Oil and NGL production data

Richard Heede
Climate Mitigation Services
File started: 11 January 2005
Last modified: March 2013

ExxonMobil Corporation, USA

ExxonMobil

Investor-owned

www.exxonmobil.com Irving, TX

Production / Extraction data

Crude Oil & NGL

Year	Company 1	Company 2	Company 3	Company 4	Sum production	Company 1	Company 2	Company 3	Company 4	Sum production
	Thousand bbl /d	Thousand bbl /d	Thousand bbl /d	Thousand bbl /d	Thousand bbl /d	Million bbl /yr	Million bbl /yr	Million bbl /yr	Million bbl /yr	Million bbl /yr
	Standard Oil (NJ) 1880-1971, Exxon 1972-99, ExxonMobil 2000-	SONJ sales Mbbly	Socony 1911-54, Socony Mobil 1955-65, Mobil Oil 1966-75, Mobil 1976-99	Socony sales Mbbly		Standard Oil (NJ) 1880-1971, Exxon 1972-99, ExxonMobil 2000-		Socony 1911-54, Socony Mobil 1955-65, Mobil Oil 1966-75, Mobil 1976-99		Total
		SONJ sales		Socony sales	Imperial Oil	SONJ		Socony		
		Heede 2003	Mobil	Heede 2003	see below	Est. prod'n	Esso	Estim. Prod'n	Mobiloil	
1880										
1881										
1882	Prod/sale ratio	7.1		1.5						
1883	-	6.9		1.5						
1884	0.010	7.2		1.5		0.1		0.0		0.1
1885	0.020	7.6		1.6		0.2		0.0		0.2
1886	0.030	8.3		1.7		0.2		0.1		0.3
1887	0.040	8.8		1.8		0.4		0.1		0.4
1888	0.050	9.4		2.0		0.5		0.1		1
1889	0.060	11.7		2.4		0.7		0.1		1
1890	0.070	12.8		2.7		0.9		0.2		1
1891	0.080	15.5		3.2		1.2		0.3		1
1892	0.090	16.6		3.5		1.5		0.3		2
1893	0.100	17.7		3.7		1.8		0.4		2
1894	0.110	18.3		3.8		2.0		0.4		2
1895	0.120	17.5		3.7		2.1		0.4		3
1896	0.130	18.6		3.9		2.4		0.5		3
1897	0.140	20.7		4.3		2.9		0.6		3
1898	0.150	20.9		4.4		3.1		0.7		4
1899	0.160	19.7		4.1		3.2		0.7		4
1900	0.170	19		4		3.3		0.7		4
1901	0.180	21		4		3.8		0.8		5
1902	0.190	22		5		4.2		0.9		5
1903	0.200	23		5		4.5		0.9		5
1904	0.210	24		5		5.0		1.1		6
1905	0.220	26		5		5.7		1.2		7
1906	0.230	28		6		6.4		1.3		8
1907	0.240	31		6		7.4		1.6		9
1908	0.250	32		7		8.1		1.7		10
1909	0.260	35		7		9.1		1.9		11
1910	0.270	41		8		11		2.3		13
1911	0.280	43		9		12		2.5		14
1912	0.290	43		9		12		2.6		15
1913	0.300	39		9		12		2.6		14
1914	0.310	39		9		12		2.7		15
1915	0.320	45		10		15		3.3		18
1916	0.330	48		11		16		3.6		19
1917	0.340	54		12		18		4.2		22
1918	0.350	62		15		22		5.1		27
1919	0.360	73		18		26		6.3		33
1920	0.370	83		20		31		7.5		38
1921	0.380	82		20		31		7.8		39
1922	0.390	88		22		35		8.7		43
1923	0.400	114		29		46		12		57
1924	0.410	145		38		59		16		75
1925	0.420	143	Prod/sale ratio	38		60		16		76
1926	0.430	157	actual 1927-39	42		68		18		86
1927 net	190	156	0.443	43		69		19		88
1928 net	205	170	0.442	47		75		21		96
1929 net	238	194	0.448	54		87		24		111
1930 net	240	193	0.455	55		88		25		113
1931 net	234	178	0.479	51		85		25		110
1932 net	293	187	0.572	55		107		31		138
1933 net	375	222	0.617	66		137		41		177

71	1934	net	456	229	0.725	69		166		50		216	
72	1935	net	488	240	0.742	73		178		54		232	
73	1936	net	523	263	0.727	81	Oil	191		59		250	
74	1937	net	602	293	0.749	92	(continued)	220		69		288	
75	1938	net	562	291	Million bbl /y:	92		205		65		270	
76	1939	net	616	309	Humble 1940-48	99		225		72		297	
77	1940	gr	650	287	49	93	Est. of net prod	207		67		274	
78	1941	gr	720	328	55	108		229		75		304	
79	1942	gr	530	296	56	99		168		56		224	
80	1943	gr	710	338	86	114		226		76		302	
81	1944	gr	923	417	113	142		293		100		393	
82	1945	gr	995	434	112	150		316		109		425	
83	1946	gr	1,091	436	113	152		347		121		468	
84	1947	gr	1,175	526	125	205		373		145		518	
85	1948	net	1,075	561	135	201		392		141		533	
86	1949	net	957	562	Humble prod'n	198		349		123		473	
87	1950	net	1,212	0.868	*not* added			442		134		576	
88	1951	net	1,455	0.872	to SONJ			531		155		687	
89	1952	net	1,559	0.871	527	gross		569	Est. of net prod	164		734	
90	1953	net	1,600	0.871	577	gross		584		180		764	
91	1954	net	1,651	0.872	595	gross		603		186		788	
92	1955	net	1,863	0.869	643	gross		680		201		881	
93	1956	net	2,057	0.869	705	gross		751		220		971	
94	1957	net	2,112	0.868	717	gross		771		224		995	
95	1958	net	2,028	0.871	750	gross		740		234		974	
96	1959	net	2,146	0.871	776	gross		783		242		1,025	
97	1960	net	2,196	0.873	823	gross		802		257		1,058	
98	1961	net	2,386	0.870	861	gross		871		269		1,140	
99	1962	gr	3,060	aver. 1950-1961	901	gross	Est. of net prod	972		281		1,253	
100	1963	gr	3,412	0.870	971	gross		1,084		303		1,387	
101	1964	gr	3,675		1,076	gross		1,168		336		1,503	
102	1965	gr	3,942		1,211	gross		1,252		378		1,630	
103	1966	gr	4,109		1,368	gross		1,305		427		1,732	
104	1967	gr	4,458		1,459	gross		1,416		455		1,872	
105	1968	gr	4,892		1,350	0.850	net	1,554		493		2,047	
106	1969	gr	5,044		1,395	0.846	net	1,602		509		2,112	
107	1970	gr	5,430		1,573	0.861	net	1,725		574		2,299	
108	1971	gr	5,554		1,735	0.863	net	1,764		633		2,398	
109	1972	gr	5,734		2,039	aver. 1968-1971	net	1,822		744		2,566	
110	1973	gr	5,525		2,131	0.855	net	1,755		778		2,533	
111	1974	gr	4,271		2,093	net		1,357		764		2,121	
112	1975	gr	3,684		2,240	gross		1,170		699		1,869	
113	1976	gr	2,683		2,156	gross		852		673		1,525	
114	1977	net	2,473		2,370	gross		903		740		1,642	
115	1978	net	2,422		2,117	gross		884		661		1,545	
116	1979	net	2,569		2,180	gross		938		680	*Mobil switches*	1,618	
117	1980	na	1,974		1,991	gross		720		621	*from gross to*	1,342	
118	1981	net	1,378		553	net		503		202	*net reporting*	705	
119	1982	net	1,418		542	net		518	*OGJ100*	198		715	
120	1983	net	1,607		591	net		587	(for comparison)	216		802	
121	1984	net	1,678		675	net		612	590	246		859	
122	1985	net	1,720		772	net		628	626	282		910	
123	1986	net	1,796		727	net		656	626	265		921	
124	1987	net	1,835		709	net		670	637	259		929	
125	1988	net	1,919				1,919	700	660	237	OGJ 200	937	
126	1989	net	1,804				1,804	658	621	249	Mobil 1988-1996	907	
127	1990	net	1,712		Missing data.		1,712	625	584	243		868	
128	1991	net	1,715		CMS uses		1,715	626	584	275		901	
129	1992	net	1,705	XTO Energy	OGJ data		1,705	622	580	278	XTO Energy	900	
130	1993	net	1,667	thousand bbl /d	for Mobil		1,667	608	568	285	million bbl /yr	893	
131	1994	net	1,709	9.5	1988 to 1996.		1,718	624	607	314	3	941	
132	1995	net	1,726	9.7			1,736	630	614	296	4	930	
133	1996	net	1,615	9.6			1,625	589	576	313	3	906	
134	1997	net	2,527	11.1		Imperial Oil	2,538	922	567	Merger / acquis.	4	926	
135	1998	net	2,502	15.9		thousand bbl /day	2,518	913	553		6	919	
136	1999	net	2,517	17.6		70% owned by XOM	2,535	919	919		6	925	
137	2000	net	2,553	17.4		NOT added to XOM	2,570	932	932		6	938	
138	2001	net	2,542	18.0		267	2,827	928	928		7	934	
139	2002	net	2,496	18.1		247	2,761	911	911		7	918	
140	2003	net	2,516	19.4		256	2,791	918	918		7	925	
141	2004	net	2,571	30.2		262	2,863	938	938		11	949	
142	2005	net	2,523	49.5		261	2,834	921	921		18	939	
143	2006	net	2,681	56.9		272	3,010	979	979		21	999	
144	2007	net	2,616	60.6		275	2,952	955	955		22	977	
145	2008	net	2,405	71.6		256	2,733	878	878		26	904	
146	2009	net	2,387	86.9				871	871		32	903	
147	2010	net	2,422	Acquired 2010				884	884		Acquired 2010	884	
148			merger with ExxonMobil June 2010										
149	Total		na	na	na	na	na	60,395	na	19,079	183	79,658	
150												79,658	
151													

Natural gas production data

Richard Heede
Climate Mitigation Services
File started: 11 January 2005
Last modified: December 2011

ExxonMobil Corporation, USA

yellow column indicates original reported units | **Investor-owned**

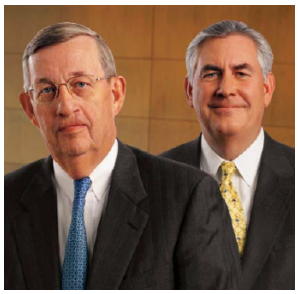
Production / Extraction data

Natural Gas

Year	Company 1	Company 2	Company 3	Company 4	Sum production	Company 1	Company 2	Company 3	Company 4	Sum production
	Million cf/d	Million cf/d	Million cf/d	Million cf/d	Million cf/d	Billion cf/yr	Billion cf/yr	Billion cf/yr	Billion cf/yr	Billion cf/yr
	Standard Oil (NJ) 1880-1971, Exxon 1972-99, ExxonMobil 2000-		Socony 1911-54, Socony Mobil 1955-65, Mobil Oil 1966-75, Mobil 1976-99			Standard Oil (NJ) 1880-1971, Exxon 1972-99, ExxonMobil 2000-		Socony 1911-54, Socony Mobil 1955-65, Mobil Oil 1966-75, Mobil 1976-99		**Total**
1880										
1881										
1882										
1883										
1884										
1885										
1886										
1887										
1888										
1889										
1890										
1891										
1892										
1893										
1894										
1895										
1896										
1897										
1898										
1899										
1900						6		3		**9**
1901						9		4		**13**
1902						10		5		**15**
1903						11		6		**17**
1904						12		6		**19**
1905						15		8		**23**
1906						19		10		**28**
1907						20		10		**29**
1908						19		10		**29**
1909						23		12		**35**
1910						24		12		**37**
1911						25		13		**37**
1912						27		14		**41**
1913						28		14		**42**
1914						28		14		**43**
1915						30		15		**46**
1916						36		18		**55**
1917						38		19		**58**
1918						35		18		**52**
1919						36		18		**54**
1920						39		20		**59**
1921						32		16		**49**
1922						37		19		**56**
1923						49		25		**74**
1924						56		28		**84**
1925						58		30		**88**
1926						64		33		**97**
1927						71		36		**107**
1928						77		39		**116**
1929						94		48		**141**
1930						95	94.6	48		**143**
1931						83		42		**125**
1932						77		39		**116**
1933						77		39		**116**

Imperial Oil
see below

ExxonMobil



Former CEO Raymond & current CEO Tillerson
Citizen Report 2004.

Hibernia Southern Extension, XOM 2010 p 34.

Estimated SONJ gas sales based on fraction of total marketed gas in US by SONJ 1900-1949

SONJ gas sales AnnRpt data 1930, 1934-35 and 1939 only

(column U is not added to sum)

Mobil & Esso in Nigeria: natural gas		
Produced	**Utilized**	**Flared**
Bcf	Bcf	Bcf
584.2	454.1	130.1
100%	78%	22%

Mobil logo, 1960

	P	S	T	U	V	W	X	Y	Z	AA	AB
					Natural Gas (continued)						
				Heede 2003							
	1934						87	79.3	44		132
	1935						95	84.5	48		143
	1936						145		30		176
	1937						189		39		228
	1938						128		27		155
	1939						178	177.8	37		215
	1940						191		40		231
	1941						203		42		245
	1942						220		46		266
	1943						246		51		298
	1944						267		56		323
	1945						283		59		342
	1946						291		61		351
	1947		inferred net	277			321		101		422
	1948		inferred net	298			360		109		469
	1949		inferred net	394			379		144		523
	1950		inferred net	524		524	420	interpolated	191		612
	1951		inferred net	594		594	462	interpolated	217		679
	1952			695	"production"	695	503	interpolated	254		756
	1953			765	"production"	765	544	interpolated	279		823
	1954			766	"production"	766	585	interpolated	280		864
	1955			852	"production"	852	626	interpolated	311		937
	1956			913	"production"	913	667	interpolated	333		1,000
	1957			974	"production"	974	708	interpolated	356		1,064
	1958			946	"production"	946	749	interpolated	345		1,094
	1959	no gas reporting		1,013	"production"	1,013	790	interpolated	370		1,160
	1960	by SONJ prior		1,106	"production"	1,106	831	interpolated	404		1,235
	1961	to 1963		1,169		1,169	872	interpolated	427		1,299
	1962	Heede 2003		1,483	"production"	1,483	913	interpolated	541		1,455
	1963	2,615	"gas sales"	1,588	"production"	4,203	954		580		1,534
	1964	2,845	"gas sales"	1,924	"production"	4,769	1,038		702		1,741
	1965	3,470	"gas sales"	1,993	"production"	5,463	1,267		727		1,994
	1966	4,071	"gas sales"	2,181	"production"	6,252	1,486		796		2,282
	1967	4,419	"gas sales"	2,382	"production"	6,801	1,613		869		2,482
	1968	5,296	"gas sales"	2,731	gross	8,027	1,933		959	estimated net	2,892
	1969	6,309	"gas sales"	3,063	gross	9,372	2,303		1,075	estimated net	3,378
	1970	7,491	"gas sales"	3,379	net of gross 1971	10,870	2,734		1,186	estimated net	3,920
	1971	8,572	"gas sales"	3,545	0.9618	12,118	3,129		1,245	estimated net	4,373
	1972	9,323	"gas sales"	3,595	gross	12,918	3,403		1,262	estimated net	4,665
	1973	10,517	"gas sales"	3,682	gross	14,199	3,839		1,293	estimated net	5,131
	1974	10,792	"gas sales"	3,581	gross	14,373	3,939		1,257	estimated net	5,196
	1975	10,645	"gas sales"	3,311	gross	13,956	3,885		1,162	estimated net	5,048
	1976	10,678	"gas sales"	3,146	gross	13,824	3,897		1,104	estimated net	5,002
	1977	10,488	"gas sales"	3,240	gross	13,728	3,828		1,137	estimated net	4,966
	1978	10,368	"gas sales"	3,270	gross	13,638	3,784		1,148	estimated net	4,932
	1979	10,181	"gas sales"	3,649	gross	13,830	3,716		1,281	estimated net	4,997
	1980	7,137	gas available	3,598	gross	10,735	2,605		1,263	estimated net	3,868
	1981	6,620	gas available	2,987	net production	9,607	2,416		1,090		3,507
	1982	5,749	gas available	2,642	net production	8,391	2,098		964		3,063
	1983	5,628	gas available	2,427	net production	8,055	2,054		886		2,940
	1984	5,918	gas available	3,285	net production	9,203	2,160		1,199		3,359
	1985	5,661	gas available	3,456	net production	9,117	2,066		1,261		3,328
	1986	5,329	gas available	3,434	net production	8,763	1,945		1,253		3,198
	1987	5,227	gas available	4,052	net production	9,279	1,908		1,479		3,387
	1988	5,192	gas available	4,278	net production	9,470	1,895		1,561		3,457
	1989	5,385	gas available	4,541	net production	9,926	1,966		1,657		3,623
	1990	5,318	gas available	4,425	net production	9,743	1,941		1,615		3,556
	1991	5,497		4,624	net production	10,121	2,006		1,688		3,694
	1992	5,661	XTO Energy	4,604	net production	10,265	2,066		1,680	XTO Energy	3,747
	1993	5,825	million cf /d	4,610	net production	10,435	2,126		1,683	Bcf/yr	3,809
	1994	5,978	58.2	4,670	net production	10,706	2,182		1,705	21.2	3,908
	1995	6,013	78.4	4,554	net production	10,645	2,195		1,662	28.6	3,886
	1996	6,577	101.8	4,587	net production	11,266	2,401		1,674	37.2	4,112
	1997	10,894	135.9		Imperial Oil	11,030	3,976		Merger / acquis.	49.6	4,026
	1998	10,617	229.7		thousand bbl /day	10,847	3,875			83.8	3,959
	1999	10,308	288.0		70% owned by XOM	10,596	3,762			105.1	3,868
	2000	10,343	343.9		NOT iadded to XOM	10,687	3,775			125.5	3,901
	2001	10,279	416.9		572	11,268	3,752			152.2	3,904
	2002	10,452	513.9		530	11,496	3,815			187.6	4,003
	2003	10,119	668.4		513	11,300	3,693			244.0	3,937
	2004	9,864	834.6		569	11,268	3,600			304.6	3,905
	2005	9,251	1,033.1		580	10,864	3,377			377.1	3,754
	2006	9,334	1,186.3		556	11,076	3,407			433.0	3,840
	2007	9,384	1,457.8		458	11,300	3,425			532.1	3,957
	2008	9,095	1,905.4		310	11,310	3,320			695.5	4,015
	2009	9,273	2,243.5				3,385			818.9	4,204
	2010	12,148	Acquired 2010				4,434			Acquired 2010	4,434
	Total	na	na	na	na	na	147,989	na	48,043	4,196	200,228
											200,228

Coal production data and energy & GHG figures

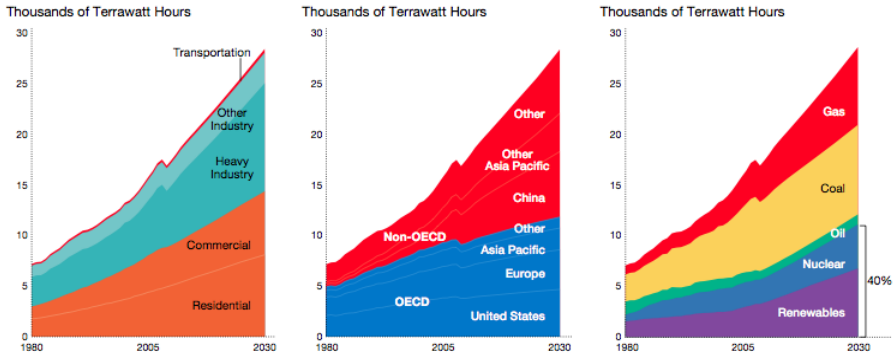
Richard Heede
Climate Mitigation Services
File started: 11 January 2005
Last modified: December 2011

ExxonMobil Corporation, USA

Coal					
Company 1	Company 2	Sum production	Company 1	Company 2	Sum production
Million tons/yr	Million tons/yr	Million tons/yr	Million tonnes/yr	Million tonnes/yr	Million tonnes/yr
Exxon	Mobil				Total

Year

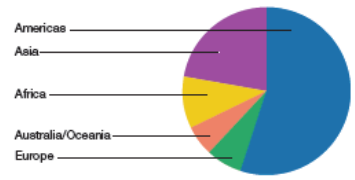
1880 1881 1882 1883 1884 1885 1886 1887 1888 1889 1890 1891 1892 1893 1894 1895 1896 1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933



ExxonMobil Corporation (2009) *Outlook for Energy: A View to 2030*

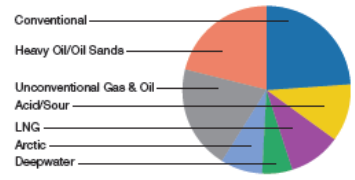
Resource Base by Geographic Region

(percent, oil-equivalent barrels)



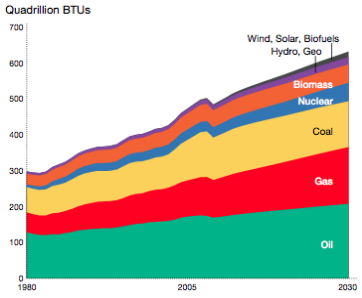
Resource Base by Type

(percent, oil-equivalent barrels)



ExxonMobil's industry-leading resource base of 84 billion oil-equivalent barrels is diverse in terms of geology, resource type, and geography.

ExxonMobil (2011) Annual Report, pages 26 and 30.



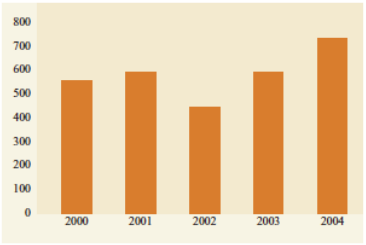
UPSTREAM STATISTICAL RECAP	2010	2009	2008	2007	2006
Earnings *(millions of dollars)*	**24,097**	17,107	35,402	26,497	26,230
Liquids production *(net, thousands of barrels per day)*	**2,422**	2,387	2,405	2,616	2,681
Natural gas production available for sale *(net, millions of cubic feet per day)*	**12,148**	9,273	9,095	9,384	9,334
Oil-equivalent production *(net, thousands of barrels per day)*	**4,447**	3,932	3,921	4,180	4,237
Proved reserves replacement[1][2] *(percent)*	**211**	100	143	107	135
Resource additions[2] *(millions of oil-equivalent barrels)*	**14,580**	2,860	2,230	2,010	4,270
Average capital employed[2] *(millions of dollars)*	**103,287**	73,201	66,064	63,565	57,871
Return on average capital employed[2] *(percent)*	**23.3**	23.4	53.6	41.7	45.3
Capital and exploration expenditures[2] *(millions of dollars)*	**27,319**	20,704	19,734	15,724	16,231

(1) Proved reserves exclude asset sales and the 2007 Venezuela expropriation. Includes non-consolidated interests and Canadian oil sands.
(2) See Frequently Used Terms on pages 98 through 101.

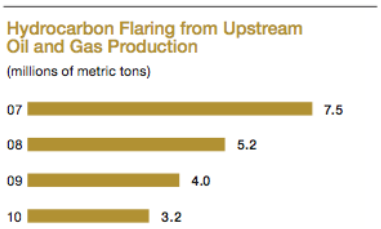
Note: Unless otherwise stated, production rates, project capacities, and acreage values referred to on pages 24 through 61 are gross.
References to U.S. unconventional activities on pages 43 through 44 reflect the full year of 2010 activity for well count and gross-operated production.

Coal (continued)

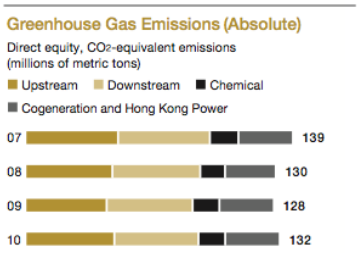
FLARING FROM WORLDWIDE OIL AND GAS PRODUCTION
(million standard cubic feet per day)



XOM CSR 2004, page 19.



ExxonMobil SustRpt 2010



ExxonMobil SustRpt 2010

Million tons/yr	Million tons/yr	Million tons/yr	Million tonnes/yr	Million tonnes/yr	Million tonnes/yr	
Exxon	Mobil				**Total**	
Exxon						
1.5		1.5	1.4		**1.4**	1934
3.1		3.1	2.8		**2.8**	1935
4.6		4.6	4.2		**4.2**	1936
6.1		6.1	5.6		**5.6**	1937
7.7		7.7	7.0		**7.0**	1938
9.2		9.2	8.3		**8.3**	1939
10.7		10.7	9.7		**9.7**	1940
12.3		12.3	11.1		**11.1**	1941
13.8		13.8	12.5		**12.5**	1942
15.3		15.3	13.9		**13.9**	1943
16.9		16.9	15.3		**15.3**	1944
18.4	Mobil	18.4	16.7		**16.7**	1945
19.9	0.0	20.0	18.1	0.0	**18.1**	1946
21.5	1.3	22.8	19.5	1.2	**20.7**	1947
23.0	2.6	25.6	20.9	2.3	**23.2**	1948
26.0	3.8	29.8	23.6	3.5	**27.0**	1949
27.0	4.8	31.8	24.5	4.4	**28.9**	1950
30.0	5.9	35.9	27.2	5.3	**32.6**	1951
32.0	6.5	38.5	29.0	5.9	**34.9**	1952
36.0	7.6	43.6	32.7	6.9	**39.5**	1953
40.0	7.8	47.8	36.3	7.1	**43.4**	1954
39.0	8.2	47.2	35.4	7.4	**42.8**	1955
37.0		37.0	33.6		**33.6**	1956
36.0		36.0	32.7		**32.7**	1957
36.0		36.0	32.7		**32.7**	1958
16.0		16.0	14.5		**14.5**	1959
15.0		15.0	13.6		**13.6**	1960
15.0		15.0	13.6		**13.6**	1961
15.5		15.5	14.1		**14.1**	1962
16.9		16.9	15.3		**15.3**	1963
16.6		16.6	15.1		**15.1**	1964
12.6		12.6	11.4		**11.4**	1965
3.0		3.0	2.7		**2.7**	1966
						1967
						1968
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						2007
						2008
						2009
						2010
634	**48**	**682**	**575**	**44**	**619**	**Total**

Cell: H9

Comment: Rick Heede:

History (wikipedia: en.wikipedia.org/wiki/ExxonMobil"

Exxon Mobil Corporation was formed in 1999 by the merger of two major oil companies, Exxon and Mobil. Both Exxon and Mobil were descendants of the John D. Rockefeller corporation, Standard Oil which was established in 1870. The reputation of Standard Oil in the public eye suffered badly after publication of Ida M. Tarbell's classic exposé The History of the Standard Oil Company in 1904, leading to a growing outcry for the government to take action against the company.

By 1911, with public outcry at a climax, the Supreme Court of the United States ruled that Standard Oil must be dissolved and split into 34 companies. Two of these companies were Jersey Standard ("Standard Oil Company of New Jersey"), which eventually became Exxon, and Socony ("Standard Oil Company of New York"), which eventually became Mobil.

In the same year, the nation's kerosene output was eclipsed for the first time by gasoline. The growing automotive market inspired the product trademark Mobiloil, registered by Socony in 1920.

Over the next few decades, both companies grew significantly. Jersey Standard, led by Walter C. Teagle, became the largest oil producer in the world. It acquired a 50 percent share in Humble Oil & Refining Co., a Texas oil producer. Socony purchased a 45 percent interest in Magnolia Petroleum Co., a major refiner, marketer and pipeline transporter. In 1931, Socony merged with Vacuum Oil Co., an industry pioneer dating back to 1866 and a growing Standard Oil spin-off in its own right.

In the Asia-Pacific region, Jersey Standard had oil production and refineries in Indonesia but no marketing network. Socony-Vacuum had Asian marketing outlets supplied remotely from California. In 1933, Jersey Standard and Socony-Vacuum merged their interests in the region into a 50–50 joint venture. Standard-Vacuum Oil Co., or "Stanvac," operated in 50 countries, from East Africa to New Zealand, before it was dissolved in 1962.

Mobil Chemical Company was established in 1950. As of 1999, its principal products included basic olefins and aromatics, ethylene glycol and polyethylene. The company produced synthetic lubricant base stocks as well as lubricant additives, propylene packaging films and catalysts. Exxon Chemical Company (first named Enjay Chemicals) became a worldwide organization in 1965 and in 1999 was a major producer and marketer of olefins, aromatics, polyethylene and polypropylene along with speciality lines such as elastomers, plasticizers, solvents, process fluids, oxo alcohols and adhesive resins. The company was an industry leader in metallocene catalyst technology to make unique polymers with improved performance.

In 1955, Socony-Vacuum became Socony Mobil Oil Co. and in 1966 simply Mobil Oil Corp. A decade later, the newly incorporated Mobil Corporation absorbed Mobil Oil as a wholly owned subsidiary. Jersey Standard changed its name to Exxon Corporation in 1972 and established Exxon as a trademark throughout the United States. In other parts of the world, Exxon and its affiliated companies continued to use its Esso trademark.

On March 24, 1989, the Exxon Valdez oil tanker struck Bligh Reef in Prince William Sound, Alaska and spilled more than 11 million US gallons (42,000 m3) of crude oil. The Exxon Valdez oil spill was the second largest in U.S. history, and in the aftermath of the Exxon Valdez incident, the U.S. Congress passed the Oil Pollution Act of 1990. An initial award of $5 billion USD punitive was reduced to $507.5 million by the US Supreme Court in June 2008, and distributions of this award have commenced.

In 1998, Exxon and Mobil signed a US$73.7 billion definitive agreement to merge and form a new company called Exxon Mobil Corporation, the largest company on the planet. After shareholder and regulatory approvals, the merger was completed on November 30, 1999. The merger of Exxon and Mobil was unique in American history because it reunited the two largest companies of John D. Rockefeller's Standard Oil trust, Standard Oil Company of New Jersey/Exxon and Standard Oil Company of New York/Mobil, which had been forcibly separated by government order nearly a century earlier. This reunion resulted in the largest merger in US corporate history.

In 2000, ExxonMobil sold a refinery in Benicia, California and 340 Exxon-branded stations to Valero Energy Corporation, as part of an FTC-mandated divestiture of California assets. ExxonMobil continues to supply petroleum products to over 700 Mobil-branded retail outlets in California In 2005, ExxonMobil's stock price surged in parallel with rising oil prices, surpassing General Electric as the largest corporation in the world in terms of market capitalization. At the end of 2005, it reported record profits of US $36 billion in annual income, up 42% from the previous year (the overall annual income was an all-time record for annual income by any business, and included $10 billion in the third quarter alone, also an all-time record income for a single quarter by any business). The company and the American Petroleum Institute (the oil and chemical industry's lobbying organization) put these profits in context by comparing oil industry profits to those of other large industries such as pharmaceuticals and banking.

On June 12, 2008, ExxonMobil announced that it was transitioning out of the direct-served retail market, citing the increasing difficulty of running gas stations under rising crude oil costs. The multi-year process will gradually phase the corporation out of the direct-served retail market, and will affect 820 company-owned stations and approximately 1,400 other stations operated by dealers distributing across the United States. The sale has not resulted in the disappearance of Exxon and Mobil branded stations; the new owners will continue to sell Exxon and Mobil-branded gasoline and license the appropriate names from ExxonMobil, who will in turn be compensated for use of the brands.

In 2010, ExxonMobil bought XTO Energy, the company focused on development and production of unconventional resources.

In terms of potential future developments, many gas and oil companies are considering the economic and environmental benefits of Floating Liquefied Natural Gas (FLNG). This is an innovative technology designed to enable the development of offshore gas resources that would otherwise remain untapped, because environmental or economic factors make it unviable to develop them via a land-based LNG operation. ExxonMobil is waiting for an appropriate project to launch its FLNG development, and the only FLNG facility currently in development is being built by Shell,[19] due for completion in around 2017.

In 2012, ExxonMobil confirmed a deal for production and exploration activities in the Kurdistan region of Iraq."

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 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: M12

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: AB12

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: AL12

Comment: Rick Heede:

Coal production by coal mining companies and state-owned enterprises, including subsidiaries of oil and gas companies.

Coal types produced are not ordinarily reported by coal operators (except for metallurgical coal). We distinguish, where possible and reasonably well known, between hard and soft coals, especially for the larger companies operating in regions such as Australia and India where soft coals are predominant. Soft coals have a much lower carbon content per tonne than do hard coals. See "Coal" under "Extractive Activities" in each sheet 1 for details.

Cell: D13

Comment: Rick Heede:

This expanded template for oil, gas, & coal is used to enter extraction data for extant companies that have merged with or acquired other significant production entities. Prominent examples include British Petroleum* and ExxonMobil.**

* BP merged with Amoco (Standard Oil Company (Indiana)) in 1998 and its acquisition of Atlantic Richfield (ARCO) in 2000; Atlantic merged with Richfield in 1966, and ARCO had acquired Sinclair Petroleum in 1969.

** Exxon Corporation and Mobil Corporation merged in 1999.

Cell: D15

Comment: Rick Heede:
Neither Exxon nor Mobil acquired or merged with other oil or natural gas producers from 1950 until the two previous members of the original Standard Oil (dissolved in 1911) merged in 1999. Both comapnies acquired coal operators, however.
Standard Oil (NJ) acquired a 50 percent interest in Humble Oil & Refining Company in the 1930s. Socony purchased a 45 percent interest in Magnolia Petroleum Company, a major refiner, marketer and pipeline transporter. In 1931, Socony merged with Vacuum Oil Co., an industry pioneer dating back to 1866 and a growing Standard Oil spin-off in its own right. In 1933, Standard Oil (NJ) and Socony-Vacuum merged their Asian interests into a 50-50 joint venture called Standard-Vacuum Oil Comapny ("Stanvac") that operated in 50 countries from East Africa to New Zealand before it was dissolved in 1962.
From www.exxonmobil.com/Corporate/About/History/Corp_A_H_PeaceWar.asp
All of these acquisitions were completed prior to our production period of greatest interest (1950 to present), and no major acquisitions have been noted post-1950, hence we complete a "two-company" worksheet to reflect production from Exxon and Mobil's predecessors from 1950.

Cell: I15
Comment: Rick Heede:
Neither Exxon nor Mobil acquired or merged with other oil or natural gas producers from 1950 until the two previous members of the original Standard Oil (dissolved in 1911) merged in 1999. Both comapnies acquired coal operators, however.
Standard Oil (NJ) acquired a 50 percent interest in Humble Oil & Refining Company in the 1930s. Socony purchased a 45 percent interest in Magnolia Petroleum Company, a major refiner, marketer and pipeline transporter. In 1931, Socony merged with Vacuum Oil Co., an industry pioneer dating back to 1866 and a growing Standard Oil spin-off in its own right. In 1933, Standard Oil (NJ) and Socony-Vacuum merged their Asian interests into a 50-50 joint venture called Standard-Vacuum Oil Comapny ("Stanvac") that operated in 50 countries from East Africa to New Zealand before it was dissolved in 1962.
From www.exxonmobil.com/Corporate/About/History/Corp_A_H_PeaceWar.asp
All of these acquisitions were completed prior to our production period of greatest interest (1950 to present), and no major acquisitions have been noted post-1950, hence we complete a "two-company" worksheet to reflect production from Exxon and Mobil's predecessors from 1950.

Cell: E18
Comment: Rick Heede:
Standard Oil Company total petroleum sales 1900 through 1949 from Heede (2003) spreadsheets based on historical data from the company annual reports and published company histories. Sales allocated to both Standard Oil (NJ) and Socony prior to 1911 based on the equity distribution to each compnay upon dissolution in 1911. See Heede (2003) for details.

Cell: I18
Comment: Rick Heede:
Standard Oil Company (NJ) production as a share of SONJ asset value acquired upon dissolution in 1911 (44 percent of total Standard Oil Trust asset value). Production is estimated from the ratio of company production to company sales. See note at "D17" and "E17" for methodology.

Cell: X31
Comment: Rick Heede:
CMS estimates (Heede, 2003) that SONJ marketed 4.8 percent of total US natural gas based on the intersects with actual reported SONJ gas sales in 1930, 1934, 1935, and 1939). Given SONJ early entry into natural gas, these estiimates may be conservative. Standard did not report natural gas production or sales in their AnnRpts from 1940-1963. This is typical for oil companies in the 1940s, although nearly all companies reported gas production or sales by the mid-1950s. CMS has interpolated or estimated SONJ gas production to 1962.
"Marketed production" in the United States, 1900 to 1970.
Sources: US Census Bureau (date unknown) Statistical Abstract of the United States, Historical tables (Natural Gas: M147). Energy Information Administration (2002) Annual Energy Review 2001, Appendix F: Energy Consumption in the United States, Selected Years, 1635-1945.

Cell: D37
Comment: Rick Heede:
This column "D" rows 17-43 develops an allocation method for known Standard Oil marketed oil products from 1900 through 1926 taken from historical data in which gross (or net) production data are not reported. We calculate Standard's gross oil production as a ratio of marketed oil products for the years 1927 through 1937:
1927 = 0.443
1928 = 0.442
1929 = 0.448
1930 = 0.455
1931 = 0.479
1932 = 0.572
1933 = 0.617
1934 = 0.725
1935 = 0.742
1936 = 0.727
1937 = 0.749
From this data series we suppose it reasonable to gradually reduce Standard's own production as a share of total sales going back in time from the known year 1927 (0.443) by 0.10 per year so that 1926 equals 0.43, 1925 equals 0.42, etc, until 1900 equals 0.17. This is roughly consonant with Standard Oil Company's early history of being a refiner and marketer of oil products rather than a producer of crude oil.

Cell: K37
Comment: Rick Heede:
Ww roughly estimate Mobil (and its predecessors Standard Oil of NY (Socony) and Standard Oil Company to 1900) based on the known production to sales ratio of Standard Oil (New Jersey)'s from 1929 to 1949. This ratio is then applied to Socony 1911 to 1949 as well as Socony's preceeding share of Standard Oil Company from 1900 to 1911.

Cell: X37
Comment: Rick Heede:
Natural gas SALES allocated to or reported by Standard Oil Company (New Jersey) from 1900 through 1949. Source: Standard Oil (NJ) Annual Reports,

Cell: Z37
Comment: Rick Heede:
Socony gas sales estimated using the same methodology as for SONJ (see notes). Mobil started reporting natural gas production in 1952 (and SONJ not until 1963).

Cell: D64
Comment: Rick Heede:
Net production of crude oil (in thousand bbl per day) for 1927-1939 from Larsen, Knowlton, & Popple (1971) History of Standard Oil Company (New Jersey): New Horizons 1927-1950, p. 148.

Cell: D66
Comment: Rick Heede:
We use net production data from Larsen et al, but note gross production data here for 1929 through 1939 from Standard Oil Company annual reports from 1930-1939:
1929 gross production: 101.9 million bbl;

1930 gross production: 102.5 million bbl;
1931 gross production: 122.2 million bbl (missing data: interpolated);
1932 gross production: 141.9 million bbl;
1933 gross production: 156.2 million bbl;
1934 gross production: 179.3 million bbl;
1935 gross production: 193.5 million bbl;
1936 gross production: 206.4 million bbl;
1937 gross production: 237.1 million bbl;
1938 gross production: 220.1 million bbl;
1939 gross production: 242.3 million bbl.
Additional notes from SONJ annual reports:
Crude oil produced in 1929 and 1930 from Standard Oil (New Jersey) Annual Report for 1930, p. 4. Production for "all of the company's interests" of which US production totaled 51.91 million bbl and foreign production 50.61 million bbl. SONJ's own production supplied 56.7 percent of the crude run through its refineries. In 1931, the company marketed
According to Standard Oil (New Jersey) Annual Report for 1930, p. 4, SONJ produced 56.7 percent of the crude run through its refineries.
The company marketed a total of 193.2 million bbl of oil products in 1930. (Source, and details on sales by product type, from Heede (2003) ExxonMobil Corporation: Emissions Inventory 1882-2002, excel worksheets.)

Cell: Y67
Comment: Rick Heede:
Natual gas SALES for 1930 from Standard Oil (New Jersey) Annual Report for 1930, p. 8. This amount is presumptively produced by SONJ and its numerous affiliates; no mention of purchased gas from other producers.

Cell: Y71
Comment: Rick Heede:
SONJ only reports gas sales in VA, PA, and OH.

Cell: Y76
Comment: Rick Heede:
Natural gas SALES for 1939 from SONJ Annual Report for 1939, p. 6. SONJ reports total production by several affiliates; we calculate SONJ production by applying company equity in each affiliate.

Cell: D77
Comment: Rick Heede:
Crude oil production (gross) for 1940-1945 from SONJ Annual Report for 1945, p. 2 and bar graph p. 10. Net production is not reported.

Cell: F77
Comment: Rick Heede:
Standard Oil (NJ) acquired Humble Oil and Refining in the early 1930s. Production data from Humble (1949) AnnRpt 1948, p. 7.

Cell: I77
Comment: Rick Heede:
Estimates net production for 1940-1947 when Exxon only reports gross production. See cell note at E100.

Cell: P82
Comment: Rick Heede:
SONJ does not report any natural gas data in its 1945 annual report.

Cell: D83
Comment: Rick Heede:
Crude oil production (gross) for 1946 and 1947 from SONJ Annual Report, p. 2. Net not reported.

Cell: U84
Comment: Rick Heede:
Since we have Socony data for gross production we estimate net for years 1947-1951 by multiplying gross by 71.6 percent (0.716), which is the average net/gross fraction for 1952-1956.
Source for "Natural gas produced" 1947-1951: Socony Mobil Oil Company (1952) Annual Report for 1951, p. 5.

Cell: D85
Comment: Rick Heede:
Crude oil production for 1948 and 1949 from SONJ Annual report for 1949, p. 5. This reports on both net and gross production.
1948 Gross: 1,271 kbbld, Net: 1,075 kbbld; Net is 0.846 of gross;
1949 Gross: 1,128 kbbld, Net: 957 kbbld; Net is 0.848 of gross.

Cell: F86
Comment: Rick Heede:
Standard Oil of New Jersey acquired 50 percent of Humble Oil & Refining in 1919. CMS assumes that Jersey's equity share of production is reflected in Jersey's annual reports from 1919 through the compan'sy full acquisition of Humble (year unknown, at the moment). Later research may change this tentative conclusion.

Cell: D87
Comment: Rick Heede:
Crude oil production for 1950 and 1951 from SONJ Annual report for 1951, p. 33. This reports on both net and gross production.
1950 Gross: 1,396 kbbld, Net: 1,212 kbbld; Net is 0.868 of gross;
1951 Gross: 1,669 kbbld, Net: 1,455 kbbld; Net is 0.872 of gross.

Cell: K87
Comment: Rick Heede:
The data gap of 1950 and 1951 is interpolated.

Cell: D89
Comment: Rick Heede:
Crude oil production for 1952 and 1953 from SONJ Annual report for 1953, p. 26. This reports on both net and gross production.

1952 Gross: 1,790 kbbld, Net: 1,559 kbbld; Net is 0.871 of gross;

1953 Gross: 1,838 kbbld, Net: 1,600 kbbld; Net is 0.871 of gross.

Cell: F89
Comment: Rick Heede:
Crude oil and NGL production (gross) in 1952 through 1961 from Socony-Mobil Oil Company (1962) Annual Report for 1961, p. tk, Table on Ten Year Financial and Operating Data. Net production is not reported.

Cell: K89
Comment: Rick Heede:
Data for Mobil from 1952 through 1983 is based on company annual reports cited in column "F" and converted to annual production.
Estimates net production for 1952-1967 when Mobil only reports gross production. See cell note at E100 and Mobil net of gross calculation at cell at G110.

Cell: U89
Comment: Rick Heede:
"Natural gas production, US and Canada, kbbld" for 1952-1961 from SoconyMobil Oil Company (1962) Annual Report for 1961, Operating Results table.

Cell: D91
Comment: Rick Heede:
Crude oil production for 1954 and 1955 from SONJ Annual report for 1955, p. 28. This reports on both net and gross production.
1954 Gross: 1,893 kbbld, Net: 1,651 kbbld; Net is 0.872 of gross;
1955 Gross: 2,143 kbbld, Net: 1,863 kbbld; Net is 0.869 of gross.

Cell: D93
Comment: Rick Heede:
Crude oil production for 1956-1959 from SONJ Annual report for 1959, p. 14. This reports on both net and gross production.
1956 Gross: 2,366 kbbld, Net: 2,057 kbbld; Net is 0.869 of gross;
1957 Gross: 2,432 kbbld, Net: 2,112 kbbld; Net is 0.868 of gross;
1958 Gross: 2,329 kbbld, Net: 2,028 kbbld; Net is 0.871 of gross;
1959 Gross: 2,464 kbbld, Net: 2,146 kbbld; Net is 0.871 of gross.

Cell: D97
Comment: Rick Heede:
Crude oil production for 1960-61 from SONJ Annual report for 1961, p. 30. This reports on both net and gross production.
1960 Gross: 2,516 kbbld, Net: 2,196 kbbld; Net is 0.873 of gross;
1961 Gross: 2,744 kbbld, Net: 2,386 kbbld; Net is 0.870 of gross.

Cell: D99
Comment: Rick Heede:
Crude oil production for 1962-1966 from SONJ Annual report for 1966, Five-Year Summary Table. This reports only gross production.

Cell: F99
Comment: Rick Heede:
Crude and NGL production (gross) 1962-1965 from Socony Mobil (1966) Annual Report for 1965, p. 21. Net production is not reported.

Cell: I99
Comment: Rick Heede:
Estimates net production for 1962-1976 when Exxon only reports gross production. See cell note at E100.

Cell: U99
Comment: Rick Heede:
Natural gas production worldwide 1962-1965 from Socony Mobil (1966) Annual Report for 1965, p. 21.

Cell: E100
Comment: Rick Heede:
We calculate the average percentage net of gross reported production for 1950-1961. This factor is applied to the years when Exxon only reports gross production (1940-1947 and 1962-1976), and we use this as a proxy factor to estimate net production in column I.

Cell: S100
Comment: Rick Heede:
"Natural gas sales" reported by Exxon for 1963-1964 only (gas is not a line item in the operating summary).
Source: Standard Oil Company (New Jersey) (1965) Annual Report 1964, p. 3.

Cell: S102
Comment: Rick Heede:
"Natural gas sales" worldwide shown for 1965-1969.
Source: Standard Oil Company (New Jersey) (1970) Annual Report for 1969, p.31.

Cell: F103
Comment: Rick Heede:
Crude and NGL production (gross) 1966-1968 from Socony Mobil (1969) Annual Report for 1968, p. 24. Net production is not reported.

Cell: D104
Comment: Rick Heede:
Crude oil plus natural gas liquids production for 1967-1971 from SONJ Annual report for 1971, p. 31, Five-Year Summary Table. This reports only gross production.

Cell: U105
Comment: Rick Heede:
Natural gas production worldwide for 1968-1971 from Mobil Oil Corporation (1972) Annual Report for 1971, p. 22. This appears to be gross production (surmised from the 1973 annual report).

Cell: F106
Comment: Rick Heede:
Net crude oil and NGL production in 1969-1971 from Mobil Oil Corporation (1972) Annual Report for 1971, p. 22. This and subsequent also gross production. We use net production in the worksheet,

and note gross production in the comments.
1968 Gross: 1,589 kbbld Net: 1,350 kbbld; Net of gross = 0.850;
1969 Gross: 1,648 kbbld Net: 1,395 kbbld; Net of gross = 0.846;
1970 Gross: 1,827 kbbld Net: 1,573 kbbld; Net of gross = 0.861;
1971 Gross: 2,010 kbbld Net: 1,735 kbbld; Net of gross = 0.863.

Cell: V108
Comment: Rick Heede:
"Gross production" is the only figure reported for global production (net is reported for the US (2,368 net of 2,853 gross, or 0.830 of gross in 1971, and 2,053 net of 2,396 gross, or 0.857 of gross in 1975) and Canada (230 of 270, or 0.852 of gross in 1971). Since we estimate internal gas consumption elsewhere, we report net production in the US and Canada plus gross in rest of world in the data reported here. Source: Mobil Corp (1976) Annual Report for 1975, p. 45.
CMS: estimated global net of gross factor: already accounted for in US and Canada (2,368 + 230 Mcf/day: 2,598 Mcf/d) of total 1971: 3,535, delta 937 Mcf/day; of we apply the averagr US and Canada net of gross factor (0.856), then 937 * (1-0.856) = 135 Mcf/d, and 3,535 - 135 = 3,400; net of gross (3,400/3,535) = 0.9618

Cell: D109
Comment: Rick Heede:
Crude oil plus natural gas liquids production for 1972-1976 from SONJ Annual report for 1976, p. 43, Five-Year Summary Table. This reports only gross production.

Cell: F109
Comment: Rick Heede:
Net crude oil and NGL production in 1972-1974 from Mobil Oil Corporation (1975) Annual Report for 1974, p. 41. This and subsequent reports also contain gross production. We use net production in the worksheet, and note gross production in the comments.
1972 Gross: 2,399 kbbld Net: 506 kbbld; Net of gross = not relevant;*
1973 Gross: 2,507 kbbld Net: 506 kbbld; Net of gross = not relevant;**
1974 Gross: 2,462 kbbld Net: 449 kbbld; Net of gross = not relevant;***
* Note: Mobil reports net from US and Canada only. We apply the gross to net ratio to estimate worldwide net production for 1972: gross of 2,399 times 0.850 = 2,039 kbbld equals estimated net production.
** Note: gross of 2,507 times 0.850 = 2,131 kbbld (estimated net production).
*** Note: gross of 2,462 times 0.850 = 2,093 kbbld (estimated net production).

Cell: U109
Comment: Rick Heede:
Natural gas production worldwide (gross) for 1972-73 from Mobil Oil Corporation (1974) Annual Report for 1973, p. 41. Net production is not reported for global, net only for US and Canada.
"Gross production" is the only figure reported for global production (net is reported for the US (2,368 net of 2,853 gross, or 0.830 of gross in 1971, and 2,053 net of 2,396 gross, or 0.857 of gross in 1975) and Canada (230 of 270, or 0.852 of gross in 1971). Since we estimate internal gas consumption elsewhere, we report net production in the US and Canada plus gross in rest of world in the data reported here.
Source: Mobil Corp (1976) Annual Report for 1975, p. 45.

Cell: F112
Comment: Rick Heede:
Crude oil production and NGL (gross) production for 1975-76 from Mobil Oil (1977) Annual Report for 1976, p. 6. Net production is NOT reported for oil or natural gas.

Cell: K112
Comment: Rick Heede:
Estimates net production for 1975-1980 when Mobil only reports gross production. See cell note at E100 and Mobil net of gross calculation at cell at G110.

Cell: U112
Comment: Rick Heede:
Natural gas production (gross) for 1975-76 from Mobil Oil (1977) Annual Report for 1976, p. 6. Net production is NOT reported for natural gas.

Cell: S113
Comment: Rick Heede:
"Natural gas sales" worldwide shown for 1976-1979.
Source: Exxon Corporation (1980) Annual Report for 1979, Operating Summary, p. 43.

Cell: D114
Comment: Rick Heede:
"Net production of crude oil and NGL and petroleum supplies available under special agreement" for 1977-1979 from SONJ Annual Report for 1979, p. 43, Table.
Note: We include line items and amounts for "net production of total consolidated affiliates" (1,308 kbbld) plus "proportional interest in production of equity companies" (1,160 kbbld) plus "oil sands production Canada" (5 kbbld). We do NOT include "supplies available under longterm agreements with foreign governments" (1,438 kbbld) or "other supplies available under special agreements" (1,180 kbbld). Thus, of total net production listed by SONJ for 1977 (5,091 kbbld) we include 2,473 kbbld, or 48.6 percent.

Cell: F114
Comment: Rick Heede:
Crude oil and NGL production (gross) for 1977 from Mobil (1981) SEC Form 10-K, p. 2. Does not report net production (except US and Canada, not total net).

Cell: U114
Comment: Rick Heede:
Natural gas production (gross) for 1977 from Mobil (1981) SEC Form 10-K, p. 2. Does not report net production (except US and Canada, not total net).

Cell: F115
Comment: Rick Heede:
Crude oil and NGL production (gross) for 1978-79 from Mobil (1980) Annual report for 1979, p. 13. Net production is not reported. Natural gas production is not reported in the portion of this annual report made available.

Cell: D117
Comment: Rick Heede:
We were unable to find production data for 1980. Gap is interpolated.

Cell: F117
Comment: Rick Heede:
Crude oil and NGL production (gross) for 1980 from Mobil (1981) SEC Form 10-K, p. 2. Does not report net production (except US and Canada, not total net).

Cell: D118
Comment: Rick Heede:
Crude oil and NGL production (net) for 1981-1982 from Exxon (1986) SEC Form 10-K for 1985, p. 45. Does not report gross production.

Cell: F118
Comment: Rick Heede:
Net crude oil and NGL production for 1981 and 1982 from Mobil Corporation (1984) SEC Form 10-K, p. 1-2.
CMS does not know why production declines from reported 1,991 kbbl per day in 1980 to 553 kbbl per day in 1981.
Gross production is also reported:
1981 Gross: 663 kbbłd, Net: 553 kbbłd, net/gross ratio: 0.834;
1982 Gross: 648 kbbłd, Net: 542 kbbłd, net/gross ratio: 0.836;
1983 Gross: 660 kbbłd, Net: 555 kbbłd, net/gross ratio: 0.841 (we use Mobil Annual Report for 1987 for 1983 net production).

Cell: S118
Comment: Rick Heede:
Exxon's 1985 Form 10-K reports only "natural gas production available for sale," plus "proportional interest in production of equity companies," but not total sales, for 1981-1985.
1981 = 6,620 million cubic feet per day; 1982 = 5,749; 1983 = 5,628; 1984 = 5,918; and 1985 = 5,661.
Source: ExxonMobil (1986) Form 10-K, p. 45.

Cell: U118
Comment: Rick Heede:
We estimate net global natural gas production by adding equity interest production from rest of world (a small amount: 78 to 78 million CF/day) to net world production, in millions of cubic feet per day.
Source: Mobil Corp (1984) SEC Form 10-K for 1983, p. 1-3.

Cell: J119
Comment: Rick Heede:
Exxon Corporatopm oil production 1984 - 1998 from OGJ (various) OGJ400, 300, and 200. This data is for comparison purposes only, as we CMS uses Exxon annual reports of net global production shown in Column J. OGJ data is NOT added to production sum in Column M.

Cell: D120
Comment: Rick Heede:
Net crude oil and NGL production for 1983 from Exxon Corp (1994) SEC Form 10-K, p. F-27.

Cell: F120
Comment: Rick Heede:
Crude oil and NGL production (net) for 1983-1987 from Mobil (1988) Annual Report for 1987. Gross production is NOT reported.

Cell: U120
Comment: Rick Heede:
Natural gas production (net) for 1983-1987 from Mobil (1988) Annual Report for 1987. Gross production is NOT reported.

Cell: D121
Comment: Rick Heede:
Net crude oil and NGL production for 1984-1994 from Exxon Corp (1995) SEC Form 10-K, p. F-27.

Cell: S123
Comment: Rick Heede:
"Natural gas made available for sale" reported for 1984-1994.
Source: Exxon Corp (1995) SEC Form 10-K, p. F27.

Cell: S124
Comment: Rick Heede:
"Natural gas production available for sale" worldwide shown in Operating Summary for 1987-1997.
Source: Exxon Corporation (1998) SEC Form 10-K for 1997, page unknown.

Cell: U124
Comment: Rick Heede:
"Net natural gas production, millions of cubic feet per day."
Source: Mobil Corp (1990) Annual Report 1989.

Cell: AH125
Comment: Rick Heede:
Keystone Coal Industry Manual shows Mobil Coal Producing (US Production only) at 7.127 million tons in 1988.

Cell: U127
Comment: Rick Heede:
"Net production of natural gas - worldwide" reported for 1990-1994.
Note: Only "net" reported from 1984 forward, no gross reported.
Source: Mobil Oil Company (1995) SEC Form 10-k for 1994, p. 11.

Cell: E131
Comment: Rick Heede:
Cross Timbers Oil Company (later XTO Energy) Annual Rpt 1996, page 1, reports both crude oil production.

Cell: T131
Comment: Rick Heede:
Cross Timbers Oil Company Annual Rpt 1999, natural gas production in million cf/day.

Cell: X131
Comment: Rick Heede:
No note in OGJ 100 re: reason for this big jump in gas production.

Cell: D132
Comment: Rick Heede:
Net crude oil and NGL production for 1995-1996 from Exxon Corp (1998) SEC Form 10-K, p. F-tk.

Cell: D134
Comment: Rick Heede:
Net crude oil and NGL production for 1997 from Exxon Corp (2000) Annual Report for 1999, p. F-39. The SEC Form 10-K for 1997 lists that year's net production of oil and NGL as 1,599 kbbld; insufficient information to discern reporting differences.

Cell: E134
Comment: Rick Heede:
Cross Timbers Oil Company (later XTO Energy) Annual Rpt 1999, page 1, reports both NGL and oil production.

Cell: G134
Comment: Rick Heede:
ExxonMobil controls 69.6 percent of Imperial Oil Ltd, which is Canada's largest oil and gas producer, markets gasoline and diesel under the Esso brand (wikipedia).
CMS does not add Imperial's oil and natural gas production to XOM's production, but merely enters data from the 2008 Annual Rpt -- in case Imperial's production is NOT included as equity production in ExxonMobil's own annual reports.

Cell: S134
Comment: Rick Heede:
"Net natural gas available for sale" for 1997 in ExxonMobil Corp Annual Report for 1999, p. F-39. Exxon and Mobil did not merge until year 1999, but the 1999 report combines reporting for both companies.

Cell: T134
Comment: Rick Heede:
Cross Timbers Oil Company Annual Rpt 1999, natural gas production in million cf/day.

Cell: V134
Comment: Rick Heede:
ExxonMobil controls 69.6 percent of Imperial Oil Ltd, which is Canada's largest oil and gas producer, markets gasoline and diesel under the Esso brand (wikipedia).
CMS does not add Imperial's oil and natural gas production to XOM's production, but merely enters data from the 2008 Annual Rpt -- in case Imperial's production is NOT included as equity production in ExxonMobil's own annual reports.

Cell: D135
Comment: Rick Heede:
Net production of crude oil and NGL for 1998, 1999, and 2002 from XOM (2003) AnnRpt 2002, p. 35.

Cell: S135
Comment: Rick Heede:
Net natural gas production available for sale for 1998, 1999, and 2002 from XOM (2003) AnnRpt 2002, p. 35.

Cell: J136
Comment: Rick Heede:
We replace OGJ data with XOM net production data from XOM Annual reports for 1999-2004. Original XOM data is a bit higher than reported in OGJ, for unknown reasons; e.g., 1999 in OGJ is 892 million bbl and XOM (though reported in kbb/d) equals 919 million bbl. 2000 OGJ = 913, 2001 OGJ = 928, 2002 OGJ = 899, 2003 OGJ = 881, and 2003 OGJ = 893.

Cell: X136
Comment: Rick Heede:
OGJ reports natual gas production a bit higher than XOM annual reports for 1999-2003. Since OGJ is reporting natural gas production whereas XOM reports natural gas for sale, we use OGJ data.

Cell: D137
Comment: Rick Heede:
Oil production data from EI (2003) Top 100, p. 147.

Cell: E137
Comment: Rick Heede:
XTO Energy Annual Rpt 2003, page 2, reports both NGL and oil production. E.g., in 2003 6,463 bbl NGL plus 12,943 bbl crude oil per day.

Cell: G137
Comment: Rick Heede:
We do not add Exxon's 70 percent equity in Imperial Oil on the assumption that Imperial's production is reflected in Exxon's reporting.

Cell: S137
Comment: Rick Heede:
Gas production data from EI (2003) Top 100, p. 147.

Cell: T137
Comment: Rick Heede:
XTO Energy Annual Rpt 2003, page 2, natural gas production, million cf/day.

Cell: G138
Comment: Rick Heede:
Imperial Oil Annual Rpt 2005, page, "Gross crude oil and NGL production."

Cell: V138
Comment: Rick Heede:
Imperial Oil Annual Rpt 2005, page 6, "gross natural gas production."

Cell: D141
Comment: Rick Heede:
XOM (2005) AnnRpt 2004, p. 45.

Cell: E141
Comment: Rick Heede:
XTO Energy Annual Rpt 2008, page 8, reports both NGL and oil production. E.g., in 2008 15,600 bbl NGL plus 56,000 bbl crude oil.

Cell: G141
Comment: Rick Heede:
Imperial Oil Annual Rpt 2008, page 9, "Gross crude oil and NGL production." CMS does NOT add Imperial's production to ExxonMobil's (since XOM's equity production should already be shown in its own production data. Imperial's 2008 production of 256,000 bbl per day equals 93.4 million bbl -- or ~10.6 percent of XOM's total reported oil production.

Cell: S141
Comment: Rick Heede:
XOM (2005) AnnRpt 2004, p. 45.

Cell: T141
Comment: Rick Heede:
XTO Energy Annual Rpt 2008, page 8, natural gas production, million cf/day.

Cell: V141
Comment: Rick Heede:
Imperial Oil Annual Rpt 2008, page 9, "gross natural gas production." CMS does NOT add Imperial's production to ExxonMobil's (since XOM's equity production should already be shown in its own production data). Imperial's 2008 production of 310 million cf per day equals 113 Bcf -- or ~3.4 percent of XOM's total reported gas production.

Cell: T144
Comment: Rick Heede:
XTO Energy Annual Rpt 10-K, page 14.

Cell: D145
Comment: Rick Heede:
XOM AnnRpt for 2008 (rpts 2004-2008 data for "liquids production"), p. 19.
Note" "Petroleum product sales" (net of purchases/sales) are higher: 6.76 million bbl per day in 2008 (and 7.52 million bbl per day in 2005); p. 27.
Note: "Refinery throughput" average 5.42 million bbl per day in 2008 (and 5.72 million bbl per day in 2005).

Cell: S145
Comment: Rick Heede (9Dec09):
XOM AnnRpt for 2008 (rpts 2004-2008 data for "natural gas production available for sale"), p. 19.

Cell: E146
Comment: Rick Heede:
XTO AR 2009 pdf report pg 14, daily and annual production reported; values in this table for 2007-2008 consistent with 2009 report

Cell: S146
Comment: Rick Heede:
XOM Annual Report 2010, page 26, shows net natural gas production 2006-2010; in 2010 daily production of 12.148 Bcf per day = 4,434 Bcf/yr (sharp increase over 2009 figure of 3,385 Bcf -- presumably from acquisition of XTO).
Note: OGJ150 Oct11 p. 38 shows 2,920 Bcf worldwide gas production.