimates of YPF and the timely reporting of the related financial impact of proved reserves changes. Our QRCs are responsible for reviewing proved reserves estimates. The qualification of each QRC is made on a case-by-case basis with reference to the recognition and respect of such QRC's peers. YPF would normally consider a QRC to be qualified if such person (i) has a minimum of 5 years of practical experience in petroleum engineering or petroleum production geology, with at least three years of such experience in charge of the estimation and evaluation of reserves, and (ii) has either (A) obtained, from a college or university of recognized stature, a bachelor's or advanced degree in petroleum engineering, geology or other related discipline of engineering or physical science, or (B) received, and is maintaining in good standing, a registered or certified professional engineer's license or a registered or certified professional geologist's license, or the equivalent thereof, from an appropriate governmental authority or professional organization.
  - (e) A formal review through technical review committees to ensure that both technical and commercial criteria are met prior to the commitment of capital to projects.
  - (f) Our internal audit team examines the effectiveness of YPF's financial controls, which are designed to ensure the reliability of reporting and safeguarding of all the assets and examines YPF's compliance with the law, regulations and internal standards.
  - (g) All volumes booked are submitted to a third party reserves audit on a periodic basis. The properties selected for a third party reserves audit in any given year are selected on the following basis:
    - i. all properties on a three-year cycle; and
    - ii. recently acquired properties not submitted to a third party reserves audit in the previous cycle and properties with respect to which there is new information which could materially affect prior reserves estimates.
- For those areas submitted to a third party reserves audit, YPF's proved reserves figures have to be within 7% or 10 mmbob of the third party reserves audit figures for YPF to declare that the volumes have been ratified by a third party reserves audit. In the event that the difference is greater than the tolerance, YPF will re-estimate its proved reserves to achieve this tolerance level or should disclose the third party figures. YPF has adopted the above-mentioned procedure by approving the corresponding internal policy.

In 2017, Gaffney, Cline & Associates audited certain YPF operated and non-operated areas in the Neuquina, Golfo San Jorge, Austral and Cuyana basins of Argentina. These audits were performed as of December 31, 2017, and the audited fields contain in aggregate, according to our estimates, approximately 262 mmboe proved reserves (90.82 mmboe of which were proved undeveloped reserves) as of such date, which represented approximately 28.2% of our proved reserves and 34.1% of our proved undeveloped reserves as of December 31, 2017. Copies of the related reserves audit reports are filed as an exhibit to this annual report.

We are required, in accordance with Resolutions No. 324/06 and 69/16 of the Argentine Secretariat of Hydrocarbon Resources, to annually file by March 31 details of our estimates of our oil and gas reserves and resources with the Argentine Secretariat of Hydrocarbon Resources, as defined in that resolution and certified by an external auditor. The aforementioned certification and external audit only have the meaning established by Resolutions No. 324/06 and 69/16, and are not to be interpreted as a certification or external audit of oil and gas reserves under SEC rules. We last filed such a report for the year ended December 31, 2017. Estimates of our oil and gas reserves filed with the Argentine Secretariat of Hydrocarbon Resources are materially higher than the estimates of our proved oil and gas reserves contained in this annual report mainly because: (i) information filed with the Argentine Secretariat of Hydrocarbon Resources includes all properties of which we are operators, irrespective of the level of our ownership interests in such properties; (ii) information filed with the Argentine Secretariat of Hydrocarbon Resources includes other categories of reserves and resources that are not included in this annual report, which are different from estimates of proved reserves consistent with the SEC's guidance contained in this annual report; and (iii) the definition of proved reserves under Resolutions No. 324/06 and 69/16 is different from the definition of proved oil and gas reserves established in Rule 4-10(a) of Regulation S-X. Accordingly, all proved oil and gas reserve estimates included in this annual report reflect only proved oil and gas reserves consistent with the rules and disclosure requirements of the SEC.

**Table of Contents*****Oil and gas production, production prices and production costs***

The following table shows our crude oil (including oil and condensate), NGL, and gas production on an as sold and annual basis for the years indicated. In determining net production, we exclude royalties due to others, whether payable in cash or in kind, where the royalty owner has a direct interest in such production and is able to make lifting and sales arrangements independently. By contrast, to the extent that royalty payments required to be made to a third party, whether payable in cash or in kind, are a financial obligation or are substantially equivalent to a production or severance tax, they are not excluded from our net production amounts despite the fact that such payments are referred to as royalties under local rules. This is the case for our production in Argentina, where royalty expense is accounted for as a production cost.

<b><i>Oil and Condensate Production</i></b> <sup>(1)</sup>	<b>2017</b>	<b>2016</b>	<b>2015</b>
	<b>(mmbbl)</b>		
<b>Consolidated Entities</b>			
South America			
Argentina	83	90	91
North America			
United States		*	*
Total Consolidated Entities	83	90	91
<b>Equity-Accounted Entities</b>			
South America			
Argentina			
North America			
United States			
Total Equity-Accounted Entities			
<b>Total Oil Production</b> <sup>(2)</sup>	<b>83</b>	<b>90</b>	<b>91</b>

<b><i>NGL Production</i></b> <sup>(1)</sup>	<b>2017</b>	<b>2016</b>	<b>2015</b>
	<b>(mmbbl)</b>		
<b>Consolidated Entities</b>			
South America			
Argentina	19	19	18
North America			
United States			
Total Consolidated Entities	19	19	18
<b>Equity-Accounted Entities</b>			
South America			
Argentina			
North America			
United States			

Total Equity-Accounted Entities

<b>Total NGL Production</b> <sup>(3)</sup>	<b>19</b>	<b>19</b>	<b>18</b>
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<b>Natural Gas Production</b> <sup>(1)</sup>	<b>2017</b>	<b>2016</b>	<b>2015</b>
		<b>(bcf)</b>	

**Consolidated Entities**

South America

Argentina	475	457	452
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North America

United States		*	*
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Total Consolidated Entities	475	457	452
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**Equity-Accounted Entities**

South America

Argentina

North America

United States

Total Equity-Accounted Entities

<b>Total Natural Gas Production</b> <sup>(4) (5)</sup>	<b>475</b>	<b>457</b>	<b>452</b>
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<i>Oil Equivalent Production</i> <sup>(1)</sup> <sup>(6)</sup>	2017	2016	2015
	(mmboe)		
<b>Consolidated Entities</b>			
Oil and Condensate	83	90	91
NGL	19	19	18
Natural Gas	85	81	81
<b>Equity-Accounted Entities</b>			
Oil and Condensate			
NGL			
Natural Gas			
<b>Total Oil Equivalent Production</b>	<b>187</b>	<b>190</b>	<b>190</b>

\* Not material (less than 1).

- (1) Loma La Lata Central and Loma La Lata Norte (southern and northern parts of the Loma La Lata field) in Argentina contain approximately 17% of our total proved reserves expressed on an oil equivalent barrel basis. Oil and condensate production in these fields was approximately 6, 6 and 6 mmbbl for the years ended December 31, 2017, 2016 and 2015, respectively. NGL production in these fields was approximately 8, 8 and 8 mmbbl for the years ended December 31, 2017, 2016 and 2015, respectively. Natural gas production in the Loma La Lata field was 127, 132 and 133 bcf for the years ended December 31, 2017, 2016 and 2015, respectively.
- (2) Crude oil production for the years ended in December 31, 2017, 2016 and 2015 includes an estimated 12, 13 and 13 mmbbl, respectively, in respect of royalty payments which are a financial obligation or are substantially equivalent to a production or similar tax. Equity-accounted entities production of crude oil in respect of royalty payments which are a financial obligation, or are substantially equivalent to a production or similar tax is not material.
- (3) NGL production for the years ended in December 31, 2017, 2016 and 2015 includes an estimated 2, 2 and 2 mmbbl, respectively, in respect of royalty payments which are a financial obligation or are substantially equivalent to a production or similar tax. Equity-accounted entities production of NGL in respect of royalty payments which are a financial obligation or are substantially equivalent to a production or similar tax is not material.
- (4) Natural gas production for the years December 31, 2017, 2016 and 2015 includes an estimated 64, 60 and 58 bcf, respectively, in respect of royalty payments which are a financial obligation or are substantially equivalent to a production or similar tax. Equity-accounted entities production of natural gas in respect of royalty payments which are a financial obligation or are substantially equivalent to a production or similar tax is not material.
- (5) Does not include volumes consumed or flared in operations (whereas sale volumes shown in the reserves table included in Supplemental Information on Oil and Gas Exploration and Production Activities Oil and Gas Reserves include volumes consumed in operations).
- (6) Volumes of natural gas have been converted to barrels of oil equivalent at 5,615 cubic feet per barrel. The composition of the crude oil produced by us in Argentina varies by geographic area. Almost all crude oil produced by us in Argentina has very low or no sulfur content. We sell substantially all the crude oil we produce in Argentina to our Refining and Marketing business segment. Most of the natural gas produced by us is of pipeline quality. All of our gas fields produce commercial quantities of condensate, and substantially all of our oil fields produce associated gas.



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The following table sets forth the average production costs and average sales price by geographic area for 2017, 2016 and 2015:

<i>Production costs and sales price</i>	<i>Total</i>	<i>Argentina</i>	<i>United States</i>
		<i>(Ps/boe)</i>	
<b>Year ended December 31, 2017</b>			
Lifting costs	228.68	228.68	
Local taxes and similar payments <sup>(1)</sup>	7.49	7.49	
Transportation and other costs	48.19	48.19	
<b>Average production costs</b>	<b>284.36</b>	<b>284.36</b>	
Average oil sales price	888.48	888.48	
Average NGL sales price	368.07	368.07	
Average natural gas sales price <sup>(2)</sup>	477.00	477.00	
<b>Year ended December 31, 2016</b>			
Lifting costs	195.80	196.30	121.66
Local taxes and similar payments <sup>(1)</sup>	8.35	8.37	
Transportation and other costs	38.93	39.02	32.81
<b>Average production costs</b>	<b>243.08</b>	<b>243.70</b>	<b>154.47</b>
Average oil sales price	861.74	863.25	510.01
Average NGL sales price	222.71	223.35	50.35
Average natural gas sales price <sup>(2)</sup>	417.95	418.00	193.08
<b>Year ended December 31, 2015</b>			
Lifting costs	151.77	151.85	125.66
Local taxes and similar payments <sup>(1)</sup>	4.82	4.83	
Transportation and other costs	14.93	14.91	21.45
<b>Average production costs</b>	<b>171.51</b>	<b>171.59</b>	<b>147.11</b>
Average oil sales price	620.77	621.85	392.86
Average NGL sales price	133.92	133.59	175.25
Average natural gas sales price <sup>(2)</sup>	249.71	249.75	129.73

(1) Does not include *ad valorem* and severance taxes, including the effect of royalty payments which are a financial obligation or are substantially equivalent to such taxes, in an amount of approximately Ps. 89.67 per boe, Ps. 86.82 per boe and Ps. 60.39 per boe for the years ended December 31, 2017, 2016 and 2015, respectively.

(2) Includes revenues from the Gas Plan.

**Drilling activity in Argentina**

The following table shows the number of wells drilled by us or consortiums in which we had a working interest in Argentina during the periods indicated.

<i>Wells Drilled in Argentina</i>	<i>For the Year</i>		
	<i>Ended December 31,</i>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
<b><u>Gross wells drilled</u></b> <sup>(1)</sup>			
Exploratory productive	17	19	35
Oil	10	14	24
Gas	7	5	11
Dry	2	12	5
Total	19	31	40
Development productive	483	697	962
Oil	325	504	766
Gas	158	193	196
Dry	4	2	10
Total	487	699	972

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<i>Wells Drilled in Argentina</i>	<i>For the Year</i>		
	<i>Ended December 31,</i>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
<b><u>Net wells drilled</u> (2)</b>			
Exploratory productive	14	14	27
Oil	7	11	22
Gas	6	3	6
Dry	1	9	4
Total	15	23	31
Development productive	363	548	766
Oil	247	409	629
Gas	116	139	137
Dry	4	2	8
Total	367	550	774

(1) Gross wells include all wells in which we have an interest.

(2) Net wells equal gross wells after deducting third-party interests.

**Exploration & Production Activity in Argentina**

During 2017, our main exploratory and development activities in Argentina have had the following principal focus,

**1. Operated Areas Exploratory Activities**

During 2017, our exploratory activities in Argentina were mainly focused on:

**1.1 Onshore****Unconventional activities**

The successful exploration results achieved in 2015 continued into 2016 and 2017. We continued the regional exploration of the Vaca Muerta formation to determine the productivity of the wet and dry gas in different areas of the Neuquina Basin. During 2017, we focused on the regional definition of the shale gas strip area obtaining positive results in Cerro Arena and Salinas del Huitrín blocks. Discoveries will be evaluated further in order to establish their commercial production potential.

**Neuquina Basin:**

*Tight gas:* Exploration of tight gas continued during 2017 in Estación Fernández Oro, Loma La Lata-Sierra Barrosa and Paso de las Bardas Blocks. Positive results were obtained in two wells, three wells continue to be evaluated and work on one well is still ongoing.

**Conventional activities**

Neuquina Basin:

A total of 13 wells targeting conventional oil and gas reservoirs were drilled in the basin, obtaining seven positive results, in the following blocks,

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Chachahuén (oil)

Señal Picada Punta Barda (gas).

Results in six other wells were below expectations.

From the results obtained in Chachahuén, we have notified the Mendoza Province, and waiting for their answer, of the following:

*Chachahuén Exploration Permit:* decision to enter the Third Exploration Period and to relinquish a fixed portion of the area (50%) as it is considered non-core lease acreage.

*Chachahuén Norte Evaluation Area:* decision to relinquish 40% of the area and the need to extend the permit of the remaining acreage until February 2020.

*Chachahuén Sur Evaluation Area:* commercial exploitation for part of the block (Cerro Morado Este) and the need to extend the permit of the remaining acreage until February 2020.

We also have requested that the Mendoza province allow commercial exploitation of the Payún Oeste block. As of the date of this annual report, we are still awaiting final approval from the province.

Golfo San Jorge basin

During 2017, the exploration activity targeted conventional oil and gas reservoirs in the Golfo San Jorge basin, with positive results in two wells in the Cañadón de la Escondida Block (oil).

We also continued to conduct exploration activities targeting conventional gas in the Escalante El Trébol Block (where one well is currently awaiting termination), Los Perales Block (where one well was completed and is currently being evaluated and a second well is close to completion) and Cañadón de la Escondida Block (where one well is currently awaiting termination).

Cuyana basin

One well targeting conventional oil was drilled in Zampal Norte with no positive results and two other wells were drilled in Mesa Verde Block (currently under evaluation). Zampal Norte Block: having fulfilled all commitments and considering that the drilled well does not show evidence of hydrocarbons, we decided not to continue with the third exploratory period and, as a result, the block was relinquished to the province of Mendoza. CCyB 17/B Block: we have been awarded an extension for the 3<sup>rd</sup> Exploration Period until June 2018.

Austral basin

Drilling activities took place in Tierra del Fuego Province. Positive results were obtained in the wells drilled in the Lago Fuego Block (gas) and the ones drilled in Tierra del Fuego Fracción E Block are currently subject to completion (gas).

In addition, during 2017 the El Turbio Block has been awarded. Commitments for the First Exploration Period are mainly related to seismic activities.

With respect of Seismic activities a long-term 2D-3D seismic survey campaign began in 2015 and continued through 2016 and 2017. During 2017, seismic 3D data covering 239 km<sup>2</sup> was recorded in Chihuido de la Sierra Negra Block (Neuquén Province, Neuquina basin).

After performing the survey, seismic data processing will be carried out for subsequent interpretation. The purpose of recording and processing the seismic data is to identify new exploration opportunities.



**Table of Contents****1.2 Offshore:**

According to the amendments to the Hydrocarbons Law adopted by Law No. 27,007, all exploration permits owned by ENARSA will be transferred to the Secretariat of Energy. YPF currently participates in three offshore blocks in association with ENARSA (E1 block: YPF 35%, E2 block: YPF 33% and E3 block: YPF 30%) with total acreage of 23,700 km<sup>2</sup>. In September 2015, the National Executive Office and YPF began negotiating the conversion of association agreements signed with ENARSA. On December 29, 2017 YPF filed a note before the Ministry of Energy confirming its willingness to negotiate the conversion of association agreement related to the Area identified as

ENARSA 1. In the same note, YPF informed that it communicated its decision not to convert the association agreements related such Areas to the Operators of Areas ENARSA 2 and ENARSA 3. As of the date of this annual report, negotiations related to Area ENARSA 1 are ongoing. As of December 31, 2017, we do not have registered assets in these blocks. See Legal and Regulatory Framework and Relationship with the Argentine Government Law No. 27,007, amending the Hydrocarbons Law for a description of new terms which apply to new production concessions or exploitation permits.

**2. Non-Operated Areas Exploratory Activities**

Exploration wells have been drilled in La Calera and CNQ-7 Blocks, which are operated by Pluspetrol (both under evaluation) and in Aguada Salada, operated by Tecpetrol, with positive results.

**3. Development Activities**

During 2017, our development activities in Argentina were mainly focused, according to the organizational structure in force in 2017, on the following regions and blocks:

**3.1 Neuquén Río Negro Region**

During 2017, Neuquén Río Negro Region production was 218.8 mboe/d, representing 39% of YPF's total production.

Neuquén concession:

Operated Areas Development Activities:

## 1. Octógono block:

Continuing with the activity of the previous year, during 2017, 5 wells were drilled in the northern sector of the field, targeting gas-bearing intervals in the Lajas formation. Four of those had positive results and the other one are being studied for optimization. Based on these results in 2018 we plan the development of the field with 6 more wells with Lajas formation as its principal objective.

## 2. Al Norte de la Dorsal block:

*Guanaco field:* During 2017, 4 wells were drilled, 3 of them are completed and 1 is in process of completion. All of them targeting gas in Lajas formation and their results are still under review. Lajas 2018 training campaign includes the plan to drill 6 more wells in the area. The Basamento formations is also planned to be evaluated in 2 wells to

determine its potential for future development. To that end, we plan to complete and test this formation on 2 of the wells planned to be drill in 2018.

Several actions for well productivity and economic improvement are planned to be conducted in 2018.

*Barda Gonzalez field:* During 2017, 1 well was drilled targeting gas in Lajas formation and its result is still under review. If the results are positive, the activity on the Lajas formation will continue in 2018 by drilling 1 more well in the area.

3. Cerro Bandera Block:

La Vía field: During 2017, 1 well was drilled targeting gas in Lajas formation. The well is not currently in production (it is without facilities), and we made five PLT (Production Logging Tool) studies to determinate its potential.

On November 22, 2017, YPF entered into an assignment agreement in respect of 100% of the exploitation concession in the Cerro Bandera area. See Exploration and Production Overview Main properties.

4. Anticlinal Block:

*Bardita Zapala Field:* During 2017, 1 well was drilled targeting gas in Chachil formation and its result is still under review.

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5. Loma La Lata Sierra Barrosa block:

Loma La Lata field: The Sierras Blancas Infill project in the southeast area continues its development with 5 wells drilled (2 horizontal and 3 directional) during 2017. All of them are already in production and the production rate achieved was as expected.

During 2017 a successful recompletion of a horizontal well, using stage frack technology was performed.

During 2018, we plan to drill 15 wells and recomplete 4 horizontal wells.

6. Aguada Toledo Sierra Barrosa field: Tight gas segment 5 (Lajas formation)

During 2017, 18 wells were drilled in Lajas formation, based on infill development activity. In addition, deeper wells in the Precuyano and Los Molles formations are being drilled and tested in two of these infill wells, taking advantage of the low incremental cost as a result of the deepening of wells raised to meet our objectives for the Lajas formation. We continue with implementation of several actions to reduce well cost successfully not only in the drilling phase, but also in the completion phase, improving project economics.

A second horizontal well was drilled in the Sierra Barrosa field as part of a pilot to improve the recovery factor in the tightest sands of the formation (in the lowest section). It produced gas over expectations

7. Barrosa Norte tight gas field (Lajas formation)

During 2017, three wells were drilled in this area, as a part of a plan to investigate different objectives: Precuyano and Los Molles Formation are two of them, also investigating the west structure of the area, and the third, is an infill type well (reducing distancing from 40 to 20 acres). The first two successfully confirmed very interesting accumulation for those deep reservoirs, and the infill well has verified original pressure and initial gas productivity was better than expected.

8. El Triángulo Field (Tordillo formation)

During 2017 an outpost well was drilled in order to investigate Tordillo formation, and is scheduled to be completed and tested in 2018 to determine its potential.

9. Sierra Barrosa Este tight gas field (Lajas formation)

During 2017 an outpost well was drilled in nearby structure to Barrosa Norte field. It produced gas at low levels, and failed to achieve expected rates.

10. Loma Campana Block:

The use of new technologies allowed the drilling of a pilot well to evaluate the development of gas and condensate near the gas water contact in Sierras Blancas formation. The well was drilled during 2017 and the production rate achieved was as expected. The drilling of a second well was completed in early 2018 using the same technology.

11. Rio Neuquén block:

During 2017, the four wells drilled in 2016 were completed, all of them above the average estimated production. An Integral Field Development Plan (FDP) was defined, considering appraisal, infill and development sub-projects. The goal of these projects is to define the optimum production rate. In any case, from the proposed plan investments will be made in facilities to increase the production capacity from 3.5 up to 5.5 million cubic meters per day. As a result of the FDP 6 wells were drilled during 2017 (2 of them were already completed, one of them with initial production rate above the expected average and the other was an appraisal with results under expectations). 12 new wells are expected to be drilled in 2018.

12. Volcán Auca Mahuida and Las Manadas blocks:

We continued with the appraisal and development of the Centenario and Mulichinco formations from the previous years. Four new wells were completed during 2017, two of them being appraisal wells. Positive results were provided by three of the four wells and the other one tested dry gas and is currently shut-in. Further appraisal and development wells are scheduled to be drilled in 2018.

13. Señal Picada Punta Barda block:

*Piedras Negras field*: one exploration well was completed during 2017 and began production in May 2017 and is currently active. Also we acquired 210 sq.km of new 3D seismic to the west of the block. No drilling activity is expected during 2018.

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14. Chihuido de la Sierra Negra block:

*Chihuido de la Sierra Negra field:* In this mature field, we completed a 3D seismic survey on the western area. Also, in order to evaluate tertiary recovery potential, a second single well chemical tracer test and log-inject-log operation (assay technique) was performed and it confirmed the previous positive results achieved in 2015 in displacing post water-flooding residual oil by an Alkali Surfactant Polymer formulation.

Non-Operated Areas Development Activities:

15. Lindero Atravesado block:

This block is operated by Pan American Energy LLC. We hold a 37.5% working interest in this block.

During 2017, 20 new wells were drilled, 22 were completed (6 of them drilled in 2016); all of them in tight gas projects, Lindero Oriental (33% of the wells had lower results than estimated ) and Lindero Occidental (all new wells were above what was expected).

The 5 remaining completions are planned to be finished in 2018. In addition, the drilling plan consists of 1 more well of the tight gas project, 2 oil wells to Quintuco Formation., an exploratory well to Los Molles Formation (shale gas), 2 exploratory wells to Vaca Muerta Formation (shale oil).

***Neuquén YPF Concession***

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0 Aguada de Castro; 1 Aguada de la Arena; 2 Aguada Pichana Occidental; 3 Aguada Pichana Oriental; 4 Aguada Villanueva; 5 Al Norte de La Dorsal; 6 Al Sur de La Dorsal I; 7 Al Sur de La Dorsal II; 8 Al Sur de La Dorsal III; 9 Al Sur de La Dorsal IV; 10 Al Sur De La Dorsal V; 11 Al Sur De La Dorsal VI; 12 Al Sur de La Dorsal VII; 13 Anticlinal Campamento; 14 Bajada de Añelo; 15 Bajo Del Toro; 16 Bandurria Sur; 17 Cerro Arena; 18 Cerro Bandera; 19 Cerro Hamaca; 20 Cerro Las Minas; 21 Chasquivil; 22 Chihuido de La Salina Sur; 23 Chihuido de La Sierra Negra; 24 Dadin Lote I; 25 Dadin Lote II; 26 Dadin Lote III; 27 Don Ruiz; 28 Dos Hermanas; 29 El Orejano; 30 El Portón; 31 El Santiagueño; 32 Filo Morado; 33 La Amarga Chica; 34 La Calera; 35 La Ribera I; 36 La Ribera II; 37 Las Manadas (Calandria Mora); 38 Las Tacanas; 39 Lindero Atravesado; 40 Loma Amarilla; 41 Loma Campana; 42 Loma Del Molle; 43 Loma La Lata Sierra Barrosa; 44 Meseta Buena Esperanza; 45 Narambuena; 46 Octogono; 47 Ojo De Agua; 48 Pampa de Las Yeguas I; 49 Pampa de Las Yeguas II Norte; 50 Pampa de Las Yeguas II Sur; 51 Paso de Las Bardas Norte; 52 Puesto Hernandez; 53 Rincón Del Mangrullo; 54 Río Neuquén; 55 Salinas del Huitrin; 56 San Roque; 57 Señal Cerro Bayo; 58 Señal Punta Barda; 59 Volcán Auca Mahuida.

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Río Negro concession:

Operated Areas Development Activities:

16. Estación Fernández Oro block

During 2017, several projects were completed that allowed for an increase in production, treatment and compression capabilities:

Stage I Increase dispatch capacity to Neuba I (Concessioned gas pipeline)

Put in operation an LTS (Low Temperature Separator)

Enlargement network gathering

With respect to drilling activity, we completed 34 gas wells targeting the Lajas formation (29 development gas wells, and 5 step-out gas wells) in general with positive results for the development wells; however, one step-out wells have not yet been evaluated. On September 2016, we started to drill with a fourth rig until November 2017, when we reverted to three rigs.

The development of the gas field will continue during 2018, focusing on drilling activity, 34 new wells are planned to be drilled.

In addition, work in the first quarter of 2018 to increase the gas pipeline sales capacity has been planned, and an LTS plant of 2 Mm<sup>3</sup>/d capacities. We plan to install it in third quarter 2018.

17. Señal Picada-Punta Barda block:

Señal Picada Block: During 2017 only workover activities were performed in this mature oil field, 12 wells were intervened, 6 for gas and 6 water injectors. Drilling of new wells is planned for 2018.

In the Punta Barda area no rig activity was performed in 2017. Three injector wells became active, as they started water injection during the first half of 2017. We plan to drill 14 new wells during 2018.

Six workovers were executed in this block, in order to test gas from the Neuquén Group formation. Four of them proved gas production and the other two were dry.

18. Los Caldenes block:

Manzano Grande field, oil target: In order to continue with the development activity in the oil block, in early 2018 we plan to drill two wells in the Manzano Grande block. No drilling activity was conducted during 2017 in this block.

Los Caldenes field, gas target: one appraisal well was drilled during 2017, and completion was achieved in 2018. According to well log information, reservoir properties are according as expected. A second appraisal well is planned to be completed during first quarter 2018.

*Río Negro YPF Concession*



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**3.2 Mendoza Region**

During 2017, Mendoza Region production was 118.3 mboe/d, representing 21% of YPF's total production.

**Operated Areas**

*Mendoza Norte concession:*

*1. Barrancas block:*

The drilling activity during the last years focused in the following fields:

- a. Barrancas:** During 2017, the development of the northwest zone continued in order to expand the area discovered in 2014, through the drilling of six oil producing wells. The target is the Barrancas Formation. The results of the wells drilled in the western flank found the limits of the field. It was also included in this zone a Secondary Recovery Project. The Development Plan of the area, including this Secondary Recovery Project, provides for the drilling of new producing wells and the conversion of other wells to water injectors during the upcoming years.
- b. Ugarteche:** After ten years without activity in this area, the drilling of two development wells in 2015 showed that there were still related opportunities in the Western zone. This scenario allowed the rejuvenation of the area through a redefinition of its development plan. As a result, four wells were drilled during 2016 and four wells in 2017, all of them with results over expectations. It is expected to continue drilling wells in order to expand the field to the south and west.
- c. Estructura Cruz de Piedra:** During 2017, two production wells were drilled with results below expectations, and the project of secondary recovery expansion continued through workover activity. It is planned to continue this activity by drilling more wells.

*2. Mesa Verde block:*

In 2014, exploration well MV.x-1 revealed the Río Blanco formation to be a productive horizon. The exploitation concession of this block was obtained during the second half of 2016. This allowed us to drill an appraisal well, which confirmed the expansion of the field.

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During 2017, the delineation and development continued through the drilling of nine wells (between advanced and development wells), with results according to expectations. The field is not yet fully delineated. The opportunity includes the drilling of development and advanced wells during the upcoming years.

***3. La Ventana block:***

Continuing with the activity of the previous years, during 2017, three infill wells were drilled in La Ventana Central area and two wells in Vacas Muertas Sur area. The results were below expectations, so the activity has been temporarily suspended, prioritizing other opportunities in the block, including the revamping of some surface installations.

Additionally, La Ventana was selected as part of a regional study to the Barrancas formation to develop EOR (tertiary recovery) with the objective of determining if it is convenient to start or not a pilot project. During 2016 the identification of the ASP (Alcali Surfactant Polymer) formulation compatible with the temperature and salinity of the formation was made, while a workover to do a single well test is planned for 2018, prior to the possible identification of a tertiary recovery pilot.

***4. Vizcacheras block:***

During 2017, seven wells were drilled to the Barrancas and Papagayos formations, with mixed results (four wells with results over expectations and the other three below expectations).

Four interventions were carried out with radial drilling technology (technique that seeks to increase the productivity of the formation), which technically met the stated objective (be able to make the horizontal branches and navigate inside the reservoir), but the wells did not respond with the expectation of oil production.

Additionally, Vizcacheras was selected as part of a regional study to the Barrancas formation to develop EOR (tertiary recovery) with the objective of determining if it is convenient to start or not a pilot project. During 2016 the identification of the ASP formulation compatible with the temperature and salinity of the formation was made, and in 2017 a workover and a Single Well Chemical Tracer Test (SWCTT) were carried out with very good results, obtaining almost 50% of reduction of residual saturation. Pilot implementations are being studied. Prior to the identification of a tertiary recovery pilot, another SWCTT has been planned in another well in Vizcacheras Block and another one in La Ventana Block.

***5. Llanquanelo block:***

During 2017 there was no drilling activity, due to negotiations with new partner, which will continue in 2018. As a remarkable fact, a bottom heater was installed in one well with the objective of increasing production by improving the mobility of the heavy crude oil. The initial results regarding the operation of the tool were as expected. Currently the well is in evaluation regarding its productivity.

***6. Cerro Fortunoso block:***

Since 2016, the new water treatment plant has been in operation, which allowed the expansion of the secondary recovery project in the Northeast Block. The very good Secondary response obtained meant that during the year 2017 an expansion was made to the Central East North zone. In the two zones (Northeast Zone and Central East Zone), 16 wells were drilled, with results over expectations. The expansion of the secondary to the entire field will be completed with the drilling of new wells (between producers and injectors) and the repair of another wells. This activity will be

carried out during the upcoming years.

*7. Valle del Río Grande Block:*

After visualizing a development opportunity for the Grupo Neuquén Formation at the Malal del Medio field, two wells were drilled in 2017. The good results obtained, allowed for a reinterpretation that increased the mineralized area. During 2018 the activity will be focus on the delineation of this opportunity.

***Mendoza Norte YPF Concession***

**Table of Contents***Mendoza Sur YPF concession:**8. Chihuido de la Sierra Negra Block:*

- a. **Desfiladero Bayo:** The Secondary Optimization project started in 2016, which included workover injection wells, wellhead acids, the adequacy of the injection facilities (with the installation of a Water Injection Plant) in order to guarantee the Water quality required, allowed to recover the production of the field to the expected volumes. During 2017 41 workovers were carried out. Additionally, a Polymer Injection Pilot Project (Tertiary Recovery) has been implemented in 2016, which included drilling of producing wells, workovers, and the construction and assembly of a polymer injection plant. The injection began in August 2016. As of the date of this annual report change in the vertical profile has been observed waiting for oil response. In the Desfiladero Bayo East area, six wells were drilled during 2017: two injectors and four producers (two with results over expectations and the other two below expectations.) in order to expand the southern zone and optimize development. As of the date of this annual report a Polymer Injection Pilot is also being implemented. Drilling activity has been completed and the pilot is on secondary recovery base line. Polymer plant will be installed by the end of 2018.
- b. **Puesto Molina:** During 2017, the Secondary Optimization Project continued through the drilling of five producing wells, with good results, and two water injector wells. Additionally, an opportunity was visualized to identify a mineralized zone in the eastern flank where there is no production, which would allow the drilling of new wells during the upcoming years. As of the date of this annual report, the first advanced well of this project was drilled. The well is producing a high percentage of water. If current flows are maintained, the project will be re-evaluated..

*9. Chachahuén Sur Block:*

During 2017 the drilling activity in the block continued with the drilling of 124 wells (102 development producers, one horizontal producer, seven advanced wells, five extension wells and 9 water injectors), in order to complete the development of productive formations Rayoso Clástico Cycles 1a, 2a and 3a. The results were as expected. The secondary recovery project for Cycle 2a and Cycle 3a is also under execution, where response is already observed. The results were as expected. New wells will be drilled in the next years.

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*10. Cañadón Amarillo Block:*

During 2017 nine wells were drilled corresponding to the Cañadón Amarillo Somero project (La Tosca and Chorreado in both the North and the South areas). 7 of those wells had results below expectations and 2 wells had very good productivity. We plan to drill 3 wells in 2018.

***Mendoza Sur YPF Concession***

**Non Operated Areas**

*1. Puesto Pinto (CNQ7/A) y Jagüel Casa de Piedra Blocks:*

During 2017, 34 producing wells with results as expected and 14 water injection wells were drilled to the Centenario Formation. They were drilled in order to continue with the Secondary Recovery Project development which started in 2006 and also expanding this project to border areas. Likewise, during 2018 we plan to drill 27 producing wells and 13 injectors. It is also planned to start the construction of facilities for the expansion of the polymer injection project, whose pilot was implemented in 2012.

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*2. Gobernador Ayala (CNQ7) Block:*

During 2017, 19 producing wells with results as expected and four water injection wells were drilled to the Centenario Formation in order to continue the development of secondary recovery in the area (started in 2009) and also to develop the area of Jagüel Casa de Piedra Sur.

During 2018, we plan to drill 11 producing wells and 11 injectors in order to continue with the development and implementation of secondary recovery in the field.

*3. Campo Durán Madrejones Block:*

One well was drilled, targeting the Tupambi Block II Formation. As of the date of this annual report the well is awaiting termination. Another well is planned to be drilled during 2018, the same target.

*4. Confluencia Sur Block:*

Towards the middle of 2017, one well was drilled, with the objective of the Troncoso Inferior Formation with good results. Another well is expected to be drilled during 2018.

Chubut-Tierra del Fuego Region

During 2017, Chubut-Tierra del Fuego Region production was 49 mboe/d, representing 9% of YPF's total production.

*Operated Areas Development activities*

Chubut concession:

During 2017 the activities in Chubut Province oilfields were affected by the occurrence of two severe climatic events that led to significant production losses and also delays in the development execution programs.

In March 2017, an unprecedented rainstorm occurred in the city of Comodoro Rivadavia and surrounding areas, declaring government of the province of Chubut a disaster zone. In June of 2017, a large-scale snow storm occurred, also declared by the government of the province of Chubut climatic emergency.

That was the reason for which the production decreases as it was detailed previously.

In order to recover production losses additional development plans were launched. In November 2017 the daily production reach the targeted values, and the delay in the execution of the drilling and workover activity was recovered.

*1. Manantiales Behr block:*

Despite the climatic issues, the gas production increased 3,3% in 2017 compared to 2016, due to the optimization of gas exploitation, with the adaptation and expansion of the facilities.

48 wells were drilled in 2017. 24 of those wells reached expected results, and 24 resulted below expectations. The 24 that did not reach expectations were recently finished and are still under production optimization.

The workover activity carried out gave positive results in all the fields except in La Carolina.

The assisted recovery project in Grimbeek began in 2013 with a focus on standard water-flooding. The field was divided in three main areas (GbkII, GbkN and GbkNII).

GBKII field is currently in an advanced stage of development with results, over expectations. On the other hand, activity in the GBKN / GNKNII fields is in the initial stage.

Also, the construction of the facilities for the assisted recovery project in Grimbeek, has already begun and will be completed by 2019.

During 2017, progress was made with the conceptualization of the second stage of the polymer injection development in GBKII, foreseeing the installation of new modular plants for the injection of polymers in 2018 and 2019.

A third stage of development is being evaluated for the subsequent years.

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The short-term focus on the Manantiales Behr block is to extend water-flooding projects along the field (GbkN full area and GbkNII) in order to sustain production growth.

Throughout 2017 progress was made with the construction of water flooding facilities and conversion of wells to extend the secondary recovery area in La Carolina field where low reservoir pressure affects results in primary production new wells and workovers..

### 2. El Trébol Escalante block:

8 wells were drilled in the deepest reservoirs related to structural and stratigraphic traps with positive results. One of them, is an advanced well, that will allow the development of a new zone.

The Workover activity also gave positive results

### 3. Zona Central Cañadón Perdido block:

This block is located in the urban area of Comodoro Rivadavia.

Since 2016, there has been no drilling of wells, due to legal issues relating to a claim from a group of neighbors of the city regarding the extension of the Bella Vista Sur drilling project. The project was reformulated so that it can be executed in 2018, from another geographical location.

### 4. Restinga Alí block:

Located on the coast between the urban area and the sea, development in this block was reactivated in 2013.

Despite the climatic issues, oil production increased 4,3 % in 2017 compared to 2016, due to the construction of facilities (oil pipelines), allowing production optimization.

Two wells were drilled in 2017. The first was an oil well with positive results, and the other a gas well that is under study, due to lower than expected production results.

## ***Chubut YPF Concession***



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Tierra del Fuego concession:

Since 2016, the drilling activity in Tierra del Fuego focused on gas in the Lago Fuego field.

The main objective was the exploitation of the Springhill formation and the exploration of the Tobífera series. We have completed 6 wells during 2017, with 3 wells reaching expected results, and 3 wells under evaluation due to lower than expected production results, where fracking and flow back programs are being analyzed in order to improve productivity. Additionally, source rock Pampa Rincon is present in these wells so studies are performed to define workover activity in Lago Fuego.

Other activities in the San Sebastian field were aimed at improving the production of gas through the installation of compressors, dewatering artificial lift systems such as capillary injection and the optimization of the vertical performance with high water gas ratio wells. These activities slowed the declining output in the field, as expected.

In the Uribe block, 2 exploration wells were drilled targeting Springhill formation and the exploration of Tobífera series and unconventional resources. 2 core samples were taken during both drills; whose analysis, allows to focus future activity in the sector of the block with the best petro physical characteristics. Completion of the two wells are pending, and will be executed in 2018.

***Tierra del Fuego YPF Concession***

Non Operated Areas:

5. El Tordillo and La Tapera-Puesto Quiroga blocks:

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Beginning in January 2014, under an agreement with the province of Chubut related to the negotiation of an extension of YPF concessions there, we transferred 41% of our working interest in the joint venture, El Tordillo and La Tapera-Puesto Quiroga, to Petrominera Chubut S.E. As a result, our interest in the joint venture will decreased from 12.196% to 7.196% since 2019.

During 2016 and 2017, no Wells were drilled due to the low Price of oil barrel.

In 2017 a new agreement was signed with Chubut Province, in which it was established the future compliance scheme of the pending investments, under the Agreement for the implementation of an activity commitment and investment in hydrocarbon areas of Chubut Province. It is planned to drill 10 wells during 2018.

### **Santa Cruz Region**

During 2017, Santa Cruz Region production was 81.6 mboe/d, representing 15% of YPF's total production.

During 2017, our development activities in Argentina were mainly focused on the following regions and blocks:

### **Operated Areas Development activities**

During 2017, we implemented 18 integral development projects across six major development areas in the province of Santa Cruz (Cañadon de la Escondida, Las Heras, El Guadal, Los Perales, Cañadon Yatel and Cañadon Seco), comprising a total portfolio of 22 projects. The main projects include the following reserve areas: Cañadón Escondida, Las Heras, Cerro Grande, Seco León, Los Perales, Cañadon Yatel and El Guadal. 14 wells were drilled (13 development wells and 1 exploration well) meeting expectations in the Cañadon Seco, Cañadon Yatel and Los Perales blocks and 348 workovers and associated facilities were executed focusing our strategy mainly on conversions and repairs of water injectors, which allow us to sustain our secondary production.

The main objectives of these integral projects are:

Comprehensively developing the areas through the drilling of new wells and deep formations with gas objectives.

Acquiring the necessary information with electrical logs, rotated plugs and well testing.

Increasing the recovery factor with new enhanced oil recovery projects.

Increasing water injection to improve sweep efficiency.

Extending horizontal and vertical limits with new appraisal and exploration wells.

Providing development support through appropriate surface facilities.

In the fourth quarter of 2017, we started an additional and challenging cost optimization plan, which as of the date of this annual report has progressed significantly, achieving results as expected.

#### 6. Cañadón Seco

During 2017, 7 wells were drilled and 83 workovers were executed, with positive results. The drilling activity was concentrated in the Mina El Carmen formation, and the D-129 geological formation (an important formation from which studies are demonstrating its potential and the results of the activities carried out so far encourage us to continue with the planned activities) continues to be delineated. During 2018 we plan to take samples of rock and fluids in order to characterize better the D129 Formation and decrease the risk of the area, to be able to propose a development plan in the medium term. From the point of view of improved recovery, the objective continues to center on the geological formation of Cañadón Seco. Several projects were executed, some of them still ongoing, in which injection is expanded horizontally as well as vertically, improving the efficiency in the production-injector wells relationship. In addition, we continue to expand the secondary recovery in the Mina El Carmen Formation, which has the challenge of higher depth and injection pressures than those required for the Cañadon Seco formation.

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### 7. Barranca Baya

During 2017, 88 workovers were executed with results as expected. All the models that supported the drilling activity in previous years were based on 2D models. During 2017, 3D models were started to increase the original oil in situ, but the economic nature of the projects is being analyzed based on the price of crude oil.

We deepened the secondary recovery control, in addition to the integrity of the facilities, which allows us to obtain a better quality of the water that is injected into the formations.

### 8. Las Heras

During 2017, 32 workovers were executed with results as expected. The activity was focused on the secondary recovery projects. The projects continued to be expanded both horizontal and vertically, incorporating both new layers to be flooded and optimizing the existing secondary recovery, with activity in cleaning injectors, re-layering and maintenance of the installation in the well.

### 9. Lomas del Cuy

During 2017, 29 workovers were executed. Secondary recovery was concentrated in Cerro Doce Grande Oeste, El Guadal Batería 2, Lomas del Cuy Norte and La Chitita Este blocks, implementing new projects and expanding existing projects.. We continued our improvements in water quality.

Although in 2016 deeper drilling had been carried out in El Guadal Sur with the objective of Castillo and D129 geological formations, due to the economic conditions of 2017, it was decided not to continue with this activity. We plan to continue with the study of the block during 2018, to propose some horizontal well during 2019 with objective of D129 formation.

### 10. Los Perales Las Mesetas

During 2017, 2 wells (including one replacement injector and one producing well of polymer project) and 78 workovers were drilled, with results as expected. There are several expectations with this polymer project and this well is aimed at gas.

Secondary activity is present in all blocks; however we have injected water only in the Bajo Barreal geological formation. We have focused on maintaining the existing secondary and expanding projects from the vertical and aerial point of view, incorporating new layers and completing existing meshes.

The first pilot of polymer injection was started in the Santa Cruz regional, in Los Perales Central B III block at December 2017.

### 11. Cañadón Yatel

During 2017, 5 wells and 38 workovers were drilled with positive results. Drilling activity was concentrated at the Estancia Cholita reservoir. An oil reservoir under the gas cap of the D-129 formation began to be developed in the southern and central blocks. The electrification of the block began in 2016, and continued during 2017 allowing us to exploit the wells with greater reliability and minimize mechanical problems. We plan to continue such activities during 2018.

*Santa Cruz Norte YPF Concession*

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*Santa Cruz Sur YPF Concession*

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4. Non-Operated Areas Development Activities:

12. Magallanes block:

On November 17, 2014, we agreed to extend the joint venture contract with ENAP Sipelrol Argentina S.A. in the Magallanes block. The objective of this agreement was to extend the rights and obligations of ENAP in the original joint venture agreement and confirm its role as operator, maintaining its 50% share until the end of the concession. On January 8, 2016, the Argentine government approved a concession extension through November 17, 2027. See Main Properties .

During 2017, we continued to develop an incremental production project, known as the PIAM-Magallanes Block Incremental Project. This project aims to increase the production capacity of the area by approximately 1.6 mmcm/d of gas with the start up originally expected in 2017 and then postponed to March 2018. During 2017, we signed an Engineering and Procurement Contract (EPC) to manage the engineering tasks. This project involves laying a marine pipeline and expanding compression capacity. The total estimated value of the project is approximately U.S.\$387 million.

**Properties and Exploration and Production Activities in Rest of South America**

1. Bolivia: On July 26, 2017, the formalization of the contract with YPFB originally signed in January 2017 was signed, to begin exploration work in Charagua, Bolivia, in a block that has a potential in natural gas resources. In addition, one exploration block was awarded in 2017 (Charagua Block). Activities to fulfill commitments are planned to begin early 2018. YPF holds a 100% working interest in the Charagua Block. However, a partnership agreement has been signed by YPF and YPFB Chaco, whereby YPF would operate holding a 60% working interest and YPFB Chaco would hold 40%. As of the date of this annual report, both parties are still waiting for the Legislative Assembly of Bolivia to formalize the agreement.
2. Chile: From the results obtained in San Sebastián Block we did not foresee any new exploratory opportunities so we:

Asked the National Authority for the commercial exploitation concession of only a portion of the area where wells with positive results had been drilled;

Informed the National Authority of our decision not to enter the Third Exploration Period, and to relinquish the rest of the area except for 3,000 acres needed to finish the testing of one exploration well. For this exception, we have requested a period of 2 years, starting on December 2017.

3. Colombia: Blocks COR 12 and COR 33 are located in the Cordillera Oriental basin, which we operate pursuant to authorization by the Colombian National Hydrocarbons Agency (Agencia Nacional de Hidrocarburos or ANH ). Our working interest is 60% in COR 12 and 55% in COR 33. The combined net acreage in these blocks is 700 km<sup>2</sup>. We and our partners informed the ANH of our decision to relinquish

both blocks. As of the date of this annual report, the parties are in the process of formalizing and executing the final agreements for the relinquishment.

**Additional information on our current activities**

The following table shows the number of wells in the process of being drilled as of December 31, 2017.

<i>Number of wells in the process of being drilled</i>	<i>As of December 31, 2017</i>	
	<i>Gross</i>	<i>Net</i>
Argentina	61	43
Rest of South America		
Total	61	43



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### **Downstream**

During 2017, our Downstream activities included crude oil refining and transportation, and the marketing and transportation of refined fuels, lubricants, LPG, and other refined petroleum products in the domestic wholesale and retail markets and certain export markets.

During 2017, the Downstream segment was organized into the following divisions:

Refining Division (oil refining and petrochemical production);

Domestic Marketing and Chemicals Division (commercialization of refined and petrochemical products obtained from such processes); and

Logistic and Trading Division (logistics related to the transportation of oil and gas to refineries and the transportation and distribution of refined and petrochemical products to be marketed in the different sales Channels).

We market a wide range of refined petroleum products throughout Argentina through an extensive network of sales personnel, YPF-owned and independent distributors, and a broad retail distribution system. In addition, we export refined products, mainly from the port at La Plata. The refined petroleum products marketed by us include gasoline, diesel, jet fuel, kerosene, heavy fuel oil and other crude oil products, such as motor oils, industrial lubricants, LPG and asphalts.

#### ***Refining division***

We wholly own and operate three refineries in Argentina:

La Plata refinery, located in the province of Buenos Aires;

Luján de Cuyo refinery, located in the province of Mendoza; and

Plaza Huincul refinery, located in the province of Neuquén.

Our three wholly-owned refineries have an aggregate refining capacity of approximately 319,500 boe/d. The refineries are strategically located along our crude oil pipeline and product pipeline distribution systems. In 2017, our crude oil production was substantially destined to our refineries, represented approximately 78.6 % of the total crude oil processed by our refineries, while in 2016 it was 85.7%. Through our stake in Refinor, we also own a 50% interest in a 26,100 boe/d refinery located in the province of Salta, known as Campo Durán.

The following table sets forth the throughputs and production yields for our three wholly-owned refineries for each of the three years ended December 31, 2017, 2016 and 2015:

	<b>For the Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
	<b>(mmboe)</b>		
Throughput crude	107.0	107.4	109.1
Throughput feedstock	4.3	4.0	4.4
Throughput crude and feedstock	111.2	111.4	113.5
<b>Production</b>			
Diesel	41.0	40.6	40.6
Motor gasoline	25.2	24.6	24.5
Petrochemical naphtha	7.9	7.6	7.0
Jet fuel	6.8	5.9	6.1
Base oils	1.0	1.0	1.1

	<b>For the Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
	<b>(thousands of tons)</b>		
Fuel oil	935	1,554	1,878
Coke	925	839	770
LPG	644	670	612
Asphalt	313	145	171

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During 2017, our global refinery utilization reached 91.73%, compared to 91.87% in 2016, based on a nominal capacity of 319.5 mboe/d.

The La Plata refinery is the largest refinery in Argentina, with a nominal capacity of 189,000 bbl/d. The refinery includes three distillation units, two vacuum distillation units, two fluid catalytic cracking units, two coking units, a coker naphtha hydrotreater unit, a platforming unit, two diesel hydrofinishing units, a gasoline hydrotreater, an isomerization unit, an FCC (fluid cracking catalysts) naphtha splitter and desulfuration unit and a lubricants complex, in addition to a petrochemical complex that generates MTBE, TAME and aromatics compounds used for blending gasoline, and other chemical products for sale. The refinery is located at the port in the city of La Plata, in the province of Buenos Aires, approximately 60 km from the City of Buenos Aires. During 2017, the refinery processed approximately 172.3 mbbbl/d. The capacity utilization rate at the La Plata refinery for 2017 was 91.15 % compared with 165.5 mbbbl/d processed in 2016, with a utilization rate of 87.6 %. The crude oil processed at the La Plata refinery, 77.96 % of which was YPF-produced in 2017, comes mainly from the Neuquina and San Jorge basins. Its crude oil supplies come from the Neuquina basin by pipeline and from the San Jorge basin by vessel, in each case to Puerto Rosales, and then by pipeline from Puerto Rosales to the refinery.

A new Coke A facility that allowed for an increase in the conversion capacity was officially started up in September 2016, and the test run was made in October 2016. The capacity of the new unit is 1,160 bbl/h of fresh feed pumped from the bottoms of the Topping and Vacuum units, providing the refinery with an increase in crude processing of 23,800 bbl/d, representing an increase of almost 12% in the capacity utilization rate. The production of this facility is a component for the blend to be used in the generation of diesel, motor gasoline and coke.

The Luján de Cuyo refinery has a nominal capacity of 105,500 bbl/d, the third largest capacity among Argentine refineries. The refinery includes two distillation units, a vacuum distillation unit, two coking units, one fluid catalytic cracking unit (FCCU), a platforming unit, a MTBE unit, an isomerization unit, an alkylation unit, an FCC naphtha splitter, a hydrocracking unit, an FCC naphtha hydrotreater unit and two gasoil hydrotreating units. During 2017, the refinery processed approximately 98.0 mbbbl/d, with a capacity utilization rate of more than 92.9%. In 2016, the refinery processed 106.0 mbbbl/d, with a capacity utilization rate of more than 100%. The lower capacity utilization during 2017 was due to planned maintenance shut-downs of the topping, isomerization, gasoil hydrotreating and coking units from June to July.

Due to its location in the western province of Mendoza and its proximity to significant distribution terminals we own, the Luján de Cuyo refinery has become the primary facility responsible for providing to the central and northwest provinces of Argentina with petroleum products for domestic consumption. The Luján de Cuyo refinery receives crude supplies from the Neuquina and Cuyana basins by pipeline directly into the facility. Approximately 77.5% of the crude oil processed at the Luján de Cuyo refinery in 2017 (and 77.8% of the crude oil processed in this refinery in 2016) was produced by us. Most of the crude oil purchased from third parties comes from oil fields located in the provinces of Neuquén and Mendoza.

The Plaza Huincul refinery, located in the province of Neuquén, has an installed capacity of 25,000 bbl/d. During 2017, the refinery processed approximately 22.8 mbbbl/d, with a capacity utilization rate of 91.2%, compared with 22.0 mbbbl/d processed in 2016 with a capacity utilization rate of 88.1%.

The only products currently produced at the refinery are gasoline, diesel and jet fuel, which are sold primarily in nearby areas and in the southern regions of Argentina. Heavier products, to the extent production exceeds local demand, are blended with crude oil and transported by pipeline from the refinery to our facilities in La Plata for further processing. The Plaza Huincul refinery receives its crude supplies from the Neuquina basin by pipeline. In 2017, 100% of the refinery's crude supplies (and 98.2% of the crude oil processed in this refinery in 2016) were

produced by us.

According to Ministry of Energy regulations, sales of gasoline and diesel must be blended by biofuels. The gasoline requires a 12% blend of ethanol (resolution 37/2016) and diesel requires a 10% blend of FAME (resolution 1125/2013), the same blend request of 2016 and 2015, except from gasoline which blend requirement was 10% in 2015.

Since 1997 and 1998, each of our refineries (La Plata, Luján de Cuyo, and Plaza Huincul) have been certified under International Organization for Standardization ( ISO ) 9001 (quality performance) and ISO 14001 (environmental performance). All of them are also certified under the OHSAS 18001 (occupational health and safety performance) standard. Inventories of industrial greenhouse gases and savings of CO2 emissions equivalent (MDL projects) have been verified in accordance with ISO 14064 in the three refineries (2009 La Plata and Lujan de Cuyo; 2017 Plaza Huincul). The refineries maintain their systems under continuous improvement and revision by authorized organizations.

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***Marketing Division***

Our Marketing Division supplies gasoline, diesel, LPG and other petroleum products throughout Argentina and other countries in the region. We supply several industries, including retail, transport and agriculture.

During 2017, YPF maintained its leading position in Argentina, reaching a market share of 56.1% for liquefied fuels.

YPF sells two types of gasoline: Infinia, a premium 98 octane gasoline, and Super, a regular 95 octane gasoline.

Our market share of Infinia and Super gasolines, according to our estimates, was 61.3 % and 52.4%, respectively, as of December 31, 2017, compared with 60.7% and 52.8%, respectively, as of December 31, 2016. Our sales volume for Infinia was 1,774 mcm in 2017 (20.1% higher than in 2016) and 3,344 mcm for Super in 2017 (2.1% less than in 2016).

With respect to diesel, according to our own estimates, our market share of diesel (500 and 1500 ppm) and Infinia diesel (10 ppm) was 56.5% and 57.6 %, respectively, as of December 31, 2017, compared with 55.7% and 58.1%, respectively, as of December 31, 2016. Along with Infinia diesel (10 ppm), for which sales volume was 1,750 mcm in 2017 compared to 1,372 mcm in 2016, our diesel (500 and 1500 ppm) decreased a sales volume of 5,947 mcm compared to 6,239 mcm in 2016. Finally, sales volume of Infinia diesel reached 22.7% of total diesel sales volumes, up from 18% in 2016.

During 2017, the competition was fiercer in the domestic Argentine market than in previous years, with our competitors implementing several aggressive marketing activities. Due to new market conditions for fuels in Argentina (see Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations Macroeconomic conditions ), we expect that this competition will continue, challenging us to respond with effective marketing and promotional tools. Consequently, during 2017 we worked on regional promotions based on the needs of each market. Micro-marketing kits have been created in order to maintain and increment sales in markets that have become competitive due to new competitor operations, such as promotion Promo Rally in Cordoba, Double KM Serviclub , Tall Cafee in our YPF Full stores, YPF Collections Competitions Cars , among others.

We continue with certain promotions based on the Serviclub loyalty program which allowed us to improve sales of Infinia gasoline and diesel and increase the base of members of the program. As of December 31, 2017 the loyalty Serviclub program has more than 2.6 million members (67% higher than 2016).

The communication and relationship actions carried out during 2017 have been focused on our Premium fuels in order to maintain the perceived quality of our premium products.

In November 2016, YPF launched Infinia diesel, a new premium diesel with a new formulation. The release plan involved an ambitious campaign in mass media and at sales points, and strong internal training of our salesforce. The launch of this product is aligned with the projected migration of heavy duty vehicles fleets to Euro 5 and 6 technology (regulatory command) in the coming years and, to a lesser extent, to capture particular premium customers.

YPF markets lubricants through three segments of the domestic market: retail, agriculture and industry. Our three manufacturing facilities, part of the La Plata industrial complex, include lubricant, asphalt and paraffin production lines. Our line of automotive lubricants, including mono-grade, multi-grade and oil, has received approval and recommendations from leading global automotive and engine manufacturers, including Ford, Volkswagen, Renault, Audi, Deutz, Cummins, Volvo, MAN Truck, GM, Porsche, Scania, Detroit Diesel and Caterpillar.

We are engaged in the LPG wholesale business, which encompasses LPG storage, logistics and commercialization to domestic and foreign markets. We obtain LPG from natural gas processing plants and refineries, as well as from third parties. In addition to butane and propane, we also sell propellants used in the aerosols manufacturing processes.

YPF also markets lubricants in Brazil and Chile, where we have subsidiary companies. Additionally, through a network of exclusive resellers, we market lubricants in three bordering countries (Uruguay, Paraguay and Bolivia).

The Domestic Marketing Division includes five main segments: Retail, Agriculture, Industry, Lubricants and Specialties and LPG.

***a) Retail Division***

As of December 31, 2017, the Retail Division's sales network in Argentina consisted of 1,563 retail service stations, compared to 1,547 as of December 31, 2016. Of these, 113 are owned by YPF. The remaining 1,450 service stations are associated service stations. OPESSA, our wholly-owned subsidiary, actively operates 172 retail service stations, of which 88 are owned by YPF, 26 are leased to the Automóvil Club Argentino and 58 are leased to independent owners. Additionally, YPF owns 50% of Refinor, a company operating 66 service stations.

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According to our estimates, as of December 31, 2017, we were the main fuel retailer in Argentina, with 35.3% of the country's gasoline service stations, followed by Shell, Axion, Oil and Petrobras and with 14.2%, 11.8%, 6.3% and 6.0%, respectively. During 2017, our market share in diesel and gasoline, marketed in all segments, increased from 55.6% to 56.1%, from December 31, 2016 to December 31, 2017.

Our convenience stores, YPF Full and YPF Full Express, are present in 435 and 107 points of sale, respectively, as of December 31, 2017. Additionally, a modern oil change service shop called YPF Boxes is present in 283 service stations across the country.

We highlight the opening of 35 new service stations in our network during 2017. This marks a milestone in the development of the YPF retail service station network in recent years because of its relevance in investment, sales volume and the full national coverage, as the openings were made in 14 of the 23 provinces of Argentina.

We became the first retailer in the Argentinian market to implement ATMs (automatic teller machines), reaching an amount of 15 machines working in service station owned by YPF. The cash in the machines comes from the service station operation, optimizing the operative process of cash recollection.

With the purpose of providing technological solutions to contribute the competitiveness of our network, we began the Intelligent Operation Control (CIO) project. This new solution replaces the actual system that links YPF to the service station. It allows a superior transactional processing of our clients information, with an on-line visualization of each individual operation. As of December 31, 2017, the project was implemented in 125 service stations and we plan to finish the system implementation during the first half of 2019.

With the commitment to streamline payment processes at service stations and continue to improve our consumer's experience, we recently launched two virtual payment methods (QR payment method and Serviclub PASS).

In July 2017, we renew the AUBASA service stations on the Buenos Aires - La Plata highway, becoming the largest service area in the country.

***b) Agriculture Division***

The Agriculture Division provides an extensive portfolio of products and services to agricultural producers, including agricultural advice, and delivery and application of products at the consumption site, under a unified brand image, directly or through a network of 104 sale points (nine owned by YPF) with exclusive commercial areas in 19 provinces, offering diesel, fertilizers, lubricants, phytosanitaries, and ensiling bags, among other products. During 2017, YPF launched 9 new products (phytosanitaries, fertilizers and adjuvants), under the YPF brand. Additionally, through distribution agreements with leading local and international suppliers, the product palette has been extended to 29 more completing an offer of 120 different agro products. This year our market share of fertilizers, according to our estimate, was 9.6% compare to 8.7% (2016).

YPF developed crop financing with instruments such as credit cards with local banks, for more than U.S. \$ 100 million. YPF accepts different types of grains as payment (*canje*), mainly soybean, but also corn, rice, wheat, sorghum, sunflower, barley and blueberries. Some of soybeans are processed by third-party companies to obtain soybean oil, meal and hulls that we generally export. Furthermore, part of the soybean oil is processed into fatty acid methyl esters ( FAME ) (a natural product added to commercial grade diesel), which covers approximately 7% of YPF's refinery needs. During 2017, we received approximately 1.5 million tons of grains (a 27% increase compared to 1.2 million tons in 2016), primarily soybeans, that positions YPF among the top five exchangers in Argentina. As December 31, 2017 the revenue from these exports represented approximately U.S. \$ 371.6 million, a 9.2% increase

compared with 2016. It is worth noting that in 2017 YPF is the tenth exporter in the Argentine market of soybean meal and also is the tenth exporter in the Argentine market of soybean oil.

***c) Industry Division***

This division supplies the entire national industry and transportation (ground and air) sectors, which require a broad portfolio of products and services that meet the needs of the customers. The division develops specific solutions for the mining, oil & gas, aviation, transport, infrastructure and construction sectors. We supply products such as fuels (diesel, gasoline, fuel oil, Jet A-1), lubricants, coal, asphalts, paraffin and derivatives (sulfur, CO<sub>2</sub>, decanted oil, aromatic extract), either directly from our refineries to the point of consumption (more than 10,000 direct customers) through our own ground and waterway network, or through a network of 11 industrial distributors with national coverage.



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Our mission is to promote efficiency in the value chains of the industries we serve through energy solutions, supplies and services. Accordingly, our strategy is based on close relationships with our clients and the development of innovative solutions focused on creating value for YPF and the region's industries.

During 2017 we implemented a control and traceability solution for the gasoline and lubricants consumption which was offered to all industrial segments customers to improve efficiency in bulk fuel management.

In the transport segment, in 2017 we completed long term agreements with main Argentine railway companies to supply diesel, gasoline, lubricants and services.

Another highlight of the year 2017 in the transportation segment was the steady growth of sales through the YER (YPF en ruta) fleet card, which resulted in an increase of 36% of volume sales than 2016, mainly as a result of certain incentive programs that were launched. This card is designed to cover the supply and administration needs of vehicles of cargo and passengers.

Regarding to the aviation segment, low cost airlines have recently entered the Argentine market. Consequently, during 2017 the company completed agreements for the supply of JET A1 with two low-cost companies which recently started to operate in Argentina. We expect this market to increase in the future.

In addition, we have become the second oil company in Santiago de Chile's airport, reaching 21.5% of market share.

In the mining segment, in 2017 we closed a long term agreement for the supply of diesel and gasoline (1.000 m3 per month) and we implemented an operation in house in Cerro Moro mining project. This operation includes the administration, maintenance and operation of the fuel plant. Besides, we closed an agreement with another mining company for 2 years for the supply of diesel and gasoline (1.600 m3/month).

In the asphalt segment, during 2017 we reached asphalt sales record of 313 ktn, double the previous year, reaching a market share of 45% (approximately 11 points of market share higher compared to 2016).

### ***d) Lubricants and Specialties Division***

In our industrial complex located in the city of La Plata, lubricants, asphalts, paraffin and Blue 32 are produced. In 2017, the necessary investments were made to ensure the supply of market demands, highlighting the start-up of the Blue 32 plant and the expansion of production capacity of modified asphalts according to the latest trends in the road construction industry. Blue 32 is the commercial name of a new product used in vehicles that comply with the emission standard EURO 5 (serves to reduce emissions of gases into the environment).

During 2017, our sales of lubricants increased by 2.4% with respect to 2016. Sales to the domestic market grew by 2%, and sales to the external market increased by 5%.

Exports are made to two large groups. On the one hand, we sale to our wholly-owned companies in the main markets of Brazil and Chile, where the volume sold decreased by 39% in Brazil with respect 2016 due to the increase in local production and increased 3% in Chile with respect to the previous year. On the other hand, we export to our network of distributors located in Bolivia, Uruguay, Paraguay and Ecuador, where the volume of sales were 18% higher than 2016.

YPF's strategy is to continue its leadership in the development of lubricants to meet the latest generation OEMs (original equipment manufacturers) requirements for protection and performance needs in both passenger and heavy

duty vehicles, maintaining the leadership in a high-profitability market in high-end lubricants. Our market share as of December 31, 2017 was 39.5% (an increase of 1.4% compared to 2016) according to information provided by the Ministry of Energy. The critical factors of competitiveness are the usage and referral agreements from the main OEMs (Ford, Volkswagen, General Motors, Porsche and Scania) and reaching the customer with the best network and service coverage.

The sales of our passenger car motor oil (PCMO) line (Elaion is the most important brand for the automotive segment) reached 14.1 Km3 in 2017, an increase of 0.8% compared to 2016. With respect to our heavy duty motor oil (HDMO) line (Extravida), 2017 sales decreased by 1.8% compared to the previous year.

In order to meet the technological update required by new vehicles that comply with the Euro 5 standard (with SCR technology) of mandatory use in the country for all new vehicles, and complemented by the launch of Infinia Diesel and XV500 Extravida, we launched our Nitrous Oxides Reducing Agent (ARNox).

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Our quality controls ensure that the product reaches the customer in optimal conditions and complies with the strict standards determined by ISO 22241 for this product. Since 1995, Lubricants and Specialties has been awarded with ISO 9001: 2008, ISO 14001: 2004, OSHAS 18.001: 2007 ISO / TS 16949-Third certifications.

**e) LPG Division**

Through our LPG Division, we sell LPG to the foreign market, the domestic wholesale market and to distributors that supply the domestic retail market. The LPG Division does not directly supply the retail market. It is supplied by YPF Gas S.A., which is our affiliate.

During 2017, we sold approximately 35% of our LPG production to YPF Gas S.A. for the domestic market.

We are the largest LPG producer in Argentina, with sales in 2017 reaching approximately 580 mtn, compared with 574 mtn in 2016. Of this, approximately 402 mtn were sold in the domestic market, compared to 410 mtn in 2016. Our main clients in the domestic market are companies that sell LPG in cylinders or bulk packing to end-consumers, also providing LPG to households in some regions. Additionally, exports in 2017 reached approximately 176 mtn, compared to 164 mtn in 2016. The main destinations were Chile, Paraguay and Bolivia. Transportation of LPG to overseas customers is carried out by truck, pipeline and barges.

Total sales of LPG, excluding LPG used as petrochemical feedstock, were Ps. 3,512 million and Ps. 2,096 million in 2017 and 2016, respectively.

The LPG Division obtains LPG from natural gas processing plants and from our refineries and petrochemical plants. We produced 541 mtn of LPG in 2017, not including LPG destined for petrochemical usage, and purchased LPG from third parties, as detailed in the table below:

	<i><b>Production and Purchases (mtn) 2017</b></i>
<i><b>LPG from Natural Gas Processing Plants(1)</b></i>	
<i>General Cerri</i>	0.06
<i>El Portón</i>	109.1
<i>San Sebastián</i>	19.2
<i>Loma Negra</i>	23.5
<i>Estación Fernandez Oro</i>	11.1
<i><b>Total Upstream</b></i>	<b>162.9</b>
<i><b>LPG from Refineries and Petrochemical Plants</b></i>	
<i>La Plata refinery</i>	242.8
<i>Luján de Cuyo refinery</i>	102.4
<i>CIE</i>	34.0
<i><b>Total refineries and petrochemical plants(2)</b></i>	<b>379.2</b>
<i><b>LPG purchased from joint ventures(3)</b></i>	<b>8.0</b>

<i>LPG purchased from unrelated parties</i>	<b>42.4</b>
<b><i>Total</i></b>	<b>592.5</b>

- (1) The San Sebastian plant is a joint venture in which we own a 30% interest; El Portón is 100% owned by us; General Cerri belongs to a third party with which we have a processing agreement.
- (2) This production does not include LPG used as petrochemical feedstock (olefins derivatives, polybutenes and maleic).
- (3) Purchased from Refinor. We also have a 50% interest in Refinor, which produced 179.4 mtn of LPG in 2017. Regarding to sales prices, the butane local market is regulated by the government, where the local prices have been unmodified since April 2015 until 2017. In April (resolution 56-E / 2017) and December 2017 (resolution 287-E / 2017) the government updated Butano's maximum reference prices for the local market recognizing an improvement in sales prices. In the case of propane, although the market is also regulated by the government, local prices published by the Ministry of Energy are referred to export parity.

**Table of Contents***Chemicals Division*

Petrochemicals are produced at our petrochemical facilities in Ensenada and Plaza Huincul. Additionally, we also own a 50% interest in Profertil, a company that has a petrochemical complex in Bahía Blanca, as discussed below.

Petrochemical production operations in the *Complejo Industrial Ensenada* ( CIE ) are closely integrated to the refining activities at the La Plata refinery, allowing a flexible supply of feedstock, the efficient use of by-products, such as hydrogen, and the supply of aromatics to increase gasoline octane levels.

The main petrochemical products and production capacities per year are as follows:

	<b>Capacity (tons per year)</b>
<i>CIE</i>	
<i>BTX (Benzene, Toluene, Mixed Xylenes)</i>	526,000
<i>Paraxylene</i>	38,000
<i>Orthoxylene</i>	25,000
<i>Cyclohexane</i>	95,000
<i>Solvents</i>	66,100
<i>MTBE</i>	60,000
<i>Butene I</i>	25,000
<i>Oxoalcohols</i>	35,000
<i>TAME</i>	105,000
<i>LAB</i>	52,000
<i>LAS</i>	32,000
<i>PIB</i>	26,000
<i>Maleic Anhydride</i>	17,500
<i>Plaza Huincul</i>	
<i>Methanol</i>	411,000

Natural gas, the raw material for methanol, is supplied by our Upstream business segment. The use of natural gas as a raw material allows us to monetize reserves, demonstrating the integration between the Chemical and the Upstream divisions.

In 2017 we successfully installed a new gas flare in our methanol plant in the Plaza Huincul refinery and a maleic anhydride pastillator in the CIE.

Additionally, in accordance with our midterm commercial strategy of establishing YPF as one of the main players of the Southern Cone's petrochemical industry, in 2017 we managed to sell over 87,000 tons of our solvents and specialties product lines to the Southern Cone region, 18% higher than 2016 and the highest sales to that destination in the last five years.

Raw materials for petrochemical production in the CIE, including virgin naphtha, propane, butane and kerosene, are supplied mainly by the La Plata refinery.

In 2017, 2016 and 2015, 84%, 80% and 72%, respectively, of our petrochemicals sales (including propylene), were made in the domestic market, while we exported to Mercosur countries, the rest of Latin America, Europe and the

United States.

We also participate in the fertilizer business, directly and through Profertil, a 50%-owned subsidiary. Profertil is a joint venture with Agrium, a worldwide leader in fertilizers, which initiated operations in 2001. Profertil has a production facility in Bahía Blanca which produces 1.3 million tons of urea and 750,000 tons of ammonia per year. In addition, Profertil markets other nutrients and special blends of prepared land to optimize soil performance.

The CIE was certified under ISO 9001 in 1996 and recertified in 2013 (2008 version). The La Plata petrochemical plant was certified under ISO 14001 in 2001 and recertified in 2014 (2008 version). The plant was also certified under OHSAS 18001 in 2005 and recertified in 2014. Since 2008, the plant verified the inventory of CO<sub>2</sub> emissions under ISO 14064: 1 and, in 2011, inventories of CH<sub>4</sub> and N<sub>2</sub>O emissions were verified as well. The CIE laboratory was certified under ISO 17025, in 2005 and recertified in 2013.

The CIE has recently attained ISO 50001 certification (2011 version) in November 2015, covering the following processes: production of complex aromatics, olefins, maleic, polybutenes and the energy generation facilities that operate within the La Plata petrochemical complex.

The methanol plant was certified under ISO 9001 in December 2001 and recently recertified with ISO 9001 (2015 version) in July 2016. The methanol plant was also certified under ISO 14001 in July 1998 together with the Plaza Huincul refinery, and recertified in July 2016 with ISO 14001:2015. In addition, the plant was also certified under OHSAS 18001 in December 2008, and the last date of recertification was August 2014.

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The certification of our petrochemical business covers the following processes:

refining process of crude oil and production of gas and liquid fuels, base stocks for lubricants and paraffin, petroleum coke (green coke) and petrochemical products in the units of refining, conversion, lubricants, aromatics, olefins PIB / Maleic and LAB / LAS, methanol production and storage.

management and development of our petrochemical business, planning and economic and commercial control, marketing and post-sale service of petrochemical products.

**Logistic Division****Crude oil and products transportation and storage**

We have available for our use a network of five major pipelines, two of which are wholly-owned by us. The crude oil transportation network includes nearly 2,700 km of crude oil pipelines with approximately 640,000 barrels of aggregate daily transportation capacity of refined products. We have total crude oil tankage of approximately 7 mmbbl and maintain terminal facilities at five Argentine ports.

Information with respect to YPF's interests in its network of crude oil pipelines is set forth in the table below:

<i>From</i>	<i>To</i>	<i>YPF Interest</i>	<i>Length (km)</i>	<i>Daily Capacity (boe/d)</i>
Puesto Hernández	Luján de Cuyo refinery	100%	528	93,509
Puerto Rosales	La Plata refinery	100%	585	326,541
La Plata refinery	Dock Sud	100%	52	141,006
Brandsen	Campana	30%	168	120,700
Puesto Hernández/P. Huincul/Allen	Puerto Rosales	37%	888	232,000

We own two crude oil pipelines in Argentina. One connects Puesto Hernández to the Luján de Cuyo refinery (528 km), and the other connects Puerto Rosales to the La Plata refinery (585 km) and extends to Shell's refinery in Dock Sud at the Buenos Aires port (another 52 km). We also own a plant for the storage and distribution of crude oil in the northern province of Formosa with an operating capacity of 19,000 cm, and three tanks in the city of Berisso, in the province of Buenos Aires, with 90,000 cm of capacity. We own 37% of Oleoductos del Valle S.A., operator of an 888-km pipeline network, its main pipeline being a double 513 km pipeline that connects the Neuquina basin and Puerto Rosales.

We hold, through Oleoducto Transandino Argentina S.A. and Oleoducto Transandino Chile S.A., an interest of 36% and 18% respectively, in the 428-km transandean pipeline, which transported crude oil from Argentina to Concepción in Chile. This pipeline ceased operating on December 29, 2005, as a consequence of the interruption of oil exports resulting from decreased production in the north of the province of Neuquén. The book value of the assets related to this pipeline was reduced to their recovery value.

We also own 33.15% of Terminales Marítimas Patagónicas S.A., operator of two storage and port facilities: Caleta Córdova (province of Chubut), which has a capacity of 314,000 cm, and Caleta Olivia (province of Santa Cruz), which has a capacity of 246,000 cm. We also have a 30% interest in Oiltanking Ebytem S.A., operator of the maritime

terminal of Puerto Rosales, which has a capacity of 480,000 cm, and of the crude oil pipeline that connects Brandsen (60,000 cm of storage capacity) to the Axion Energy Argentina S.R.L. (previously ESSO, a former subsidiary of ExxonMobil which was acquired by Bidas Corporation) refinery in Campana (168 km), in the province of Buenos Aires.

In Argentina, we also operate a network of multiple pipelines for the transportation of refined products with a total length of 1,801 km. We also own seventeen storage terminals for distribution of refined products and seven LPG storage terminals with an approximate aggregate capacity of 1,620,000 cm. Three of our storage and distribution terminals are annexed to the refineries of Luján de Cuyo, La Plata and Plaza Huinul. Ten of our storage and distribution terminals have maritime or river connections. We operate 53 airplane refueling facilities (40 of which are wholly-owned) with a capacity of 22,500 mcm, 123 manual fuel dispensers and 17 automatic fuel dispensers. These facilities provide a flexible countrywide distribution system and allow us to facilitate exports to foreign markets, to the extent allowed pursuant to government regulations. Products are delivered by an exclusive tanker truck fleet of approximately 2,400 units of which 28 are owned.



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YPF currently blends ethanol in the Luján de Cuyo, Monte Cristo, San Lorenzo, La Plata, Junín, Plaza Huincul, Barranqueras, Concepción del Uruguay, Villa Mercedes and La Matanza storage plants.

In 1998, our logistics activities were certified under ISO 9001 (quality performance) and ISO 14001 (environmental performance), and recertified in 2012 under ISO 9001:2008 and ISO 14001:2004. In 2010, logistics activities were also certified under OHSAS 18001 (security performance) and recertified in 2013. In 2014, our trucking activities were certified under ISO 39001 (road traffic safety management system).

Our logistics activities were recertified in 2015 under ISO 9001 and ISO 14001, and recertified in 2016 under OHSAS 18001. Additionally, in 2016, our land transport and light vehicle logistics activities were certified under ISO 39001:2012. As of December 31, 2017, our logistics processes remain certified under ISO 9001, ISO 14001, OHSAS 18001, and ISO 39001 Standards.

## ***Trading Division***

Our Trading Division sells refined products and crude oil to international customers and crude oil to domestic oil companies. Exports may include crude oil, unleaded gasoline, diesel, fuel oil, LPG, light naphtha, virgin naphtha, MTBE, green coke and decanted oil.

This division exports to different countries, principally to United States of America and Brazil, as well as to other countries. Sales to international customers for 2017 and 2016 were Ps. 4,982 million and Ps. 3,305 million, respectively. In 2017, refined products accounted for 49% of total sales, up from 37% in 2016. In 2017, 48% of total sales corresponded to marine fuels, down from 59% in 2016. In 2017 and 2016, sales volumes to customers outside Argentina consisted of 3.0 mmbbl and 2.4 mmbbl of refined products, respectively, and 2.3 mmbbl and 2.7 mmbbl of marine fuels, respectively.

For the domestic market, sales of crude oil totaled Ps. 995 million, or 1.2 mmbbl, in 2017 and Ps. 784 million, or 0.9 mmbbl, in 2016. Sales of marine fuels totaled Ps. 1,726 million, or 1.2 mmbbl, in 2017 and Ps. 1,652 million, or 1.3 mmbbl in 2016.

In addition, imports of low sulfur diesel, gasoline, AVGAS and JP1 in 2017 totaled 4.6 mmbbl, a decrease of 18% compared with 5.6 mmbbl in 2016. Imports of fertilizers, agrochemicals and paraffin totaled 0.16 million tons in 2017, a decrease of 16% compared with 0.20 million tons in 2016. China and Morocco were the principal origin of these imports.

In 2017, imports of crude oil totaled 1.4 mmbbl. All of them came from Nigeria.

## ***Gas and Power***

During 2017, our Gas and Power activities included: (i) the commercialization and distribution of natural gas to third parties; (ii) the technical operation of LNG regasification in Bahía Blanca and Escobar terminals, through the contracting of two regasification vessels; and (iii) the generation of both conventional thermal electricity and renewable energy projects.

## ***Delivery commitments***

We are committed to providing fixed and determinable quantities of crude oil and natural gas in the near future under a variety of contractual arrangements.

With respect to crude oil, we sell substantially all of our Argentine production to our Refining and Marketing business segment to satisfy our refining requirements. As of December 31, 2017, we were not contractually committed to deliver material quantities of crude oil to third parties in the future.

As of December 31, 2017, we were contractually committed to deliver 13,511 mmcm (or 477 bcf) of natural gas in the future, (without considering interruptible export supply contracts) of which approximately 10,153 mmcm (or 359 bcf) will have to be delivered from 2018 through 2020. According to our estimates as of December 31, 2017, our contractual delivery commitments for the next three years could be met with our own production and, if necessary, with purchases from third parties. In addition, in regard with The Terms and Conditions (See Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government Market Regulation Natural gas ), during January 2018, we signed agreements with natural gas distribution companies promising to deliver 4,755.9 mmcm (or 167.9 bcf) of natural gas in 2018.

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However, since 2004 the Argentine government has established regulations for both the export and domestic natural gas markets which have affected Argentine producers' ability to export natural gas. Consequently, since 2004 we have been forced in many instances to partially or fully suspend natural gas export deliveries that are contemplated by our contracts with export customers.

For information regarding regulations that have been affecting our operations see Item 4. Information on the Company Regulatory Framework and Relationship with the Argentine Government Market Regulation.

For information regarding claims arising from restrictions in the natural gas market see Item 8. Financial Information Legal Proceedings.

On November 29, 2017, natural gas producers (among them, YPF) and ENARSA, at the request of the MINEM, subscribed the Terms and Conditions for the Provision of Natural Gas to Gas Distributors through Networks (the Terms and Conditions ).

The Terms and Conditions set forth the basic policies to guarantee the adequate supply of natural gas to Distributors, and consequently to the residential and commercial final consumers, the continuity of the gradual and progressive reduction of subsidies. The Terms and Conditions were entered into within the framework of the normalization process of the natural gas market, which provides that the Terms and Conditions will be effective during the transition period to normalization which is currently scheduled to run through December 31, 2019.

Among other provisions, the Terms and Conditions recognize the right to transfer the cost of acquiring gas to the tariff paid by users and consumers and establish the volume that each producer and each basin must make available on a daily basis to the distributors (who in turn may express their lack of interest in receiving such amounts before a certain cut-off date set forth in the Terms and Conditions) during each month. In addition, the Terms and Conditions: (i) set forth penalties for any party's non-compliance with their obligation to take or deliver gas, (ii) set maximum gas prices in US dollars for each basin for the two-year period from the execution of the Terms and Conditions, which were significantly higher than those prevailing until this agreement, (iii) include payment guidelines for the purchases made by the distributors to the producers and (iv) they include guidelines for early termination in the event of certain breaches by the parties. Pursuant to the Terms and Conditions, during the transition period ENARSA assumed the obligation to supply the demand corresponding to areas where the subsidies of residential gas consumption set forth in section 75 of Law No. 25,565 (corresponding to the areas of lower price of residential gas charged to users and consumers) are applicable.

The Terms and Conditions constitute guidelines for all parties in the negotiation of their respective individual agreements; however, the terms and conditions are guidelines and not obligations of the parties who entered into the Terms and Conditions. Entering the Terms and Conditions allows YPF to have predictability over its demand since natural gas for residential consumers is no longer dispatched according to priorities established in Resolution 1410/2010, but following the proportions and maximum quantities set forth in the Terms and Conditions annexes, compelling distribution companies to acquire natural gas for peak demand in the spot market.

On December 29, 2017, MINEM N ° 508-E / 2017 Resolution was published. This establishes the procedure for the compensation of lower revenues than the Licensees of the Natural Gas Distribution Service for User Networks See Item 4. Information on the Company Regulatory Framework and Relationship with the Argentine Government Natural Gas.

*Natural gas supply contracts*

The Argentine government has established regulations for both the international and domestic natural gas markets, which have affected the ability of producers in Argentina to export natural gas. Our principal supply contracts are briefly described below.

We were committed to supplying a daily quantity of 125 mmcf/d (or 3.5 mmcm/d) to the Methanex plant in Cabo Negro, Punta Arenas, in Chile (under three original agreements entered into on January 5, 1995, March 11, 1997 and November 13, 2001, which expire between 2017 and 2025). Pursuant to instructions from the Argentine government, deliveries have been interrupted since 2007. In connection with these contracts, the Company signed three new agreements with Methanex through which YPF eliminated all

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contractual obligations and past and future potential claims related to the original agreements through 2018. The first agreement was signed in 2011, through which YPF committed to investments in E&P. The second one was signed in 2012, through which YPF committed to temporarily exporting gas to Chile and importing methanol as the final product ( Gas Tolling Agreement ), receiving the approval from the Argentine government. A new Gas Tolling Agreement was signed in December 2016, through which YPF committed to supplying a total volume of 4 bcf (115 mmcm) of gas to Methanex through April 2018. The new Gas Tolling Agreement was signed by YPF and Methanex and presented for approval of the Argentine government to temporarily export gas and import methanol. An addendum to the Gas Tolling Agreement was signed on December 4, 2017 by YPF and Methanex, pursuant to which YPF has the option to supply 1 mmcm/d until September 2018 or until reaching a total amount of 115 mmcm whatever comes first. Each cubic meter delivered, reduces proportionally the commitment of YPF to deliver natural gas according to the 1997 Agreement, from January 1 to December 31, 2019. The Gas Tolling Agreement as well as the addendum (both approved by MINEM through Resolution No. 502/2017) states that if the volumes of the addendum are completely delivered, the commitment established in 1997 Agreement, is considered fulfilled. However, no sanction could apply to YPF if the company decides not to fulfilled the volumes mentioned in the addendum.

We are currently engaged in a 15-year contract signed in 2003 with Gas Valpo, a natural gas distributor, to supply 35 mmcf/d (or 1 mmcm/d) through the Gas Andes pipeline linking Mendoza, Argentina to Santiago, Chile, which has a transportation capacity of 353 mmcf/d (or 10 mmcf/d) (designed capacity with compression plants). This contract has been modified to an interruptible contract.

We have a 21-year contract (entered into in 1999) to deliver 93 mmcf/d (or 2.63 mmcm/d) of natural gas to a Chilean distribution company (Innergy) that distributes natural gas to residential and industrial clients through a natural gas pipeline (with a capacity of 318 mmcf/d or 9 mmcm/d) connecting Loma La Lata in Neuquén, Argentina with Chile. The contract was modified to reduce its deliver or pay obligation, not to exceed an annual quantity of 20 mmcm with a daily basis of 7.1 mmcf/d (or 0.2 mmcm/d).

Because of certain regulations implemented by the Argentine government, we could not meet our export commitments and were forced to declare force majeure under our natural gas export sales agreements, although certain counterparties have rejected our position. See The Argentine natural gas market and Item 8. Financial Information Legal Proceedings. As a result of actions taken by the Argentine government, through measures described in greater detail under Legal and Regulatory Framework and Relationship with the Argentine Government Market Regulation Natural gas, during recent years we have been forced to reduce the export volumes authorized to be provided under the relevant agreements and permits.

***The Argentine natural gas market***

We estimate (based on preliminary reports of amounts delivered by gas transportation companies) that natural gas consumption in Argentina totaled approximately 1,775 bcf (or 50.26 bcm) in 2017. We estimate that the number of users connected to distribution systems throughout Argentina was approximately 8.7 million as of October 31, 2017.

In 2017, we sold approximately 35% of our natural gas to local residential distribution companies, approximately 1.5% to compressed natural gas end users, approximately 55.9% to industrial users (including our affiliates, Mega and Profertil) and power plants and 7.2% to YPF downstream operations. Sales were affected by increased consumption by residential consumers during winter months (June to August). During 2017, approximately 87.6% of our natural gas sales were produced in the Neuquina basin. In 2017, our domestic natural gas sales volumes were approximately equal to 2016.

During the past few years, the Argentine government has taken a number of steps aimed to satisfy domestic natural gas demand, including pricing, export regulations, higher export taxes and domestic market injection requirements. These regulations were applied to all Argentine producers, affecting natural gas production and exports from every producing basin. See Delivery commitments Natural gas supply contracts. Argentine producers such as YPF complied with the Argentine government's directions to curtail exports in order to supply gas to the domestic market, whether such directions are issued pursuant to resolutions or otherwise. Resolutions adopted by the Argentine government provide penalties for non-compliance. Rule SSC No. 27/2004 issued by the Undersecretary of Fuels ( Rule 27 ), for example, punishes the violation of any order issued thereunder by suspending or revoking the production concession. Resolutions No. 659 and No. 752 also provide that producers not complying with injection orders will have their concessions and export permits suspended or revoked and state that pipeline operators are prohibited from shipping any natural gas injected by a non-complying exporting producer.

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The Argentine government began suspending natural gas export permits pursuant to Rule 27 in April 2004, and in June 2004 the Argentine government began issuing injection orders to us under Resolution No. 659. Thereafter, the volumes of natural gas required to be provided to the domestic market under the different mechanisms described above have continued to increase substantially. See additionally Item 4. Information on the Company Regulatory Framework and Relationship with the Argentine Government Natural gas export administration and domestic supply priorities .

On January 8, 2017, Law No. 26,732, which establishes export duties on hydrocarbon exports, ceased to be in force. As a result, export duties are no longer imposed on natural gas exports.

See Item 4. Information on the Company Regulatory Framework and Relationship with the Argentine Government Natural gas for additional information on these and other related regulations.

***Argentine natural gas supplies***

Most of our proved natural gas reserves in Argentina (approximately 79% as of December 31, 2017) are situated in the Neuquina basin, which is strategically located in relation to the principal market of Buenos Aires and is supported by sufficient pipeline capacity during most of the year. Accordingly, we believe that natural gas from this region has a competitive advantage compared to natural gas from other regions. The capacity of the natural gas pipelines in Argentina has proven in the past to be inadequate at times to meet peak-day winter demand, and there is no meaningful storage capacity in Argentina. Since privatization, local pipeline companies have added capacity, improving their ability to satisfy peak-day winter demand, but no assurances can be given that this additional capacity will be sufficient to meet demand.

In order to bridge the gap between supply and demand, especially with respect to peak-day winter demand, the Argentine government has entered into gas import agreements.

YPF has provided regasification services to ENARSA under certain agreements since May 2008. As of the date of this annual report, both parties are engaged in renegotiations towards an extension of the agreement, which expires in October 2018

Since the beginning of its operations, this regasification vessel has converted 21.85 bcm (or 771,6 bcf) of LNG into natural gas, which has been injected into a pipeline which feeds the Argentine national network. Most of this volume was supplied during the peak winter demand period. In 2017, natural gas injected into the network amounted to approximately 2.21 bcm (or 78.2 bcf).

YPF is the operator of UTE Escobar (a joint venture formed by YPF and ENARSA), which operates an LNG Regasification Terminal ( LNG Escobar ) located in the km 74.5 of the Paraná River. The LNG Escobar terminal has a floating storage and regasification unit permanently moored at a new port facilities, for which UTE Escobar has executed agreements with Excelerate Energy to provide and operate a 151,000 cm (or 533,252 cf) regasification vessel moored at the LNG Escobar terminal with the capacity to supply up to 20 mmcm/d (or 700 mmscf/d) of natural gas.

Since the beginning of its operations, this regasification vessel has converted 16.50 bcm (or 582.6 bcf) of LNG into natural gas, which has been injected into a pipeline which feeds the Argentine national network. Most of this volume was supplied during the peak winter demand period. In 2017, natural gas injected into the network amounted to approximately 2.23 bcm (or 78.7 bcf).

***Natural gas transportation and storage capacity***

Natural gas is delivered by us through our own gathering systems to the five trunk lines operated by Transportadora de Gas del Norte S.A and Transportadora de Gas del Sur S.A. from each of the major basins. The capacity of the natural gas transportation pipelines in Argentina is mainly used by distribution companies. A major portion of the available capacity of the transportation pipelines is booked by firm customers, mainly during the winter, leaving capacity available for interruptible customers to varying extents throughout the rest of the year.

We have utilized natural underground structures located close to consuming markets as underground natural gas storage facilities, with the objective of storing limited volumes of natural gas during periods of low demand and selling such natural gas during periods of high demand. Our principal gas storage facility, Diadema, is located in the Patagonia region, near Comodoro Rivadavia city. The injection of natural gas into the reservoir started in January 2001.



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### *Other investments and activities*

#### *NGLs*

We participated in the development of our affiliate Mega to increase its ability to separate liquid petroleum products from natural gas. Through the fractionation of gas liquids, Mega increased production at the Loma La Lata gas field by approximately 5.0 mmcm/d (or 176.5 mmcf/d) in 2001 with our assistance.

We own 38% of Mega, while Petrobras and Dow Chemical have stakes of 34% and 28%, respectively.

Mega operates:

A separation plant, which is located in the Loma La Lata field, in the province of Neuquén.

An NGL fractionation plant, which produces ethane, propane, butane and natural gasoline and is located in the city of Bahía Blanca in the province of Buenos Aires.

A pipeline that links both plants and that transports NGLs.

Transportation, storage and port facilities in close proximity to the fractionation plant.

Mega's maximum annual production capacity is 1.62 million tons of natural gasoline, LPG and ethane. YPF is Mega's only supplier of natural gas. The production of the fractionation plant is used mainly in the petrochemical operations of PBBPolisur S.A. (PBB), owned by Dow Chemical Company, and is also exported by tanker to Petrobras facilities in Brazil.

Pursuant to Decree No. 2067/08 and Resolutions No. 1982/2011 and 1991/2011 of ENARGAS, since December 1, 2011, Mega had been required to pay, on a monthly basis, a fee of Ps. 0.405 per cubic meter of natural gas it purchases. This requirement has a significant impact on the operations of Mega and has been challenged in the Argentine federal courts. On October 27, 2015, the Argentine Supreme Court (CSJN) ruled on the legal proceedings filed by Mega covering the period up to the issuance of Law No. 26,784 (November 13, 2012). It ruled that Decree 2067/08 was unconstitutional and did not apply to Mega.

In addition, on February 25, 2013, Mega filed another action requesting that the federal courts declare the unconstitutionality of Articles 53 and 54 of Law No. 26,784, which included within the provisions of Law No. 26,095 the fee created by Decree No. 2067/08 and ENARGAS regulations, which, as of the date hereof, has not been ruled on by the first instance judge.

Finally, on April 1, 2016, MINEM issued Resolution No. 28, which provided for the suspension of the application of the fee created by Decree No. 2067/08 and related ENARGAS regulations effective as of the date of issuance.

#### *Electricity market generation*

The Argentine Electricity Market

Argentina's energy demand in 2017 was almost similar to its energy demand in 2016, according to Compañía Administradora del Mercado Mayorista Eléctrico S.A. (CAMMESA). During 2017, domestic consumption decreased 2.14% and exports decreased more than 79%.

In order to satisfy this energy demand, Argentina's overall power generation in 2017 was similar to its power generation in 2016, according to CAMMESA. In 2017, 64,5% of Argentina's power generation came from thermal power plants, 28.9% from hydroelectric power plants, 4.2% from nuclear power plants, 1.9% from renewable energy sources and 0.5% from spot imports from Uruguay, Brazil, Paraguay and Chile (733.8 Gwh). Those spot imports were used to satisfy peak demand hours without capacity reserves.

Peak capacity demand reached its maximum in February 2017 (25,628 Mw), but maintaining 1,614 Mw of capacity reserve for security of the electrical system.

Thermal power plants consumed 1,396,122 cm of diesel oil, a decrease of 41.4% compared to 2016, 1.286 million tons of fuel oil, a 51.5% decrease compared to 2016, and 17.08 billion cm of natural gas, an 9.8% increase compared to 2016.

The average electricity price was Ps. 1157.1/MWh, a 9.7% increase compared to 2016, while the annual average marginal cost of production was Ps. 1,473/MWh, also a 28.8% decrease compared to 2016 due to an improvement in the efficiency of power plants and to a lower consumption of liquid fuels.

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In 2017, Resolution No. 19/2017 of the Secretariat of Electric Energy replaced Resolution 95/13 and defined a new remuneration method for available power and generated energy, allowed the power generation plants to increase the profitability and reliability of the generation of energy. This resolution established remuneration based on the available power by type of technology (gas turbine, steam turbine, combined cycles, hydroelectric) and remuneration for energy generated and operated. Likewise, additional remuneration was established as incentive to efficiency. The payment of these concepts is done in cash and denominated in dollars.

In Resolution SEE 287 E / 2017 of May 10, 2017, the Ministry of Energy instructed CAMMESA to call interested parties to offer new thermal generation of technology: a) combined cycle or b) cogeneration, with compromise to be available to meet the demand in the wholesale electric market, contribute to the reduction of costs and to the increase of the reliability in the Argentine Electrical System.

*YPF in Power Generation*

On August 1, 2013, as a result of the spinoff of the assets of PlusPetrol Energy S.A., YPF Energía Eléctrica S.A ( YPF EE ), was created to continue the power generation operations and businesses of Central Térmica Tucumán and Central Térmica San Miguel de Tucumán.

During 2017, YPF EE participated in the following power generation plants with an aggregate net installed capacity of 1,367 MW:

a 100% interest in Central Térmica Tucumán (447 MW combined cycle) through YPF EE, in which we have a 100% interest;

a 100% interest in Central Térmica San Miguel de Tucumán (382 MW combined cycle) through YPF EE, in which we have 100% interest; and

a 100% interest in Loma Campana Este (14 MW motogenerators) through YPF EE, in which we have 100% interest;

a 100% interest in Loma Campana I (105 MW gas turbine) through YPF EE, in which we have 100% interest;

a 66,67% interest in Loma Campana II (107 MW gas turbine) through YGEN, in which we have 66,67% interest; and

a 40% interest in Central Dock Sud (797.5 MW combined cycle and 72 MW gas turbines), directly and through Inversora Dock Sud S.A., in which we have a 42.86% interest.

Additionally, YPF EE owns assets that are part of Filo Morado Partnership, which has an installed capacity of 63 MW. However the relevant facilities have not been in operation since November 2008.

In addition to YPF EE, YPF also owns and operates power plants supplied with natural gas produced by itself, which produce power to supply upstream and downstream activities:

Los Perales power plant (74 MW), which is located in the Los Perales natural gas field;

Chihuido de la Sierra Negra Power Plant (40 MW); and

Plaza Huincul Power Plant (40 MW).

In 2017, YPF EE generated 5,270 GWh with its two combined cycle plants. Central Térmica Tucumán's production was 2,498 GWh, and Central Térmica San Miguel de Tucumán's production was 2,772 GWh. Additionally, Central Dock Sud generated 4,944 GWh. The energy produced by YPF EE and Central Dock Sud (10,214 GWh in total) represented 7.45% of Argentina's electricity generation in 2017.

Energy produced by both combined cycle plants in Tucumán was 5% lower in 2017 compared to 2016, because of major overhauls on units TUCUTV01 and TUCUTG02 at Central Térmica Tucumán in September 2017 and October 2017.

Energy produced by Central Dock Sud in 2017 decreased by 1.62% for annual borscopy inspection on units DSUDTG10 and DSUDTG09.

On November 7, 2017, YPF EE reached the commercial operating date of an important new thermal power generation plant, Central Térmica Loma Campana (105 MW gas turbine), which is located in Añelo, Neuquén. This additional generation plant was designed with the objective of supplying YPF's internal energy demand all over the country.

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Within the framework of Secretary of Electrical Energy (S.E.E.) Resolution No. 21/2016, YPF EE, together with a subsidiary of General Electric, decided to engage in two projects for the development and operation of two power plants.

One project consists of a new 107 MW thermal power plant located at Loma Campana in Neuquén province, Argentina. The project has succeeded in obtaining a purchase price agreement at the second round of the power capacity auction established through S.E.E. Resolution No. 21/2016 and the reference terms issued by CAMMESA. The commercial operating date of this power plant was on November 30, 2017.

The second project consists of a new 267 MW thermal power plant located at El Bracho in Tucumán province, Argentina. The project has succeeded in obtaining a purchase price agreement at the first round of the power capacity auction established through S.E.E. Resolution No. 21/2016 and the reference terms issued by CAMMESA. The project reached the commercial operating date on the January 27, 2018.

Both projects involved an aggregate investment of U.S.\$307,9 million, and the total shareholders' contribution was U.S.\$88,4 million (approximately U.S.\$58,9 million payable by YPF EE), with the remainder of the investment amount, U.S.\$ 219,5 million financed by financial institutions.

As a consequence of Law No. 27,191 related to renewable energy, YPF EE started in 2016 the construction of its renewable generation project, Manantiales Behr Wind Farm, near Comodoro Rivadavia in the Chubut province, in order to supply the percentage of YPF total demand with clean generation that will be required by law in 2018. This project is expected to be finished by 2018 with the generation of 99 MW.

In addition, and in the context of the Law No. 27,191, the Ministry of Energy and Mining launched in August, 2017 the Plan RenovAr 2.0, an auction for 1,200 MW for the construction of renewable energy generation plants, in which YPF EE was awarded with the construction of the Cañadón Leon Wind Farm, a project of another 100 MW of clean generation, in the Santa Cruz province. Under the terms of the auction, this project will allow YPF EE to have another power purchase agreement with CAMMESA. This project is expected to be finished by January 2020.

As far as efficient energy generation is concerned, YPF EE won the award of two projects at the second round of the cycle closure and cogeneration plants auction established through S.E.E. Resolution No. 287/2017. One project consists of a new 72 MW cogeneration plant located in the Buenos Aires province. The other implies the closure of the open cycle of the El Bracho thermal power plant in Tucumán (198 MW). Besides, in January, 2018 YPF EE bought the cogeneration plant in La Plata to Central Puerto S.A (128 MW).

With all these projects in its portfolio, among others, YPF EE pursues to be one of the strongest competitors in the electrical generation market in Argentina. For this purpose, YPF EE established negotiations with GE Energy Financial Services during 2017 in order to redistribute its share capital, trusting that the entrance of the strategic partner will hasten the growth of the company in the country.

On December 14, 2017, the Board of Directors of the Company approved the terms of a memorandum of understanding signed with GE Energy Financial Services, Inc. ( GE EFS ) which established the framework conditions under which the parties would agree to the capitalization of YPF EE. This Agreement, the framework conditions of which were approved by the Board of Directors of the Company, established that GEEFS intended to contribute capital through a vehicle company and subscribe for shares of YPF EE in order to have a shareholding of 25% of its capital stock.

On February 6, 2018, the conditions of the definitive and binding agreement entered into by YPF with EFS Global Energy B.V. ( GE ) and GE Capital Global Energy Investments B.V., companies indirectly controlled by GE EFS, which establishes the conditions for the capitalization of YPF EE (the Share Subscription Agreement ). The Share Subscription Agreement establishes that GE, subject to compliance with certain preceding conditions, will subscribe for shares of YPF EE in order to have a shareholding of 24.99% of its capital stock and jointly control this company with YPF.

The contribution will be US\$ 310 million, composed as follows:

Subscription price of US \$ 275 million:

US \$135 million as of the closing date of the transaction; and

US \$140 million 12 months after the closing date of the transaction.

Contingent price of up to the maximum sum of US \$ 35 million subject to the evolution of the prices of Resolution 19/17 (33.33% as of 24 months from the closing date of the transaction and 16.67% each subsequent year).

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On March 20, 2018, GE EFS Power Investments B.V. ( GE ), a subsidiary of EFS Global Energy B.V. (both corporations indirectly controlled by GE Energy Financial Services, Inc.), subscribed for shares of YPF Energía Eléctrica S.A. ( YPF EE ) in an amount equal to 24.99% of YPF EE 's capital stock through a cash contribution of US\$ 275,000,000, plus a contingent payment for up to US\$35,000,000. This cash contribution will allow YPF EE a more accelerated development of its business plan. As of the date of the subscription of YPF EE shares by GE, GE and YPF S.A. have joint control of YPF EE.

Additionally, YPF continues negotiating with a possible third partner for the purposes of granting an option to subscribe an additional 24.5% of YPF EE 's capital stock, on similar terms as agreed with GE.

See Note 3 to the Audited Consolidated Financial Statements for additional information.

*Natural gas distribution*

We currently hold a 70% stake in Metrogas S.A. ( Metrogas ), a natural gas distribution company in the capital region and southern suburbs of Buenos Aires, and one of the main distributors in Argentina. During 2017, Metrogas distributed approximately 20.4 mmcm (or 719.7 mmcf) of natural gas per day to 2.3 million customers in comparison to approximately 19.3 mmcm (or 681.0 mmcf) of natural gas per day to 2.4 million customers in 2016. During May 2013, we, through our subsidiary YPF Inversora Energética S.A. ( YPF Inversora Energética ), gained 100% ownership of Gas Argentino S.A. ( GASA ), the controlling company of Metrogas, by acquiring shares representing the remaining 54.7% interest in GASA not already owned by us. In 2016, GASA and YPF Inversora Energética were both merged into us and dissolved without liquidation.

Additionally, on December 28, 2016, YPF has received from Metrogas a copy of the note received by it from ENARGAS, requesting it to adjust Metrogas ' equity structure in line with the term provided for in Emergency Law No. 25,561 and in compliance with Section 34 of Law 24,076. In this regard, it should be noted that YPF indirectly acquired 70% of Metrogas equity, which transaction was approved by ENARGAS Resolution No. I/2,566 dated April 19, 2013; and, following the merger with YPF Inversora Energética S.A. and Gas Argentino S.A., is the holder of 70% of Metrogas shares.

On March 30, 2017, YPF filed an appeal for reconsideration requesting to overrule the ENARGAS Note and render a new decision setting a reasonable timeframe consistent with the current reality of the gas market to comply with the provisions set forth article 34 of Law 24,076.

On June 15, 2017, YPF submitted to ENARGAS a tentative schedule for the process of adapting its equity interests in Metrogas, which was expanded in detail on July 3, 2017. As of the date of this annual report, ENARGAS has not issued any decision regarding the appeal or the submitted tentative schedule.

Such presentation does not imply withdrawal of the aforementioned appeal.

On April 5, 2018, the Company was notified that the ENARGAS rejected the motion for reconsideration submitted by YPF on March 30, 2017. As of the date of this annual report, we are discussing the following legal steps as a result of the previously mentioned rejection.

*Metrogas tariff issues*

The Emergency Law published in the Official Gazette on January 7, 2002, modified the legal framework in force for license contracts of public services.

The main provisions of Emergency Law that have an impact on the License duly granted to MetroGAS by the National Government and that modified express provisions of the Gas Law were the following: pesification of tariffs that were fixed in convertible dollars at the exchange rate specified in the Convertibility Law (Law No. 23,928), the prohibition of tariff adjustments based on any foreign index, thus not allowing the application of the international index specified in the Regulatory Framework (US Producer Price Index-PPI) and the renegotiation of the License granted to the Company in 1992.

Moreover, the Emergency Law established the beginning of a renegotiation process of public utility services agreements granted by the PEN without detriment to the requirements that utility services companies must go on complying with all their obligations.

The Emergency Law, which was originally to be due in December 2003, was extended several times until December 31, 2017. The terms for renegotiating licenses and public services concessions were also extended. See Item 4. Information on the Company Regulatory Framework and Relationship with the Argentine Government Public Emergency .



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In the framework of the renegotiation process, the Company signed a series of agreements with different entities representing the National Government.

For the agreements signed in 2017, see Item 4. Information on the Company Regulatory Framework and Relationship with the Argentine Government Natural Gas Tariffs .

## **Seasonality**

For a description of the seasonality of our business, see Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations Seasonality.

## **Research and Development**

At the end of 2013, YPF created YPF Tecnología S.A. ( Y-TEC ), a highly specialized company focusing on research and development ( R&D ) activities. YPF holds an interest stake of 51% and CONICET, a state-owned research and development organization, holds an equity interest of 49%.

All lines of R&D carried out by Y-TEC are strategically aligned with the needs of YPF. The Board of Directors of Y-TEC consists of three directors appointed by YPF and two directors appointed by CONICET; additionally, the Chairman and the General Manager of Y-TEC are appointed by YPF.

For the operations of Y-TEC, five hectares from the National University of La Plata ( UNLP ) were acquired, and a 13,000 m2 building consisting of 47 labs and 12 experimental plants was recently built. The staff and the equipment moved into the new building in June 2016. More than 300 professionals work in the new building, to create innovative solutions for the energy sector.

The main goals of Y-TEC are: to generate high-impact technological solutions, provide high quality technical and laboratory support services and lead the fast implementation in the industry of existing innovative technologies (quick wins).

Y-TEC explores opportunities throughout the actual and future energy sector. This is a broad and diversified strategy approach that cover core areas such as Unconventional Resources, Mature Fields and Petrochemical, as well as New Energies, Future Mobility and Environmental Sustainability.

The new R&D portfolio consists of 66 projects, 35 short-term high impact quick wins and more than 100 technical assistance and specialized services.

In 2017, U.S.\$30.3 million was allocated to R&D activities, and U.S.\$4.56 million (YPF 's working interest) was invested in new equipment. In 2016, U.S.\$27.7 million was allocated to R&D activities, and U.S.\$12.23 million (YPF 's working interest) was invested in new laboratory building and equipment. In 2015, U.S.\$29.7 million was allocated to R&D activities, and U.S.\$22.7 million (YPF 's working interest) was invested in a new laboratory building and equipment.

Y-TEC believes in the value of liaising with technological partners to reinforce regional leadership, adopting the open innovation concept. This concept allows us to reduce technological risk, shorten the time to have the product on the market and minimize costs.

Since 2016, we have opened more than twenty Innovation Spaces. These are areas promoted by Y-TEC to complement scientific capacities in public and private institutions and allow the development of technological products of high impact for the national energy industry. Knowledge, experience and state-of-the-art equipment are brought together by Y-TEC and CONICET.

In exploration and production of unconventional resources, R&D efforts are focused on the design, development and application of very specific technologies. Our most important challenges include the design and development of simulation and modeling tools; measuring and monitoring solutions; proppants and smart proppants; fluids, smart fluids, additives and chemical products for optimizing drilling, completion and production operations.

To optimize production from mature fields, we focused on the development of enhanced oil recovery technologies and the development of new processes and materials to reduce the operational costs of our facilities, to increase their run life and integrity.

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Regarding refining and marketing of petroleum products, we applied our technological knowledge to optimize refinery operations and improve product quality, with a strong focus on the achievement of energy efficiency and environmental improvements. In the petrochemical business, R&D activities are mainly focused on the development of new products with higher added value, such as special solvents, fertilizers and several agricultural products.

Renewable energy is a strategic R&D area. Energy storage based on li-ion technologies, solar energy (photovoltaics and thermal), hydrogen production, bioenergy and energy efficiency are among the greater challenges.

Supporting the process of transformation initiated by YPF and in line with the advancement of digital technologies, we created in Y-TEC first Center of Excellence in Analytics (COE) fully dedicated to run data science projects across all YPF businesses.

The COE combines, under one single department data scientists, process modeling experts and IT professionals to provide integrated solutions to O&G industry. With this initiative, YPF is set at the forefront of other companies in the country by enhancing the use of the data to improve performance, protect assets and discover new businesses. For 2018, the main goals of the COE are: to lead the company cultural revolution, by making data analytics accessible to all levels of the organization; to promote a vision of one team overseeing synergies and the integration of different data science projects and multiply value, by prioritizing projects which can give the highest return on investment.

**Competition**

In our Upstream business, we encounter competition from major international oil companies and other domestic oil companies in acquiring exploration permits and production concessions. Our Upstream business may also encounter competition from oil and gas companies created and owned by certain Argentine provinces, including La Pampa, Neuquén, Santa Cruz and Chubut. See [Legal and Regulatory Framework and Relationship with the Argentine Government Overview](#) and [Legal and Regulatory Framework and Relationship with the Argentine Government Law No. 26,197](#). However, changes introduced in the Hydrocarbons Law through Law No. 27,007 (2014) limit the ability of provincial companies to possess future exclusive rights over permits and concessions, which supports competition in the Argentine oil and gas industry. See [Legal and Regulatory Framework and Relationship with the Argentine Government Law No. 27,007, amending the Hydrocarbons Law](#). Moreover, during the last several years we have made a comprehensive move to secure, either by renewing, extending and converting through mechanisms provided in the Law, the majority of such permits and concessions in Argentina considered valuable in the long term. In our Downstream businesses, we face competition from domestic and international oil companies. In our export markets, we compete with numerous oil and trading companies.

We operate in a dynamic market in the Argentine downstream industry and the crude oil and natural gas production industry. Crude oil and most refined products prices are subject to international supply and demand and, in certain cases, to Argentine regulations.

In January 2017 the government adopted a policy of convergence between the domestic oil price and the international benchmark and since October 2017 has suspended the price-setting system for domestically-consumed fuel. Since then, the hydrocarbons market in Argentina had become a liberalized market and, thus, fluctuate. This decision formally ended the transition to international oil price parity and, consequently, it is expected that, from 2018 onwards, that petroleum companies in Argentina will establish their own pricing policies. See [Item 3. Key Information Risk Factors Risks Relating to the Argentine Oil and Gas Business and Our Business Limitations on local pricing in Argentina may adversely affect our results of operations](#) and [Item 3. Key Information Risk Factors Risks Relating to the Argentine Oil and Gas Business and Our Business](#) We are exposed to the effects of fluctuations in the prices of oil, gas and oil products.

We continuously assess the external environment and our competitive position in order to adjust our business strategies and plans to create and sustain competitive advantage.

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**Table of Contents****Environmental Matters*****YPF-Argentine operations***

YPF is committed to operate in balance with its environment. In this sense, it carries forward its mission to produce and provide energy focus on environmental care, trying to minimize the impact, looking enhance the positive effects associated with its work and prioritizing the protection of workers, the environment and the community in general.

The approach is based on the Policy of Safety, Protection of the Environment and Preservation of Health, on a strong corporate culture of security and protection, and it is deployed through a management system focused on occupational risks, the mitigation of industrial risks and integration of the principles of process safety to control the risks and the impacts. This management system and its application is certified according to standards OHSAS 18001 (Safety) and ISO 14001 (Environment) in the major industrial centers of the company.

Our operations are subject to a wide range of laws and regulations relating to the general impact of industrial operations on the environment, including air emissions and waste water, the disposal or remediation of soil or water contaminated with hazardous or toxic waste, fuel specifications to address air emissions and the effect of the environment on health and safety. We have made and will continue to make expenditures to comply with these laws and regulations. In Argentina, local, provincial and national authorities are moving towards more stringent enforcement of applicable laws. In addition, since 1997, Argentina has been implementing regulations that require our operations to meet stricter environmental standards that are comparable in many respects to those in effect in the United States and in countries within the European Community. These regulations establish the general framework for environmental protection requirements, including the establishment of fines and criminal penalties for their violation. We have undertaken measures to achieve compliance with these standards and are undertaking various abatement and remediation projects, the more significant of which are discussed below. We cannot predict what environmental legislation or regulation will be enacted in the future or how existing or future laws will be administered or enforced. Compliance with more stringent laws or regulations, as well as more vigorous enforcement policies of regulatory agencies, could require additional expenditures in the future by us, including the installation and operation of systems and equipment for remedial measures, and could affect our operations generally. In addition, violations of these laws and regulations may result in the imposition of administrative or criminal fines or penalties and may lead to personal injury claims or other liabilities.

We continued making investments in order to comply with new Argentine fuel specifications, pursuant to Resolution No. 1283/06 (amended by Resolution No. 478/2009) of the Argentine Secretariat of Energy (currently as Argentine Ministry of Energy and Mines) (which replaces Resolution No. 398/03) relating to, among other things, the purity of diesels. In the La Plata refinery, a new ultra-low sulfur diesel desulfurization plant was started up during 2012. In Luján de Cuyo refinery, new HDS III (diesel desulfurization) and HTN II (gasoline desulfurization) plants were started up in 2013. Additionally, we are increasing the tankage capacity of several of our terminals in order to optimize fuel distribution logistics. First stage projects related to biofuels, such as the addition of bioethanol to gasoline and FAME to diesel, were accomplished by the end of 2009 and were operational by the beginning of 2010. During 2010 and 2011, additional bioethanol facilities at several terminals were installed and became ready to operate. Also, during this period, further investments were made in several terminals in order to allow the increased addition of FAME to diesel and to improve the related biofuel logistics. A new facility for FAME blending was started up in 2013 in the Montecristo terminal. In 2014, a 3,000 cm FAME tank at Terminal Dock Sud ( TDS ) a 3,000 cm FAME tank at TVM and two 200 cm ethanol tanks at Concepción del Uruguay were built. A new 3,000 cm FAME tank was also completed in the San Lorenzo terminal.

As in previous years, we continued with the initiatives relating to remedial investigations, feasibility studies and pollution abatement projects, which are designed to address potentially contaminated sites and air emissions. In addition, we have implemented an environmental management system to assist our efforts to collect and analyze environmental data in our upstream and downstream operations.

Also, as part of our commitment to satisfying domestic demand for fuels and meeting high environmental standards, during 2013 we started up a new Continuous Catalyst Regeneration ( CCR ) unit. The plant uses the latest worldwide technology to perform chemical processes and improvements in productivity, safety and environmental standards. Additionally, the plant produces aromatics that can be used as octane enhancers for gasoline and automotive applications, as well as increases hydrogen production to feed the fuel hydrogenation processes to increase fuel quality and reduce sulfur content, further reducing the environmental impact of internal combustion engines.

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On September 2016, we started up a new coke unit at the La Plata refinery, replacing the one that was severely damaged in the incident that occurred on April 2, 2013. The new unit design is expected to optimize energy efficiency and minimize particulate matter emissions. In addition to the projects mentioned above, we have begun to implement a broad range of environmental projects in the domestic Exploration and Production, Refining & Marketing and Chemicals segments, such as increasing the capacity of biological treatment in the La Plata refinery, a new flare in the Luján de Cuyo refinery, wastewater treatment and fire protection facilities, new flare in CIPH, improvement of fireproofing in existing facilities and implementation of bottom loading systems in terminals.

We and several other industrial companies operating in the La Plata area have entered into a community emergency response agreement with three municipalities and local hospitals, firefighters and other health and safety service providers to implement an emergency response program. This program is intended to prevent damages and losses resulting from accidents and emergencies, including environmental emergencies. Similar projects and agreements were developed at other refineries and harbor terminals as well. During 2016, we implement a similar program in the Luján de Cuyo area.

In 1991, we entered into an agreement with certain other oil and gas companies to implement a plan to reduce and assess environmental damage resulting from oil spills in Argentine surface waters to reduce the environmental impact of potential oil spills offshore. This agreement involves consultation on technological matters and mutual assistance in the event of any oil spills in rivers or at sea due to accidents involving tankers or offshore exploration and production.

During 1997 and 1998, each of our refineries (La Plata, Luján de Cuyo, and Plaza Huincul) were certified under the ISO (International Organization for Standardization) 9001 (quality performance) and ISO 14001 (environmental performance). All of them are also certified under the OHSAS 18001 (occupational health and safety performance) standard. In addition, since 2008, the La Plata and Luján de Cuyo complexes have been verified in accordance with ISO 14064 for the inventories of industrial greenhouse gases. The refineries maintain their systems under continuous improvement and revision by accredited organizations.

With respect to climate change, YPF has:

committed to active promotion of identification and pursuit of opportunities to reduce greenhouse gas emissions in our operations;

a Company target has been set to reduce the intensity of CO<sub>2</sub> emissions in future periods;

established a new internal corporate commitment on climate change and energy efficiency which was developed in June 2015. This document sets the framework for the company to work on reducing greenhouse gas emissions, contributing to mitigation activities while promoting sustainable development and preserving natural resources. In October 2017, it was renewed together with the Company's Sustainable Policy;

intensified the execution of internal projects to obtain credits under the relevant clean development mechanisms through the efficient use of resources, contributing to the transfer of technology and to the sustainable development of Argentina;

obtained the approval of the United Nations in December 2010 for an industrial project developed by YPF in Argentina defined as a Clean Development Mechanism ( CDM ) project, the first of its kind in the world. The project in the La Plata refinery reduces the emissions of greenhouse gases from fossil fuels used for process heating by replacing these fuels with recovered waste gases that were previously burned in flares. The project increases energy efficiency by reducing the demand for fuel oil and natural gas, allowing an estimated annual emission reduction of approximately 200,000 tons of CO<sub>2</sub>. On September 7, 2012, 89,930 Certified Emission Reductions (CERs) were issued by the United Nations after a peer review of the reported reduction in emissions. During 2017, La Plata project reduced CO<sub>2</sub> emissions by approximately 119,200 tons;

obtained the approval of the United Nations in December 2011 for an industrial project developed by YPF in Argentina defined as a CDM at the Luján de Cuyo refinery. During 2017, Luján de Cuyo project reduced CO<sub>2</sub> emissions by approximately 24,700 tons;

developed a methodology which was approved by the United Nations in 2007 under the name of AM0055 Baseline and Monitoring Methodology for the recovery and utilization of waste gas in refinery facilities. Six CDM projects are being developed around the world (Argentina, China, Kuwait and Egypt) applying this methodology developed by YPF;



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undertook third-party greenhouse gas emission inventory verification for refining and chemical operations in accordance with the ISO 14064 Standard. The inventory at CIE has been verified since 2008. In July 2017, the inventory verification process for greenhouse gases in the La Plata complex and the Luján de Cuyo refinery was completed. During 2016, we began to implement third-party greenhouse gas emission inventory verification in the Plaza Huincul refinery, achieving its verification in 2017. Based on our estimations regarding the contribution that forestry projects located in the province of Neuquén had with respect to climate change we found that these projects constitute approximately 6,500 hectares of trees forested under a long-term work program. Using the afforestation methodologies and tools available at the United Nations Framework Convention on Climate Change ( UNFCCC ) Clean Development Mechanism web site, it was possible to arrive to a conservative estimated amount of approximately 760,000 tons of CO2 equivalents that were captured by the afforestation project activities from 1984 (when the first afforestation activity occurred) through 2013;

We continue working on the commitment to minimize gas sent to flares and gas vented, giving compliance to the requirements established in National Resolutions 236/93 and 143/98 issued by the former Energy Secretariat of the Nation (SEN) and all those Applicable provincial regulations. In this sense, there is a new initiative, implemented in Mendoza: the virtual gas pipeline, that implies the liquefaction and transportation of the natural gas associated from remote wells to an electric power plant in order to reduce flaring.

strengthened the relationship established with the Argentinean Environmental Authority (*Ministerio de Ambiente y Desarrollo Sustentable de la Nación*), in particular with its Climate Change Unit (CCU *Dirección de Cambio Climático*) in order to collaborate with the development of the Third National Communication on Climate Change to the UNFCCC and during 2017 in workshops organized by the CCU for developing the National Climate Change Plans related to the Nationally Determined Contributions (NDCs) committed by the country under the signed Paris Agreement;

signed a framework agreement with the Argentinean Environmental Authority for a mutual collaboration on environmental issues, particularly relating to climate change; and

executed a pilot project on adaptation activities in a particular site of the company, using an adaptation tool that required the identification of climate risks, research on past, current and future climate trends and the identification of current taken and needed adaptation activities. In 2017, we implemented the same tool in another facility and co-organized in partnership with ARPEL (*Asociación latinoamericana de empresas de Petróleo*) a workshop on Climate Change vulnerability and adaptation.

In relation with water management activities, the Local Water Tool has been implemented on two sites for the identification of water risks and practices taken of the proper management of water and effluents during 2016, continuing the implementation in 2017 in another two sites. Furthermore, during the past years a baseline study on water management has been performed for the different facilities of the company, which allowed us to establish the points of water intake and water disposal (effluent) with corresponding volumes. Focusing on the development and research, the company created YPF Tecnología S.A. (see Item 4. Information on the Company Research and

Development ) where environmental activities are being undertaken in different fields. In particular, during 2016 we started performing activities on strengthening the biological restoration of sites which were continued during 2017. These activities were supported by local universities as well.

Our estimated capital expenditures are based on currently available information and on current laws. Any future information or future changes in laws or technology could cause a revision of such estimates. Changes in management's business plans or in Argentine laws and regulations may cause expenditures to become material to our financial position, and may affect results of operations in any given year.

### **Waste Management**

Since 2012, we have been working on initiatives in our Upstream business unit in order to systematically reduce the stock of soil with hydrocarbons. This is being performed with the commitment, leadership and responsibility of the entire Company achieving a reduction of 65% of the stock in our repositories from 2012 to 2017. Some of the activities that allow us to achieve this target were related to actions to the providers, mainly with the development of technical specifications for the contractual arrangements and effective technical supervision of their activities, optimizing the biotreatment times.

Furthermore, each business unit developed Waste Management Plans in line with the Upstream Waste Management Procedure and the Corporate Norm. Together with these plans the Oil spill cleaning procedure was also developed which is focused on the minimization of waste during remediation activities.

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### **Management of biodiversity and ecosystem services**

In 2017 a revision on our corporate Biodiversity Management Standard was done with the participation of representatives of each Business Unit. This revision was performed as part of the update of the document.

The management of biodiversity mainly focuses on instances where operations are being performed in ecological sensitive areas. These activities are being documented in the Biodiversity Management Plans. Currently, our Upstream business unit has two of these plans, one for our operations in the Llanquanelo Ramsar site in the Mendoza province and another in the Auca Mahuida site in the Neuquen province.

The activities related to biodiversity management in many cases involve changes in operational procedures, such as multiple location development, the camouflage of drilling equipment and even actions that require the adaptation of the operation sites in order to promote the allocation of particular species.

As operations continue to adapt, biodiversity monitoring activities are also being performed under a complex process due to the frequent natural variations that affects the wild populations, ecosystems and ecological processes in the medium and long term. This is done in order to gather information related to the local ecosystem and is focused on its protection and, when necessary, its restoration. This information is also important for the proper and sustainable use of natural resources before operations start.

Furthermore, as previously mentioned, in 2017 we continued the activities started in 2016 on strengthening the biological treatment of certain sites, particularly in the Santa Cruz province.

### **Environmental activities led by YPF in areas of unconventional exploitation of crude oil and natural gas**

Organically rich shale gas and oil accumulations are drawing increasing attention worldwide as sources of significant natural gas and oil reserves.

Since 2008, YPF has led various exploration and development projects related to unconventional resources in Argentina, the most important being in the Vaca Muerta formation within Neuquina basin.

The Vaca Muerta formation is found between 2,500 and 4,000 meters of depth, more than 2,000 meters below the water table, which is usually located at depths of 300-500 meters. See Item 3. Key Information Risk Factors Risks Relating to the Argentine Oil and Gas Business and Our Business Our domestic operations are subject to extensive regulation and Item 3. Key Information Risk Factors Risks Relating to the Argentine Oil and Gas Business and Our Business Oil and gas activities are subject to significant economic, environmental and operational risks.

Hydraulic stimulation, a long time proven technology, allows these resources to be extracted in an efficient and environmentally-friendly way. Hydraulic stimulation consists of injecting high pressure fluids and sand into the wellbore to crack the rock and enable the trapped hydrocarbons in the formation to flow to the surface like in any conventional well.

Generally, this technique uses water and sand (99.5% of the water can be recycled) and additives (0.5%). These additives are the same as those used in products for household and commercial applications, such as sodium chloride (used in table salt), borate salts (used in cosmetics), potassium carbonate (used in detergents), guar gum (used in ice cream) and isopropyl alcohol (used in deodorants).

The water used for the development of these reservoirs is acquired from bodies of running water and it represents only a small percentage of the total flow, which involves much lower volumes than those used for agricultural and human consumption in the province of Neuquén.

From the beginning of unconventional operations, YPF has considered the environmental protection as one of the values of its health, safety and environment policy.

In accordance with law Disposition No. 112/2011 of the Environmental Subsecretary of Neuquén, the project has an Environmental Baseline Study ( EBS ). The EBS includes the current description and environmental characterization of the concession areas and specifically environmental components that may be affected significantly by the projects and activities.

YPF developed a water management framework, which focuses on three key areas of water use: water resources (sustainability factors, measures that consider the needs of other local water users, and the net environmental effect); water use and efficiency (controls of replacing water use, reducing water consumption, and the reuse and recycling to consider the net environmental effect); and wastewater management (consider similar sustainability factors and the net environmental effect as outlined for water resources).

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In addition, YPF commissioned the following studies: (i) a hydrogeological study of confined and semi-confined aquifers of Neuquén and Rayoso Groups and hydrogeological study of the unconfined aquifer of the alluvial plain of the Neuquén River in the Loma Campana area and (ii) a similar study in the Narambuena area, which was conducted in 2016.

Following the hydrogeological studies that took place in 2015 and 2016, during 2017 YPF focused its studies on gathering hydrogeological information by electric profiles and water samples in order to perform a regional hydrogeological study for all the conventional and non-conventional areas in 2018. This hydrogeological study will cover not only the traditional hydrogeological aspects but also the assessment on the quality of the water for irrigation and potable water. In addition, the aim of this study is to identify the depth of the aquifer that should be protected.

## **Our commitment to sustainability**

The oil and gas industry is undergoing a time of profound changes that require the harmonization of the growing energy demand with new challenges in terms of costs and profitability, diversification of the energy matrix and an increasing concern about climate change.

In this context, YPF has started a transformation process to become an integral energy company and the leader for sustainable energy development in Argentina.

Guided by the company's corporate values, policies and code of conduct, our vision and strategy frame our understanding of and our response to sustainability issues. In this sense we have revamped our commitment to sustainability in order to lead the energy transition, through a responsible and transparent business based on innovation, new technologies and the best economic, environmental and social practices. And creating shared value for our owners, customers, people, suppliers, partners, society and our country, at the same time.

We know that energy transition cannot happen overnight. This is why, while oil and gas will continue to form the basis of our portfolio for the next years, we are committed to strengthening energy efficiency, reducing specific emissions and developing more sustainable energy alternatives, including the promotion of natural gas production and renewable energy as cleaner alternatives to oil. By providing strong R&D and project investment in this area, the company expects to increase its power-generation capacity by diversifying energy sources, including increased uses of natural gas, thermal, solar and wind power.

In 2017, we designed and approved our corporate sustainability policy and our commitment to climate change and we structured the corporate sustainability department.

We also renewed our commitment to the UN Global Compact and its Ten Principles on Human Rights, Labor Rights, the Environment and the Fight against Corruption, and keep participating as a Board member of the Argentine Network.

We carried on a process to explore the role that the company should play to contribute towards the 2030 Global Agenda for Sustainable Development, particularly in the framework of the country endorsement. Some initiatives in line with these Sustainable Development Goals are already under way and this process will continue for the next few years.

We have defined and developed the contents of this Report by taking into account those internal and external groups, because we believe that the only way to create value for our stakeholders is by understanding their concerns and expectations while keeping an ongoing dialogue with them. Their opinions and suggestions were collected in several

dialogue instances, through different corporate communication channels, and by analyzing public opinion surveys, and reputation and brand positioning research, among others. The materiality assessment undertaken to shape the content of this annual sustainability report serves as both a retrospective and forward looking review of our priorities. This assessment re-emphasised the following stakeholder concerns:

MATERIAL TOPICS ENVIRONMENTAL AND		
ECONOMIC	SAFETY	SOCIAL
Profitable, competitive and responsible business	Climate change	Human rights
Comprehensive company in the energy, petrochemical, and related services sector	Occupational health and safety	Diversity
Value chain	Environmental management	Local economic and social development
Innovation and technology	Renewable energies	Talent development Quality-employment creation

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**Table of Contents****Property, Plant and Equipment**

Most of our property, which comprises investments in assets which allow us to explore or exploit crude oil and natural gas reserves, as well as refineries, storage, manufacturing and transportation facilities and service stations, is located in Argentina. See Downstream Refining division and Downstream Logistics Division. As of December 31, 2017, 10 of our proved reserves were located in Argentina.

Our petroleum exploration and production rights are in general based on sovereign grants of concession. Upon the expiration of the concession, our exploration and production assets associated with the particular property subject to the relevant concession revert to the government. See Exploration and Production Overview Main properties. In addition, as of December 31, 2017, we leased 84 service stations to third parties and also had activities with service stations that are owned by third parties and operated by them under a supply contract with us for the distribution of our products.

**Insurance**

The scope and coverage of the insurance policies and indemnification obligations discussed below are subject to change, and such policies are subject to cancellation in certain circumstances. In addition, the indemnification provisions of certain of our drilling, maintenance and other service contracts may be subject to differing interpretations, and enforcement of those provisions may be limited by public policy and other considerations. We may also be subject to potential liabilities for which we are not insured or in excess of our insurance coverage, including liabilities discussed in Item 3. Key Information Risk Factors Risks Relating to the Argentine Oil and Gas Business and Our Business We may not have sufficient insurance to cover all the operating hazards that we are subject to, Item 3. Key Information Risk Factors Risks Relating to the Argentine Oil and Gas Business and Our Business The oil and gas industry is subject to particular economic and operational risks and Item 3. Key Information Risk Factors Risks Relating to the Argentine Oil and Gas Business and Our Business We may incur significant costs and liabilities related to environmental, health and safety matters.

***Argentine Operations***

We insure our operations against risks inherent in the oil and gas industry, including loss of or damage to property and our equipment, control-of-well incidents, loss of production or profits incidents, removal of debris, sudden and accidental pollution, damage and clean up and third-party claims, including personal injury and loss of life, among other business risks. Our insurance policies are typically renewable annually and generally contain policy limits, exclusions and deductibles.

Our insurance policy covering our Argentine operations provides third party liability coverage up to U.S.\$400 million per incident, with a deductible of U.S.\$2 million, in each and every loss. Certain types of incidents, such as intentional pollution and gradual and progressive pollution are excluded from the policy's coverage. The policy's coverage extends to control-of-well incidents, defined as an unintended flow of drilling fluid, oil, gas or water from the well that cannot be contained by equipment on site, by increasing the weight of drilling fluid or by diverting the fluids safely into production. Our policy provides coverage for third-party liability claims relating to pollution from a control-of-well event ranging from U.S.\$75 million for certain onshore losses and a maximum combined single limit of U.S.\$250 million for offshore losses.

Our insurance policy also covers physical loss or damage in respect of, but not limited to, onshore and offshore property of any kind and description (whether upstream or downstream), up to U.S.\$2 billion per incident combined for downstream and upstream operations, with varying deductibles of between U.S.\$1 million and U.S.\$5 million,

including loss of production or profits with deductibles of 90 days for downstream operations and 60 days with a minimum deductible of U.S.\$20 million for upstream operations.



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Argentine regulations require us to purchase from specialized insurance companies (*Aseguradoras de Riesgos de Trabajo*) insurance covering the risk of personal injury and loss of life of our employees. Our insurance policies cover medical expenses, lost wages and loss of life, in the amounts set forth in the applicable regulations. These regulatory requirements also apply to all of our contractors.

We have adopted a position in agreements entered into with contractors that provide drilling services, well services or other services to our exploration and production operations ( E&P Services Agreements ), whereby contractors are generally responsible for indemnifying us to varying degrees for certain damages caused by their personnel and property above the drilling surface. Similarly, we are generally responsible under our drilling contracts to indemnify our contractors for any damages caused by our personnel and property above the drilling surface.

In connection with losses or liabilities resulting from damages caused below the surface, we have agreed with some contractors that YPF assumes responsibility for indemnifying our contractors provided that such damages below the surface have not been caused by the negligence of the contractor in which case the contractor shall be liable up to a limited amount agreed by the parties in the E&P Services Agreements. However, we have also agreed with a number of contractors that YPF shall be responsible and shall indemnify contractors for damages or liabilities caused below the surface, unless such damages or liabilities result from the gross negligence or willful misconduct of contractors, in which case contractor shall be liable in full or, in certain cases, up to a limited amount.

E&P Services Agreements usually establish that contractors are responsible for pollution or contamination including clean-up costs and third party damages caused above the surface by the spill of substances under their control, provided that the damage has been caused by the negligence or willful misconduct of the contractor. In the event of pollution or contamination produced below the surface, contractors shall also typically be liable for damages caused due to the contractor's negligence or willful misconduct. However, in this last case the damages are also usually limited to an amount agreed upon by the parties in the E&P Services Agreement.

We are also partners in several joint ventures and projects that are not operated by us. Contractual provisions, as well as our obligations arising from each agreement, can vary. In certain cases, insurance coverage is provided by the insurance policy entered into by the operator, while in others, our risks are covered by our insurance policy covering our Argentine operations. In addition, in certain cases we may contract insurance covering specific incidents or damages that are not provided for in the operator's insurance policy. We also retain the risk for liability not indemnified by the field or rig operator in excess of our insurance coverage. With respect to downstream servicing contracts, contractors are usually responsible for damages to their own personnel and caused by them to third parties and they typically indemnify us for damages to equipment. A mutual hold-harmless provision for indirect damages such as those resulting from loss of use or loss of profits is normally included.

## **Legal and Regulatory Framework and Relationship with the Argentine Government**

### *Overview*

The Argentine oil and gas industry is regulated by Law No. 17,319, referred to as the Hydrocarbons Law, which was enacted in 1967 and amended by Law No. 26,197 enacted in 2007 and Law No. 27,007 enacted in 2014, which established the general legal framework for the exploration and production of oil and gas, and Law No. 24,076, referred to as the Natural Gas Law, enacted in 1992, which established the basis for deregulation of natural gas transportation and distribution industries. See Law No. 27,007, amending the Hydrocarbons Law.

The National Executive Office issues the regulations to complement these laws. The regulatory framework of the Hydrocarbons Law was established on the assumption that the reservoirs of hydrocarbons would be national

properties and Yacimientos Petrolíferos Fiscales Sociedad del Estado, our predecessor, would lead the oil and gas industry and operate under a different framework than private companies. In 1992, the Privatization Law privatized YPF and provided for transfer of hydrocarbon reservoirs from the Argentine government to the provinces, subject to the existing rights of the holders of exploration permits and production concessions.

The Privatization Law granted us 24 exploration permits covering approximately 132,735 km<sup>2</sup> and 50 production concessions covering approximately 32,560 km<sup>2</sup>. Limits under the Hydrocarbons Law on the number of concessions for transportation that may be held by any entity, and the total area of exploration permits that may be granted to a single entity, were eliminated by Law No. 27,007. As a consequence of the transfer of ownership of certain hydrocarbons areas to the provinces, we participate in competitive bidding rounds organized since the year 2000 by several provincial governments for the award of contracts for the exploration of hydrocarbons.

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In October 2004, the Argentine congress enacted Law No. 25,943, creating a new state-owned energy company, ENARSA. The corporate purpose of ENARSA is the exploration and exploitation of solid, liquid and gaseous hydrocarbons, the transport, storage, distribution, commercialization and industrialization of these products, as well as the transportation and distribution of natural gas, and the generation, transportation, distribution and sale of electricity. Moreover, Law No. 25,943 granted to ENARSA all exploration concessions in respect to offshore areas located beyond 12 nautical miles from the coast line up to the outer boundary of the continental shelf that were vacant at the time of the effectiveness of this law (i.e., November 3, 2004). Law No. 25,943 has been modified by Law No. 27,007, as described below, eliminating all permits and hydrocarbon production concessions where association agreements with ENARSA have not been signed and reverting them to the Argentine Secretariat of Energy (except for permits and concessions granted prior to Law No. 25,943). Additionally, Law No. 27,007 provides for a six month negotiating period to convert association agreements with ENARSA into permits or concessions. In September 2015, the National Executive Office and YPF began negotiating the conversion of association agreements executed with ENARSA. On December 29, 2017 YPF filed a note before the Ministry of Energy confirming its willingness to negotiate the conversion of association agreement related to the Area identified as ENARSA 1 . In the same note, YPF informed that it communicated its decision not to convert the association agreements related such Areas to the Operators of Areas ENARSA 2 and ENARSA 3 . As of the date of this annual report, negotiations related to Area ENARSA 1 are ongoing.

In addition, in October 2006, Law No. 26,154 created a regime of tax incentives aimed at encouraging hydrocarbon exploration and which apply to new exploration permits awarded in respect of the offshore areas granted to ENARSA and those over which no rights have been granted to third parties under the Hydrocarbons Law, provided the provinces in which the hydrocarbon reservoirs are located adhere to this regime. Association with ENARSA is a precondition to qualifying for the benefits provided by the regime created by Law No. 26,154. The benefits include: early reimbursement of the value added tax for investments made and expenses incurred during the exploration period and for investments made within the production period; accelerated amortization of investments made in the exploration period and the accelerated recognition of expenses in connection with production over a period of three years rather than over the duration of production; and exemptions to the payment of import duties for capital assets not manufactured within Argentina. As of the date of this annual report, we have not used the tax incentives previously mentioned.

Ownership of hydrocarbons reserves was transferred to the provinces through the enactment of the following legal provisions that effectively amended the Hydrocarbons Law:

In 1992, the Privatization Law approved the transfer of the ownership of hydrocarbons reserves to the provinces where they are located. However, this law provided that the transfer was conditioned on the enactment of a law amending the Hydrocarbons Law to contemplate the privatization of Yacimientos Petrolíferos Fiscales Sociedad del Estado.

In October 1994, the Argentine National Constitution was amended and pursuant to Article 124 thereof, provinces were granted the primary control of natural resources within their territories.

In August 2003, Executive Decree No. 546/03 transferred to the provinces the right to grant exploration permits, hydrocarbons exploitation and transportation concessions in certain locations designated as transfer areas, as well as in other areas designated by the competent provincial authorities.

In January 2007, Law No. 26,197 acknowledged the provinces' ownership of the hydrocarbon reservoirs in accordance with Article 124 of the National Constitution (including reservoirs to which concessions were granted prior to 1994) and granted provinces the right to administer such reservoirs.

*The Expropriation Law*

On May 3, 2012, the Expropriation Law (Law No. 26,741) was passed by the Argentine congress and, on May 7, 2012, it was published in the Official Gazette of the Republic of Argentina. The Expropriation Law declared achieving self-sufficiency in the supply of hydrocarbons, as well as in the exploitation, industrialization, transportation and sale of hydrocarbons, a national public interest and a priority for Argentina. In addition, its stated goal is to guarantee socially equitable economic development, the creation of jobs, the increase of the competitiveness of various economic sectors and the equitable and sustainable growth of the Argentine provinces and regions.

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Article 3 of the Expropriation Law provides that the principles of the hydrocarbon policy of the Republic of Argentina are the following:

- (a) Promote the use of hydrocarbons and their derivatives to promote development, and as a mechanism to increase the competitiveness of the various economic sectors and that of the provinces and regions of Argentina;
  - (b) Convert hydrocarbon resources to proved reserves and their exploitation and the restoration of reserves;
  - (c) Integrate public and private capital, both national and international, into strategic alliances dedicated to the exploration and exploitation of conventional and unconventional hydrocarbons;
  - (d) Maximize the investments and the resources employed for the achievement of self-sufficiency in hydrocarbons in the short, medium and long term;
  - (e) Incorporate new technologies and categories of management that contribute to the improvement of hydrocarbon exploration and exploitation activities and the advancement of technological development in the Republic of Argentina in this regard;
  - (f) Promote the industrialization and sale of hydrocarbons with a high added-value;
  - (g) Protect the interests of consumers with respect to the price, quality and availability of hydrocarbon derivatives; and
  - (h) Export hydrocarbons produced in excess of local demand, in order to improve the trade balance, ensuring a rational exploitation of the resources and the sustainability of its exploitation for use by future generations.
- According to Article 2 of the Expropriation Law, the National Executive Office will be responsible for setting forth this policy and shall introduce the measures necessary to accomplish the purpose of the Expropriation Law with the participation of the Argentine provinces and public and private capital, both national and international.

***Creation of Federal Council of Hydrocarbons***

Article 4 of the Expropriation Law provides for the creation of a Federal Council of Hydrocarbons which shall include the participation of (a) the Ministry of Economy, the Ministry of Federal Planning, the Ministry of Labor and the Ministry of Industry, through their respective representatives; and (b) the provinces of Argentina and the City of Buenos Aires, through the representatives that each may appoint. According to Article 5 of the Expropriation Law, the responsibilities of the Federal Council of Hydrocarbons will be the following: (a) promote the coordinated action of the national and provincial governments, with the purpose of ensuring the fulfillment of the objectives of the Expropriation Law; and (b) adopt decisions regarding all questions related to the accomplishment of the objectives of the Expropriation Law and the establishment of the hydrocarbons policy of the Republic of Argentina that the

National Executive Office may submit for consideration.

***Expropriation of shares held by Repsol YPF***

For purposes of ensuring the fulfillment of its objectives, the Expropriation Law provided for the expropriation of 51% of the share capital of YPF represented by an identical stake of Class D shares owned, directly or indirectly, by Repsol YPF S.A. and its controlled or controlling entities. According to the Expropriation Law, the shares subject to expropriation, which have been declared of public interest and were transferred to the Republic of Argentina, will be assigned as follows: 51% to the Argentine Republic and 49% to the governments of the provinces that compose the National Organization of Hydrocarbon Producing States. In addition, the Expropriation Law provided for the expropriation of 51% of the share capital of the company Repsol YPF GAS S.A. represented by 60% of the Class A shares of such company owned, directly or indirectly, by Repsol Butano S.A. and its controlled or controlling entities.

As of the date of this annual report, the transfer of the shares subject to expropriation between the National Executive Office and the provinces that compose the National Organization of Hydrocarbon Producing States is still pending. According to Article 8 of the Expropriation Law, the distribution of the shares among the provinces that accept their transfer must be conducted in an equitable manner, considering their respective levels of hydrocarbon production and proved reserves.

To ensure compliance with its objectives, the Expropriation Law provides that the National Executive Office, by itself or through an appointed public entity, shall exercise all the political rights associated with the shares subject to expropriation until the transfer of political and economic rights to the provinces that compose the National Organization of Hydrocarbon Producing States is completed. In addition, in accordance with Article 9 of the Expropriation Law, each of the Argentine provinces to which shares subject to expropriation are allocated must enter into a shareholder's agreement with the federal government that will provide for the unified exercise of its rights as a shareholder.

Any future transfer of the shares subject to expropriation is prohibited without the permission of the Argentine congress by a vote of two-thirds of its members.

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In accordance with Article 9 of the Expropriation Law, the appointment of YPF Directors representing the expropriated shares shall be made proportionately considering the holdings of the Argentine Republic and provincial governments, and one Director shall represent the employees of YPF.

In accordance with Article 16 of the Expropriation Law, the federal government and the provinces must exercise their rights pursuant to the following principles: (a) the strategic contribution of YPF to the achievement of the objectives set forth in the Expropriation Law; (b) the administration of YPF pursuant to the industry's best practices and corporate governance, safeguarding shareholders' interests and generating value on their behalf; and (c) the professional management of YPF.

See Law No. 26,932 for descriptions of the agreement between Repsol and the Argentine Republic relating to compensation for the expropriation of 51% of the share capital of YPF owned, directly or indirectly, by Repsol, and the arrangement between Repsol and YPF for the withdrawal of certain claims and actions relating to such expropriation.

### ***Legal nature of the Company***

YPF is and will continue to operate as a publicly traded corporation pursuant to Chapter II, Section V of Law No. 19,550 and its corresponding regulations, and neither is nor will not be subject to any legislation or regulation applicable to the management or control of companies or entities owned by the federal government or provincial governments.

In accordance with Article 17 of the Expropriation Law, YPF will resort to internal and external sources of funding, strategic alliances, joint ventures, transitory business unions, and cooperation partnerships, whether public, private or mixed companies, domestic and foreign.

You can find a copy of an English translation of the Expropriation Law in the report on Form 6-K furnished by the Company to the SEC on May 9, 2012.

### ***Law No. 26,932***

On February 25, 2014, the Republic of Argentina and Repsol reached an agreement (the Repsol Agreement) in relation to compensation for the expropriation of 200,589,525 of YPF's Class D shares pursuant to the Expropriation Law under the Repsol Agreement. As a result, the Republic of Argentina is definitively the owner of 51% of capital stock of each of YPF and YPF GAS S.A.

### ***Law No. 26,197***

Law No. 26,197, which amended the Hydrocarbons Law, transferred to the provinces and to the Autonomous City of Buenos Aires the ownership over all hydrocarbon reservoirs located within their territories and in the adjacent seas up to 12 nautical miles from the coast. Law No. 26,197 also provides that the hydrocarbon reservoirs located beyond 12 nautical miles from the coast to the outer limit of the continental shelf shall remain within the ownership of the federal government.

Pursuant to Law No. 26,197, the Argentine congress shall continue to enact laws and regulations to develop oil and gas resources existing within the Argentine territory (including its sea), but the governments of the provinces where the hydrocarbon reservoirs are located shall be responsible for the enforcement of these laws and regulations, the administration of the hydrocarbon fields and shall act as granting authorities for the exploration permits and

production concessions. However, the administrative powers granted to the provinces shall be exercised within the framework of the Hydrocarbons Law and the regulations that complement this law.

Consequently, even though Law No. 26,197 established that the provinces shall be responsible for administering the hydrocarbon fields, the Argentine congress retained its power to issue rules and regulations regarding the oil and gas legal framework. Additionally, the Argentine Republic retained the power to determine the national energy policy.

It is expressly stated that the transfer will not affect the rights and obligations of exploration permit and production concession holders, or the basis for the calculation of royalties, which shall be calculated in accordance with the concession title and paid to the province where the reservoirs are located.



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Law No. 26,197 provides that the Argentine Republic shall retain the authority to grant transportation concessions for: (i) transportation concessions located within two or more provinces within the territory and (ii) transportation concessions directly connected to export pipelines for export purposes. Consequently, transportation concessions which are located within the territory of only one province and which are not connected to export facilities shall be transferred to the provinces. Finally, Law No. 26,197 grants the following powers to the provinces: (i) the exercise, in a complete and independent manner, of all activities related to the supervision and control of the exploration permits and production concessions transferred by Law No. 26,197; (ii) the enforcement of all applicable legal and/or contractual obligations regarding investments, rational production and information and surface fee and royalties payment; (iii) the extension of legal and/or contractual terms; (iv) the application of sanctions provided in the Hydrocarbons Law; and (v) all the other faculties related to the granting power of the Hydrocarbons Law.

*Decree No. 1277/2012*

Decree No. 1277/12 derogated the main provisions relating to free availability of hydrocarbons which were specifically contained in section 5 subsection d) and sections 13, 14 and 15 of Decree No. 1055/89, sections 1, 6 and 9 of Decree No. 1212/89 and sections 3 and 5 of Decree No. 1589/89. Decree No. 1277/12 enacted the Hydrocarbons Sovereignty Regime Rules, regulating the Expropriation Law.

This regulation created a commission, the Commission for Planning and Strategic Coordination of the National Plan of Hydrocarbons Investments (the Commission). This Commission was entrusted with annually making the National Plan for Hydrocarbons Investments.

Decree No. 1277/12 required every company that performs activities of exploration, exploitation, refining, transport and commercialization of hydrocarbons to supply the Commission with all required technical information. The Commission was also responsible for a National Hydrocarbons Investments Registry for all companies performing the activities of exploration, exploitation, refining, transport and commercialization. All these companies were required to file an annual plan of investments before the Commission.

With respect to the refining industry, Decree No. 1277/12 gave the Commission the power to regulate the minimum utilization rates for primary or secondary refining. It also had the ability to enact measures of promotion and coordination, aimed to guarantee the development of the local processing capacity according with the goals established by the National Plan of Hydrocarbons Investments.

With respect to commercialization, the Commission was entitled to publish reference prices of every component of the costs and sales prices of hydrocarbons and fuels, which should enable the recovery of production costs plus a reasonable profit margin. The Commission also had to periodically audit the reasonability of the informed costs and the respective sales prices, being entitled to adopt necessary measures to prevent or correct distortive practices that might affect the interests of consumers.

This Commission was dissolved by Decree No. 272/2015 on January 4, 2016, and its remaining functions were assumed by the Ministry of Energy and Mining. See Decree No. 272/2015 below.

*Decree No. 13/2015*

On December 11, 2015, Decree No. 13/2015 was published in the Official Gazette of the Republic of Argentina, modifying the Ministries Law No. 22,520. Among other changes, it created the Ministry of Energy and Mining (MINEM), which absorbed the functions of the Secretaries of Energy and Mining and decentralized entities, from the former Ministry of Federal Planning, Public Investment and Services. The responsibilities of the MINEM include

participating in the management of the State's shareholdings in the corporations and companies operating in the area of its competence.

*Decree No. 272/2015*

On January 4, 2016, Decree No. 272/2015 was published in the Official Gazette of the Republic of Argentina, which modified Decree No. 1277/12. Among other changes, it dissolved the Commission, derogated certain responsibilities of the Commission and stated that the tasks previously assigned to the Commission will be performed by the Ministry of Energy and Mining ( MINEM ).

Furthermore, the decree established that the rights derived from the shares owned by the Republic of Argentina in YPF and YPF GAS S.A., with the exception of the shares that belong to the Sustainability Guarantee of the Public Securities Regime Fund created by Decree No. 897/07, will be exercised by the MINEM, as of its publication date.

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In addition, the decree established that the MINEM will conduct a comprehensive review and reorganization regarding the creation of records and information duties in the hydrocarbon industry, which remains in force as long as it is not derogated by the dispositions of the decree or addressed by the re-organization plan to be determined by the MINEM.

*Decree No. 2/2017*

On January 3, 2017, Decree No. 2/2017 was published in the Official Gazette of the Republic of Argentina, modifying the Ministries Law No. 22,520. Among other changes, it split the Ministry of Economy and Public Finance, creating the Ministry of Economy and the Ministry of Finance and separating their respective powers and responsibilities.

*Law No. 27,275, Decree No. 79/2016 and Regulatory Decree No. 206/2017 Access to Public Information*

On November 10, 2015, the Argentine Supreme Court ordered us to furnish information regarding an agreement we entered into with Chevron, based on the requirements of Decree No. 1172/03, which regulates access to information considered public. The agreement aims to develop hydrocarbon resources in Argentina. The information was delivered to the court on February 23, 2016. We believe that public disclosure of confidential information could put us at a competitive disadvantage in relation to our contracting parties and potential partners. For this reason, and given the business, industrial, technical, economic and financial value as well as the nature of the information requested, we pursued all avenues to preserve its confidentiality. We have stated we intend to comply with the requirements of aforementioned Decree No. 1172/03 while preserving our right to keep certain industrial, commercial, financial and technical matters confidential as provided by the decree. Notwithstanding the foregoing, on March 14, 2016, the court ordered us to deliver the requested agreement within five business days without an opportunity to keep certain information confidential as requested by us and in accordance with the exemptions contemplated by Decree No.1172/03. On March 16, 2016, the Company appealed this decision.

On July 14, 2016, the Federal Administrative Court Room I (*Cámara Contencioso Administrativo Federal Sala I*) upheld the ruling of the Court of First Instance, stipulating that the Company must comply with the order to deliver the required documentation in relation to its agreement with Chevron within five business days.

On August 11, 2016, the Company filed a Federal Extraordinary Appeal contesting the decision of the Federal Administrative Court.

On September 22, 2016, the Company reported that it was served with notice on September 15, 2016 of the decision handed down by Panel I of the Federal Administrative Court of Appeals hearing Disputed Administrative Matters (*Cámara Contencioso Administrativo Federal*), which rejected the Federal Extraordinary Appeal filed by the Company from such Panel's docket that ordered the Company to deliver the Project Investment Agreement (PIA) executed with Chevron on July 16, 2013.

The Company submitted a full copy of the PIA in compliance with the decision of the Federal Administrative Court Room I.

In both cases, the Company noted that the PIA was entered into under Law No. 19,550 and the confidentiality of the terms thereof was intended to safeguard geological, commercial and financial information, which was of strategic value to both parties to the PIA.

Delivery of the PIA does not imply the Company's waiver of rights in the event that any other confidential information and/or documents of the Company are required to be disclosed in the future.

On September 29, 2016, Law No. 27,275 was published in the Official Gazette of the Republic of Argentina, guaranteeing a right of access to public information. This right includes the ability to freely seek, access, request, receive, copy, analyze, process, use and distribute information in possession of the bound parties as defined under the law. State-owned companies, companies with majority state-owned capital, mixed-economy companies and all other business organizations where the National State has a majority interest in capital or in the formation of corporate decisions are deemed bound parties, except for companies authorized to make public offerings of their securities. Law No. 27,275 has come into effect one year after its publication in the Official Gazette.

On January 31, 2017, Decree No. 79/2017 was published in the Official Gazette of the Republic of Argentina, modifying the public information access right established under the General Regulation of Access to Public Information for the National Executive Office. The decree established that exceptions to the definition of bound parties, as described in Law No. 27,275, will come into effect the day after their publication in the Official Gazette.

On March 28, 2017 Regulatory Decree No. 206/2017 was published in the Official Gazette of the Republic of Argentina and came into effect on September 29, 2017, which regulates certain aspects of Law No. 27,275, including further clarifications with respect to scope of the exceptions to the obligation of the bound parties to furnish certain information.

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*Law No. 27,007, amending the Hydrocarbons Law*

On October 31, 2014, Law No. 27,007 amending the Hydrocarbons Law was published in the Official Gazette of the Republic of Argentina. The Hydrocarbons Law applies in certain aspects of some of YPF's existing concessions, as well as future concessions. The most relevant modifications in that law are detailed below.

With respect to exploration permits, it distinguishes between those with conventional and unconventional objectives, and those in which exploration is undertaken in the territorial sea and continental shelf. Law No. 27,007 modifies the basic time periods governing such activities, from three to two periods and limiting the two basic periods to (i) three years each for exploration with conventional objectives and (ii) four years each for exploration with unconventional objectives and (iii) four years each for exploration in the territorial sea or on the continental shelf. In each of these cases, the extension period of up to five years (already established in the Hydrocarbons Law) is maintained, although it is subject to the permit holder having complied with its investment and other obligations. At the end of the first basic period and so long as the permit holder has complied with its obligations under the permit, the permit holder may continue to hold the entire area. After the second basic period ends, the permit holder may surrender the entire area or, if the holder decides to trigger the extension period, 50% of the remaining area.

In relation to concessions, Law No. 27,007 provides for three types of concessions: conventional production, unconventional production and production in the territorial sea or on the continental shelf. Each of these concessions will last 25, 35 and 30 years, respectively. In addition, permit holders or production concessionaires may request unconventional production concessions on the basis of the development of a pilot plan. So long as the concessionaires (i) have complied with their obligations, (ii) are producing hydrocarbons in the areas under consideration and (iii) present an investment plan for the development of such areas as requested by the competent authorities up to a year prior to the termination of each term of the concession, they may request extension periods of ten years each.

The amounts to be paid with respect to annual surface fee pursuant to Sections 57 and 58 of the Hydrocarbons Law for the periods of exploration and production have been increased with the goal of incentivizing exploration and development of these areas. Additionally, beginning with the second basic exploration period, these may be reduced partially in light of investments actually carried out in the relevant areas. Restrictions on the number of exploration permits and/or production concessions that an individual or legal entity may hold were eliminated.

The Hydrocarbons Law established a 35-year term for those concessions granted for the transportation of oil, gas and petroleum products that holders of production concessions are entitled to receive. Law No. 27,007 modified the awarded term for hydrocarbon transportation concessions to be synchronized with the production concession periods.

In connection with exploration and production offerings, tenders may be made by Argentine and foreign companies, with the goal of obtaining the highest number of tenders possible. In addition, the bidding documents must be prepared by the competent authorities on the basis of the model bidding document which will be drafted jointly by the competent authorities of the provinces and the Argentine Secretariat of Energy. This model bidding

document must be prepared within 180 days of the effective date of Law No. 27,007. Tenders will be awarded to offerors who present the most relevant offer, in particular, the one proposing the highest amount of investments or exploratory activity.

Royalties have been set at a maximum of 12% on the results of liquid hydrocarbons or natural gas production. Royalties may be reduced, taking into account the productivity of the area and the type of production. In cases of extension periods, an additional royalty of 3% will be added for each extension, up to a maximum of 18%. In addition, in case of such extensions, the competent authority may include the payment of an extension bond, which maximum amount shall equal the result of multiplying the remaining proved reserves at the end of the concession period to be extended by 2% of the average basin price, for the two-year period prior to the moment when the extension is granted, applicable to the hydrocarbons at issue.

Law No. 27,007 also provides that the Argentine Republic and the provinces may not establish, in the future, new areas reserved in favor of state-owned entities or companies with state participation. Further, with respect to existing reserved areas that do not have association agreements with third parties as of the date of this new law, associative schemes may be carried out so long as, during the development phase, the participation of state-owned entities or companies with state participation is proportional to the effective investments promised and carried out by them.

Law No. 27,007 additionally incorporates into the Investment Promotion Regime for the Exploration of Hydrocarbons (Decree No. 929/2013) projects, as authorized by the MINEM, that imply direct investments in foreign currency greater than U.S.\$250 million to be invested during the first three years of the project. Also, it modifies the percentages of hydrocarbons that, beginning with the third year, will be subject to the benefits of the regime. For conventional and unconventional production concessions, as well as offshore concessions at depths less than or equal to 90 meters, the percentage shall be 20%; for offshore concessions at depths greater than 90 meters, the percentage shall be 60%.

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Within the framework of the Investment Promotion Regime for the Exploration of Hydrocarbons, Law No. 27,007 provides for contributions by companies to the provinces where the projects take place, which amount to 2.5% of the initial investment amount of the project, to be directed to Corporate Social Responsibility contributions. In addition, an amount to be determined by the Commission in light of the extent of the project must be contributed by the Argentine Republic to finance infrastructure.

Law No. 27,007 establishes that capital goods and inputs that are essential to the execution of the investment plans of companies registered in the National Registry of Hydrocarbon Investments shall pay import duties as indicated in Decree 927/13 (reduced rates). This list may be extended to other strategic products.

According to Law No. 27,007, the federal government and the provinces shall attempt to establish uniform environmental legislation and the adoption of uniform fiscal treatment in this sector. The competent authorities, including the Argentine Secretariat of Energy and the MINEM, will promote unification of procedures and registries.

All national offshore permits and offshore hydrocarbon production concessions that had no association agreements with ENARSA as of the date of the new law reverted and were transferred to the Argentine Secretariat of Energy. Permits and concessions granted prior to Law No. 25,943 shall be exempted from this provision. The National Executive Office may negotiate, for 180 days following the enactment of the new law, the conversion of association agreements signed with ENARSA to permits or production concessions. In September 2015, the National Executive Office and YPF began negotiating the conversion of association agreements executed with ENARSA. On December 29, 2017 YPF filed a note before the Ministry of Energy confirming its willingness to negotiate the conversion of association agreement related to the Area identified as ENARSA 1. In the same note, YPF informed that it communicated its decision not to convert the association agreements related such Areas to the Operators of Areas ENARSA 2 and ENARSA 3. As of the date of this annual report, negotiations related to Area ENARSA 1 are ongoing.

*Resolution No. 14/2015*

On February 4, 2015, Resolution No. 14/2015 was published in the Official Gazette, that created the Crude Oil Production Stimulus Program (*Programa de Estímulo a la Producción de Petróleo Crudo*) (the Program), which was in force from January 1, 2015 through December 31, 2015. This Program provided for a payment in Argentine pesos to beneficiary companies, in an amount of up to U.S.\$3.00 per barrel when such company's quarterly production of crude oil was equal to or greater than the base production level under the Program, in addition to the compliance with certain other requirements related to the level of activity of the Company as set for Resolution No. 33/2015. The base production level under the Program was the total production of crude oil of the beneficiary company for the fourth quarter of 2014. Those beneficiary companies that had satisfied the demand of all of the domestic refineries operating within Argentina may direct a portion of their production to the international market and receive an additional payment of U.S.\$2.00 or U.S.\$3.00 per barrel of crude oil exported, depending on the volume exported.

The payments would be made in Argentine pesos using the Reference Exchange Rate of BCRA Communication A 3500 of the last business day prior to the presentation of the information of the corresponding quarter to the Commission. See Item 5. Operating and Financial Review and Prospects Results of Operations Revenues.

*MINEM Resolution No. 21/2016*

On March 11, 2016, MINEM Resolution No. 21/2016 was published in the Official Gazette, which established an export stimulus program of crude oil surplus, after satisfying domestic demand for crude oil Escalante from the San Jorge Gulf basin. The stimulus was paid for each shipment to the extent that the average price of Brent oil did not exceed U.S.\$47.50 per barrel two days after the shipment, and was valid until December 31, 2016. The compensation paid by the Argentine government amounted to U.S.\$7.50 per barrel as long as the criteria was met.

*Decree No. 442/2016 Province of Chubut*

On April 11, 2016, Decree No. 442/2016 was published in the Official Gazette of the province of Chubut, which established an export stimulus program of crude oil surplus, after satisfying domestic demand. The stimulus was paid for each shipment to the extent that the average price of Brent oil did not exceed U.S.\$47.20 per barrel two days after the shipment, and was valid until December 31, 2016. The compensation paid by the province of Chubut amounted to U.S.\$2.50 per barrel as long as the criteria was met.



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On March 21, 2017, Decree No. 192/2017 was published in the Official Gazette of the Republic of Argentina, which created the Oil and its Byproducts Import Operations Registry (the Registry), which authority of application is MINEM (through the Secretariat of Hydrocarbon Resources). The Registry involves import operations of: (i) crude oil and (ii) certain other specific byproducts listed in section 2 of the decree. By means of this regulation, any company that wishes to perform such import operations is obligated to register such operation in the Registry and obtain authorization from the MINEM before the import takes place. The registration of the operation with the MINEM will be filed in accordance with a specific proceeding that the MINEM will establish for such purpose.

According to this decree, the MINEM will also set the methodology applicable to issue import authorizations, which will be based in the following criteria: (a) lack of crude oil with the same characteristics offered in the domestic market; (b) lack of additional treatment capacity in domestic refineries with domestic crude oil; and (c) lack of byproducts listed in section 2 of the decree offered in the domestic market. This regime excepts any import by CAMMESA in order to supply power plants with the main purpose of technical supply to the Inter-connection Argentinean System (*Sistema Argentino de Interconexión* or SADI).

Decree No. 192/2017 was in force until December 31, 2017, according to Decree No. 962/2017 (published in the Official Gazette of the Republic of Argentina on November 27, 2017).

*Public Emergency*

On January 6, 2002, the Argentine congress enacted the Public Emergency Law, which represented a profound change in the economic model effective as of that date, and rescinded the Convertibility Law No. 23,928, which had been in effect since 1991 and had pegged the peso to the dollar on a one-to-one basis. In addition, the Public Emergency Law granted to the National Executive Office the authority to enact all necessary regulations in order to overcome the economic crisis that Argentina was then facing. The situation of emergency declared by Law No. 25,561 has been partially extended until December 31, 2019 by Law No. 27,345; specifically with respect to social emergency as established by Law 27,200 (but not with respect to economic emergency which expired on December 31, 2017). The National Executive Office is authorized to execute the powers delegated by Law No. 25,561 until such date.

After the enactment of the Public Emergency Law, several other laws and regulations have been enacted to overcome the economic crisis, including (1) the conversion into pesos of deposit, obligations and tariffs of public services, among others, and (2) the imposition of customs duties on the export of hydrocarbons with instructions to the National Executive Office to set the applicable rate thereof. The application of these duties and the instruction to the National Executive Office has been extended until January 2017 by Law No. 26,732. On January 8, 2017, export duties upon hydrocarbon exports established by Law No. 26,732 ceased to be enforceable. See Taxation.

*Exploration and Production*

The Hydrocarbons Law establishes the basic legal framework for the regulation of oil and gas exploration and production in Argentina. The Hydrocarbons Law empowers the National Executive Office to establish a national policy for development of Argentina's hydrocarbon reserves, with the principal purpose of satisfying domestic demand.

Pursuant to the Hydrocarbons Law, exploration and production of oil and gas is carried out through exploration permits, production concessions, exploitation contracts or partnership agreements. The Hydrocarbons Law also permits surface reconnaissance of territory not covered by exploration permits or production concessions upon

authorization of the Argentine Secretariat of Energy and/or competent provincial authorities, as established by Law No. 26,197, and with permission of the private property owner. Information obtained as a result of surface reconnaissance must be provided to the Argentine MINEM and/or competent provincial authorities, which may not disclose this information for two years without permission of the party who conducted the reconnaissance, except in connection with the grant of exploration permits or production concessions.

Under the Hydrocarbons Law, the federal and/or competent provincial authorities may grant exploration permits after submission of competitive bids. Permits were granted to third parties in connection with the deregulation and demonopolization process and permits covering areas in which our predecessor company, Yacimientos Petrolíferos Fiscales Sociedad del Estado, was operating at the date of the Privatization Law were granted to us by such law. In 1991, the National Executive Office established a program under the Hydrocarbons Law (known as Plan Argentina) pursuant to which exploration permits were auctioned. The holder of an exploration permit has the exclusive right to perform the operations necessary or appropriate for the exploration of oil and gas

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within the area specified by the permit. Under the Hydrocarbons Law, each exploration permit may cover only unproved areas not to exceed 10,000 km<sup>2</sup> (15,000 km<sup>2</sup> offshore), and may have a term of up to 14 years (17 years for offshore exploration). The 14-year term is divided into three basic terms and one extension term. The first basic term is up to four years, the second basic term is up to three years, the third basic term is up to two years and the extension term is up to five years. At the expiration of each of the first two basic terms, the acreage covered by the permit is reduced, at a minimum, to 50% of the remaining acreage covered by the permit, with the permit holder deciding which portion of the acreage to keep. At the expiration of the three basic terms, the permit holder is required to surrender all of the remaining acreage to the Argentine government, unless the holder requests an extension term, in which case such grant is limited to 50% of the remaining acreage. Under Law No. 27,007, which applies to exploration permits issued on or after October 31, 2014, each exploration permit may have a term of up to 11 years for conventional objectives and 13 years for unconventional objectives and offshore exploration. The terms are divided into two basic terms and one extension term. The first and second basic terms are up to three years for conventional objectives and up to four years for unconventional objectives and offshore exploration, and the extension term is up to five years, so long as the permit holder has complied with its investments and other obligations. At the expiration of the first basic term, the permit holder will have the right to continue exploring the entire area for the second basic term so long as it has complied with all its obligations under the permit. At the expiration of the second basic term, the permit holder is required to surrender all of the remaining acreage, unless the holder requests an extension term, in which case such grant is limited to 50% of the remaining acreage.

If the holder of an exploration permit discovers commercially exploitable quantities of oil or gas, the holder has the right to obtain an exclusive concession for the production and development of this oil and gas. The Hydrocarbons Law, as modified by Law No. 27,007, provides that new conventional oil and gas production concessions shall remain in effect for 25 years from the date of the award of the production concession, new unconventional oil and gas production concessions shall remain in effect for 35 years from that date, and new offshore oil and gas production concessions shall remain in effect for 30 years from that date, in addition to any remaining exploration term at the date of such award. The Hydrocarbons Law, as modified by Law No. 27,007, further provides for the concession term to be extended for periods of up to ten additional years each, subject to terms and conditions approved by the grantor at the time of the extension. Such conditions may include the payment of an extension bond with a maximum amount equal to the result of multiplying the remaining proved reserves at the end of the concession period by 2% of the average basin price, for the period two years prior to the date the extension is granted, applicable to the hydrocarbons at issue. Under Law No. 26,197, the authority to extend the terms of current and new permits and concessions has been vested in the governments of the provinces in which the relevant block is located (and the Argentine government in respect of offshore blocks beyond 12 nautical miles). In order to be entitled to the extension, a concessionaire, such as us, must have complied with all of its obligations under the Hydrocarbons Law, including, without limitation, evidence of payment of taxes and royalties and compliance with environmental, investment and development obligations, must be producing hydrocarbons in the area at issue and must present an investment plan to develop the concession. A production concession also confers on the holder the right to conduct all activities necessary or appropriate for the production of oil and gas, provided that such activities do not interfere with the activities of other holders of exploration permits and production concessions. A production concession entitles the holder to obtain a transportation concession for the oil and gas produced. See Transportation of Liquid Hydrocarbons.

Exploration permits and production concessions require holders to carry out all necessary work to find or extract hydrocarbons, using appropriate techniques, and to make specified investments. In addition, holders are required to:

avoid damage to oil fields and waste of hydrocarbons;

adopt adequate measures to avoid accidents and damage to agricultural activities, fishing industry, communications networks and the water table; and

comply with all applicable federal, provincial and municipal laws and regulations.

According to the Hydrocarbons Law, holders of production concessions, including us, are also required to pay royalties to the province where production occurs. As modified by Law No. 27,007, royalty rates are set at a maximum of 12% (though 3% will be added for each extension up to a maximum of 18%). They are payable on the value at the wellhead (equal to the price upon delivery of the product, less transportation, treatment costs and other deductions) of crude oil production and natural gas volumes sold. These royalty rates may be reduced taking into account productivity and the type of production at issue. Notwithstanding the foregoing, in concessions extended prior to the effectiveness of Law No. 27,007, October 31, 2014, the previous conditions remain in force. In some cases, an additional 3% royalty has been added. See [Main Properties Argentine Exploration Permits and Exploitation](#)

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Concessions. In the extension of our concessions in Santa Cruz, we agreed to a 10% royalty (instead of 12%) for unconventional hydrocarbons. The value is calculated based upon the volume and the sale price of the crude oil and gas produced, less the costs of transportation and storage. In addition, pursuant to S.E. Resolution No. 435/04 issued by the Argentine Secretariat of Energy, if a concession holder allots crude oil production for further industrialization processes at its plants, the concession holder is required to agree with the provincial authorities or the Argentine Secretariat of Energy, as applicable, on the reference price to be used for purposes of calculating royalties.

As a result of Resolution No. 394/07 of the Ministry of Economy, among other things, which increased duties on exports of certain hydrocarbons, Argentine companies began to negotiate the price for crude oil in the domestic market, which would in turn be used as the basis for the calculation of royalties. In January 2013, the Ministry of Economy issued Resolution No. 1/13, modifying exhibit I of Resolution No. 394/07 of the Ministry of Economy, thus setting a new reference price for crude oil (U.S.\$70 per barrel) and certain products. In October 2014, the Ministry of Economy issued Resolution No. 803/2014, incorporating exhibit III to Resolution No. 394/07 of the Ministry of Economy, thus modifying the applicable percentages of duties of exports for certain products below certain prices.

However, on December 29, 2014, Resolution No. 1077/2014 repealed Resolution No. 394/07, as amended, and set forth a new withholding program based on the international price of crude oil (the International Price). The International Price was calculated based on the Brent value for the applicable month less U.S.\$8 per barrel. The new program established a 1% general nominal withholding applicable to all products covered by the resolution, including crude oil, diesel, gasoline and lubricants as well as other petroleum products, to the extent that the International Price was below U.S.\$71 per barrel. The resolution further provides an increasing variable withholding rate for crude oil exports to the extent the International Price exceeds U.S.\$71 per barrel. As a result, the maximum a producer may charge was approximately U.S.\$70 per barrel exported, depending on the quality of crude sold. The resolution also sets forth increasing withholding rates for exports of diesel, gasoline, lubricants and other petroleum when the International Price exceeds U.S.\$71 per barrel at rates that allow the producer to receive a portion of the elevated price.

On January 8, 2017, export duties on hydrocarbon exports established by Law No. 26,732 ceased to be enforceable.

In addition to the above, the Public Emergency Law, which created the export withholdings, established that export withholdings were not to be deducted from the export price for purposes of calculating the 12% royalties. The royalty expense incurred in Argentina is accounted for as a production cost (as explained in Exploration and Production Oil and gas production, production prices and production costs). According to the Hydrocarbons Law, any oil and gas produced by the holder of an exploration permit prior to the grant of a production concession is subject to the payment of a 15% royalty.

Furthermore, pursuant to Sections 57 and 58 of the Hydrocarbons Law, holders of exploration permits and production concessions must pay an annual surface fee that is based on acreage of each block and that varies depending on the phase of the operation, such as exploration or production, and in the case of the former, depending on the relevant period of the exploration permit. These amounts were updated by Law No. 27,007 and may be partially adjusted as from the second basic exploration period in light of investments actually carried out. Exploration permits and production or transportation concessions may be terminated upon any of the following events:

failure to pay annual surface taxes within three months of the due date;

failure to pay royalties within three months of the due date;

substantial and unjustifiable failure to comply with specified production, conservation, investment, work or other obligations;

repeated failure to provide information to, or facilitate inspection by, authorities or to utilize adequate technology in operations;

in the case of exploration permits, failure to apply for a production concession within 30 days of determining the existence of commercially exploitable quantities of hydrocarbons;

bankruptcy of the permit or concession holder;

death or end of legal existence of the permit or concession holder; or

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failure to transport hydrocarbons for third parties on a non-discriminatory basis or repeated violation of the authorized tariffs for such transportation.

The Hydrocarbons Law further provides that a cure period, of a duration to be determined by the Argentine Secretariat of Energy and/or the competent provincial authorities, must be provided to the defaulting concessionaire prior to the termination.

When a production concession expires or terminates, all oil and gas wells, operating and maintenance equipment and facilities automatically revert to the province where the reservoir is located or to the Argentine Republic in the case of reservoirs under federal jurisdiction (for instance, located on the continental shelf or beyond 12 nautical miles offshore), without compensation to the holder of the concession.

Most of our production concession expirations have been extended from their original expiration dates. See [Item 3. Key Information Risk Factors Risks Relating to the Argentine Oil and Gas Business and Our Business Argentine oil and gas production concessions and exploration permits are subject to certain conditions and may be cancelled or not renewed.](#) The granting of an extension is an unregulated process and normally involves lengthy negotiations between the applicant and the relevant government. Although the Hydrocarbons Law, as modified, provides that applications must be submitted at least one year prior to the concession expiration date, it is industry practice to commence the process far earlier, typically as soon as the technical and economic feasibility of new investment projects beyond the concession term become apparent.

On March 16, 2006, the Argentine Secretariat of Energy issued S.E. Resolution No. 324/06 requiring that holders of exploration permits and hydrocarbon concessions must file with such agency details of their proved reserves existing in each of their areas, certified by an external reserves auditor, each year. Holders of hydrocarbon concessions that export hydrocarbons are obliged to certify their oil and gas proved reserves. The aforementioned certification only has the meaning established by S.E. Resolution No. 324/06, according to which it is not to be interpreted as a certification of oil and gas reserves under the SEC rules. See [Exploration and Production Overview Oil and Gas Reserves.](#) On November 7, 2016, MINEM issued Resolution No. 69/2016, which included technical modifications to S.E. Resolution No. 324/06 by amending some of its technical annexes regulating the reserves information required to be provided. It also established sanctions for hydrocarbon producers in the case of irregularities in the reserves reports filed, including admonishment, suspension or cancellation of the Hydrocarbons Producers Registry, depending on the magnitude of the irregularity.

In March 2007, the Argentine Secretariat of Energy issued Resolution No. 407/07 that approved new regulations concerning the Oil and Gas Exploration and Production Companies Registry. According to Resolution No. 407/07, YPF, as a holder of production concessions and exploration permits, is banned from hiring or in any way benefiting from any company or entity which is developing or has developed oil and gas exploration activities within the Argentine continental platform without an authorization from the relevant Argentine authorities.

In connection with the extension of concessions, see [Exploration and Production Overview Main properties.](#)

### *Security Zones Legislation*

Argentine law restricts the ability of non-Argentine companies to own real estate, oil concessions or mineral rights located within, or with respect to areas defined as, security zones (principally border areas).

Additionally, prior approval of the Argentine government is required:

for non-Argentine shareholders to acquire control of us; or

if and when the majority of our shares belong to non-Argentine shareholders, as was the case when we were controlled by Repsol for any additional acquisition of real estate, mineral rights, oil or other Argentine government concessions located within, or with respect to, security zones.

*Natural Gas Transportation and Distribution*

The gas transmission system is currently divided into two systems principally on a geographical basis (the northern and the southern trunk pipeline systems), designed to give both systems access to gas sources and to the main centers of demand in and around Buenos Aires. These systems are operated by two transportation companies. In addition, the distribution system is divided into nine regional distribution companies, including two distribution companies serving the greater Buenos Aires area.



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The regulatory structure for the natural gas industry creates an open-access system, under which gas producers, such as us, will have open access to future available capacity on transmission and distribution systems on a non-discriminatory basis.

Cross-border gas pipelines were built to interconnect Argentina, Chile, Brazil and Uruguay, and producers such as us had been exporting natural gas to the Chilean and Brazilian markets, to the extent permitted by the Argentine government. During the last several years the Argentine authorities have adopted a number of measures restricting exports of natural gas from Argentina, including issuing domestic supply instruction pursuant to Regulation No. 27/04 and Resolutions No. 265/04, 659/04 and 752/05 (which require exporters to supply natural gas to the Argentine domestic market), issuing express instructions to suspend exports, suspending processing of natural gas and adopting restrictions on natural gas exports imposed through transportation companies and/or emergency committees created to address crisis situations. However, since 2017 the Argentine authorities have adopted a number of measures aiming at allowing companies to resume natural gas exports. See *Market Regulation Natural gas export administration and domestic supply priorities*.

### *Transportation of Liquid Hydrocarbons*

The Hydrocarbons Law permits the National Executive Office to award 35-year concessions for the transportation of oil, gas and petroleum products following submission of competitive bids. Pursuant to Law No. 26,197, the relevant provincial governments have the same powers. Holders of production concessions are entitled to receive a transportation concession for the oil, gas and petroleum products that they produce. The term of a transportation concession may be extended for an additional ten-year term upon application to the National Executive Office.

Law No. 27,007, which applies to concessions issued on or after October 2014 other than those already governed by previous laws, for the transportation of liquid hydrocarbons, permits the National Executive Office to award concessions for the transportation of oil, gas and petroleum products for terms equivalent to those granted for production concessions linked to those transport concessions, following submission of competitive bids. The term of a transportation concession may be extended for additional terms equivalent to those of the associated production concession. The holder of a transportation concession has the right to:

transport oil, gas and petroleum products; and

construct and operate oil, gas and products pipelines, storage facilities, pump stations, compressor plants, roads, railways and other facilities and equipment necessary for the efficient operation of a pipeline system.

The holder of a transportation concession is obligated to transport hydrocarbons for third parties on a non-discriminatory basis for a fee. This obligation, however, applies to producers of oil or gas only to the extent that the concession holder has surplus capacity available and is expressly subordinated to the transportation requirements of the holder of the concession. Transportation tariffs are subject to approval by the Argentine Secretariat of Energy for oil and petroleum pipelines and by ENARGAS for gas pipelines. Upon expiration of a transportation concession, the pipelines and related facilities automatically revert to the Argentine government without payment to the holder. The Privatization Law granted us a 35-year transportation concession with respect to the pipelines operated by Yacimientos Petrolíferos Fiscales Sociedad del Estado at the time. Gas pipelines and distribution systems sold in connection with the privatization of Gas del Estado are subject to a different regime as described above.

Additionally, pursuant to Law No. 26,197, all transportation concessions located entirely within a province's jurisdiction and not directly connected to any export pipeline are to be transferred to such province. The National Executive Office retains the power to regulate and enforce all transportation concessions located within two or more provinces and all transportation concessions directly connected to export pipelines.

*Refining*

Crude oil refining activities conducted by oil producers or others are subject to prior registration of oil companies in the registry maintained by the Argentine Secretariat of Energy and compliance with safety and environmental regulations, as well as to provincial environmental legislation and municipal health and safety inspections.

In January 2008, the Argentine Secretariat of Domestic Commerce issued Resolution No. 14/2008, whereby the refining companies were instructed to optimize their production in order to obtain maximum volumes according to their capacity.

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Executive Decree No. 2014/08 of November 25, 2008, created the Refining Plus program to encourage the production of diesel and gasoline. The Argentine Secretariat of Energy, by S.E. Resolution No. 1312/08 of December 1, 2008, approved the regulations of the program. Pursuant to this program, refining companies that undertook the construction of a new refinery or the expansion of their refining and/or conversion capacity, and whose plans were approved by the Argentine Secretariat of Energy, were entitled to receive export duty credits to be applied to exports of products within the scope of Resolution No. 394/07 and Resolution No. 127/08 (Annex) issued by the Ministry of Economy. In February 2012, by Notes No. 707/12 and 800/12 (the Notes) of the Argentine Secretariat of Energy, YPF was notified that the benefits granted under the Refining Plus program had been temporarily suspended. The effects of the suspension extend to benefits accrued and not yet redeemed by YPF at the time of the issuance of the Notes. The reasons alleged for such suspension were that the Refining Plus program had been created in a context where domestic prices were lower than prevailing prices and that the objectives sought by the program had already been achieved. On March 16, 2012, YPF filed an administrative complaint against the temporary suspension. As of the date of this annual report, YPF has partially collected the compensation expected according to the Program.

**Market Regulation***Overview*

Under the Hydrocarbons Law and the Oil Deregulation Decrees, holders of production concessions, such as us, have the right to produce and own the oil and gas they extract and are allowed to sell such production in the domestic or export markets, in each case subject to the conditions described below.

The Hydrocarbons Law authorizes the National Executive Office to regulate the Argentine oil and gas markets and prohibits the export of crude oil during any period in which the National Executive Office finds domestic production to be insufficient to satisfy domestic demand. If the National Executive Office restricts the export of crude oil and petroleum products or the sale of natural gas, the Oil Deregulation Decrees provide that producers, refiners and exporters shall receive a price for the crude oil and petroleum products, not lower than that of imported crude oil and petroleum products of similar quality.

Furthermore, the Oil Deregulation Decrees required the National Executive Office to give twelve months notice of any future export restrictions. Notwithstanding the above provisions, certain subsequently-enacted resolutions (S.E. Resolution No. 1679/04, S.E. Resolution No. 532/04 and Ministry of Economy Resolution No. 394/07) have modified the aforementioned price mechanism, resulting, in certain cases, in prices to producers that are below the levels described above.

In addition, in May 2012, the Expropriation Law was passed by the Argentine congress and became effective. See The Expropriation Law and Decree No. 1277/2012 and Decree No. 272/2015.

On July 15, 2013, Decree No. 929/2013 was published in the Official Gazette, which provides for the creation of an Investment Promotion Regime for the Exploitation of Hydrocarbons (the Promotion Regime), both for conventional and unconventional hydrocarbons to be applied across the Argentine territory. Applications to be included in this Promotion Regime may be filed by subjects duly registered with the National Registry of Hydrocarbon Investments who are holders of exploration permits and/or exploitation concessions and/or third parties associated with those holders and who submit an Investment Project for Hydrocarbon Exploitation (the Investment Project) to the Commission created by Decree No. 1,277/12, entailing a direct investment in foreign currency of at least U.S.\$1 billion, calculated at the time of submission of the Investment Project, and to be invested in the first five years of the Investment Project. Beneficiaries of this Promotion Regime shall enjoy the following benefits, among others: i) they shall be entitled, under the terms of the Hydrocarbons Law, from the fifth anniversary of the start-up of their

respective Investment Project, to freely export 20% of the production of liquid and gaseous hydrocarbons produced under such Investment Projects, at a 0% export tax rate, if applicable; ii) they shall freely dispose of 100% of the proceeds derived from the export of the hydrocarbons mentioned in i) above, provided the approved Investment Project would have generated an inflow of foreign currency into Argentina's financial market equal to at least U.S.\$1 billion, following the requirements mentioned above; iii) if hydrocarbon production in Argentina is not enough to cover domestic supply needs in accordance with section 6 of the Hydrocarbons Law, beneficiaries of the Promotion Regime, from the fifth anniversary of the start-up of their respective Investment Projects, shall be entitled to obtain, in relation to the aforementioned exportable rate of liquid and gaseous hydrocarbons produced in the Investment Projects, a price not lower than the reference export price calculated without deducting any export duties that would have been applicable. Law No. 27,007, as described above, has incorporated into this regime projects submitted to the Commission entailing a direct investment in foreign currency of at least U.S.\$250 million, calculated at the time of submission of the Investment Project, and to be invested in the first three years of the Investment Project. Further, Law No. 27,007 modifies the percentages of hydrocarbons to be benefitted under this regime to 20% of the production of conventional, unconventional and offshore concessions at depths less than or equal to 90 meters and 60% of the production of offshore concessions at depths greater than 90 meters. See Law No. 27,007, amending the Hydrocarbons Law and Decree No. 272/2015.

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Additionally, the decree discussed above created a new type of concession for the Exploitation of Unconventional Hydrocarbons, which has been incorporated into the Hydrocarbons Law by Law No. 27,007, consisting of the extraction of liquid and/or gaseous hydrocarbons through unconventional stimulation techniques applied to reservoirs located in geological formations of schist and slates (shale gas or shale oil), tight sands (tight oil and tight gas), coal layers (coal bed methane) and, in general, from any reservoir that presents low-permeability rock as its main feature. The Decree provides that holders of exploration permits and/or exploitation concessions that are beneficiaries of the Promotion Regime shall be entitled to apply for a Concession for Unconventional Hydrocarbons Exploitation. Likewise, holders of a Concession for Unconventional Hydrocarbons Exploitation who are also holders of an adjacent and pre-existing concession may request the unification of both areas into a single unconventional exploitation concession, provided the geological continuity of such areas is duly proven.

As noted above, Law No. 27,007 provides for contributions by companies to the provinces where the projects take place, which amount to 2.5% of the initial investment amount of the project, to be directed to Corporate Social Responsibility contributions. In addition, an amount to be determined by the Commission in light of the extent of the project, to finance infrastructure, have to be contributed by the Argentine Republic. Finally, Law No. 27,007 establishes that capital goods and inputs that are essential to the execution of the investment plans of companies registered in the National Registry of Hydrocarbon Investments shall pay import duties indicated in Decree No. 927/13 (reduced rates). This list may be extended to other strategic products.

*Production of crude oil and reserves*

Executive Decree No. 2014/08 of November 25, 2008, created the Petroleum Plus program to encourage the production of crude oil and the increase of reserves through new investments in exploration and development. The Argentine Secretariat of Energy, through S.E. Resolution No. 1312/08 of December 1, 2008, approved the regulations of the program. The program entitled production companies which increased their production and reserves within the scope of the program, and whose plans were approved by the Argentine Secretariat of Energy, to receive export duty credits to be applied to exports of products within the scope of Resolution No. 394/07 and Resolution No. 127/08 (Annex) issued by the Ministry of Economy. In February 2012, YPF was notified by the Argentine Secretariat of Energy that the benefits granted under the Petroleum Plus program had been temporarily suspended. The effects of the suspension extend to benefits accrued and not yet redeemed by YPF at the time of the issuance of the notice. The reasons stated for the suspension were that the Petroleum Plus program had been created in a context where domestic prices were lower than prevailing prices and that the objectives sought by the program had already been achieved. On March 16, 2012, YPF filed an administrative complaint against the temporary suspension. Executive Decree No. 1330/2015 of July 13, 2015 provided for the termination of the Petroleum Plus program, establishing compensation in BONAR 2024 Argentine public bonds. As of the date of this report, YPF has not been compensated for the benefits accrued and not yet redeemed by YPF.

*Refined products*

In April 2002, the Argentine government and the main oil companies in Argentina, including us, reached an agreement on a subsidy provided by the Argentine government to public bus transportation companies. The Agreement on Stability of Supply of Diesel was approved by Executive Decree No. 652/02 and assured the transportation companies their necessary supply of diesel at a fixed price of Ps. 0.75 per liter from April 22, 2002 to July 31, 2002. Additionally, it established that the oil companies are to be compensated for the difference between this fixed price and the market price through export duty credits. Subsequent agreements entered into between the Argentine government and the main oil companies in Argentina extended the subsidy scheme until December 2009, while the aforementioned fixed price was revised from time to time.

In March 2009, Executive Decree No. 1390/09 empowered the Chief of Staff to sign annual agreements extending the diesel subsidy to transportation companies for the fiscal year 2009 and until the end of the public emergency declared by the Public Emergency Law and its amendments, and instructed such official to incorporate the necessary modifications in order to extend the possibility to compensate with export duty credits on all hydrocarbon products currently exported, or with cash. As of the date of this annual report, execution of the annual agreements for the fiscal years 2010 and 2011 is pending. Nevertheless, the subsidy scheme has continued to be in place on the basis of the monthly communications issued by the Argentine Secretariat of Transport notifying oil companies of the volumes to be delivered to each beneficiary of the scheme at the fixed price, and the Argentine government has continued to compensate oil companies for deliveries of diesel made under the scheme.

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The Argentine Secretariat of Energy has issued a series of resolutions in order to provide the market with information about liquid fuel prices and volumes. For example, S.E. Resolution No. 1,102/04 created the Registry of Liquid Fuels Supply Points, Self-Consumption, Storage, Distributors and Bulk Sellers of Fuels and Hydrocarbons, and of Compressed Natural Gas; S.E. Resolution No. 1,104/04 created a bulk sales price information module as an integral part of the federal fuel information system, as well as a mechanism for communication of volumes sold. S.E. Resolution No. 1,834/05 compels service stations and/or supply point operators and/or self-consumption of liquid fuels and hydrocarbons who have requested supply, and have not been supplied, to communicate such situation to the Argentine Secretariat of Energy. S.E. Resolution No. 1,879/05 established that refining companies registered by the Argentine Secretariat of Energy, who are parties to contracts that create any degree of exclusivity between the refining company and the fuel seller, shall assure continuous, reliable, regular and non-discriminatory supply to its counterparties, giving the right to the seller to obtain the product from a different source, and thereupon, charging any applicable cost overruns to the refining company.

Disposition S.S.C. No. 157/06 of the Undersecretariat of Fuels provides that fuel sellers who are parties to contracts that create any degree of exclusivity between the refining company and the fuel seller, and which for any reason are seeking to terminate such contract, shall report the termination in advance with the Undersecretariat of Fuels in order to inform the Argentine Secretariat of Domestic Commerce of the situation. In that case, the Argentine Secretariat of Domestic Commerce is to: (i) issue a statement regarding the validity of the termination of the contract and (ii) use all necessary means to allow the fuel seller terminating the contract to execute another agreement with a refining company and/or fuel broker in order to guarantee its fuel supply. The Disposition has not been imposed by the authorities in cases involving YPF.

S.E. Resolution No. 1679/04 reinstated the registry of diesel and crude oil export transactions created by Executive Decree No. 645/02, and mandated that producers, sellers, refining companies and any other market agent that wishes to export diesel or crude oil to register such transaction and to demonstrate that domestic demand has been satisfied and that they have offered the product to be exported to the domestic market. In addition, S.E. Resolution No. 1338/06 added other petroleum products to the registration regime created by Executive Decree No. 645/02, including gasoline, fuel oil and its derivatives, aviation fuel, coke coal, asphalts, certain petrochemicals and certain lubricants. Resolution No. 715/07 of the Argentine Secretariat of Energy empowered the National Refining and Marketing Direction to determine the amounts of diesel to be imported by each company, in specific periods of the year, to compensate exports of products included under the regime of Resolution No. 1679/04; the fulfillment of this obligation to import diesel is necessary to obtain authorization to export the products included under Decree No. 645/02 (crude, fuel oil, diesel, coke coal and gasoline, among others). In addition, Resolution No. 25/06 of the Argentine Secretariat of Domestic Commerce, issued within the framework of Law No. 20,680, imposes on each Argentine refining company the obligation to supply all reasonable diesel demand, by supplying certain minimum volumes (established pursuant to the resolution) to their usual customers, mainly service station operators and distributors. YPF has duly fulfilled its obligation under this Resolution and has not received any type of sanction from the authorities in this regard.

On August 17, 2010, the Argentine Secretariat of Domestic Commerce issued Resolution No. 295/10, imposing that the trade price of liquid fuels should be rolled back to those prices prevailing on July 31, 2010. This resolution has been successfully challenged by another company and a preliminary injunction was granted suspending the effectiveness of such Resolution. This Resolution was later on repealed by Resolution No. 543/10 of the Argentine Secretariat of Domestic Commerce.

On February 2, 2011, the Argentine Secretariat of Domestic Commerce issued Resolution No. 13/11 stating that the retail price of liquid fuels had to be rolled back to those prices prevailing on January 28, 2011. This resolution also required refineries and oil companies to continue to supply amounts of fuel to the domestic market consistent with

amounts supplied the prior year, as adjusted for the positive correlation between the increase in the demand of fuel and gross domestic product. On March 29, 2011, however, the Argentine Secretariat of Domestic Commerce issued Resolution No. 46/11, which repealed Resolution No. 13/11, alleging that market conditions had changed since its issuance.

On April 10, 2013, Resolution No. 35/2013 of the Argentine Secretariat of Domestic Commerce, determined a price cap for fuel at all service stations for period of six months, which shall not exceed the highest outstanding price as of April 9, 2013 in each of the regions identified of the Annex of the Resolution.

The above resolutions affecting domestic prices expired on November 24, 2013 and are no longer in effect.

In addition, in May 2012, the Expropriation Law was enacted by the Argentine congress and became effective. See The Expropriation Law and Decree No. 1277/2012.



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On December 30, 2013, the Commission approved, through Resolution No. 99/2013, the general rules for the grant of quotes of liquid fuels volumes allowed to be imported by locally registered companies, including, among others, oil companies registered in the relevant registries of the Secretariat of Energy. These rules regulate the requirements, grant of volumes to be imported and other conditions to be complied with by the companies that wish to import liquid fuels free of the tax on liquid fuels (imposed by Law No. 23,966) and the tax on diesel (imposed by Law No. 26,098), jointly with other fuels up to a maximum aggregate amount of 7 mmcm.

The Secretariat of Hydrocarbon Resources from MINEM approved Resolution No. 5/2016 on May 31, 2016, replacing Annex II of Resolution No. 1283/2006, which previously established specifications for Argentina's two grades of gasoline, naphtha grades 2 and 3. The resolution's new Annex includes modifications to the content of lead, manganese, oxygen and ethanol and, most significantly, sulfur, and requires oil and gas companies to implement a plan to lower sulfur limits to 50mg/kg for grade 2 gasoline, 10mg/kg for grade 3 gasoline, and to 350mg/kg for diesel between 2019 and 2022. Oil and gas companies must file with the Secretariat of Hydrocarbon Resources a detailed timeline of the program of investments for the next four years, to reach the goals provided in Annex I. From June 1, 2016, the sulfur limit for fuel oil will be 7,000 mg/kg. Local refineries producing fuel oil that does not fulfill the above mentioned specifications must present to the Secretariat of Hydrocarbon Resources a remediation plan that includes steps and actions to fulfill the maximum limit of sulfur within 24 months. Based on the above, YPF has undertaken several studies in respect of investment configurations and estimations, under the advice of main technological experts in the field in order to adapt its industrial networking units according to the parameters required by the regulation. In October 2016, YPF submitted to the MINEM the following information: a) an investment plan towards 2019 containing detailed information about projects and terms necessary to fulfill the new quality specification of products required by Resolution No. 5/2016; and b) an evaluation of the necessary terms in order to develop the configuration of studies, as discussed in the previous sentence. Once those studies, together with their economic impact, are completed, YPF will obtain internal approval from its Board of Directors and then submit to the MINEM its investment program towards 2022 to fulfill additional quality requirements established by Resolution No. 5/2016.

**Agricultural Commodity Export Tax Changes**

By Executive Decree No. 133/2015, published in the Official Gazette on December 17, 2015, the Argentine government reduced the export tax on soybeans and soybean byproducts by 5% to 30% and eliminated the export taxes on all other commodities. Agricultural commodities with a new 0% export tax include meat products, grains, fruits, and vegetables, among other products. In addition, through Executive Decree No. 1343/2016, published in the Official Gazette on December 30, 2016, the Argentine government established that, beginning January 2018, the soybean export tax will be reduced by 0.5 % each month until December 2019. By the end of 2019, the soybean export tax will be 18%, down from its current level of 30%.

Finally, by Joint Resolutions Nos. 4/2015 and 7/2015 of the Ministries of Agroindustry, Treasury and Public Finance and Production published in the Official Gazette on December 29, 2015, the export permits known as ROEs were eliminated and replaced by the registration of a Sworn Affidavit of Exports Sales, known as a DJVE.

***Automatic and Non-Automatic Import Licenses***

On December 23, 2015, the Ministry of Production published Resolution No. 5/2015, in the Official Gazette, which reinstated the automatic and non-automatic import licenses ( LAI and LNA, respectively). In 2013, the former Ministry of Economy and Public Finance eliminated the LNA, stating that it existed alongside the Anticipated Import Affidavit (*Declaración Jurada Anticipada de Importación*) requirement implemented in February 2012, which was recently repealed by AFIP Resolution No. 3823.

Resolution No. 5/2015 also established that importers of products included in the Mercosur Tariff Code must obtain an LAI prior to the entrance of the product into Argentina.

Certain products which are listed in Annexes II to XVII of Resolution No. 5/2015 will be subject to an LNA. The LNA will be applicable to a wide variety of products, including, but not limited to, textile, footwear, toys, domestic appliances, motorbikes, and automobile parts.

In order to obtain the LNA, importers must submit certain information from the importer itself (name, tax identification number) and the product (FOB value, type and quantity, commercial brand, model, country of origin and of shipping, etc.) through the Import Monitoring System (*Sistema Integral de Monitoreo de Importaciones*) ( SIMI ) created by AFIP Resolution No. 3823. After submitting this information, importers will have ten business days to complete certain additional information required by Resolution No. 5/2015. If the ten-day term expires, the SIMI declaration will be automatically cancelled.

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Regarding the LNA, Resolution No. 5/2015 establishes that, at any stage of the process, importers may be required to submit additional information or documents of the product subject to the LNA and request verification of technical agencies, as applicable.

Import licenses will be valid for 90 calendar days, once approved by the SIMI.

The following imports are exempt from the import regime established by Resolution No. 5/2015:

Donation regime.

Sample regime.

Diplomatic exemption regime.

Import of products with duties and tax exemption.

Import of products from Special Custom Zone (Tierra del Fuego, Antártida and Islas del Atlántico Sur).

Import of products by the General Secretary of Executive Branch (Secretaria General de la Presidencia de la Nación).

Courier and mail delivery, only for importer private use or consumption.

Resolution No. 5/2015 became effective on December 24, 2015, and the Secretariat of Trade is the application authority.

**Decree N° 629/2017**

Decree N° 629/2017 published in August 10, 2017 in the official Gazette of the Republic of Argentina- introduces a Regime for the Import of Used Good for the Oil & Gas Industry (the Régime ), that admits definitive import of used goods not older than 10 years since fabrication.

The Regime establishes an import rate ranging between 0% and 14% for goods included in the duty positions included in the annexes to the Decree.

Both companies registered under the Registry of Oil Companies and companies providing services directly to the oil and gas industry may apply for the benefit.

The Regime will be in force from August 11, 2017 until June 30, 2019.

*Natural gas*

In January 2004, Executive Decree No. 180/04 (i) created the Electronic Gas Market ( MEG ) for the trade of daily spot sales of gas and a secondary market of transportation and distribution services, and (ii) established information obligations for buyers and sellers of natural gas in relation to their respective commercial operations, required as a condition to be authorized to inject into and transport through the transportation system any volume of natural gas (further regulated by Resolution No. 1,146/04 issued on November 9, 2004 and Resolution No. 882/05 issued by the Argentine Secretariat of Energy). According to Executive Decree No. 180/04, all daily spot sales of natural gas must be traded within the MEG.

In January 2004, Executive Decree No. 181/04 authorized the Argentine Secretariat of Energy to negotiate with natural gas producers a pricing mechanism for natural gas supplied to industries and electric generation companies. Domestic market prices at the retail market level were excluded from these negotiations.

On June 14, 2007, Resolution No. 599/07 of the Argentine Secretariat of Energy approved a proposed agreement with natural gas producers regarding the supply of natural gas to the domestic market during the period 2007 through 2011 ( Agreement 2007-2011 ). We executed Agreement 2007-2011 taking into account that producers that did not enter into Agreement 2007-2011 would be required to satisfy domestic demand before those who entered into Agreement 2007-2011. The purpose of Agreement 2007-2011 was to guarantee the supply of the domestic market demand at the levels registered in 2006, plus the growth in demand by residential and small commercial customers. However, we expressly stated that the execution of Agreement 2007-2011 did not entail any recognition by us of the validity of the terms and conditions of the various resolutions of the Argentine Secretariat of Energy establishing programs for the curtailment or re-routing of exports to satisfy domestic demand. We challenged Resolution No. 599/07 and stated that we signed Agreement 2007-2011 taking into account the potential consequences of not doing so.

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The Argentine Secretariat of Energy created, through Resolution No. 24/08 issued on March 13, 2008, a program named "Gas Plus" to encourage natural gas production resulting from discoveries, new fields and tight gas, among other factors. The natural gas produced under the Gas Plus program is not subject to Agreement 2007-2011 and the price conditions established under such agreement.

The Argentine Secretariat of Energy, through Resolution No. 1031/08 issued on September 12, 2008, modified Resolution No. 24/08, establishing the specific conditions petitioners must meet in order to qualify for the Gas Plus program. Certain of such conditions were modified by Resolution No. 695/09 of the Argentine Secretariat of Energy, which demands compliance with commitments already assumed.

The Argentine Secretariat of Energy, through Resolution No. 1070/08 issued on October 1, 2008, ratified the complementary agreement entered into between Argentine natural gas producers and the Argentine Secretariat of Energy on September 19, 2008 (the "Complementary Agreement"), which (i) modified gas prices at the wellhead and segmented the residential sector in terms of natural gas demand, and (ii) established the requirement that natural gas producers contribute to the fiduciary fund created by Law No. 26,020. The Complementary Agreement also contains certain requirements concerning the provision of LPG to the domestic market. See "Liquefied petroleum gas." Through Resolution No. 1417/08, the Secretariat of Energy determined the basin prices for the residential segment applicable to the producers that signed the Complementary Agreement. On January 13, 2010, the natural gas producers signed an addendum to the Complementary Agreement which extended the commitment to contribute to the fiduciary funds created by Law No. 26,020 until December 31, 2010. On January 25, 2011, the natural gas producers signed a second addendum to the Complementary Agreement which extended such commitment until December 31, 2011.

On March 19, 2012, the Official Gazette published S.E. Resolution No. 55/2012 of the Secretariat of Energy, which extended the Complementary Agreement for 2012 and established the following with respect to non-signing parties: (i) the natural gas price increase established by the Complementary Agreement will not be applicable to natural gas injected into the gas system by non-signing parties; (ii) natural gas injected by non-signing parties will be consumed first in the order of priority by residential users, which has the lowest tariffs; and (iii) non-signing parties must fulfill all of the commitments undertaken by natural gas producers under Agreement 2007-2011, which was extended by Resolution S.E. No. 172. On March 23, 2012, S.E. Resolution No. 55/2012 was supplemented by ENARGAS Resolution No. 2087/2012, which sets forth, among others, the procedure that distribution companies should follow to secure amounts to be deposited with the fiduciary fund created by Law No. 26,020. Additionally, according to this resolution, producers that have not signed the 2012 extension of the Complementary Agreement are not allowed to charge the wellhead price increases for gas set forth in S.E. Resolutions No. 1070/2008 and 1417/2008 to consumers directly supplied by distribution companies. Thus, such non-signing producers have to invoice the lower prices which were in effect prior to the adoption of these resolutions for the gas supplied to the distribution companies.

Thereafter, on April 19, 2012, December 18, 2012 and December 19, 2013, YPF signed the 2012, 2013 and 2014 extensions of the Complementary Agreement, respectively. The dispatch mechanism for natural gas was regulated further by Resolution No. 1410, as explained below.

Executive Decree No. 2067/08 of December 3, 2008, created a fiduciary fund to finance natural gas imports destined for injection into the national pipeline system, when required to satisfy the internal demand. The fiduciary fund is funded through the following mechanisms: (i) various tariff charges which are paid by users of regular transport and distribution services, gas consumers that receive gas directly from producers and companies that process natural gas; (ii) special credit programs that may be arranged with domestic or international organizations; and (iii) specific contributions assessed by the Argentine Secretariat of Energy on participants in the natural gas industry. This decree has been subject to different judicial claims and judges throughout the country have issued precautionary measures suspending its effects. On November 8, 2009, ENARGAS published Resolution No. 1982/11, which supplements

Decree No. 2067/08. This Resolution adjusts the tariff charges established by Executive Decree No. 2067/08 to be paid by users in the residential segment and gas processing and electric power companies, among others, starting December 1, 2011. On November 24, 2011, ENARGAS issued Resolution No. 1991/11, which extends the type of users that will be required to pay tariff charges. YPF has challenged these resolutions. On April 13, 2012, a precautionary measure was granted regarding the processing plant El Porton, suspending the effects of these resolutions with respect to such plant.

Through Resolution No. 28/2016, published on April 1, 2016, MINEM declared that all acts which determined the imposition of the tariff charge ceased to be effective and instructed ENARGAS to adopt measures to cease invoicing the tariff charge.

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On November 5, 2012 the Official Gazette published Law No. 26,784 which approves the National Administration Budget for 2013. Article 54 of the Law established that the tariff charges and the fiduciary fund established by Executive Decree No. 2067/08 and all its supplementary acts shall be ruled by Law No. 26,095.

On July 17, 2009, the Ministry of Federal Planning and certain natural gas producers (including YPF) signed an agreement which sets forth: (i) natural gas prices at the wellhead for the electric power generators segment from July to December 2009, and (ii) amounts to be received by natural gas producers for volumes sold to the residential segment from August 2009 onwards. These amounts are adjusted on a monthly basis so that they represent 50% of the amount collected by the fiduciary fund to finance natural gas imports.

On October 4, 2010, the Official Gazette published ENARGAS Resolution No. 1410/10, which set forth new rules for natural gas dispatch applicable to all participants in the gas industry and imposing the following new and more severe priority demand gas restrictions on producers:

Distributors remain able to solicit all the gas necessary to cover the priority demand despite such gas volumes exceeding those that the Argentine Secretariat of Energy would have allocated by virtue of Agreement 2007-2011 ratified by the Resolution No. 599/07. See Exploration and Production Overview Delivery commitments.

Producers are obligated to confirm all the natural gas requested by distributors in respect of the priority demand. The producers' portion of such volumes follows the allocation criterion established by the Resolution No. 599/07. We cannot predict the amount of the estimated domestic demand that a producer may be required to satisfy, regardless of whether such producer signed Agreement 2007-2011.

Once the priority demand has been satisfied, the remaining demands are fulfilled, with exports last in order of priority.

In the event a producer is unable to meet the requested demand, transporters are responsible for redirecting gas until a distributor's gas demand is met. The gas deficiency is either (i) deducted from the producer suffering the deficiency if it is able to meet the demands of its other clients in the same basin or (ii) recuperated from the remainder of the gas producers in the event the deficient producer is not able to serve any of its clients in the same basin.

As a result, this regime imposes a jointly liable supply obligation on all producers in the event any producer experiences a gas supply deficiency. We have challenged the validity of the aforementioned regulation. On December 9, 2015, ENARGAS denied our administrative appeal.

Rules established by ENARGAS Resolution No. 1410/10 were amended by MINEM Resolution No. 89/2016, dated June 1, 2016, which: required ENARGAS to develop a procedure to amend and supplement ENARGAS Resolutions No. 716/1998 and 1410/2010 and establish daily operating conditions of the Transportation and Distribution Systems, establishes the volumes that distributors may request in order to satisfy priority demand and, if there has been a contract with a producer to fulfill such request, reduces the contracted volume requirement in accordance with the framework provided by Resolution No. 1,410/2010. Pursuant to this resolution, ENARGAS Resolution I/3833 was issued on June 5, 2016, which establishes the Supplementary Procedure for Gas Requests, Confirmations and Control.

On December 17, 2010 certain natural gas producers (including YPF) signed an agreement which set forth the percentage of regasified LNG assigned to each natural gas producer for 2011. Amounts produced under this agreement were counted towards such producers' commitments to supply natural gas to distributors under Resolution No. 599/07. As of the date of this annual report, similar agreements have not been entered into for years subsequent to 2011.

In addition, on June 1, 2016, MINEM published Resolution No. 89/2016, which:

Requires ENARGAS to develop a procedure to amend and supplement ENARGAS Resolutions No. 716/1998 and 1410/2010 and establish daily operating conditions of the Transportation and Distribution Systems.

Establishes the volumes that distributors may request in order to satisfy priority demand and, if there has been a contract with a producer to fulfill such request, reduces the contracted volume requirement in accordance with the framework provided by Resolution No. 1,410/2010.



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Pursuant to this resolution, on June 5, 2016 ENARGAS Resolution No. I/3833 was issued, which establishes the Supplementary Procedure for Gas Requests, Confirmations and Control.

The purpose of the Procedure is to establish the transition mechanism and application criteria for the administration of the natural gas dispatch to preserve the operation of the transportation and distribution systems giving priority to the consumption of the Priority Demand in cases of supply crisis and / or emergencies which may put at risk the normal provision of the natural gas public service or which may affect the provision of another public service.

The new Procedure establishes that each day the Distribution Service Providers will request in the programming computer systems of the Transport Companies for the operational day  $n + 1$ , with first priority, the natural gas necessary to supply the Priority Demand, based on their consumption estimate and in accordance with the contracted transport capacity and its supply agreements.

The confirmation of natural gas in the TSEP for Priority Demand will have priority over other segments. The confirmation of gas for segments other than the Priority Demand will maintain the confirmation priority established by the Producer in the respective contracts with direct consumers (or Marketers), which will be informed to Transportation and Distribution Service Providers.

The transportation nomination of each Distribution Service Provider will give priority to the supply of their Priority Demand over any other user of that Provider.

The Providers of the Transportation and Distribution Service that verify that the transportation capacity is not sufficient to supply the Priority Demand must summon the Emergency Committee, chaired by the president of ENARGAS, who will procure the means to allocate the volumes in the emergency situation.

On June 6, 2017 ENARGAS Resolution No 4.502/17 was issued which approved the Procedure for the administration of the office in the Emergency Executive Committee ( EEC ), modifying the procedure for the delivery request and gas confirmations which were approved by ENARGAS Resolution No. 3,833/16 and provided for measures and criteria to be adopted in a supply crisis of the Priority Demand for Natural Gas declared by the Transportation Companies, Distribution Companies or the ENARGAS.

Among such measures, it was provided that the EEC or (if the EEC disagrees to it) the ENARGAS, will define the way in which the Priority Demand will be supplied considering the quantities of natural gas available in each basin for each producer and discounting the amounts contracted to supply the Priority Demand.

Under the energy sector normalization process, the MINEM called on natural gas producers (including YPF) and ENARSA to establish the basic conditions of those supply agreements to be executed to the distribution of Natural Gas through Networks as of January 1, 2018. The MINEM stated in the notice of call that before the end of the extension period established in Law 27,200 regarding the public emergency that began in 2002, Law No. 24,076 regained effectiveness as it sets forth that the price of natural gas supply agreements will be that determined by the supply and demand free interaction.

In this sense, on November 29, 2017, natural gas producers (among them, YPF) and ENARSA, at the request of the MINEM, subscribed the Terms and Conditions for the Provision of Natural Gas to Gas Distributors through Networks (the Terms and Conditions ).

The Terms and Conditions establish the basic guidelines to assure the adequate supply of natural gas to the Distributors, and consequently to residential and commercial final consumers. Moreover, they establish the continuity

of the gradual and progressive path of reduction of subsidies, all within the framework of the process of normalization of the natural gas market, which occurs within the period of validity of such Terms and Conditions until December 31, 2019 considered as the transition period until the normalization indicated above.

The guidelines established in the Terms and Conditions include, among others, the recognition of the right to transfer to the gas tariff the cost of gas acquisition paid by users and consumers; establishes the available volumes that each producer and each basin must make available daily to the distributors for each month, who may express their lack of interest before a certain date set forth in the Terms and Conditions; establishes penalties for non-compliance for any of the parties regarding their obligation to deliver or take gas; establishes gas prices for each basin for the next two years, in US dollars, the parties being able to set prices lower than those established under the applicable free negotiations; establishes payment guidelines for the purchases made by the Distributors to producers; ENARSA assumes the obligation to supply the demand corresponding to areas reached by the subsidies of residential gas consumption contemplated in article 75 of Law 25,565 (corresponding to the areas of lower price of residential gas charged to users and consumers), during the period of Transition.

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The Terms and Conditions constitute the terms and conditions to consider in the negotiations of their respective individual agreements, without this being construed as an obligation. Additionally, the Terms and Conditions establish guidelines for early termination in the event of non-compliance by the parties. YPF fulfilled its commitment to sign supply agreements, according to the terms and conditions established in the Agreement.

On August 27, 2012, the Official Gazette published S.E. Resolution No. 1445/2012 of the Secretariat of Energy, according to considerations set by Decree No. 1,277/2012, which modified gas prices at the wellhead for compressed natural gas (CNG) which represents an increase of approximately 369% of the prices realized by the Company for such segment product.

On February 14, 2013, Resolution No. 1/2013 of the Commission was published in the Official Gazette. This resolution creates the Natural Gas Additional Injection Stimulus Program. Under this regulation, gas producing companies were invited to file with the Commission before June 30, 2013 projects to increase natural gas injection, in order to receive a compensation up to U.S.\$7.50 per mmBtu for all additional natural gas injected. These projects shall comply with minimum requirements established in Resolution No. 1/2013, and will be subject to consideration approval by the Commission, including a maximum term of five years, renewable at the request of the beneficiary, upon decision of the Commission. If the beneficiary company in a given month does not reach the committed production increase it will have to make up for such volumes not produced. In addition, the Commission may withdraw a previously approved proposal to increase the total injection of natural gas if some of the following events occur: (i) any omission, inaccuracy or distortion of information provided by a company participating in a project or during its execution; (ii) breach of the obligations set forth in Decree No. 1,277/2012 and its regulations or supplementary acts; (iii) breach by a company of its obligations under the program after notice of not less than 15 business days; (iv) if the import price is equal to or lower than the price of the additional natural gas injected for at least 180 days or (v) if the value of a company's supply contracts or invoices used in the monthly calculation corresponding to each month covered by the program had weighted average price decreases or unjustified amounts. On May 23, 2013, the Commission approved the project submitted by YPF. A similar program was created under Resolution No. 60/2013 of the Commission, as amended by Resolution No. 83/2013 of the Commission for gas producers that failed to file their natural gas additional injection program filings before the expiration date established by Resolution No. 1/2013 of the Commission. The compensation to be received under this new program varies from U.S.\$4.00 per mmBtu to U.S.\$7.50 per mmBtu, depending on the production curve reached by the applicable company. Additionally, a third stimulus program entered into effect under Commission Resolution No. 185/2015 for companies without any prior gas production in Argentina at the time of issuance of the resolution. Similar to the Gas Plan, companies with an approved program under this new resolution will receive compensation for the difference between the price obtained in the market for the sale of all their gas production and U.S.\$7.50 per mmBtu. The gas production subject to such compensation only applies to the production from areas acquired by companies with approved programs under either Resolution No. 1/2013 or Resolution No. 60/2013, as long as such production was computed under these programs as increased injection as opposed to base injection.

On May 18, 2016, MINEM Resolution No. 74/2016 created the Natural Gas New Projects Stimulus Program in order to incentivize natural gas production for companies submitting new natural gas projects that are not beneficiaries of the Natural Gas Additional Injection Stimulus Program or the Natural Gas Injection Stimulus for Companies with Reduced Injection created by Resolutions No. 1/2013 and 60/2013, respectively, of the former Commission. The submission of new projects, which must be approved by the Secretariat of Hydrocarbon Resources, may obtain a stimulus price of U.S.\$7.50/mmBtu.

The Natural Gas New Projects Program will be effective from the date of the publication of the resolution in the Argentine Official Gazette (May 18, 2016) until December 31, 2018. The requirements to be considered a new natural gas project are as follows: it must (i) come from an exploitation concession granted as a result of a discovery reported

after the effective date of Resolution No. 1/2013 of the former Commission; (ii) come from an exploitation concession of areas classified as Tight Gas or Shale Gas ; or (iii) belong to companies without natural gas injection registers which acquire an interest in areas belonging to companies registered in the Natural Gas Additional Injection Stimulus Program or the Natural Gas Injection Stimulus for Companies with Reduced Injection created by Resolutions No. 1/2013 and 60/2013, respectively, of the former Commission, but for which total injection coming from the areas in question, including the acquired areas, would have been zero during the period in which the selling company would have calculated its base injection.

On May 20, 2016, Decree No. 704/2016 was published, whereby the pending debt which were in Peso terms for the natural gas stimulus programs debt was cancelled in Argentine National Bonds nominated in US dollars and at an interest rate of 8% per annum maturing in 2020 ( BONAR 2020 US\$ ).

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Accordingly, On July 13, 2016, the Group received, under the Natural Gas Additional Injection Stimulus Program, BONAR 2020 US\$, with a face value of US\$ 630 million.

In addition, on September 21, 2016, under the Supply of Propane Gas for Undiluted Propane Gas Distribution Networks Agreement, the Group received BONAR 2020 US\$, with a face value of US\$ 12 million.

### **MINEM Resolution No. 97/2018**

On April 3, 2018, the Ministry of Energy and Mining published Resolution N° 97/2018 in the Official Gazette that approves the procedure for cancelation of the pending compensations under the Natural Gas Additional Injection Stimulus Program, the Natural Gas Injection Stimulus Program for Companies with Reduced Injection and the Natural Gas New Projects Program corresponding to 2017 natural gas injections (the Procedure).

Gas producing companies are invited to join the Procedure by filing a Form during 20 business days following the publication in the Official Gazette of the Resolution.

In order to determine the amount of the compensation, the Secretariat of Hydrocarbon Resources shall issue a Resolution of Compensation, calculated as follows:

1. 85%: the amount in USD calculated using the exchange rate at the time of injection of the natural gas.
2. 15%: the amounts in USD calculated using the exchange rate between the time of injection and the time of payment due or the exchange rate as of the date of the Resolution, as per corresponds.

The compensation shall be monthly paid in 30 equal and consecutive payments as from January 2019 using the exchange rate Comunicacion A 3500 Mayorista corresponding to each payment of each month.

Gas producing companies joining the Procedure shall waive all claims, legal actions and measures as well as accept the terms and conditions of payment compensations under the Procedure during the maximum period of 20 working days since the publication of the Resolution in the Official Gazette of the Republic of Argentina. As of the date of this annual report we are analyzing the necessary steps to comply with said Resolution.

### **MINEM Resolution No. 46/2017**

On March 6, 2017, the MINEM Resolution No. 46-E/2017 was published in the Official Gazette, which approved the Investment in Natural Gas Production from Non-Conventional Reservoirs Stimulus Program. The program was established in order to stimulate the investments in natural gas from non-conventional reservoirs in the Neuquina basin and will be in effect until December 31, 2021.

Resolution No. 46/2017 establishes compensation for the volume of non-conventional gas production from concessions located in the Neuquina basin included in the program. To be included in the program, the concessions must have a specific investment plan approved by the province's application authority and the Secretariat of Hydrocarbon Resources.

The compensation will be determined by deducting from the effective sales price obtained from sales to the internal market, including conventional and non-conventional natural gas, the minimum sales prices established by Resolution

No. 46/2017 each year, multiplied by the volumes of production of non-conventional gas. The minimum prices established by Resolution No. 46/2017 are U.S.\$7.50 per mmBtu for 2018, U.S.\$7.00 per mmBtu for 2019, U.S.\$6.50 per mmBtu for 2020 and U.S.\$6.00 per mmBtu for 2021.

Compensation from the program shall be paid, for each concession included in the program, 88% to the companies and 12% to the province corresponding to each concession included in the program.

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On November 2, 2017, Resolution MINEM 419-E/2017 was published and its Annex replaces the similar Annex of Resolution 46-E/2017. The new resolution modifies the previous one in the following aspects:

- a) It defines that the Initial Production to be computed will be the monthly mean Non-Conventional Gas production assessed for the period between July 2016 and June 2017 . Also, it states that the Production Included, to the effect of the compensation, shall be i) for the concessions with Initial Production lower than 500,000 m3/day, the total monthly production of Non-Conventional Gas coming from such Included Concession, to which the requesting company is entitled, and ii) for the concessions with Initial Production higher than 500,000 m3/day, the total monthly production of Non-Conventional Gas coming from such Included Concession, to which the requesting party is entitled, discounting the Initial Production.
- b) It modifies the definition of Effective Price, previously defined as the average price weighted by volume of total natural gas sales of each company in the domestic market , to the average price weighted by volume of total natural gas sales in the Argentine Republic that will be published by the Secretariat of Hydrocarbon Resources , regulating the guidelines to be followed for such calculation.
- c) A requirement to qualify for the Program is included, that is, that the investment plan submitted for each concession reaches a yearly mean production, in any consecutive period of twelve months before December 31, 2019, equal to or higher than 500,000 m3/day, and the obligation to reimburse the amounts of the compensation received (updated to reflect interest) corresponding to the concessions that do not reach the above mentioned production level, with the possibility that the Secretariat of Hydrocarbon Resources may require filing a surety bond to guarantee the eventual reimbursement of the compensations received by the participating companies, and retaining the power to suspend payments if such bond is not submitted.

On November 17, 2017, Resolution MINEM 447-E/2017 which extends the Stimulus Program to the non-conventional gas production from the Austral Basin was published. The only difference with respect to the Program applicable to the Neuquina Basin is that this resolution allows the Hydrocarbon Secretary to determine special technical conditions (such as initial production flow) that the production must meet in order to be considered non conventional gas and thus be suitable for the program.

*Tariffs*

On April 4, 2014, Resolution S.E. No. 226/2014 of the Argentine Secretariat of Energy was published in the Official Gazette. Under this resolution, the Secretariat of Energy set new prices for residential, commercial consumers and compressed natural gas consumers. Residential and commercial consumers that achieve certain consumption savings compared to prior years will be: (i) excluded from the price increase or (ii) subject to a lower price increase. Industrial users and power generation plants are excluded from the price increase. Consumers served by distributor Camuzzi Gas del Sur S.A., which is not an affiliate of YPF, or its sub-distributors, are excluded.

On November 17, 2014, Resolution No. 231/2014 of the Commission was published in the Official Gazette. Under this resolution, the price of compressed natural gas in service stations will be raised by the same percentage as the weighted average price within Argentina, excluding taxes, of super quality gasoline over 93 octane or of any product that replaces it in the future as provided for under the resolution.

After public hearings with respect to the tariff review were held on September 16, 17 and 18, 2016, MINEM issued Resolution No. 212/2016 on October 7, 2016 that set forth new TSEP (Transport System Entering Point) prices for natural gas and new natural gas tariff schedules for users who purchase gas from distributors.

Resolution No. 212/2016 instructs the Secretariat of Hydrocarbons to, until TSEP gas prices are established by the free interaction of supply and demand, submit to the MINEM for its approval a proposal of natural gas TSEP prices corresponding to each half-year period, starting April 1 and October 1 of each year, based on the values contemplated in the subsidy reduction scheme, adjusting the target price for each half-year period, as per the market conditions at the time of elaboration of the proposed prices. Such a proposal shall be submitted 30 days in advance at the beginning of each half-year period, and shall be submitted with a report containing the basis of the adjustments or modifications proposed.

Resolution No. 212/2016 also instructs ENARGAS to provide for any such measures as required so that the final amount, including taxes of bills issued by distributors of utility gas through networks across the country, that users are required to pay based on consumptions after the effective date of the TSEP gas prices established in this resolution, does not exceed maximum amounts equivalent to the percentages below, considered as incremental percentages over the total amount, including taxes, of the bill issued to the same user for the same billing period in the previous year:

Users R1-R23: 300%;

Users R31-R33: 350%;



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Users R34: 400%; and

Users SGP: 500%.

It further sets forth that the increase limits established above on the final invoiced amounts shall apply, provided that the total amount of the bill exceeds the amount of Ps. 250.

On such same date, ENARGAS published Resolutions No. 4044/2016, 4045/2016, 4046/2016, 4047/2016, 4048/2016, 4049/2016, 4050/2016, 4051/2016, 4052/2016, 4053/2016 and 4054/2016, whereby it approved the tariff schedules for the users in the following license areas: Metrogas S.A., Gasnea S.A., Gas Natural Ban S.A., Camuzzi Gas Del Sur S.A., Camuzzi Gas Pampeana S.A., Distribuidora de Gas Cuyana S.A., Distribuidora de Gas del Centro S.A., Gasnor S.A., Litoral Gas S.A., Transportadora de Gas del Norte S.A. and Transportadora de Gas del Sur S.A.

On February 16, 2017, MINEM published Resolution No. 29-E/2017, through which it called a public hearing to be held on March 10, 2017 to consider new natural gas prices at TSEP that would be determined to apply to the half-year period commencing in April 2017. The hearing took place, and the final report by the Secretariat of Hydrocarbon Resources was issued to the MINEM; See [New gas prices at the TSEP and Metrogas transition tariff schemes](#).

## **Tariff renegotiation**

### **Transitional Agreement 2017**

On March 30, 2017, Metrogas executed a Transitional Agreement with the MINEM and the Ministry of Finance providing for the temporary adjustment of prices and tariffs for the Natural Gas Distribution Public Service, the specific impact of the amounts provided therein until the subscription of the Memorandum of Agreement for Comprehensive Contractual Renegotiation and the entry into force of the definitive tariff schemes resulting from the Comprehensive Tariff Review (the CRT ). The 2017 Transitional Agreement is supplementary to the 2008 Transitional Agreement and amends the 2017 Transitional Agreement and the 2016 Transitional Agreement previously executed.

The 2017 Transitional Agreement, which is not subject to ratification by the PEN establishes a transitional tariff regime as of April 1, 2017, consisting of the readjustment of tariffs based on the guidelines necessary to maintain the continuity of the service for the purpose of allowing Metrogas to meet its operating and maintenance, administration and marketing expenses, those expenses corresponding to the execution of the mandatory investment plan determined by the ENARGAS and to comply with the respective payment obligations, maintaining its chain of payments for the purpose of ensuring the continuity of the regular provision of the public service under their charge until the entry into force of the tariff regime resulting from the Memorandum of Agreement for a Contractual Renegotiation.

Likewise, the 2017 Transitional Agreement provides for the transfer of the impact of changes in tax regulations pending resolution, except for the, and incorporates a Mandatory Investment Plan to which Metrogas is committed.

Lastly, Metrogas will not be authorized to distribute dividends without previously proving to ENARGAS the full compliance with the Mandatory Investment Plan.

On March 30, 2017, the MINEM instructed the ENARGAS, through Resolution No. 74 E/2017, to put into effect the tariff schemes resulting from the CRT process.

In this regard, it set forth that for the gradual and progressive implementation of this measure, the ENARGAS should apply on a progressive basis, the rate increases resulting from the CRT as follows: 30% of the increase, from April 1,

2017, 40% of the increase, as of December 1, 2017, and the remaining 30%, as of April 1, 2018.

Moreover, and for cases in which the corresponding Memorandum of Agreement for a Contractual Renegotiation had not entered into force, it instructed the ENARGAS to apply to the Licensees (including Metrogas) a transitory tariff adjustment because of the CRT.

On March 31, 2017, ENARGAS Resolution No. 4,356/2017 was published in the Official Gazette through which the tariff schemes resulting from the Metrogas CRT, effective as of April 1, 2017 and the temporary tariff schemes applicable to Metrogas users were approved. Through differentiated tariffs, ENARGAS Resolution No. 4,356 / 2017 determined tariff schemes for residential users who recorded savings in their consumption equal to or greater than 15% with respect to the same period of 2015, as well as those that would apply to the beneficiaries of the Social Tariff (Resolutions No. 28/2016 of the MINEM and ENARGAS No. I-2,905/2014 and No. 3,784/2016) and the Entidades de Bien Público (Public Welfare Entities) (Law No. 27,218).

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The tariff schemes corresponding to beneficiaries of the Social Tariff were rectified by ENARGAS Resolution No. 4,369/2017. The billing resulting from the application of the new transitory tariff schemes must respect the limits established in Article 10 of MINEM Resolution No. 212/2016, and therefore the criteria of ENARGAS Resolution No. I-4,044/2016 are maintained.

Likewise, ENARGAS Resolution No. 4,356/2017 overruled ENARGAS Resolutions No. I-2,407/12 and No. I-3,249/15 that enabled the collection of a fixed amount per invoice under the operation of the Fund for Gas Distribution Consolidation and Expansion Works ( FOCEGAS ).

In addition, ENARGAS Resolution No. 4,356/2017 approved: (i) the technical economic studies of the Company's CTR, (ii) the non-automatic Semi-Annual Adjustment Methodology to become effective jointly with the License Readjustment Memorandum of Agreement and (iii) the Metrogas Investment Plan for the next five-year term.

On October 24, 2017, and through ENARGAS Resolution No. 74/2017, a public hearing was called for November 15, 2017 in order to consider the transitory tariff adjustment effective as of December 1, 2017, corresponding to Metrogas.

On December 1, 2017, the Official Gazette published: (i) ENARGAS Resolution No. 131/2017 that ordered (a) to declare the validity of the Public Hearing called by ENARGAS Resolution No. 74/2017, (b) approve Metrogas temporary tariff scheme applicable as of December 1, 2017; and (c) approve new values for the Rates and Charges received by Metrogas for Additional Services; and (ii) ENARGAS Resolution N° 132/2017 that provides for a bonus to be implemented by Metrogas in favor of certain users who (a) record savings in their consumption; or (b) are beneficiaries of the Social Tariff.

On January 31, 2018, ENARGAS Resolution No. 249/2018 was published in the Official Gazette, which called for a public hearing to be held on February 22, 2018 to consider (i) the application of the Semi-Annual Tariff Adjustment Methodology, if applicable, for the adjustment of Metrogas tariffs; (ii) the application of the transfer to tariffs of the price of the purchased gas; and (iii) methodological alternatives for a more predictable billing of residential users consumption.

Memorandum of Understanding for the Natural Gas Distribution License Contract (also known as Memorandum of Understanding for the Comprehensive Contractual Renegotiation )

On March 30, 2017, and within the framework of the renegotiation process of the public service contracts established by the Emergency Law, its extensions and Decrees No. 367/2016 and N° 2/2017, Metrogas subscribed with the MINEM and with the Ministry of Finance, a Memorandum of Agreement for the Adaptation of the Natural Gas Distribution License Agreement (which contains the terms of the comprehensive renegotiation and conditions for the adjustment of the License Agreement. The Memorandum of Agreement is based on the 2008 Transitional Agreement, the 2014 Transitional Agreement, the 2016 Transitional Agreement and the 2017 Transitional Agreement.

The provisions contained in the Memorandum of Agreement, once it has entered into full force and effect after being ratified by the PEN, will be applied during the contractual period ranging from January 6, 2002 and the termination of the License Agreement.

A series of guidelines to be contemplated by the CRT process are established in the terms provided for therein.

The Metrogas tariff scheme resulting from the Integral Tariff Review according to the indicated guidelines will be applicable once all the procedures provided for the entry into force of the Memorandum of Agreement has been

fulfilled. The CTR will become in full force and effect not later than December 31, 2017. In the event that ENARGAS provides for the phased and progressive application of the tariff increase resulting from the Comprehensive Tariff Review, the application of the last step may not exceed April 1, 2018.

As a condition prior to ratification, the Memorandum of Agreement for the Comprehensive Contractual Renegotiation provides for the suspension and withdrawal of all claims, appeals and complaints filed, pending or in the process of being executed, whether administrative, arbitral or judicial, in the Argentine Republic or abroad, which are founded or linked to the facts or provided measures, with respect to the License Agreement, as of the Emergency Law and/or in the annulment of the PPI Index (Producer Price Index of the United States of America). Moreover, the Memorandum of Agreement must be ratified by the Shareholders Meeting of Metrogas, so that the PEN issues the Decree ratifying the terms of the Memorandum of Agreement. On April 27, 2017, the Shareholders Meeting of Metrogas ratified the Memorandum of Agreement for the Adaptation of the Natural Gas Distribution License Agreement.

Finally, the Memorandum of Agreement provides for the Company's commitment to make, during the effective term of the License, plus its potential ten-year extension and within the area of its License, additional sustainable investments equivalent to the amount of the award rendered in the arbitration proceedings in re: BG Group Plc. vs. The Argentine Republic (UNC 54 KGA) with the proportional abatement percentage that would have been established in the payment agreement and excluding the amounts corresponding to the default interest on the payment of the award. The amount and the plan for additional investments will be determined by ENARGAS at the proposal of the Company and they will not be included in the rate base.

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The Memorandum of Agreement is subject to the controls established by the Emergency Law in order for the PEN to issue the ratification Decree. On March 28, 2018 Decree No. 252/2018 was published in the Official Gazette by which the PEN ratified the Memorandum of Agreement. Also, Resolution ENARGAS No. 300/2018 was published on that day, with the new tariffs scheme applicable as from April 1, 2018.

**Temporary economic assistance**

MINEM Resolution No. 312 E/2016 was published in the Official Gazette, on December 30, 2016, which ordered a new temporary economic assistance to the Licensees of the Natural Gas Distribution Service through Networks for the period April-September 2016, for the purpose of funding the mandatory investments established (with respect to Metrogas) in ENARGAS Resolutions No. 3,726/2016 and No. 4,044/2016, and the payment to gas producers; all of which is on account of the CTR.

Under the terms of the Resolution, the transfer of the amounts assigned to Metrogas of 759 was applicable as long as, at the discretion of the ENARGAS, the financial situation of Metrogas that gave rise to the assistance was maintained taking into account the availability of funds to meet its investment obligations and payments to gas producers.

For the release of the funds corresponding to the temporary financial assistance, Metrogas had to file a sworn statement with the ENARGAS, in the terms of ENARGAS Note No. 106/2017, on the allocation to be given to the amounts required. In accordance with the ENARGAS criteria, if the sworn statements meet the requirements of MINEM Resolution No. 312 E/2016, they would be sent to the MINEM Hydrocarbons Secretariat in order to arrange for the transfer of the assistance. Likewise, the Resolution set forth that the Licensees could not distribute dividends under the terms of Resolution No. 31/2016 of the MINEM.

On March 31, 2017, Metrogas received the amount of 759 corresponding to MINEM Resolution No. 312 E/2016.

**New gas prices at the TSEP and Metrogas transition tariff schemes**

Through Resolution No. 74 E/2017, the MINEM determined the new natural gas prices at the TSEP applicable from April 1, 2017 to the categories of users indicated therein. Moreover, it determined the new prices at the TSEP, subsidized for natural gas Residential users who register a saving in their consumption equal or superior to fifteen percent (15%) with respect to the same period in 2015. These new prices in the TSEP have been contemplated in ENARGAS Resolution No. 4,356/2017.

MINEM Resolution No. 474-E/2017 determined the new Gas prices at the TSEP as of December 1, 2017. In addition, a 10% discount is established on the Gas price for all categories of Residential users who register a saving in their consumption equal to or greater than 20% with respect to the same period in 2015, and it establishes that the bonus corresponding to the Social Tariff beneficiaries will be equivalent to: i) 100% of the Natural Gas price on the consumption block base determined by Resolution; and ii) 75% of the price of Natural Gas on a surplus consumption block of equal volume to that determined in paragraph i). Consumptions over and above the block indicated in paragraph ii) will be paid by 100%. It also establishes that the billing resulting from the application of the new tariff schedules must respect the limits established in Article 10 of Resolution No. 212 dated October 6, 2016 of the MINEM. These new prices in the TSEP have been contemplated in the ENARGAS Resolution No. 131/2017, which approved the Metrogas temporary tariff scheme, applicable as of December 1, 2017.

**Procedure for the compensation of the lower revenues that the Distributors receive from their users for benefits and / or bonuses and for higher costs of unaccounted gas.**

MINEM Resolution No. 508-E/2017, published on December 29, 2017, established the procedure for the compensation of the lower revenues that the Licensees of the Natural Gas Distribution Service through Networks receive from their users, as a product of: (i) the application of benefits and/or discounts to users arising from the regulations in force in the tariff area of the distribution service of natural gas through networks, and (ii) the higher UNG costs compared to those established for its recognition in the rates, applicable as of January 1, 2018.

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Note from the ENARGAS on deferred collection to residential users

On August 25, 2017, the ENARGAS issued some Notes instructing the Licensees of the Gas Distribution Service ( Distributors ), by virtue of the presentation received from the MINEM, and in relation to the invoices to be issued from August 25, 2017 and until October 31, 2017 for residential users, to contemplate a fifty percent (50%) payment deferral of the total amount of the settlement corresponding to the billing period, without any interest. According to this instruction, the amounts subject to deferral must be included in the first invoice issued after October 31, 2017 in accordance with the guidelines related to the issuance of Public Service Settlement receipts for bimonthly invoicing with monthly payment obligations currently in force, i.e., in two equal and consecutive monthly installments. Such deferral is not applicable to residential users who are beneficiaries of the Social Tariff.

The Notes sent by the ENARGAS also contemplate that, if there is a financial impact on the Distributors' income by virtue of such deferral, such impact will be timely evaluated and assumed by the Argentine Government through the corresponding budgetary management.

On September 20, 2017, YPF submitted a note to the MINEM (with a copy to ENARGAS), requesting the intervention of the MINEM so that it adopts the necessary measures to prevent the instruction given by the ENARGAS from being misinterpreted by some Distributors to place on the Producers, such as YPF, the financial impact that such a measure could cause, through the unilateral postponement of the payment obligations by the Distributors. As of the date hereof, the note submitted by YPF is yet to be answered.

As a result of the changes introduced through MINEM Resolution No. 474 E/2017 and ENARGAS Resolutions No. 131/2017 and No. 132/2017, and the guidelines established in the Terms and Conditions MINEM, Resolution No. 508-E / 2017 was published on December 29, 2017, which establishes the procedure for the compensation of the lower revenues that the Licensees of the Natural Gas Distribution Service through Networks receive from their users, as a result of: (i) the application of benefits and / or discounts to users resulting from the regulations in force regarding the tariffs applicable to the natural gas distribution service through networks; and (ii) the higher costs of the Unaccounted Natural Gas ( UNG ) with respect to those established for its recognition in the tariffs.

In accordance with the compensation procedure, the Distribution Licensees must inform to the ENARGAS within the terms established therein and based on the annualized monthly consumption and as a sworn statement, the amounts required to compensate the aforementioned differences. The same information regime is adopted in relation to UNG.

Thus, in order to calculate compensations for the amount that they do not receive for the discounts in billing as well as for the UNG differences, compensation is established resulting from the difference between the purchase price to the natural gas producer and the sale to its customers.

Benchmark prices for the butane commercialization chain

On April 5, 2017, the Secretariat of Hydrocarbon Resources published Resolution No. 56-E/2017 in the Official Gazette, establishing new maximum benchmark prices for the different segments of the butane commercialization chain to be bottled in 10, 12 and 15 kg bottles under the Household Program (Decree No. 470/2015 and former Energy Secretariat Resolution No. 49/2015), and modifying the benchmark prices established in former Energy Secretariat Resolution No. 70/2015. The new maximum benchmark prices for the Company are Ps. 2,568/TN for butane and Ps. 2,410/TN for propane. For fractionators such as YPF GAS S.A., the prices established by Resolution No. 56-E/2017 are Ps. 63.89 for 10 kg bottles, Ps. 76.67 for 12 kg bottles and Ps. 95.84 for 15 kg bottles.

On June 7, 2017, the Secretariat of Hydrocarbon Resources published Resolution No. 75/2017 in the Official Gazette, which modifies the regulations applicable to the Household Program (former Energy Secretariat Resolution No. 49/2015) and provides that the adjustment of benchmark prices applicable to the different segments of the butane commercialization chain to be bottled in 10 and 12 kg bottles will not be implemented automatically in quarterly periods. Instead, those adjustments will be made at the discretion of the Secretariat of Hydrocarbon Resources in its capacity as enforcement authority of the Household Program. In addition, the resolution establishes that the adjustment of benchmark prices for LPG producers and fractionators on account of the Comprehensive Tariff Review established by the Household Program in its regulations will take place only after the prior analysis of cost variations and their incidence, and taking into account regional, distribution and logistical factors.

MINEM Resolution No. 287-E/2017, published on December 1, 2017, established new maximum benchmark prices and compensations for butane and propane producers effective from December 1, 2017, and introduced amendments to the Annex to the Regulation of the Bottle-to-Bottle Program approved by Resolution No. 49/2015, among which, it is prohibited to charge the distributors for any additional service whatever its denomination, if in doing so the maximum benchmark prices and the maximum allowed deviations are exceeded.



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*Natural gas export administration and domestic supply priorities*

In March 2004, the Argentine Secretariat of Energy issued S.E. Resolution No. 265/04 adopting measures intended to ensure the adequate supply of natural gas to the domestic market and regulate its consequences on electricity wholesale prices. Among the measures adopted were:

the suspension of all exports of surplus natural gas;

the suspension of automatic approvals of requests to export natural gas;

the suspension of all applications for new authorizations to export natural gas, filed or to be filed before the Argentine Secretariat of Energy; and

the authorization to the Undersecretariat of Fuels to create a rationalization plan of gas exports and transportation capacity.

In March 2004, the Undersecretariat of Fuels, pursuant to the authority given to it under S.E. Resolution No. 265/04, issued S.S.C. Regulation No. 27/04 establishing a rationalization plan of gas exports and transportation capacity. Among other things, S.S.C. Regulation No. 27/04 established a limit on natural gas export authorizations, which, absent an express authorization by the Undersecretariat of Fuels, may not be executed for volumes exceeding exports registered during 2003.

In June 2004, the Argentine Secretariat of Energy issued S.E. Resolution No. 659/04, which established a new program to assure natural gas supply to the domestic market (which substitutes for the program created by S.S.C. Regulation No. 27/04). Under S.E. Resolution No. 659/04 (amended by S.E. Resolution No. 1,681/04), natural gas exports may be restricted due to shortages of natural gas in the domestic market, because exporting producers may be required to supply additional volumes of natural gas to the domestic market beyond those that they are contractually committed to supply. The export of natural gas under current export permits is conditioned on the fulfillment of additional supply requirements imposed on exporting producers by governmental authorities.

This program was further amended and supplemented by S.E. Resolution No. 752/05 issued by the Argentine Secretariat of Energy in May 2005, which further reduced the ability of producers to export natural gas, and created a mechanism under which the Argentine Secretariat of Energy may require exporting producers to supply additional volumes to domestic consumers during a seasonal period ( Permanent Additional Supply ), which volumes of natural gas are also not committed by the exporting producers. Based on the provisions of Rule No. 27/04, S.E. Resolution No. 659/04 and S.E. Resolution No. 752/05, the Argentine Secretariat of Energy and/or the Undersecretariat of Fuels have instructed us to redirect natural gas export volumes to the internal market, thereby affecting natural gas export commitments. We have challenged the validity of the aforementioned regulations and resolutions, and have invoked the occurrence of a force majeure event under the corresponding natural gas export purchase and sale agreements. The counterparties to such agreements have rejected our position. See Item 8. Financial Information Legal Proceedings.

S.E. Resolution No. 752/05 also establishes (i) a special market, open and anonymous, for compressed natural gas stations to purchase natural gas under regulated commercial conditions, with the demand being ensured by the Argentine Secretariat of Energy through Permanent Additional Supply required of exporting producers, and (ii) a

mechanism of standardized irrevocable offers for electric power generators and industrial and commercial consumers to obtain supply of natural gas, with the demand being ensured by the Argentine Secretariat of Energy through the issuance of the Permanent Additional Supply mentioned above.

Pursuant to the standardized irrevocable offers procedure mentioned above, which operates at the MEG, any direct consumer may bid for a term gas purchase at the export average gas price, net of withholdings by basin. The volume necessary to satisfy the standardized irrevocable offers which have not been satisfied will be required as a Permanent Additional Supply only until the end of the seasonal period during which the unsatisfied requests should be made (October April or May September). Such Permanent Additional Supply will be requested from the producers that export gas and that inject the natural gas from the basins that are able to supply those unsatisfied irrevocable offers. S.E. Resolution No. 1886/06, published on January 4, 2007, extended the term of effectiveness of this mechanism of standardized irrevocable offers until 2016, and empowered the Undersecretariat of Fuels to suspend its effectiveness subject to the satisfaction of internal demand of natural gas achieved by means of regulations, agreements or due to the discovery of reserves.

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By means of S.E. Resolution No. 1329/06, later supplemented by S.S.C. Note No. 1011/07, the Argentine Secretariat of Energy required producers to give first priority in their injections of natural gas into the gas pipelines to certain preferential consumers and obligated transportation companies to guarantee these priorities through the allocation of transportation capacity. In general, these regulations subordinate all exports of natural gas to the prior delivery of natural gas volumes that are sufficient to satisfy domestic market demand.

Also, beginning during the severe Argentine winter in 2007 and continuing thereafter, we and most gas producers, as well as the transportation companies in Argentina, received instructions from the government to decrease exports, except for certain volumes addressed to satisfy Chilean residential consumption and other specific consumption.

National Decree No. 893/2016, dated July 25, 2016, determined that MINEM would be empowered to regulate the award of export permits for the following purposes: i) to deliver assistance with natural gas emergency situations of foreign countries, and ii) to replace natural local transport restrictions by means of utilizing foreign transportation infrastructure to ease transportation of natural gas within the Argentine market and allow for an increase in local production.

On January 8, 2017, export duties on hydrocarbon exports established by Law No. 26,732 ceased to be enforceable. Thereafter, there will be no export duties on natural gas exports.

On January 13, 2017, MINEM published Resolution No. 8/2017 regulated National Decree No. 893/2016, establishing an especial procedure to grant natural gas export permits subject to import commitments. Solicitors for both types of permits will have to commit to import the volumes of natural gas exported and to indemnify the Argentine government for breaching such obligation, including the payment of 150% of the import costs incurred by the Argentine government to replace the outstanding natural gas. Permits would be extended for a maximum period of two years and are subject to possible termination in the event that public interest makes it convenient for local market supply in accordance with MINEM's criteria.

On November 27, 2017, MINEM published Decree No. 962/2017 in the Official Gazette, which, among other aspects, modifies Article 3 of the Regulatory Decree of the gas law, establishing the following principles for export authorizations: 1) export authorizations will be issued by the MINEM once the applications have been evaluated; 2) the export agreements that imply the construction of new facilities and/or new connections to the gas pipelines, or the use of any of the existing systems, or other transportation alternatives, will be approved by the MINEM with the intervention of ENARGAS; 3) the authorizations issued by the MINEM may provide for the export of gas surplus to the amounts established therein, provided they are subject to interruption when there are internal supply problems.

In this case, it will not be necessary to obtain the approval of each surplus export transaction in the authorization, only to submit to ENARGAS, for informative purposes only, the respective contract evidencing the existence of a condition relating to the possibility of interruption should arise and the absence of compensation in case of such interruption. The modifications introduced by Decree No. 962/2017 do not modify the regime of temporary export permits subject to export commitments provided for in Decree No. 893/2016.

*Liquefied petroleum gas*

Law No. 26,020, enacted on March 9, 2005, sets forth the regulatory framework for the industry and commercialization of LPG. This law regulates the activities of production, bottling, transportation, storage, distribution, and commercialization of LPG in Argentina and declares such activities to be of public interest. Among other things, the law:

creates the registry of LPG bottlers, obliging LPG bottlers to register the bottles of their property;

protects the trademarks of LPG bottlers;

creates a reference price system, pursuant to which the Argentine Secretariat of Energy shall periodically publish reference prices for LPG sold in bottles of 45 kilograms or less;

requires the Argentine Secretariat of Energy to comply with the following tasks: (i) create LPG transfer mechanisms, in order to guarantee access to the product to all the agents of the supply chain; (ii) establish mechanisms for the stabilization of LPG prices charged to local LPG bottlers; and (iii) together with the CNDC, analyze the composition of the LPG market and its behavior, in order to establish limitations on market concentration in each phase, or limitations to the vertical integration throughout the chain of the LPG industry (such limitations apply to affiliates, subsidiaries and controlled companies);

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grants open access to LPG storage facilities; and

creates a fiduciary fund to finance bottled LPG consumption for low-income communities in Argentina and the extension of the natural gas distribution network to new areas, where technically possible and economically feasible. The fiduciary fund is funded through the following mechanisms: (i) penalties established by Law No. 26,020, (ii) assignments from the General State Budget, (iii) funds from special credit programs that may be arranged with national or international institutions, and (iv) funds that may be assessed by the Argentine Secretariat of Energy on participants in the LPG industry.

The Argentine Secretariat of Energy established, through several subsequent resolutions, reference prices applicable to sales of LPG bottles of less than 45 kilograms, and to sales of bulk LPG exclusively to LPG bottlers. Also, the Argentine Secretariat of Energy approved the method for calculating the LPG export parity, to be updated monthly by the Undersecretariat of Fuels. In 2007, the Argentine Secretariat of Energy increased the LPG volumes to be sold to bottlers at the reference prices set forth in the unconventional above mentioned resolutions.

Disposition No. 168/05 of the Undersecretariat of Fuels requires companies intending to export LPG to first obtain an authorization from the Argentine Secretariat of Energy. Companies seeking to export LPG must first demonstrate that the local demand is satisfied or that an offer to sell LPG to local demand has been made and rejected.

On September 19, 2008, the Secretariat of Energy and Argentine LPG producers entered into the Complementary Agreement which, among other objectives, seeks to stabilize the price of LPG in the domestic market. The Complementary Agreement applies only to LPG sold to bottlers that declare their intention to bottle such LPG in LPG bottles of 10, 12 or 15 kilograms. The Complementary Agreement requires LPG producers to supply LPG bottlers with a prescribed volume and accept the price per ton set forth in the Complementary Agreement. The Complementary Agreement was then extended in the following years until 2015 with certain modifications in quantities and prices to be provided every year.

On April 7, 2015, Resolution No. 73 of the Argentine Secretariat of Energy terminated the fiduciary agreement to which YPF was a party as a natural gas producer, contributing funds for the payment of compensation for LPG producers and bottlers. As a result, natural gas producers that were parties to the Complementary Agreement are no longer required to contribute funds. At the same time, a new program for the provision of bottled LPG at reference prices was established by Decree No. 470/2015 dated March 31, 2015. This decree established that LPG producers and bottlers provide LPG at reference prices in the domestic market, gradually increasing the volumes provided in 2014.

This new program for the provision of bottled LPG has been modified by different succeeding resolutions which modified the reference prices and the methodology for reference price future updates, among other changes. These resolutions are: Hydrocarbon Secretary Resolution No. 56-E/2017, No. 75/2017 and MINEM Resolution No. 287-E/2017.

*Electricity*

By means of Decree No.134/2015, published in December 2015, the Executive Branch declared the National Electric System Emergency through December 31, 2017. This decree instructs the Minister of Energy to develop and propose measures and to ensure adequate power supplies.

The following regulations were issued by the Ministry of Energy and its Secretariat of Electric Power ( SEE ) as measures to the National Electric System Emergency among others: MINEM No.6/2016; SEE No.21/2016; SEE

No.22/2016; SEE No.19/2017 and SEE No.256/2017.

Through Resolution No. 06/2016, published in January 2016, MINEM established new seasonal reference prices of power and energy in the MEM from February 1, 2016 to April 30, 2016. The resolution also establishes a stimulus plan, with reference prices for residential consumers that reduce their consumption over the same month in 2015, and a social tariff.

Through Resolution SEE No. 21/2016, dated February 2016, the Secretariat of Electric Power called for a public bid for the installation of new thermic power generation and associated electric energy production that may confirm availability for summer 2016/2017, winter 2017 and summer 2017/2018.

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Through Resolution No. 41/2016, published in January 2016, which modifies Resolution No. 06/2016, MINEM established new seasonal reference prices of power and energy in the MEM from May 1, 2016 to October 31, 2016. It also confirms the applicability of the stimulus plan and social tariff until October 31, 2016.

Through Resolution No. 20/2017, published in January 2017, MINEM established, among other things, new seasonal reference prices of power and energy in the MEM from February 1, 2017 to April 30, 2017.

National Decree No. 531/2016, dated March 31, 2016, regulates Law No. 27,191 (regarding the national incentive for the use of renewable sources to generate electricity) and, among other things, establishes that big consumers shall contract for or co-generate renewable energy to comply with the obligation to consume 8% of its electricity from renewable sources, by December 2017. If such requirement is not met, the big consumers will be punished with a fine equal to the variable cost of producing the unmet electricity by a thermos-electrical power plant with imported gasoil fuel.

Argentine Secretariat of Electric Power Resolution No. 22/2016, dated March 30, 2016, modified Resolution No.482/2015, adjusting the remuneration components for power generators that adhered to Resolutions No. 95/2013, 529/2014 and 482/2015, retroactively to February 2016.

MINEM Resolution No. 41/2016, dated April 13, 2016, establishes new prices on the natural gas at TSEP for each basin which would then be acquired for electric generation purposes and therefore commercialized within the MEM or generally destined to the satisfy the electricity distribution services.

SEE Resolution No.420/2016, published on November 2016, called for projects which may contribute to the electric market cost reduction and the increase in the Argentine electric system reliance.

Through Resolution No. 19/2017, published in January 2017, MINEM, through its Secretariat of Electric Power established a new set of prices for installed electricity generation facilities for any new contracts regarding guaranteed energy offers. Prices have been dollarized and represent an increase with respect to those in force in 2016. Resolution No. 19/2017 also determined a stimulus mechanism towards operative efficiency.

Through Resolution No. 256/2017, published in April 2017, MINEM established, among other things, new seasonal reference prices of power and energy in the MEM from May 1, 2017 until October 31, 2017.

Through Resolution SEE No. 287/2017, dated May 2017, within the framework of Resolution No. 420/2016 the Electric Power Secretariat established a public bid for projects willing to sell electricity produced by co-generation or close cycle projects.

Through Resolution No.1091/2017, published in November 2017, MINEM established, among other things, new seasonal reference prices of power and energy in the MEM from November 1, 2017 to April 30, 2018. It also establishes the Social Tariff Subsidy and the Stimulus Plan discounts for the period running from December 1, 2017 through April 30, 2018.

Electricity Secretary Resolution 926-E/2017, dated October 17, 2017 authorized CAMESA the signature of purchase power agreements for YPF Energía Eléctrica S.A. co-generation project in La Plata, Buenos Aires Province and YGEN Eléctrica S.R.L. close cycle project in El Bracho, Province of Tucumán, awarded in Resolution No. 287 public bid framework.

*Argentine Environmental Regulations*

The enactment of Articles 41 and 43 in the National Constitution, as amended in 1994, as well as new federal, provincial and municipal legislation, has strengthened the legal framework dealing with damage to the environment. Legislative and government agencies have become more vigilant in enforcing the laws and regulations regarding the environment, increasing sanctions for environmental violations.

Under the amended Articles 41 and 43 of the National Constitution, all Argentine inhabitants have both the right to an undamaged environment and a duty to protect it. The primary obligation of any person held liable for environmental damage is to rectify such damage according to and within the scope of applicable law. The federal government sets forth the minimum standards for the protection of the environment and the provinces and municipalities establish specific standards and implementing regulations.

Federal, provincial and municipal laws and regulations relating to environmental quality in Argentina affect our operations. These laws and regulations set standards for certain aspects of environmental quality, provide for penalties and other liabilities for the violation of such standards, and establish remedial obligations in certain circumstances.



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In general, we are subject to the requirements of the following federal environmental regulations (including the regulations issued thereunder):

National Constitution (Articles 41 and 43);

Law No. 25,675 on National Environmental Policy;

Law No. 25,612 on Integrated Management of Industrial and Service Industry Waste;

Law No. 24,051 on Hazardous Waste;

Law No. 20,284 on Clean Air;

Law No. 25,688 on Environmental Management of Waters;

Law No. 25,670 on the Management and Elimination of Polychlorinated Biphenyls;

Criminal Code; and

the Argentine Civil and Commercial Code, which sets forth the general rules of tort law. These laws address environmental issues, including limits on the discharge of waste associated with oil and gas operations, investigation and cleanup of hazardous substances, workplace safety and health, natural resource damages claims and toxic tort liabilities. Furthermore, these laws typically require compliance with associated regulations and permits and provide for the imposition of penalties in case of non-compliance.

In addition, we are subject to various other provincial and municipal regulations, including those relating to gas venting, oil spills and well abandonment, among other matters.

By Resolution No. 404/94, the Argentine Secretariat of Energy amended Resolution No. 419/93, and created the Registry of Independent Professionals and Safety Auditing Companies (*Registro de Profesionales Independientes y Empresas Auditoras de Seguridad*), which may act with respect to areas of hydrocarbons storage, oil refineries, gas stations, fuel commercialization plants and plants for fractionation of LPG in containers or cylinders. The Resolution provides that external audits of oil refineries, gas stations and all fuel storage plants must be carried out by professionals registered in the Registry. Domestic fuel manufacturing companies and companies that sell fuels are prohibited from supplying these products to any station failing to comply with its obligations. Penalties for failure to perform the audits and remedial or safety tasks include the disqualification of plants or gas stations. In addition, a set of obligations was established regarding underground fuel storage systems, including a mechanism for instant notification in cases of loss or suspicion of loss from the storage facilities.

On July 19, 2001, the Secretariat of Environmental Policy of the province of Buenos Aires issued Resolution No. 1037/01 ordering us to clean up certain areas adjacent to the La Plata refinery. The resolution was appealed through an administrative procedure which has not yet been resolved. Nevertheless, we have commenced certain actions in order to identify potential technical solutions for the treatment of the historical contamination, while reserving that the remediation must be made by the parties responsible for the environmental damage. Under current law, the Argentine government has the obligation to indemnify us against any liability and hold us harmless for events and claims arising prior to January 1, 1991, according to the Privatization Law.

During 2005, the Argentine Secretariat of Energy, by means of Resolution No. 785/05, created the National Program of Hydrocarbons Warehousing Aerial Tank Loss Control, a measure aimed at reducing and correcting environmental pollution caused by hydrocarbons warehousing-aerial tanks.

The description of the material Argentine environmental regulations is only a summary and does not purport to be a comprehensive description of the Argentine environmental regulatory framework. The summary is based upon Argentine regulations related to environmental issues as in effect on the date of this annual report, and such regulations are subject to change.

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**Table of Contents****Taxation**

Holders of exploration permits and production concessions are subject to federal, provincial and municipal taxes and regular customs duties on imports. The Hydrocarbons Law grants such holders a legal guarantee against new taxes and certain tax increases at the provincial and municipal levels, except in the case of a general increase in taxes.

Pursuant to Sections 57 and 58 of the Hydrocarbons Law, holders of exploration permits and production concessions must pay an annual surface fee that is based on acreage of each block and which varies depending on the phase of the operation, i.e., exploration or production, and in the case of the former, depending on the relevant period of the exploration permit. On October 17, 2007, the Official Gazette published Executive Decree No. 1,454/07, which significantly increased the amount of exploration and production surface fees expressed in Argentine pesos that are payable to the different jurisdictions where the hydrocarbon fields are located. Law No. 27,007 published in the Official Gazette on October 31, 2014 updated amounts that must be paid pursuant to Sections 57 and 58 of the Hydrocarbons Law. See Exploration and Production.

In addition, net profit (as defined in the Hydrocarbons Law) of holders of permits, or concessions accruing from activity as such holders, might be subject to the application of a special 55% income tax. This tax has never been applied. Each permit or concession granted to an entity other than us has provided that the holder thereof is subject instead to the general Argentine tax regime, and a decree of the National Executive Office provides that we are also subject to the general Argentine tax regime.

Following the introduction of market prices for downstream petroleum products in connection with the deregulation of the petroleum industry, Law No. 23,966 established a volume-based tax on transfers of certain types of fuel, replacing the prior regime, which was based on the regulated price. Law No. 25,745 modified, effective as of August 2003, the mechanism for calculating the tax, replacing the old fixed-value per liter according to the type of fuel for a percentage to apply to the sales price, maintaining the old fixed value as the minimum tax. Through Laws No. 26,028 and 26,181, new taxes on diesel and gasolines sales have been established.

See additionally Note 30.1 to the Audited Consolidated Financial Statements.

**Reduction in tax rates for fuels**

On December 30, 2014, Decree No. 2579/2014 set forth a reduction in fuel taxes established by Laws No. 23,966 and 26,181 with respect to diesel and unleaded gasoline products. The reductions took effect on January 1, 2015.

On December 29, 2017, Law No. 27,430 introducing modifications to the fuel tax was published in the Official Gazette as follow (Laws No. 26,028 and 26,181 were repealed):

1. A new tax was created (the so called CO<sub>2</sub> Tax). This new tax essentially applies to Fuel Oil, coke and coal, as well as the same fuels taxed by Law 23,966.
2. Starting in March 2018, the fuel tax and CO<sub>2</sub> Tax will be calculated as a fixed amount per liter instead of as a percentage of the sales price.

**Export taxes**

Export duties on hydrocarbons were established in 2002 by Law No. 25,561 of Public Emergency, for a term of five years. The regime varied during in different periods until it ceased after the second extension expired on January 7, 2017. As a result, export duties on hydrocarbons are no longer applied.

We cannot give any assurances as to future levels of export taxes.

### **Repatriation of Foreign Currency**

Decree No. 893/2017, published on November 1, 2017, completely revoked the different types of requirements and restrictions which were imposed from time to time in Argentina, with respect to the repatriation of foreign currency proceeds derived from exports.

Particularly concerning the upstream oil industry, Executive Decree No. 1,589/89, had allowed us and other companies engaged in oil and gas production activities in Argentina to freely sell and dispose of the hydrocarbons we produce. Additionally, under Decree No. 1,589/89, we and other oil producers were entitled to keep up to 70% of foreign currency proceeds received from crude oil and gas export sales outside of Argentina, but were required, at that time, to repatriate the remaining 30% through the exchange markets of Argentina.

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After that, Decree No. 1722/2011 of October 26, 2011 had required all oil and gas companies (including YPF to repatriate 100% of their foreign currency export receivables. Although such mandatory requirement imposed by Decree No. 1722/2011 remained in force and effect until late 2017, its practical application had been substantially relaxed during 2016 and 2017, specially buy the Resolution No. 47-E/2017 7 (issued by the Argentine Secretariat of Commerce) which for the repatriation of foreign currency export receivables had significantly extended, from 30 calendar days as of December 2015, up to 10 years on December 2017.

However, as a result of Decree No., 893/2017 described in the first paragraph, complemented by the Argentine Central Bank s Communication A 6244, there are currently no requirements regarding mandatory repatriation of foreign currency export receivables.

### **ITEM 4A. Unresolved Staff Comments.**

YPF does not have any unresolved Staff comments.

### **ITEM 5. Operating and Financial Review and Prospects**

The following discussion should be read in conjunction with our Audited Consolidated Financial Statements included in this annual report.

#### **Overview**

We are Argentina s leading energy company, operating a fully integrated oil and gas chain with leading market positions across the domestic upstream and downstream segments. See Item 4. Information on the Company History and Development of YPF Overview.

#### **Presentation of Financial Information**

Our Audited Consolidated Financial Statements are prepared in accordance with IFRS as issued by the IASB. Our Audited Consolidated Financial Statements are fully compliant with IFRS. See Note 2.a to the Audited Consolidated Financial Statements for additional information.

The financial data contained in this annual report as of December 31, 2017, 2016 and 2015 and for the years ended December 31, 2017, 2016 and 2015 has been derived from our Audited Consolidated Financial Statements included in this annual report, which were approved at the Board of Directors meeting and authorized to be issued on March 2, 2018. These consolidated financial statements, which comprise those presented before the CNV on March 2, 2018, and an update of Note 34 Subsequent events and the inclusion of Note 35 Supplemental information on oil and gas producing activities (unaudited) , have been approved by Management on April 23, 2018.

Additionally, certain oil and gas disclosures are included in Note 35 to the Audited Consolidated Financial Statements included in this annual report under the heading Supplemental information on oil and gas producing activities (unaudited).

#### **Segment Reporting**

In connection with our segment reporting, see Note 5 to our Audited Consolidated Financial Statements and Item 4. Information on the Company Business Organization.

Sales between business segments are made at internal transfer prices established by us, which generally seek to approximate market prices.

**Table of Contents****Summarized Statement of Comprehensive Income**

	<i>For the Year Ended December 31,</i>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
	<i>(in millions of pesos)</i>		
Revenues	252,813	210,100	156,136
Cost	(211,812)	(177,304)	(119,537)
Gross profit	41,001	32,796	36,599
Administrative expenses	(8,736)	(7,126)	(5,586)
Selling expenses	(17,954)	(15,212)	(11,099)
Exploration expenses	(2,456)	(3,155)	(2,473)
Recovery / (Impairment) of property, plant and equipment and intangible assets	5,032	(34,943)	(2,535)
Other net operating results	(814)	3,394	1,682
Operating profit (loss)	16,073	(24,246)	16,588
Income from equity interest in associates and joint ventures	1,428	588	318
Net financial results	(8,798)	(6,146)	12,157
Net profit / (loss) before income tax	8,703	(29,804)	29,063
Income tax	3,969	1,425	(24,637)
Net profit / (loss) for the year	12,672	(28,379)	4,426
Total other comprehensive income for the year	21,917	27,414	43,758
Total comprehensive income / (loss) for the year	34,589	(965)	48,184

**Factors Affecting Our Operations**

Our operations are affected by a number of factors, including:

the volume of crude oil, oil byproducts and natural gas we produce and sell;

regulation of domestic pricing, mainly related to gas;

export administration by the Argentine government and domestic supply requirements;

international and domestic prices of crude oil and oil products;

our capital expenditures and financing availability;

cost increases;

domestic market demand for hydrocarbon products;

operational risks, labor strikes and other forms of public protest in Argentina;

taxes, including export taxes;

regulation of capital flows;

the Argentine peso/U.S. dollar exchange rate;

the revocation of our concessions in case of noncompliance with certain provisions as set by laws and agreements with provinces in Argentina;

dependence on the infrastructure and logistics network used to deliver our products;

laws and regulations affecting our operations, such as import regulations; and

interest rates.



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Our operating profit in 2017 was Ps. 16,073 million, compared to a loss of Ps. 24,246 million in 2016. This increase was attributable to the factors explained in -Principal Income Statement Line Items-Operating profit (loss) .

Our business is inherently volatile due to the influence of external factors, such as internal demand, market prices, availability of financial resources for our business plan and its corresponding costs and government regulations. Consequently, our past financial condition, results of operations and the trends indicated by such results and financial condition may not be indicative of the financial conditions, results of operations or trends in future periods. We will continue to focus on increasing productivity and efficiency in 2018. We believe that we need to create a more efficient industry that is sustainable in a lower crude oil price environment. Therefore, we estimate that we will not see production growth this year (estimated to be around 2% - 3% lower than 2017 on a boe basis). We expect to increase our capital expenditures during 2018 compared to 2017, reaching approximately U.S.\$4 billion, mainly in our Upstream operations, considering the startup of new non-conventional projects. In addition, we expect a decrease of capital expenditures in our Gas and Power segment (mainly in connection with projects that will be executed by our former controlled company YPF Energía Eléctrica (See Item 4 Information of the Company Gas and Power YPF in Power Generation. ) which are not going to be consolidated any more since 2018.

Most of our shale oil production comes from the Loma Campana area through our joint venture with Chevron, which was the first and largest farm-out. As we gathered more experience, drilling activity migrated to horizontal wells, obtaining wells with a promising relation between expected EURs and well costs. As we pushed forward several initiatives to improve efficiency and significantly reduce well costs, we have been reducing the cost per fracture reaching at the end of 2017 an average cost of approximately U.S.\$1.4 thousand for lateral foot (approximately 54% lower than the average cost in 2015). Our strategy is to continue to invest and de-risk, but at a slower pace than some years ago.

Since October 2017, Crude oil prices in Argentina have been based on import parity and export parity references, , taking into account that domestic prices and costs had previously been decoupled from international prices. We expect to implement fuel price increases following international oil prices, Argentine peso and biofuel pricing evolution. We expect to preserve refining margins and do not expect refining margins to decrease going forward. Nevertheless, we cannot assure we will have the chance to implement those increases, principally considering the relevant conditions that affect the domestic market such as domestic demand and growth, among others.

See Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations Macroeconomic conditions .

Notwithstanding the foregoing, there can be no assurance that our production, costs, prices or our estimates of future cash flows from operations, among other items, could not be affected by factors beyond our control and, as such, differ from our estimates. See Item 3. Key Information Risk Factors.

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**Table of Contents*****Macroeconomic conditions***

Substantially all of our revenues are derived from our operations in Argentina and are therefore subject to prevailing macroeconomic conditions in Argentina. Changes in economic, political and regulatory conditions in Argentina and measures taken by the Argentine government have had and are expected to continue to have a significant impact on us.

The Argentine economy has experienced significant volatility in past decades, characterized by periods of low or negative growth and high variable levels of inflation. Inflation reached its peak in the late 1980s and early 1990s. Due to inflationary pressures prior to the 1990s, the Argentine currency devalued repeatedly and macroeconomic instability led to broad fluctuations in the real exchange rate of the Argentine currency relative to the U.S. dollar. To address these pressures, past Argentine governments implemented various plans and utilized a number of exchange rate systems.

In the fourth quarter of 1998, adverse international financial conditions caused the Argentine economy to enter into a recession and GDP to decrease between 1999 and 2001. By the end of 2001, Argentina suffered a profound deterioration in social and economic conditions, accompanied by high political and economic instability. The restrictions on the withdrawal of bank deposits, the imposition of exchange controls, the suspension of the payment of Argentina's public debt and the abrogation of the peso's one-to-one peg to the dollar (with the consequent devaluation of the peso against the dollar) caused a decline in economic activity. Real GDP declined by 10.9% in 2002, annual inflation rose to 41%, the exchange rate continued to be highly volatile, and the unemployment rate rose to more than 20%. The political and economic instability not only curtailed commercial and financial activities in Argentina but also severely restricted the country's access to international financing.

Strong economic growth in the world's developed economies, favorable raw material prices from 2003 through the first half of 2008 and the implementation of new macroeconomic policies paved the way for Argentina's economic recovery. Real GDP grew at an average cumulative rate of 8.5% between 2003 and 2008. As a result of the crisis in the global economy, Argentina's real GDP growth rate decelerated in 2009 to 0.9%, but recovered in 2010 and 2011 growing by approximately 9% each year.

After the growth in 2010 and 2011, several factors led to a decrease in growth of the Argentine economy in 2012 and 2013. The growth of the global economy was not as strong as expected following the easing of U.S. economic crisis that started in 2007, and financial volatility continued at high levels. The decline in the price of Brent crude to below U.S.\$50 per barrel, among other things, presented a complicated international scenario that creates uncertainty about the future performance, including potential downside risks, of developed and emerging economies, including Argentina.

Mauricio Macri was elected president of Argentina, and his administration took office on December 10, 2015. The new administration has been facing and continues to face challenges in respect of Argentina's economy, such as reducing the rate of inflation, the devaluation of the Argentine peso, improving the competitiveness of the local industries and normalizing or adjusting prices of certain goods and services, such as electricity and natural gas for certain residential consumers of Argentina. Some of the measures necessary to meet these objectives were and continue to be potentially unpopular and could generate political and social opposition or unrest. As a result, it is difficult to predict the impact of these measures on the Argentine economy as a whole and the energy sector in particular, including revisions and reforms to pricing mechanisms for oil and gas and elimination of energy subsidies, as well as other policy changes that may affect the energy sector. This includes decisions that the new administration has already taken, such as the elimination of exchange restrictions, the partial adjustment of gas and electricity prices, the liberalization of prices for oil and its main fuel products, or future measures it may take to address inflation or

changes to the exchange rate. Uncertainty regarding the measures to be taken on the economy could further lead to price volatility of Argentine companies, including in particular companies like ours in the energy sector, given the high level of regulation. In addition, there can be no assurance that current government programs and policies that apply to the oil and gas sector will continue to be in place in the future. See Item 3. Key Information Risk Factors Risks Relating to the Argentine Oil and Gas Business and Our Business Limitations on local pricing in Argentina may adversely affect our results of operations and Item 3. Key Information Risk Factors Risks Relating to the Argentine Oil and Gas Business and Our Business We are exposed to the effects of fluctuations in the prices of oil, gas and oil products.

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According to the IMF's estimates, global economic growth reached 3.1% in 2015, although the rate of growth or, in some cases, contraction, varied significantly from region to region. On March 27, 2014, the Argentine government announced a new method of calculating GDP by reference to 2004 as the base year (as opposed to 1993, which was the base reference year under the prior method of calculating GDP). However, on January 7, 2016 through Decree No. 55/2016, the new leadership of INDEC issued a report declaring a national statistical emergency. INDEC stated that since 2006 its administration has been irregular and due to that they revised the published data from 2005 to 2015. As a result of this revision, the GDP growth rate for 2013 and 2014 was revised from 2.9% to 2.4% and from 0.5% to a decline rate of 2.5%, respectively. As of the date of this annual report, Argentina's provisional GDP growth rate for 2015, the preliminary GDP growth rate for 2016 and the preliminary GDP growth rate for 2017 published by INDEC were positive 2.6%, negative 2.3% and positive 2.9%, respectively.

The official exchange rate of the Argentine peso to the U.S. dollar as of December 31, 2016 was Ps. 15.85 per U.S.\$1.00, a devaluation of approximately 21.9% compared to Ps. 13.01 per U.S.\$1.00 as of December 31, 2015. In addition, as of December 31, 2017, the peso fell to Ps. 18.77 per U.S.\$1.00, a devaluation of approximately 18.4% compared to the rate as of the end of 2016.

Argentina has confronted and continues to confront inflationary pressures. According to inflation data published by INDEC, from 2008 to 2013, the Argentine consumer price index (CPI) increased 7.2%, 7.7%, 10.9%, 9.5%, 10.8% and 10.9%, respectively, and the wholesale price index increased 8.8%, 10.3%, 14.5%, 12.7%, 13.1% and 14.7%, respectively. In 2014, the Argentine government established a new consumer price index known as the IPCNU that more broadly reflects consumer prices by considering price information from the 24 provinces of the country, divided into six regions. According to INDEC, the IPCNU increased 23.9% in 2014. In 2015, the new administration of INDEC published an alternative CPI that showed an increase of 26.9%. In 2016, the alternative CPI, from January to April, increased 4.1%, 4.0%, 3.3% and 6.5%, respectively, and from May to December, a new CPI was published that showed increases of 4.2%, 3.1%, 2.0%, 0.2%, 1.1%, 2.4%, 1.6% and 1.2% respectively. In 2017, the CPI increased 24.8%. In January, February and March 2018, the CPI increased 1.8%, 2.4% and 2.3%, respectively.

The wholesale price index increased 28.3%, 34.5% and 18.8% in 2014, 2016 and 2017 (provisional), respectively. In January, February and March 2018, the provisional wholesale price index increased 4.6%, 4.8% and 1.9%, respectively. Before the new administration took office, certain private sector analysts believed that inflation was significantly higher than the rate published by INDEC.

See Item 3. Key Information Risk Factors Risks Relating to Argentina Our business is largely dependent upon economic conditions in Argentina.

During 2017, Argentina's provisional trade balance was a deficit of approximately U.S.\$ 8.5 billion according to preliminary estimates from INDEC, with total exports of approximately U.S.\$ 58.4 billion during 2017, representing a 0.9% increase compared to the same period in 2016. Total imports were approximately U.S.\$ 66.9 billion, representing an increase of 19.7% compared to the same period in 2016.

The drop occurred some years ago in the international price of Brent crude has affected and will likely continue to affect the oil industry's expected activities worldwide, particularly with respect to expected investments in the industry. In 2015, this decline resulted in an approximately U.S.\$7 reduction to the domestic price per barrel compared to the price in effect on December 31, 2014. This change stemmed from negotiations between producers and refiners to reduce the domestic price of Medanito and Escalante crude during January 2015 to U.S.\$77 and U.S.\$63 per barrel, respectively. These prices stood at U.S.\$75 and U.S.\$61, respectively, as of November 30, 2015.

In 2016, following the continuous drop in the average international price of Brent crude, a new reduction of approximately 10% in the domestic crude oil price per barrel compared to the price in effect on December 31, 2015 was agreed upon. This change stemmed from negotiations between producers, refiners and MINEM, whereby it was agreed to reduce the domestic price of Medanito crude and Escalante crude since January 2016 until July 2016 to U.S.\$67.50 and U.S.\$54.90 per barrel, respectively. In addition, in August 2016 a new agreement between producers, refiners and MINEM provided for a new gradual reduction in the domestic crude oil price per barrel by 2% per month in August, September and October for a 6% aggregate drop before November 2016.

In 2017, continuing with the gradual reduction of crude oil prices in the domestic market, an agreement among producers (the Transitional Agreement ), refiners and MINEM was reached to attain price parity with international markets during the course of 2017 and sustain domestic production and labor sources. This agreement establishes decreasing prices for domestic crude oil during 2017, with the aim of reaching the price of Brent crude in the international market as of the effective date of the agreement. As a starting point, a reference price of U.S.\$59.40 and U.S.\$48.30 was set for Medanito and Escalante crude, respectively, for January 2017, with a gradual reduction to U.S.\$55.00 and U.S.\$47.00, respectively, in July 2017 and maintaining those prices until December 2017, provided that the price of Brent crude oil and the exchange rate of the Argentine peso to the U.S. dollar remains within certain parameters. It was also agreed that imports of crude oil and petroleum products as a complement to domestic production of these hydrocarbons will be subject to the shortage of both products in the domestic market, for which MINEM will promote the creation of a registry of imports of crude oil and derivatives to ensure the full utilization of domestic production within the constraints of production and processing of each producer and/or refiner.

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The Transitional Agreement provided that if, at any time, the international average price of a barrel of Brent crude oil exceeded the reference value for local crude oil of Medanito type by less than one U.S. dollar per barrel for a period greater than 10 consecutive days, the commitments assumed by the parties to the agreement would be suspended, effective as of the immediately succeeding calendar month.

Additionally, the Transitional Agreement establishes mechanisms to adjust fuel prices, on a quarterly basis, in the domestic market in 2017 to reflect the impact of changes in crude oil prices, biofuels and changes to the exchange rate, in accordance with the formula established in the agreement. In the past, domestic fuel prices had been adjusted but not in line with international market prices for petroleum products mainly due to the market conditions affecting the Argentine market.

On September 26, 2017, MINEM informed that the conditions for the suspension of the Transitional Agreement had been achieved on September 13, 2017, and consequently the terms of the Transitional Agreement (other than the requirements relating to the import of crude oil and derivatives) were suspended, effective as of October 1, 2017. During November and December of 2017, the average price of the Brent crude oil continued to run higher than the reference value for local crude oil of Medanito. Consequently, the Transitional Agreement remained suspended and finally, as of December 31, 2017, the Transitional Agreement was officially discontinued.

After the finalization of the 2017 Transitional Agreement, according to Argentina's Ministry of Energy and Mining, hydrocarbons market in Argentina has become a completely liberalized market and oil and fuel prices must be set by the market conditions and fluctuate. This decision formally ends the transition to international oil price parity and consequently, it is expected that from 2018 onwards, petroleum companies in Argentina will -establish -their own pricing policy.

In general terms, the pricing policy of fuels depends on several factors such as crude oil prices, international refining spreads, processing and distribution costs, biofuel prices, exchange currencies, local demand and supply, stocks, local taxation, and domestic margins for our products, among others.

As a result of these new market conditions, since October of 2017 YPF has been negotiating the prices of crude purchases with producer companies based on import parity and export parity references, and the fuel prices based on the factors discussed above. We expect to continue negotiating crude oil prices based on market condition and continue to apply the market-based fuel pricing strategy, in the future. See Item 3. Key Information Risk Factors Risks Relating to Argentina Limitations on local pricing in Argentina may adversely affect our results of operations.

Energy consumption in Argentina has increased significantly since 2003. Continued growth in demand has led to fuel shortages and power outages, prompting the Argentine government to take additional measures to assure domestic supply. As a result of this increasing demand, declines in the production of certain products and companies in our industry, and actions taken by the Argentine regulatory authorities to prioritize domestic supply the volumes of hydrocarbon product exports, especially natural gas, have declined steadily during this period. At the same time, in recent years, Argentina has increased its imports of natural gas and refined products.

On December 17, 2015, as a result of Decree No. 134/2015, the new government declared an emergency of the national electricity system until December 31, 2017 and instructed the Ministry of Energy and Mining to develop and propose measures that would ensure power supply under adequate technical conditions. See Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government Market Regulation Electricity, Item 3. Key Information Risk Factors Risks Relating to Argentina Our business is largely dependent upon economic conditions in Argentina.



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The table below shows Argentina's total sales, production, exports and imports of crude oil, diesel and gasoline products for the periods indicated.

	Year Ended December 31,		
	2017	2016	2015
<b>Crude Oil in Argentina</b>			
Production (mmbbl)	167.02	178.96	186.63
Exports (mmbbl)	9.91	16.48	13.27
Imports (mmbbl)	7.90	5.79	1.84
<b>Diesel Fuel in Argentina</b>			
Sales (mcm) <sup>(1)</sup>	14,192.94	14,324.35	14,290.54
Production (mmbbl)	11,858.23	11,945.86	12,181.12
Exports (mcm)	4.86	5.87	1.84
Imports (mcm)	2,131.90	2,186.30	1,933.69
<b>Gasoline in Argentina</b>			
Sales (mcm) <sup>(1)</sup>	9,465.37	8,848.96	8,720.81
Production (mmbbl)	8,763.76	8,431.55	8,320.07
Exports (mcm)			
Imports (mcm)	415.67	246.52	15.00

(1) Includes domestic market sales.

Source: Argentine Secretariat of Energy

***Policy and regulatory developments in Argentina, including the Expropriation Law***

The Argentine oil and gas industry has been subject to certain governmental policies and regulations that have resulted in: (i) domestic prices that do not keep pace with those prevailing in international markets (which usually resulted in lower local prices compared to prevailing international market prices before the recent decrease in international oil prices); (ii) export and import regulations; (iii) domestic supply requirements that oblige us from time to time to divert supplies from the export or industrial markets in order to meet domestic consumer demand; (iv) increasingly higher export duties on the volumes of hydrocarbons allowed to be exported, before the recent decrease in international oil prices and before Law No. 26,732 ceased to be in force, which established export duties; (v) increasingly higher investment and costs expenditure requirements in order to satisfy domestic demand and (vi) increasingly higher taxes, although certain taxes have recently declined as a result of the incentives set by the Argentine government in response to the decrease in international oil prices to promote domestic activity. These governmental pricing and tax policies have been implemented in an effort to satisfy increasing domestic market demand and, in recent years, to incentivize domestic activity as a result of recent decreases in international oil prices allowing domestic prices to stay above those prevailing in international market for certain periods. Since December 2015, the new government has taken measures to improve general economic and business conditions in Argentina, such as the elimination of exchange restrictions, the partial adjustment of gas and electricity prices and the elimination or reduction of export taxes for certain products. See Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations Macroeconomic conditions. As discussed in Item 3. Key Information Risk Factors and elsewhere in this annual report, actions by the Argentine government have had and will continue to have a significant effect on Argentine companies, including us.



Notwithstanding the foregoing, after the termination of the 2017 Transitional Agreement, according to Argentina's Ministry of Energy and Mining, the hydrocarbons market in Argentina had become a liberalized market and oil and fuel prices must be set by the market conditions and, thus, fluctuate. As mentioned before, this decision formally ended the transition to international oil price parity.

For information regarding policy and regulatory developments relating to the oil and gas industry in Argentina see Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government.

The Expropriation Law declared achieving self-sufficiency in the supply of hydrocarbons, as well as in the exploitation, industrialization, transportation and sale of hydrocarbons, a national public interest and a priority for Argentina. In addition, its stated goal is to guarantee socially equitable economic development, the creation of jobs, the increase of the competitiveness of various economic sectors and the equitable and sustainable growth of the Argentine provinces and regions. See Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government The Expropriation Law. Upon the passage of the Expropriation Law, the Argentine government gained control over the Company. See Item 3. Key Information Risk Factors Risks Relating to Argentina The Argentine Republic owns 51% of the shares of the Company.

**Table of Contents*****Declining export volumes***

The exported volumes of many of our hydrocarbon products have declined significantly in recent years, driven mainly by increasing domestic demand and export administration, as well as by declines in production.

The table below presents, for the periods indicated, the exported volumes of certain of our principal hydrocarbon products.

<b>Product</b>	<b>Year Ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
	<b>(units sold)</b>		
Natural gas (mmcm)			2
Gasoline and diesel (mcm)	213	125	90
Fuel oil (mtn) <sup>(1)</sup>	282	375	462
Petrochemicals (mtn)	206	202	301

(1) Includes bunker oil sales of 282 mtn, 375 mtn and 462 mtn in 2017, 2016 and 2015, respectively.

Due to the decreased export product volumes indicated above, the portion of our revenues accounted for by exports decreased steadily in recent years. Exports accounted for 8.7%, 7.8% and 7.9% of our consolidated revenues in 2017, 2016 and 2015, respectively. Export duties are accounted for as tax expenses in our Audited Consolidated Financial Statements.

The Argentine government currently requires companies intending to export crude oil and diesel to obtain prior authorization from the Argentine Ministry of Energy and Mining by demonstrating that local demand for those products has been satisfied. The same criteria is applied to exports of LPG upon Law 26,020, dated 2005.

***Seasonality***

Historically, our results have been subject to seasonal fluctuations during the year, particularly as a result of greater natural gas sales during the winter. After the 2002 devaluation and as a consequence of the natural gas price freeze imposed by the Argentine government until recent years, the use of this fuel has diversified, generating an increase in its long-term demand throughout the year. However, with the recent adjustments in gas prices (See Item 4. Information on the Company Regulatory Framework and Relationship with the Argentine Government Market Regulation Natural Gas. ), which also affect the residential market where demand has demonstrated some sensitivity to gas price, we could be subject to seasonal fluctuations in our sales volumes, which could have negative impact on our level of natural gas production and sales. See Item 3. Key Information Risk Factors Risks Relating to Our Business Oil and gas activities are subject to significant economic, environmental and operational risks.

**Critical Accounting Policies**

Our accounting policies are described in Note 2.a and b. to the Audited Consolidated Financial Statements. IFRS requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, revenues and expenses and disclosures of contingent assets and liabilities in our financial statements. Actual results could differ from those estimates. We consider the following policies or matters to be most critical in understanding the judgments

that are involved in preparing our Audited Consolidated Financial Statements and the uncertainties that could impact our results of operations, financial condition and cash flows:

Functional and reporting currency. See Note 2.b.1 to the Audited Consolidated Financial Statements.

Impairment of long-lived assets. See Notes 2.b.8 and 2.b.9 to the Audited Consolidated Financial Statements. Furthermore, for additional information regarding assumptions used for our impairment calculation as of December 31, 2017, see Note 2.c to the Audited Consolidated Financial Statements.

Depreciation of oil and gas producing properties. See Note 2.b.6 to the Audited Consolidated Financial Statements.

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Asset retirement obligations. See Note 2.b.6 to the Audited Consolidated Financial Statements.

Environmental liabilities, litigation and other contingencies. See Notes 2.c, 14.a and b., 27 and 28.b to the Audited Consolidated Financial Statements.

Income tax and deferred tax. See Note 15 to the Audited Consolidated Financial Statements.

In connection with the disclosure of the impact that recently issued accounting standards will have on financial statements in future periods, see Note 2.b.25 to the Audited Consolidated Financial Statements as of December 31, 2017.

In addition, for information regarding our estimates of oil and gas reserves, see Item 4. Information on the Company Exploration and Production Oil and Gas reserves.

During 2017, YPF recorded a recovery of Ps. 5,032 million on a prior impairment for property, plant and equipment. As discussed in Note 2.c to the Audited Consolidated Financial Statements as of December 31, 2017, the recoverable amount of property, plant and equipment and intangible assets analysis is performed on the year-end date or whenever there is evidence of impairment of the recoverable value. See Note 2.c Provision for impairment of property, plant and equipment and intangible assets to the Audited Consolidated Financial Statements.

It is difficult to predict with reasonable certainty the amount of expected future impairment losses given the many factors impacting the asset base and the cash flows used in the prescribed ceiling test calculation. These factors include, but are not limited to, future prices, operating costs and negotiated savings, foreign exchange rates, capital expenditures timing and negotiated savings, production and its impact on depletion and cost base, upward or downward reserve revisions, reserve additions, and tax attributes. According to the foregoing, and in connection with impairment of long-lived assets according to our estimation as of December 31, 2017, if the average of the oil prices used for impairment tests as of December 31, 2017 were reduced by U.S.\$5 each year, holding all other factors constant, our ceiling test limitation related to the net book value of our proved oil properties would be reduced by approximately U.S.\$1.5 billion. This hypothetical calculation was prepared assuming all other factors remain constant to isolate the impact of commodity prices on our ceiling test limitation. Consequently, as noted above, actual cash flows may be materially affected by other factors. There are numerous uncertainties inherent in the estimation present value of future cash flow, so this hypothetical calculation should not be construed as indicative of our development plans or future results. For more information on recent declines in the international Brent crude oil prices, domestic crude oil prices and domestic gasoline prices, see Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations Macroeconomic conditions. For information regarding our domestic oil prices and reserves sensitivity analysis, See Item 3. Key Information Risk Factors Risks Relating to Argentina Our oil and natural gas reserves are estimates.

## **Principal Income Statement Line Items**

The following is a brief description of the principal line items of our income statement.

### ***Revenues***

Revenues include primarily our consolidated sales of crude oil and natural gas and refined fuel and chemical products net of the payment of applicable fuel transfer taxes and turnover taxes. Customs duties on exports are accounted as selling expenses in our consolidated results of operations. Royalty payments required to be made to a third party,

whether payable in cash or in kind, which are a financial obligation, or are substantially equivalent to a production or similar tax, are accounted for as a cost of production and are not deducted from revenues. See Item 4. Information on the Company Exploration and Production Oil and gas production, production prices and production costs and Note 19 to the Audited Consolidated Financial Statements.

**Costs**

The following table presents, for each of the years indicated, a breakdown of our consolidated cost by category:

	<b>For the year ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
	<b>(in millions of pesos)</b>		
Inventories at beginning of year	21,820	19,258	13,001
Purchases for the year	66,075	48,760	33,886
Production costs <sup>(1)</sup>	147,423	127,075	85,550
Translation effect	3,877	4,031	6,358
Reclassifications and other movements	(92)		
Inventories at end of year	(27,291)	(21,820)	(19,258)
<b>Costs</b>	<b>211,812</b>	<b>177,304</b>	<b>119,537</b>

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- (1) The table below presents, for each of the years indicated, a breakdown of our consolidated production costs by category:

	<b>For the year ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
	<b>(in millions of pesos)</b>		
Salaries and social security taxes	12,548	10,228	7,566
Fees and compensation for services	1,159	1,037	775
Other personnel expenses	3,493	2,773	2,303
Taxes, charges and contributions	2,215	1,861	1,144
Royalties, easements and canons	17,630	17,114	11,932
Insurance	840	1,037	831
Rental of real estate and equipment	5,710	5,097	3,360
Depreciation of properties, plant and equipment	51,607	43,077	25,706
Amortization of intangible assets	688	499	185
Industrial inputs, consumable material and supplies	5,813	5,732	3,801
Operational services and other service contracts	12,033	10,494	6,261
Preservation, repair and maintenance	20,204	16,710	14,231
Transportation, products and charges	8,724	6,952	4,796
Fuel, gas, energy and miscellaneous	4,759	4,464	2,659
<b>Total</b>	<b>147,423</b>	<b>127,075</b>	<b>85,550</b>

Our cost accounted for 83.78, 84.4% and 76.6% of our consolidated revenues in 2017, 2016 and 2015, respectively. Our cost of sales increased by 19.5% from 2016 to 2017 due to the factors explained in -Principal Income Statement Line Items-Cost .

***Other net operating results***

Other operating results, net principally include provisions for pending lawsuits and other claims, provisions for environmental remediation and provisions for defined benefit pension plans and other post-retirement benefits. See -Other net operating results .

***Financial income (expense), net***

Financial income (expense), net consists of the net of gains and losses on interest paid and interest earned and foreign currency exchange differences.

***Income Tax***

The effective income tax rates for the periods discussed in this annual report differ from the statutory tax rate (35%) mainly because: the registration of the deferred income tax as a result of the effect of applying the current tax rate (35%) on the difference generated between the tax basis of fixed and intangible assets (for which any asset remeasurement from the original value in pesos is not acceptable under income tax law) and their book value under IFRS, measured in its functional currency and converted into pesos, as described in Note 2.b.1 to our Audited Consolidated Financial Statements. See Note 15 to the Audited Consolidated Financial Statements for a more detailed

description of the difference between statutory income tax rate and effective income tax rate. For information regarding the Law No. 27,430 and 27,432 introducing modifications to the Income Tax, see Item 10. Additional Information Taxation.

**Table of Contents****Results of Operations****Consolidated results of operations for the years ended December 31, 2017, 2016 and 2015**

The following table sets forth certain financial information as a percentage of revenues for the years indicated.

	Year Ended December 31,		
	2017	2016	2015
	(percentage of revenues)		
Revenues	100.0	100.0	100.0
Cost	(83.8)	(84.4)	(76.6)
Gross profit	16.2	15.6	23.4
Administrative expenses	(3.5)	(3.4)	(3.6)
Selling expenses	(7.1)	(7.2)	(7.1)
Recovery / (Impairment) of property, plant and equipment and intangible assets	2.0	(16.6)	(1.6)
Other net operating results	0.3	1.6	1.1
Exploration expenses	(1.0)	(1.5)	(1.6)
Operating profit (loss)	6.4	(11.5)	10.6

The tables below present, for the years indicated, volume and price data with respect to our sales of our principal products in the domestic and export markets, respectively. Due to the decreased export product volumes, the portion of our revenues accounted for by exports decreased steadily in recent years. Exports accounted for 8.7%, 7.8% and 7.9% of our consolidated revenues in 2017, 2016 and 2015, respectively.

**Domestic Market**

Product	Year Ended December 31,					
	2017		2016		2015	
	Units sold	Average Price per unit <sup>(1)</sup> (in pesos)	Units sold	Average Price per unit <sup>(1)</sup> (in pesos)	Units sold	Average Price per unit <sup>(1)</sup> (in pesos)
Natural gas	14,208 mmcm	2,997 /mcm	13,816 mmcm	2,636 /mcm	14,009 mmcm	1,571 /mcm
Diesel	7,751 mcm	10,539 /cm	7,803 mcm	9,096 /cm	8,134 mcm	6,970 /cm
Gasoline	5,158 mcm	11,483 /cm	4,828 mcm	9,580 /cm	4,894 mcm	7,141 /cm
Fuel oil	620 mtn	6,646 /ton	1,226 mtn	7,869 /ton	1,387 mtn	5,095 /ton
Petrochemicals	597 mtn	9,258 /ton	629 mtn	6,465 /ton	587 mtn	5,620 /ton



(1) Average prices shown are net of applicable domestic fuel transfer taxes payable by consumers.

**Table of Contents****Export Markets**

Product	Year Ended December 31,					
	2017		2016		2015	
	Units sold	Average Price per unit <sup>(1)</sup> (in pesos)	Units sold	Average Price per unit <sup>(1)</sup> (in pesos)	Units sold	Average Price per unit <sup>(1)</sup> (in pesos)
Gasoline	82 mcm	10,577 /cm	54 mcm	10,061 /cm	50 mcm	7,843 /cm
Diesel	131 mcm	7,667 /cm	71 mcm	6,721 /cm	40 mcm	1,000 /cm
Fuel oil	282 mtn	5,663 /ton	375 mtn	3,864 /ton	462 mtn	2,972 /ton
Petrochemicals <sup>(2)</sup>	206 mtn	14,134 /ton	202 mtn	11,638 /ton	301 mtn	5,694 /ton

(1) Average prices shown are gross of applicable export withholding taxes payable by us.

(2) Includes exports of refined paraffinic.

**Revenues**

Revenues in 2017 were Ps. 252,813 million, representing a 20.3% increase compared to Ps. 210,100 million in 2016. Among the main factors contributing to the increase were:

Diesel revenues increased by Ps. 10,713 million, or 15.1%, as a result of an increase in the average price for diesel mix of 15.9%, partially offset by a decrease in sales volumes of 0.7%, despite an 27.5% increase in sales volumes of Infinia diesel, a premium diesel;

Gasoline revenues increased by Ps. 12,976 million, or 28.1%, primarily as a result of an increase in the average price for gasoline mix of 19.9%, and an increase in sales volumes of 6.8%, reflecting additionally an increase of 20.0% in sales volumes of Infinia gasoline;

Fuel oil revenues in the Argentine domestic market decreased by Ps. 5,531 million, or 57.3%, primarily as a result of a decrease in the average price of 15.5% and a decrease in sales volumes of 49.5%;

Natural gas revenues increased by Ps. 6,171 million, or 16.9%, primarily as a result of an increase of 14.1% in the average sale price in Argentine peso terms, which includes not only higher prices from third parties but also the Gas Plan, which increased the average prices obtained by YPF as a result of increasing YPF's natural gas production, and also a result of an increase in sales volumes of 1.1%. Additionally, in the first quarter of 2017, we invoiced Ps. 603 million corresponding to 242 million m<sup>3</sup> opportunely injected and pending nomination, which were assigned to the commercial segment of CNG, and resulted in an increase of 2.8% in sales volumes;

Natural gas revenues to the retail segment (residential and small general service category) increased by Ps. 3,783 million, or 57.8%, primarily due to our subsidiary Metrogas which registered an increase in the average price of approximately 70.1% partially offset by a decrease in sales volumes of 13.1%;

The remaining sales in the domestic market increased by Ps. 8,875 million, or 37.1%, primarily due to the increase of asphalts sales by 154.2%, the increase of LPG sales by 48.9%, petrochemical products by 35.9% and aerokerosene by 37.3%, in all of these cases mainly due to the higher prices of these products, with the exception of asphalts, which also registered an increase of 103.5% in sales volumes;

Export revenues increased by Ps. 5,727 million, or 35.0%, primarily due to increases in exports of petrochemical products of 23.8%, and LPG of 57.7%, in both cases due to an increase in average prices in Argentine peso terms, as well as increases in exports of flour and soy oils of 24.0%, aerokerosene of 53.9%, and virgin naphtha of 110.3%, all due to an increase in average prices in Argentine peso terms and in sales volumes.

Revenues in 2016 were Ps. 210,100 million, representing a 34.6% increase compared to Ps. 156,136 million in 2015. Among the main factors contributing to the increase were:

Diesel revenues increased by Ps. 14,303 million, or 25.2%, as a result of an increase in the average price for diesel mix of 30.5%, partially offset by a decrease in sales volumes of 4.1%, despite an 8.3% increase in sales volumes of Infinia diesel, a premium diesel;

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Gasoline revenues increased by Ps. 11,298 million, or 32.3%, primarily as a result of an increase in the average price for gasoline mix of 34.1%, partially offset by a decrease in sales volumes of 1.3%, despite an 1.1% increase in sales volumes of Infinia gasoline;

Fuel oil revenues in the Argentine domestic market increased by Ps. 2,583 million, or 36.6%, primarily as a result of an increase in the average price of 54.5%, partially offset by a decrease in sales volumes of 11.6%;

Natural gas revenues increased by Ps. 14,409 million, or 65.5%, primarily as a result of an increase of 67.8% in the average sale price in Argentine peso terms (or a 5.8% increase in U.S. dollar terms), which includes not only higher prices from third parties but also the Gas Plan, which increased the average prices obtained by YPF as a result of increasing YPF's natural gas production, partially offset by a decrease in sales volumes of 1.4%;

Natural gas revenues to the retail segment (residential and small general service category) increased by Ps. 2,866 million, or 78.0%, primarily due to an increase in the average price of approximately 60.1% and an increase in sales volumes of 11.2%;

Export revenues increased by Ps. 4,054 million, or 33.0%, primarily due to increases in exports of flour, grains and oils of 38.8%, aerokerosene of 29.0%, and petrochemicals of 37.2%, all due to an increase in average prices in Argentine peso terms, partially offset by decreases in sales volumes; and

Partially compensating for the effect of the above mentioned increments, in 2015, the Company recorded Ps. 1,988 million of revenue corresponding to the Crude Oil Production Stimulus Program (*Programa de Estímulo a la Producción de Petróleo Crudo*) set forth under Resolution No. 14/2015 of the Hydrocarbon Commission. See Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government Market Regulation Resolution No. 14/2015. This program was discontinued in 2016.

**Cost**

Cost in 2017 was Ps. 211,812 million, representing a 19.5% increase compared to Ps. 177,304 million in 2016, including increases in production costs and purchases of 16.0% and 35.5%, respectively. Among the main factors contributing to this increase were:

Property, plant and equipment depreciation costs increased by Ps. 8,530 million, or 19.8%, primarily as a result of (i) overall increases in Argentine peso terms of the value of fixed assets, which was related to the devaluation of the Argentine peso against the U.S. dollar, which is the functional currency of the Company, and (ii) the increase in the depreciation rate due to the decrease in net reserves of crude oil as a consequence of a reduction in the selling price in the domestic market, offset by the net decrease in these assets as a result of the impairment charge recorded in the third quarter of 2016, which is explained below, and the lower production recorded in 2017;

Total lifting costs increased by Ps. 5,380 million, or 14.4%, considering an increase of the unit indicator in Argentine peso terms of 19.4%, in line with the general increase of prices in the economy, offset by lower production;

Refining costs increased by Ps. 1,762 million, or 20.6%. This increase was driven by higher charges for consumption of materials, spare parts, electricity and other supplies and fuels, considering an increase of the unit indicator in Argentine peso terms of 21.1%;

Higher charges for environmental contingencies for Ps. 738 million, or 110.9%, linked to the activity developed by the Downstream and Upstream business areas;

Net increase in royalties and other charges associated with production by Ps. 319 million, or 1.9%, with an increase of Ps 1,045 million related to natural gas production, due to the higher wellhead value of this product, partially offset by a decrease of Ps. 726 million related to crude oil production, due to the lower production.

Transportation costs increased by Ps. 1,772 million, or 25.5%, mainly due to increases in rates in 2017;

Purchases of crude oil from third parties increased by Ps. 6,259 million, or 45.9%, primarily as a result of an increase in purchased volumes of approximately 49.1%, due to lower production, partially offset by a decrease in average prices charged by third parties in Argentine peso terms of approximately 2.2%, mainly related to the price agreement between producers and refiners. See Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations Macroeconomic conditions. ;

Purchases of biofuels increased by Ps. 4,807 million, or 36.4%, primarily as a result of an increase in the average prices of FAME and ethanol biofuel of approximately 22.2% and 20.0%, respectively, and an increase in purchased volumes of FAME and ethanol biofuel of 8.7% and 17.3%, respectively;

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Purchases of natural gas from other producers for resale in the distribution segment to retail customers (residential and small businesses and industries) increased by Ps. 1,069 million, or 20.6%, primarily as a result of an increase in the purchase price of approximately 22.7%, partially offset by a decrease in purchased volumes of 1.7%;

Grain purchases in the agricultural sales segment through the form of barter, which were recorded as purchases for accounting purposes, increased by Ps. 1,141 million, or 27.5%. This increase is due to an increase in the average price of approximately 4.2%, and an increase in volumes of 22.3%; and

Imports of fuels increased by Ps. 1,023 million, or 18.2%, primarily as a result of an increase in purchased Infinia gasoline of 200.1%, jet fuel of 21.7%, gas oil of 2.8%. In all cases, purchase prices increased and in terms of imported volumes, there was an increase in Infinia gasoline volumes and a decrease in the other two mentioned products. Increased purchases mentioned above were partially offset by a positive stock variation of Ps. 1,686 million in 2017, primarily due to a recomposition in crude oil stocks and a revaluation of refined products, while in 2016, this amount was negative for Ps. 1,469 million, primarily due to a decrease in crude oil stocks observed in that year.

Cost of sales in 2016 was Ps. 177,304 million, representing a 48.3% increase compared to Ps. 119,537 million in 2015, including increases in production costs and purchases of 48.5% and 43.9%, respectively. Among the main factors contributing to this increase were:

Property, plant and equipment depreciation costs increased by Ps. 17,371 million, or 67.6%, primarily as a result of (i) increased investments in assets and (ii) overall increases in Argentine peso terms of the value of fixed assets, which was related to the devaluation of the Argentine peso against the U.S. dollar, which is the functional currency of the Company;

Total lifting costs increased by Ps. 8,405 million, or 29.1%, considering an increase of the unit indicator in Argentine peso terms of 28.2%;

Refining costs increased by Ps. 2,530 million, or 42.0%. This increase was driven by higher charges for consumption of materials, spare parts, electricity and other supplies and fuels, considering an increase of the unit indicator in Argentine peso terms of 44.2%;

Royalty payments increased by Ps. 5,163 million, or 45.7%, primarily as a result of increases of (i) Ps. 3,179 million related to crude oil production and (ii) Ps. 1,984 million related to natural gas production, due to the higher wellhead values of these products;

Transportation costs increased by Ps. 2,156 million, or 45.0%, mainly due to increases in rates in 2016;

Purchases of crude oil from third parties increased by Ps. 2,228 million, or 19.5%, primarily as a result of an increase in average prices charged by third parties in Argentine peso terms of approximately 35%, which was mainly related to the devaluation of the Argentine peso, in comparison, there was a 13.4% decrease in average prices charged by third parties in U.S. dollar terms, partially offset by a decrease in purchased volumes of approximately 11.4%;

Purchases of biofuels increased by Ps. 5,454 million, or 70.5%, primarily as a result of an increase in the average prices of FAME and ethanol biofuel of approximately 76.3% and 45.6%, respectively, and an increase in purchased volumes of FAME and ethanol biofuel of 1.4% and 11% (due to an increase in the cut rate of naphthas), respectively;

Purchases of natural gas from other producers for resale in the distribution segment to retail customers (residential and small businesses and industries) increased by Ps. 2,274 million, or 78.2%, primarily as a result of an increase in the purchase price of approximately 70.0% and an increase in purchased volumes of 4.8%; and

Grain purchases in the agricultural sales segment through the form of barter, which were recorded as purchases for accounting purposes, increased by Ps. 1,526 million, or 58.1%. This increase is due to an increase in the average price of approximately 91.1%, partially offset by a decrease in volumes of 17.3%.

All of this was partially offset by the following:

Imports of fuels decreased by Ps. 621 million, or 10.0%, primarily as a result of a decrease in purchased volumes of gas oil of 38.5%, partially offset by an increase in imported volumes of gasoline and jet fuel of 15.7% and an increase in average prices of fuels of 23.9%; and

Additionally, insurance payments related to the losses suffered from an incident at our La Plata refinery in April 2013 were Ps. 615 million in 2015, which did not recur in 2016. This had a negative impact on cost of sales for 2016 compared to the same period in 2015. In addition, with respect to the incident that affected the facilities of our oil treatment plant in Cerro Divisadero in Mendoza in March 2014, an insurance payment amount of Ps. 1,165 million was recorded in 2015, of which Ps. 794 million was recorded as a lower cost for purchases and Ps. 371 million as other operating income, which did not recur in 2016.

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**Table of Contents*****Administrative expenses***

Administrative expenses in 2017 were Ps. 8,736 million, representing a 22.6% increase compared to Ps. 7,126 million in 2016, primarily as a result of increases in personnel costs and IT service contracts, licenses, and institutional advertising.

Administrative expenses in 2016 were Ps. 7,126 million, representing a 27.6% increase compared to Ps. 5,586 million in 2015, primarily as a result of increases in personnel costs and IT service contracts.

***Selling expenses***

Selling expenses in 2017 were Ps. 17,954 million, representing an 18.0% increase compared to Ps. 15,212 million in 2016, primarily as a result of higher charges for product transportation, mainly related to increased transport volumes due to higher sales, and to increased rates for the transportation of fuels in the domestic market, as well as increases in personnel costs, charges related to bank credits and debits taxes and export taxes, primarily flours and oils, partially offset by a decrease in doubtful accounts in the segment of natural gas distributors and customers of our subsidiary Metrogas.

Selling expenses in 2016 were Ps. 15,212 million, representing a 37.1% increase compared to Ps. 11,099 million in 2015, primarily as a result of higher charges for product transportation, mainly related to increased rates for the transportation of fuels in the domestic market, as well as increases in personnel costs, charges related to depreciation of property, plant and equipment, advertising and promotional activities, and in the provision for doubtful accounts, which was negatively affected by recoveries in the provision for doubtful accounts in the natural gas distribution segment in 2015.

***Exploration expenses***

Exploration expenses in 2017 were Ps. 2,456 million, representing a 22.2% decrease compared to Ps. 3,155 million in exploration expenses in 2016, primarily as a result of a Ps. 650 million decrease in negative results from unproductive exploratory drilling in 2017 compared to 2016.

Exploration expenses in 2016 were Ps. 3,155 million, representing a 27.6% increase compared to Ps. 2,473 million in exploration expenses in 2015, primarily as a result of a Ps. 625 million increase in negative results from unproductive exploratory drilling in 2016 compared to 2015. Additionally, expenditures for the development of geological and geophysical studies did not vary significantly in 2016 compared with 2015. However, total investments in exploration decreased Ps.1,375 million, or 49.7%, compared to 2015.

***Recovery / (Impairment) of property, plant and equipment and intangible assets***

In 2017, the Company recorded a partial reversal of the impairment for property, plant and equipment registered in 2016 of Ps. 5.032 million, mainly due to multiple factors such as the variation in production and associated investments considered in the cash flow: the effect of variations in operating and abandonment costs, the variation in the discount rate and, to a lesser extent, the variation in oil prices, also considering the book value of the assets as of December 31, 2017 compared to the end of the previous year, based on the depreciation charge versus the increase for new investments made, among others. For a further description, see additionally Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations Critical Accounting Policies. and Note 2.c to the Consolidated Financial Statements as of December 31, 2017.



In 2016, the Company recorded an impairment for property, plant and equipment of Ps. 34,943 million, mainly due to an estimated reduction in the price of oil marketed in the Argentine domestic market, together with the estimated evolution of costs based on both macroeconomic variables and the operational behavior of the Company's assets. For a more detailed description, see Item 5. Operating and Financial Review and Prospects Critical Accounting Policies and Note 2.c to the Audited Consolidated Financial Statements as of December 31, 2017.

***Other net operating results***

Other net operating results, in 2017 were a loss of Ps. 814 million, compared to the gain of Ps. 3,394 million in 2016. In 2016, other net operating results mainly included a net income of Ps.1,528 million attributable to the deconsolidation of the Maxus Entities (see Note 27 to the Consolidated Financial Statements as of December 31, 2017) and an income of Ps. 1,407 million related to the PIAM under the concession agreement with the Company's partner to participate in the extension of the concession of this area and the temporary economic assistance accrued by our subsidiary Metrogas.

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Other net operating results, in 2016 were a gain of Ps. 3,394 million, or 101.8%, compared to the gain of Ps. 1,682 million in 2015. In 2016, other net operating results mainly includes a net income of Ps.1,528 million attributable to the deconsolidation of the Maxus Entities (see Note 27 to the Consolidated Financial Statements as of December 31, 2016) and an income of Ps. 1,407 million related to the PIAM under the concession agreement with the Company's partner to participate in the extension of the concession of this area. The remaining variation mainly corresponds to a Ps. 199 million decrease in construction incentives received by our subsidiary A-Evangelista S.A and a Ps. 48 million increase in the temporary economic assistance accrued by our subsidiary Metrogas.

***Operating Income / (loss)***

Operating profit in 2017 was Ps. 16,073 million due to the factors discussed above, compared to a loss of Ps. 24,246 million in 2016.

Operating loss in 2016 was Ps. 24,246 million due to the factors discussed above, representing a 246.2% decrease compared to a gain of Ps. 16,588 million in 2015.

***Financial results, net***

In 2017, financial results, net, was a loss of Ps. 8,798 million, representing a 43.2% increase negative results compared to the loss of Ps. 6,146 million in 2016. The Company recorded lower positive foreign exchange differences on net monetary liabilities in pesos of Ps. 2,661 due to lower devaluation of the Argentine peso against the U.S. dollar in 2017 compared to the same period in 2016. The Company recorded higher interest expenses of Ps. 276, as a result of higher average indebtedness in 2017 compared to the same period in 2016, almost totally offset by lower interest rates on debt in Argentine peso. Additionally, better results were obtained due to an increase of Ps. 382 million from the measurement of the fair value of investments in financial assets.

In 2016, financial results, net, was a loss of Ps. 6,146 million, representing a 150.6% decrease compared to income of Ps. 12,157 million in 2015. The Company recorded lower positive foreign exchange differences on net monetary liabilities in pesos of Ps. 8,603 due to lower devaluation of the Argentine peso against the U.S. dollar in 2016 compared to the same period in 2015. The Company recorded higher interest expenses and other financial expenses of Ps. 9,700, as a result of higher average indebtedness and higher interest rates in 2016 compared to the same period in 2015. The average net debt in 2016 was Ps. 116,976 million, while the average net debt in 2015 was Ps. 64,956 million. The average amount of net debt was calculated as the linear average of current and non-current loans at the beginning and end of the corresponding period, net of the linear average of cash and cash equivalents at the beginning and end of the corresponding period.

***Income tax***

Income tax in 2017 was a gain of Ps. 3,969 million, representing a 178.5% increase compared to a gain of Ps. 1,425 million in 2016. This increase was mainly due to the higher positive deferred tax charge of Ps. 2,415 million. In 2017, the effect of the deferred tax liability reduction corresponding to the decrease in the tax rate was recorded from the recently approved tax reform (See Item 10. Additional Information-Taxation), while in 2016 the deferred asset effect was recorded related to the impairment for property, plant and equipment discussed above.

Income tax in 2016 was a gain of Ps. 1,425 million, representing a 105.8% decrease compared to a loss of Ps. 24,637 million in 2015. This decrease was mainly due to lower deferred tax of Ps. 27,313 million, partially offset by an increase of Ps. 1,251 in current income tax. The lower deferred tax charge is due to the recognition of the deferred tax assets of Ps. 12,230 related to the impairment for property, plant and equipment discussed above and the lower

difference generated by the revaluation of the book value of the Company's property, plant and equipment in U.S. dollars, which is the functional currency of the Company, with respect to the tax values of property, plant and equipment held in historical Argentine pesos to be deducted from tax as they are depreciated and the lower devaluation of the Argentine peso in 2016.

***Net profit / (loss) for the year***

Net profit / (loss) in 2017 was a gain of Ps. 12,672 million, compared to a loss of Ps. 28,379 million in 2016.

Other comprehensive income in 2017 was Ps. 21,917 million, representing a 20.1% decrease compared to Ps. 27,414 million in 2016. This decrease was mainly attributable to lower appreciation of property, plant and equipment.

As a result of the foregoing, total comprehensive income in 2017 was a gain of Ps. 34,589 million, compared to a loss of Ps. 965 million in 2016.

Net profit / (loss) in 2016 was a loss of Ps. 28,379 million, representing a 741.2% decrease compared to a net income of Ps. 4,426 million in 2015.

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Other comprehensive income in 2016 was Ps. 27,414 million, representing a 37.4% decrease compared to Ps. 43,758 million in 2015. This decrease was mainly attributable to lower appreciation of property, plant and equipment.

As a result of the foregoing, total comprehensive income in 2016 was a loss of Ps. 965 million, representing a 102.0% increase compared to a gain of Ps. 48,184 million in 2015.

## **Consolidated results of operations by business segment for the years ended December 31, 2017, 2016 and 2015**

In 2016, our activities related to power generation and natural gas distribution was separated from the Downstream activities. See Item 4. Information on the Company Business Organization.

See the table of revenues and operating income for each of our business segments for the years ended December 31, 2017, 2016 and 2015 in Item 4. Information on the Company Business Organization.

### *Upstream*

Revenues from the Upstream business segment in 2017 were Ps. 116,694 million, representing a 2.2% increase compared to Ps. 114,143 million in 2016.

Operating income in 2017 for the Upstream business segment was a gain of Ps. 3,877 million, compared to a loss of Ps. 26,845 million in 2016.

This increase in operating income was principally due to the following factors:

The intersegment oil price measured in U.S. dollars decreased 8.2%, while increasing 3.0% in Argentine peso terms. Oil production in 2017 reached 227,500 barrels per day, representing a 7.0% decrease compared to 2016. The natural decline of the mature fields, together with the effects of the heavy rain and snow storms during the second quarter of 2017, that affected mainly the province of Chubut, and to a lesser extent the province of Santa Cruz, are the reasons leading to this decrease in crude production. This contributed to the decrease of 1.05 mmcm of crude oil, or 7.5%, transferred from the Upstream business segment to the Downstream business segment and a decrease of approximately 204 mcm of crude oil, or 47.6%, in sales to third parties; and

Natural gas production in respect of our operations in Argentina in 2017 reached 44.1 mmcm per day, representing a 1.1% decrease compared to 2016. In the fourth quarter of 2016, certain volumes of natural gas were injected that were pending of nomination and were only billed in the first quarter of 2017. Sales volumes increased 1.1% in 2017 compared to 2016. The Upstream business segment records the average price obtained by YPF in such sales, net of sales and marketing fees. The Upstream segment also includes revenues from the Gas Plan, which increases the average prices obtained by YPF as a result of increasing YPF's natural gas production. The average natural gas revenue recorded by the Company in 2017, including revenues from the Gas Plan, was U.S.\$4.92 per million BTU, a 3.7% increase compared to U.S.\$4.74 per million BTU in 2016.

Total operating costs in respect of our operations in Argentina in 2017 were Ps. 115,380 million (excluding exploration costs), representing a 11.0% increase compared to Ps. 103,965 million in 2016. Among the main factors contributing to the increase were:

Property, plant and equipment depreciation costs increased by Ps. 7,188 million, or 18.9%, primarily as a result of overall increases in Argentine peso terms of the value of fixed assets, which was related to the devaluation of the Argentine peso against the U.S. dollar, which is the functional currency of the Company, compensated by the net decrease of assets as a result of the impairment charge recorded in 2016, described above and by the lower production recorded in the year;

Total lifting costs increased by Ps. 5,380 million, or 14.4%, considering an increase of the unit indicator in Argentine peso terms of 19.4%, in line with the general increase of prices in the economy, offset by lower production;

Net increase in royalties and other charges associated with production by Ps. 319 million, or 1.9%, with an increase of Ps 1,045 million related to natural gas production, due to the higher wellhead value of this product, partially offset by a decrease of Ps. 726 million related to crude oil production, due to the lower production;

Decrease in provisions for stand-by equipment by Ps. 523 million, or 14%, and:

In 2017, a positive stock variation was recorded for Ps.195, compared to a negative stock variation recorded in 2016 for Ps. 1,330 million, due to a reduction in the volumes in stock in 2016.

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Exploration expenses in 2017 were Ps. 2,456 million, representing a 22.2% decrease compared to Ps. 3,155 million in exploration expenses in 2016, primarily as a result of a Ps. 650 million decrease in negative results from unproductive exploratory drilling in 2017 compared to 2016.

In 2016, the Company recorded an impairment for property, plant and equipment of Ps. 34,943 million, mainly due to an estimated reduction in the price of oil marketed in the domestic market, together with the estimated evolution of costs based on both macroeconomic variables and the operational behavior of the Company's assets. For a more detailed description, see Note 2.c to the Consolidated Financial Statements as of December 31, 2016.

In 2017, the Company recognized a partial reversal of the impairment charge mentioned in the previous paragraph for Ps. 5,032 million, which is generated by the combination of multiple factors, such as the variation in production and associated investments considered in the flow, the effect of variations in operating and abandonment costs, the variation in the rate of discount and, to a lesser extent, the variation in oil prices, taking into account also the book value of the assets as of December 31, 2017 compared to the previous year, based on the accounting depreciation charge versus the increase for new investments made, among others. See additionally Item 5. Operating and Financial Review and Prospects Factors Affecting Our Operations Critical Accounting Policies. and Note 2.c to the Consolidated Financial Statements as of December 31, 2017

In 2016, other net operating results included income of Ps. 1,407 million related to the PIAM under the concession agreement with the Company's partner to participate in the extension of the concession of this area.

Revenues from the Upstream business segment in 2016 were Ps. 114,143 million, representing a 42.2% increase compared to Ps. 80,287 million in 2015.

Operating income in 2016 for the Upstream business segment was a loss of Ps. 26,845 million, including an impairment for property, plant and equipment of Ps. 34,943 million in 2016, compared to a gain of Ps. 7,535 million in 2015, including an impairment for property, plant and equipment and intangible assets of Ps. 2,535 million in 2015.

This decrease in operating income was principally due to the following factors:

The intersegment oil price measured in U.S. dollars decreased 13.1%, while increasing 38.8% in Argentine peso terms. Oil production in 2016 reached 244,700 barrels per day, representing a 2.0% decrease compared to 2015. This contributed to the increase of 82 mcm of crude oil, or 0.6%, transferred from the Upstream business segment to the Downstream business segment and a decrease of approximately 40 mcm of crude oil, or 8.4%, in sales to third parties; and

Natural gas production in respect of our operations in Argentina in 2016 reached 44.6 mmcm per day, representing a 0.9% increase compared to 2015. With the exception of the YSUR production, all natural gas produced, net of internal consumption, is assigned to the Gas and Power segment for sale to third parties (in the case of YSUR, the Gas and Power segment is solely responsible for the commercialization of the gas produced by YSUR). Sales volumes decreased 1.4% in 2016 compared to 2015. The Upstream business segment records the average price obtained by YPF in such sales, net of sales and marketing fees. The Upstream segment also includes revenues from the Gas Plan, which increases the average prices obtained by YPF as a result of increasing YPF and YSUR's natural gas production. The average natural gas revenue recorded by the Company in 2016, including revenues from the Gas Plan, was U.S.\$4.76 per million BTU, a

5.8% increase compared to U.S.\$4.50 per million BTU in 2015.

All of this was more than offset by the following:

In 2015, the Company recorded Ps. 1,988 million corresponding to the Crude Oil Production Stimulus Program (*Programa de Estímulo a la Producción de Petróleo Crudo*) set forth by Resolution No. 14/2015 of the Hydrocarbon Commission. See Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government Market Regulation Resolution No. 14/2015. This program was discontinued as of 2016.

Total operating costs in respect of our operations in Argentina in 2016 were Ps. 103,965 million (excluding exploration costs), representing a 51.9% increase compared to Ps. 68,421 million in 2015. Among the main factors contributing to the increase were:

Property, plant and equipment depreciation costs increased by Ps. 15,050 million, or 65.2%, primarily as a result of (i) increased investments in property, plant and equipment and (ii) overall increases in Argentine peso terms of the value of fixed assets, which was related to the devaluation of the Argentine peso against the U.S. dollar, which is the functional currency of the Company;

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Total lifting costs increased by Ps. 8,405 million, or 29.1%, considering an increase of the unit indicator in Argentine peso terms of 28.2%;

Royalty payments increased by Ps. 5,163 million, or 45.7%, primarily as a result of increases of (i) Ps. 3,179 million related to crude oil production and (ii) Ps. 1,984 million related to natural gas production; and

Transportation costs increased by Ps.641 million, or 40.2%, mainly due to increases in rates in 2016. Exploration expenses in 2016 were Ps. 3,155 million, representing a 27.6% increase compared to Ps. 2,473 million in exploration expenses in 2015, primarily as a result of a Ps. 625 million increase in negative results from unproductive exploratory drilling in 2016 compared to 2015. Additionally, expenditures for the development of geological and geophysical studies did not vary significantly in 2016 compared with 2015. However, total investments in exploration decreased Ps.1,375 million, or 49.7%, compared to 2015.

In 2016, the Company recorded an impairment for property, plant and equipment of Ps. 34,943 million, mainly due to an estimated reduction in the price of oil marketed in the domestic market, together with the estimated evolution of costs based on both macroeconomic variables and the operational behavior of the Company's assets. For a more detailed description, see Note 2.c to the Consolidated Financial Statements as of December 31, 2016.

In 2015, the Company recognized an impairment of property, plant and equipment and intangible assets for Ps. 2,535 million, mainly due to a reduction in the price of domestically traded oil in the short term and a reduction in expected medium and long-term international prices. This loss impacted the assets of fields in Argentina with reserves and oil production in the amount of Ps. 2,361 million and the assets of fields with crude oil production in the United States for Ps.174 million.

In 2016, other net operating results includes income of Ps. 1,407 million related to the PIAM under the concession agreement with the Company's partner to participate in the extension of the concession of this area.

With respect to the incident that affected the facilities of our oil treatment plant in Cerro Divisadero in Mendoza in March 2014, an insurance payment amount of Ps. 1,165 million was recorded in 2015, which did not recur in 2016, and of which Ps. 794 million was recorded as a lower cost for purchases and Ps. 371 million as other operating income.

*Downstream*

Revenues from the Downstream segment in 2017 were Ps. 196,309 million, representing a 20.1% increase compared to Ps. 163,463 million in 2016.

Operating income for the Downstream business segment in 2017 was Ps. 15,813 million, representing a 411.3% increase compared to Ps. 3,093 million in 2016. This increase in operating income is primarily due to the following factors:

The average volume of oil processed per day in YPF's refineries was about 293,000 barrels of oil per day, without significant changes with respect to 2016. With these similar processing levels we obtained a similar



production overall, with an increase of diesel by 0.5%, gasoline by 2.0% and a decrease of fuel oil by 35,8% and with increased production of jet fuel, petrochemical gasoline, asphalts, coal oil and lubricant bases;

Diesel revenues increased by Ps. 10,713 million, or 15.1%, as a result of an increase in the average price for diesel mix of 15.9%, partially offset by a decrease in sales volumes of 0.7%, despite an 27.5% increase in sales volumes of Infinia diesel, a premium diesel;

Gasoline revenues increased by Ps. 12,976 million, or 28.1%, primarily as a result of an increase in the average price for gasoline mix of 19.9%, and an increase in sales volumes of 6.8%, reflecting additionally an increase of 20.0% in sales volumes of Infinia gasoline;

Fuel oil revenues in the Argentine domestic market decreased by Ps. 5,531 million, or 57.3%, primarily as a result of a decrease in the average price of 15.5% and a decrease in sales volumes of 49.5%;

The remaining sales in the domestic market increased by Ps. 8,848 million, or 43.4%, primarily as a result of increased sales of Asphalts by 154.2%, of LPG by 48.9%, petrochemical products by 35.9% and aerokerosene by 37.3%, in all these cases mainly due to the higher prices of these products, with the exception of asphalts, which also registered an increase of 103.5% in sales volumes;

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Export revenues obtained by the Downstream segment increased by Ps. 5,840 million, or 36.0%, primarily due to increases in exports of petrochemical products of 23.8%, and LPG of 57.7%, in both cases due to an increase in average prices in Argentine peso terms, as well as increases in exports of flour and soy oils of 24.0%, aerokerosene of 53.9%, and virgin naphtha of 110.3%, all due to an increase in average prices in Argentine peso terms and in sales volumes.

Purchases of crude oil increased by Ps. 2,688 million, or 3.0%, primarily as a result of an increase in oil prices of approximately 2.3% in Argentine peso terms as a result of the devaluation of the Argentine peso against the U.S. dollar. Crude oil transferred volumes from the Upstream business segment decreased by 7.5% (approximately 1.05 mmcm), while crude oil purchased volumes from third parties increased approximately 49.1% (approximately 1.16 mmcm);

Purchases of biofuels increased by Ps. 4,807 million, or 36.4%, primarily as a result of an increase in the average prices of FAME and ethanol biofuel of approximately 22.2% and 20.0%, respectively, and an increase in purchased volumes of FAME and ethanol biofuel of 8.7% and 17.3%, respectively;

Imports of fuels increased by Ps. 1,023 million, or 18.2%, primarily as a result of an increase in import prices of gas oil of 34.3% and jet fuel of 35.0%, and of an increase in volumes of 83.7% and purchase prices of 63.4% of Premium gasoline. All of this was partially offset by a decrease in imported volumes of gas oil of 23.5% and in imported volumes of jet fuel of 9.8%.

Grain purchases in the agricultural sales segment through the form of barter, which were recorded as purchases for accounting purposes, increased by Ps. 1,141 million, or 27.5%. This increase was due to an increase in the average price of approximately 4.2%, and an increase in volumes of 22.3%.

In 2017, a positive stock variation was recorded by Ps. 3,667, representing an increase of Ps. 3,173 million compared to 2016, mainly as a result of a higher valuation of the stocks, and to a lesser extent, by an accumulation of stock, especially of crude oil, due to the higher purchases made in the year 2017;

Higher charges for environmental contingencies of approximately Ps. 594 million, or 328.9%, linked to the activity developed by the Downstream business segment;

Property, plant and equipment depreciation increased by Ps. 1,247 million, or 27.4%, primarily as a result of (i) increased investments in assets (in particular, the launch of the new Coke unit at the La Plata refinery in the fourth quarter of 2016) and (ii) an overall increase in property, plant and equipment values in Argentine pesos, which was related to the devaluation of the Argentine peso against the U.S. dollar, which is the functional currency of the Company;

Selling expenses increased by Ps. 2,707 million, or 18.6%, primarily as a result of increases in transport expenses, mainly related to increased transport volumes, due to higher sales, and to increased rates for the

transportation of fuels in the domestic market, as well as increases in personnel costs, charges related to bank credits and debits taxes and export taxes, primarily flours and oils;

Production costs related to refining costs increased by Ps. 1,762 million, or 20.6%. This increase was driven by higher charges for consumption of materials, spare parts, electricity and other supplies and fuels. As a result of this, and considering that the level of processing in refineries was 0.2% lower, the cost of unit refining increased by 21.1% in 2017 compared to 2016. In turn, transportation costs related to production (naval and pipelines) increased by Ps. 985 million, or 23.8%.

In the other net operating results for this segment, we recorded an increase in the provision for lawsuits and contingencies of approximately Ps. 528 million compared to the previous year.

Revenues from the Downstream business segment in 2016 were Ps. 163,463 million, representing a 30.0% increase compared to Ps. 125,766 million in 2015.

Operating income for the Downstream business segment in 2016 was Ps. 3,093 million, representing a 55.5% decrease compared to Ps. 6,948 million in 2015. This decrease in operating income is primarily due to the following factors:

The average volume of oil processed per day in YPF's refineries decreased 1.8% to 293,500 barrels of oil per day, with decreased production of diesel by 1.3%, gasoline by 1.0% and fuel oil by 16.0% and with increased production of LPG by 8.8% and petrochemical gasoline by 5.6%;

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Diesel revenues increased by Ps. 14,303 million, or 25.2%, as a result of an increase in the average price for diesel mix of approximately 30.5%, partially offset by a decrease in sales volumes of approximately 4.1%, despite an 8.3% increase in sales volumes of Infinia diesel, a premium diesel;

Gasoline revenues increased by Ps. 11,298 million, or 32.3%, primarily as a result of an increase in the average price for gasoline mix of approximately 34.1%, partially offset by a decrease in sales volumes of approximately 1.3%, despite a 1.1% increase in sales volumes of Infinia gasoline;

Fuel oil revenues in the Argentine domestic market increased by Ps. 2,583 million, or 36.6%, primarily as a result of an increase in the average price of approximately 54.5%, partially offset by a decrease in sales volumes of approximately 11.6%;

Export revenues obtained by the Downstream segment increased by Ps. 3,979 million, or 32.5%, primarily due to increases in exports of flour, grains and oils of 38.8%, aerokerosene of 29.0%, and petrochemicals of 37.2%, all due to an increase in average prices in Argentine peso terms, partially offset by decreases in sales volumes; and

Imports of fuels decreased by Ps. 621 million, or 10.0%, primarily as a result of a decrease in purchased volumes of gas oil of 38.5%, partially offset by an increase in imported volumes of gasoline and jet fuel of 15.7% and an increase in average prices of fuels of 23.9%.

All of this was more than offset by the following:

Purchases of crude oil increased by Ps. 23,744 million, or 36.1%, primarily as a result of an increase in oil prices of approximately 38.0% in Argentine peso terms as a result of the devaluation of the Argentine peso against the U.S. dollar, partially offset by a decrease in purchased volumes. Crude oil transferred volumes from the Upstream business segment increased by 0.6% (approximately 82 mcm), and crude oil purchased volumes from third parties decreased approximately 11.4% (approximately 304 mcm);

Purchases of biofuels increased by Ps. 5,454 million, or 70.5%, primarily as a result of an increase in the average prices of FAME and ethanol biofuel of approximately 76.3% and 45.6%, respectively, and an increase in purchased volumes of FAME and ethanol biofuel of 1.4% and 11% (due to an increase in the cut rate of naphthas), respectively;

Grain purchases in the agricultural sales segment through the form of barter, which were recorded as purchases for accounting purposes, increased by Ps. 1,526 million, or 58.1%. This increase is due to an increase in the average price of approximately 91.1%, partially offset by a decrease in volumes of 17.3%;

Property, plant and equipment depreciation increased by Ps. 2,504 million, or 100.5%, primarily as a result of (i) increased investments in assets (in particular, the launch of the new Coke unit at the La Plata refinery)

and (ii) an overall increase in property, plant and equipment values in Argentine pesos, which was related to the devaluation of the Argentine peso against the U.S. dollar, which is the functional currency of the Company;

Selling expenses increased by Ps. 3,820 million, or 35.6%, primarily as a result of (i) increases in transport expenses, mainly related to increased fuel prices in the Argentine domestic market and (ii) the increase in the depreciation of assets linked to commercial use and of advertising and promotional activities; and the provision for contingencies increased in 2015 by Ps. 650 million in connection with a ruling against YPF regarding a claim filed by the Union of Consumers and Users (*Unión de Usuarios y Consumidores*) for claims alleging that excess fees were charged to LPG consumers during the period 1993 to 1997;

Production costs related to refining costs increased by Ps. 2,530 million, or 42.0%. This increase was driven by higher charges for consumption of materials, spare parts, electricity and other supplies and fuels. As a consequence of this, and considering also that the level of processing in refineries was 1.8% lower, the cost of unit refining increased by 44.2% in 2016 compared to 2015. In turn, transportation costs related to production (naval and pipelines) increased by Ps. 1,182 million, or 40.0%.

#### *Gas and Power*

In 2016, the Company began to report separately its Gas and Power business segment, as explained in Item 4. Information on the Company Business Organization, which includes the transportation, distribution and commercialization of natural gas to third parties, natural gas liquid (NGL), regasification services and electricity generation.

Revenues from the Gas and Power business segment in 2017 were Ps. 60,880 million, representing a 108.0% increase compared to Ps. 29,276 million in 2016, mainly due to the fact that the Stimulus Plan for Surplus Natural Gas Injection in this business segment began to be accrued in 2017

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The operating income for the Gas and Power business segment in 2017 was a gain of Ps. 3,259 million, representing a 62.3% increase compared to a gain of Ps. 2,008 million in 2016. This increase was mainly due to the gradual recomposition of rates obtained by our subsidiary company Metrogas S.A., which recorded an operating income of Ps. 1,427 million in 2017, compared to an operating profit of Ps. 310 million in 2016. There were also better operating results from our subsidiary company YPF Energía Eléctrica S.A. attributable to this segment.

The operating income for the Gas and Power business segment in 2016 was a gain of Ps. 2,008 million, representing a 34.0% increase compared to a gain of Ps. 1,498 million in 2015. This increase was mainly due to (i) the improved results in pesos obtained by LNG regasification services in Bahía Blanca and Escobar, which rates are set in U.S. dollars, (ii) the improved results obtained by our subsidiary YPF Energía Eléctrica S.A. and (iii) the Transitional Economic Assistance of Ps. 759 million accrued by our subsidiary Metrogas in 2016 in comparison with Ps. 711 million accrued in 2015.

*Central Administration and Others*

The operating loss for the Central Administration and Others in 2017 was a loss of Ps. 4,400 million, representing a 172.4% increase in loss compared to a loss of Ps. 1,615 million in 2016. In the second quarter of 2016, this segment included a net income of Ps. 1,528 million attributable to the deconsolidation of the Maxus Entities (see Note 27 to the Audited Consolidated Financial Statements). The remaining variation is mainly related to increases in personnel costs, higher charges for computer licenses and lower results obtained by our subsidiary A-Evangelista SA, resulting in part from the lower incentives for construction by Ps. 234 million.

The operating loss for the Central Administration and Others in 2016 was a loss of Ps. 1,615 million, representing a 30.7% decrease in loss compared to a loss of Ps. 2,331 million in 2015. During 2016, this group of activities includes a net income of Ps. 1,528 million attributable to the deconsolidation of the Maxus Entities (see Note 27 to the Audited Consolidated Financial Statements), offset by the increase in personnel costs, mainly due to higher wages, IT service contracts and depreciation of property, plant and equipment.

**Liquidity and Capital Resources***Financial condition*

Total loans outstanding as of December 31, 2017, 2016 and 2015 were Ps. 191,063 million, Ps. 154,345 million and Ps. 105,751 million, respectively, consisting of (i) current loans (including the current portion of non-current loans) of Ps. 39,336 million and non-current loans of Ps. 151,727 million as of December 31, 2017, (ii) current loans of Ps. 26,777 million (including the current portion of non-current loans) and non-current loans of Ps. 127,568 million as of December 31, 2016 and (iii) current loans of Ps. 27,817 million (including the current portion of non-current loans) and non-current loans of Ps. 77,934 million as of December 31, 2015. As of December 31, 2017, 2016 and 2015, 77%, 70%, and 73% of our loans were denominated in U.S. dollars, respectively.

In the past we have repurchased certain of our publicly-traded bonds in open market transactions on an arms-length basis. As of December 31, 2017, we had repurchased Ps. 309 million of our outstanding bonds. We may, from time to time, make additional purchases of, or effect other transactions relating to, our publicly-traded bonds if, in our own judgment, the market conditions are attractive.

The following tables set forth our consolidated cash flow information for the periods indicated.

	<b>For the year ended December 31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
	<b>(in millions of pesos)</b>		
Net cash flows from operating activities	71,974	49,183	41,404
Net cash flows used in investing activities	(55,242)	(66,174)	(64,049)
Net cash flows provided by financing activities	(355)	10,817	23,665
Translation differences provided by cash and equivalents	1,665	1,692	4,609
Reclassification of assets held for disposal	(61)		
Deconsolidation of subsidiaries		(148)	
Net (increase) decrease in cash and equivalents	17,981	(4,630)	5,629
Cash and cash equivalents at the beginning of period	10,757	15,387	9,758
Cash and cash equivalents at the end of period	28,738	10,757	15,387

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Net cash flows from operating activities were Ps. 71,974 million in 2017 compared to Ps. 49,183 million in 2016. This 46.3% increase was primarily attributable to better operating results, without considering impairment of property, plant and equipment and intangible assets, depreciation of property, plant and equipment and amortization of intangible assets, increased non-cash provisions, which did not involve expenditures, and lower income tax. On the other hand, there was a decrease in net working capital, mainly due to the higher accounts payable as a result of higher purchases and higher collections from the natural gas distribution companies. In addition, in 2016, we received pending payments under the Gas Plan until December 31, 2015, through the delivery of public debt instruments, specifically Argentine Bonds denominated in U.S. Dollars due 2020 ( BONAR 2020 USD ) (see Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government Market Regulation Natural gas ). The bonds were in portfolios as of December 31, 2016 and did not increase the operating cash of the Company. We believe that, given the high level of cash flow provided by operating activities, including our expectation of reducing accounts receivable from transactions with government entities (see Item 3. Key Information Risk Factors Risks Relating to the Argentine Oil and Gas Business and Our Business A significant percentage of our cash flow from operations is derived from counterparties that are governmental entities ) and certain private clients, our working capital is reasonable for the current requirements of the Company.

Net cash flows from operating activities were Ps. 49,183 million in 2016 compared to Ps. 41,404 million in 2015. This 19% increase was primarily attributable to better operating results, without considering impairment of property, plant and equipment and intangible assets, depreciation of property, plant and equipment and intangible assets, increased non-cash provisions, which did not involve expenditures, and lower income tax. This was partially offset by an increase in working capital in 2016 related to the accrual of accounts receivable, including the Gas Plan. In addition, in 2016, we received pending payments under the Gas Plan until December 31, 2015, through the delivery of public debt instruments, specifically Argentine Bonds denominated in U.S. Dollars due 2020 ( BONAR 2020 USD ) (see Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government Market Regulation Natural gas ). The bonds were in portfolios as of December 31, 2016 and did not increase the operating cash of the Company.

Cash flows used in investing activities were Ps. 55,242 million in 2017, compared to Ps. 66,174 million in 2016, representing a 16.5% decrease compared with 2016, as a result of a reduction in investments of property, plant and equipment and intangible assets in order to align said investments to the operational generation of funds, a greater liquidation of investments in financial assets, which came mainly from the collection of the Gas Plan through the receipt of public securities mentioned in the previous paragraph, and a decrease in financial loans granted. Cash flows used in investing activities were Ps. 66,174 million in 2016, compared to Ps. 64,049 million in 2015, representing a 3% increase compared with 2015, which related mainly to investments made by our Upstream business segment and investment in our refineries.

Net cash flows provided by financing activities in 2017 were Ps. (355) million, which came primarily from lower takeover, net cancellation of debt maturity and higher interest payment. Net cash flows provided by financing activities in 2016 were Ps. 10,817 million, which came primarily from the issuance of notes in the local market and international markets, net of repayments of principal and interest, including issuance of notes in the international debt capital markets for an aggregate principal amount of Ps. 13.3 billion, U.S.\$1.2 billion and of CHF 0.3 billion. In 2017, at the shareholders' ordinary and extraordinary general meeting held on April 28, 2017, a dividend of Ps. 716 million (Ps. 1.82 per share or ADS) was authorized and paid in December 2017. In 2016, at the shareholders' ordinary and extraordinary general meeting held on April 29, 2016, a dividend of Ps. 889 million (Ps. 2.26 per share or ADS) was authorized for payment in 2016. In 2015, at the shareholders' ordinary and extraordinary general meeting held on April 30, 2015, a dividend of Ps. 503 million (Ps. 1.28 per share or ADS) was authorized for payment in 2015.



A Global Medium-Term Notes Program was approved at a shareholders meeting held on January 8, 2008 for an amount up to U.S.\$1.0 billion. On September 13, 2012 and on April 30, the shareholders meeting approved the increase of the amount of the program, mentioned above, for an amount of U.S.\$2.0 billion each time, resulting in a maximum nominal amount in circulation at any time under the program of U.S.\$5.0 billion, or its equivalent in other currencies, and providing the use of the proceeds to cover all alternatives contemplated by Article 36 of Law No. 23,576 of Negotiable Obligations and Supplementary rules. On February 5, 2015, the shareholders meeting resolved by a majority of computable votes to approve the increase of the amount of the Company's Global Medium-Term Notes Program of U.S.\$5.0 billion or its equivalent in other currencies by U.S.\$3.0 billion, resulting in the total maximum nominal amount outstanding under the program at any time becoming U.S.\$8.0 billion, or its equivalent in other currencies, or a lower amount as may be determined by the Board of Directors.

On April 29, 2016, the Ordinary and Extraordinary General Meeting of Shareholders approved the increase of the amount of the Company's Global Medium Term Note Program (*Programa Global de Emisión de Títulos de Deuda de Mediano Plazo de la Compañía*) by U.S.\$2.0 billion, to a total of U.S.\$10.0 billion, or its equivalent in other currencies to remain outstanding at any time under the program. In addition, the term of the Program was extended for five years starting from October 25, 2017 by our shareholders at a meeting held on April 28, 2017 and in a meeting of our Board of Directors held on June 7, 2017.

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Under the Global Medium-Term Notes Program, the Company issued several series of notes in the local and international markets at different interest rates. All such securities are authorized to be traded on the Buenos Aires Stock Exchange (*Bolsa de Comercio de Buenos Aires*) and the Electronic Open Market (*Mercado Abierto Electrónico*) in Argentina. For additional information about the outstanding notes of YPF S.A. and our controlled companies as of December 31, 2017, see Notes 4 and 16 to the Audited Consolidated Financial Statements.

The following table sets forth our commitments for the periods indicated below with regard to the principal amount of our debt, as of December 31, 2017, plus accrued but unpaid interest as of that date:

	Total	Expected Maturity Date						
		Less than 1 year	1 Year	2 Years	3 Years	4 Years	5 Years	More than 5 years
(in millions of pesos)								
Loans	191,063	39,336	11,411	19,051	25,776	13,929	81,560	

For detailed information regarding our indebtedness, see Notes 4 and 16 to the Audited Consolidated Financial Statements.

**Contractual obligations**

The following table sets forth information with regard to our commitments, expressed in U.S. dollars, under commercial contracts for the periods indicated below, as of December 31, 2017:

Contractual Obligations <sup>(1)</sup>	Total	Less than 1 year				More than 5 years
		1 Year	3 Years	5 Years	More than 5 years	
(in millions of U.S.\$) <sup>(7)</sup>						
Debt <sup>(2)</sup>	15,720	2,878	3,242	3,051	6,549	
Operating lease obligations	551	295	212	18	27	
Purchase obligations <sup>(3)(4)</sup>	2,928	1,350	945	285	349	
Purchases of services	2,112	745	734	285	349	
Purchases of goods	816	605	211			
Gas	573	363	211			
Oil	107	107				
Gas Oil, Fuel Oil and Gasoline	67	67				
Steam	2	2				
Others	67	66	1			
Other liabilities <sup>(5)(8)</sup>	8,052	3,372	1,041	675	2,965	
Total <sup>(5)(6)</sup>	27,252	7,894	5,440	4,028	9,890	

(1) The expected timing for payments of the obligations in the preceding table is estimated based on current information. Timing of payments and actual amounts paid may be different, depending on the time of receipt of goods or services, or changes to agreed-upon amounts for some obligations.

(2)

These projected amounts include interest due during all the periods presented. Interest on variable rate instruments is calculated using the rate as of December 31, 2017 for all periods. See additionally Item 5. Operating and Financial Review and Prospects Liquidity and Capital Resources Covenants in our indebtedness.

- (3) Purchase obligations are obligations under contractual agreements to purchase goods or services, including capital projects. These obligations are enforceable and legally binding on YPF and specify all significant terms, including fixed or minimum quantities to be purchased; fixed, minimum, or variable price provisions; and the approximate timing of the transaction. For obligations with cancellation provisions, the amounts included in the preceding table were limited to the non-cancellable portion of the agreement terms or the minimum cancellation fee. In addition, the table includes purchase commitments under commercial agreements that do not provide for a total fixed amount, which have been valued using our best estimates. Accordingly, our actual purchase obligations may differ from the estimated amounts shown in the table.
- (4) Some of our purchase orders represent authorizations to purchase rather than binding agreements. In that regard, we have entered into certain agreements for the purchase of products that specify minimum prices and quantities based on a percentage of the total available market or based on a percentage of our future purchasing requirements. Due to the uncertainty of the future market and our future purchasing requirements, as well as the non-binding nature of these agreements, obligations under these agreements have been excluded from the preceding table. Payments related to these obligations were not significant as of December 31, 2017.

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- (5) Provisions for contingent liabilities under commercial contracts, which amounted to U.S.\$ 664 million as of December 31, 2017, are not included in the table above since we cannot, based on available evidence, reasonably estimate the settlement dates of such contingencies.
- (6) As a result of the extension of our concessions in certain exploration areas, we are committed to carrying out exploration activities and making certain investments and expenditures until the expiration of some of our concessions. The commitments for these investments and expenditures amounted to U.S.\$ 12.3 billion as of December 31, 2017. The table includes the portion of this amount for which contracts have been executed.
- (7) The table is presented in U.S.\$, which is the Company's functional currency.
- (8) Includes accounts payable, salaries and social security, taxes payable, provisions for pensions, provisions for environmental liabilities and provisions for hydrocarbon wells abandonment obligations as set forth in our audited consolidated financial statements included as of December 31, 2017.

We have additional commitments under guarantees. For a discussion of these additional commitments see [Guarantees provided](#).

***Covenants in our indebtedness***

Our financial debt generally contains customary covenants. With respect to a significant portion of our financial debt totaling Ps. 191,063 million, including accrued interest (current and non-current debt) as of December 31, 2017, we have agreed, among other things and subject to certain exceptions, not to establish liens or charges on our assets. In addition, approximately 52 % of our debt outstanding as of December 31, 2017 were subject to financial covenants related to our leverage ratio and debt service coverage ratio.

Bank credit facilities together with capital market debt provide a material source of liquidity for the Company. Under the terms of our credit agreements and indentures, if we fail to comply with the covenants previously described or fail to remedy them during an established period of time, we will be in default; an event that would limit our capacity of borrowing under our credit facilities and would therefore materially limit our sources of liquidity.

In addition, upon an event of default, any creditor, including the holders of outstanding notes amounting to Ps. 165,154 million as of December 31, 2017, may declare due and immediately payable the principal and accrued interest on amounts owed to them, which could result in other accelerations due to cross default provisions. As of the date of this annual report, none of our debt is under any event of default that could trigger an acceleration provision. As of December 31, 2017, we were in compliance with all covenants in connection with our indebtedness.

***Guarantees provided***

As of December 31, 2017, in relation to compliance with obligations of subsidiaries, YPF has issued bank guarantees for an approximate amount of US\$ 26 million and has assumed other commitments for an approximate value of US\$ 42 million.

Additionally, see Note 29.b to the Audited Consolidated Financial Statements for a description of the Chevron transaction and see Note 16 to the Audited Consolidated Financial Statements for a description of guaranteed financial debt.

**Table of Contents****Capital investments, expenditures and divestitures**

## Capital investments and expenditures

The table below sets forth our capital expenditures and investments by activity for each of the years ended 2017, 2016 and 2015.

	2017		2016		2015	
	(in millions of pesos)	(%)	(in millions of pesos)	(%)	(in millions of pesos)	(%)
Capital expenditures and investments <sup>(1)</sup>						
Upstream	45,380	77	50,258	79	50,927	82
Downstream	8,179	14	9,839	15	8,874	14
Gas and Power	3,867	7	2,134	3	469	1
Central Administration and Others	1,639	3	1,679	3	1,939	3
Total	59,065	100%	63,910	100%	62,209	100%

(1) Includes acquisitions of properties, plant and equipment and exploration expenses, net of unproductive drilling expenses and well abandonment costs.

We make capital expenditures to achieve the goals of the Company's strategy described under Item 4. Information on the Company History and Development of YPF.

**Capital divestitures**

We have not made any significant divestitures in the past three years.

**Quantitative and Qualitative Disclosures about Market Risk**

For a description of our exposure to market risk, see Item 11. Quantitative and Qualitative Disclosures about Market Risk.

**Off-Balance Sheet Arrangements**

We do not have any material off-balance sheet agreements. Our off-balance sheet agreements are described in Liquidity and Capital Resources Guarantees provided.

**Research and Development, Patents and Licenses, etc.**

For a description of our research and development policies, see Item 4. Information on the Company Research and Development.

**ITEM 6. Directors, Senior Management and Employees**

## Management of the Company

On May 3, 2012, the Argentine congress enacted the Expropriation Law. Among other matters, the Expropriation Law provided for the expropriation of 51% of the share capital of YPF represented by an identical stake of Class D shares owned, directly or indirectly, by Repsol and its controlled or controlling entities. The shares subject to expropriation, which have been declared of public interest, will be assigned as follows: 51% to the Argentine Republic and 49% to the governments of the provinces that compose the National Organization of Hydrocarbon Producing States. To ensure compliance with its objectives, the Expropriation Law provides that the National Executive Office, by itself or through an appointed public entity, shall exercise all the political rights associated with the shares subject to expropriation until the transfer of political and economic rights to the provinces that compose the National Organization of Hydrocarbon Producing States is completed.

The Expropriation Law states that YPF shall continue as a publicly traded corporation and the management of the shares subject to expropriation shall be carried out according to the following principles: (i) strategic contribution of the Company to the aims established in the Expropriation Law; (ii) the management of the Company in accordance with the best industry and corporate governance practices, preserving the interests of the Company's shareholders and creating value for them; and (iii) the professional management of the Company. The information provided below describes the composition and responsibilities of our Board of Directors and committees as of the date of this annual report.

**Table of Contents****Board of Directors*****Composition of our Board of Directors***

Our business and affairs are managed by the Board of Directors in accordance with our by-laws and the Argentine General Corporations Law. Our by-laws provide for a Board of Directors composed of 11 to 21 members and up to an equal number of alternates. Alternates are those elected by the shareholders or the Supervisory Committee, when applicable, to replace directors who are absent from meetings or who are unable to exercise their duties, when and for whatever period appointed to do so by the Board of Directors. Alternates have the responsibilities, duties and powers of directors only if and to the extent they are called upon to attend board meetings and as long as they perform the duties of a director.

Directors shall hold office from one to three years, as determined by the shareholders' meetings. As of the Shareholders' Meeting held on April 28, 2017, our Board of Directors was composed of 15 directors and 11 alternates.

In accordance with our by-laws, the Argentine government, as the sole holder of Class A shares, is entitled to elect one director and one alternate.

Under the Argentine General Corporations Law, a majority of our directors must be residents of Argentina and all directors must establish a legal domicile in Argentina for service of notices in connection with their duties.

Our by-laws require the Board of Directors to meet at least once every quarter in person or by video conference, and a majority of directors is required to constitute a quorum. If a quorum is not met within one hour after the start time set for the meeting, the President or his substitute may invite alternates of the same class as that of the absent directors to join the meeting or call a meeting for another day. Resolutions must be adopted by a majority of the directors present (including those connected by video conference), and the President or his substitute is entitled to cast the deciding vote in the event of a tie.

The current members of our Board of Directors, in accordance with the resignations accepted by the Board of Directors at its meetings of February 15 and March 22 and the designation approved at its meeting held on April 5, 2018, is composed by 13 directors and 9 alternates. The year in which they were appointed and the year their term of appointment expires is as follows:

<i>Name</i>	<i>Position</i>	<i>Age</i>	<i>Director Since</i>	<i>Term Expiration</i>
Miguel Ángel Gutiérrez	Chairman and Director	59	2017	2018
Roberto Luis Monti	Director	79	2017	2018
Norberto Alfredo Bruno	Director	58	2017	2018
Néstor José Di Pierro	Director	62	2017	2018
Ignacio Perincioli	Director	42	2018	2018
Gabriel Alejandro Fidel	Director	55	2017	2018
Juan Carlos Abud	Director	58	2017	2018
Carlos Alberto Felices	Director	72	2017	2018
Daniel Gustavo Montamat	Director	63	2017	2018
Fabián Jorge Rodríguez Simón	Director	59	2017	2018
Inés María Leopoldo	Director	60	2017	2018

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Luis Augusto Domenech	Director	65	2017	2018
Emilio José Apud <sup>(1)</sup>	Director	72	2017	2018
Gerardo Damián Canseco <sup>(2)</sup>	Alternate Director	52	2017	2018
Luis Gustavo Villegas	Alternate Director	45	2017	2018
Lucio Mario Tamburo	Alternate Director	57	2017	2018
Miguel Lisandro Nieri	Alternate Director	45	2017	2018
Daniel Cristian González Casartelli <sup>(2)</sup>	Alternate Director and CFO	48	2017	2018
Carlos Alberto Alfonsi <sup>(2)</sup>	Alternate Director and Operations and Transformations Executive Vice President	57	2017	2018



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<i>Name</i>	<i>Position</i>	<i>Age</i>	<i>Director Since</i>	<i>Term Expiration</i>
Fernando Pablo Giliberti <sup>(2)</sup>	Alternate Director and Supply Chain Vice President	51	2017	2018
Santiago Martínez Tanoira <sup>(2)</sup>	Alternate Director and Downstream Executive Vice President	45	2017	2018
Marcos Miguel Browne <sup>(2)</sup>	Alternate Director and Gas and Energy Executive Vice President	48	2017	2018

(1) Represents our Class A shares.

(2) As of April 19, 2018, the individual owns less than one percent of our Class D shares.

The General Ordinary and Extraordinary Shareholders' meeting held on April 29, 2016 approved, by a majority of computable votes, the modification of Article 17, subsections i) and xiii); Article 18, subsections a), b), c), d) and e); and Article 19, subsections iii), iv) and v) of the Company's By-laws, which separated the functions of the Chairman and the Chief Executive Officer (CEO).

The Chairman of the Board of Directors, who, according to our by-laws, must be a Class D director, was elected by the Board of Directors at the meeting held on April 28, 2017. All other officers serve at the discretion of the Board of Directors and may be terminated at any time without notice.

On February, 15, 2018, the Board of Directors accepted Mr. Octavio Frigerio's resignation as Director of Class D shares, for strictly personal reasons.

On February, 15, 2018, the Board of Directors accepted Mr. Fernando Dasso's resignation as Alternate Director of Class D shares, for strictly personal reasons.

On February, 15, 2018, the Board of Directors accepted Mr. Alejandro Rodrigo Monteiro's resignation as Alternate Director of Class D shares, for strictly personal reasons.

On March, 22, 2018, the Board of Directors accepted Mr. Juan Franco Donnini's resignation as Director of Class D Shares, for strictly personal reasons.

On March, 22, 2018, the Board of Directors accepted Mr. Daniel Alberto Kokogian's resignation as Director of Class D Shares, for strictly personal reasons.

On April 5, 2018 the members of the Supervisory Committee for the Class D shares designated Mr. Ignacio Perincioli as Director for Class D shares, to replace Mr. Juan Franco Donnini with tenure until the election of new directors at the next Shareholders' Meeting.

*Outside business interests and experience of the members of our Board of Directors*

*Miguel Ángel Gutiérrez*

Mr. Gutiérrez is a founding partner of The Rohatyn Group and leads its private investments, real estate, infrastructure and renewable energy activities. From 1980 to 2001, he held various positions at J.P. Morgan, including Managing

Director in charge of Global Emerging Markets and member of the Management Committee for Global Markets. In addition, he served as Chairman of the Board of Directors of Autopistas de Oeste S.A. and Chairman and CEO of Grupo Telefónica de Argentina S.A. He was also a member of the Consultative Council of CIPPEC and of the International Advisory Board of the IAE Business School. Currently, he is a member of the Economic and Social Council of the Universidad Torcuato Di Tella, and of the Council of the Fundación Cruzada Argentina. He has been a member of the Board of Directors of YPF since December 2015 and Chairman of the Board of Directors since April 2016.

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**Table of Contents***Roberto Luis Monti*

Mr. Monti earned undergraduate and master's degrees in electrical engineering from the Universidad de Buenos Aires and a master's degree in business administration from the American Management Association in New York. He has broad experience in the national and international energy industry. From 1995 to 1997, he was Chairman and CEO of Maxus Energy Corporation. From 1997 to 1999 he held various positions at YPF, including CEO during 1997 and Chairman and CEO from 1998 to 1999. From 1999 to 2000, he was Executive Vice-President of Exploration and Production of Repsol YPF in Argentina. He was also a member of the Board of Directors of Petrobras Argentina S.A. until July 26, 2016. He is a member of the Board of Directors of Tenaris S.A. He has been a member of the Board of Directors of YPF since April 2016.

*Norberto Alfredo Bruno*

Mr. Bruno earned a degree in business administration from Universidad Argentina de la Empresa and completed postgraduate studies in strategic management at the Institute of Strategic Management, Organization and Business Management and the Instituto Argentino de Economía Energética, as well as in energy economics at the Massachusetts Institute of Technology. From 1983 to 1998, he held various positions at YPF, including International Development Manager. From 1998 to 2000, he was CEO of YPF Perú. From October 2001 to December 2013, he was CEO of Empresa de Energía Río Negro S.A. Thereafter, he served as a business consultant and advisor. Since December 2015, Mr. Bruno has served as Minister of Economy and Infrastructure of the Province of Neuquén. He has been a member of the Board of Directors of YPF since April 2016.

*Néstor José Di Pierro*

Mr. Di Pierro was a Deputy in the Legislature of the Province of Chubut from 1991 to 1995, Secretary of Social Welfare for the Municipality of Comodoro Rivadavia in the Province of Chubut from 1995 to 1999, Councilman in the Deliberative Council of Comodoro Rivadavia from 1999 to 2001, Comptroller of Petrominera Chubut S.E from 2003 to 2009, President of Correo Oficial de Argentina S.A. from 2009 to 2011, and Mayor of the Municipality of Comodoro Rivadavia from 2011 to December 2015. He has been a member of the Board of Directors of YPF since December 2015.

*Ignacio Perincioli*

Mr. Perincioli holds a degree in business administration and is a Certified Public Accountant from the Universidad de Buenos Aires. He has also completed a Project Management specialization of the Asociación Argentina de Evaluadores (ASAE) and a specialization in the management of small and medium sized enterprises in the Universidad de Buenos Aires. He served in the Department of Control of External Indebtedness of the Auditor General's Office, in the Secretariat for Coordination and Management Control and in the Provincial Road Program within the Ministry of Federal Planning, Public Investment and Services of the Argentine Government. He also worked in the Finance and Management Department of Opinion Austral S.A. Between July 2014 and December 2015 he was a member of the Board of Directors of YPF S.A. From December 2015 through March 2018 he was the President of Fomento Minero de Santa Cruz S.E., Director and Vice-President of Cerro Vanguardia S.A., and a member of the Supervisory Committee in Patagonia Gold S.A. Currently he is the Minister of Economy, Finance and Infrastructure of the Province of Santa Cruz. He is a member of the Board of Directors of YPF since April 5, 2018.

*Gabriel Alejandro Fidel*

Mr. Fidel obtained an administration and political science degrees from the Universidad Nacional de Cuyo and has a master's degree in Public Affairs with specialization in economic policy from University of Texas, Austin. He was awarded a Fulbright Scholarship and of UN-CEPAL (Chile). He has held various positions throughout his career, including Under Secretary of Tourism, Ministry of Government, and Ministry of Economy, all of them of the Province of Mendoza. Currently, he is a member of the Mercosur Parliament and a part-time professor of Economics at the Universidad Nacional de Cuyo. He was designated a member of the Board of Directors of YPF on March 29, 2017.

*Juan Carlos Abud*

Mr. Abud graduated as public accountant from the Universidad Nacional de Jujuy. He obtained an MBA from the Universidad Nacional de Jujuy and completed the Advanced Management Program at Instituto Centroamericano de Administración de Empresas. He has held various offices throughout his extensive career. He was a representative in the Jujuy Province Legislature (1997 through 2001 and 2001 through 2005); President of the Public Policies Institute (2005 through 2007); President of the San Salvador de Jujuy City Council, where he served two terms of office (between 2007 and 2011); and Treasury Secretary of the San Salvador de Jujuy Municipality (2011 through 2015). Mr. Abud has been Minister of Economic Development and Production of the Province of Jujuy since December 2015. He has been a member of YPF's Board of Directors since April 2017.

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**Table of Contents***Carlos Alberto Felices*

Mr. Felices earned a business administration degree from the Universidad de Buenos Aires and completed postgraduate studies in the United States. He has held various positions at Pfizer Inc., including Treasurer in Argentina, CFO in Brazil and Director of Administration for Latin America in the United States. From 1993 to 2002, he worked for YPF eventually serving as CFO. He was CEO of Telecom Argentina S.A. until 2007 and Chairman of the Board of Directors of Telecom Argentina S.A. from 2007 until April 2008. He has been a member of the Board of Directors of YPF, President of the Audit Committee and the Audit Committee Financial Expert since December 2015.

*Daniel Gustavo Montamat*

Mr. Montamat holds a law degree, a degree in Economics and is a Certified Public Accountant. He earned a master's degree in economics from Michigan State University in the United States, a doctoral degree in economics from the Universidad Católica de Córdoba and a doctoral degree in law and social sciences from the Universidad Nacional de Córdoba. He has held various positions, including Director of Gas del Estado, Director and President of YPF and Secretary of Energy of Argentina. In 1991, he founded Montamat & Asociados in the Autonomous City of Buenos Aires where he serves as Executive Director. Currently, he is a consultant for the World Bank and the Inter-American Development Bank and a postgraduate professor for the Energy Regulation Study Centre (CEARE) at Universidad de Buenos Aires. He has been a member of the Board of Directors of YPF and the Audit Committee since December 2015.

*Fabián Jorge Rodríguez Simón*

Mr. Rodríguez Simón earned a law degree from the Universidad de Buenos Aires and completed a PIL at Harvard Law School. He has held various positions, including Advisor to the Mayor of the Autonomous City of Buenos Aires, Chief of Staff for the Ministry of Environment and Public Space of the Autonomous City of Buenos Aires from 2007 to 2009 and President of the Commission Act 1840 Zero Waste. He was a founding partner of Llerena & Abogados and served as Director of its Executive Committee. He was a member of the Governing Council of the Instituto de Empresa (Madrid) between 2006 and 2014. He is President of the Fundación Pericles, member of the Council of the Council of Fundación Pensar. Currently, he is a senior partner of AlfaLegalGroup. Since October 2015 he is a member of the Mercosur Parliament. He has been a member of the Board of Directors of YPF since December 2015.

*Inés María Leopoldo*

Mrs. Leopoldo graduated as an electronic engineer from the Universidad Tecnológica Nacional and earned a master's degree in business administration from the Universidad de Buenos Aires. Additionally, she completed diverse Senior Management Programs at IESE Business School, the INSEAD and Columbia Business School and a Corporate Governance Program at IC-A in Spain. She has broad experience in the IT, telecommunications and internet industries and has held various positions at Telecom, La Nación newspaper and Telefónica. She is senior member of the IEEE (Institute of Electronic and Electrical Engineers). Currently, Mrs. Leopoldo is partner at Neo Labels SL an advertising agency in Spain. She has been a member of the Board of Directors of YPF and the Audit Committee since April 2016.

*Luis Augusto Domenech*

Mr. Domenech earned a degree in business administration from the Universidad de Buenos Aires and completed the Senior Management Program at IAE Business School and the Executive Education Program at the Business School at the University of Michigan in the United States. From 1993 to 2004, he held several positions at Metrogas S.A., including CFO from 1993 to 2002 and CEO from 2002 to 2004. From 2004 to 2013, he was President and CEO of

Companhia do Gas do Sao Paulo (COMGAS) in Brazil. He has been a member of the Board of Directors of YPF and the Audit Committee since April 2016.

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**Table of Contents***Emilio José Apud*

Mr. Apud earned an industrial engineering degree and completed postgraduate degrees in energy economics and management control of large projects at the Engineering School of the Universidad de Buenos Aires. He earned a postgraduate degree in Regional Economic Analysis at the Institute for Economic and Social Development at Torcuato Di Tella Institute and a postgraduate specialization in energy conservation at Dupont W.L. in the United States. He has held various positions, including Director of CAMMESA and Secretary of Energy and Mining of Argentina in 2001. From 1983 to 1989, he founded and served as Vice President of IAE and the Energy Institute G. Mosconi. He has owned Apud & Associates, a consulting firm in energy and the environment, since 2005. Currently, he serves as partner and director of AMPAR, a Paraguayan consulting firm and of Ecoriental, an Uruguayan consulting firm. In addition, he serves as Chairman of BAE S.A., a builder and developer, as Counselor at the Fundación Libertad y Progreso and as member of Fundación Pensar. He has been a member of our Board of Directors since 2015.

*Gerardo Damián Canseco*

Mr. Canseco earned a law degree and specializes in Trade Union Law. Since 1984, he has been an employee of YPF. He has held several other positions, including Government Secretary for the Municipality of San Lorenzo in the Province of Santa Fe from 2007 to 2011, Undersecretary of Labor for the Labor and Social Security Ministry from 2011 to 2014, and President of the Centro de Estudios Laborales y Sociales of Rosario from 2014 to 2016. He has been an alternate member of the Board of Directors of YPF since April 2016.

*Luis Gustavo Villegas*

Mr. Villegas has served in several positions within the oil industry since 1990. Currently, he serves as Undersecretary for the Union of Senior Staff and Professionals in the Southern Patagonian Oil and Gas Private Sector and as a Senior Staff Member of the Oil Tankers Mutual Commission. He has been an alternate member of the Board of Directors of YPF since December 2015.

*Lucio Mario Tamburo*

Mr. Tamburo earned a civil engineering degree from the Universidad Nacional del Sur Bahía Blanca. He has held various positions, including Inspection Assistant for the Provincial Roads Direction in the Province of Río Negro and as Sanitation Consultant for the National Undersecretary of Water Resources. He was the Engineering and Construction Manager and Service and Maintenance Chief of Bahía Blanca at Azurix Buenos Aires S.A. He also served as Administrator of the National Entity of Water Works of Sanitation (ENOHSA) until December 2015. He has been an alternate member of the Board of Directors of YPF since December 2015.

*Miguel Lisandro Nieri*

Mr. Nieri earned a degree in economics from the National Universidad Nacional de Cuyo and holds a master's degree in finance and management control from the ADEN Business School, University of San Francisco. He has held various positions throughout his career, including Advisor of the Ministry of Finance of the Province of Mendoza from January 2000 to November 2003, Subdirector of Finance of the Provincial Fund for the Transformation and Growth of Mendoza from July 2004 to February 2007, member of the Board of Directors of Mendoza Fiduciaria S.A. from June 2006 to April 2007, business manager of Puente Hnos. Sociedad de Bolsa in Cuyo from March 2008 to June 2009, and Administrator of Financing for the Development of Mendoza Agency from December 2015 to March 2017. Currently, he is Minister of Finance of the Province of Mendoza since March 2017 and alternate member of the

Board of Directors of YPF since March 2017.

*Daniel Cristian González Casartelli*

Mr. Gonzalez earned a degree in business administration from the Pontificia Universidad Católica de Argentina. He worked for the investment bank Merrill Lynch & Co. in Buenos Aires and New York for 14 years and held the positions of Head of Mergers and Acquisitions for Latin America and President for the Southern Cone (Argentina, Chile, Peru and Uruguay), among others. While at Merrill Lynch, Mr. Gonzalez played a leading role in several of the most important investment banking transactions in the region and was an active member of the firm's global fairness opinion committee. He remained as a consultant to Bank of America Merrill Lynch after his departure from the bank. Additionally, he has held the position of Head of Financial Planning and Investor Relations in Transportadora de Gas del Sur SA. Currently, he is a member of the Board of Directors of Adecoagro S.A. He was an alternate member of our Board of Directors from April 2014 to June 2014, a member of our Board of Directors from June 2014 to April 2016. He was CEO on an interim basis from April 29, 2016 until June 30, 2016 and was our Chief Financial Officer from July 2012 until April, 2018. He is an alternate member of our Board of Directors since April 2016, and he is our CEO since April, 2018.



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**Table of Contents***Carlos Alberto Alfonsi*

Mr. Alfonsi earned a degree in chemistry from the Universidad Tecnológica de Mendoza, a degree in IMD Managing Corporate Resources from the University of Lausanne and has studied at the Massachusetts Institute of Technology. Since 1987, he has held various positions at YPF, including Operations Manager, Director of La Plata Refinery, Operation Planning Director, Director of Commerce and Transportation for Latin America, Director of Refinery and Marketing in Perú, Country Manager for Perú and R&M for Perú, Chile, Ecuador and Brazil. Mr. Alfonsi was our Downstream Executive Vice President from June 2010. He was an alternate member of the Board of Directors from March 2008 to June 2012 and a member of the Board of Directors from 2012 to 2016. Currently he is an alternate member of the Board of Directors of YPF since April 2016. Mr. Alfonsi is our Operations and Transformation Executive Vice President since August 2017.

*Fernando Pablo Giliberti*

Mr. Giliberti earned a certified public accountant degree from the Universidad Católica Argentina, a master's degree in business administration from the Universidad Argentina de la Empresa, a postgraduate diploma in Management and economics of Natural Gas, University of Oxford and a Master of Science in Management degree from Stanford University. He has held several positions at YPF, including Head of Accounting and Finance at our headquarters in Mendoza, South Division Business Support Manager, Asset Manager of the El Guadal-Lomas del Cuyo, Business Development Manager and Exploration and Production Business Development Director. In San Antonio, he was Vice President of Business Development and Vice President of the Latin America Division of Pride International. He later served as Vice President of Business Development at Pioneer Natural Resources of Argentina. In 2006, he founded Oper-Pro Services S.A. He was our Strategy and Business Development Vice President from June 2012 until December 2016. He was member of the Board of Directors of YPF from June 2012 to April 2013. He has been an alternate member of the Board of Directors of YPF since April 2014 and our Supply Chain Vice President since December 2016.

*Santiago Martínez Tanoira*

Mr. Martínez Tanoira earned a degree in industrial engineering from the Instituto Tecnológico de Buenos Aires (ITBA), he holds a master's degree in Business Administration from Universidad Austral, he completed specialization courses at the University of Virginia Darden, Wharton School of the University of Pennsylvania and Harvard University in the United States. In 1998, he joined YPF and took on several roles within the Petrochemical Business Development area of the Petro-chemistry Division. He was in charge of Marketing and Business Development within the Industrial Products Business Unit and served as Planning Manager of YPF's Petrochemicals Division. Moreover, he held the position of Base Petrochemical and Intermediate Director at Repsol Química in Spain. Afterwards he was appointed Director of YPF Chemistry at YPF and a member of the board of directors of Profertil. Over the last four years, he served as Executive Manager of the Mendoza Region, in charge of the Upstream operations. Mr. Martínez Tanoira was our Upstream Executive Vice President from October 2016 until August 2017, and has been our Downstream Executive Vice President since August 2017.

*Marcos Miguel Browne*

Mr. Browne earned a degree in industrial engineering from the Instituto Tecnológico de Buenos Aires (ITBA), obtained a master's degree in business administration from Henley Management College in the United Kingdom and a diploma in natural gas management and economics from the College of Petroleum Studies, University of Oxford United Kingdom. He further completed a specialization in the economics of petroleum and natural gas at the ITBA and a Management Development Program at IAE Business School. He has held several positions at YPF, including

Head of Supply and Processing of Natural Gas from February 1994 to May 2000. He served as Head of the Gas and Liquid Gas Processing Business at TGS S.A. where he held various roles from June 2000 to March 2004. He is a founding partner of Endriven S.A. where he served as Director until March 2016. He also served as General Manager of Gas Meridional S.A., General Manager of C3Plus S.A. and President of Fuels Meridional S.A. Mr. Browne has been our Gas & Energy Executive Vice President since March 2016.

*Board practices*

The information provided below describes the composition and responsibilities of our Board of Directors.

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### ***Board practices of our Board of Directors***

In accordance with the Argentine General Corporations Law, directors have an obligation to perform their duties with loyalty and with the diligence of a prudent business person. Directors are jointly and severally liable to us, our shareholders and to third parties for the improper performance of their duties, for violating the law or our by-laws or regulations, and for any damage caused by fraud, abuse of authority or gross negligence. Specific duties may be assigned to a director by the by-laws, applicable regulations, or by shareholder resolution. In such cases, a director's liability will be determined by reference to the performance of those specific duties so long as the director's appointment and assignment of duties was approved at a shareholders' meeting and is registered with the Superintendency of Corporations.

Only shareholders, through a shareholders' meeting, may authorize directors to engage in activities in competition with us. Transactions or contracts between directors and us in connection with our activities are permitted to the extent they are performed under fair market conditions. Transactions that do not comply with the above requirements may only be carried out with prior approval of the Board of Directors or, in the absence of a quorum at a Board of Directors meeting, the Supervisory Committee. In addition, these transactions must be subsequently approved by our shareholders at a general meeting. If our shareholders do not approve the relevant transaction, the directors and members of the Supervisory Committee who approved the transactions will be held jointly and severally liable for any damages caused to us.

Any director whose personal interests conflict with ours on any matter shall notify the Board of Directors and the Supervisory Committee and abstain from voting on the matter. Otherwise, such director may be held liable to us.

A director will not be liable if, notwithstanding his presence at the meeting at which a resolution is adopted or his knowledge of such resolution, a written record exists of his opposition to such resolution and he reports his opposition to the Supervisory Committee before any complaint against him is brought before the Board of Directors, the Supervisory Committee, the shareholders' meeting, the appropriate governmental agency or the courts. Any liability of a director to us terminates upon approval of the director's actions by the shareholders at a general meeting, provided that shareholders representing at least 5% of our capital stock do not object and provided further that such liability does not result from a violation of the law, our by-laws or other regulations.

### **Board of Directors and Senior Management Roles in cybersecurity**

The Board of Directors have analyzed risks, action plans and evolution of cyber security in the company.

Directors and Senior Management have also carried out workshops over certain cyber security issues and their possible impact on the Company operations.

Training for mid-range management, key holders and employees regarding several cyber security topics was also carried out. See Item 3. Key Information Risk Factors Risks Relating to Our Business We may be subject to information technology system failures, network disruptions, and breaches in data security and our business, financial position, results of operations, and cash flows could be negatively affected by such security threats and disruptions.

The Audit Committee of the Company's Board of Directors oversees the Company's risk mitigation strategies related to cybersecurity. The Risks and Sustainability Committee monitors the main risks that are specific to the Company and/or its activity, including cyber risks; and ensures that the Company implements the corresponding mitigation actions, among other functions.

**Senior Management**

At its meeting on August 28, 2017, the Board of Directors of the Company approved the following changes:

The resignation of the CEO, Mr. Ricardo Darré.

The creation of the Operations and Transformation Vice Presidency and the appointment of Mr. Carlos Alfonsi to serve in this role.

The designation of Mr. Pablo Bizzotto to serve as Upstream Executive Vice President.

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The designation of Mr. Santiago Martínez Tanoira to serve as Downstream Executive Vice President.

The Communication and Institutional Relations Vice Presidency is converted to the Corporate Affairs, Communications and Marketing Vice Presidency, which will be led by Mr. Sebastián Mocerrea.

The incorporation of the Business Development function within the functions of the CFO.

The creation of the internal Executive Management Committee, composed of the Upstream, Downstream, Gas and Energy Executive Vice Presidencies, the CFO and the new Vice Presidencies of Corporate Affairs, Communications and Marketing and of Operations and Transformation.

The other vice-presidencies that made up the Management Committee, will report as follows

The incorporation of the Business Development area within the functions of the CFO and that the Vice Presidency of Supply Chain, led by Mr. Fernando Giliberti; MASS, led by Mr. Gustavo Chaab; Human Resources, led at that time by Mr. Fernando Dasso and currently by Mr. José Manuel Aggio; and the CTO, Mr. Sergio Fernández Mena, will report to the new Vice Presidency of Operations and Transformation led by Mr. Carlos Alfonsi.

The Board of Directors also approved that the Legal Affairs Corporate Vice Presidency, led by Mr. Germán Fernández Lahore, will report to the Vice Presidency of Corporate Affairs, Communication and Marketing.

The Vice Presidency for Business Development by Sergio Giorgi will report to the CFO. Afterwards, the Board, on its meeting held on April 5, 2018 approved the appointment of Mr. Daniel González as General Manager (CEO) of the Company.

Additionally, in the same meeting, the Board approved that the positions reporting to Mr. González, will now report to the CEO, as follows:

I. Controller, Mr. Diego Martín Pando; and

II. CFO, Mr. Luis Sas.

Furthermore, the Strategy and Business Development Vice Presidency, in charge of Mr. Sergio Giorgi, also reporting to the CEO, will have under its report the Investor's Relations Management, led by Mr. Diego Celaá.

As of the date of this annual report, the internal Executive Management Committee is composed of the CEO, the Upstream, Downstream, Gas and Energy Executive Vice Presidencies, and the new Vice Presidencies of Corporate Affairs, Communications and Marketing and of Operations and Transformation.

Our current senior management as of the date of this annual report consists of:

<i>Name</i>	<i>Position</i>
Daniel Cristian González Casartelli <sup>(1)</sup>	Chief Executive Officer
Diego Martín Pando	Controller and President of the Disclosure Committee
Luis Miguel Sas	Chief Financial Officer
Santiago Martínez Tanoira <sup>(1)</sup>	Downstream Executive Vice President
Pablo Bizzotto (1)	Upstream Executive Vice President
Carlos Alfonsi <sup>(1)</sup>	Operations and Transformations Executive Vice President
Marcos Browne (1)	Gas and Energy Executive Vice President
Sebastián Mocerrea <sup>(1)</sup>	Corporate Affairs, Communication and Marketing Executive Vice President
Sergio Fabián Giorgi (1)	Strategy and Business Development Vice President

(1) As of April 19, 2018, the individual owns less than one percent of our Class D shares.

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In addition to the members of our senior management for whose outside business interests and experiences were described above, we include the following:

### *Pablo Bizzotto*

Mr. Bizzotto holds a petroleum engineering degree from Universidad Nacional del Comahue. He completed a Management Development Program at IAE and earned an MBA from the University of Barcelona. He started his career with Tecpetrol (Techint Group). He also worked at Panamerican Energy for thirteen years, where he served as Acambuco Unit Manager, in the North of Argentina, and Cerro Dragón General Manager, in Golfo San Jorge Basin. He then joined YPF, where he served as Executive Manager of the Unconventional Region between April 2014 and August 2017. Since August 2017, he has been our Upstream Executive Vice President.

### *Sebastián Mocerrea*

Mr. Mocerrea earned a degree in law from the University of Buenos Aires and a degree in political science from the Pontifical Catholic University of Argentina. From 1996 to 1998, he served as Chairman of the Asociación de Televisión Argentina and as Vice President of Argentina's Information and Communications Chamber from 1998 to 2000. In 1997, he joined IBM as Director of Communications and External Relations of IBM South Latin-America Argentina, Chile, Paraguay and Uruguay. In 2000, he became a Regional Director of IBM Latin America in the United States. He also served as Vice President of Public Affairs of IBM Europe in Brussels. In 2012, he founded Argencon, an institution that promotes the export of knowledge-based services. Currently, he serves as Board Adviser of Argencon and participates in the Council of the Americas and ACDE. From October 2012 to May 2016, Mr. Mocerrea was Vice-President of Public Affairs and Regulations, Latin America and Global Business Support of IBM Corporation. Mr. Mocerrea was our Communication and Institutional Relations Vice President from May 2016 until August 2017. He has been our Corporate Affairs, Communications and Marketing Executive Vice President since August 2017.

### *Diego Martín Pando*

Mr. Pando holds a Public Accountant degree from the Universidad Nacional de Rosario, a Master degree in Corporate Finance from Universidad CEMA and a Postgraduate degree in Business Administration from Universidad Austral de Rosario. He started his career joining the ex-brand Arthur Andersen company in which he performed in the audit and corporate finance area. In 2002 he joined the YPF group originally working in one of its subsidiaries, A-Evangelista S.A. Since 2005 he joined YPF S.A. where he held several positions. Currently, he is our Controller and President of the Disclosure Committee.

### *Luis Miguel Sas*

Mr. Sas holds a Public Accountant degree from the Universidad de Buenos Aires. He also holds an MBA Master's Degree in Business and Administration from the IAE and an executive program from Columbia University. He has an extensive background in corporate finance, financial operations, capital markets and finance projects. He worked in management positions at Petrobras, Edesur and Pérez Companc. In addition, he participated in the privatization of Telecom, Edesur, TGS and Metrogas. He was a member of financial committees in various companies and responsible for conducting the due diligence for various companies. Since June 2018 he joined the Financial Vice Presidency at YPF. Currently, he is our CFO.

### *Sergio Fabian Giorgi*

Mr. Giorgi earned a degree in Civil Engineering from the University of Buenos Aires and a Postgraduate degree from the French Institute of Petroleum. He completed a General Management Program organized by Total Group, in partnership with HEC Paris and Saïd Business School from Oxford University. In 1994, he joined YPF as a drilling engineer. In 1996, he joined Total where he assumed different positions within the oil exploration and exploitation areas for Argentina, Scotland, Indonesia, Italy, Libya and France. In 2007, he managed Total's drilling and wells operations for Asia, North Africa, Middle East and Australia. In 2009, he was in charge for Development and Planning Studies group with focus in Africa. From 2011 to 2013, he was appointed Total's New E&P Business Project Director for Latin America. Thereafter, he joined Total Austral in Argentina as Unconventional Resources Director. Mr. Giorgi was appointed as our Business Development and Project Architecture Vice President in December 2016 and is our Strategy and Business Development Vice President since August 2017.



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### **The Audit Committee**

The information provided below describes the composition and responsibilities of our Audit Committee.

#### *Composition and responsibilities of our Audit Committee*

The Stock Market Law, as defined in Item 9. The Offer and Listing Argentine Securities Market, and Resolution No. 622/2013 of the Argentina National Securities Commission (*Comision Nacional de Valores*) ( the CNV ) require Argentine public companies to appoint an Audit Committee (*comité de auditoría*) composed of at least three members of the Board of Directors. The by-laws must set forth the composition and regulations for the operation of the Audit Committee and a majority of its members must be independent directors. See Independence of the Members of our Board of Directors and Audit Committee.

The Board of Directors of the Company, at its meeting held on April, 28, 2017, appointed the current members of the Audit Committee, who as of the date of this filing are: Carlos Felices, as chairman, and Daniel Gustavo Montamat, Luis Augusto Domenech, Emilio José Apud and Inés María Leopoldo, as members. Additionally, Mr. Felices was determined by our Board of Directors to be an Audit Committee Financial Expert pursuant to the rules and regulations of the SEC.

Executive directors may not sit on the Audit Committee.

Our Audit Committee, among other things:

periodically inspects the preparation of our financial and economic information;

reviews and opines on the Board of Directors proposals regarding the designation of the external auditors and the renewal, termination and conditions of their appointment;

evaluates internal and external audit work, monitors our relationship with the external auditors, and assures their independence;

provides appropriate disclosure regarding transactions where a conflict of interest exists among members of the corporate committees or controlling shareholders;

opines on the reasonability of proposals brought forth by the Board of Directors on fees and stock option plans for directors and administrators;

verifies compliance with applicable national or international regulations for matters related to behavior in the stock markets; and

ensures that the internal Code of Ethics complies with normative demands and is adequate.

*Activities of the Audit Committee*

The Audit Committee, pursuant to its regulations, must meet as many times as needed and at least once every quarter. From April 2017 to April 23, 2018 the Audit Committee held 9 formal meetings, regardless of all the working meetings held.

The Audit Committee must support the Board of Directors in its oversight duties, periodically review economic and financial information relating to us, supervise the internal financial control systems and oversee the independence of external auditors.

*Economic and financial information*

Using the assessment of the CFO and the work performed by our external and internal auditors, the Audit Committee analyzes the consolidated annual and quarterly financial statements before they are submitted to the Board of Directors. The Audit Committee reviewed our consolidated financial statements as of and for the year ended December 31, 2017 included in our report on Form 6-K furnished to the SEC on March 5, 2018.

*Oversight of the internal control system*

The Audit Committee oversees the progress of our annual internal audit, which is aimed at identifying critical risks, to supervise internal financial control systems and ensure that they are sufficient, appropriate and efficient.

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Throughout the year, the Audit Committee is kept informed by our internal audit department of the most relevant facts and recommendations arising out of its work and the status of the recommendations issued in prior years.

The Audit Committee supervised the alignment of our internal control system for financial reporting with the requirements established by Section 404 of the Sarbanes-Oxley Act. These regulations require that, along with the annual audit, a report must be presented by our management relating to the design, maintenance and periodic evaluation of the internal control system for financial reporting and be accompanied by a report from our external auditor. Several of our departments are involved in this activity, including the internal audit department.

*Relations with the external auditors*

The Audit Committee interacts closely with the external auditors, allowing them to make a detailed analysis of the relevant aspects of the audit of financial statements and to obtain detailed information on the planning and progress of the work.

The Audit Committee also evaluates the services provided by our external auditors, determines whether the conditions for independence of the external auditors, as required by applicable law, are met and monitors the performance of external auditors to ensure that it is satisfactory.

As of the date of this annual report, and pursuant to the evaluation process described in the above paragraph, the Audit Committee had no objections to the designation of Deloitte & Co. S.A. as our external auditors of the financial statements for the year ended December 31, 2017. In addition, the Audit Committee, at its meeting held on March 2, 2018, as a result of the evaluation process outlined in the preceding paragraph, had no objections to the designation of Deloitte & Co. S.A. as our external auditors for the year ended December 31, 2018, which will be voted on at the next general shareholders meeting.

*Independence of the Members of our Board of Directors and Audit Committee*

Pursuant to CNV regulations, a director is not considered independent when such director (i) owns at least a 15% equity interest in a company, or a lesser interest if the director has the right to appoint one or more directors of the company (hereinafter Significant Participation), or has a Significant Participation in another company that in turn has a Significant Participation in the company or a significant influence on the company (significant influence as defined by Argentine GAAP); (ii) is a member of the Board of Directors of, or depends on, or is otherwise related to shareholders who have a Significant Participation in the company or another company in which these shareholders have a direct or indirect Significant Participation or significant influence; (iii) is or has been in the previous three years an employee of the company; (iv) has a professional relationship with, or is a member of a company that maintains professional relationships with, or receives remuneration (other than that received in consideration of his performance as a director) from the company or any of its shareholders who has a direct or indirect Significant Participation in or significant influence on the company, or with a third-party company that has a direct or indirect Significant Participation or a significant influence; (v) directly or indirectly sells or provides goods or services to the company or to any of its shareholders who has a direct or indirect Significant Participation in or significant influence on the company for an amount exceeding his remuneration as a member of the Board of Directors or Audit Committee; or (vi) is the spouse or parent (up to second grade of affinity or up to fourth grade of consanguinity) of persons who, if they were members of the Board of Directors or Audit Committee, would not be independent, according to the above-listed rules.

As of the date of this annual report, Directors Miguel Ángel Gutiérrez, Roberto Luis Monti, Norberto Alfredo Bruno, Néstor José Di Pierro, Ignacio Perincioli, Gabriel Alejandro Fidel, Juan Carlos Abud, Carlos Alberto Felices, Daniel

Gustavo Montamat, Fabián Jorge Rodríguez Simón, Inés María Leopoldo, Luis Augusto Domenech and Emilio José Apud, and Alternate Directors Luis Gustavo Villegas, Lucio Mario Tamburo and Miguel Lisandro Nieri qualified as independent members of our Board of Directors under the above-described criteria.

## **Disclosure Committee**

### ***Composition and responsibilities of our Disclosure Committee***

In February 2003, the Board of Directors created a Disclosure Committee to:

monitor overall compliance with regulations and principles of conduct of voluntary application, especially in relation to listed companies and their corporate governance;

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direct, establish and maintain procedures for the preparation of accounting and financial information to be approved and filed by us or generally released to the markets;

direct, establish and maintain internal control systems that are adequate and efficient in order to ensure that our financial statements included in annual and quarterly reports as well as any accounting and financial information to be approved and filed by us is accurate, reliable and clear;

identify significant risks to our businesses and activities that may affect the accounting and financial information to be approved and filed by us;

assume the activities that, according to U.S. laws and SEC regulations, are applicable to us and may be assumed by disclosure committees or other internal committees of a similar nature, especially those activities relating to the SEC regulations dated August 29, 2002 ( Certification of Disclosure in Companies Quarterly and Prospectus SEC Release number 33-8124) and the existence and maintenance of adequate procedures and controls for the generation of the information to be included in our annual reports on Form 20-F and other information of a financial nature as required to be certified by our Chief Executive Officer and Chief Financial Officer;

take on activities similar to those stipulated in SEC regulations for a disclosure committee with respect to the existence and maintenance of adequate procedures and controls for the preparation and content of the information to be included in the annual financial statements and any accounting or financial information to be filed with the CNV and other regulators of the stock markets where our stock is traded; and

formulate proposals for an internal code of conduct with respect to stock markets that follow applicable rules and regulations or any other standards deemed appropriate.

In addition, the Disclosure Committee reviews and supervises our procedures for the preparation and filing of:

official notices to the SEC, the Argentine stock market authorities and other regulators of the stock markets where our stock is traded;

interim financial reports;

press releases containing financial data on results, earnings, large acquisitions, divestitures or any other information relevant to shareholders;

general communications to shareholders; and

presentations to analysts, investors, rating agencies and lending institutions.

As of the date of this annual report, the Disclosure Committee is composed of the following individuals:

<i>Name</i>	<i>Position</i>
Daniel Cristian González Casartelli	Chief Executive Officer
Diego Martín Pando	Controller and President of the Disclosure
Luis Miguel Sas	Chief Financial Officer
Germán Fernández Lahore	Legal Affairs Corporate Vice President and Secretary of the Disclosure Committee
Santiago Martínez Tanoira	Downstream Executive Vice President
Pablo Bizzotto	Upstream Executive Vice President
Gustavo Chaab	Environment, Security and Health Vice President
Carlos Alfonsi	Operations and Transformations Executive Vice President
Marcos Browne	Gas and Energy Executive Vice President
Fernando Giliberti	Supply Chain Vice President
Sebastián Mocerrea	Corporate Affairs, Communication and Marketing Executive Vice President
José Manuel Aggio	Human Resources Vice President

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<i>Name</i>	<i>Position</i>
Sergio Fernandez	Chief Technical Officer
Javier Fevre	Internal Auditor
Carlos Colo	Reserves Auditor
Sergio Fabián Giorgi	Strategy and Business Development Vice President

In addition to the members of our senior management whose outside business interests and experiences were described above, we include the following:

*Germán Fernández Lahore*

Mr. Fernández Lahore earned a law degree from the Universidad de Buenos Aires and participated in the Academy for American and International Law. He further earned a master's degree in Natural Resources Law and Policy from University of Dundee, Scotland, United Kingdom as a Chevening scholar, a postgraduate degree in Tax Law from Universidad Austral, and completed the Management Development Program at IAE Business School. He is a member of the Academic Council of the Argentine Journal of Energy, Hydrocarbons and Mining Law (*Revista Argentina de Derecho de la Energía, Hidrocarburos y Minería*). His areas of expertise include Oil, Natural Gas and Mining Law and Natural Resources Taxation and Financing. Prior to joining YPF, he served as an attorney at Estudio Beccar Varela, as foreign associate at Haynes and Boone, LLP in Dallas, Texas. He joined our company our Oil Affairs Management in February 2002 and served as our Upstream Legal Affairs Manager. Mr. Fernandez Lahore has been our Legal Affairs Corporate Vice President since December 2015.

*Gustavo Chaab*

Mr. Chaab earned a degree in industrial engineering from the Universidad Nacional de Cuyo, a postgraduate degree in energy and energetic planning from the IDEE/Fundación Bariloche, a master's degree in International Business from the National Ponts et Chaussées Ecole and completed the Advanced Study Program from the Massachusetts Institute of Technology. In 1994, he joined YPF at the Luján de Cuyo Refinery and took on several roles including Chief of Administration and Sales Area of this Refinery in 1999, Downstream Operative Planning Manager in 2004, Lubricants Business Manager in 2008, and Planning and Technical Development Manager for Refinement, Logistic and Chemistry in 2008. From 2011 to March 2017, he served as Manager of the Industrial Complex in La Plata. Mr. Chaab has been our Environment, Security and Health Vice President since March 2017.

*José Manuel Aggio*

Mr. José Manuel Aggio earned a law degree from the Universidad de Buenos Aires and completed the Executive Education Program at IAE Business School. He started his professional career at the Pérez Companc Group, where he held several management positions. During 25 years he held various positions in the HR area in Aguas Argentinas, Prudential Financial, Barrick Gold Corporation (Argentina and Chile), San Miguel AGICIF, el Tejar and Danone. His most recent function was HR Director for the Southern Cone at Danone. He has been our Human Resources Vice President since February 2018.

*Sergio Fernández*

Mr. Fernández is an Electronics Engineer graduated from the Universidad Nacional del Tucumán. He also holds an MBA from Universidad Torcuato di Tella. He has over 20 years of experience leading the IT areas at Cargill. In 2003, he was in charge of setting up the shared services area for the Latin American infrastructure which required an organizational redesign to reduce costs and gain efficiencies. He became part of the Global IT Executive Committee, participating in key definitions of the organization. His last position, which reported to the CEO of that company, was

Global IT Head, Food Ingredients and Bio Industrial Enterprise. He was also responsible for leading and developing the current Global IT strategy, holding at the same time the position as IT Head for Latin America.

*Javier Fevre*

Mr. Fèvre earned a certified public accountant degree from the Argentine University of Business. He has held several positions throughout his career, including Auditor for the General Auditor Office, Advisor to the Deputy General Syndic at the Argentine Office of the General Comptroller, Assistant Internal Auditor at the Ministry of Foreign Affairs, International Trade and Worship and General Coordinator of Internal Audit at Aerolíneas Argentinas S.A. He has been our Internal Auditor since September 2012.



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### *Carlos Colo*

Mr. Carlos Agustín Colo holds a degree in Geological Sciences from Universidad Nacional de la Patagonia San Juan Bosco. In 1979 he joined YPF where he developed his career in the Upstream Sector. He started as Exploration geologist and then he served in different positions related to exploration and production. He held various positions within the Company as General Manager in Colombia, Director of the Las Heras Economic Unit, Director of the E&P Technical Management, Exploration Director and Executive Manager of Exploration and Development. He has been our Reserve Auditor since June 2017.

## **Compliance with New York Stock Exchange Listing Standards on Corporate Governance**

In accordance with the NYSE corporate governance rules, effective as of July 31, 2005, all members of the Audit Committee are required to be independent. Independence is determined in accordance with highly detailed rules promulgated by the NYSE and SEC. Each of the members of our Audit Committee was determined to be independent in accordance with the applicable NYSE and SEC rules.

### *Significant differences between our corporate governance practices and those required by NYSE listing standards*

Non-U.S. NYSE-listed companies may, in general, follow their home country corporate governance practices in lieu of most of the NYSE corporate governance requirements. The NYSE rules, however, require that non-U.S. companies disclose any significant ways in which their specific corporate governance practices differ from those of U.S. companies under the NYSE listing standards.

The following is a summary of the significant differences between our corporate governance practices and those applicable to U.S. companies under the NYSE listing standards.

### *Independence of the directors on the Board of Directors*

In accordance with the NYSE corporate governance rules, a majority of the board of directors of U.S. companies listed on the NYSE must be composed of independent directors, whose independence is determined in accordance with highly detailed rules promulgated by the NYSE. The relevant Argentine rules for determining director independence are described under Independence of the Members of our Board of Directors and Audit Committee above.

### **Compensation and nomination committees**

In accordance with the NYSE corporate governance rules, all U.S. companies listed on the NYSE must have a compensation committee and a nomination committee and all members of such committees must be independent in accordance with highly detailed rules promulgated by the NYSE. Under Argentine law, these committees are not mandatory, but are recommended by the CNV under CNV's General Resolution No. 622/13. The Company follows the CNV's recommendation and has a Compensation and Nomination Committee established by the Board of Directors under the option provided in Article 17 clause (xii) of the Company's by-laws, which currently is composed of Directors Daniel Gustavo Montamat, Roberto Luis Monti, Carlos Alberto Felices and Fabián Jorge Rodríguez Simón. As a result of the foregoing, all the members of the Compensation and Nomination Committee are independent.

### *Shareholder approval of equity compensation plans*

The NYSE rules require that, with limited exemptions, all equity compensation plans be subject to a shareholder vote. Under Argentine law, the approval of equity compensation plans is within the authority of the Board of Directors.

*Separate meetings for non-management directors*

In accordance with the NYSE corporate governance rules, independent directors must meet periodically outside of the presence of its executive directors. Under Argentine law, this practice is not required and as such, the independent directors on our Board of Directors do not meet outside of the presence of the other directors, except for the meetings of the Audit Committee, which is comprised of independent directors.

**Compensation of members of our Board of Directors and Supervisory Committee**

Argentine law provides that the aggregate annual compensation paid to the members of the Board of Directors (including those directors acting in an executive capacity) and the Supervisory Committee with respect to a fiscal year may not exceed 5% of net income for such year if YPF is not paying dividends in respect of such net income, which percentage is increased up to 25% of net

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income based on the amount of dividends, if any, are paid. The compensation of the Chairman and other directors acting in an executive capacity, together with the compensation of all other directors and members of the Supervisory Committee, requires the ratification of an ordinary general shareholders' meeting as provided by Argentine law. When the exercise of special commissions or technical administrative functions by one or more directors and the reduced or lack of profits exceed the limits, such remunerations may only be paid in excess if expressly agreed by the shareholders' meeting, for which the matter should be included on the agenda. For the year ended December 31, 2017, the aggregate compensation accrued by the members of the Board of Directors and YPF's executive officers for services in all capacities was Ps. 373.3 million, excluding social security payments made by the Company as required by law, but including Ps. 43.8 million in the form of equity compensation plans, pensions, retirement or similar benefits that YPF provides to its Board of Directors and executive officers and Ps. 4.2 million in compensation paid to the members of the Supervisory Committee. During 2017, YPF's performance-based compensation programs included a performance bonus program for approximately 6,400 non-unionized YPF employees and 9,000 unionized YPF employees. This bonus program is intended to motivate and reward individuals for the annual achievement of business objectives. The program compensated participants in cash based on a measurable and specific set of objectives established by YPF's Management by Objectives Program and individual performance results.

In 2017, our shareholders' meeting, as proposed by our Board of Directors, approved the creation of a voluntary reserve of Ps. 100 million for the fulfillment of our long-term incentive plan which contemplates compensation in shares for certain employees. To that end, the Company purchased its own shares in accordance with Section 64 et seq. of Law No. 26,831. For additional information see Note 2.b.10.iii to our Audited Consolidated Financial Statements. The share-based benefit plan: (i) encourages key personnel to align their performance with the objectives of the Company's strategic plan, (ii) generates a clear and direct link between the creation of shareholder value and compensation of key personnel, rewarding them for achieving long-term results reflected in share price and (iii) assists in the retention of key personnel in the organization.

YPF's directors do not have any service contracts with YPF involving the payment of compensation other than those previously mentioned for the performance of their duties with the Company. None of the members of our Board of Directors are party to any service contract with us or any of our subsidiaries providing for benefits upon termination of their term in office.

**Supervisory Committee**

The Supervisory Committee is responsible for overseeing compliance by the management and the Board of Directors with Argentine General Corporations Law, the by-laws and regulations (if any), and shareholders' resolutions. The functions of the Supervisory Committee include, among others, attending all meetings of the Board of Directors, preparing a report of the financial statements for our shareholders, attending shareholders' meetings and providing information upon request to holders of at least 2% of our capital stock.

The by-laws provide for a Supervisory Committee composed of three to five members and three to five alternate members that are elected for one-year terms. The Class A shares are entitled to elect one member and one alternate member of the Supervisory Committee so long as one share of such class remains outstanding. The holders of Class D shares may elect up to four members and up to four alternates. Under the by-laws, meetings of the Supervisory Committee may be called by any member. The meetings require the presence of all members and a majority vote of the members in order to make a decision. The members and alternate members of the Supervisory Committee are not members of our Board of Directors. The role of our Supervisory Committee is distinct from that of the Audit Committee. See The Audit Committee. In 2017, the aggregate compensation paid to the members of the Supervisory Committee was Ps. 4.2 million.

The current members of the Supervisory Committee, the year in which they were appointed and the year their current term expires is as follows:

<i>Name</i>	<i>Class of Shares Represented</i>	<i>Age</i>	<i>Member Since</i>	<i>Term Expires</i>
Alejandro Fabián Díaz	A	53	2017	2018(*)
María Dolores Pujol	D	36	2017	2018(*)
Raquel Inés Orozco	D	62	2017	2018(*)
Guillermo Stok (alternate member)	A	62	2017	2018(*)
Carlos Manuel Vidal (alternate member)	D	69	2017	2018(*)
María Rosa Eckard (alternate member)	D	67	2017	2018(*)

(\*) Members of our Supervisory Committee are appointed each fiscal year. Our shareholders, in the Ordinary and Extraordinary General Shareholders meeting held on April 28, 2017 appointed the members of our Supervisory Committee for fiscal year 2017.

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*Alejandro Fabián Díaz*

Mr. Díaz earned a certified public accountant degree from the Universidad de Buenos Aires and completed postgraduate studies in social responsibility, social accounting and business management. Since 2000, he has held several roles for the Argentine National Office of the Comptroller General, including Auditing Supervisor, Certified Accountant, member of the Supervisory Committee of first-tier businesses and Manager of Business Audits. He has been a member of the Organization for Economic Cooperation and Development since 2014 and a member of the Latin American Network on Corporate Governance of State-Owned Enterprises since 2010. He has been developing his role as a teacher at universities and postgraduate institutions. He has also been a speaker at several conferences and has written books and articles related to his specialty.

*María Dolores Pujol*

Ms. Pujol earned a law degree from Universidad Católica Argentina. She obtained a postgraduate degree in Economic Administrative Law. She completed a Compliance Program for Specialists at IAE Business School and an Executive Program in Prevention of Money Laundering, Money Laundering from Drug Trafficking and Financing of Organized Crime at University of CEMA. She has worked at the General Auditor's Office of the Autonomous City of Buenos Aires and at the Administrative and Tax Litigation Court No. 19 of the Autonomous City of Buenos Aires. Between 2013 and 2015, she worked in various areas of the Government of the Autonomous City of Buenos Aires, as Legal and Technical Secretary and Chief of the Cabinet of Ministers. She currently serves as Executive Director at the Lottery of the Autonomous City of Buenos Aires.

*Raquel Inés Orozco*

Ms. Orozco earned a law degree from the Universidad de Buenos Aires. Currently, she is a member of the Supervisory Committees of Central Térmica Guemes S.A., Ubatec S.A., Inder S.E. (e.I), Foncap S.A., LT10 Radio Universidad del Litoral S.A. and YPF Gas S.A.

*Guillermo Stok*

Mr. Stok earned a certified public accountant degree and business administration degree from the Pontificia Universidad Católica de Argentina and completed postgraduate studies in public sector economics, the management of sustainable economic development and social economics. He was appointed by the World Bank (PNDU) to advise the Finance Secretary at the Buenos Aires City Government. In 2001, he was designated General Manager of the National Administration of Social Security (ANSES). Currently, he works for the Argentine National Office of the Comptroller General as an Assistant Manager supervising majority state-owned enterprises.

*Carlos Manuel Vidal*

Mr. Vidal earned a public accountant degree from Universidad de Buenos Aires. He was appointed advisor to the Energy Secretariat by the Public Employment Information and Management System (SIGEP) to work in the Financing Scheme of the National Energy Plan from 1986 to 2000. He was a member of the Supervisory Committees of Repsol YPF S.A.; Papel Prensa S.A.; Aerolíneas Argentinas S.A.; Lotería Nacional S.E.; and TELAM S.E., among other. Currently, he is member of the Supervisory Committee of Edenor S.A.; TGS S.A. and NCA S.A.

*María Rosa Eckard*

Ms. Eckard earned a law degree from Universidad Nacional del Litoral. She has an extensive background in organizations and entities of the National Public Sector and Public Administration, where she has held several positions since 1974 related to legality control and supervision as a member of Supervisory Committees. Currently, she is a member of the Supervisory Committees of Casa de la Moneda SE., Coviara Empresa del Estado, SRT SA, Radio Universidad Nacional del Litoral and Télam S.E.

### **The Compliance Committee**

The information provided below describes the composition and responsibilities of our Compliance Committee as of the date of this annual report.

**Table of Contents*****Composition and responsibilities***

In April 2016, the Board of Directors created the Compliance Committee: to encourage compliance with the requirements of laws, regulations, rules, policies and/or organizational codes and principles of good corporate management and ethical standards applicable to the Company; to monitor the control systems of YPF processes in accordance with the rules that regulate YPF's operation; to reduce exposure to financial, legal and operational risks that could arise from illicit behavior; to safeguard the image and reputation of the Company; and to promote, facilitate and regulate cooperation between the various sectors of the Company to ensure the effectiveness of measures and actions enacted to prevent, detect, punish and eradicate corruption, among other functions.

As of the date of this annual report, the Compliance Committee is composed of the following members:

Name	Position
Fabián Rodríguez Simón	Director President
Inés María Leopoldo	Director
Emilio José Apud	Director

***The Risk and Sustainability Committee***

The information provided below describes the composition and responsibilities of our Risk and Sustainability Committee as of the date of this annual report.

***Composition and Responsibilities***

In April 2016, the Board of Directors created the Risk and Sustainability Committee: to establish comprehensive management policies for business risks and to monitor their adequate implementation; to identify and evaluate the principal risk factors that are specific to the Company and/or its activity; and to monitor risks and implement corresponding mitigation actions, among other functions.

As of the date of this annual report, the Risk and Sustainability Committee is composed of the following members:

<i>Name</i>	<i>Position</i>
Roberto Luis Monti	Director President
Nestor José Di Pierro	Director
Norberto Alfredo Bruno	Director
Gabriel Alejandro Fidel	Director

**The Strategy and Transformation Committee**

In August 2017, the Board of Directors created the Strategy and Transformation Committee to discuss issues related to the Company's medium and long-term strategy and to act as liaison between the Board of Directors and the Executive Management Committee and the Company executives who are its members, in order to facilitate and expedite the internal treatment of the Company's business development overall strategies; to promote and transversally

review the Company's transformation agenda, covering aspects of excellence and best operational practices in the industry, the commercial agenda, reviewing its organization with a central focus on the customer, the Company's digitalization and technological renewal agenda, and the renewal of support areas with a special focus on cultural change in the area of human resources; and to resolve, in the event of unforeseen or emergency situations, the approval of the Company's operations and / or necessary management.



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As of the date of this annual report, The Strategy and Transformation Committee is composed of the following members:

<i>Name</i>	<i>Position</i>
Miguel Ángel Gutiérrez	President of the Board of Directors
Carlos Alberto Felices	President of the Audit Committee
Daniel Gustavo Montamat	President of the Compensation and Nomination Committee
Fabián Rodríguez Simón	President of the Compliance Committee
Roberto Luis Monti	President of the Risk and Sustainability Committee
Emilio José Apud	Director for Class A Shares

**Diversity and Inclusion**

We know that diversity and inclusion, which make it possible to create a more representative workforce, help to build a more successful and profitable company.

Our people are key in this way. Without their commitment, the company could not develop. That is why we are guided by the conviction to respect and value singularity. The will to create opportunities and develop talents. The certainty of promoting inclusion, of seeking plurality, of growing in diversity.

We have taken important steps towards diversity and inclusion.

We incorporated a new value in our Code of Ethics and Conduct: Gender Equality which provides that YPF guarantees that both women and men receive the same treatment and opportunities to grow within the company, with identical conditions and possibilities, including those of economic nature, for persons holding the same offices. Besides, it ensures access to institutional programs and benefits in equality of conditions for both genders.

Since 2016, we have been carrying out the Training Program for the Employability of Persons with Disabilities, in conjunction with the Ministry of Labor. An initiative that lasts ten months and gives participants the opportunity to perform qualifying and professionalizing practices in different areas of the company with the guidance of a tutor assigned by YPF.

We believe that one of the bases of inclusion is access to work, that is why we have an Inclusive Procurement Program that facilitates access to the network of YPF suppliers to all those organizations, cooperatives, protected workshops, associations and entities committed to the employability of people with some physical, sensory or mental disability with skills to create and produce articles of aesthetic value, practical utility and / or attractive for the use. Because people with disabilities do not need special help, they need the same opportunities as everyone else.

During 2017, we invited more than 1,900 YPF women to participate in a survey to find out their opinion about diversity and its impact on the work environment. We also convened open talks in which men and women from our company, from all regions and businesses, told us what they think about gender equality.

Thanks to an active collaboration and participation, we were able to identify ten areas in which women find obstacles to fully develop their careers.

These axes were the basis for the definition of actions to remove these obstacles that will be implemented between 2018 and 2020.

To guarantee equal opportunities, we created a Diversity Committee, with the main objective of leading the implementation of gender equality.

In parallel, the Committee works on the development and presentation of a 5-year plan that includes projects to promote and care for diversity and inclusion for our people and for our customers and suppliers. It will also define the strategy for monitoring and evaluating results.

**Table of Contents****Employee Matters**

Our total workforce consists of permanent and temporary employees. As of December 31, 2015, 2016 and 2017, we had 22,025, 19,257 and 19,072 employees, respectively. In 2017, the number included 8,506 employees in the Downstream business segment, 3,255 employees in the Upstream business segment, 1,649 employees in the Gas & Energy business segment and 5,662 employees in the Central Administration and Others business segments. We had 813 temporary employees in 2017. The most significant variation in 2017 included a decrease of employees at YPF Servicios Petroleros S.A, by approximately 220 employees during 2017. Approximately 45% of our employees are represented by the Federation of Oil Workers Union ( SUPeH ) that negotiates labor agreements and salaries applicable to YPF and OPESSA unionized employees. SUPeH is continually negotiating with us, and we maintain a good level of communication. In general, requests of labor unions in connection with the petrochemical industry were consistent with general wage increases given by the General Unions Confederation.

In addition, labor conditions and salaries of third-party employees are represented by sixteen other unions. Approximately 55% of third-party employees, mostly in the Upstream business, are represented by nine unions with whom we directly negotiate labor agreements and salaries. These unions are clustered into three groups: Petroleros Privados, which consists of five unions, Personal Jerárquico, which consists of three unions, and SUPeH Emprendimientos. The remaining 45% of third-party employees are represented by unions with whom we do not participate in labor agreements.

During 2016, YPF sought to create an addendum to the main Union s Labor Agreements that would result in greater levels of efficiency, productivity and sustainability in the Shale and Tight operations. During 2017, as a result of collaboration with the main actors in the industry, including the Argentine government, provincial governors, Unions and representatives of the main production companies, YPF created and rolled out an addendum to the main union s labor agreements that resulted in greater levels of efficiency, productivity and sustainability in the Shale and Tight operations. The addendum was signed with both Neuquén Unions in January 2017, and extended to the Chubut unions, including shale, tight and conventional operations. By the end of 2017, similar agreements were reached individually with Santa Cruz s main services companies.

As of December 31, 2017, YPF was a party to approximately 1,024 labor lawsuits related to events or acts that took place after December 31, 1990. The outcome of these lawsuits will depend on factual issues that vary from case to case, and it is not always feasible to predict the outcome of particular cases. However, based on the number and nature of the lawsuits already commenced, the estimated likelihood of additional claims in view of the number of dismissed employees, applicable statutes of limitations, the legal principles involved in the suits and the financial statement reserves previously established, our management does not expect the outcome of these lawsuits to have a material adverse effect on our financial condition or future results of operations.

As of December 31, 2017, there were also approximately 43,000 third-party employees under contract, mostly with large international service providers. Although we have policies regarding compliance with labor and social security obligations for our contractors, we are not in a position to ensure that the contractors employees will not initiate legal actions against us seeking indemnification based upon a number of Argentine judicial labor court precedents that recognized joint and several liability between the contractor and the entity to which it was supplying services under certain circumstances.

The following table provides a breakdown of our employees by segment as of December 31, 2017.

<b>Employees by Business Units</b>	
<b>Upstream</b>	<b>3,255</b>
<b>Downstream</b>	<b>8,506</b>
Refining and Marketing	8,474
Chemicals	32
<b>Gas and Power (1) (2)</b>	<b>1,649</b>
<b>Central Administration and Others (3)</b>	<b>5,662</b>
<b>Total YPF</b>	<b>19,072</b>

- (1) Includes 1,398 employees of Metrogas S.A. and its subsidiaries.
- (2) Includes 117 employees of YPF Energia Eléctrica S.A. and its subsidiaries.
- (3) Includes 3,342 employees of A-Evangelista S.A. and its subsidiaries.

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The following table provides a breakdown of our employees by geographic location.

<i>Employees by geographic location</i>	
Argentina	18,931
Rest of South America	141
<b>Total YPF</b>	<b>19,072</b>

**ITEM 7. Major Shareholders and Related Party Transactions**

The Expropriation Law has significantly changed our shareholding structure. The Class D shares subject to expropriation from Repsol or its controlling or controlled entities, which represent 51% of our share capital and have been declared of public interest, will be assigned as follows: 51% to the Argentine Republic and 49% to the governments of the provinces that compose the National Organization of Hydrocarbon Producing States. In addition, the Argentine Republic and certain provincial governments already own our Class A and Class B shares. See Item 3. Key Information Risk Factors Risks Relating to Argentina The Argentine federal government owns 51% of the shares of the Company. Additionally, see Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government Law No. 26,932 for a description of the agreement between Repsol and the Argentine Republic relating to compensation for the expropriation of 51% of the share capital of YPF owned, directly or indirectly, by Repsol. As of the date of this annual report, the transfer of the shares subject to expropriation between the National Executive Office and the provinces that compose the National Organization of Hydrocarbon Producing States is still pending. According to Article 8 of the Expropriation Law, the distribution of the shares among the provinces that accept their transfer must be conducted in an equitable manner, taking into account their respective levels of hydrocarbon production and proved reserves. To ensure compliance with its objectives, the Expropriation Law provides that the National Executive Office, by itself or through an appointed public entity, shall exercise all the political rights associated with the shares subject to expropriation until the transfer of political and economic rights to the provinces that compose the National Organization of Hydrocarbon Producing States is completed. In addition, in accordance with Article 9 of the Expropriation Law, each of the Argentine provinces to which shares subject to expropriation are allocated must enter into a shareholder's agreement with the federal government which will provide for the unified exercise of its rights as a shareholder. See Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government The Expropriation Law.

The following table sets forth information regarding ownership of our capital stock by each person known to us to own beneficially at least 5% of our common shares, the Argentine federal and provincial governments and our Employee fund as of April 9, 2018 :

	<i>Number of shares</i>	<i>(%)</i>
National State Ministry of Energy and Mining <sup>(1)</sup>	200,589,525	51.000%
Floating <sup>(2)</sup>	144,075,846	36.631%
Lazard Asset Management LLC <sup>(3)</sup>	28,620,917	7.277%
Slim Family <sup>(4)</sup>	19,974,695	5.079%
Argentine federal and provincial governments <sup>(5)</sup>	11,388	0.003%

Employee fund <sup>(6)</sup>	40,422	0.010%
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- (1) The expropriated Class D shares, which represent 51% of our share capital, and which now are owned by the Republic of Argentina, will be assigned as follows: 51% to the Argentine Republic and 49% to the governments of the provinces that compose the National Organization of Hydrocarbon Producing States. The completion of this assignment is pending. To ensure compliance with its objectives, the Expropriation Law provides that the National Executive Office, by itself or through an appointed public entity, shall exercise all the political rights associated with the shares subject to expropriation until the transfer of political and economic rights to the provinces that compose the National Organization of Hydrocarbon Producing States is completed. In addition, in accordance with Article 9 of the Expropriation Law, each of the Argentine provinces to which shares subject to expropriation are allocated must enter into a shareholder's agreement with the federal government which will provide for the unified exercise of its rights as a shareholder. See Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government The Expropriation Law, Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government Decree No. 13/2015 and Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government Decree No. 272/2015.

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- (2) According to data provided by The Bank of New York Mellon, as of April 9, 2018, there were 170,483,216 ADSs outstanding and 47 holders of record of ADSs. Such ADSs represented approximately 43% of the total number of issued and outstanding Class D shares as of such date.
- (3) According to Schedule 13G filed with the SEC on February 9, 2018.
- (4) According to Schedule 13G filed with the SEC on February 14, 2017, Slim Family consists of Carlos Slim Helú, Carlos Slim Domit, Marco Antonio Slim Domit, Patrick Slim Domit, María Soumaya Slim Domit, Vanessa Paola Slim Domit and Johanna Monique Slim Domit through Inmobiliaria Carso, S.A. de C.V. and Grupo Financiero Inbursa, S.A.B. de C.V.
- (5) Reflects the ownership of 3,764 Class A shares and 7,624 Class B shares by the Argentine Republic and provincial governments, respectively.
- (6) Reflects the ownership of 40,422 Class C shares.

**Related Party Transactions**

All material transactions and balances with related parties as of December 31, 2017 are set forth in Note 31 to the Audited Consolidated Financial Statements. The main related party transactions were our sales of refined and other products to certain joint ventures and affiliates (which amounted to Ps. 6.955 million in 2017), our purchase of petroleum and other products that we do not produce ourselves from certain joint ventures and affiliates (which amounted to Ps. 3.667 million in 2017), as well as what is mentioned in the following paragraphs.

In addition, since the the Expropriation Law (See Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government The Expropriation Law. ), the Argentine Republic owns 51% of the shares of the Company. Consequently, and in addition to transactions mentioned in the paragraph above, we are party to numerous agreements with the federal government, as well as with certain agencies or institutions dependent on such governments and stated-owned companies.

The information disclosed in Note 31 to the Audited Consolidated Financial Statements disclose the balances with joint ventures and affiliated companies as of December 31, 2017, December 31, 2016 and December 31, 2015, and transactions with the aforementioned parties for the twelve-month periods ended December 31, 2017, 2016 and 2015. Additionally, the balances and transactions held with the entities within the Repsol group are included until the date the conditions required to be considered as related parties were met. Information regarding major transactions with government entities are also described in Note 31 to the Audited Consolidated Financial Statements.

In addition, see Note 2.b.10.iii to our Audited Consolidated Financial Statements regarding our long-term share compensation plan offered to certain personnel.

For an organizational chart showing our organizational structure, including our interests in our principal affiliates, see Item 4. Information on the Company History and Development of YPF Overview.

**Argentine Law Concerning Related Party Transactions**

Section 72 of the Stock Market Law provides that before a company whose shares are listed in Argentina may enter into an act or contract involving a significant amount with a related party or parties, such company must obtain approval from its board of directors, and obtain an opinion, prior to such board approval, from its audit committee or from two independent valuation firms that states that the terms of the transaction are consistent with those that could be obtained on an arm's-length basis.

For the purpose of Section 72 of the Stock Market Law and CNV Regulations, significant amount means an amount that exceeds 1% of the issuer's net worth as reflected in the latest approved financial statements. For purposes of the

Stock Market Law, related party means (i) directors, members of the supervisory committee or managers; (ii) the persons or entities that control or hold a significant participation in the company or in its controlling shareholder (to be regulated by CNV); (iii) any other company under common control; (iv) direct relatives of the persons mentioned in (i) and (ii); or (v) companies in which the persons referred to in (i) to (iv) hold directly or indirectly significant participations.



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The acts or contracts referred to above, immediately after being approved by the board of directors, shall be disclosed to the CNV, making express indication of the audit committee's or independent valuation firm's opinion, as the case may be. Also, beginning on the business day following the day the transaction was approved by the board of directors, the audit committee's or independent valuation firm's reports shall be made available to the shareholders at the company's principal executive offices.

If the audit committee or the two independent valuation firms do not find that the contract is on arm's-length terms, prior approval must be obtained at the company's shareholders' meeting.

**ITEM 8. Financial Information  
Financial Statements**

See Item 18 for our Audited Consolidated Financial Statements.

**Legal Proceedings**

The descriptions of the legal proceedings in Notes 14.a, 27.a and 28.b to the Audited Consolidated Financial Statements are incorporated herein by reference.

**Dividend Policy**

See Item 10. Additional Information Dividends.

**Significant Changes**

Since December 31, 2017, there have been no significant changes regarding the Company. Notwithstanding the foregoing, see Note 34 to the Audited Consolidated Financial Statements.

**ITEM 9. The Offer and Listing  
Shares and ADSs*****New York Stock Exchange***

The ADSs, each representing one Class D share, are listed on the NYSE under the trading symbol YPF. The ADSs began trading on the NYSE on June 28, 1993, and have been issued by The Bank of New York Mellon, as depositary (the Depositary).

The following table sets forth, for the five most recent full financial years and for the current financial year, the high and low closing prices in U.S. dollars of our ADSs on the NYSE:

	<i>High</i>	<i>Low</i>
2013	34.17	12.26

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2014	38.91	21.85
2015	31.58	14.91
2016	21.98	12.83
2017	26.16	16.85
2018 <sup>(1)</sup>	26.27	20.89

(1) Through April 9, 2018

The following table sets forth, for each quarter of the most recent two financial years and for each quarter of the current financial year, the high and low closing prices in U.S. dollars of our ADSs on the NYSE.

	<i>High</i>	<i>Low</i>
<b>2016:</b>		
First Quarter	18.83	12.83
Second Quarter	21.98	16.52
Third Quarter	19.77	16.88
Fourth Quarter	19.46	15.09

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<b>2017:</b>		
First Quarter	24.28	16.85
Second Quarter	26.16	21.09
Third Quarter	22.44	18.80
Fourth Quarter	25.16	21.00
<b>2018:</b>		
First Quarter	26.27	20.89
Second Quarter <sup>(1)</sup>	21.58	21.13

(1) Through April 9, 2018

The following table sets forth, for each of the most recent six months and for the current month, the high and low closing prices in U.S. dollars of our ADSs on the NYSE.

	<i>High</i>	<i>Low</i>
<b>2017:</b>		
September	22.28	20.04
October	24.73	22.23
November	25.16	22.26
December	22.99	21.00
<b>2018:</b>		
January	26.27	23.01
February	24.60	21.12
March	22.85	21.89
April <sup>(1)</sup>	21.58	21.13

(1) Through April 9, 2018

According to data provided by The Bank of New York Mellon, as of April 9, 2018, there were 170,483,216 ADSs outstanding and 47 holders of record of ADSs. Such ADSs represented approximately 43% of the total number of issued and outstanding Class D shares as of such date. The Buenos Aires Stock Market is the principal Argentine market for trading the ordinary shares.

BYMA (Bolsas y Mercados Argentinos) is the largest stock market in Argentina and has been authorized by the CNV to delegate certain functions to the Buenos Aires Stock Exchange (BASE). Trading on the BYMA is conducted either through the traditional auction system from 11 a.m. to 5 p.m. on trading days, or through Millenium, which allows electronic negotiation with automatic execution of transactions. Currently, all transactions relating to listed securities can be executed through Millenium result in an additional 10-minute successive suspension period.

Investors in the Argentine securities market are mostly individuals and companies. Institutional investors, which are responsible for a growing percentage of trading activity, consist mainly of insurance companies and to a lesser extent mutual funds.

The last information available to us regarding the Argentine stock market is set forth in the table below:

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	2017	2016	2015	2014	2013	2012	2011
Market capitalization (in billions of pesos)	6,877	4,512	3,292	3,893	3,356	2,300	1,611
As percent of GDP	65% <sup>(1)</sup>	56% <sup>(1)</sup>	56%	86%	124%	107%	87%
Volume (in millions of pesos)	2,558.539	1,329.607	749,829	621,831	367,830	242,324	207,805
Average daily trading volume (in millions of pesos)	13,509	5,949	4,822.6	2,581	1,526.3	1,005.5	848.2

(1) INDEC GDP Provisional Data

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The following table sets forth, for the five most recent full financial years and for the current financial year, the high and low closing prices in Argentine pesos of our Class D shares on the BASE:

	<i>High</i>	<i>Low</i>
2013	294.00	101.30
2014	558.00	250.00
2015	375.50	207.00
2016	303.00	179.00
2017	437.35	270.00
2018 <sup>(1)</sup>	518.65	421.85

(1) Through April 9, 2018

The following table sets forth, for each quarter of the most recent two financial years and for each quarter of the current financial year, the high and low closing prices in Argentine pesos of our Class D shares on the BASE.

	<i>High</i>	<i>Low</i>
<b>2016:</b>		
First Quarter	295.00	179.00
Second Quarter	303.00	238.50
Third Quarter	296.25	255.90
Fourth Quarter	295.50	233.00
<b>2017:</b>		
First Quarter	375.00	270.00
Second Quarter	411.00	341.50
Third Quarter	389.25	333.00
Fourth Quarter	437.35	368.80
<b>2018:</b>		
First Quarter	518.65	421.85
Second Quarter <sup>(1)</sup>	434.80	429.25

(1) Through April 9, 2018

The following table sets forth, for each of the most recent seven months and for the current month, the high and low closing prices in Argentine pesos of our Class D shares on the BASE.

	<i>High</i>	<i>Low</i>
<b>2017:</b>		
September	389.25	345.00
October	435.40	386.70
November	437.35	388.30
December	422.10	368.80

**2018:**

January	518.65	431.75
February	480.05	421.85
March	461.15	422.75
April <sup>(1)</sup>	434.80	429.25

(1) Through April 9, 2018

As of April 9, 2018, there were approximately 32,187 holders of Class D shares in the BASE.

***Stock Exchange Automated Quotations System International***

The ADSs are also quoted on the Stock Exchange Automated Quotations System International.

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**Table of Contents****Argentine Securities Market**

The securities market in Argentina was originally composed of 5 stock exchanges, which are located in the City of Buenos Aires (the Buenos Aires Stock Exchange BASE), Córdoba, Mendoza, Rosario and Santa Fe, with affiliated stock markets and, accordingly, authorized to quote publicly offered securities. However this system was affected by the enactment of Law No. 26,831, Decree No 1,203/2013 issued by the National Executive Office and the new regulations issued by the CNV, mainly contained in Resolution No. 622/2013, as amended, which stated that securities can only be listed and exchanged in stock markets authorized to function as such by the CNV.

The BASE, which began operating in 1854, was the principal and longest-established stock exchange in Argentina. The exchange functions of the BASE have now been absorbed by the Buenos Aires Stock Market (MERVAL), which is a stock market authorized by the CNV to function as such, under Law No. 26,831. The MERVAL and the BASE have entered into an agreement which has been approved by the CNV, whereby the MERVAL has delegated to the BASE certain functions, such as: (i) the authority to grant listing authorization for securities; (ii) the authority to constitute arbitration courts; and (iii) the issuance of a public information bulletin.

On December 29, 2016, the Board of Directors of the CNV approved the creation of Bolsas y Mercados Argentinos (ByMA) as a new market. The shareholders of ByMA are the MERVAL and BASE, with each holding initially 60% and 40% of the capital stock of ByMA, respectively.

The Argentine securities market is regulated and overseen by the CNV, pursuant to Law No. 26,831 (the Capital Markets Law) which governs the regulation of securities exchanges, as well as stockbroker transactions, market operations, the public offering of securities, corporate governance matters relating to public companies and the trading of futures and options. Argentine institutional investors and insurance companies are regulated by separate government agencies, whereas financial institutions are regulated primarily by the Argentine Central Bank.

In Argentina, debt and equity securities traded on an exchange or the over-the-counter market must, unless otherwise instructed by their shareholders, be deposited with Caja de Valores S.A., a corporation owned 99.96% by Bolsas y Mercados Argentinos S.A. (ByMA). This company is the central securities depository of Argentina and provides central depository facilities, as well as acting as a clearinghouse for securities trading and as a transfer and paying agent for securities transactions. Additionally, it handles the settlement of securities transactions carried out by the ByMA and operates through Millenium.

Among the key provisions of the Capital Markets Law are the following: the definition of a security, that governs the treatment of negotiable securities; the corporate governance requirements, including the obligations for publicly listed companies to form audit committees composed of three or more members of the Board of Directors (the majority of whom must be independent under CNV regulations); regulations for market stabilization transactions under certain circumstances, regulations that governs insider trading, market manipulation and securities fraud and regulates going-private transactions and acquisitions of voting shares, including controlling stakes in public companies. In addition, the Capital Markets Law includes provisions regarding the demutualization of the stock exchanges; new regulatory powers and resources for the CNV; a mandatory tender offer system and other provisions, like new requirements for brokers/dealers and other market participants. These provisions were regulated by the CNV pursuant to General Resolution No. 622/2013, as amended. Before offering securities to the public in Argentina, an issuer must fulfill certain requirements established by the CNV in regard to the issuer's assets, operating history and management. Only securities approved for a public offering by the CNV may be listed on an authorized market. However, CNV approval does not imply any kind of certification as to the quality of the securities or the solvency of the issuer, even though issuers of listed securities are required to file unaudited quarterly financial statements and audited annual financial statements in accordance with IFRS and various other periodic reports with the CNV and the authorized

market on which their securities are listed, as well as to report to the CNV and the relevant authorized market any event related to the issuer and its shareholders that may materially affect the value of the securities traded.

***Anti-Money laundering and Terrorism Prevention regulations***

Modifications to Argentine money laundering regulations have resulted in their application to increasing numbers and types of securities transactions.

The notion of money laundering is generally used to refer to transactions aimed at introducing funds derived from unlawful activities into the institutionalized system and therefore, transforming profits obtained from unlawful activities into assets having a presumed lawful origin.



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Law No. 25,246 (as subsequently amended by Law No. 26,087, Law No. 26,119, Law No. 26,268 and Law No. 26,683) provides for an administrative criminal system and replaces several sections of the Argentine Criminal Code, incorporating, among other matters, the definition of money laundering as a type of crime committed whenever a person converts, transfers, manages, sells, charges, conceals or otherwise markets any asset derived from a criminal offense, with the possible consequence that the original assets or substitutes thereof appear to come from a lawful source, provided that the total value of the asset exceeds Ps. 300,000 regardless of whether such amount results from one act or a series of related acts. Law No. 26,683 considers money laundering to be an autonomous crime against the economic and financial order, separate from the crime of concealment, which is an offense against the public administration, which allows for sanctions for the autonomous crime of money laundering regardless of participation in the crime that originated the funds subject to such money laundering. With the enactment of Law No. 27,260 and Decree No. 895/2016, the Financial Information Unit (*Unidad de Información Financiera* or UIF ) was moved under the jurisdiction of the Ministry of Finance and Public Finance. Subsequently, in accordance with Decree No. 2/2017, the UIF acts under the jurisdiction of the Ministry of Finance.

According to Article 303 of the Argentine Criminal Code, money laundering (as defined above) shall be punished with three to ten years of imprisonment and a fine of two to ten times the amount of the transactions made. The penalty prescribed above shall be increased by one third of the maximum and one half of the minimum if: (a) the wrongdoer carries out the act on a regular basis or as a member of an association or gang organized with the purpose of continuously committing acts of a similar nature; or (b) if the primary wrongdoer is a public officer who committed the infringement in the exercise of his/her duties (in such a case, the wrongdoer shall also be punished by special disqualification for three to ten years, and the same penalty shall apply to a wrongdoer who commits the offense in the service of a profession or trade requiring special qualification). The individual who receives money or other assets derived from a criminal offense with the purpose of applying them to a money laundering transaction shall be punished with imprisonment from six months to three years. If the value of the assets is not over Ps.300,000, the wrongdoer will be punished with imprisonment from six months to three years. The provisions in this section shall apply even when the criminal offense is committed outside the geographical jurisdiction of the Argentine Criminal Code, so long as the crime is also penalized in the jurisdiction where it was committed.

Article 277 of the Argentine Criminal Code sets forth that an imprisonment of between six months and three years shall be applied (with varying minimum terms attaching depending on the particular circumstances) to any person who helps a perpetrator avoid or be removed from prosecution, obscures or destroys evidence of a crime, acquires, receives, hides or alters money or other proceeds from a crime, does not report the commission of the crime or does not identify the perpetrator or participant in a crime with knowledge that such person would have been obliged to assist in the criminal prosecution of such crime and/or aids or abets the perpetrator or participant in making safe the proceeds of the crime. The minimum and maximum terms of punishment shall be doubled when: (a) the offense implies a particularly serious crime (for which minimum penalty is higher than three years of imprisonment); (b) the abettor acts for profit; (c) the abettor habitually commits concealment acts; or (d) the abettor is a public official.

At the end of 2011, with the enactment of Laws No. 26,733 and 26,734, new crimes were introduced into the Argentine Criminal Code to protect financial and stock market activities and to prevent the financing of terrorism. On the one hand, Law No. 26,733 established penalties of imprisonment, fines and special disqualification for anyone who: uses or supplies inside information to conduct securities transactions (Article 307); manipulates stock markets by offering or conducting securities transactions through false information, feigned negotiations or meeting of the main shareholders in order to negotiate at a certain price (Article 308); and carry out financial and stock market activities without corresponding authorization (Article 309). On the other hand, Law No. 26,734 incorporated into the Argentine Criminal Code Article 306, which punishes with imprisonment and fines those who directly or indirectly collect assets or money to be used to finance a crime or an individual or organization that threatens the population, or to force national or foreign authorities or an international organization to perform or refrain from performing a particular act.

The penalties will apply regardless of whether the crime was committed or the financing was used. Additionally, the penalties will apply if the crime, individual or organization that is intended to be financed is carried out or located outside of Argentina. Likewise, the UIF was empowered to freeze assets linked to the financing of terrorism through a reasoned decision and immediate communication to a competent judge.

Law No. 25,246 contemplates that the legal entity whose management collected or provided assets or money, whatever their value, knowing that such assets were to be used by a terrorist organization, may be subject to a fine between five to 20 times the value of such assets. Furthermore, whenever the management of the legal entity infringes the duty to treat the information submitted to the UIF as confidential, the legal entity shall be subject to a fine between Ps. 50,000 to Ps. 500,000. Additionally such regulation created the UIF as an autonomous and financially self-sufficient entity within the jurisdiction of the Argentine Ministry of Justice and Human Rights, in charge of analyzing, treating and transmitting information in order to preclude and prevent money laundering. Pursuant to this legislation, the UIF is empowered to receive and request reports, documents, background and any other information deemed useful to fulfill its duties from any public entity, whether federal, provincial or municipal, and from individuals or public or private entities, all of which entities must furnish such information in accordance with Law No. 25,246. Whenever the information furnished

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or analyses performed by the UIF show the existence of sufficient evidence to suspect that a money laundering or terrorist financing crime has been committed, the UIF shall transmit such evidence to the Government Attorney's Office so that it may start the relevant criminal action, and the UIF may appear as an accusing party to such proceedings. Moreover, Law No. 26,087 mandates that banking secrecy or professional privilege, or legal or contractual commitments, cannot be considered exceptions to the compliance with the obligation to submit information to the UIF in the context of an investigation of suspicious activity. The main goal of Law No. 25,246 is to prevent money laundering and the financing of terrorism. In line with internationally accepted practices, the duty to control such illegal transactions is not concentrated solely in Argentine federal governmental entities but also distributed among several private sector entities such as banks, brokers, brokerage firms and insurance companies. One of the mechanisms of the regime of preventing and combating these crimes consists of the obligation to inform the UIF imposed by Article 20 of the Prevention of Money Laundering Law to those parties listed that, due to their profession, activity or industry, hold a key position in the detection of suspicious money-laundering operations and/or terrorist financing transactions. Such duties mainly consist of data collection functions, such as: (i) gathering from clients, applicants or contributors any documentation sufficient to prove their identity, legal capacity, domicile and further data as necessary on a case by case basis; (ii) reporting any suspicious fact or transaction irrespective of its amount; and (iii) abstaining from disclosing to the client or third parties any procedures being followed pursuant to law. According to Law No. 25,246, a suspicious transaction shall mean any transaction that, in accordance with standard business practices and in the experience of the entities and individuals subject to reporting obligations, is regarded as unusual, unjustified from an economic or legal standpoint, or unnecessarily complex, whether it is a one-time transaction or a series of transactions.

In February 2016, the National Executive Office issued Decree No. 360/2016, through which it creates, under the jurisdiction of the Ministry of Justice and Human Rights, and directly dependent on its leadership, the National Coordination Program in the Fight against Money Laundering and Terrorist Financing, with the mission of reorganizing, coordinating and strengthening the national anti-money laundering system and against the financing of terrorism, attending to the specific risks that could impact national terrorism and effective global exigencies in compliance with international obligations and recommendations established by the United Nations Conventions and the standards of the Financial Action Task Force ( FATF ). By virtue of Article 6 of Decree No. 360/2016, the UIF will act as the coordinator in the material operation of the national, provincial and municipal order in the strict compliance of its duties as an financial information organization.

Resolution No. 30-E/2017 of the UIF ( Resolution 30 ), which became effective on September 15, 2017, abrogated Resolution No. 121/2011 and set forth new obligations that financial entities subject to Law No. 21,526 and exchange entities subject to Law No. 18,924, as amended (the Resolution 30 Reporting Parties ), must observe in their capacity as reporting parties pursuant to article 20, paragraphs 1 and 2, of Law No. 25,246. Resolution 30 follows the International Standards on Combating Money Laundering and the Financing of Terrorism and Proliferation issued by the Financial Action Task Force in 2012, with the purpose of adopting a risk-based approach to ensure that measures to prevent or mitigate money laundering and terrorist financing are commensurate with the risks identified.

Among other duties and obligations, Resolution 30 provided that Resolution 30 Reporting Parties must: (i) develop and document the risk identification and assessment methodology they will implement in order to identify, evaluate, mitigate and monitor their ML/TF (as defined below) risks, prior to December 31, 2017; (ii) have a technical report reflecting the results of the implementation of the methodology described in (i) above, prior to March 31, 2018; and (iii) have adjusted their policies and procedures, as set forth in Resolution 30, and in accordance with the results of the risk self-assessment performed (which policies should be incorporated into the Resolution 30 Reporting Party's money laundering and financing of terrorism ( ML/FT ) Prevention Manual (as defined below)).

Resolution No. 229/2011 of the UIF, as amended by UIF Resolutions No. 52/2012, 140/2012, 104/2016, 141/2016 and 4/2017 ( Resolution 229 ), is applicable to Stockbrokers and stockbrokerage firms, companies managing mutual funds, over-the-counter market agents, and all those intermediaries engaged in the purchase, lease or borrowing of securities trading in the field of stock exchanges with or without markets attached to them and intermediaries registered with futures and options markets, whichever their purpose may be ( Resolution 229 Reporting Parties , and together with the Resolution 30 Reporting Parties, the Reporting Parties ). Resolution 30 and Resolution 229 regulate, among other matters, (i) the obligation to collect certain documentation from clients, (ii) the obligations and internal restrictions to be implemented for purposes of complying with their duty to report suspicious ML/TF operations and (iii) know your customer (KYC) policies (including the distinction between regular and occasional clients), information which must be requested from clients, documentation storage requirements and the procedures for purposes of detecting and reporting suspicious transactions.

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Pursuant to Resolution 30 and Resolution 229, the Reporting Parties' main duties consist of: a) implementing a manual (the Prevention Manual), based on the Reporting Party's particular activities, setting forth the mechanisms and procedures to be used to prevent ML/TF; b) the designation of a compliance officer pursuant to article 20 bis of Law 25,246, as amended, and article 20 of Decree No. 290/07, as amended; c) the implementation of periodic audits; d) personnel training; e) elaborating and maintaining analysis records and risk management of detected unusual operations and operations reported because they were considered suspicious; f) implementation of technological tools to have efficient control systems and be able to prevent money laundering and terrorism financing; and g) implementation of measures that allow the Reporting Parties, respectively, to electronically consolidate the operations they perform with clients, as well as technological tools, which enable analyzing or monitoring different variables to identify certain behaviors and detect possible suspicious operations. The Reporting Parties must report to the UIF any suspicious transaction within 30 calendar days from the day a transaction is qualified as a suspicious transaction on money laundering grounds (and regardless of whether the action was completed or attempted) and any suspicious transaction on terrorism financing grounds of within 48 hours of its occurrence.

Resolution 30 defines (i) unusual transactions as those which lack economic and/or legal justification, whether attempted or performed in isolation or repeatedly, regardless of their amount, do not correspond to the client's risk or transactional profile, or that, due to their frequency, recurring nature, amount, complexity, nature and/or other particular characteristics, deviate from standard market practices, and (ii) suspicious transactions as those operations, whether attempted or performed, that cause a suspicion of ML/FT activities, or that have previously been identified as an unusual transaction, and after the analysis and evaluation carried out by the Reporting Party, cannot be justified. Resolution 229 defines (i) unusual transactions as those operations that are attempted or carried out in isolation or repeatedly, without economic and/or legal justification, and that do not relate to the risk or transactional profile of the client or deviate from standard market practices, due to their frequency, recurring nature, amount, complexity, nature and/or particular characteristics, and (ii) suspicious transactions as those operations that are attempted or carried out that cause a suspicion of ML/FT activities, or that have previously been identified as an unusual transaction, and after the analysis and evaluation carried out by the Reporting Party, they create a doubt about the authenticity, veracity or coherence of the documentation presented by the client, in relation to their activity. Pursuant to Resolution 30, financial entities have the duty to (i) implement an ML/FT prevention system (the Prevention System), which must contain all the policies, procedures and controls established for ML/FT risk management to which they are exposed and the elements of compliance required by such resolution and (ii) constitute an anti-ML/FT prevention committee.

Furthermore, Resolution 30 modified compliance officers' duties and required entities to upload the following reports through the UIF website: (a) a report of cash transactions in excess of Ps. 200,000; (b) a report detailing international transfers from and to Argentine accounts; and (c) an annual systematic report.

Resolution No. 92/2016 of the UIF imposed on the reporting parties the obligation to implement a risk management system in accordance with the voluntary and exceptional affidavit of holding of national currency, foreign currency and other assets in the country or abroad established by Law No. 27,260, in order to report suspicious transactions performed by clients until March 31, 2017, derived from the tax amnesty regime.

In addition, the CNV rules, under Title XI of Prevention of Money Laundering and Terrorist Financing, establish that brokers and brokerage firms, and companies managing common investment funds, agents of the over-the-counter market, intermediaries in the purchase or lease of securities affiliated with stock exchange entities with or without associated markets and intermediary agents registered on forwards or option markets, and individuals or legal entities acting as trustees, for any type of trust fund, and individuals or legal entities, owners of or related to, directly or indirectly, with trust accounts, trustees and grantors in the context of a trust agreement, shall comply with Law No. 25,246, the UIF's rulings and the CNV's regulations. Additionally, companies managing common investment funds, any person acting as placement agent or performing activities relating to the trading of common investment

funds, any person acting as placement agent in any primary issuance of marketable securities, and any issuer with respect to capital contributions, irrevocable capital contributions for future issuances of stock or significant loans, must also comply with such regulations.

Such resolutions also contain certain requirements for the reception and delivery of checks and payments made between the individuals and entities listed above, as well as the prohibition of transactions relating to the public offering of securities, when they are consummated or ordered by individuals or companies domiciled or residing in domains, jurisdictions, territories or associated states not included in the list of Decree No. 589, as amended (regulating mainly the jurisdictions which are considered cooperatives for fiscal transparency purposes ).

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Brokers and dealers must duly know their clients and apply policies and maintain adequate structures and systems in line with a policy against money laundering and terrorist financing. Also, interested investors undertake the obligation to submit any information and documents that may be required in order to comply with criminal regulations and other laws and regulation in connection with money laundering, including capital market regulations preventing money laundering issued by the UIF and similar regulations issued by the CNV.

According to the regulations related to the prevention of money laundering, the financing of terrorism and other illicit activities issued by the Central Bank, financial entities should take certain measures with respect to its clients, including, without limitation:

observe the norms governing the collection of proceeds, the legislation applicable to these matters (laws and regulatory decrees) and the norms of the UIF. This includes the decrees of the National Executive Office with reference to the decisions adopted by the United Nations Security Council in combatting terrorism and comply with the resolutions (and their respective annexes) issued by the Ministry of Foreign Affairs and Worship;

in the absence of documentation or the existence of doubts and/or the detection of irregularities regarding veracity, accuracy, coherence or integrity of the documents provided by the clients, or because situations have been detected that deviate from the customer profile (as determined in accordance with existing regulations), require additional information and/or documentation, indicating to the client the obligation to comply with such additional requests;

under no circumstance can relationships with new clients be carried out until the provisions of current regulations regarding the identification and knowledge of the client, and risk management are duly complied with;

in the case of existing clients in respect of which identification and knowledge could not be complied with in accordance with the regulations in force, an analysis should be made with a risk-based approach, in order to assess the continuity of the relationship with the client. In September 2016, Communication A 6060 of the BCRA came into force, which set forth that the criteria and procedures to be applied in this process must be described by the financial entities in their Prevention Manual. If it is appropriate to discontinue the relationship with a client, the procedures and deadlines established by the provisions of the Argentine Central Bank that are specific to the applicable product(s) must be observed. The reporting subjects must keep the written records of the procedures applied in each case where they discontinue the relationship with a client, for a period of 10 years;

send a certified copy of the designation of the regular and alternate chief compliance officer, if any, to the UIF of the Central Bank, carried out in accordance with the conditions and within the terms established in the regulations issued by the UIF;

keep a database with information corresponding to clients that perform individual operations for amounts equal to or greater than Ps. 240,000 (or its equivalent in other currencies) for certain concepts. The scope of this obligation will also include cases relating to customers who, in the opinion of the intervening entity, carry out related-party operations that do not reach the minimum threshold on an individual basis, but exceed or reach such amount in the aggregate. For such purpose, they are also required to store information corresponding to persons who conduct transactions which in the aggregate during any day are equal to or greater than Ps. 30,000 (or its equivalent in other currencies).

Failure to comply with the requirements established by the BCRA to access the local exchange market for transactions involving the purchase and sale of securities of all types constitute an infraction subject to the criminal exchange regime.

In addition, in November 2016, BCRA Communication A 6094 established that the regulations of the prevention of money laundering, terrorist financing and other illicit activities issued by the Central Bank must also be complied with by the foreign representatives of the financial entities that are not authorized to operate in Argentina.

Through the enactment of Law No. 27,260 and its related regulations and Decree No. 895/2016, the UIF was granted the power to communicate information to other public entities with intelligence or investigation powers, provided that such powers can only be exercised following a well-founded resolution issued by the UIF's president and solely in those case where there are serious, precise and concordant signs regarding the commission of any of the crimes set forth by Law N° 25,246. Any information provided by the UIF will be transferred along with the obligation to maintain secrecy pursuant to Article 22 of Law N°25,246, and any unlawful disclosure of confidential information by any entity will be subject to certain penalties. The UIF will not exercise the authority referred to in cases related to voluntary and exceptional declarations made under Law No. 27,260.

For a more exhaustive analysis of the anti-money laundering regime applicable as of the date of this annual report, it is suggested that investors should consult with their legal advisors and read Title XVIII, Book Two of the Argentine Criminal Code, and the regulations issued by the UIF, the CNV and the Central Bank, which can be found on the website of the Ministry of Justice and Human Rights of Argentina, under the section Legislative Information ([www.infoleg.gov.ar](http://www.infoleg.gov.ar)), and/or on the UIF's website ([www.uif.gov.ar](http://www.uif.gov.ar)) and/or on the CNV's website ([www.cnv.gov.ar](http://www.cnv.gov.ar)) and/or the Central Bank's website ([www.bcra.gov.ar](http://www.bcra.gov.ar)).



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### **Law No. 27,401 on Corporate Criminal Liability**

On November 8, 2017, a law establishing the criminal liability regime applicable to private legal entities, state-owned or not, was enacted by the Argentine Congress and published in the Official Gazette of the Argentine Republic on December 1, 2017 (the Corporate Criminal Liability Law ). The law entered into force in March 2018, 90 days following its publication.

The Corporate Criminal Liability Law applies to private legal entities for the crimes of national and transnational bribery and influence peddling; transactions that are incompatible with the exercise of public offices; and illegal exaction committed by public officials; among others.

Legal entities are liable for those crimes, carried out directly or indirectly, with their intervention or in their name, interest and benefit. The legal entity is also liable if a third party, without any capacity to act on its behalf, acted in its own benefit or interest, provided the legal entity has ratified the third party's acts, even implicitly.

In the event of transformation, merger, absorption, spin-off or any other corporate restructuring, the legal entity's responsibility will be transferred to the resulting or absorbing legal entity.

The law also provides that the legal entity may be convicted even if the individual involved could not be identified or judged, provided that the circumstances of the case allow establishing that the crime could not have been committed without the acquiescence of the legal entity's bodies.

The penalties that could be applicable to legal entities included fines, total or partial suspension of commercial activities of up to ten (10) years, suspension from participating in public bids or tenders for the execution of public works or services, dissolution and winding up of the legal entity under certain circumstances, loss or suspension of government benefits, among others.

Penalties can be graduated by judges, who will contemplate the compliance of internal rules and procedures, the number and hierarchy of the officials, employees and collaborators involved; the lack of surveillance; the extent of damage caused; the amount of money involved; the willingness to reduce or repair the damage and recidivism.

The legal entity will be exempted from penalties and administrative liability provided that: a) It has self-reported an offense under the Corporate Criminal Liability Law; b) It has implemented an adequate monitoring and supervision system (Compliance Program), prior to the fact under prosecution occurred, and c) It has returned the undue benefit obtained.

The Ministerio Público Fiscal (Public Prosecutor's Office) and the legal entity may enter into a effective collaboration agreement, whereby the latter undertakes to cooperate by disclosing data or information for the clarification of the facts, the identification of the participants and/or the recovery of the assets or profits proceeding from the crime, as well as to comply with the conditions established.

Legal entities are not required under the Corporate Criminal Liability Law to implement Compliance Programs with the exception of those entering into certain agreements with the Government. The Compliance Programs shall include a set of internal actions, mechanisms and procedures to promote integrity, supervision and control aimed at preventing, detecting and correcting irregularities and unlawful acts under this law.

**ITEM 10. Additional Information**

*Capital Stock*

Our capital stock consists of Ps.3,933,127,930, divided into 3,764 Class A shares, 7,624 Class B shares, 40,422 Class C shares and 393,260,983 Class D shares, each fully subscribed and paid, with a par value of ten pesos each and the right to one vote per share. Our total capital stock has not changed since December 31, 2004.

In November 1992, the Privatization Law became effective. Pursuant to the Privatization Law, in July 1993, we completed a worldwide offering of 160 million Class D shares, representing approximately 45% of our outstanding capital stock, which had been owned by the Argentine government. Concurrently with the completion of such offering, the Argentine government transferred approximately 40 million Class B shares to the Argentine provinces, which represented approximately 11% of our outstanding capital stock, and made an offer to holders of pension bonds and certain other claims to exchange such bonds and other claims for approximately 46.1 million Class B shares, representing approximately 13% of our outstanding capital stock. As a result of these transactions, the Argentine government's ownership percentage of our capital stock was reduced from 100% to approximately 30%, including shares that had been set aside to be offered to our employees upon establishment of the terms and conditions by the Argentine government in accordance with Argentine law. The shares set aside to be offered to employees represented 10% of our outstanding capital stock.

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In July 1997, the Class C shares set aside for the benefit of our employees in conjunction with the privatization, excluding approximately 1.5 million Class C shares set aside as a reserve against potential claims, were sold through a global public offering, increasing the percentage of our outstanding shares of capital stock held by the public to 75%. Proceeds from the transactions were used to cancel debt related to the employee plan, with the remainder distributed to participants in the plan. Additionally, Resolution No. 1,023/06 of the Ministry of Economy, dated December 21, 2006, effected the transfer to the employees covered by the employee share ownership plan, or PPP, of 1,117,717 Class C shares, corresponding to the Class C shares set aside as a reserve against potential claims, and reserving 357,987 Class C shares until a decision was reached in a pending lawsuit. Subsequently, with a final decision having been reached in the lawsuit, and consistent with the mechanism of conversion of Class C shares into Class D shares established by Decree 628/1997 and its accompanying rules, as of December 31, 2009, 1,447,983 Class C shares had been converted into Class D shares. In 2010, a former employee of the Company who was allegedly excluded from the Argentine government's YPF PPP filed a claim against YPF seeking recognition of his status as a shareholder of YPF. In addition, the Federation of Former Employees of YPF joined the proceeding as a supporting third-party claimant, purportedly acting on behalf of other former employees who were also allegedly excluded from the PPP. Under the jurisprudence of the CSJN upholding numerous decisions of the relevant Argentine Courts of Appeals, YPF believes it will not be held liable for claims of this nature related to the PPP. Through Law No. 25,471, the Argentine government assumed sole responsibility for any compensation to be received by YPF's former employees who were excluded from the PPP.

The Expropriation Law has significantly changed our shareholding structure. The Class D shares subject to expropriation from Repsol YPF or its controlling or controlled entities, which represent 51% of our share capital and were declared of public interest and are currently held by the Republic of Argentina, will be assigned as follows: 51% to the Argentine federal government and 49% to the governments of the provinces that compose the National Organization of Hydrocarbon Producing States. In addition, the Argentine federal government and certain provincial governments already own our Class A and Class B shares. See Item 3. Key Information Risk Factors Risks Relating to Argentina The Argentine Republic owns 51% of the shares of the Company.

See Note 25 to the Audited Consolidated Financial Statements, Item 4. Information on the Company History and Development of YPF, Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government The Expropriation Law, Item 4. Information on the Company Legal and Regulatory Framework and Relationship with the Argentine Government Decree No. 272/2015 and Item 7. Major Shareholders and Related Party Transactions.

**Memorandum and Articles of Association**

YPF's by-laws were approved by National Executive Decree No. 1,106, dated May 31, 1993, and notarized by public deed No. 175, dated June 15, 1993 at the National Notary Public Office, sheet 801 of the National Registry, and registered at the Inspection Board of Legal Entities of the Argentine Republic on the same date, June 15, 1993 under number 5,109 of the book of Corporations number 113, volume A.

At a shareholders' meeting on April 29, 2016, YPF's shareholders approved an amendment to YPF's by-laws. Copies of the by-laws, which have been filed as Exhibit 1.2. to YPF's 2016 annual report on Form-20 filed on April 7, 2017, are also available at the offices of YPF.

For a detailed description of YPF's object and purpose, see Item 4. Information on the Company. YPF's object is set forth in Section 4 of its by-laws.

Pursuant to Argentine Corporations Law, the Board of Directors or the Supervisory Committee shall call either annual general or extraordinary shareholders meetings in the cases provided by law and whenever they consider appropriate. Shareholders representing not less than 5% of YPF's capital stock may also request that a shareholders meeting be called.

A shareholders meeting shall be called at least twenty days prior to the meeting date by notice published in the legal publications journal for a period of five days. The notice shall include the nature, date, time and place of the meeting, the agenda to be discussed and the specific requirements shareholders must meet to attend the meeting.

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**Table of Contents***Shareholders Meetings*

Pursuant to the Argentine Corporations Law, the Board of Directors or the Supervisory Committee shall call either annual ordinary or extraordinary shareholders meetings in the cases provided by law and whenever they consider appropriate. Shareholders representing not less than 5% of our capital stock may also request that a shareholders meeting be called, in which case the meeting must take place within 40 days of such shareholders request. If the Board of Directors or the Supervisory Committee fails to call a meeting following such a request, a meeting may be ordered by the CNV or by the courts.

Shareholders meetings may be ordinary meetings or extraordinary meetings. We are required to convene and hold an ordinary meeting of shareholders within four months of the closing of each fiscal year to consider the matters specified in the first two paragraphs of Section 234 of the Argentine Corporations Law, such as the approval of our financial statements, allocation of net income for such fiscal year, approval of the reports of the Board of Directors and the Audit Committee and the election, performance and remuneration of directors and members of the Supervisory Committee. In addition, pursuant to the Stock Market Law, at ordinary shareholders meetings, shareholders must consider (i) the disposition of, or creation of any lien over, assets as long as such decision has not been performed in the ordinary course of business and (ii) the execution of administration or management agreements and whether to approve any agreement by virtue of which the assets or services provided to us are paid partial or totally with a percentage of our income, results or earnings, if the payment is material when measured against the volume of the ordinary course of business and our shareholders equity. Other matters which may be considered at an ordinary shareholders meeting convened and held at any time include the responsibility of directors and members of the Supervisory Committee, capital increases and the issuance of certain notes. Extraordinary shareholders meetings may be called at any time to consider matters beyond the authority of an ordinary meeting including, without limitation, the amendment of our by-laws, issuance of debentures, early dissolution, merger, spin-off, reduction of capital stock and redemption of shares, transformation from one type of entity to another and limitation or suspension of shareholders preemptive rights.

*Notices of meetings*

Notice of shareholders meetings must be published for five days in the Official Gazette, in an Argentina newspaper of wide circulation and in the bulletin of the BASE, at least 20 but not more than 45 days prior to the date on which the meeting is to be held. Such notice must include information regarding the type of meeting to be held, the date, time and place of such meeting and the agenda. If a quorum is not available at such meeting, a notice for a meeting on second call, which must be held within 30 days of the date on which the first meeting was called, must be published for three days at least eight days before the date of the meeting on second call. The above-described notices of shareholders meetings may be effected simultaneously for the meeting on second call to be held on the same day as the first meeting, only in the case of ordinary meetings. Shareholders meetings may be validly held without notice if all the shares of our outstanding share capital are present and resolutions are adopted by unanimous vote of shares entitled to vote.

*Quorum and voting requirements*

Except as described below, the quorum for ordinary meetings of shareholders on first call is a majority of the shares entitled to vote, and action may be taken by the affirmative vote of an absolute majority of the shares present that are entitled to vote on such action. If a quorum is not available at the first meeting, a meeting on second call may be held at which action may be taken by the holders of an absolute majority of the shares present, regardless of the number of such shares. The quorum for an extraordinary shareholders meeting on first call is 60% of the shares entitled to vote, and if such quorum is not available, a meeting or second call may be held, at which action may be taken by the holders

of an absolute majority of the shares present, regardless of the number of such shares.

Our by-laws establish that in order to approve (i) the transfer of our domicile outside Argentina, (ii) a fundamental change of the corporate purpose set forth in our by-laws, (iii) delisting of our shares from the BASE or NYSE, and (iv) a spin-off by us, when as a result of such spin-off more than 25% of our assets are transferred to the resulting corporations, a majority of the shares representing 75% or more of our voting shares is required, both in first and second call. Our by-laws also establish that in order to approve (i) certain amendments to our by-laws concerning tender offers of shares (as described below), (ii) the granting of certain guarantees in favor of our shareholders, (iii) full stop of refining, commercialization and distribution activities and (iv) rules regarding appointment, election and number of members of our Board of Directors, a majority of the shares representing 66% or more of our voting shares is required, both in first and second call, as is the affirmative vote of the Class A shares, voting at a special meeting of the holders of such shares.

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In order to attend the meeting, shareholders must deposit their shares, or a certificate representing book-entry shares issued by a bank, clearing house or depository trust company, with us. This certificate will allow each shareholder to be registered in the attendance book which closes three business days before the date on which the meeting will be held. We will issue to each shareholder a deposit certificate required for admission into the meeting. Shares certified and registered in the attendance book may not be disposed of before the meeting is held unless the corresponding deposit is cancelled.

Under the Argentine Corporations Law, foreign companies that own shares in an Argentine corporation are required to register in the National Corporations Registry (held by the Ministry of Justice and Human Rights, or the agency to be determined by such ministry to that effect, according to Decree N°27/2018 published on January 11, 2018 in the Official Gazette of the Republic of Argentina) in order to exercise certain shareholder rights, including voting rights. Such registration requires the filing of certain corporate and accounting documents. Accordingly, if a shareholder owns Class D shares directly (rather than in the form of ADSs) and it is a non-Argentine company, and such shareholder fails to register in the National Corporations Registry, the ability to exercise its rights as a holder of Class D shares may be limited.

Directors, members of the Supervisory Committee and senior managers are both entitled and required to attend all shareholders' meetings. These persons may only exercise voting power to the extent they have been previously registered as shareholders, in accordance with the provisions described in the above paragraph. Nevertheless, these persons are not allowed to vote on any proposal regarding the approval of their management duties or their removal for cause.

Shareholders who have a conflict of interest with us and who do not abstain from voting may be liable for damages to us, but only if the transaction would not have been approved without such shareholders' votes. Furthermore, shareholders who willfully or negligently vote in favor of a resolution that is subsequently declared void by a court as contrary to the law or our by-laws may be held jointly and severally liable for damages to us or to other third parties, including shareholders.

Our major shareholders do not have different voting rights.

## **Directors**

### *Election of Directors*

Our business and affairs are managed by the Board of Directors in accordance with our by-laws and the Argentine Corporations Law. Our by-laws provide for a Board of Directors of 11 to 21 members, and up to an equal number of alternates. Alternates are those elected by the shareholders to replace directors who are absent from meetings or who are unable to exercise their duties, when and for whatever period appointed to do so by the Board of Directors. Alternates have the responsibilities, duties and powers of directors only if and to the extent they are called upon to attend board meetings or for such longer period as they may act as replacements.

Directors hold office from one to three years, as determined by the shareholders' meetings. As of the General Ordinary and Extraordinary Shareholders' meeting and the Board of Directors' meeting, both held on April 28, 2017, and the Board of Directors' meeting held on February 15, 2018, our Board of Directors is composed of 14 directors and 9 alternates.

In accordance with our by-laws, the Argentine government, as sole holder of Class A shares, is entitled to elect one director and one alternate.

Under the Argentine Corporations Law, a majority of our directors must be residents of Argentina. All directors must establish a legal domicile in Argentina for service of notices in connection with their duties.

Our by-laws require the Board of Directors to meet at least once every quarter in person or by video conference, and a majority of directors is required in order to constitute a quorum. If a quorum is not met one hour after the start time set for the meeting, the President or his substitute may invite alternates of the same class as that of the absent directors to join the meeting, or call a meeting for another day. Resolutions must be adopted by a majority of the directors present, and the President or his substitute is entitled to cast the deciding vote in the event of a tie. Our Directors are not required to hold any shares in us, and there is no age limit requirement for the retirement or non-retirement of our Directors.

According to our