



JOINT ECONOMIC COMMITTEE

JIM SAXTON, CHAIRMAN

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OPEC's 902 BILLION BARREL OIL RESERVE

Abundant, low-cost crude oil. The eleven members of the Organization of the Petroleum Exporting Countries (OPEC) together hold 902 billion barrels of oil reserves. The world consumed about 30.3 billion barrels in 2005. Thus OPEC alone could meet the world's current rate of oil consumption for nearly 30 years, without developing additional reserves. OPEC's oil production is the least costly on earth. The five largest members of OPEC are Persian Gulf countries with production costs less than \$5 per barrel.¹ OPEC members outside the Persian Gulf have somewhat higher costs but still below \$9 per barrel.²

Yet the price of oil has soared. World oil demand has been increasing, mainly due to economic growth among developing nations in Asia. The average price of the various OPEC crude oil grades rose from \$36 in 2004 to over \$50 per barrel in 2005.³ Nevertheless, OPEC accounted for only 40% of the market with production of 12.4 billion barrels in 2005. OPEC's production barely exceeds its peak in the 1970's, though its reserves have more than doubled. In anticipation of seasonally reduced oil demand for the 2nd quarter of 2006, OPEC had even signaled a possible output cut, which now may be superseded by potential

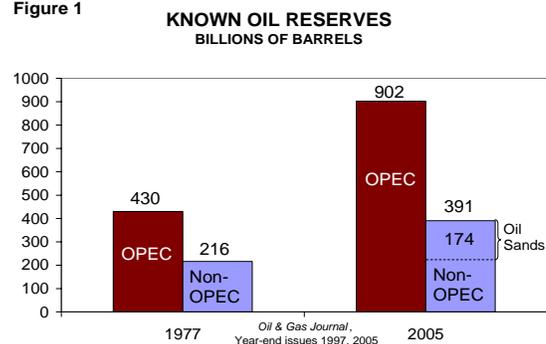
¹ OECD Economic Outlook, December 2004, p.123.

² The Energy Information Administration (EIA) International Energy Outlook 2005 presents capital and lifting cost data for OPEC that implies a cost per barrel less than \$9 outside the Persian Gulf (p.31).

³ On June 15, 2005, OPEC made changes to its crude oil "basket" price calculation that lowered the average at that time from \$52.26 to \$50.03 (see EIA, "Country Analysis Briefs," November 8, 2005).

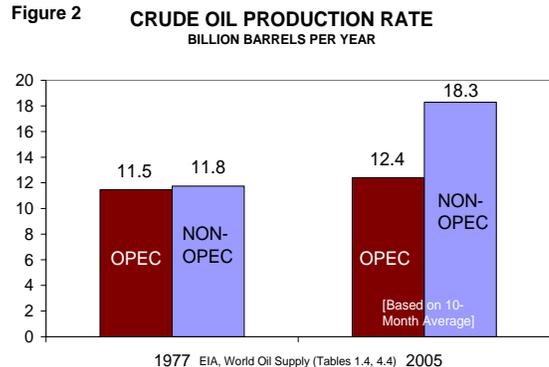
supply issues in Iran and Nigeria.⁴ Figure 1 compares OPEC's reserve growth to non-OPEC reserves, which have remained constant but for the addition of non-conventional oil sands.

Figure 1



In 1977, OPEC produced 11.5 billion barrels of oil with 430 billion barrels in reserves; non-OPEC countries produced 11.8 billion barrels with 216 billion in reserves. Remarkably, annual non-OPEC production since 1977 increased by 56% to 18.3 billion barrels in 2005; 0.4 billion was from oil sands. Figure 2 compares OPEC and non-OPEC crude oil production.

Figure 2



⁴ See *Wall Street Journal*, Bhushan Bahree & Karen Matusic, "OPEC Retains Current Quota But Plans a Review in January," 12/13/05; David Bird, "Crude Futures Top \$66 on Fresh Supply Concerns," 1/18/06.

Owners of oil reserves. Figure 3 shows the ten countries with the largest known crude oil reserves. Eight of them are OPEC members, and of the top six, five are Persian Gulf countries. (All Persian Gulf countries, except Bahrain, are OPEC members). Canada, ranked second, holds oil reserves that consist of 98% oil sands with extraction costs upwards of five times those in the Persian Gulf. There are three other OPEC members, Qatar, Algeria, and Indonesia, ranked 13th, 15th, and 24th by reserves, respectively.

Rank	Country		Bil. Brls
1	Saudi Arabia (OPEC)		264.3
2*	Canada		178.8
3	Iran (OPEC)		132.5
4	Iraq (OPEC)		115.0
5	Kuwait (OPEC)		101.5
6	U.A.E. (OPEC)		97.8
7	Venezuela (OPEC)		79.7
8	Russia		60.0
9	Libya (OPEC)		39.1
10	Nigeria (OPEC)		35.9

* 174.1 billion barrels are oil sands.

Oil exporters. One would expect the largest oil exporters to be in the Persian Gulf given the low cost there. But, among the top five net oil exporting nations, only three are OPEC members and only two are from the Persian Gulf. Ranked second and third are Russia and Norway, which have higher costs. Most of Russia's production is in Siberia and all of Norway's is in the North Sea.

Rank	Country		Mil.Brils/Day
1	Saudi Arabia (OPEC)		8.73
2	Russia		6.67
3	Norway		2.91
4	Iran (OPEC)		2.55
5	Venezuela (OPEC)		2.36
6	U.A.E. (OPEC)		2.33
7	Kuwait (OPEC)		2.20
8	Nigeria (OPEC)		2.19
9	Mexico		1.80
10	Algeria (OPEC)		1.68

Oil producers. A ranking of countries by crude oil production reflects the restrictive output policies of the OPEC cartel. Among the top ten producers only four are OPEC

Rank	Country		Mil.Brils/Day
1	Saudi Arabia (OPEC)		10.37
2	Russia		9.27
3	United States		8.69
4	Iran (OPEC)		4.09
5	Mexico		3.83
6	China		3.62
7	Norway		3.18
8	Canada		3.14
9	Venezuela (OPEC)		2.86
10	U.A.E. (OPEC)		2.76

countries and only three are from the Persian Gulf. The second largest producer, Russia, produces oil at a rate just 10.5% less than Saudi Arabia from reserves that are not even one-fourth the size of Saudi Arabia's (60 vs. 264 billion barrels). Iran, with reserves more than twice the size of Russia's, produces less than half as much crude oil. Kuwait with over 100 billion barrels in oil reserves is not even on the top ten producer list.

Conclusions.

- (1) OPEC's huge, low-cost reserves have grown over time. Yet in the face of increasing demand and soaring prices, the cartel barely produces more oil than 30 years ago, releases much less oil than non-OPEC nations, and even threatens to cut output.
- (2) Non-OPEC countries consume the oil they develop or export it; they do not hoard it.
- (3) Conventional non-OPEC oil reserves in total have not been depleted; they are continually replenished by oil field development and function as producers' in-ground inventory.
- (4) A steady volume of in-ground inventory has been supporting an increasing rate of non-OPEC oil production, which suggests efficient use of capital.