Has Energy Economics A Viable Future?

*By Paul Tempest**

Many of us in the IAEE today have arrived at a career in energy economics from unlikely origins and often by diverse, if not bizarre, routes. Energy economics is a crossing of many ways : the strength and reputation of the profession lies not only in the grasp and understanding of the detail but in the broader overview of global economic and energy fundamentals and an awareness of the driving forces of technological change and international co-operation and inter-dependence.

In my own case, I began my education with a rigorous training in logic and language at Oxford. So, whenever I attend a conference like this (and I have attended 21 of the 24 annual international conferences of the IAEE so far), I always carry a small notebook to jot down any new arguments and also to record changes in the language of energy economics.

Out of a long list this year, I liked particularly, the ominous ring of a CLM (a career limiting move) and the grim prospect of a 24-7-52 working year; also the T-shirts marked STOP PLATE TECHTONICS; and wondered whether the PLATED BREAKFAST served yesterday would be gold-, silver-, steel- or tin-plated or a counterpart to NO FREE LUNCH.

On a more serious linguistic note, I was prompted by Shirley Neff's masterly review of the brand-new US presidential energy agenda to wonder how long those pretentious and outworn concepts,

SUSTAINABLE DEVELOPMENT

ENVIRONMENTAL CONSERVATION

OPEN MARKET REGULATION

might last in the fresh, breezy new Texan linguistic style in the White House. Each, an oxymoron, has probably already exceeded its shelf-life. How soon, I wonder, will we have to wait in California for

SUSTAINABLE STANDSTILL ?

ADAPTING TO THE ENVIRONMENT ?

CONSENSUS PRICE-CAPPING ?

Going back to our first IAEE International, held in Washington in 1979, we spoke an almost completely different language – that dominated by Cold War politics and OPEC confrontation where the key issues were seen to be possible European dependence on Russian gas blocked by US embargo, Limits to Growth caused by fossil resource depletion, Project Independence whereby the United States would quickly eliminate oil imports and the imminence of War in the Middle East, caused by political chaos in Iran. Parts of these issues have passed inexorably into history; other parts have a familiar ring about them.

In this year's IAEE Conference, we have focussed on US and particularly Californian gas and electricity supply shortfalls, the shortcomings of the privatisation and deregulation process, Middle East capacity constraints and the painfully slow impact of new vehicle technology.

You were fairly evenly divided in the poll in Marianne Kah's session on whether Government should or should not intervene in energy pricing. Yet you were almost unanimous in the conviction that governments would continue to intervene. Equally, in this final session, you were unanimous in expecting OPEC or the OPEC lead-producers to continue to intervene to move the oil-price, but fairly evenly divided as to whether this would be good or damaging for the world economy and global markets.

As we bring this splendid conference to a close, I will leave you with two thoughts drawn from our debates.

The first concerns the current acceleration in new energy and communications technology and the inability of the financial and stock markets to see much beyond the year-end. Dr Samuel Johnson put it well, in referring to a brewery in mid-18th century England :

> "We are not here to sell a parcel of boilers or vats, but the potentiality of growing rich beyond the dreams of avarice".

Of course we are going to resolve with some pain almost all the minor energy supply constraints preoccupying us at present. Brand-new, clean technologies of energy are already clearly within sight, although most here today seem to be thinking more in terms of a 50-year transition period than one of 20 or 30 years. Meanwhile there appears to be an adequate global resource base of oil, natural gas and coal, abundant development finance and a benign investment climate.

We will, however, only get there if we can apply common sense and an orderly evaluation of risk and opportunity. The mobilisation of human energy is, as always, the key to the future. With the internet and the globalisation of markets, we are currently taking a quantum leap forward in the deployment of human energy.

Energy economics is an essential tool in this process. The energy economist, not the corporate accountant or refinery engineer, is best placed to demonstrate the foolishness of, say, devoting 10-20% of a refining budget to improving only marginally the quality of tailpipe emissions as specified in many different ways by many different authorities in many different places. The lunatic fringe of the current energy debate can only be discredited in its entrenched positions by common sense and informed analysis of the data available.

The key long-term issues facing the energy industries today have less to do with geology, engineering and salesmanship and a great deal to do with public and government acceptability and a keen understanding of commercial, financial and geo-political risk. These are all areas where sound energy economists will have a vital role. It is, therefore, a pretty safe conclusion that, however rough the ride on the roller-coaster to come, the profession of energy economics will be providing challenging and satisfying employment for many - for many generations to come.

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