

**The Banff Taxonomy of Asset Valuation Methods:  
How Petroleum Asset Valuation Has Evolved in the Past and  
Where It Might Go in the Future**

In the fall of 2002, the Society of Petroleum Engineers asked me to organise an advanced workshop on next steps in petroleum asset valuation. It was held in Banff in September 2003. I shall give a brief review of the outputs and conclusions of the workshop, focussing on:

- 1) a taxonomy of asset valuation methods (the Banff taxonomy) that we used to orient our discussion of what the industry had done about valuation in the past and where it might go in the future
- 2) some of the organisational, strategic and technical issues involved in the design of a superior valuation process
- 3) the reasons behind the conclusion of the workshop that a case had been made to begin exploring seriously whether and how to use:
  - a) dynamic models of uncertainty, especially with longer time horizons than those used now in typical decision tree analyses
  - b) risk adjustment of underlying uncertainties (like oil or gas prices) rather than risk discounting of asset net cash-flow, to take into account the effects of uncertainty on value
- 4) some steps that producing organisations and software, consulting and training providers might take to participate efficiently and effectively in this exploration.