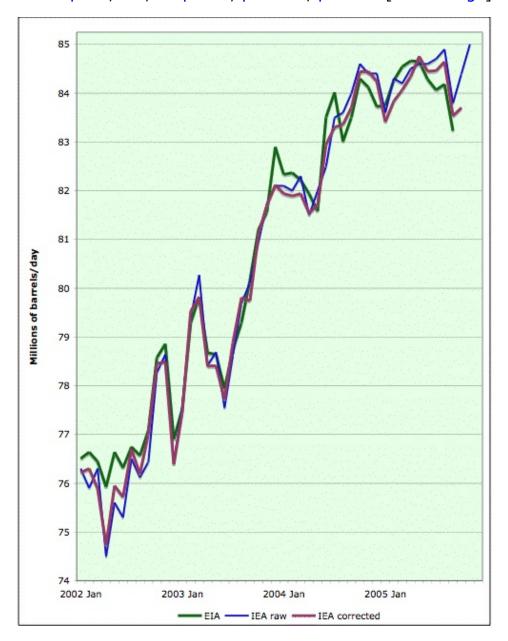


November IEA global production

Posted by Stuart Staniford on December 22, 2005 - 1:21pm

Topic: Supply/Production

Tags: eia, hubbert peak, iea, oil prices, peak oil, plateau [list all tags]



Average monthly oil production from various estimates. Click to enlarge. Believed to be all liquids. Graph is not zero-scaled. Source: IEA, and EIA. The IEA raw line is what they initially state each month. The IEA corrected line is calculated from the month-on-month production change quoted the following month.

There's about five posts I want to write tonight, and only time to do one of them. I picked an analysis arising from the <u>debate with Freddy Hutter</u> today about my <u>Thanksgiving day graph</u> of Oil and Gas Journal monthly production.

The graph above shows three estimates of average monthly global production since the beginning of 2002 (ie the doldrums after the tech crash in the world economy). The dark green line is the EIA estimate, which only goes through September 2005. The thin blue line is what the IEA says about monthly production in each of their monthly reports (which typically come about 10 days after the end of the month). However, the following month, they report a change from the prior month which generally implies a significant recalculation of the prior month (occasionally they explicitly acknowledge it, but not usually). Anyway, that recalculated line is the plum colored one, and is presumably their more reliable estimate.

The EIA says "Oil Supply includes crude oil, natural gas plant liquids, other liquids, and refinery processing gain." They also mention that the US number includes ethanol added to gasoline. I couldn't find a description of exactly what the IEA includes.

As Freddy notes, the November estimate is the IEA's highest ever raw estimate. Lately, they have tended to revise downwards, so perhaps this one will go down too. However, I caution that over the whole period shown, the average IEA revision is -54kbd, which is 1.35 standard deviations below zero (not statistically significant), so one has to argue that they tended to revise up in 2002, and revise down in 2004-2005. The IEA number is on average 125kbpd below the EIA, but with a standard deviation of 500kbd, and a standard error of 74kbpd. Thus the average difference between the two agencies is only 1.7 standard errors from zero and is not statistically significant either (over this time period).

Overall, it still looks to me like there was a structural break last summer. Whether we are very close to peak, or we will crawl up some more is hard to tell, but the sharp increases of 2002-2004 definitely seemed to stop in the middle of last year. Given my best current understanding of decline rates in current production, and the fact that OPEC is threatening to cut output, it's hard for me to see massive increases in the near term. At least now I've done the hard work of extracting the IEA data and can easily include future months in this graph. We await the December report with eager interest...

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