

Thank you again for inviting me to your roundtable discussion on **Oil & Gas perspectives in the 21st Century**. It was exciting to be in such distinguished academic company, and to see how analytical techniques have come so far since the days of my own experience as an oil industry investment analyst in the late 70s.

Although not involved in oil & gas today, I do still take a close interest in the geopolitical issues, and I sit on the boards of two SMEs for whom energy efficiency is an important market factor – one supplying the concrete/construction industry and the other in LED lighting.

You asked me for my observations, purely as a non-academic outsider, so here they are.

1. Overall the discussion was very much supply-side focussed, and it was only in the last quarter of an hour that demand factors were discussed in any depth. I would have enjoyed extra time for the latter in order to give a more balanced overall perspective.
2. There was of course discussion of the Middle East. But overall it felt very much from a European-North American perspective. I believe some of the authors were not present who had covered Latin America and Africa. Nevertheless the Asian perspective was almost absent – certainly an important part of the demand side equation.
3. While I have some sympathy or perhaps empathy for the debate about GDP not being the best representation of the optimum economic state of play this too is a Western or developed economy view. If you are an individual at (as Prahalad would call it) the bottom of the pyramid, you are striving to improve your living standards, rise up the economic ladder and seek better education for your family. Happiness and the environment (and other social metrics) might be rather low in the list of priorities. That's not to say that governments can't help the process.
4. Finally, I am sure we all came to hear the academic power houses that were present – and we were not disappointed. Nevertheless it would have been good to hear the impressions of some of the students present.

The impact points for me were as follows (apologies for not remembering all the speakers' names):

1. 'Energy out' v. 'energy in' cost of production is an important metric. From my own perspective I am seeing that carbon

footprint has become a lead metric (i.e it influences approval process in a major way) at the design stage in construction projects - certainly in the West (London Olympics is a good case study probably).

2. Similarly I liked the differentiation between energy and 'useful energy': an important point.
3. The structure of large oil & gas companies being from a different era (Beth Mitchell?) is a great point, and also applicable to some other major industry sectors dominated by very large corporations. Nevertheless this needs to be balanced by the fact that in the developing world it is not uncommon to see state owned oil companies not only dominating the sector, but being a key government tool in economic and investment strategy.
4. Whether I interpreted the point correctly I am not sure; but I thought the point was raised that academic journals need to learn to communicate better with a broader and non-academic audience. I agree. Very important.
5. I look forward to seeing how some of 'headline grabbing' statements turn out, e.g. end of OPEC as an exporter by 2040; or, 'Peak gas' within 10 years.
6. Somewhat in the context of the above (5), I wonder how the world will look from a geopolitical perspective after several years of USA self-sufficiency in energy production ... or China becoming the dominant external influence in Lithium-rich Afghanistan.

Hugh Purser