



## What Does an Undulating Plateau Really Mean?

Posted by [Glenn](#) on November 18, 2006 - 12:56pm in [The Oil Drum: Local](#)

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Dave did a great job on our [editorial consensus statement](#) as our official reaction to the Cambridge Energy Research Associates [strange press release](#) but here are some of my thoughts on CERA's work and how dangerous it is to have out there. My favorite excerpt is this line which claims that peak oil theory is wrong because it won't happen for another 25 years.

The new report describes CERA's liquids supply outlook as "not a view of endless abundance." However, based on a range of potential scenarios and field-by-field analysis, CERA finds that not only will world oil production not peak before 2030, but that the idea of a peak is itself "a dramatic but highly questionable image."

That's like saying you don't believe in Santa Claus because it's not midnight yet.

Well, let me just say that I agree with Representative Udall (D-NM), who together with Rep. Bartlett (R-MD) forms the bipartisan [Congressional Peak Oil Caucus](#), when he says:

CERA's report is one of the most optimistic predictions for the peak in global oil production to date, and it still underscores the need to address this problem immediately. Whether it is Peak Oil, global warming, or the fact that some of the money we send overseas to support our oil addiction comes back to us in the form of terrorism, **the U.S. cannot wait any longer to develop sensible and sustainable alternatives to oil.**

That's right, even if you agree with CERA's wildly optimistic assumptions, you have to admit that we are in a bit of trouble with oil. Based on everything I've read here on the subject, I do think we are headed for a production plateau of a few years followed by a slow decline in total production. But what makes CERA's prediction incredibly scary is the fact that global supply will not be able to meet increased demand would like to continue to increase at 1-3% per year to feed the voracious Asian consumers and the continued suburbanization of America.

What CERA most gets wrong IMHO, is their obsession with oil reserves versus production rates. You can't run an industrial economy on reserves - you need to pull it out of the ground first. They treat reserves like a bank account that can be cashed out based on the economics of demand. But there are two problems with this concept.

First, there are geologic limits to how fast oil will rise out of the ground. While there are many advances in the technology to hasten this process (water, CO<sub>2</sub>, etc), it is not clear whether this is sustainable over the long term or merely "sucking harder on the straw" to get what is available to produce out quicker. Once pressure in an oil field declines, it is nearly impossible to increase production as we have seen across the US and most of the other mature oil areas with high technology.

Second, all that work to pull the last half of recoverable oil out of the ground without using the natural pressure takes a lot of energy which you have to subtract from the gross oil production to get the true net oil production. Just looking at the gross production level ignores the fact that an increasing amount of energy will have to go right back into primary energy production. This is even more true of the unconventional tar sands.

This sets up what will eventually become the real issue to concern the USA and other oil importing nations: **The oil export market will be squeezed tighter every year.**

Given the local political constraints of export nations, even if there is a global "plateau", oil will first meet domestic needs and then the excess will be sold as exports. World market prices will continue to rise for the export market in that scenario.

Which means that not only will future increased demand to be destroyed by higher prices, but a growing percentage of what is imported. Given how oil prices have effectively tripled within a few years with little change in our consumption, **it is unclear what price levels would effectively destroy that much demand in the US.**

The alternative is to outbid the other importers and send even more of our financial resources over to the unstable or unfriendly export nations (not you Norway). Either way, the plateau for just a few years means crippling the US economy with much higher prices.

To return to Udall quote above "Whether it is Peak Oil, global warming, or the fact that some of the money we send overseas to support our oil addiction comes back to us in the form of terrorism, the U.S. cannot wait any longer to develop sensible and sustainable alternatives to oil."

In fact, the best way right now for the US to tame oil prices and limit our future exposure to extortionate oil prices, is to start a crash mitigation plan now. Perhaps the Peak Oil Caucus could formally introduce Alan's ["Electrification of Rail" proposal](#).

For New York, it's time to get serious about extending the reach of electrified mass transit deep into the outerboroughs and suburbs, building more transit oriented developments around transit hubs, congestion pricing, building a real biking infrastructure and reducing our reliance on automobiles as quickly as possible.



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