



Tech Talk - Global Crude Oil and Iran

Posted by [Heading Out](#) on October 28, 2012 - 3:35am

There has been a stir in energy news lately as folks have begun to extrapolate the growth in American oil and gas production to the point that they predict the United States may out-produce Saudi Arabia, in terms of total hydrocarbon production. Of course, in some cases, it is [North American oil independence](#) that is featured rather than that of the USA. The reason for this generalization is that by broadening the geography so the region also includes Canadian and Mexican production, then US imports from those countries magically disappear (which does not mean that they don't have to be paid for. The US imported around [2.5 mbd from Canada and 1 mbd](#) from Mexico in July). The stories also don't dwell on the comparison of apples and apples. Consider the [following quote from NPR](#). It is the easily missed sentence at the end of the first paragraph that is critical.

In 2011 the U.S. produced 5.66 million barrels of crude oil a day, according to the Department of Energy's Energy Information Administration. By next year the agency projects that will increase 21 percent to 6.85 million barrels a day. Add in things like natural gas liquids, biofuels and processing gains at refineries and that number increases.

"By 2013, we'll probably be a little over 11 million barrels a day," says EIA administrator Adam Sieminski. "That puts you pretty close to Saudi Arabia's" production of more than 11 million barrels a day, he says.

It might be pertinent to note that some of the crude produced in the Kingdom of Saudi Arabia (KSA) will be refined in the US, providing refinery gains here, and further distorting the comparison. Ah, well!

The current production gain in the US has resumed after a short plateau, although the gains following the shut-ins for Hurricane Isaac seem to be leveling off.

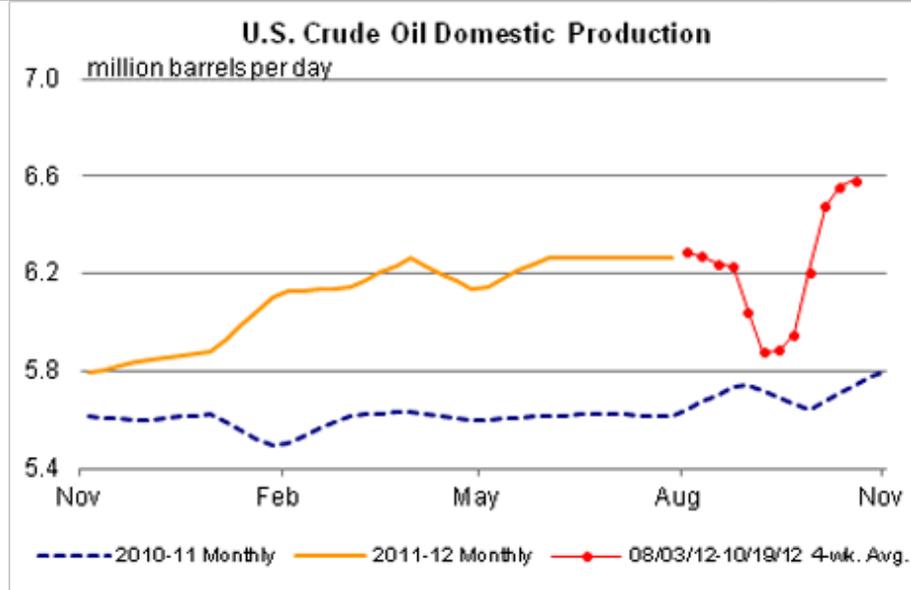


Figure 1. U.S. Crude Production through mid-October 2012 (EIA TWIP)

The information in the [October Monthly Oil Market Report](#) from OPEC show that crude oil production from KSA is running at 9.85 mbd, as reported by other sources.

OPEC crude oil production based on secondary sources, tb/d									
	2010	2011	1Q12	2Q12	3Q12	Jul 12	Aug 12	Sep 12	Sep/Aug
Algeria	1,250	1,240	1,233	1,214	1,204	1,214	1,206	1,191	-14.4
Angola	1,786	1,667	1,763	1,738	1,693	1,644	1,806	1,627	-179.6
Ecuador	475	490	492	493	497	493	500	499	-1.7
Iran, I.R.	3,706	3,628	3,391	3,086	2,748	2,797	2,724	2,723	-0.8
Iraq	2,401	2,665	2,705	2,956	3,104	3,066	3,119	3,129	10.8
Kuwait	2,297	2,538	2,768	2,793	2,809	2,800	2,807	2,821	14.4
Libya	1,559	462	1,213	1,424	1,460	1,434	1,464	1,485	21.0
Nigeria	2,061	2,111	2,075	2,143	2,129	2,136	2,193	2,056	-136.6
Qatar	791	794	786	748	744	745	746	743	-3.0
Saudi Arabia	8,263	9,293	9,819	9,925	9,836	9,847	9,807	9,854	46.8
UAE	2,304	2,517	2,564	2,574	2,622	2,626	2,614	2,626	12.0
Venezuela	2,338	2,380	2,379	2,366	2,349	2,363	2,358	2,325	-33.8
Total OPEC	29,231	29,786	31,189	31,460	31,196	31,165	31,343	31,078	-264.8
OPEC excl. Iraq	26,831	27,120	28,484	28,504	28,092	28,099	28,224	27,949	-275.6

Totals may not add up due to independent rounding.

Figure 2. Reported production from the OPEC nations through September 2012, as reported by others (OPEC MOMR)

When one looks at the production that KSA itself is reporting, the numbers are slightly reduced.

OPEC crude oil production based on <i>direct communication</i> , tb/d									
	2010	2011	1Q12	2Q12	3Q12	Jul 12	Aug 12	Sep 12	Sep/Aug
Algeria	1,184	1,173	1,215	1,213	1,201	1,204	1,203	1,195	-8.0
Angola	1,691	1,618	1,734	1,716	..	1,576	1,744	..	..
Ecuador	475	500	502	500	509	508	512	506	-5.6
Iran, I.R.	3,544	3,576	3,742	3,758	..	3,751	3,747	..	..
Iraq	2,358	2,653	2,628	2,936	3,150	3,051	3,166	3,235	69.0
Kuwait	2,312	2,660	2,995	2,990	2,957	2,945	3,025	2,900	-125.1
Libya	1,487	462	1,296	1,503	1,504	1,423	1,552	1,537	-14.8
Nigeria	1,968	1,896	1,880	1,971	..	1,999	1,988	..	..
Qatar	733	734	745	737	726	719	723	735	11.0
Saudi Arabia	8,166	9,311	9,883	10,002	9,760	9,801	9,753	9,724	-28.6
UAE	2,324	2,565	2,602	2,615	2,727	2,776	2,713	2,691	-21.8
Venezuela	2,779	2,795	2,792	2,818	..	2,832	2,828	..	..
Total OPEC	29,020	29,942	32,015	32,758	..	32,585	32,955	..	..
OPEC excl. Iraq	26,662	27,290	29,387	29,823	..	29,534	29,789	..	..

Totals may not add up due to independent rounding.
 .. Not available

Figure 3. Reported production from the OPEC nations through September 2012, as they reported to OPEC ([OPEC MOMR](#))

While the comparison of the two levels of crude suggest that the US has a long way to go in matching KSA crude production, the two sets of figures also point to the answer to another question.

Looking at the figures for Iran, it is clear [the sanctions](#) that have been imposed on this nation by the West are having a serious impact. Not only is this seen in the fall in oil production, likely around 1 mbd, but in the more consequential cut to exports this fall is reflected in a [\\$7 billion reduction](#) in income. Iran has just started to admit that this bite in their export market is hurting production. And it is only now that they recognize that [this will further fall](#), though they are also threatening to carry this drop to its ultimate conclusion, and to [stop exports entirely](#). An immediate impact would fall on Turkey, which has cut oil imports from Iran [by about 20%](#), but which has a six month exemption from the full impact of the sanctions. It is currently importing around 200 kbd of crude. Some of that oil's value is apparently returning to Iran as [gold bullion](#), which can be easier to spend.

However, the primary question might well be: if world oil markets are so tight, why hasn't taking a million barrels out of production had a more significant impact? And the answer to this comes in part because of the increase in production from KSA (note that a year ago the country was producing around 500 kbd less than it currently is), and also from the gains in production from the United States (as shown in Figure 1).

Further, given that the global economy, though regenerating from the depths of recession, is still not operating at levels sufficient to bring unemployment to more normal levels, overall demand also remains below what it might be.

Since we live in a global economy, the problems of Europe and America are reflected in a reduced demand for goods from China and other Asian countries, which impacts the energy demand from factories. China has been taking some [40% of the Iranian export](#). OPEC has noted that Chinese demand has declined, and that part of this decline stems from an 18% reduction in imports from Iran. Interestingly, this was partially made up through an increase in imports from Iraq.

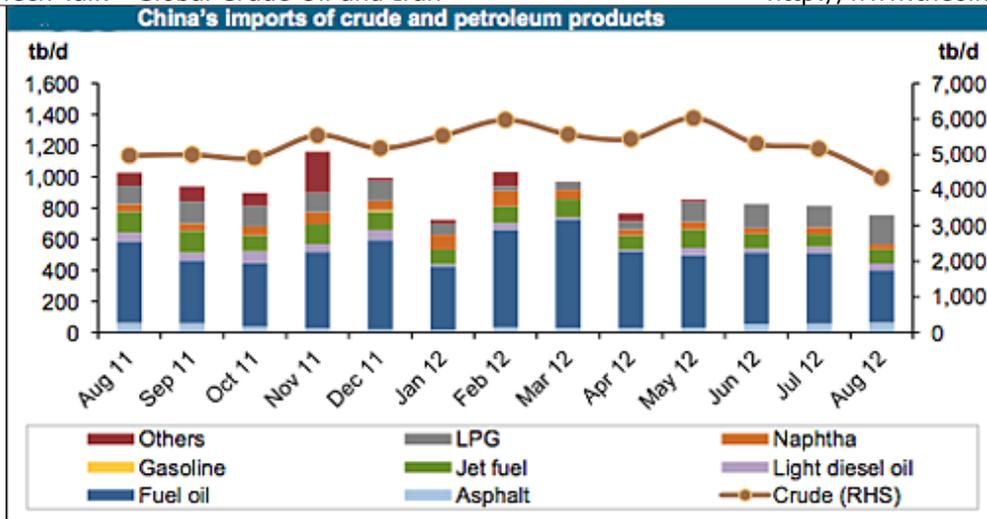


Figure 4. Change in Chinese petroleum imports over the past year ([OPEC MOMR](#))

One of the threats that Iran has made is that it will [shut down its exports](#) completely. The country was initially exporting some 2.3 mbd [before sanctions occurred](#), and sanctions have dropped this already to around 860 kbd. Of this, 200 kbd are going to Turkey, but this is a country with pipeline connections that give it options. There is a pipeline running from Iraq, the Kirkuk- Ceyhan connection which carries 300 kbd, and was [briefly damaged](#) by fire in August; and more famously, there is the Baku-Tbilisi-Ceyhan pipeline from the Caspian. This can carry [1 mbd of crude](#), and having run [190 mb through September](#) this year, it is running not quite full.



Figure 5. Oil and Natural gas pipelines through Turkey ([Journal of Energy Security](#))

In short, as with the suggestions [mentioned the other week](#) that Iran might seek to challenge Qatar in going into the natural gas LNG market, the threat this week is that it might shut off exports of crude seems to be likely geared only for domestic consumption.

The global demand at present is not such that the Iranian supply is critical to ensuring a balance in an acceptable price between supply and demand. It would seem that the global economy would need to regenerate further, and for North American and KSA to reach some form of current peak in production against that potential of rising demand before this balance is threatened. But in consolation to Iran, resting oilfields can sometimes help in terms of their longer-term production (as KSA has practiced for years).



This work is licensed under a [Creative Commons Attribution-Share Alike 3.0 United States License](http://creativecommons.org/licenses/by-sa/3.0/).