

# Oil and natural gas extraction data

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Climate Mitigation Services  
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## Ecopetrol, Colombia

www.ecopetrol.com.co Bogota

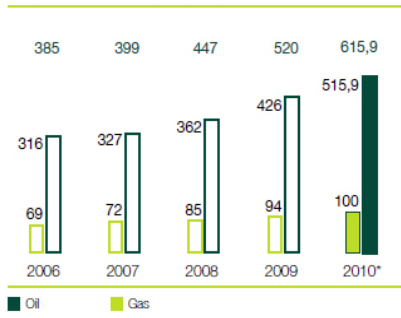
yellow column indicates original reported units  
80% State-owned enterprise

## Production / Extraction data

Year	Crude Oil & NGL			Natural Gas				
	Net production Thousand bbl / d	Net production Million bbl / yr	Net production Million tonnes/yr	Net production Million cf/d	Net production Million SCM/d	Net production Billion cf/yr	Gross production Million tons/yr	Gross production Million tonnes/yr
		Empresa Colombiana de Petroleos ~2000; EcoPetrol ~2000-				Empresa Colombiana de Petroleos ~2000; EcoPetrol ~2000-		



Oil production + gas | Kbdpe



\*Business group

Ecopetrol AR 2010

cubic feet per bbl 5,700

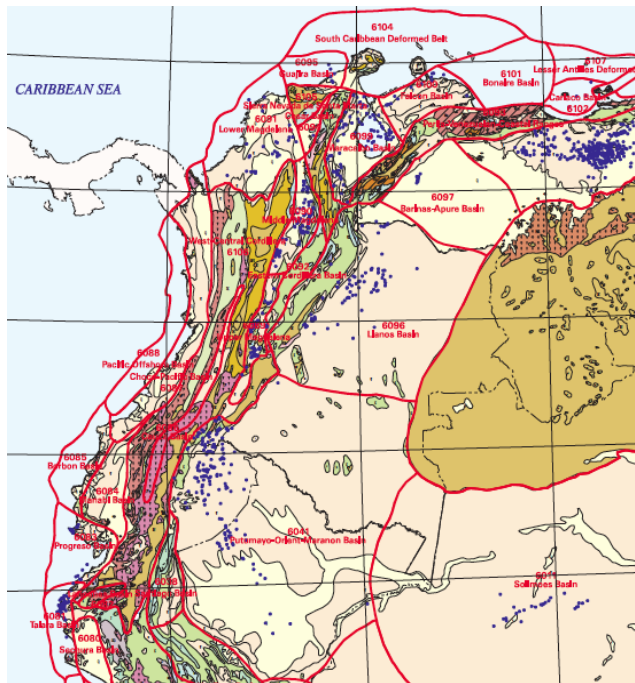
Year	Oil (Kbdpe)	Gas (Kbdpe)	Total (Kbdpe)	Oil (Kbdpe)	Gas (Kbdpe)	Total (Kbdpe)
1950						
1951						
1952						
1953						
1954						
1955						
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1999						
2000	443		443			
2001	350		350			
2002						
2003						
2004	528		528			
2005	526		526			
2006	316		316			
2007	327		327			
2008	362		362			
2009	426		426			
2010	516		516			
<b>Total</b>	<b>na</b>	<b>3,902</b>	<b>-</b>	<b>na</b>	<b>3,931</b>	<b>-</b>

**US Energy Information Administration, International Energy Statistics**

www.eia.gov/emeu/internationalenergy.html

Vented & Flared of

	Colombia		Updated April 2013	Colombia		Colombia		Colombia		Colombia	
	Crude oil, condensate, & NGPL k bbl per day	million bbl per yr		Gross NatGas Prod Bcf per year	Prod Market Gas Bcf per year	Reinjected NatGas Bcf per year	gross %	Vented & Flared Bcf per year	Dry NatGas Prod Bcf per year		
1980	132	48		NA	NA	NA		27	99		
1981	131	48		NA	NA	NA		28	106		
1982	147	54		NA	NA	NA		28	106		
1983	156	57		NA	NA	NA		26	102		
1984	172	63		NA	NA	NA		24	143		
1985	180	66		NA	NA	NA		21	144		
1986	310	113		NA	NA	NA		18	144		
1987	391	143		NA	NA	NA		18	140		
1988	382	139		NA	NA	NA		11	146		
1989	411	150		NA	NA	NA		9	146		
1990	448	164		183	157	19	4%	7	151		
1991	425	155		186	161	18	4%	7	155		
1992	439	160		187	158	16	10%	19	151		
1993	461	168		189	163	19	4%	7	157		
1994	455	166		195	168	20	4%	7	162		
1995	590	215		271	168	87	6%	16	161		
1996	633	231		333	176	139	5%	17	167		
1997	656	240		453	222	214	4%	18	211		
1998	737	269		508	233	254	4%	20	221		
1999	821	300		534	195	318	4%	21	183		
2000	694	253		513	213	283	3%	18	201		
2001	627	229		529	229	283	3%	18	215		
2002	579	211		534	233	283	3%	18	218		
2003	545	199		513	231	265	3%	18	215		
2004	533	194		504	235	251	4%	18	218		
2005	530	193		532	253	261	3%	18	236		
2006	535	195		518	273	233	2%	12	255		
2007	534	195		575	302	261	2%	12	270		
2008	591	216		1,026	357	653	2%	16	318		
2009	673	246		1,197	425	750	2%	21	370		
2010	788	287		1,124	454	646	2%	24	398		
2011	917	335		1,115	466	623	2%	25	387		
2012	947	346									
1990-2011 totals				11,718	5,473	5,896	3.0%	356	5,019		



geologic basins of Colombia, USGS, 1997.

**Cell:** I9**Comment:** Rick Heede:

Wiki: Ecopetrol, formerly known as Empresa Colombiana de Petróleos S.A. is the largest and primary petroleum company in Colombia. As a result of its continuous growth, Ecopetrol forms part of the Fortune Global 500 and is ranked 303, it belongs to the group of the 25 largest petroleum companies in the world, and it is one of the four principal petroleum companies in Latin America. The reversion of "De Mares Concession" ("Concesión De Mares") to the Colombian State on August 25, 1951 gave way to the Empresa Colombiana de Petróleos, which had been created in 1948 by means of Law 165 of that same year. The growing company assumed the reverted assets of the Tropical Oil Company that began oil activities in 1921 in Colombia with the implementation of the Cira-Infantas Field in the Middle Magdalena River Valley, located some 300 kilometers northeast of Bogotá. Ecopetrol undertook activities in the oil chain as a State-owned Industrial and Commercial Company in charge of administrating the nations hydrocarbon resources, and grew as other concessions reverted and became part of its operation. In 1961, it assumed the direct management of the Barrancabermeja Refinery. Thirteen years later, it purchased the Cartagena Refinery, built by Intercol in 1956. In 1970, it adopted its first by-laws, which ratified its nature as a State-owned Commercial and Industrial Company, linked to the Ministry of Mines and Energy, fiscally supervised by the General Comptrollership of the Republic of Colombia. In September 1983, the best news for the history of Ecopetrol and some of the best news for Colombia was given: the discovery of the Cano Limón Field in association with OXY, a reservoir with reserves estimated at 1.1 billion barrels (170,000,000 m<sup>3</sup>). Thanks to this field, the Company began a new era and in the year 1986, Colombia began to export oil again. During the 1990s, Colombia extended its oil self-sufficiency with the discovery of the Cusiana and Cupiagua giants in the Foothills of the Plains region, in association with the British Petroleum Company. In 2003, the Colombian government restructured the Empresa Colombiana de Petróleos, in order to internationalize it and make it more competitive in the framework of the world hydrocarbon industry. Decree 1760 / June 26, 2003 (available only in Spanish) modified the organic structure of the Empresa Colombiana de Petróleos and made it Ecopetrol S.A., a public stock-holding corporation, one hundred percent state-owned, associated with the Ministry of Mines and Energy, and governed by its by-laws contained in Notarized Document No. 2931 / July 7, 2003, issued by the Second Notary Public of the Bogotá D.C. Circle. The transformation of the Empresa Colombiana de Petróleos into the new Ecopetrol S.A., released the Company from State functions as the administrator of the oil source and the ANH (Agencia Nacional de Hidrocarburos) [National Hydrocarbons Agency] was created to carry out the function. As of 2003, Ecopetrol S.A. began an era in which, with more autonomy, it has accelerated its exploratory activities, its capacity to obtain results with a business and commercial vision and the interest in improving its competitiveness on the world oil market. Wikipedia "Ecopetrol" accessed April 2013.

**Cell:** M9**Comment:** Rick Heede:

World Bank, 2008b, page 329: "State- owned, public stock-holding corporation. Shares Controlled by Government: 80%."  
World Bank (2008b) A Citizen's Guide to National Oil Companies, Part B: Data Directory, World Bank, Washington, & Center for Energy Economics, Bureau of Economic Geology Jackson School of Geosciences University of Texas, Austin, 764 pp.

**Cell:** D11**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 U.S. or metric tonnes per year.

Note: the carbon content of the extracted resources is adjusted by a number of factors before emissions estimates are made in the worksheet 1 to the left. Most important is the subtraction of the fraction typically sequestered in petrochemicals and other non-combusted uses such as road oils, waxes, lubricants, greases, etc. See the comment for each extracted resource for detailed discussions of the combusted vs sequestered fractions.

**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 gross production (before royalty production is netted out). More often, however, oil companies report production net of royalty production.  
Oil & Gas Journal Data Book (our primary source for oil and gas production from 1988 through 2003) reports net production.  
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.

**Cell:** E53**Comment:** Rick Heede:

Oil & Gas Journal OGJ100 for Empresa Colombiana de Petroleos and Ecopetrol, various years.

**Cell:** J53**Comment:** Rick Heede:

Oil & Gas Journal OGJ100 for Empresa Colombiana de Petroleos and Ecopetrol, various years.

**Cell:** E64**Comment:** Rick Heede:

No report for EcoPetro for 1998-1999. Instead production reported for Empresa Colombiana de Petroleos. Verify same company.

**Cell:** D66**Comment:** Rick Heede:

Oil and gas production data from Energy Intelligence (2003) Top 100: Ranking the World's Oil Companies, p. 136.

**Cell:** D70**Comment:** Rick Heede (Dec09):

Ecopetrol Annual Rpt 2008, data for 2004-2008, in thousand bbl per day.  
CMS note: Oil & Gas Journal OGJ100 data is significantly lower: 112.0 million bbl in 2004, NA 2005, 115.7 million bbl in 2006, 119.5 million bbl in 2007, and 32.1 million bbl in 2008.

**Cell:** I70**Comment:** Rick Heede (Dec09):

EcoPetro Annual Rpt 2008. Data for 2004-2008, in "Mpcd", which appears to be Spanish contraction for million cubic feet per day.

**Cell:** D72**Comment:** Rick Heede:

Ecopetrol Annual Report 2010 (see chart above) for 2006-2010.

**Cell:** H72**Comment:** Rick Heede:

Ecopetrol Annual Report 2010 (see chart above) for 2006-2010.

**Cell:** I75

**Comment:** Rick Heede:

online annual report, reported production in Kbdpe; assumes 5,700 cf per barrel.

**Cell:** F162

**Comment:** Rick Heede:

U.S. Geological Survey (1997) Maps Showing Geology, Oil and Gas Fields, and Geologic Provinces of the South America Region, Compiled by Christopher J. Schenk, Roland J. Viger, & Christopher P. Anderson, USGS Open File Rpt 97-470D, Denver, [pubs.usgs.gov/of/ 1997/ofr-97-470/OF97-470D/index.html#TOP](https://pubs.usgs.gov/of/1997/ofr-97-470/OF97-470D/index.html#TOP)