

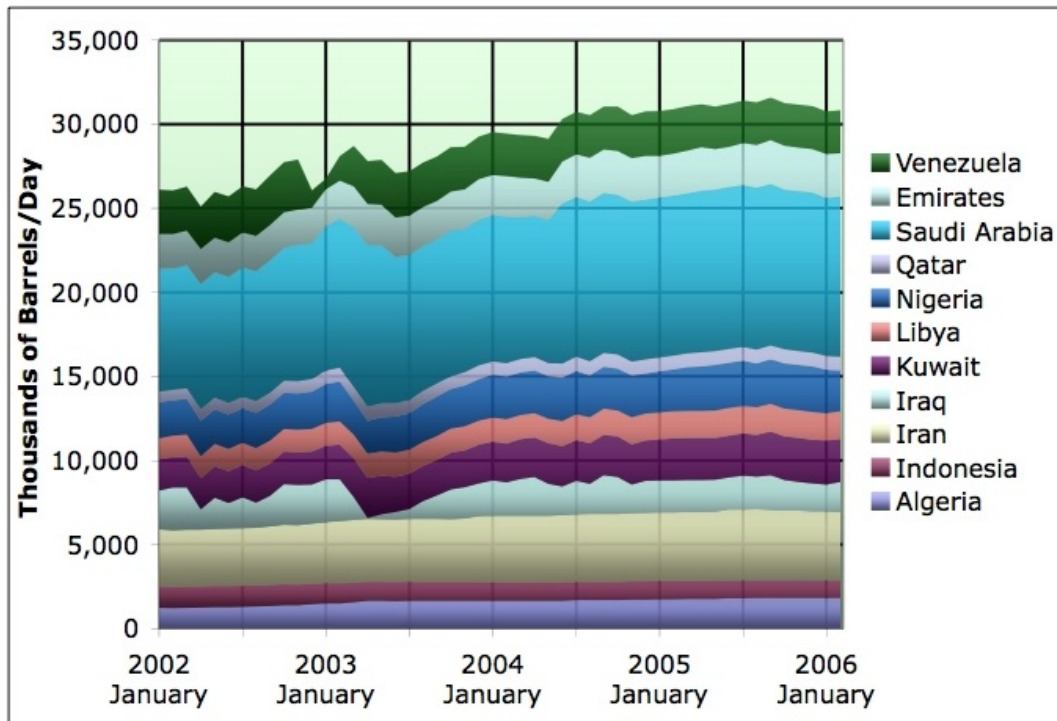


OPEC Declines and the World Plateau

Posted by [Stuart Staniford](#) on May 3, 2006 - 2:50am

Topic: [Supply/Production](#)

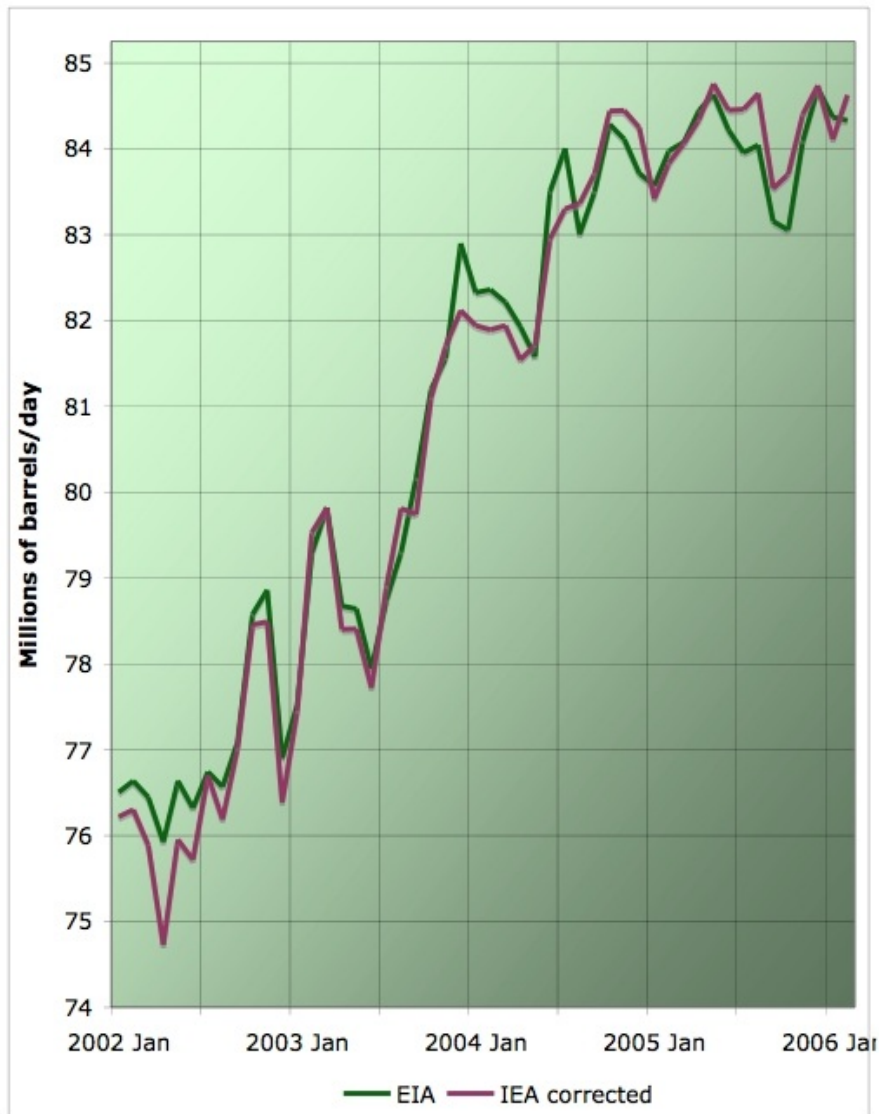
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Average daily oil production, by month, for OPEC countries (stacked). Click to enlarge. Runs from Jan 2002 to Feb 2006. Believed to be all liquids. Source: [EIA](#).

The EIA came out with the [latest International Petroleum Monthly](#) yesterday, which allows us to update the plateau graph, and triggered me into a little investigation of what's going on with OPEC production.

Firstly, the world situation:

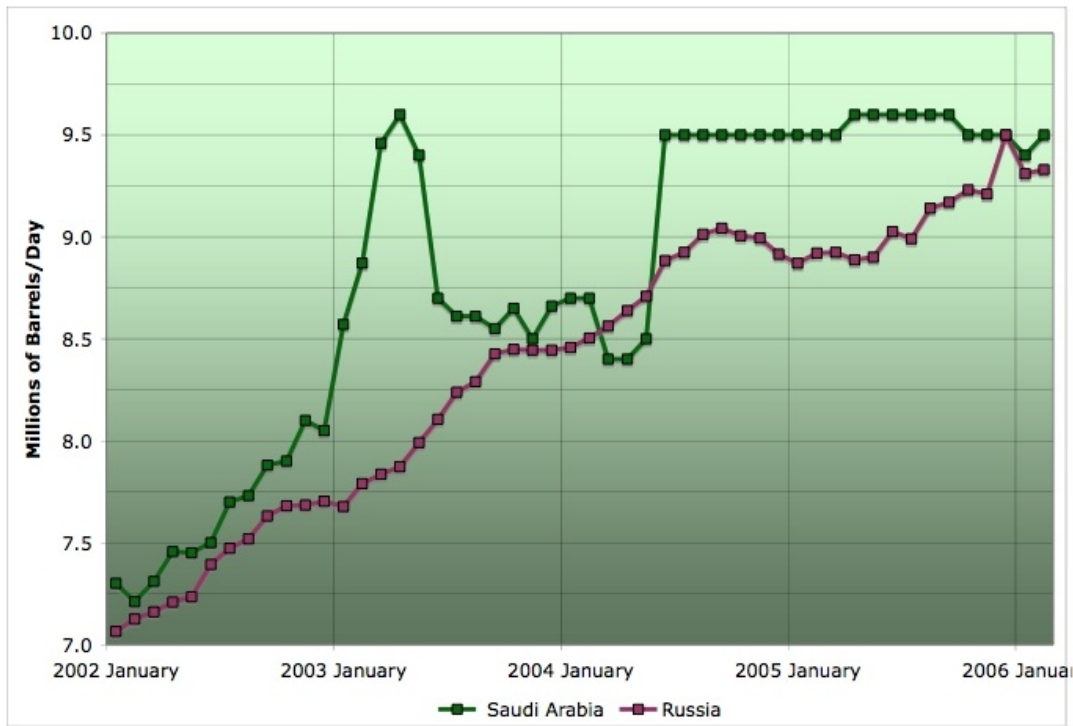


Average daily oil production, by month, from various estimates. Click to enlarge. Runs from Jan 2002 to Feb 2006. Believed to be all liquids. Graph is not zero-scaled. Source: [IEA](#), and [EIA](#). The IEA corrected line is calculated from the month-on-month production change quoted the following month.

As you can see, the EIA confirms the IEA's impression that February production is down from the all time peaks of May/December 2005, but still definitely within striking range. The EIA is slightly more negative than the IEA for this month, but the discrepancy between the two is not large by historical standards.

In short, the plateau continues for now, but there certainly is not compelling evidence that we have seen the all-time production peak month at present.

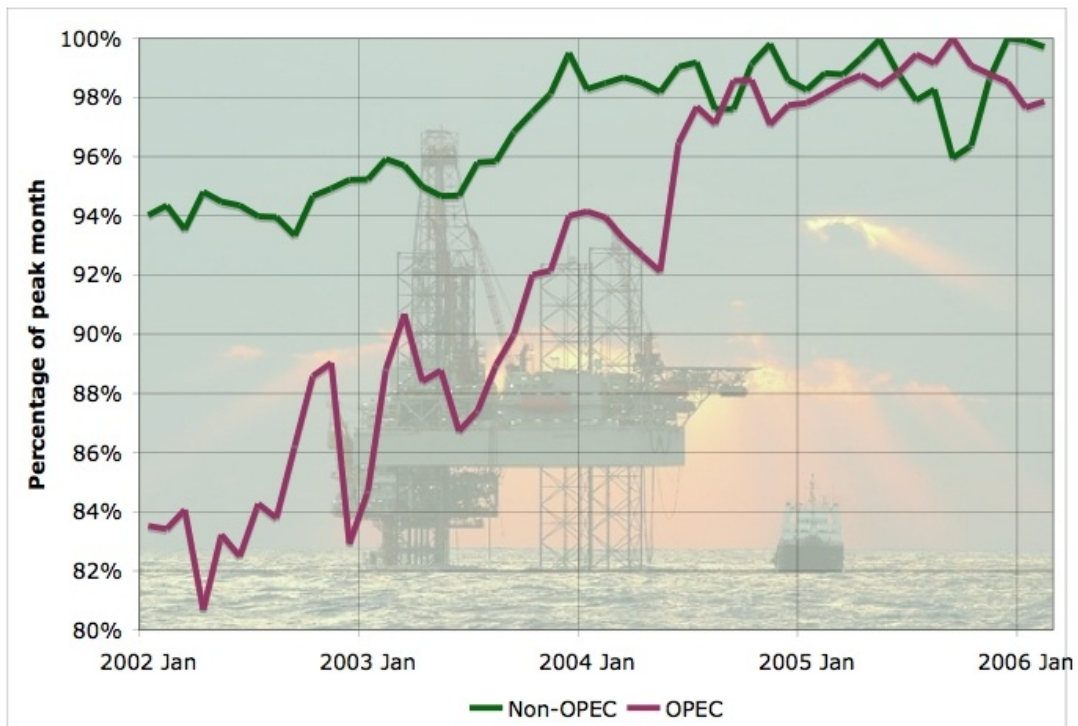
A quick update of the graph for the two most key players gives:



Average daily oil production, by month, for Russia and Saudi Arabia. Runs from Jan 2002 to Feb 2006. Click to enlarge. Believed to be all liquids. Graph is not zero-scaled. Source: [EIA](#).

As you can see, February saw Saudi Arabian production continuing in the plateau they've been in for over eighteen months now. More significantly, Russian production in February has not resumed the upward march of the last few years, following a weather related anomaly in January. Is this due to the continued effects of the cold winter in northern Eurasia, or [more than that](#)? Time will tell...

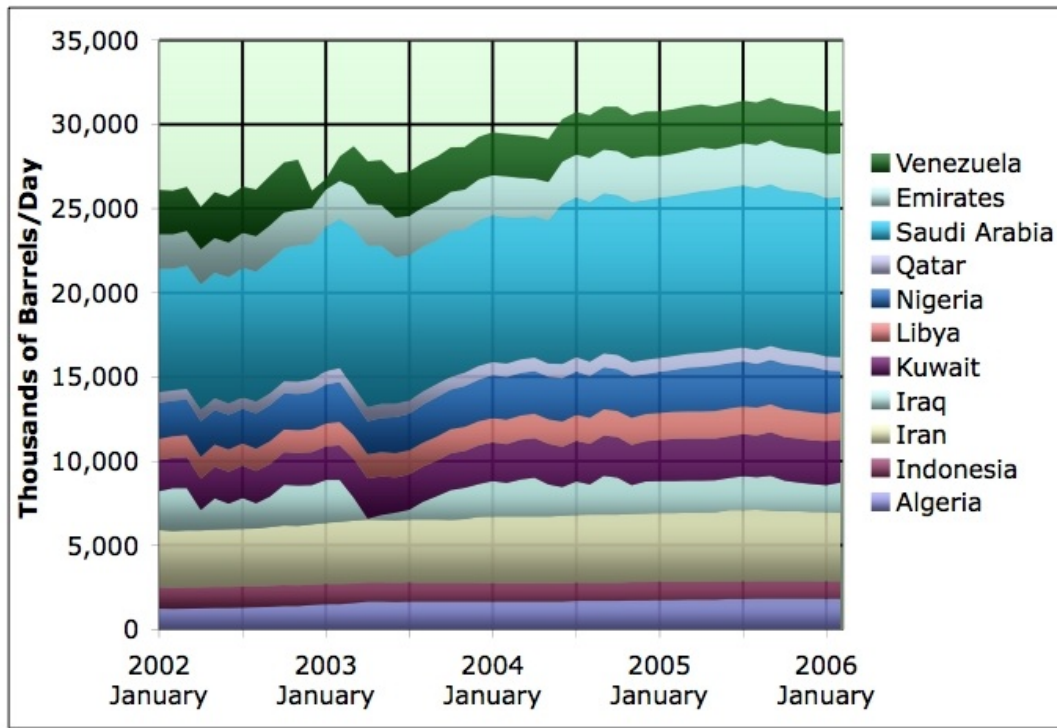
Moving onto my main theme, here's an update of the OPEC versus non-OPEC production. Each is expressed as a percentage of the peak month (September 2005 for OPEC, and December 2005 for non-OPEC).



Average daily oil production, by month, as a percentage of peak month, for OPEC and the rest of the world. Runs from Jan 2002 to Feb 2006. Click to enlarge. Believed to be all liquids. Graph is not zero-scaled. Source: [EIA](#).

Non-OPEC production has been in a bumpy plateau for two years now (being within 1/2% of peak production on four occasions: Dec 2003, Nov 2004, May 2005, and December 2005). However, OPEC production was increasing rapidly through the middle of 2004, then slowly through September of 2005. Since then, production has been declining. It's too early, I think, to call the decline a trend, rather than a typical chunk of noise in the production curve, but it's been going on long enough to start to make one scratch one's head and want to investigate further.

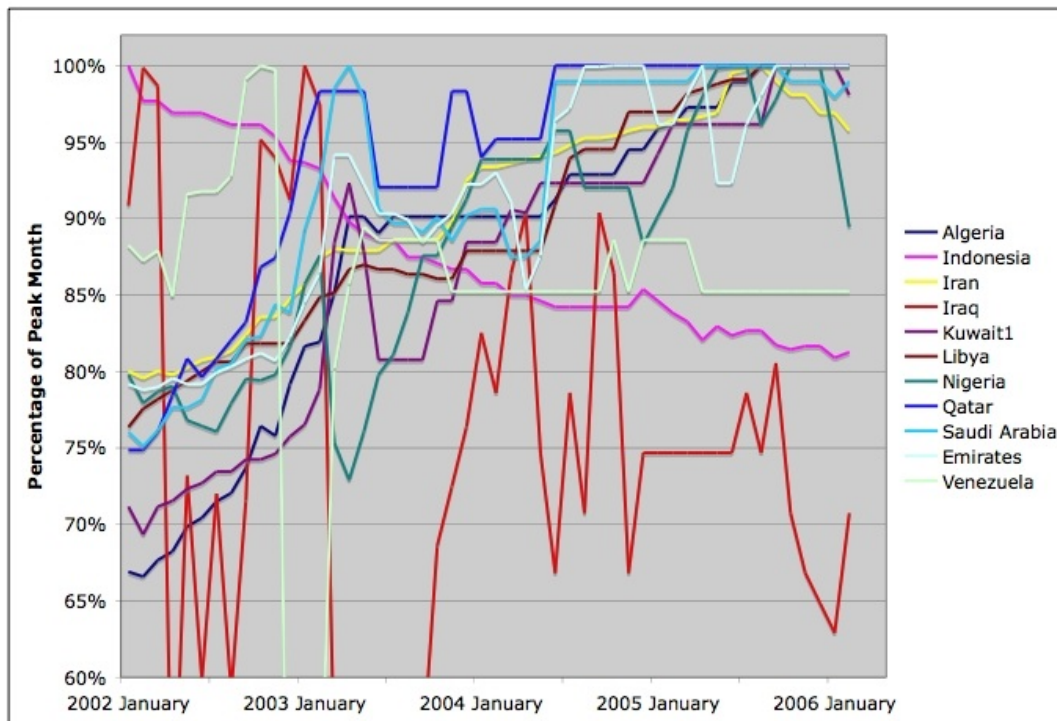
If we stack all the production profiles for the OPEC countries we get this:



Average daily oil production, by month, for OPEC countries (stacked). Runs from Jan 2002 to Feb 2006. Click to enlarge. Believed to be all liquids. Source: [EIA](#)

This graph makes it clear that most of the short term wiggles in the OPEC production total are caused by the gyrations of Iraqi production, but longer term trends are harder to discern here.

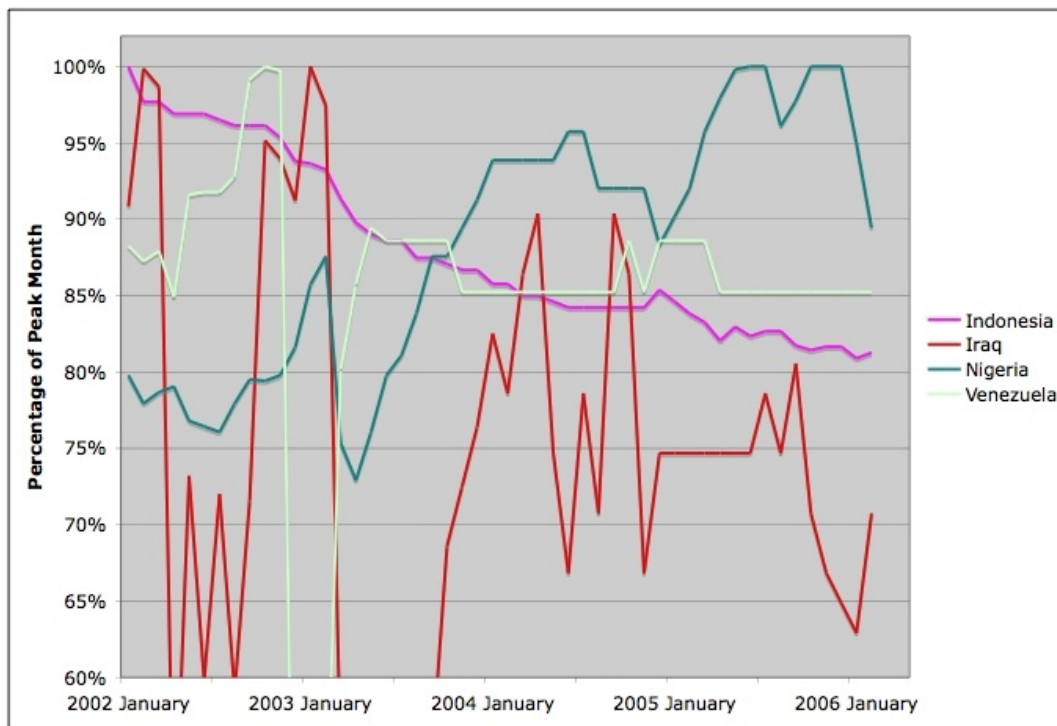
Instead, let's try plotting the curve of each country's production as a percentage of its peak month:



Average daily oil production, by month, for OPEC countries as a percentage of peak monthly production for

Ok, still rather tough to see what's going on in this curve-knitting soup. But it did inspire me to separate the OPEC countries into two groups. I'm calling them the *regular* OPEC producers, and the *irregular* OPEC producers. The regular ones have that name because their production profiles all follow an approximate common pattern. The irregular ones are so named because they all dance to their own individual pipers, unrelated to the common pattern.

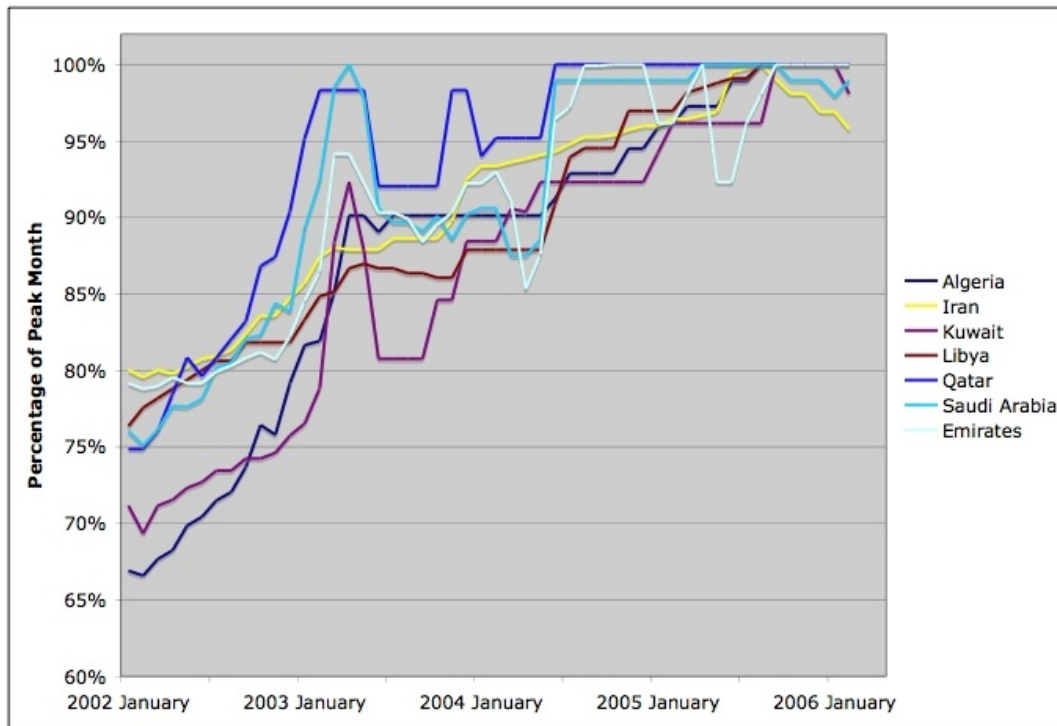
First the irregulars:



Average daily oil production, by month, for selected ("irregular") OPEC countries as a percentage of peak monthly production for each country (in the period of the graph). Runs from Jan 2002 to Feb 2006. Click to enlarge. Believed to be all liquids. Graph is not zero-scaled. Source: [EIA](#).

The case of Indonesia is pretty clear: they have peaked and are now declining at a very healthy rate of knots. The others are all cases in which production is noticeably affected by internal political factors of one kind and another. Iraq is the most severe, with production all over the place depending on the relative success of insurgents and coalition/government forces. Venezuela still hasn't restored production to pre-coup-attempt levels. Since there are huge reserves there, it is hard to view this as any kind of permanent peak, as opposed to a reflection of ongoing political developments. Nigeria was steadily increasing, but the political problems that have started to affect oil production in recent months seem quite severe (see [Dave's nice summary](#)) and it's not at all clear that they are transitory, so I have placed it into the irregular group also.

The rest of the OPEC countries (the regular ones) have these production profiles:



Average daily oil production, by month, for selected ("regular") OPEC countries as a percentage of peak monthly production for each country (in the period of the graph). Runs from Jan 2002 to Feb 2006. Click to enlarge. Believed to be all liquids. Graph is not zero-scaled. Source: [EIA](#).

As you can see, these countries have the common pattern of steadily increasing production in the early years of our period of interest, followed by each hitting their individual plateau production. The date of that plateau varies from mid 2004 to mid 2005, but what is significant is that **no OPEC country has increased production after September 2005!** That's the latest that any of these countries hit their individual production plateaus. And a few of them have declined a bit (Iran looks most noticeable in this respect, though whether this is an additional form of sabre-rattling or due to purely technical factors is unclear).

And that's a key part of the story about why OPEC production has been declining for the last six months. No OPEC country has been both willing and able to increase production to offset disruptions in Iraq and Nigeria.

So which is it: *willing?* Or *able?*

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- [Cigar Now?](#)
- [Missing Barrels](#)
- [Close, but no cigar](#)
- [November Statistics Updates](#)
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- [November IEA global production](#)
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