The Oil Drum
DISCUSSIONS ABOUT ENERGY AND OUR FUTURE

# The ASPO Conference - a comment

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So! Going to Cork was not a cheap experience, with at least a day of travel each way, not to mention the energy cost – so was it worth it? And to define whether it was worth it, what did I learn? What follows is purely my set of opinions and recollections, and given the number of TOD folk there – do please chip in with your own comments. And let me begin by stating that I am definitely glad I went, and, even though a fair amount of what we heard reflects posts on different topics that have appeared here over the past year or so, the information was largely more up-to-date, the speakers were highly qualified, and the conversations outside the formal presentations could not have been reproduced in any other way. (And if you want to consider that a hint about the value of going to the Houston ASPO Conference , you'd be right).

Putting together the papers on Supply, there are perhaps two or three significant thoughts that have hardened based on what I have heard. The first is in regard to the actual peak volume of oil and associated liquids that will mark the peak. Numbers at the conference floated up around 100 mbdoe, but I think it is now likely to be closer to 90. The second is in regard to how much of this will be exported. Westexas points on the decreasing amounts that will flow from producing countries were validated by the growth numbers that we heard for the indigenous economies of the producers. This reduction in export volumes will likely advance the arrival of an apparent peak to oil-importing nations to a time in advance of the real peak in production, with an even earlier significant economic impact above that seen to date. My sense for that timing is about two years, with the potential that, given the sensitivity of the issue, volumes might be adjusted prior to that in order to influence the next Presidential election. And in regard to how much of the export volumes the OECD can anticipate – well probably less than they are currently expecting. The way in which China, with foresight, has sought out future supplies and lined up commitments is likely to make the available supply significantly less for the rest of us, and the earlier optimistic projections from the majors that they had enough for us not to worry is being increasingly made irrelevant, as they get displaced from country after country. And, finally, as sort of a combination of these, I worry that the post-peak supplies may decline faster than the long plateau that currently keeps us complacent, and which does not reflect the bell-shaped curve that some of us use when talking about the subject. I am significantly more pessimistic.

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In regard to the supplies of other fuels that were discussed at the Conference, I was a bit disappointed that we did not hear more about the state of natural gas. This has to be a topic of some concern, given the decaying prospects for North American supply, against a large use, and the current stories from the Middle East. It is a major concern for Ireland, given that they are at the end of a long, "leaky" supply pipe that stretches back to corroding pipes set on melting muskeg in Siberia. I did not find the discussion about nuclear supplies particularly credible. The

delay in the re-opening of the Canadian mine can easily be offset by increasing production from adjacent mines owned by the same company, and the alarmist nature of this as presented in the paper tended to reflect on the overall value of the paper itself. There was really no comment on coal – apart from the reply, elicited by Dr Schlesinger that China has definitely stopped CTL development. Which in itself is highly informative. Given that it will become, while definitely not the fuel of choice for many, but the fuel of necessity, I thought it might have been useful to have a debate on the size of the resource – perhaps next time.

In terms of Demand, there are many things going on, outside the Conference, that make it hard to come to a definite conclusion. Anecdotally the car park that I normally use at the airport was full, for the first time in at least five years, when I got there. Planes I flew on usually seemed to have stand-by passengers ready to fill untaken seats (which may be why the airline let the flight I was supposed to cross the Atlantic on leave, when the 20 passengers on my delayed connection had been promised that it would be held for us). However the rising use of energy in China and India, as well as the oil-producing countries, will likely help pull demand to the levels of future availability of supply, with demand being managed (I got told off for saying destroyed) by price. The futility of imposing a gas tax to manage demand was briefly discussed. The tax would have to be so onerous (see European experience) to have any impact that any Government imposing it could anticipate a short life, and a long political exile. Unfortunately the uncertainties that governs this, taken with some of the increased costs for new production equipment, are likely to impact the decisions to start new projects, and so will influence intermediate term supply. Demand can, therefore, be expected to grow, at levels that will not be met by the available supply at current prices.

So, what do we do about this – the Conference was, after all, named "Time to React?" Well to make my point here I suspect I am going to make a whole lot of you mad at me, again. But, if you will allow me to make the argument, it might help you to understand the problem.

One of the speakers at the Conference was the ex-Minister for the Environment in the UK. As part of his remarks he made a fairly passionate set of statements about Global Warming in the course of which he stated that "the case for greenhouse gases causing Global Warming is inarguable" (or words to that effect). Now that is not a true statement. On my way back to the States, for example, I read the book The Chilling Stars – A New Theory of Climate Change by Svensmark and Calder. In this book they show the influence of cosmic rays on cloud growth, and thereby on global climate. Anecdotally you have only to go out on a clear night in winter, as opposed to a cloudy one, to see the role that clouds play in reflecting heat (you will find it colder without the clouds). However, it is in the reflection on the top side, which reflects sunlight back into space, rather than letting it through, that the book discusses. The relative cloud cover is, in part, potentially due to the changing density of the cosmic rays to which the Earth is exposed, in itself a function of the relative position of the Sun in the Galaxy, and the strength of its magnetic field. Experiments are described (carried out last year in Denmark) that show that this occurs. Specks are the small droplets that form the nucleation sites for the larger particles that form a cloud.

> They showed very clearly that the greater the number of charged particles set free in the air, the higher was the production of ultra-fine specks. To double the count of specks needed a fourfold increase in the number of ions. (In other words the productivity goes with the square root of the density of ions). That means that any variations in the cosmic rays would have most effect on speck production when the overall intensity was fairly weak. So the ion seeding was real, after all.

What is also interesting (to those of us more nerd-like) is that geological information is then used to calculate the speed of the Sun through the Milky Way. (12 km/sec). This is deduced because as the Sun (and us on the planets) moves through the different parts of the Milky Way, so the intensity of the cosmic rays changes significantly. This affects the clouds, which is, in turn, reflected in the ground temperature, and what grows (and is retained in the fossil record).

An experiment is planned in a cloud chamber at CERN in 2010 that will look into this further. (Anecdotally it was a visit to my later alma mater on a school trip to see the construction of a cloud chamber that ultimately led to my going there). By the way did you know that the Alpine glaciers were at their greatest extent in 10,000 years in 1852 during the Little Ice Age? It might be why Hannibal could cross the Alps with elephants during the Roman Warming period, when the ice was about 300 m above current levels. The ice advance of the Little Ice Age was sufficiently great that it destroyed or moved earlier moraines (p 24 in "Glaciers and Climate Change - Spatio-temporal Analysis of Glacial Fluctuations in the European Alps after 1850," Michael Zemp von Roomos LU, Dr. sc. nat. Dissertation, Univ Zurich, 2006).

So why the big concern with this, and why are the authors treated as pariahs and find it difficult to get funding or serious consideration, well:

> Svensmark and Nigel Marsh were able (to) reckon that the reduction of the relevant cosmic rays since the beginning of the century was 11 per cent. Translating that into the effect on clouds, they concluded that low-level cloudiness diminished by about 8.6 per cent as the Sun became busier. “A crude estimate for the century trend in low cloud radiation forcing is a warming of 1.4 watts per square meter. That was a provocative figure to give, because the Intergovernmental Panel on Climate Change used the same 1.4 watts per square meter for the supposed global warming effect of all the carbon dioxide added to the air by human activity since the Industrial Revolution.

So how many of you are going to go out and buy the book? Raise your hands, oh! That Few! Instead (if you haven’t read beyond this) what we are likely to see, based on past experience, is a lot of ad hominem attacks on me and the authors and, aside from that, more salient comments pointing to a web-site of climate scientists who have discussed this issue, an international panel that reviews these matters, the opinions of influential, and knowledgeable people and your own common sense based on the media keep giving examples of how it is happening, and it does seem hotter this year.

OK so you’re all good and mad at me – but now I want you to change places. You are John Q Public (or the mayor of a small town in the US) concerned with your fuel bill. You have not really heard about Peak Oil, but when you look around to see if it is true you will find industry experts that tell you not to worry. There are International Agencies that state that there will be no problem, and national agencies that state that there is loads of oil left to find. International figures and reputable folk that graduated from Harvard tell you that there is no problem, and the media talk about oil companies ripping us off and that this is an excuse, and your common sense remembers that gas prices always go up immediately on a crisis. And so you decide it is a conspiracy of the oil companies. Now you have made that decision, and you start to read more of the blogs that state that Peak Oil is a myth, and interpret the stories in that light. And you become more of a believer.

Now here is the problem – you remember the incredulity that you felt when I told you about the Cosmic Ray book? Was this based on your own evaluation, or on your “knowing the facts”? (This is not meant as a judgment, I am trying to make a point). And the reality is, as I believe it was

Debbie Cook said in the closing session – once someone has made up their mind it is very difficult to get them to change it. We deride politicians who "flip-flop" on issues. However, as yet the general public really does not have a strong perception of the Peak Oil situation. She noted that no academic had come to her, during her time as mayor. (Note to self – go talk to the mayor). And where there is media comment, in large part it is still (in the mainstream) equivocal about the issue, though, as George Lee an Economics Reporter for a national TV station in Ireland mentioned, he found it, actively against the concept of peak oil. And this ties in with what I think that Nate was referring to in terms of mental activity. Tie the two together and instead of a response we will, apart from Ireland, (and even there it may be that they are more concerned with political supply restrictions than geological ones) likely see a continuing inertia in the system. The public will continue to believe in the conspiracy. (And there is a good example of this in the story that Leanan led off with on Sunday.)

The public, therefore, needs to be educated on the problem, and this is likely better done at the grass-roots and local government levels, since these are those who see the problems already. But who should do the educating. Those that are aware of the issue. And who are they? Stand up, go find a mirror and take a good look! If you have been a reader here very long you have been given information that very few people on the planet have. You have an understanding of the issues that very few others have. If you don't do it, who will?

But if you think it will be easy – well you really aren't going to buy that book, are you?

From which you will gather, that the answer to the Conference question is a strong YES!