



Tech Talk - An Introduction to Iran

Posted by [Heading Out](#) on October 1, 2012 - 9:10am

The theme of these posts over the past eighteen months is to look at the leading producer nations that provide crude oil to the world, and to see if it is realistic to anticipate significant increases in their production. Posts have now looked at North America, Russia, Saudi Arabia and China based on [the original list](#) of rankings produced by the EIA in 2009. And, as I noted before [beginning the China posts](#), the interesting question at the moment relates to a) how much oil Iran is currently producing and b) how much, realistically, can it be expected to produce?

These are not questions with the same answer, since the current sanctions imposed on the country have clearly already had an impact on the amount of oil that is being exported from Iran. Nevertheless, the volumes produced have fallen below those now achieved by China, and for that reason China was given priority when it came to the order of writing these posts. But back at the [beginning of 2011](#), there was no doubt that Iran was one of the top 5 producers, particularly if one combines the USA and Canada into the new “politically correct” term of North America as a way of dodging questions on long-term US production levels.

If one looks at the latest September [OPEC Monthly Oil Market Report](#) (MOMR), for example, there is now a gap of 1 mbd between the official production claims, which are shown below, and the reports from other sources, which follow.

Table 5.5: OPEC crude oil production based on direct communication, tbd

	2010	2011	4Q11	1Q12	2Q12	Jun 12	Jul 12	Aug 12	Aug/Jul
Algeria	1,184	1,173	1,180	1,215	1,213	1,212	1,204	..	..
Angola	1,691	1,618	1,685	1,734	1,716	1,614	1,576	..	..
Ecuador	475	500	503	502	500	502	508	512	4.1
Iran, I.R.	3,544	3,576	3,609	3,742	3,758	3,756	3,751	3,747	-4.0
Iraq	2,358	2,653	2,638	2,628	2,936	2,951	3,051	3,166	115.0
Kuwait	2,312	2,660	2,909	2,995	2,990	2,981	2,945	2,980	34.6
Libya	1,487	462	697	1,296	1,503	1,453	1,423	1,552	128.7
Nigeria	1,968	1,896	1,836	1,880	1,971	1,972	1,983	..	..
Qatar	733	734	733	745	737	746	719	723	4.3
Saudi Arabia	8,166	9,311	9,736	9,883	10,002	10,103	9,801	9,753	-47.7
UAE	2,324	2,565	2,549	2,602	2,615	2,753	2,776	2,713	-62.5
Venezuela	2,779	2,795	2,809	2,792	2,818	2,811	2,832	2,842	9.2
Total OPEC	29,020	29,942	30,883	32,015	32,758	32,854	32,569	..	..
OPEC excl. Iraq	26,662	27,290	28,245	29,387	29,823	29,903	29,518	..	..

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

Figure 1. OPEC production reports, from the originating country ([OPEC September MOMR](#))

OPEC crude oil production based on secondary sources, tb/d

	2010	2011	4Q11	1Q12	2Q12	Jun 12	Jul 12	Aug 12	Aug/Jul
Algeria	1,250	1,240	1,228	1,233	1,214	1,212	1,209	1,202	-7.7
Angola	1,786	1,667	1,766	1,763	1,739	1,693	1,655	1,848	193.6
Ecuador	475	490	493	492	492	490	491	497	6.4
Iran, I.R.	3,706	3,628	3,572	3,391	3,086	2,957	2,780	2,767	-13.1
Iraq	2,401	2,665	2,666	2,705	2,956	2,953	3,094	3,113	18.7
Kuwait	2,297	2,538	2,695	2,768	2,794	2,800	2,800	2,799	-1.0
Libya	1,559	462	562	1,213	1,424	1,429	1,417	1,440	23.3
Nigeria	2,061	2,111	2,027	2,075	2,140	2,134	2,130	2,179	49.1
Qatar	791	794	796	786	748	746	743	743	-0.2
Saudi Arabia	8,263	9,293	9,666	9,819	9,908	9,926	9,845	9,855	9.8
UAE	2,304	2,517	2,557	2,564	2,574	2,599	2,626	2,610	-16.0
Venezuela	2,338	2,380	2,371	2,379	2,366	2,367	2,366	2,357	-9.0
Total OPEC	29,231	29,786	30,400	31,189	31,442	31,305	31,156	31,410	253.9
OPEC excl. Iraq	26,831	27,120	27,733	28,484	28,486	28,353	28,062	28,297	235.2

Totals may not add up due to independent rounding.

Figure 2. OPEC production reports, as provided by secondary sources ([OPEC September MOMR](#))

In passing, it should be noted that OPEC is anticipating global oil demand to grow 0.9 mbd in 2012, and 0.8 mbd in 2013. To meet that, OPEC anticipates that non-OPEC production gains will be 0.7 mbd in 2012, and 0.9 mbd in 2013, taking some of the pressure away from the OPEC producers. Within OPEC production, the gains from NGL's are anticipated to further increase by 0.4 mbd in 2012, and 0.2 mbd in 2013. These figures again ease the need for OPEC to show increases in production to meet export demands at the same time that their internal consumption continues to rise.

Iran is thus, by the original criterion, the last of the Big Five to be looked at, although in light of current production numbers, it has clearly fallen into the second tier, and with current production below 3 mbd, it joins others (Mexico and Venezuela, for example) who have fallen through from [upper second tier](#) into the lower second tier of nations that [produce below 3 mbd](#), though this is likely transient, depending on how long sanctions last and more critically, are effective.

If there is little likelihood of major increases in production from Russia, Saudi Arabia, and China, and I take some of the optimism over North American production gains with a considerable grain of salt, then global increases in production must come from nations now producing below 3 mbd. With that size of an industry it is difficult to anticipate spectacular increases from a single producer. Rather, individual country gains (with the exception of Iraq, which could [increase production to 4 mbd](#)) will perhaps only be on the order of 100 kbd. As a result, if global needs are to be satisfied, there has to be a whole series of overall gains in a multiplicity of countries. Only in this way can the total combine to sustain the optimism of those who see a cornucopia of oil flooding our future through the next ten years.

That Iraq has moved into the second tier above 3 mbd this month (by both their own and other counts) makes it a separate point of discussion. But first there is Iran. And with President Mahmoud Ahmadinejad giving [a more subdued speech](#) before the UN this week as sanctions continue to bite, the role of crude in the Iranian economy may be becoming more evident to their government. Domestic consumption runs at about half of production, but the country needs the income from exports.

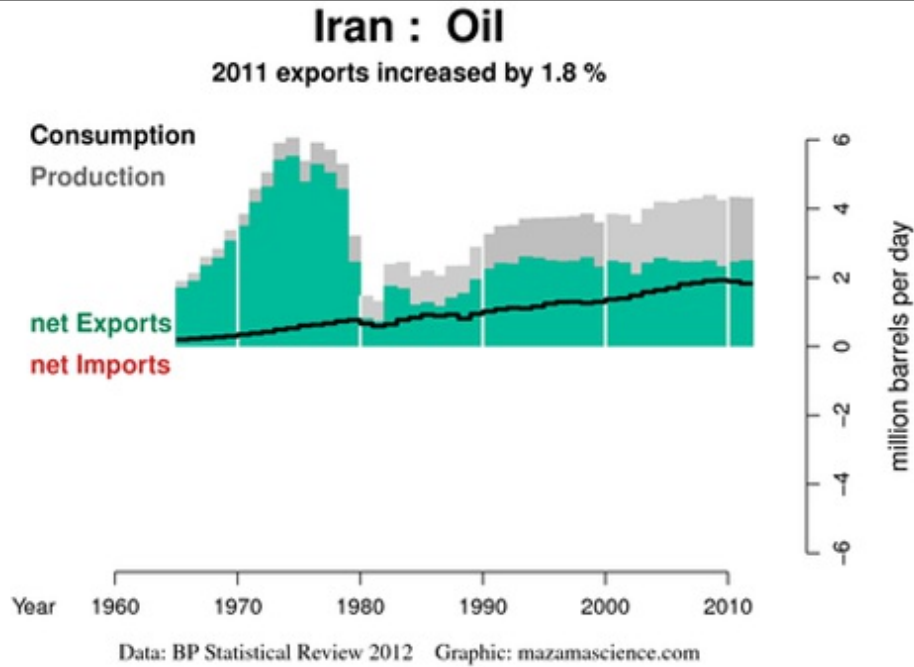


Figure 3. Iranian Oil statistics ([Energy Export Databrowser](#))

Euan Mearns illustrated the range of Iranian oil facilities in [his post last December](#) prior to the embargo.



Figure 4. Iranian oil and gas fields and infrastructure ([Euan Mearns at TOD](#))

Oil production in Iran has increased since the days in 2005, when it appeared for a while that the country had reached a point of declining oil production, and where natural gas injection was being debated as the possible answer. At that time, as the debate over Iran “going nuclear” was beginning to build, there was already a rationale for the [development of nuclear power](#) in the country.

Jump forward seven years and that debate is now at a much more intense level. The Israeli Prime Minister is [seriously concerned](#) over the development of nuclear weapons in Iran, as are other countries in the region, and around the world. The relative need for Iran to establish a nuclear-based electricity program, while used as a justification of the program by their government, has been largely neglected in the concern over the potential for weapons development.

Sharing the largest gas field in the world (the South Pars: North Field) with Qatar, Iran has a resource that is used at an increasing rate internally, with slight amounts imported in the remote northern part of the country, where it is easier to use gas from abroad than to lay the delivery lines in country.

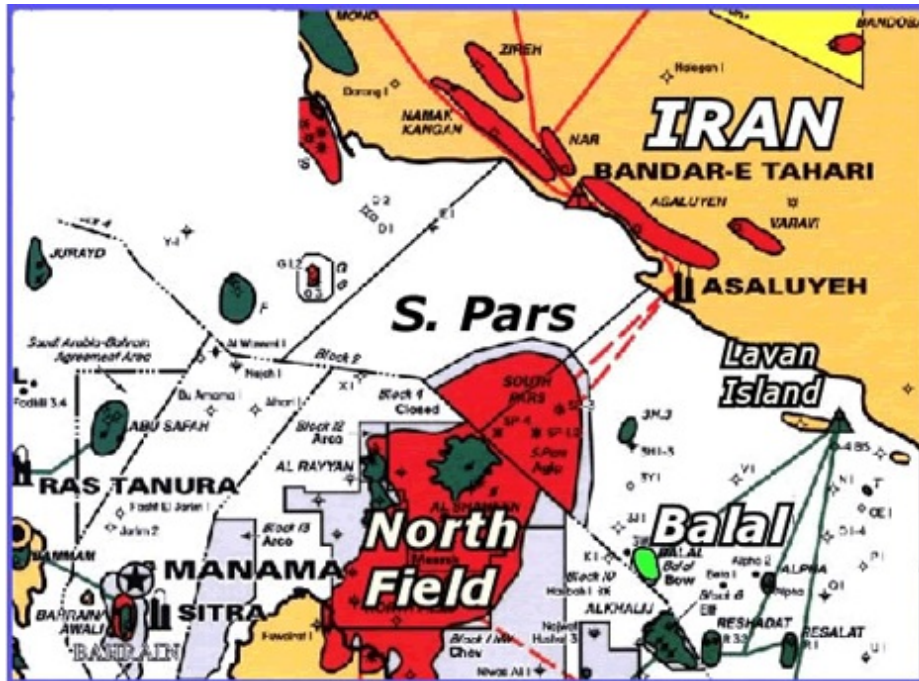


Figure 5. The South Pars: North Field Gas field shared by Iran and Qatar (Petroleum reports via [The Encyclopedia of Earth](#))

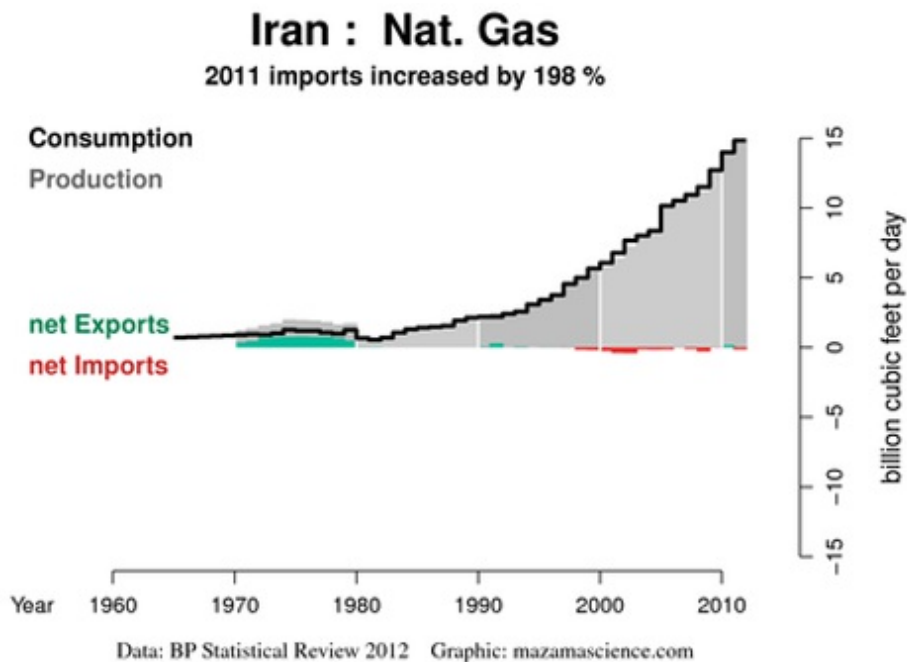


Figure 6. Iranian natural gas statistics ([Energy Export Databrowser](#))

And so, with the above as background, the next couple of posts will look at the Iranian situation in a little more detail.



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