The Oil Drum DISCUSSIONS ABOUT ENERGY AND OUR FUTURE

Random Thoughts from ASPO-9

Posted by Luis de Sousa on May 9, 2011 - 11:43am

The ASPO conference was back to the old continent with a joint organization by ASPO-Belgium and ASPO-Netherlands. Set at the political heart of Europe with an ambitious programme that called in many speakers outside the ASPO circle, even outside the ASPO view of the world, the expectation was high. I hadn't been at an ASPO conference since 2008 in Barcelona, hence this one had a rather different tone to it. With the first economic impact already upon us and the basic mission of setting a date for Peak Oil now largely behind us, the conference's objectives were considerably different.

Fortunately, those two and half days completely fulfilled expectations with an overall high standard of quality and above all, opened ASPO to new dimensions of resource depletion and the end of growth as we know it. Beyond that, the large time slots provided for discussion were a serious plus that enriched the intellectual outcome of the conference. Rembrandt Koppelar, Patrick Brocorens, Simon Kalf and the remaining staff are all to be congratulated for a fantastic job.

Below the fold are a set of thoughts from this conference, as I lived it.

Beyond the obvious difference between a pre-crisis conference and incrisis conference, this was the first conference where I felt Peak Oil catching up with me personally. I only secured the funding for travelling to Brussels within weeks of the conference and flew there



A monument to the Cycling culture in Brussels.

without knowing if I still had a job when returning. Once again I had to face the reality of not having an alternative to flying if the journey takes me beyond the Pyrenees, and tickets are more expensive now, 120 € alone on air fare taxes. The outlook is as bleak as it ever was.

This is only part of the story, since the conference had parallel sessions in the afternoon. I missed the Agriculture and Unconventional Fossil Fuels sessions to attend the Energy Policy and Renewables sessions. I really dislike parallel sessions, especially at a conference where everything's interesting, but fortunately all presentations shall be accessible in flash format at the conference's website; don't forget to drop by.

On a sunny day in April we left the hotel early in the morning on a pleasant walk to the venue. Brussels is a pleasant city, very walkable, and though Belgians are famous for not being the best drivers in Europe, the traffic is slow and quiet. Bikes everywhere, in every direction, for they have the priority in the city and most traffic signs do not apply to them (why can't it be like that where I live?) They tell me that in Flanders the bicycle cult is even deeper; it reminds me that I don't know yet who won the Liége-Bastogne-Liége. The conference attendees gathered at an interesting 1920's style building to begin registration and by 9 o'clock they packed the large hall for the first session.

For a decade, ASPO has been working to raise collective awareness of the imminence of Peak Oil, so that the recognition of its consequences could change behaviours and policies. The Depletion Protocol has been the most visible tool emerging from this endeavour, a voluntary and unilateral compromise to reduce oil consumption, in parallel with reserves depletion. In his welcome address, Colin Campbell explained that one country had "already" ratified the Depletion Protocol: Portugal. I cannot claim any credit for this, it was all my friend Rui Rosa's work, who for a long time has worked with the Communist Party's Energy Work Group, perhaps an episode more awkward than edifying for Portugal. The legislation is simply a recommendation to the executive, without any effective impacts on policies or the budget execution. And it was approved without being discussed by a Parliament within hours of dissolution to a demissionary Government, negotiating foreign financial aid at the time. In a country where oil consumption fell by 20% since 2005 by the sheer effect of demand destruction, what meaning has the ratification of the Depletion Protocol?

Nonetheless, congratulations to Rui. This success may also indicate that ASPO may need to deepen relations with political institutions, influencing policies from the inside. More on that later.



Oil consumption in Portugal according to the <u>EIA</u>. Among other things, this graph implies that by 2009 this small western state had already accomplished its 20-20-20 targets regarding oil.

The first morning went on with the classical Peak Oil keynote address by Kyell Aleklett. After being refined through several years, this presentation has become quite a wonder, littered with metaphors that make it easier for the common man to understand. World oil reserves are counted as bottles of champagne, with a bottle for every 100 Gb. We have drunk about a dozen bottles, know where 10 more are, know that 2 or 3 other will be found, and still have 4 or 5 unconventional bottles. The problem is that the latter are not champagne, but rather sparkling

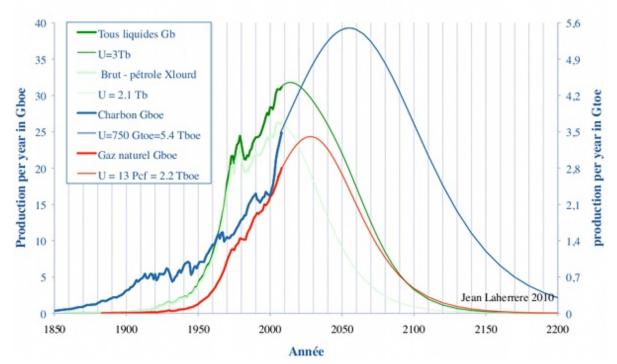
wine. It's one of those comments that pulls a good laugh from the audience, providing an useful allegory for declining net energy.

Following came the BAU scenarios. Well, that's what many might think but not exactly. The following speakers come from two heavy-weight institutions, the French oil company TOTAL and the IPCC, marking early on the underlying openness of the conference with the participation of relevant figures outside the ASPO circle. Far from the brain-dead infinite growth scenarios of institutions like the IEA, Pierre Mauriaud presented an oilman's view of the future, which can be summarized as: with higher oil prices, sparkling wine shall be there to fill the gap and sustain present levels of production for two decades more. Something happened in the afternoon session on Unconventional Fossil Fuels (which I missed) that left Pierre Mauriaud somewhat aghast: possibly impolite remarks on oil companies from the audience. I regret that and hope that people like him can continue the dialogue with ASPO, challenging the association's views. After the conference I had the chance to exchange a few words with him, and asked if he was considering the consequences of high oil prices needed to tap the unconventionals. His answer was very interesting and the outlook he presented was simply that the geological potential and naturally high prices should impact the economy, resulting not in a straight line to 2030, but in an undulating plateau. This outlook is a base line upon which social-economic models should build, such not being a task for TOTAL. When properly dissected, Pierre Mauriaud's scenario wasn't BAU at all.

Closing the first morning was another name of weight: Jean-Pascal van Ypersèle, Vice-President of the IPCC. He reviewed the usual hallmarks of the subject and went on to the CO2 emissions scenarios. He presented the SRES scenarios from the last IPCC assessment report, though somewhat acknowledging the surreality of most of them. But according to the latest knowledge gathered by the IPCC, even with the lowering of the SRES scenario (B1) anthropogenic CO2 emissions must turn negative by 2060 to avoid global temperatures rising above 2°C of where they are today. During the debate session, Kyell Aleklett emphasized that not even the B1 scenario is possible with the knowledge his research group has gathered on fossil fuel reserves. Tension built up between the two men in a "my problem is worse than yours" mood that was anything but scientific. In the afternoon sessions climate change was again on the menu and so was the side taking; Aviel Verbruggen for instance had a very strong "I do not believe in Peak Oil" attitude amid his address. Certainly, the two camps have still some way to go before reaching common ground.

But what's really behind these apparently non-reconcilable views? In the scientific plane, ASPO has tried to particularly influence the disciplines of economics and systems engineering in a way that they could incorporate the concepts of fossil fuels finitude and net energy into their anticipation tools. The conference had several presentations by modellers, or on models such as the address by the IPCC's Vice-President and a few more in the parallel sessions on afternoons of the first two days. Whilst to some extent these models are starting to acknowledge the finitude of oil, the same can't be said about natural gas or coal. But above all, modellers and models alike seem to be ages away from realizing what net energy is and its implications on the resource substitution process and usage scalability.

Production and forecast of fossil energy (without constraints on demand)



Jean Laherrère was there only for the first day of conference, but his benchmark model was later presented by Jean-Luc Wingert. Though much simpler than the other models presented at the conference (but not exactly easier to produce), it still looks somewhat more comprehensive, enclosing scarcity and declining net energy, even if heuristically.

The parallel session of the late afternoon was dedicated to Renewable energy and contained several interesting things. The first highlight goes to Henrik Lund's presentation on the Danish Wind energy sector. First of all, he very vocally dismissed the idea that wind energy produced in Denmark is being consumed elsewhere; according to his figures 99% of that electricity is consumed in Denmark. He went on to explain that the Danish electric grid can absorb a wind share of 20% without new infrastructure, 40% with a new load-balancing paradigm based on combined heat and power (CHP) and up to 60% with the addition of electric transport. He used the city of Skagen as an example, where new regulation and a series of decentralized CHP plants with heat pumps have managed to provide a proof of concept. He also explained that the fuel being used the most at Danish CHP plants is waste. Can this model scale to other places? With fewer heating needs and denser population centres?

Right after came Yulong Ding with a presentation on electricity storage systems. According to him only two of these systems have reached maturity: back pump hydro and lead-acid batteries, all the others, though in some cases technically proven, haven't yet reached economical feasibility. In the set of those closer to reach maturity today are compressed air storage and manifolds. He then went on to present his own storage system: Cryogenic Energy Storage. The idea is relatively simple to state: use up excess energy in the grid to manipulate the conditions of combustion (heat and pressure) in conventional fossil fuel power plants, with that increasing their combustion efficiency. The promise is to halve fossil fuel intake for the same electrical output, including full carbon capture (though Yulong Ding was one of several speakers sceptical of the technical feasibility of CCS, in his case stressing that storage isn't proven yet). In the debating sessions things became quite interesting. Henrik Lund insisted that Denmark does not need electrical storage and that the CHP paradigm is the way to go. Moreover, to balance wind power, storage systems have to operate on horizons of several days, or even weeks, and most systems aren't efficient enough. Even after Yulong Ding pointed out that with cryogenic storage the loss is about 2% per day, Henrik Lund stood firmly by the Danish outright balancing scheme.

The morning of the second day of the conference was dedicated to economic outlooks. Jeff Rubin was the first to address the audience with a compelling view of where the OECD is and where it is headed. After him followed David Murphy, Jean-Luc Wingert, Chris Skrebowski, Erik Townsend and later Douglas Reynolds in the debating panel, who tried to put some numbers on what's ahead, the price rises, the reduction of GDP, and the social backlash. After the modelling sessions of the previous day, this morning served to bring our feet back to the ground and ended up being one of my favourite sessions of the conference. If during the 6 decades that followed the end of World War II economic growth was the norm, interrupted by brief periods of recession that coincided with rising oil prices, during this new time in which we now live, recession may become the norm with brief periods of growth in between. Governments won't be able to expand their debts as before, unemployment won't abate, austerity shall be a huge failure. Social consequences are not easy to fully anticipate but the collapse of the Soviet Union can provide an exemplary model.

In terms of policy it seems that ASPO is still somewhat alone. In the afternoon session Euan Mearns presented on the interplay between Climate Change and Peak Oil, reviewing the policies that can serve both ends and those that focus on only one and then are prejudicial from the opposite perspective. It is a presentation that every energy policy maker in this planet should watch - I invite everyone to send a link to their representatives, parliament members or politicians of choice. Bruce Robinson and Jörg Schindler tackled transport policy, the former (already on the third day) with some simple but effective experiments being made in Australia, the latter proposing an alternative philosophical approach to transport, focused on the mobility of people and goods and not on the movement of vehicles. Though not entirely new in content, Jörg Schindler's presentation was quite different from what we usually have at an ASPO conference, but perhaps more consonant with the behavioural adaptation imposed by a world without growth.

And here a parenthesis. In one of the after conference dinners an interesting subject came about: what role can religious institutions have in this transition phase we are living? Years ago Gail visited this <u>precise subject</u>, but it would be interesting to have a religious leader at a coming conference. Are religious institutions aware of the root causes of the economic trouble we live in today and its potential social consequences? Are they preparing? How can they contribute on the philosophical aspect of the transition?

The last day of the conference was directed at politics. Facing recurrent fuel price hikes, governments started using scarcity to explain their apparent inability to deal with the problem. The end of cheap oil has been largely acknowledged but its consequences are yet to be grasped. As Jeff Rubin explained the day before, governments haven't yet acknowledged the fundamental role that coal and oil prices had on the developments that lead to the Lehman Brothers collapse in 2008. They still miss the true root of the social convulsions raging today in many points of the globe: increasing prices of food stuffs whose production is highly reliant on oil and natural gas. When presenting energy policies, transport or agricultural programmes, parties and governments alike seem to fire in many different directions, without objective direction. The cause can be the frailty of the science supporting it, as per the issues discussed above.

But all in all, it has been possible to dialogue with politicians, as the sessions with the Wallon Parliament on the 26th of April and at the European Parliament on the 3th of May prove. This is where Philippe Lamberts enters, leader of the Greens parliamentary group at the European Parliament. His address was a pleasant surprise, which started more or less like this:

I have a friend who lives in Frankfurt who has a job that's very simple to describe: keep inflation in the Eurozone below 2% per year. One day I asked him: "Jean-Claude, what do you think about oil scarcity?" To which he replied: 'I think nuclear fusion will save

us'."

This opening remark served to show the present mindset gridlock into which our leaders have cast themselves. By its very nature, Peak Oil has such broad-reaching implications that the present social-economic dominating philosophy simply can't cope. Philippe Lamberts stated that today all economists think alike, as if they all shared the same genetic code and it takes a simple virus to wipe them all out. The answer to the present crisis lies not in traditional economics tools but in a fundamental behavioural change from our societies. To that end the Green Party is working on a thorough, integrated, broad-reaching policy that takes into account not only Peak Oil, but also Climate Change and the social reforms needed to protect social equity and solidarity. I certainly hope the Greens can devise such policy, given that the programme presented at the last European election was below expectations to say the least. I'd further note that presently citizens like me can't vote for the Green party; there's a party with that name in Portugal, but they are incorporated in the GUE/NL Communist group. It is never too much to insist that it is only by federating themselves and the European Union that these parties and their policies can succeed.

Rumour had it that Nick Griffin, leader of the British National Party, attended the conference. I didn't recognize him, but other members of this party were spotted in the audience. This isn't happening by chance, indeed the liberal philosophy that commanded Europe (and the remainder of the OECD) during the past 25 years seems to be heading for its sunset. The EPP and the PES have been the visible faces of this philosophy and are the parties standing the most to lose if they don't find a way to reinvent themselves. It is not by chance that this post refers mostly to fringe parties; it is not by chance either that in recent elections in Finland and Bavaria both Nationalists and Greens came up on top. Hence, it might just be that by engaging with these fringe parties it may be easier to bring a depletion-aware energy policy forward, instead of directly engaging governments. Personally that doesn't feel comfortable, for there's a risk of connoting resource depletion with this or that political philosophy, but the results seen so far on the issue demand a second thought.

And so another ASPO conference went by. Beyond some excellent presentations, addresses and panel discussions, what I end up enjoying the most about these conferences are the sideline talks during coffee/lunch breaks and after conference dinners. I had the opportunity to see friends which I haven't seen for almost three years and make new acquaintances with very interesting folk, with whom luckily I'll remain in touch. Among others I met a salmon fisherman from Alaska, an historian from Texas and a barman from New Jersey. I pretty much suspect the latter is somehow involved in the organized crime by the way he talked, bet he has a tommy gun under the bar.

I left the pleasant city of Brussels on another shiny day, just to find the peninsula all covered in clouds a few hours later. As the aircraft descended through the fluff approaching the airport, the first thing I could glimpse below were windmills, today characteristic in the landscape of the Portuguese west. An ending note of hope, perhaps.

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