



Oil Depletion versus supply

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I am not quite sure why it is that some of us trying to model the oil situation keep coming back to alcoholic analogies, but courtesy of [The Energy Bulletin](#) is today's statement from ODAC on Depletion. They model oil depletion on drinking your favorite beer at a pub.

The attention grabbing paragraph at the beginning is this one:

Currently, world oil depletion is running at 4-6 percent, according to ExxonMobil. Taking 5 percent of 2004 production of 82.5 million barrels per day (mn b/d) gives a depletion rate of 4.1mn b/d per year. This sounds huge but is in fact correct.

It accords with a presentation given by Klaus Rehaag of the International Energy Agency (IEA) in Rio last year. Another way of looking at it is that 70 percent of global production is already in decline and is declining at 7 percent per year. Simple maths: $70\% \times 82.5 \times 0.07 = 4.04\text{mn b/d}$ "close enough."

They go on to explain why this has, in the past, been offset by changes in production, but also conclude, with a quote from Chris Skrebowski at the end of the article

My personal view is that the constant upward revision of demand estimates from official agencies such as the IEA (whose estimates in 2004 more than doubled over the course of the year) is probably the result of their failing to recognise depletion properly, rather than for any other reason.

So, for example, the actual 2.7mn b/d of 'demand growth' in 2004 was in fact made up of 1mn b/d just to offset Type 3 depletion plus a further 1.7mn b/d to meet genuine new demand "high but not exceptional. In other words, the IEA's early estimates of demand growth at 1.2mn and 1.4 mn b/d at the start of last year, though low, were in the right ballpark, but they must not have taken into account Type 3 depletion.

The first estimates of demand growth for 2005 were 1.4 mn b/d. Now, the latest EIA estimate has risen to 2.2mn b/d, and the latest IEA estimate is 1.8mn b/d. But do these figures include Type 3 depletion? If not, we could see real demand (new needs + depletion) outstripping available supplies this year.

If one looks at this as an overall global production and demand balance, it is increasingly hard to see where the additional supply will come from to match the declines in production at all levels, not to mention the increases in demand that are still forecast to occur.

Technorati Tags: [peak oil](#), [oil](#)



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