



Prepping for Peak: How Fast Can We Change?

Posted by [Robert Rapier](#) on October 15, 2007 - 10:00am

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Reading the Tea Leaves

Whether Peak Oil is on top of us now, or we have a few more years before the downturn, I think it is a problem that we will soon face. I believe that those born in the 1990's and beyond - like my kids - will grow up in a world of declining energy resources. And because like most parents I am deeply concerned about my children's futures, I am deeply concerned about the ramifications of Peak Oil.

We know the horror stories: Billions dead as oil depletes. Chaos. The aftermath of [Hurricane Katrina](#) played out on a worldwide scale. Many rational people are anticipating this scenario. (In case you are completely unfamiliar with the massive die-off arguments, spend some time at [Die Off](#) or [Life after the Oil Crash](#)).

Even though I understand the reasoning, my mind just won't accept a scenario in which billions die. And I would add that I think some people toss those scenarios around pretty casually, without really reflecting on the horror of what it would mean if a billion plus people died of starvation. Look at your family, imagine them starving, and then imagine this playing out on a horrific scale. That is the reality of a billion-plus population reduction; a reality that I honestly don't believe our brains are equipped to handle.

Not a day goes by that I am not thinking about how this is all going to play out. A lot of variables are going to come into play. How much time do we have? Will our political leaders ever pass energy legislation that truly helps to mitigate falling production? Will production plateau for a few years and then decline, or will it peak sharply and decline at 5% or more each year? Will we see a totally unanticipated technology breakthrough? But for me, I think the most important question is: How fast can we change?

Powering Down

I drive a car that gets 50 mpg, and I don't drive it that many miles a year. My family will tell you that I keep the house too hot in the summer and too cold in the winter. In fact, I almost always wear a jacket in the house during the winter. I am obsessive over our programmable thermostat; I don't want energy wasted when nobody is home. My direct fossil fuel usage is maybe 25% of the average usage for the U.S., and well less than the average for the U.K. (Indirect usage - like fossil fuels to produce the food I eat - is much harder to estimate, but one way I minimize this is by minimizing the meat in my diet).

I don't behave like this because I am cheap. (Don't ask my wife about that). I try to minimize my fossil fuel usage because 1). I want to be prepared to make do with less in the near future; 2). I

want to know just how low I can reasonably go if things get really bad; 3). I am aware of the negative environmental externalities of using fossil fuels; and 4). I want to set a good example. But if the stakes were high, could I cut my direct fossil fuel usage even more than I already have? Yes, I think I could still cut it in half. I have given a lot of thought to what I would do if the gas stations were out of fuel tomorrow. It wouldn't be a fun exercise. But I don't think it would be immediately life-threatening either.

So, if I have identified areas that I can still cut if I have to - and conservation is already very important to me - then I imagine the average person has **a lot** of consumption that they can cut. Those long commutes? If you had to cut your gasoline usage in half, you would search hard for a car pool or public transportation. In the longer term you would get the most fuel efficient car you could get. You would start cutting out unnecessary trips. At home, you would start to adjust your thermostat and be more aware of lights and TVs that are habitually left on.

Don't get me wrong. I don't expect this to be a picnic. I don't expect technology to save us, but I also don't expect this to be the end of civilization. On the other hand, I don't completely discount the worst-case scenarios. I do allow for the possibility. But I think what we are likely to see is that people will start to [Power Down](#) when supplies start to shrink and fossil fuels become much more expensive. The best possible situation in my opinion is for [Peak Lite](#) to play out for several years before true peak. This will provide for a less rapid loss of available supplies, and would give us a better chance at managing a Power Down.

Conclusion: Planning for the Worst

My personal plans do involve preparing for the possibility that I could be wrong. You don't prepare for a disaster only if you know there is going to be a disaster. You try to plan for worst case scenarios that have a reasonable probability of occurring. (I have no plan for a Texas-sized asteroid impact). So this is what I have attempted to do.

I have no debt. My savings are protected against both energy inflation and a collapsing dollar. The value of my profession should increase as energy supplies become tighter. My family has a fair amount of farmland, and I also have my eye on farmland in several locations that I think would fare well if things go sour. I have a decent amount of food in storage. But I am hopeful that I never have to put my plans into action. If we can change fast enough, I don't think I will have to.

Governments could play a huge role here by getting serious about a long-term energy strategy. But on this point, I don't hold out much hope as it would require that the public is asked to sacrifice - usually not something that will make you popular when running for reelection. It would also require that the rosy scenarios painted by the EIA are discounted for more conservative assumptions about future supplies. I think our next best hope is for Peak Oil to soon be widely recognized as a serious threat, and then we have a plateau or slow decline so that governments have some time to get their acts together. But I think this is going to require a few more price spikes (\$100 oil?) before Peak Oil becomes conventional wisdom.

Note

I [posted this essay first on my blog](#), and several commented that it was uncharacteristically dark for me. It certainly wasn't intended to be. Rather, I am trying to share the constant internal debate that I go through regarding Peak Oil. Where I am at is that I am optimistic, because we do have great capacity for change. On the other hand, I am an optimist by nature, and I recognize this. So I am able to step into the role of pessimist and take the worst-case scenarios seriously enough to have contingency plans.

Coming Soon

[As I wrote in the March 4, 2007 Drumbeat:](#)

So, count me among those who still don't think Saudi has peaked. In fact, **I think you will see their decline stop by summer**, and if demand picks up you will see their production head back up. If that happens, I suspect a lot of people around here are suddenly going to develop amnesia regarding all the predictions that have been made.

I took a lot of flack (to put it mildly) earlier in the year regarding my arguments on Saudi, but it is about time to revisit those involuntary decline scenarios that were so popular in early 2007 - when I was predicting the decline would soon stop. Those who favored the involuntary decline hypothesis may want to go back and look at where Saudi production was predicted to be in late 2007 based on assumptions of no spare production and an involuntary production decline. Even if we discount Saudi's recent announcements that they will raise production, steady production is inconsistent with involuntary decline and no spare capacity.

While this doesn't settle the question of whether Saudi has peaked, their steady production is in the process of falsifying those declining trendlines that were predicting 8 million bpd or lower by year end. Earlier this year I allowed myself to get dragged into endless debates over this issue, when it clearly would not be illuminated until later in the year. Well, later in the year is here, and Saudi production has been constant since February.

At the latest, I will take a look back in a year-end post in which I will also discuss the results - win or lose - of [the \\$1000 bet](#) on oil prices; a bet that I made because of my confidence that Saudi was voluntarily reducing production to keep prices high, and that they were sitting on some spare capacity. The collapsing dollar has made this interesting, but I still think we will end up closer to my predicted year end of \$73.50 than \$100.

Unrelated Footnote: If any of you have direct connections to any Brazilian sugarcane ethanol plants that use bagasse to supply the plant energy, please contact me: tenaciousdna AT gmail DOT com. The kind of connections I need are the kind that can get me inside the plant to talk to their engineers. I can't explain right now, but hopefully I can soon enough. Maybe after I get back from Brazil. :-)



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