

Oil & natural gas extraction data

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 Climate Mitigation Services
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Libya National Oil Corporation, Libya

www.noclibya.com.ly

Tripoli

yellow column indicates original reported units

100% State-owned enterprise

Production / Extraction data

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 bbl /yr	Billion cf/yr	Tcf/yr	Billion cf/yr

Libya NOC established in 1970; Libya nationalized petroleum industry in 1973

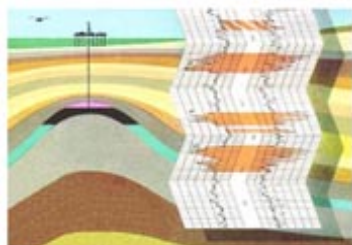


Year	Libya		Libya NOC		Percent of Libya	Libya NOC	Percent of Libya	Libya NOC	Percent of Libya
	million bbl /yr	million bbl /yr	million bbl /yr	million bbl /yr					
1950									
1951									
1952									
1953									
1954									
1955									
1956									
1957									
1958									
1959									
1960									
1961		7		1	10%				
1962		67		7	10%				
1963		169		17	10%				
1964		316		32	10%				
1965		445		45	10%				
1966		550		55	10%				
1967		637		64	10%				
1968		951		95	10%				
1969		1,134		113	10%				
1970		1,149		230	20%				
1971	interpolated	999		300	30%				
1972	interpolated	849		340	40%				
1973	interpolated	699		356	51%				
1974		549		302	55%				
1975	interpolated	585		351	60%				
1976	interpolated	620		403	65%				
1977	interpolated	656		459	70%				
1978	interpolated	691		484	70%				
1979	thousand bbl /day	727		509	70%				
1980	1,827	667		467	70%				
1981	1,175	429		300	70%				
1982	1,190	434		304	70%				
1983	1,135	414		290	70%				
1984	1,124	410		287	70%				
1985	1,085	396		277	70%				
1986	1,064	388		272	70%				
1987	1,002	366		256	70%				
1988	1,205	440		308	70%				
1989	1,185	433		303	70%				
1990	1,410	515		360	70%				
1991	1,523	556		389	70%				
1992	1,473	538		376	70%				
1993	1,402	512		358	70%				
1994	1,419	518		362	70%				
1995	1,430	522		365	70%				
1996	1,450	529		370	70%				
1997	1,506	550		385	70%				
1998	1,450	529		370	70%				
1999	1,379	503		352	70%				
2000	1,470	537		376	70%				
2001	1,429	521		365	70%				
2002	1,384	505		353	70%				
2003	1,486	542		380	70%				
2004	1,583	578		405	70%				
2005	1,722	629		440	70%				
2006	1,810	661		462	70%				
2007	1,846	674		472	70%				
2008	1,876	685		479	70%				
2009	1,790	653		457	70%				
2010	1,790	653		457	70%				
Total		28,086		15,561				12,068	8,161

70 % of Libya Nations Encycl.
Million tonnes/yr
157.4
interpolated
interpolated
interpolated
75.2
interpolated
interpolated
interpolated
99.6

Oil & Gas Journal	Oil & Gas Journal
million bbl /yr	Bcf/yr
345	198
326	182
418	203
502	231
545	239
500	225
504	226
502	224
508	227
519	232
508	225
488	211
516	216
496	216
475	246
511	249
565	251
599	258
624	259
621	266
628	415
564	447
566	552

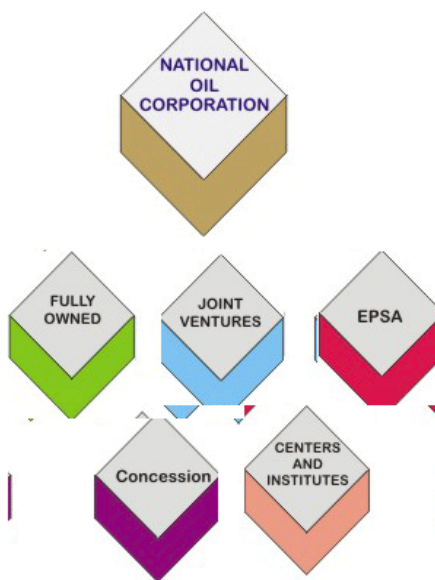
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
81														
82														
83														
84														
85		US Energy Information Administration, International Energy Statistics												
86		www.eia.gov/emeu/internationalenergy.html												
87						Vented & Flared of								
88		Libya		Libya		Libya			Libya		Libya		Libya	
89		Crude oil, condensate, & NGPL		Updated April 2013		Gross NatGas Prod	Prod Market Gas	Reinjected NatGas	gross	Vented & Flared	Dry NatGas Prod			
90		k bbl per day	million bbl per yr			Bcf per year	Bcf per year	Bcf per year	%	Bcf per year	Bcf per year			
91	1980	1,827	667			NA	NA	NA			161	180		
92	1981	1,175	429			NA	NA	NA			82	110		
93	1982	1,190	434			NA	NA	NA			102	120		
94	1983	1,135	414			NA	NA	NA			68	140		
95	1984	1,124	410			NA	NA	NA			44	162		
96	1985	1,085	396			NA	NA	NA			28	180		
97	1986	1,064	388			NA	NA	NA			25	198		
98	1987	1,002	366			NA	NA	NA			28	189		
99	1988	1,205	440			NA	NA	NA			91	194		
100	1989	1,185	433			NA	NA	NA			118	212		
101	1990	1,410	515			572	219	155	31%		177	219		
102	1991	1,523	556			550	252	168	24%		130	231		
103	1992	1,473	538			503	260	166	15%		76	239		
104	1993	1,402	512			438	246	131	14%		61	225		
105	1994	1,419	518			442	247	132	14%		63	226		
106	1995	1,430	522			440	245	132	14%		63	224		
107	1996	1,450	529			446	248	135	14%		64	227		
108	1997	1,506	550			456	253	137	14%		65	232		
109	1998	1,450	529			445	246	135	15%		65	225		
110	1999	1,379	503			325	205	74	14%		46	184		
111	2000	1,470	537			358	233	88	10%		37	212		
112	2001	1,429	521			365	230	87	13%		48	218		
113	2002	1,384	505			366	232	87	13%		48	219		
114	2003	1,486	542			451	207	218	6%		26	194		
115	2004	1,583	578			585	316	237	5%		32	285		
116	2005	1,722	629			696	434	230	13%		91	399		
117	2006	1,810	661			956	722	128	11%		105	466		
118	2007	1,846	674			1,032	810	119	10%		103	540		
119	2008	1,876	685			1,070	807	125	13%		139	562		
120	2009	1,790	653			1,034	793	126	11%		115	562		
121	2010	1,790	653			1,069	825	120	12%		123	594		
122	2011	502	183			348	277	25	13%		46	277		
123	2012	1,484	542											
124		1990-2011 totals				12,946	8,309	2,953	13%		1,723	6,757		



en.noclibya.com.ly, NOC In Brief.



OUR COMPANIES



en.noclibya.com.ly, "Our Companies."



en.noclibya.com.ly, NOC In Brief.

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

"The National Oil Corporation (NOC) was established on 12 November 1970, under Law No: 24/1970, replacing the general Libyan Petroleum Corporation which established under Law No. 13 of 1968 to assume the responsibility of the oil sector operations."

NOC is carrying out exploration and production operation through its own affiliated companies, or in participation with other companies under service contracts or any other kind of petroleum investment agreements. This is in addition to marketing operations of oil and gas, locally and abroad. For this purpose, NOC has its own fully owned companies which carry out exploration, development and production operations, in addition to local and international marketing companies. NOC also has participation agreements with specialized international companies. Such agreements have developed into exploration and production sharing agreements, in accordance with the development of the international oil and gas industry, and international petroleum marketing.

NOC owns refining, and oil and gas processing companies, operating refineries such as Zawia and Ras Lanuf refineries, ammonia, urea and methanol plants, the Ras Lanuf petrochemical complex and the gas processing plant. To establish petrochemical industries, another stage of development of the ethylene plant has been completed, as well as the low and high density linear polyethylene plants.

"NOC in Brief", at www.noclibya.com.ly (12Dec11).

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

100 percent government owned. 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: F26**Comment:** Rick Heede:

We have no information on Libya NOC's equity production or details of production sharing agreements with international operators (such as Turkish Petroleum, BP, Eni, and others). Until detailed information is available, we use a ownership stake of 51 percent starting when international oil company assets were nationalized in 1973 and rising to a 70 percent stake in 1977 through 2010. This factor may significantly under-estimate Libya's stake in the country's oil production and will be revised if more detailed information on working interest production becomes available.

The Oil & Gas Journal estimates for 1987-2010 appear to reflect total Libyan production, not Libya NOC's, and we do not use the O&GJ data (reproduced in column L).

Cell: E28**Comment:** Rick Heede:

Libya oil production 1961-1969 from US Bureau of Mines (1971), International Petroleum Encyclopedia, p. 37.

Cell: J34**Comment:** Rick Heede:

We assume that Libya's equity production (through production sharing agreements, concessions, and royalties) was 51 percent upon Libya's nationalization of international production assets in 1973, and rising to 70 percent in 1977-2010.

The Oil & Gas Journal estimates for 1987-2010 appear to reflect total Libyan production, not Libya NOC's, and we do not use the O&GJ natural gas data (reproduced in column M).

Cell: M34**Comment:** Rick Heede:

According to the UN, "As of 2002, the NOC had an overall share of more than 70% in the oil industry." Nations' Encyclopedia; see cell note in column M. CMS applies this percentage to all of Libya's crude oil production from the year of industry nationalization in 1970 to 1986; thereafter CMS uses Oil & Gas Journal OGJ200 production estimates for Libya NOC for 1987 - 2008..

Cell: I35**Comment:** Rick Heede:

U.S. Bureau of Mines, Minerals Yearbook 1970, page 764, gross and marketed production 1968-1970. Note: "no marketed production reported."

Cell: B37**Comment:** Rick Heede:

BP operations in Libya were nationalized in 1970, and other producers that did not agree to a government production share of 51 percent were also nationalized.

Cell: I37**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.

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

Cell: I38**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: I39**Comment:** Rick Heede:

U.S. Bureau of Mines Minerals Yearbook 1974, page 887, reports both gross and marketed production for 1972-1973.

Cell: B40**Comment:** Rick Heede:

The government of Libya negotiated an immediate 51 percent equity share in 1973. Stevens, 2012, page 181.

Cell: G40**Comment:** Rick Heede:

The government of Libya negotiated an immediate 51 percent equity share in 1973. Stevens, 2012, page 181.

See Stevens, Paul (2012) "Saudi Aramco: the jewel in the crown," in Victor et al, eds, Oil and Governance, pp. 173-233, Cambridge Univ. Press, 1034 pp.

Cell: I41**Comment:** Rick Heede:

U.S. Bureau of Mines Minerals Yearbook 1976, page 887, reports both gross and marketed production for 1974-1976. Note: "Includes gas reinjected to reservoirs, if any."

Cell: L54**Comment:** Rick Heede:

Oil & Gas Journal data for 1987-2004, Libya National Oil Corporation.

Cell: L76

Comment: Rick Heede:
OGJ100 6Sep2010 pg 69;
OGJ 3 Oct 2011 pg 49

Cell: M76

Comment: Rick Heede:
OGJ100 6Sep2010 pg 69;
OGJ 3 Oct 2011 pg 49