

# Commentary -- The Oil Production Story: Pre- and Post-Peak Nations

updated June 2010 with 2009 data

The world oil production data below tell a story about: 1) nations that are past peak (see "Peak Year," turquoise fill), because of geologic limits (e.g., US, Norway, etc.) or other reasons; and 2) nations that have yet to peak (see "na" under "Peak Year;" Saudi Arabia, UAE, China), or if they have peaked it is not yet clear. An equally interesting trend is--irrespective of peaking--whether or not nations are increasing (first column; Brazil); have either flat or volatile production (second column, in blue; Iran, Iraq); or are experiencing decreasing production (third column, in red); the 2009 OPEC quotas significantly complicate the overall numbers here. Finally, the net amount of change in any year (2009 data, plus partial 2010 % data) is useful. **Five non-OPEC nations increased by over 100,000 barrels/day-year (vs. 12 in 2004); three non-OPEC experienced declines over 100,000 barrels/day-year (vs. two in 2004).** Peak appears to be approaching; we were on relatively plateau production during 2005-2008, then dropping in 2009 due to demand destruction from our ailing economy. Keep following the increasing roles of economic-driven demand destruction, violence, resource nationalism, timing of production investment and peak oil exports.

BP's data show 2009 world oil production at 79.95 million barrels per day, down 2.6% vs. 2008. Note that the Top 10 producers account for 61% of world oil production and that the Top 20 account for 84%; all Top 20 produce over 1 million barrels per day. So it is the production trends of the Top 20 world oil producers that will determine when world oil production peaks. During 2009, Azerbaijan moved up into the notable million barrel/day club.

Note how many nations have likely peaked: 6 of Top 10; 10 or 11 of the Top 20; etc. China declined for first time ever, but Russia hit post-Soviet peak in 2009.

**Source: British Petroleum, using 2007 data. Includes crude oil, shale oil, oil sands, and natural gas liquids (NGLs); excludes biomass.**

[Oil & Gas Journal\\*](#)

	Increasing (black in column #4 = OPEC declines)	Flat/Volatile	Decreasing	Change barrels/day	Trend (13 years)	Million barrels/day	Peak year	Peak Rate mb/day	data through <b>Feb-10</b>	Comments
1	<b>Russia</b>			<b>144000</b>	1	10.0	1987 / 2009	1987 = 11.5	3.7%	09 increase more than offset '08 decrease.
2			<b>Saudi Arabia</b>	<b>-1123000</b>	9 of 15	9.7	na		1.9%	decline = OPEC cutback; capacity increased in big way
3			<b>USA</b>	<b>462000</b>	16 of 19	7.2	1970	11.3	4.7%	New GOM, Bakken oil = first big increase since 1978
4	<b>Iran</b>			<b>-111000</b>	10 of 14	4.2	1974	6.06	-0.7%	OPEC cut; Iran won't reapeak; nuclear policy a roadblock
5	<b>China</b>			<b>-111000</b>	1	3.8	na		5.1%	28 straight years of inceases ended; plateau here?
6	<b>Canada</b>			<b>-56000</b>	9 of 13	3.2	na		-3.0%	1 year slip; Canada could stall out, oil sands expensive
7			<b>Mexico</b>	<b>-188000</b>	5	3.0	2004	3.82	-2.3%	Mexico in permanent decline; exports still well down
8			<b>U.A.E.</b>	<b>-337000</b>	8 of 14	2.6	na		-0.9%	UAE talks increases; what's in their best interest?
9			<b>Kuwait</b>	<b>-301000</b>	9 of 13	2.5	1972	3.34	-3.8%	Internal discussions continue about size of reserves
10	<b>Iraq</b>			<b>59000</b>	volatile	2.5	1979	3.49	9.4%	Planned several million barrel increase announced 2009
	<b>TOP TEN</b>					<b>48.7 mb/d</b>				<b>Top Ten Produce 61% of global oil.</b>
11			<b>Venezuela</b>	<b>-121000</b>	8 of 11	2.44	1970	3.75	4.0%	Resource nationalism poster child; Chavez-driven drop
12			<b>Norway</b>	<b>-109000</b>	8	2.34	2001	3.42	-8.0%	Norwegian North Sea steadily declining; -33% in 8 yrs
13			<b>Nigeria</b>	<b>-55000</b>	4	2.06	2005??	2.5	8.7%	Nigeria = basketcase; down 16% 3 yrs before OPEC cut
14	<b>Brazil</b>			<b>130000</b>	13 of 14	2.03	na		5.7%	Still growing; excludes cane ethanol; Tupi big future
15			<b>Algeria</b>	<b>-182000</b>	4 of 5	1.81	na		-0.8%	Algeria has room to grow; cut for OPEC quota last 2 yrs
16			<b>Angola</b>	<b>-91000</b>	10 of 14	1.78	na		10.7%	Angola's rising star slowed by OPEC cuts.
17	<b>Kazakhstan</b>			<b>128000</b>	14	1.68	na		26.0%	Kazaks have tripled production over last decade.
18			<b>Libya</b>	<b>-168000</b>	8 of 13	1.65	1970	3.36	-5.6%	Libya can increase, but new peak unlikely; nationalism
19			<b>United Kingd</b>	<b>-78000</b>	8 of 9	1.45	1999	2.91	-7.7%	Flows down 50% since '99; sold low, buying high
20	<b>Qatar</b>			<b>-33000</b>	12 of 14	1.35	na		5.9%	Qatar doubled 2002 to 2009; more LNG gains to come
	<b>Nations 11-20</b>					<b>18.59 mb/d</b>				<b>Nations 11-20 produce 23% of global oil.</b>

21	Azerbaijan		118000	12	1.03	na		7.7%	Rapid increase last 5 years (+230%) due to slow.
22		Indonesia	-10000	11 of 13	1.02	1977	1.69	0.0%	Former OPEC member used to export; now net importer
23	Oman		56000	2	0.81	2001	0.96	7.6%	Oman: 16% decline since 2001, but two-year uptick
24		India	-14000	14	0.75	na		12.1%	India flat, imports rising, but new oil bump next 2-3 yrs?
25		Malaysia	-28000	13	0.74	2004?	0.79	-0.7%	Malaysia doubled since '85; now declining. On watch list
26		Egypt	20000	11 of 14	0.74	1993	0.95	-5.2%	Egypt is gas-prone; oil slowly down 23%; up last 3 yrs
27	Columbia		69000	5	0.69	1999	0.84	18.8%	Columbia still down 19% from peak, but up 2 yrs running
28		Argentina	-6000	10 of 11	0.68	1998	0.89	-3.6%	Argentina's steady decline (24% in 10 years) continues.
29		Australia	3000	7 of 9	0.56	2000	0.81	-7.3%	Down 31% this decade, but new offshore will help
30		Ecuador	-19000	6	0.50	na		-5.1%	Will three-year small decline continue? Politics volatile.
	<b>Nations 21-30</b>				<b>7.52 mb/d</b>				<b>Nations 21-30 produce 9% of global oil.</b>
31	Sudan		10000	12	0.49	na		n/a	Sudanese violence persists; growth slowing
32		Syria	-22000	8	0.38	1995	0.60	not provided	Syria down 37% since 2001; no reversal in sight
33		Vietnam	28000	4 of 5	0.35	2004	0.43	14.8%	26% decline 2005-08; then nice recovery in 2009
34	Thailand		9000	13 of 14	0.33	na		-4.6%	Thailand's long slow growth trend slowing further?
35		Eq. Guinea	-43000	2	0.31	2007?	0.38	not provided	E. Guinea producing 14 yrs; down 18% in two years
36		Yemen	-6000	7	0.30	2002	0.46	-0.9%	35% drop in 7 years since peak.
37		Denmark	-22000	5	0.27	2004	0.39	-8.8%	What's "cliff" in Danish? 32% decline in 5 yrs since peak
38		Congo	25000	12	0.27	na		not provided	Congo increased 10% last year. Repeaked in 2009.
39		Gabon	-6000	10 of 13	0.23	1997	0.37	13.6%	Gabon, former OPEC, 7-yr flat spot during decline.
40		Turkmenistan	1000	7	0.21	na		not provided	on relative plateau for 7 years;
					<b>3.14 mb/d</b>				<b>Nations 31-40 total produce little less than Canada.</b>
41		Brunei	-7000	6	0.17	1979	0.26	14.9%	6 year decline after secondary peak
42		Trinidad&Tobago	2000	22	0.15	1978	0.23	-4.3%	2-year decline trend might still reverse
43	Peru		25000	6	0.15	1982	0.20	11.3%	Peru up a third during 4 years; watch for nationalism
44		Chad	-9000	4	0.12	2005?	0.17	not provided	producing only 6 yrs yet hoopla gone; 4 yrs down 32%
45		Uzbekistan	-7000	10	0.11	1999	0.19	not provided	could repeak, but unlikely; down 42% in 9 yrs
46		Italy	-13000	3 of 4	0.10	na	0.12	1.8%	Mama mia...small production dropping fast
47		Romania	-5000	20+	0.09	1976	0.30	not provided	world's first oil wells drilled here and Baku
48		Tunisia	-3000	2	0.09	1984	0.12	-8.3%	only Tunisia cares about small decrease
49		Cameroon	-11000	17 of 19	0.07	1985	0.18	-10.3%	only Cameroon cares about small decrease
50		Other		na	0.99	na	na		"Everybody else" equals Indonesia, but past peak
					<b>2.03</b>			<b>world: +2.4%</b>	<b>Remaining nations produce same as Nigeria.</b>

79.95

**Very small producers, in decline**

Pakistan Netherlands France  
Croatia Bolivia Japan  
Germany New Zealand  
Papua New Guinea

**Very small producers, i increasing**

Austria  
Bahrain  
Mauritania  
Turkey

**Very small producers, flat**

**Small producer, question mark**

Cuba could see bump in 2010-2012

Use of the BP production data set is no better than those from IEA and EIA. It's simply used here on a once-a-year basis.

\* This set of data from the O&GJ is only included to fill in the gap in 12 months between the updating of BP's data. It uses a different baseline, thus is used here only as a %.