The Oil Drum
DISCUSSIONS ABOUT ENERGY AND OUR FUTURE

A little more updating of information

Posted by Heading Out on November 28, 2006 - 1:46am
Topic: Supply/Production
Tags: artic regions, iea annual review, natural gas production, north slope, wood mackenzie [list all tags]

We have been a little fixated over the recent CERA report on the myth of an imminent peak oil problem, and, in the process, have not given enough recognition to another report that has just been released. Wood MacKenzie is also a company that provides information on the energy industry and, is the often more conservative evaluator of reserves that Jean Laherrere has used in some of his studies. On November 1 Leanan noted their press release, which can be seen on video in which they noted that while the Arctic Regions do, in fact, contain significant amounts of oil

> The US can no longer consider the Arctic as a long-term strategic energy supply source, according to a new joint study by Wood Mackenzie and Fugro Robertson, "Future of the Arctic." The study found the Arctic potential is significantly less than previous estimations had suggested, and the mix of resources have been found to contain much less oil and more gas.
> "These findings are disappointing from a world oil resource base perspective," said lead study author, Andrew Latham, Vice President, Energy Consulting at Wood Mackenzie.
> The study shows only approximately one quarter of the oil volumes previously assessed in key North American and Greenland basins.

In a more recent OG&J review (behind a pay wall) of the report it is noted that:

> As a result, the study said the US "must look elsewhere to meet rising demand," including member nations of the Organization of Petroleum Exporting Countries "such as Venezuela," and to Russia-areas of "broader, geopolitical concerns relating to security of supply."
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> This study is the first overall assessment of the Arctic's total oil and gas potential by Wood Mackenzie or anyone else, Latham said. "Nobody has done it all, not even the US Geological Survey," he said.

It further goes on to comment on the estimated costs of production, noting that

> The cost of Arctic operations is high, driven by extreme transportation costs, with wide variation between basins. "Average field development costs of around $6/boe are comparable with many other parts of the world. High costs elevate average

> development breakeven prices across the Arctic to above $30/boe," said the report.
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> It said there are attractive niche opportunities in many basins where the breakeven price of the largest fields are much less than average, below $20/bbl in some cases. Two basins-the North Slope in Alaska and Russia's Pechora Sea-achieve exploration full-cycle returns greater than 20%. "These are both oil-prone basins with good access to markets via pipelines and ice-free seas," Latham said.

The North Slope region has previously also been addressed by the USGS.

I thought it a worth putting the additional emphasis on this to remind us all that not all the rosy estimates relating to the development of future reserves will actually turn out to be there, or will be developed in the immediate future (note that the report anticipates the major gas not being produced until perhaps 2050 due to export and technological constraints).

And, to give further support to Westexas comments about drilling more and producing less, let me also stick in here the information from the API from their third quarter well completion report.

> a 21-year high estimated 37,261 oil wells, natural gas wells and dry holes were completed in the first three quarters of 2006. In the third quarter alone, there were an estimated 12,687 completions. This figure is the highest single quarter estimate since the first quarter of 1986 and the twelfth consecutive quarter of increases in estimated U.S. drilling activity.

The wells broke down into 11,545 oilwells and 21,897 gas wells. In an additional comment from the OG&J (protected)

> (quoting Frederick Lawrence of the Independent Petroleum Association) While EIA estimated in September that an average 264 rigs drilled for oil in the US during 2006's first 8 months-66% more than the average of 159 in the same 2004 period-US oil production fell more than 7% to an average 5.098 million b/d from 5.5 million b/d, he said.
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> "Although the well completion totals are very impressive, production isn't keeping up. Producers need access to more supplies and have to pay increasing costs for equipment and personnel. The cost per well is increasing, which diminishes some of the value of the increased commodity prices," Lawrence said.

However, opening the latest volume of the OG&J one finds their take on the recent IEA report, that Dave found more pessimistic than usual. I thought I would include one of the tables from their review.

ESTIMATED WORLD OIL RESOURCES,[1] 1995-2025

Table 1

Region	Proved reserves	Reserve growth	Undis-covered	Total
	Billion bbl			
OECD[2]				
US	21.4	76.0	83.0	180.4
Canada	178.8	12.5	32.6	223.9
Mexico	12.9	25.6	45.8	84.3
OECD Europe	15.1	20.0	35.9	71.0
Japan	0.1	0.1	0.3	0.5
Australia-New Zealand	1.5	2.7	5.9	10.1
Non-OECD				
Russia	60.0	106.2	115.3	281.5
Other Europe-Eurasia	19.1	32.3	55.6	107.0
China	18.3	19.6	14.6	52.5
India	5.8	3.8	6.8	16.4
Other Asia	10.3	14.6	23.9	48.8
Middle East	743.4	252.5	269.2	1,265.1
Africa	102.6	73.5	124.7	300.8
Central and South America	103.4	90.8	125.3	19.5
Total world	**1,292.5**	**730.2**	**938.9**	**2,961.6**
OPEC[3]	901.7	395.6	400.5	1,697.8
Non-OPEC	390.9	334.6	538.4	1,263.9

[1]Reserves include crude oil (including lease condensate) and natural gas plant liquids. [2]Organization for European Cooperation & Development countries. [3]Organization of Petroleum Exporting Countries.
Sources: International Energy Outlook 2006, Energy Information Administration (2006), US Geological Survey, World Petroleum Assessment 2000 (http://pubs.usgs.gov/dds/dds-060/), Proved reserves as of Jan. 1, 2006 (OGJ, Dec. 19, 2005, p. 24)

As you may note from the line about the US, the current decline is production may only be temporary (though I am not holding my breath). On the other hand the OGJ review does anticipate a decline in the production of natural gas, failing "a much more aggressive leasing policy, both on and offshore, especially for unconventional natural gas resources."