



## Peak Oil, IHS Data and The Broken Clock

Posted by <u>nate hagens</u> on February 17, 2008 - 9:01am Topic: <u>Supply/Production</u> Tags: <u>cera</u>, <u>daniel yergin</u>, <u>ihs energy</u>, <u>production</u>, <u>supply</u> [<u>list all tags</u>]

We have been writing for almost 3 years on this site about the privatization of energy data by IHS Energy and the <u>negative impact</u> the lack of accuracy that CERA's historically <u>optimistic claims</u> are having on energy policy. The rebuttals and <u>counteranalysis</u> at TOD to CERAs assertions are too numerous to list. Today at the IHS Energy Conference in Houston, the CEO of IHS Energy, parent of CERA and other energy information agencies, asserted that *Peak Oilers don't have the data* to support their claims. This post is a brief rebuttal to this 'news' coming out of Houston, and a plea to refocus the questions to what is relevant and probable, not on what is irrelevant and unlikely.



Source - various - detailed here by <u>G. Morton</u>(Click to enlarge)

Well right off the bat I should point out, with a track record like the one above, I'm not sure we *want* the data that IHS refers to<sup>\*\*</sup>, but here are some excerpts from the Bloomberg story this afternoon. I should also state that it's not CERA's fault that the traditional media still seems to fawn over their every assurance.

`Peak Oil' Backers Don't Have Data to Support Claims, IHS Says

By Edward Klump

The Oil Drum | Peak Oil, IHS Data and The Broken Clock

Feb. 13 (Bloomberg) -- IHS Inc., owner of Cambridge Energy Research Associates, said those who espouse the theory that the world's oil production has already peaked lack evidence to support their claims. "The only thing that's relevant is our data," Jerre Stead, chief executive officer at Englewood, Colorado-based IHS, said today in an interview in Houston. Believers in the so-called Peal Oil theory "don't have our data".

Stead made his comments at an industry conference hosted by Cambridge Energy Research Associates, which is headed by Daniel Yergin, the energy researcher whose Pulitzer Prize-winning book was touted as a bible of the petroleum industry. Yergin has said supposed oil shortages historically have eased as breakthroughs unlock new sources of crude.

U.S. oil futures jumped 57 percent last year on the way to topping \$100 a barrel for the first time in January. Peak Oil supporters include billionaire hedge-fund manager Boone Pickens and Houston investment banker Matthew Simmons. Stead said some supporters of Peak Oil are interested in being consultants. **IHS is standing by the facts**, he said. "The Peak Oil discussion is useful in terms of trying to enlighten or shine a light on the discussion about where are the reserves today and what's the production capacity from them", Ron Mobed, IHS's co-president, said today in an interview.

`Above-Ground Issues'

He said political concerns in places such as Nigeria present larger problems than getting oil out of the ground. "The production capacity compared to actual production is moderated much more today by what we call above-ground issues than below-ground issues", Mobed said.

Cambridge Energy Research Associates last month said worldwide oil production from established fields was declining at a slower rate than estimated by Peak Oil proponents. Global production capacity for crude oil and condensate could climb from 91 million barrels a day in 2007 to as much as 112 million barrels a day by 2017, when demand will be 101 million barrels, the firm said.

As a former (and current) stock trader, this all strikes me as a stubborn adherence to a fundamental theme, while the technical signals are pointing to the fact that there are some new underlying drivers to the market dynamics that the old school analysts haven't figured out yet. I long ago gave up relying solely on fundamental analysis and now combine it with the 'trend is our friend'. The relevant trend in question is the 800%+ increase in oil prices over the past 8 years. Something fundamental has changed in this period in the relationship between oil supply to oil demand-perhaps we don't know precisely what is it is yet, but we do have some clues.

Our own government data, in an <u>EIA</u> release earlier this week, announced downward revisions in Crude + Condensate oil production for November 2007, confirming (for now) that 2005 is still the standing peak for oil production. World production through the first 11 months of 2007 averaged 73,223,000 bpd which is 594,000 bpd below the average for 2005. November 2007 production is still 582,000 bp/d below the record month of May 2005.

I do not know if this date will remain the peak for all time (because I am not privy to the IHS database, of course), but since the record of the analysts writing here at theoildrum has been quite accurate for the last couple years, I would put the odds considerably higher than zero that 2005-6 was the peak for conventional crude oil. Of course, it's quite possible we may continue to expand the definition of <u>what is "oil"</u> to include algal biodiesel, used french fry drippings, oil

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extracted from garbage dumps, etc. adding on to the already inclusive crude, condensate, ethanol, NGPL, coal-to-liquids, processed tar sand bitumen, etc. In any case, what is more important than the date of oils maximum production, is that neither the numbers by CERA, nor most data from the EIA show how much this oil costs to extract - the tone of the interview and comments is such that 112 million barrels in 2017 will still mean society can grow, function, etc. without diverting all its resources and natural capital to the endeavor. Though this graphic from the EIA (from the EIA report *"Performance Profile of Major Energy Producers"*), shows that finding and production costs, at least as of 2006, were increasing much faster than the price of oil. In short, what really matters is how much per barrel a globally interconnected complex society can afford.

Here is the actual (public/ free) data from EIA graphically represented:



Chart by Matt Mushalik using EIA data showing incremental world oil production since 2001 (thanks Gail)



*Chart by Matt Mushalik using EIA data showing incremental OPEC oil production since 2001 (thanks Gail)* 

The above graphs take the minimum monthly production for each country for the period 2001-November 2007 and subtracts this minimum from each monthly production to arrive at an incremental production relative to the minimum. For example, for the United States, the incremental oil production is the area in dark red in the top graph. The advantage of this approach it gives a clearer view of how production has been changing recently. -Note recent peak is well below prior 2005 peak for OPEC.

## A Broken Clock is Right Twice a Day

"One shouldn't be investing with the mindset that oil's going to be \$100 forever...A recession could change that pretty quickly"

This same logic may have precluded nations, regions and individuals from investing in long duration energy assets 2,3..6 years ago when energy was still cheap - that's one of the biggest losses in all of this - the energy costs of lost opportunities. Regarding Mr. Yergin's recession comment, the one event that may finally make one of his price forecasts come true is a recession or depression in OECD nations, which will reduce demand and the ability to pay for oil, especially considering the leveraged - aka supercharged in both directions - nature of our monetary/financial system. While at that point the broken clock may appear to again be working, the disincentives to invest, potential lack of financing available to new energy projects, (both oil and alternative), and a retracement in revenues while costs remain high, brought about by the

lower oil prices may cement 2005 as the global peak. In other words, be careful in wishing to be right.

# Here are some questions I respectfully offer to IHS Energy and CERA:

IHS Energy and CERA and their other subsidiaries are undoubtedly experts on the worlds oil fields. But does field by field analysis of production capacity give us the answers that we need in todays complex and rapidly changing world? Here are some of the issues, from a birds eye view, that I believe the answers to which are very important:

1) At each tranche of predicted future oil production, how much will it cost to obtain those barrels? Please respond in:

\*a) dollar units (2008 inflation adjusted)

\*b) energy terms (dollars being limited by political will and paper but energy being finite and requiring energy to procure)

\*c) environmental terms (the planet being a place we not only procure energy from but also need to live on)

2) What is the shortfall risk if your data continues to give erroneous predictions of oil price and supply, as it has generally done, at least via your CERA subsidiary so far this century? Is the risk losing clients and money, or is the risk something greater?

3) If below ground factors have informed us we have plenty of spare capacity, but we have plateaued for 2.5 years already in an environment of rapidly rising prices, at what point do you start to hire analysts who are experts on 'above ground factors'? (Said differently, do the rules that governed the first half of oil supply apply equally to the era we have now entered?)

4) What does the oil field data suggest the impact of a recession and credit contraction have on the future of supply? (e.g. since oil is priced at the marginal unit, some of the more expensive oil may not profitably come to market. Also, some marginal production players may have higher financing costs or find credit unavailable, thus highlighting a key difference between production capacity and actual production.) What impact will OECD's 'borrowing from the future' via 40 years in a row of debt increasing more than GDP have on the future affordability of oil (and everything else) and thus your forecasts?

5) How should society best invest its remaining high quality energy stocks so future generations, including many living today, have reliable flows of energy?

6) To best serve your clients interests (which would then trickle down to energy policy), would you be willing to add interdisciplinary systems analysts to your mensa research staff, and look deeper at the interplay of the many different variables impacting oil availability, beyond just productive capacity?

## Here are some questions for long time theoildrum readers:

1) How can analysis and facts trump sound-bites and rhetoric about the urgency of the planetary energy and resource situation, before events themselves precipitate response?

2) Should there be something similar to Sarbanes-Oxley with respect to energy analysis companies charging fees? What is the shortfall if IHS/CERA are wrong, or wrong by an order of magnitude (e.g. peak is now as opposed to in 30 years+)?

3) If IHS forecasts for 100 mbpd+ somehow are correct, how can society shift from using this energy bounty on short term novelty that has become conspicuous consumption to something more meaningful?

4) How do we get the traditional media, like Bloomberg and CNN, to start asking questions and writing more like scientists?

\*\*Note regarding data: In all seriousness, the group of people I interact with at TOD are some smart cookies, and volunteer their time to work on thorny issues related to society's energy future because there has been little market incentive for others to do so- so any credible data sent our way is welcomed - especially the expensive kind). (A few of the TOD crew are currently working on an independent TOD megaprojects analysis).

It would be among my top wishes that the smart folks at IHS/CERA are correct in their oil production and price forecasts. I will gladly eat crow in exchange for a more stable progressive world that has more time to turn an energy crisis into an energy transition.

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