Energy Meeting with Minister Macfarlane, 2nd Dec 2014 Canberra

Our B/HERT members have been very encouraged by the emphasis the minister has given to collaboration and the need for research impact. Additionally, initiatives such as the $476M Industry Skills Fund and the Research Connections programme are most welcomed.

To today’s topic of Energy, it is complex and one that sits at the centre of the national interest. The past month has seen an avalanche of articles including Clean Coal, Power Rip-off, and Cheap Coal gives way to Cheap Energy.

Last Wednesday in the Australian, Alan Kohler suggested - ‘Innovation, including in the production of energy, is driving prices lower and shifting power away from producers to consumers, and that process has only just begun.’ Innovation is causing deflation

Indeed, innovations such as the quest for a High-beta fusion Reactor and the promise of Wireless Electricity support this view.

Over the last four years we have witnessed the renaissance in the US energy market and the flow-on benefits that has brought to sectors such as manufacturing [GE] and steel recycling [Nucor].

Like other sectors including accommodation, communications, education, finance, health, ICT and retail; the energy sector needs to be disrupted. Industry participants will take the initiative as they will seek bottom-line arbitrage. A recent case study is where Honda, USA has implemented its Green Factory initiative which delivers 10% of its power from renewables and seeks to lower emissions by 30% by 2020 compared with 2000 levels. The bottom-line arbitrage is - reduced consumption of fossil fuel resulting in better CSR, reduced input costs, and improved energy productivity. Brickworks, Australia’s largest brick-maker is also reaping cost benefits through alternative fuels in its bid to nullify the escalating gas price.

Some may deem such a shift to be a long-tail proposition. Such a proposition based on legacy assets not being impaired, corporates and investors seeking to maintain economic rents for as long as possible, and at a macro-level managing a material negative impact on our terms of trade.

Others submit to a forthcoming inflexion point: a point where technology advancement, the cost curve and market demand meet. As Honda’s energy and operations chief Barry Mcclelland says ‘Honda’s view is you’ve got to go with the change’. Oct 27, 2014 Fortune. Pg18

Therefore, is the imperative for our economy to re-structure the inflexion point for Australia? The current balance of 64% coal to 13% renewable energy generation will change. Bottom-line arbitrage will demand it, consumers will demand it, the world community will demand it.

Within the Energy Green Paper the following items appear eminently sensible, scalable and with the merit of economic and societal benefit. These being:

1. Cost-reflective electricity tariffs
2. Distributed generation
3. Demand aggregation
4. The E3 programme [Equipment Energy Efficiency] and
5. The High Efficiency/Low Emissions technology

Increasingly, Australia is comfortable being an early adopter, however we need to pursue the 1st mover advantage as exampled by Floating LNG.

As a country let us pursue the E7 goals – Efficient Economically viable Emissions reduced Environmentally sustainable Energy Everywhere Equitably. This is no small task.