

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

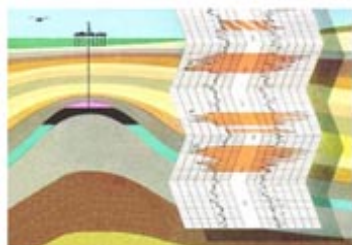


Year	Libya		Libya NOC		Percent of Libya	Libya NOC	Percent of Libya	Libya NOC	Percent of Libya
	million bbl/yr	million bbl/yr	million bbl/yr	million bbl/yr					
1950									
1951									
1952									
1953									
1954									
1955									
1956									
1957									
1958									
1959									
1960									
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

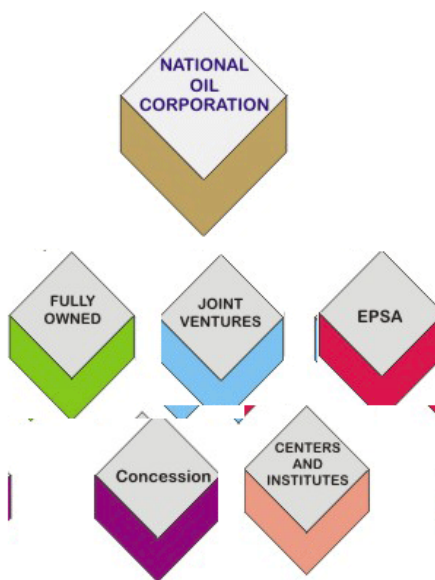
	A	B	C	D	E	F	G	H	I	J	K	L	M	N		
81																
82																
83																
84																
85		US Energy Information Administration, International Energy Statistics														
86		www.eia.gov/emeu/internationalenergy.html														
87						Vented & Flared of										
88		Libya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