



## ASPO 6: Have we reached the tipping point?

Posted by [Chris Vernon](#) on September 28, 2007 - 9:59am in [The Oil Drum: Europe](#)

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*This is a guest post by Julian Jackson. Julian is a London based writer on technology and photography. He is currently forming an urban relocalisation group which has received funding and support for various projects to enhance the local environment. Here's a link to [Julian's personal website](#).*

### A Report on the ASPO 6 Conference "Time to React" held in Cork, Ireland

It seems to me that we have reached several important tipping points this year in relation to Peak Oil, Climate Change and their impact on public consciousness. Peak oil is a geological tipping point, but I am more interested in psychological tipping points: when Peak Oil enters the general consciousness and stops being a dubious fringe pursuit. I think we may have reached that point, unfortunately at the same time as we are rolling over the peak "plateau".



*Panel session at ASPO6, Cork*

#### Tipping Point 1

**"The battle is over – the Peakists have won." James Schlesinger, former US Energy Secretary and ex-CIA director**

When people from the "inner circle" of the global elite give overt credence to Peak Oil Theory, then we can say the battle of credibility is won. Schlesinger wouldn't be committed to a peak date, and he did seem to be in the "Technology Will Save Us" camp, but his pronouncement was

## Tipping Point 2

### **“A large hole that has to be filled” Mike Rodgers, PFC Energy**

Mike looked at the statistics of oil exploration and production. He said that exploration was less successful than before. Over the last 10 years we have only found one barrel for every three we use. Oil fields pass over peak and go into decline when they are between 50 and 60% depleted averaging out at 54%. There is a large hole in potential future production “OPEC will reach the critical level of 60% depletion in the later part of the next decade”. PFC’s estimate is that Saudi Arabia is 41% depleted now.

The picture is looking fairly grim.

## Tipping Point 3

### **Insiders agree USGS estimates “wildly overstated”**

Ray Leonard of Kuwait Energy Co gave us a fascinating insight into a secret no-press, invitation-only conference of oil technologists he attended in November 2006. After many caveats about what he could and couldn’t reveal, he said that behind closed doors many of the oil experts present challenged the rosy USGS projections as “wildly overstated”.

He looked at West Siberia, his area of expertise, where discovery has peaked. Reserve growth would be more important than new discovery. Average recovery had increased from 37 to 43% with improved techniques.

He estimated that West Siberia would provide 80 gigabarrels, with another 6 gigabarrels coming from reserve growth.

Leonard thought that at best unconventional oil which provides 2 million barrels per day today would only double to 4mbpd because of slow extraction rates and environmental consequences.

Leonard was one of several contributors who thought there would be a plateau at 90-100m bpd “in a very high price environment”, but it is difficult to reconcile that with the current flat output of around 83 m bpd and the erosion of megaprojects gains coming onstream by depletion; the largest new field, Kashagan, for example, been delayed two years because of problems. Skrebowski’s April 2006 estimates are a *net gain* of less than 2mbpd till 2009 declining thereafter.

## Tipping Point 4

### **Not enough Uranium**

Using official nuclear industry statistics, CERN nuclear physicist Michael Dittmar showed that there was insufficient uranium to grow nuclear power at more than a modest 0.3% per year, and worse still – the flooding of the Canadian Cigar Lake mine would cause shortages in the next few years, possibly leading to existing plants being shut down because they have no fuel. There will be no nuclear renaissance without sufficient Uranium. Dittmar also dismissed fast breeders: no peer-reviewed evidence that they would work in a valid commercial way; and fusion: not enough tritium can be produced to run them.

## Tipping Point 5

## **Can rationality overcome evolutionary conditioning?**

Nate Hagens of the Oil Drum gave what was generally felt to be the most stimulating speech of the conference. He analysed our denial of problems, our short-term behavioural emphasis on the present and our reluctance to plan for the future, in terms of cognitive neuroscience.

Our evolution over millions of years biases us towards the short-term gains of food and procreation over long-term planning. Nate showed a hilarious slide of an Irish Elk male, which, in search of reproductive success had grown such huge display horns that they consumed so much energy to build it became extinct.

It wasn't difficult to get the implication.

Nate also talked about our impulsive behaviour caused by short term urges towards pleasure such as smoking and drinking, which become addictions. We crave stimulus, but it quickly becomes routine so we need a bigger "high". In a previous existence he was a high-flying broker, acquainted with the very rich, and told of one \$100m client who "just needed another \$100m to be satisfied", but when he got there, he found his peer group had \$500m so he had to keep competing to stay in the game: we can never have enough – our neurochemical "dopamine" is "a *wanting* drug".

This was not a very comforting picture of our response to future energy shortages – in this paradigm we will ignore them for as long as possible, then panic. Later Michael Meacher MP added his opinion on this: "I think we are sleep-walking to doom", and Lord Ron Oxburgh, former chairman of Shell UK said: "Challenges are so great that urgent interim measures are needed to stop the boat sinking."

## **Tipping Point 6**

### **Climate Change is a Coal Problem**

Jeremy Leggett of Solar Century alleviated some concern about the possible rise in temperature, because the IPCC models rely on IEA figures which put the amount of natural gas and oil around much higher than most peakers. By changing this to reflect lower reserves, Leggett showed there is not enough to push us through the 2° threshold that most climate scientists believe will lead to catastrophe.

*Unfortunately there is enough coal:* if we burn that too, we are in very serious trouble. China is building two coal-fired power stations per week. The USA, Russia, India and Australia also have substantial reserves of coal and this does not bode well for the atmosphere. Ron Oxburgh said that Carbon Capture and Storage (CCS) technology increases the capital cost of a coal-fired power station by 30% and reduces efficiency by around 10%. He added: "If we don't create technology to cheaply capture carbon we are in very deep trouble." His overall view was that to mitigate these problems there was no "silver bullet" and that all technologies, including renewables, conservation, nuclear and CCS would need to be deployed as soon as possible.

## **Can politicians recognise these tipping points and move to reduce the impact of these complex and intractable problems?**

Michael Meacher, MP, made a stirring and passionate speech about our multiple problems, singling out air travel as being particularly damaging and wasteful. Responding to a question from the floor about political will, said that current politicians have a poverty of vision, and are keeping their heads down.

The success of the Transition Towns movement (Rob Hopkins described it as the fastest-growing

political movement he'd ever experienced) shows that there is movement at the grassroots but it is not being mirrored by sufficient intensity at national government level. Several speakers and conference attendees I talked to were not impressed by the Irish government's apparent inability to recognise the precarious position of Ireland's electricity generation system, so it is not just the UK government which has blinkers on.

The range of initiatives I heard of from speakers, commercial companies and local groups at the conference was impressive. Meanwhile, the continuous burning of fossil fuels by the heedless mass of vehicles circling the beautiful Cork city centre by day and night continued relentlessly – when will the Padraigs or Roisins in these mostly single-occupant, highly-inefficient ICE vehicles reach their consciousness tipping point? Or will they, as Nate Hagens suggested, discount the future till it is too late, then panic?



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