The Oil Drum
DISCUSSIONS ABOUT ENERGY AND OUR FUTURE

ASPO-USA Denver Conference Report (Thursday)

Posted by Stuart Staniford on November 11, 2005 - 5:23am
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Here's my report on the first day (Thurs) of the ASPO-USA conference in Denver. HO and Dave are both here also and are giving their own perspectives. Prof G is supposed to show up tonight also.

The hall in the Sherman St Events Center in Denver where the conference took place.

Note that you can get the slides from ASPO's website, and audio recordings from Global Public Media.

First, my overall impressions. In particular it's interesting to constrast this conference with the Peak Oil and Community Solutions conference in Yellow Springs a couple of months ago. If that conference could have been subtitled "Peak Oil for Grey Ponytails", this one is "Revenge of the Suits". More than half of the attendees are attired in that fine expression of sartorial status in Western culture, with most of the rest in either "academic sports-jacket", or business "I escaped the office to this conference" smart casual (the latter category including yours truly).

The attendees are in fact an extremely interesting cross section. There are a very roughly equal mix of:

- Hydrocarbon production industry folks,
- Alternative energy folks
- Financial/investment/analyst community

- Academics/researchers
- Policy/legislative people
- Non-profit/environmental/peak-oil activists
- Media folks

That mix makes for interesting Q&A sessions, and interesting break discussions.

After introductory remarks from ASPO-USA organizers Steve Andrews and Randy Udall, and cohost Kathleen Beatty of CU Denver, we move to the first speaker, Tom Petrie.

Tom Petrie

Tom Petrie talking about Peak Oil.

Tom Petrie is CEO and Co-founder of Petrie, Parkman and Co, a boutique investment bank in the oil industry. His company is basically a competitor to Simmons Co, and has offices in Denver and Houston. As such his presentation was extremely interesting, not because he said anything profoundly surprising to someone who has been following Peak Oil, but because he shed a great deal of light on the question: is Matt Simmons isolated in his views within the energy investment banking community? Answer: no. Petrie is a little more moderate in his views than Simmons, but basically the big picture is the same: he believes Peak Oil is not too far off, he thinks OPEC reserves are exaggerated, and he thinks alternative hydrocarbons, EOR, etc will soften the decline, but nonetheless considerable demand side adaptation to declining liquid fuel supply is going to be required. He differs from Simmons -- "I don't completely agree with Matt" -- especially in thinking that "the Saudis probably have a little more fat", and perhaps in thinking peak is somewhat further out, but believes Simmons has done a great job of elevating the profile of the debate. Tom worked through several scenarios around being more or less optimistic about the amount and timing of new projects and more or less optimistic about depletion of the fields currently in production. Only if depletion of FIP is very mild and delays can be ignored do we avoid peak oil before 2010. More likely, we are peaking sooner.

Chris Skrebrowski

Chris Skrebowski contrasting his views with those of CERA

Next up was Chris Skrebowski, well known to the Peak Oil community for his recent MegaProject Reports. Chris is a long time oil industry person and has edited Petroleum Review for the last eight years. He basically gave a summary of his current views on the near term situation. In essence, he agrees with CERA that there are about 16-17mbpd of new capacity coming on between now and 2010, and the key differences are around depletion. He assumes 5% depletion of the fields in production, which gets us in trouble pretty quickly.

Following Chris's talk, he and Tom sat for a Q&A session. I think the dominant message sent during the first sessions was "Credible people believe this stuff". There was a limited amount of really new material for peak oil followers, but probably these talks were more aimed at the folks at the conference that hadn't already drunk the cool-aid.

Tom Petrie and Chris Skrebowski take questions with moderator Randy Udall.

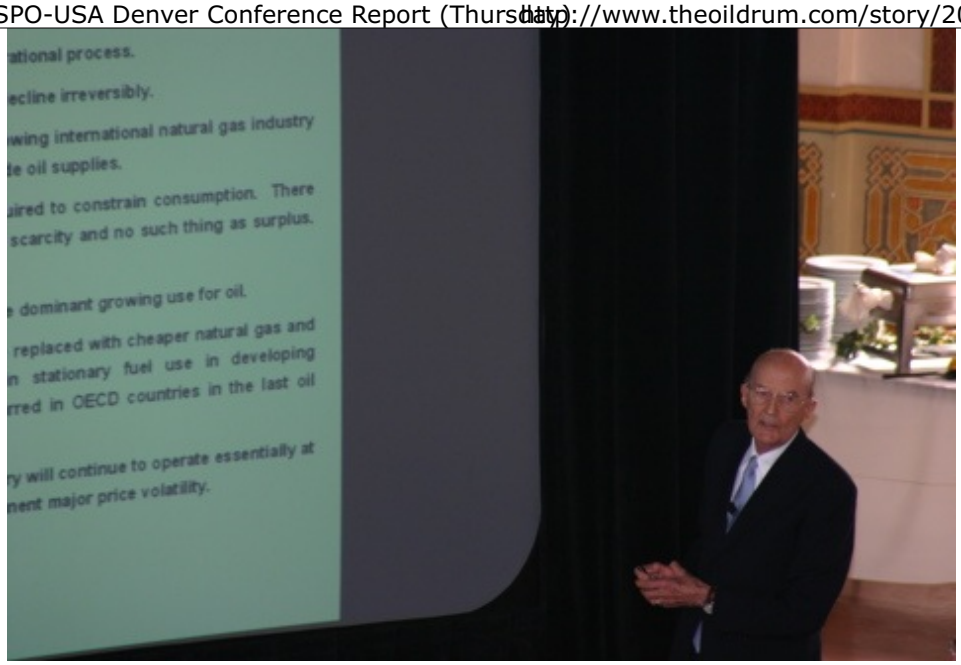
Jeremy Gilbert

Jeremy Gilbert preaching the gospel according to ASPO-Ireland

Jeremy Gilbert is the recently retired chief Petroleum Engineer of BP, and a delightfully accented Irishman with a lifetime of experience in the oil industry. If Tom Petrie proved "Matt Simmons is not alone", then Jeremy Gilbert proved "Colin Campbell is not alone either" as a long standing senior technical figure in the oil industry who believes in Peak Oil. Indeed Jeremy is also involved in ASPO Ireland and his talk was cowritten with Colin. Jeremy gave a very nice overview of how oil gets formed, the typical way the fields in a basin get discovered, and then summarized discovery and production curves for a number of key basins. He culminated with the new ASPO projection (the one with the extra deepwater that gives peak oil in 2010).

The talk didn't give too much new for peak oil followers, but was a very nice introduction, and it all adds to the increasing wave of credibility.

Henry Groppe



Henry Groppe lectures on how it's going to be.

One of the speakers that I personally got the most out of was Henry Groppe, founder of Groppe, Long, and Littel, an energy analysis firm. While he is now a gentleman of increasing years, he struck me as extremely savvy and thoughtful and likely to be calling the future better than anyone else I've heard.

On the supply side, he believes oil is pretty much at peak and will flatten out and then start declining. But what caught my attention was his opinion on the demand side. He believes that something like 20mbpd of the current 84mbpd of oil demand is going for heat and power generation primarily in developing countries. He thinks that with oil in the $50-$60 range, all of this will get converted to coal or natural gas, and that, along with vehicle fuel efficiency, will be the main initial responses to peaking, and will keep us out of serious economic pain for a decade or so.

I need to research it, but that story made a lot of sense to me. Fuel switching in heat and power was exactly what the US and Europe did back in the late 70s and early eighties, so it's believable that developing countries would do that this time around. Combine that with a lot of OECD fuel efficiency improvements (which have already begun) and we can probably maintain economic growth through quite a bit of the early post-peak era (except for geo-political shocks). That also buys us more time to start doing the harder things that will need to be done down the road.

Charlie Brister

Charlie Brister, who knows how to steer a drill bit into a 3' target several miles under the ground.

Charlie is a directional driller. He works as part of a rig crew in Montana, and sits and watches a piece of the drill train the measures the gamma radiation coming from the rock (with a Geiger counter), and compares it with the known signature of the rock layers (from other wells in the past). By this, and other means, he and his crew are able to know exactly where they are in the rock layers - it's called geo-steering. Their current project involves drilling horizontally several miles through a payzone that is 3 feet thick under 10000 feet of rock.

It's absolutely staggering, both that it can be done, and that it needs to be done.

Charlie gave a really great talk with a lot of photos of life on his rig, what happened to the industry over the last thirty years with all the contraction and pain, and how old the workforce is now, and how bloody hard they all still work.

John Barnes

John Barnes.

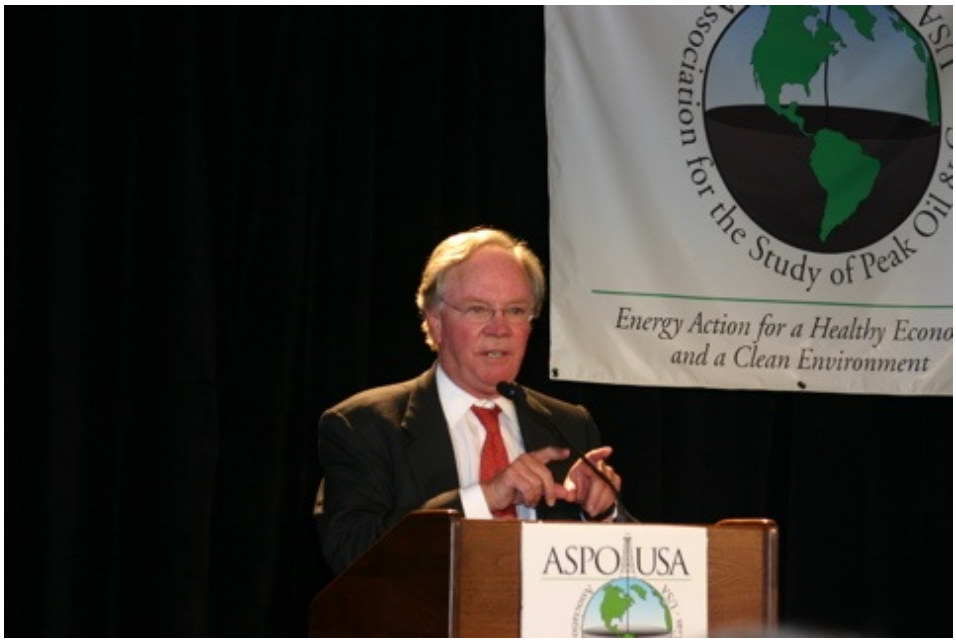
John Barnes gave us a flavor of what it's like to run a small independent oil exploration firm. The independent sector in the US produces most of the oil and gas, since the US is such a mature production area. Production is coming mainly either from small fields, or extracting the production tail from large fields, and both things are best done by small companies with lower cost structures than the majors.

A big them of his talk was the difficulty of the current economics of exploration now that the industry has hit so many capital bottlenecks. His costs are inflating by about 5% a month, between steel for casings, mud, energy to run the rig, and everything else needed. There are long delays for ordering many parts, and any delay costs massive amounts of money.

Lunchtime Awards and Keynote

Steve Andrews giving Al Bartlett one of the first M. King Hubbert Awards.

At lunch, Steve Andrews announced winners of the first annual "M. King Hubbert Awards", which ASPO-USA will be giving out for service to the cause of public understanding of peak oil. The first winners were L.F. (Buz) Ivanhoe, the founder of the M.King Hubbert Center for Petroleum Supply Studies, Al Bartlett, a Professor Emeritus of Physics at the University of Colarado, who is famous for his writing and lecturing on the dangers of exponential population and economic growth in a finite world, and retired Oregon Geology Professor Walter Youngquist, author of *GeoDestinies*. Finally, our keynote speaker got one:



Matt Simmons giving the keynote address.

Matt gave a very good talk - his main themes will be familiar to TOD readers. Particularly interesting points where his view that the natural gas situation in the US is significantly more serious than the oil situation, and a tidbit of news he credited to Bloomberg that Kuwait's giant Burgan field has gone into decline (though I can't substantiate this on the web). I also managed to score a one-on-one interview with Matt - that write-up will come later.

Steve Andrews giving Matt Simmons another of the M. King Hubbert Awards.

Charles Hall

Charles Hall.

Next up was Charles Hall, a famous guru of EROEI analysis, who gave a dynamic overview of the history of that style of analysis, and what is known of the current EROEI for various fuel sources (although these numbers seem to be very controversial and not well agreed on). An interesting sidepoint was that hardly any of the greats of academic energy analysis (Hall, Cleveland, Ayres, etc) have received any funding for their work on it - it's essentially been done on their spare time.

Randy Udall

Randy Udall.

Randy Udall gave a short introductory piece introducing the next few speakers and placing them in the context of the resource pyramid - the idea that there's a pyramid with an apex of relatively small quantities of high-quality energy sources, and a base with very large amounts of lower quality fuels, to which we then turned. Randy is somewhat optimistic that with hard work and Yankee ingenuity, we can produce enough of these things to get by.

Mike Ashar

Mike Ashar.

Mike Ashar is Executive Vice President with Suncor, a pioneering producer of syncrude from Canada's tar sands. He gave an overview of Suncor's history and production plans, and also talked about current industry plans, which give growth to 2mbpd by 2010, and 5mbpd by 2030. However, he said the current plans were predicated on $40 oil, and things might get developed faster if oil stayed in the $50-$60 range. He alluded to the problems of carbon emissions, natural gas cost risk, land and water degradation, but I didn't feel like I really got the straight scoop on whether these issues are likely to really impact the growth of the industry or not (obviously he's a producer, so he's not going to tell any barrier is insurmountable).

Michael Pacheco

Michael Pacheco, covering the continent in biomass crops.

Michael Pacheco is the director of the National Bioenergy Center, part of the National Renewable Energy Laboratory. He gave a talk arguing that biofuels could eventually replace a sizeable fraction - 50-60% - of US gasoline usage. He argues that Pimentel and Patzcek are wrong because they use outdated numbers and really ethanol from corn has a positive net energy. But more importantly, they hope to make breakthroughs that allow them to ferment the woody (cellulose and lignin) parts of plants to fuel, thus allowing them to use a variety of fast growing trees and grasses as biofuel, including ones that could grow in arid areas. They can also use a significant fraction of agricultural waste from food production.

I didn't quite find this plausible, but nor do I know enough to say it's wrong. As Jim Ulrich of Petrie Parkman put it to me at the reception last night: "I just have a problem with the concept of burning food". Clearly this whole question of biofuels needs much more intensive examination on the Oil Drum in the future.

Jeff Probst

Jeff Probst.

Jeff Probst is the President and Chaiman of Blue Sun Biodiesel. They are in production today making a commercial B20 blend of 20% biodiesel and 80% regular diesel. They are vertically integrated, growing oilseed crops (mainly in Colorado), and refining, blending, and marketing their own product. He gave an overview of their operations, and argued that this kind of operation could be scaled up to a large amount of biodiesel (given a lot of capital).

Film Festival

After a floor comment session and a reception, we had a choice of going to a session on net-energy or a peak-oil film festival. I admit to following the easy path here and going to the film festival.

Gregory Green.

Gregory Green, producer/director of "End of Suburbia", gave excerpts of his sequel documentary

on "Escape from Suburbia", which looks pretty intriguing.

Melody Chase being introduced by ASPO-USA interim President Jim Baldauf.

Finally, proving that not all peak-oilers are old, male, and ugly, Melody Chase, star in the Fox TV production *Oil Storm* showed some clips of the movie. She also talked a little about how she had been completely unaware of the issues prior to being involved in the film, but had become very conscious of them as a result.