

A	B	C	D	E	F	G	H	I	J	K	L	M	N
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Oil & natural gas extraction data

Richard Heede
Climate Mitigation Services
 File started: 11 January 2005
 Last modified: June 2019

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YPF S.A. (Yacimientos Petrolíferos Fiscales)

Buenos Aires www.ypf.com

yellow column indicates original reported units
 State-owned enterprise

Production / Extraction data

Year

Year	Crude Oil & NGL			Natural Gas				
	Net production	Net production	Net production	Net production	Net production	Net production		
	Thousand bbl /d	Million bbl /yr	Million tonnes/yr	Million cf/d	Million SCM/d	Billion cf/yr	Million tons/yr	Million tonnes/yr

- 17 1950
- 18 1951
- 19 1952
- 20 1953
- 21 1954
- 22 1955
- 23 1956
- 24 1957
- 25 1958
- 26 1959
- 27 1960
- 28 1961
- 29 1962
- 30 1963
- 31 1964
- 32 1965
- 33 1966
- 34 1967
- 35 1968
- 36 1969
- 37 1970
- 38 1971
- 39 1972
- 40 1973
- 41 1974
- 42 1975
- 43 1976
- 44 1977
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- 46 1979
- 47 1980
- 48 1981
- 49 1982
- 50 1983
- 51 1984
- 52 1985
- 53 1986
- 54 1987
- 55 1988
- 56 1989
- 57 1990
- 58 1991
- 59 1992
- 60 1993
- 61 1994
- 62 1995
- 63 1996
- 64 1997
- 65 1998
- 66 1999
- 67 2000
- 68 2001
- 69 2002
- 70 2003
- 71 2004
- 72 2005
- 73 2006
- 74 2007
- 75 2008
- 76 2009
- 77 2010
- 78 2011
- 79 2012
- 80 2013
- 81 2014
- 82 2015
- 83 2016
- 84 2017
- 85 2018



Shale Gas Basins in Southern South America



First oil well in Comodoro Rivadavia, 1907



YPF station, Chacarita, Buenos Aires, 1951

YPF Form 20-F 2012, page 39:

Volumes of natural gas been converted to an oil equivalent basis at 5.615 mcf per barrel

	Crude oil	Condensate	Liquids	Natural Gas	Natural Gas
	Mb	Mb	Mb	Bcf	Bcf
2007	120.0 Mb		120	578 Bcf	578
2008	115.0 Mb		115	555 Bcf	555
2009	110.0 Mb		110	472 Bcf	472
2010	294.0 kb/day		107	1,211 Mcf/day	442
2011	274.0 kb/day		100	1,090 Mcf/day	398
2012	276.0 kb/day		101	1,029 Mcf/day	376
2013	84.0 Mb	18.0 Mb	102	378 Bcf	378
2014	89.0 Mb	18.0 Mb	107	471 Bcf	471
2015	91.0 Mb	18.0 Mb	109	452 Bcf	452
2016	90.0 Mb	19.0 Mb	109	457 Bcf	457
2017	83.0 Mb	19.0 Mb	102	475 Bcf	475
2018	83.0 Mb	14.0 Mb	97	461 Bcf	461
Total	na	106	1,279	na	5,514

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
89														
90														
91				<i>Oil and Condensate Production ⁽¹⁾</i>					2018	2017	2016			
92									(mmbbl)					
93				Consolidated Entities										
94				South America										
95				Argentina		83			83		90			
96				North America										
97				United States		—			—		*			
98				Total Consolidated Entities		83			83		90			
99				Equity-Accounted Entities										
100				South America										
101				Argentina		—			—		—			
102				North America										
103				United States		—			—		—			
104				Total Equity-Accounted Entities		—			—		—			
105				Total Oil Production ⁽²⁾		83			83		90			
106														
107														
108				<i>NGL Production ⁽¹⁾</i>					2018	2017	2016			
109									(mmbbl)					
110				Consolidated Entities										
111				South America										
112				Argentina		14			19		19			
113				North America										
114				United States		—			—		—			
115				Total Consolidated Entities		14			19		19			
116				Equity-Accounted Entities										
117				South America										
118				Argentina		—			—		—			
119				North America										
120				United States		—			—		—			
121				Total Equity-Accounted Entities		—			—		—			
122				Total NGL Production ⁽³⁾		14			19		19			
123														
124														
125				<i>Natural Gas Production ⁽¹⁾</i>					2018	2017	2016			
126									(bcf)					
127				Consolidated Entities										
128				South America										
129				Argentina		461			475		457			
130				North America										
131				United States		—			—		*			
132				Total Consolidated Entities		461			475		457			
133				Equity-Accounted Entities										
134				South America										
135				Argentina		—			—		—			
136				North America										
137				United States		—			—		—			
138				Total Equity-Accounted Entities		—			—		—			
139				Total Natural Gas Production ^{(4) (5)}		461			475		457			
140														
141														
142														
143				YPF Form 20-F for 2018, page 49.										



Production	For the Year Ended December 31,		
	2009	2008	2007
	(mmbbl)		
Oil production(1)			
Argentina(2)	110	114	120
North America	1	1	0
Total oil production(3)	111	115	120
	(bcf)		
Natural gas production			
Argentina(2)	471	554	577
North America	1	1	1
Total gas production(4)	472	555	578

YPF Annual Report and Form 20-F 2009, page 29.

Year	Petroleum output (million barrels)	Natural gas output (billion cu ft)	Petroleum reserves (million barrels)	Natural gas reserves (billion cu ft)
1992	101	493	1029	10918
1993-95	130	423	1136	8965
1996-98	182	490	1458	9812
1999-2001	173	606	1592	10472
2002-04	154	631	1255	7923
2005-07	127	651	677	4739
2008-10	111	544	601	3805
2011 ^[7]	100	441	583	3695
2014 ^[4]	89*	547*	601*	3016*

<https://en.wikipedia.org/wiki/YPF>

Cell: I9

Comment: Rick Heede:

YPF S.A. (Yacimientos Petrolíferos Fiscales: "Fiscal Oilfields") is a vertically integrated Argentine energy company, engaged in oil and gas exploration and production, and the transportation, refining, and marketing of gas and petroleum products.

Founded in 1922 under President Hipólito Yrigoyen's administration, YPF was the first oil company established as a state enterprise outside of the Soviet Union, and the first state oil company to become vertically integrated.

YPF's first director was Enrique Mosconi, who took up his charge in 1922, remaining there until 1930. During his run on the company, Mosconi advocated economic independence and starting in 1928, nationalization of oil supplies; the latter, however, was never achieved due to a 1930 military coup against Yrigoyen backed by, among others, foreign oil interests. YPF was privatized in 1993 and bought by the Spanish firm Repsol S.A. in 1999; the resulting merger produced 'Repsol YPF'. The renationalization of 51% of the firm was initiated in 2012 by President Cristina Fernández de Kirchner. The government of Argentina eventually agreed to pay \$5 billion compensation to Repsol.

<https://en.wikipedia.org/wiki/YPF>

Repsol acquisition: Madrid-based multinational corporation Repsol S.A. purchased 98% of YPF in 1999 in two stages: a 15% share sold by the national government for US\$2 billion, and a further 83% for over US\$13 billion including all remaining public sector shares (10%, equally divided between the nation and the provinces) as well as most of the outstanding investor shares. The union of the two companies took on the name Repsol YPF; YPF would represent 40% of the new firm's reserves and over 50% of its production.

The Petersen Group (property of the Eskenazi family of Buenos Aires) entered into a partnership with Repsol in 2007 by acquiring a 15% stake in YPF; the group bought another 10% of the company for US\$1.3 billion on 4 May 2011. A majority of the firm's shares (58%) remained under the control of Repsol, while 16% remained in private portfolios; the Argentine Government retained the golden share.

Renationalization: Argentine international energy trade recorded an imbalance of US\$3 billion in 2011, the first negative figure since 1987, and the relationship between YPF and the government became difficult.

Investment in exploration at YPF as a percentage of profits had been far below those in most other Repsol subsidiaries. Market analysts and Repsol blamed the decline in exploration and production on government controls on exports and prospecting lease awards, and price controls on domestic oil and gas. Political risks and government intervention, including price controls, have discouraged foreign investment in oil production in Latin America in general. President Cristina Fernández de Kirchner raised YPF frequently in speeches during March 2012, claiming that underinvestment and excessive dividends at the firm had caused declines in output.

Governors in six fossil-fuel producing provinces subsequently revoked YPF leases representing a fifth of its oil production.

Cristina Fernández de Kirchner announces the bill to renationalize YPF, April 2012. Citing Brazilian oil giant Petrobras as an example, the president announced the introduction of a bill on 16 April 2012, for the renationalization of YPF: the national government would purchase a controlling 51% share, with ten provincial governments receiving the remaining 49%. Planning Minister Julio de Vido was appointed to head the Federal intervention, replacing CEO Sebastián Eskenazi. Repsol YPF CEO Antonio Brufau, Spanish Prime Minister Mariano Rajoy, and other Spanish officials objected to the nationalisation, accusing the Argentine government of driving down YPF shares ahead of the announcement (market price of the shares declined by over half from February to April). Economy Minister Hernán Lorenzino claimed in turn that asset stripping at YPF had financed Repsol's expansion in other parts of the world.

Responses included a diplomatic offensive by Rajoy in other countries in the region, assurances by Industry Minister José Manuel Soria of "clear and decisive" Spanish government measures.[51] Foreign Minister José García-Margallo y Marfil's admonition that Argentina had "shot itself in the foot" by damaging relations with Spain,[50] and other threats.

The Chinese state oil concern, Sinopec, was reported to have been in talks to buy out Repsol's share in YPF – a potential deal scuttled by the Argentine announcement. Both Repsol and YPF shares fell sharply before and after the announcement.[42] and the cost of insuring Argentine government bonds against default rose, as did those of Spain. Repsol Chairman Brufau estimated the company's potential loss at €5.7 billion (US\$7.5 billion).

The largest minority shareholder, the Petersen Group, had financed their initial purchase of 15% of the stock with a vendor's loan from Repsol for €1.5 billion. The 2008 agreement required Repsol to buy back shares owned by the Group and to assume the loan should the Madrid-based firm lose majority control of YPF. Sebastián Eskenazi indicated however that the group would forgo this option.

The Senate of Argentina approved the takeover on 26 April with 63 votes in favor of the measure, three opposing it and four abstentions. The Chamber of Deputies in turn approved the bill on 4 May with 208 votes out of 257 and six abstentions. The president signed the renationalization into law on 5 May. Miguel Galluccio, an Argentine petroleum engineer with experience at both YPF and at oilfield services leader Schlumberger as president of its production management division in London, was appointed CEO.

<https://en.wikipedia.org/wiki/YPF>

Cell: M11

Comment: Rick Heede:

On this worksheet we report extractive data for each company or state-owned enterprise. Three columns under crude oil and natural gas allow for data reported in one of three formats (e.g., thousand barrels per day, or million barrels per year, or million tonnes per year). Coal is normally reported in short tons or metric tonnes per year.

The subtraction of the fraction typically sequestered in petrochemicals and other non-combusted uses such as road oils, waxes, lubricants, greases, etc. Non-fuel uses are accounted for in the emission factors and applied to each entry in the oil, gas, and coal summary worksheets.

Cell: F12

Comment: Rick Heede:

Total net worldwide crude oil plus natural gas liquids produced by each company or state-owned enterprise. Where data is available, we list net production (after royalty production is deducted).

We rely on company annual reports, Form 10-k, or other company data where available. In some cases -- particularly for state-owned oil and gas companies -- we use production data from the Oil & Gas Journal in its OGI100 and OGI100.

Crude production includes natural gas liquids (NGL) unless noted.

Cell: J12

Comment: Rick Heede:

Natural gas is typically reported as dry gas; natural gas liquids are reported under crude oil.

Carbon dioxide is normally removed from the gas flow at the production site (see "Vented Carbon Dioxide").

"SCM/d" = standard cubic meters per day. "cf/d" = cubic feet per day.

Net production typically excludes a number of diverted gas streams. Quantities and fractions vary; ExxonMobil's exclusions are typical of the industry: "Net production available for sale quantities are the volumes withdrawn from ... natural gas reserves, excluding royalties and volumes due to others when produced, and excluding gas purchased from others, gas consumed in producing operations, field processing plant losses, volumes used for gas lift, gas injections and cycling operations, quantities flared, and volume shrinkage due to the removal of condensate or natural gas liquids production."

ExxonMobil Corporation (2004) 2003 Financial and Operating Review, www.exxonmobil.com, p. 55.

Cell: G54

Comment: Rick Heede:

Oil Peak (2012) Argentina Energy Report, <http://www.endofcrudeoil.com/2012/04/argentina-energy-report.html>

Cell: D74

Comment: Rick Heede:

YPF Annual Report and Form 20-F 2009, page 29. Oil production in Mb, and includes crude oil, condensate, and natural gas liquids.

Cell: H74

Comment: Rick Heede:

YPF Annual Report and Form 20-F 2009, page 29. Gas production in Bcf.

Note: the 2007 Form 20-F reports 635 Bcf gas production: "

- In 2007, we produced 120 mmbbl of oil (329 mbbbl/d) and 635 bcf of gas (1,740 mmcf/d)."

Cell: D77

Comment: Rick Heede:

YPF Annual Report & Form 20-F 2012, page 38. reports crude oil production in thousand bbl per day.

Cell: D80

Comment: Rick Heede:

YPF Annual Report & Form 20-F 2015, page 49.

Cell: D82

Comment: Rick Heede:

YPF Annual Report & Form 20-F 2017, page 53. In million bbl of crude oil and condensate

Cell: H82

Comment: Rick Heede:

YPF Annual Report & Form 20-F 2017, page 53. Gas production in Bcf.

Cell: D85

Comment: Rick Heede:

YPF Form 20-F for 2018 Downloaded 15 June 2019. Oil and condensate production, and NGL, in Mb.

<https://www.ypf.com/english/investors/Lists/InformeAnualForm20/YPF-20F-2018.pdf>

Cell: H85

Comment: Rick Heede:

YPF Form 20-F for 2018, page 49. Natural gas production, in Bcf.

<https://www.ypf.com/english/investors/Lists/InformeAnualForm20/YPF-20F-2018.pdf>