

S. 47F

Sent: Saturday, 9 February 2008 2:01 AM

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Subject: RE: Paper on Oil [SEC=UNCLASSIFIED]

Thanks S. 47F for your opus – a huge amount of effort obviously, and I don't feel very well qualified to comment. But a couple of points do arise.

It would be worth discussing how similar we should expect OPEC discovery and production trends to be to the US model. The peak oil people make a lot of the different motivations between profit driven private business developing US resources and a state monopolists developing reserves in the Middle East that at least until recently seemed to be so big no one needed to measure them. It might be worth talking to

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Because of the importance of Canadian tar sands, Venezuelan extra heavy, and the various deep water oil contributions to future world supply it would be worth setting out the model of their discovery and production in as much detail as you do for each the conventional oil production zones. I was surprised to infer that the deep water discoveries have already reached the point where the discovery rate drops below 3% per year – I would have thought we are still in a bit of a turbulent region – but I have never tried to look at this.

There are tar sands also in Russia and the Middle East. Any chance of adding those in?

In the conclusions you might be more specific about tar sands, super heavy, oil shale and coal to liquids, being the alternative fuels available for scenario 1, and point out that double and plus CO2 emissions per unit of energy produced are their handicap as much as or more than cost, and if the resource estimate figures we usually see for shale and coal are right then you might give an indication of how many decades longer the plateau – or peak – is stretched to.

The peak oil guys reckon coal has already peaked. Normally I would shrug that off, but as much now hinges on China that needs to be looked at more carefully. China is supposed to have a huge amount of coal and be about to turn lots of it into liquid fuels. But I know it is currently mining a lot of rubbish and wasting scarce, unpriced water to wash out the ash and scarce, unpriced, rail capacity to get the stuff to coastal power stations. If China is forced to rationalise, and switches to importing Indonesian and Australian coal, what does that do to the resource picture? (Unless FisherTropsch liquids can be produced economically from high ash coal without water). This maybe going beyond what you are prepared to do with the present exercise but it would be a nice follow up project.

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