

OPEC CAPACITY AND PRODUCTION

The members of the Organization of Petroleum Exporting Countries (OPEC) have capacity to produce approximately 30.3 million barrels per day (mmbd) of crude oil, 1.1 mmbd of condensate, and 2.6 mmbd of gas liquids.

OPEC adopted a definition of condensate in 1988 but lacks a formal definition of crude oil. In concept quotas apply only to crude oil. Condensate and the liquids from gas processing plants (ethane, propane, butanes, and natural gasoline) are not subject to production controls.

Outside OPEC statistical convention is to include most condensate in figures for "crude oil" production. When applied to OPEC that practice prompts allegations of "cheating". It also produces inflated figures for total production. Actual cheating is minimal because quotas for most of the OPEC members are close to their capacity to produce crude oil.

Chronic overstatement of actual production encourages OPEC to raise quotas to levels that exceed market demand at stable prices. The result is periods of depressed prices even as production is nearing capacity.

The Peak Periods

Since OPEC was formed in 1960 its production capacity has been tested only twice. The first occasion was in 1973 after the Railroad Commission of Texas raised allowables to 100 percent during 1972. The second was in 1979 and 1980 before and during the revolution in Iran and the start of the war with Iraq.

Actual production in the two peak periods was as follows:

OPEC Production in Peak Periods			
Thousand Barrels Per Day (mmbd)			
	1973	1979	1980
Algeria	1,067	1,038	912
Indonesia	1,339	1,523	1,499
Iran	5,861	3,168	1,467
Iraq	2,018	3,477	2,646
Libya	2,175	2,092	1,827
Nigeria	2,054	2,302	2,058
Qatar	570	508	471
<u>United Arab Emirates</u>			
Abu Dhabi	1,313	1,484	1,341
Dubai	220	354	349
Other	-	13	10
Venezuela	3,366	2,353	2,162
Kuwait	2,753	2,213	1,389
Neutral Zone	529	568	544
Saudi Arabia	7,335	9,251	9,631
Crude Oil	30,600	30,344	26,306
<u>Condensate</u>			
Algeria	27	99	97
Indonesia	-	67	76
Venezuela	3	4	3
<u>Gas Liquids</u>			
Saudi Arabia	92	303	378
Algeria	5	39	25
Other	236	277	246
Total	30,963	31,133	27,131

In 1973 both Venezuela and Kuwait were operating under self-imposed production limits. Peak production of crude oil in Venezuela was 3,808 mmbd in 1970. Peak production in Kuwait proper (i.e. excluding the Neutral Zone) was 3,078 mmbd of crude oil in 1972.

Condensate and Gas Liquids

The first quotas for crude oil production by OPEC members were agreed in March, 1982 for a total of 17,500 mmbd. Actual crude oil production by the members continued to decline to its low point in 1985 of only 16,055 mmbd. In 1985 production of condensate had increased to 578 mmbd and production of gas liquids was up to 908 mmbd.

All the OPEC members have continued to expand the use of natural gas. Algeria, Indonesia, Qatar, and Abu Dhabi are exporters of natural gas as well as oil. Nigeria, Qatar, and Abu Dhabi operate cycling projects in gas fields which make it possible to produce condensate and gas liquids despite lack of market for natural gas.

Recent Experience

In 1998 total OPEC production was back up to 30,106 mbd distributed as follows:

OPEC Production in 1998			
Thousand Barrels Per Day (mbd)			
	Crude	Condensate	Gas Liquids
Algeria	827	388	243
Indonesia	1,316	147	93
Iran	3,253	14	131
Iraq	2,154	-	79
Libya	1,403	-	65
Nigeria	1,939	108	60
Qatar	613	64	95
<u>United Arab Emirates</u>			
Abu Dhabi	1,701	116	185
Dubai	243	8	19
Other	2	53	25
Venezuela	3,047	18	202
Kuw ait	1,777	-	163
Neutral Zone	529	-	-
Saudi Arabia	8,006	-	1,020
Crude Oil	26,810	916	2,380

Taking into account development projects and new fields in Algeria, Libya, Nigeria, and Qatar current production capacity is 100-300 mbd higher than it was in 1998. The current capacity is approximately 34,050 mbd distributed as follows:

OPEC Capacity - 2000			
Thousand Barrels Per Day (mbd)			
	Crude	Condensate	Gas Liquids
Algeria	875	410	285
Indonesia	1,225	135	85
Iran	3,375	23	137
Iraq	2,705	-	95
Libya	1,420	-	60
Nigeria	2,050	115	90
Qatar	700	140	140
<u>United Arab Emirates</u>			
Abu Dhabi	2,270	240	245
Dubai	228	7	17
Other	2	48	23
Venezuela	2,950	20	210
Kuw ait	2,025	-	190
Neutral Zone	650	-	-
Saudi Arabia	9,800	-	1,060
Crude Oil	30,275	1,138	2,637

The quotas for crude oil adopted at the June OPEC meeting total 25,400 mbd excluding Iraq. Including Iraq the total is about 28,105 mbd which compares with capacity as follows:

Quotas and Capacity		
Thousand Barrels Per Day (mbd)		
	Crude Oil	
	Quotas	Capacity
Algeria	811	875
Indonesia	1,317	1,225
Iran	3,727	3,375
Iraq	2,705	2,705
Kuw ait	2,037	2,350
Libya	1,361	1,420
Nigeria	2,091	2,050
Qatar	658	700
Saudi Arabia	8,253	10,125
U.A.E.	2,219	2,500
Venezuela	2,926	2,950
Crude Oil	28,105	30,275
Condensate		1,138
Gas Liquids		2,637
Total		34,050

With OPEC crude oil production getting close to capacity the oil situation in 2000 resembles the situation in 1973. The collapse of the peace negotiations at Camp David makes the resemblance even stronger. The third Middle East war in October, 1973 followed a similar period of contention. A big difference is that the OPEC members now produce

THE AMERICAN OIL AND GAS REPORTER

over 900 mbd of condensate and 2,400 mbd of liquids. OMR routinely reports figures for OPEC crude oil production that include condensate and natural gasoline. Total OPEC production is then overstated because the other liquids are counted twice – first as crude oil and then as gas liquids. It is always true, of

Confusion About Numbers

During 1997 OPEC's Secretariat (i.e. the professional staff in Vienna) collected data for production of crude oil from the members. They compare with the average quotas and other estimates as follows:

OPEC Production in 1997				
Thousand Barrels Per Day (mbd)				
	Oil		Groppe,	
	OPEC	Market	Long &	Average
	Members	Report	Littell	Quotas
Algeria	0.80	0.85	0.85	0.75
Indonesia	1.33	1.36	1.33	1.33
Iran	3.60	3.60	3.29	3.60
Iraq	1.38	1.15	1.37	1.37
Kuwait	2.01	2.11	2.01	2.00
Libya	1.40	1.42	1.42	1.39
Nigeria	1.88	2.28	2.22	1.86
Qatar	0.40	0.62	0.49	0.38
Saudi Arabia	8.01	8.35	8.01	8.00
U.A.E.	2.16	2.28	2.14	2.16
Venezuela	2.41	3.18	3.02	2.36
Crude Oil	25.38	27.20	26.15	25.20
Other Liquids		2.71	3.13	
		29.91	29.28	

At the meeting in Jakarta, Indonesia of November, 1997 belief that they were already producing 27.2 mmbd played a major role in the OPEC decision to raise quotas to 27.5 mmbd. Disaster ensued well before Iraq gained relief from restraints on its oil production by the United Nations in June, 1998.

Since 1997 the Secretariat has not collected monthly statistics from the members. Instead it compiles statistics from Oil Market Report (OMR), published monthly by the International Energy Agency, and other "secondary sources." Although the members of OPEC include some of the more corrupt governments on earth it is fascinating that they would resort to OMR and the trade press for data about their own production.

After all the downsizing and mergers in a long bear market the oil industry no longer does much analysis. OMR gets a lot of attention, even from the industry itself, because there is essentially nothing else available in the public domain. The Secretariat's consensus of the "secondary sources" is invariably only slightly different from what appears in OMR.

course, that a number for "crude oil" that includes condensate and/or natural gasoline is greater than the number for crude oil. Except for Algeria – where condensate production is rarely mentioned and statistics are practically a state secret – all the OPEC members with significant condensate are reported to be "cheating" (i.e. producing crude oil in excess of quota).

In 1997 there were minor amounts of real cheating by the African members of OPEC and blatant disregard for its quota by Venezuela. Further increases in quotas have helped a lot to correct those problems.

In recent history the OPEC members have not had bad experiences due to cheating on their quotas for crude oil. The problem is that chronic overstatement of actual production encourages raising quotas to levels that exceed market demand at stable prices. The result is that OPEC can manage to cause periods of low oil prices even as quotas approach capacity and the stage is set for the next oil crisis.