

EIA: If This Is Peak Oil, Then I'm Not Sure What The Problem Is

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Topic: Supply/Production

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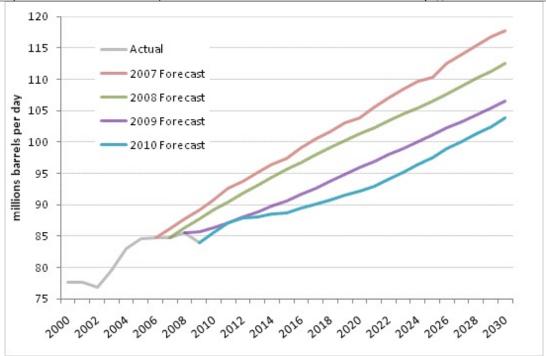
This is a guest post by Michael Levi who is a Senior Fellow for Energy and the Environment at the Council on Foreign Relations. It is a critique of Steven Kopitz of Douglas Westwood his recent guest post at The Oil Drum, which was about the crude oil production scenario's in the US Department of Energy's International Energy Outlook 2010.

Steven Kopits claims that the new EIA oil supply projections are a "Hard Core Peak Oil Forecast". His argument is that the EIA has been steadily reducing its oil supply projections for 2020 over its last four annual projections, and that this is a sign that EIA has "placed its fortunes firmly with the peak oil crowd". I think he's wrong. In any case, if this is what counts as peak oil, then I'm not sure why anyone is so excited about it.

This is a guest post by Michael Levi who is a Senior Fellow for Energy and the Environment at the Council on Foreign Relations. It is a critique of Steven Kopits of Douglas Westwood's recent guest post. The version of the guest post Michael Levi is commenting on was published on Econobrowser under the title EIA: Hard Core Peak Oil Forecast. It was published earlier this week at The Oil Drum, under the title EIA: From Forecast of Oil Supply Abundance to Decade of Stagnation. The post was about the crude oil production scenarios in the US Department of Energy's International Energy Outlook 2010.

Steven Kopits claims [in the Econobrowser version] that the new EIA oil supply projections are a "Hard Core Peak Oil Forecast". His argument is that the EIA has been steadily reducing its oil supply projections for 2020 over its last four annual projections, and that this is a sign that EIA has "placed its fortunes firmly with the peak oil crowd". I think he's wrong. In any case, if this is what counts as peak oil, then I'm not sure why anyone is so excited about it.

Here's the graph that attempts to make the case:



EIA Forecasts of World Petroleum Liquids Production to 2030, Source: EIA IEO -2007-2010

Sure enough, EIA has been steadily reducing its projections for 2020, from 104 million barrels per day (mb/d) in its 2007 projection to 92 mb/d in its most recent projections (released last month).

But why have the projections gone down? It's possible to more than explain the whole difference through revised expectations for economic growth. The decreased projections for oil supply have almost nothing to do with changed beliefs about the prospects for oil supply development. They are pretty much entirely explained by external factors.

The 2007 projections pegged total world GDP in 2020 at 107.1 trillion (2000) dollars, which is equivalent (XLS file) to about 118 trillion (2005) dollars. (I've used a "world" GDP deflator, rather than a U.S. one, to convert from 2000 to 2005; switching measures doesn't make a big difference.) The 2010 EIA projections expect GDP in 2020 to be 97.5 trillion (2005) dollars, for a 17% reduction in expected GDP. Contrast that with a 13% reduction in expected oil production. If the GDP-elasticity of oil demand were 0.64, the reduced GDP expectations would fully explain the lower oil production estimates. As is stands, long-run income-elasticity of oil demand is almost certainly higher than that, so revised GDP estimates more than explain the lower supply projections. Indeed the interesting puzzle may be why oil supply is so high in the new estimate, rather than why it is so low.

The only way out for someone who wants to blame the lower supply projections on peak oil is to argue that the lower GDP projections are themselves a consequence of peak oil. The argument would say that the lower GDP projections are the result of the current recession (true), that the current recession was the result of high oil prices (possible [PDF] but debatable [PDF]), and that the high oil prices of 2002-2008 were the result of peak oil (who the heck knows). But that is not the case that the EIA is making: It projects oil prices to rise to about \$110/bbl in 2020, and to over \$180/bbl [PDF] in its "high oil price case", but in neither case does it project a recession. Indeed the impact of the high oil price case on economic growth is tiny.

The Oil Drum | EIA: If This Is Peak Oil, Then Iâ€□m Not Sure What The Problemttp://www.theoildrum.com/node/6584 forecasts), then I'm not sure what anyone's so worried about. Are people really claiming that \$110/bbl oil will be catastrophic?

The EIA may be wrong about how well economies can withstand sustained high oil prices and about how much oil the world can produce at a given price if called on. But it is clearly not in the peak oil camp.

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