



(Biofuels Research & Industry Development)

20 November 2012

**Committee Secretary**

House of Representatives Standing Committee on Economics  
PO Box 6021  
Parliament House  
Canberra ACT 2600

Via email: [economics.reps@aph.gov.au](mailto:economics.reps@aph.gov.au)

**Submission**

**The House of Representatives Standing Committee on Economics**

**Inquiry into Australia's Oil Refinery Industry**

Dear Secretary

Renewable Fuels Australia (RFA) appreciates having the opportunity to make a submission to The House of Representatives Standing Committee on Economics' inquiry into Australia's Oil Refinery Industry

***Background***

The role of Renewable Fuels Australia (RFA) is to support the domestic production and deployment of sustainable Australian biofuels for transport and industry development, and to work together with other Australia domestic alternative fuels during the transition from oil over the next 20 to 30 years.

In November 2011 during an interview in Barcelona,<sup>1</sup> Arthur Reijnhart, the General Manager for Alternative Energies and Fuel Development Strategy for Shell, said that Shell's view is that while it sees a place for gas, hydrogen and electricity – *"We see biofuels as the single most important alternative to hydrocarbons in mobility in the next 20 years."*

Shell anticipated that the number of cars on the road is expected to triple by 2050, that many vehicles will continue to run on petrol and diesel and that blending these fuels with cleaner burning alternative fuels such as biofuels will offer one of the best commercially viable ways of reducing CO<sub>2</sub> emissions from road transport fuels over the next 20 years.

---

<sup>1</sup> F.O. Licht's Ethanol & Biofuels Conference in Barcelona, 8 November 2011

## **Introduction**

Energy security in Australia is defined as adequate, reliable and competitive for the supply of energy and energy services to support the nation' economic and social development, where: transport and social development where:

- **adequacy** is the provision of sufficient energy to support economic and social activity;
- **reliability** is the provision of energy with minimal disruptions to supply, and
- **competitiveness** is the provision of energy at an affordable price that does not adversely affect the competitiveness of the economy and that supports continued investment in the energy sector.

Australia is well endowed with a wide diversity of energy resources and will continue to remain an important global supplier of energy resources for years to come.

With the exception of oil, Australia's energy resources will be available in significant volumes to meet the demand of energy for Australia and growing Asian economies such as China, India and Japan over the next 50 years.

In a growing and insatiable energy world this should place Australia in a special and advantageous position that few other countries enjoy.

The barrier to Australia's energy self-sufficiency in the short term and in the longer term however is oil.<sup>2</sup>

The 19<sup>th</sup> century was the fossil fuel century of coal. Oil took the lead during the 20<sup>th</sup> century along with emerging natural gas. Today it is generally accepted that cheap and "easy-to-access" conventional oil has now entered the process of plateau, decline and transition.

The global oil sector has accepted that the extraction of difficult to refine conventional and unconventional oils in the future will require deeper, high-cost, drilling into the earth's mantle on land and under the sea, and thus require major investment in the future in the search for extraction and refining of oil.

This has triggered a landmark decision by the major Western global oil companies to divest as much of their outdated refinery infrastructure by sale or dismantlement as soon as possible, and to use those cost savings to support investment and management of future oil extraction challenges and the maximization of future conventional and unconventional oil prices.

A single exploratory deep-water-well can cost half a billion dollars to drill and still come up empty.<sup>3</sup>

In the U.S. this oil policy shift became increasingly obvious when major refineries on the East Coast and North East were put on the sale block or shut down in 2010 in unusual numbers, and continued throughout 2011 and into 2012.

Unfortunately the 2011 National Energy Security Assessment (NESA) did not identify that oil refinery change in Australia is now also part of a wider global sized step-change, not just an isolated domestic change issue alone, that demands further urgent consideration to ensure surstainment of the framework of Australia's future energy security.

<sup>2</sup> Transport Energy Futures: Long-term oil supply trends and projections – Report 117, March 2009

<sup>3</sup> Richard Heinberg. An edited extract of a speech on the future of oil in Canberra on 28 September 2012.

***Australia's Future Transport Fuels Options***

Australia's future is inevitably increasing dependence on imported oil with expected higher future fuel prices in life in a more uncertain and insecure world.

Even further oil refinery change in Australia can be expected in the future as our dependence on refined fuels from large modern refineries in foreign countries such as Singapore and Korea grows, and as the Western oil sector gradually withdraws from the refining industry.

Under normal circumstances Australia and other countries will have the benefit of access to very efficient oil supply chains in the form of mega refineries in China, India, Korea and Singapore.

The weakness in this situation is their total dependence on access to imported crude oil. In this context these refineries cannot provide Australia with security of access to their refined oil products during oil crises.

According to the 2011 NESAs, a major refinery disruption in Singapore where most of our imports come from would leave Australia with only three-to-four weeks of supply of petrol and diesel and other products in Australia's current refinery storage, or on their way here.

This falls far below Australia's obligation as a member of the International Energy Agency (IEA) to store and maintain 90 days of fuel and lubricants for all transport sectors. Current fuel security in Australia stands at less than 30 percent of this factor.

According to the IEA<sup>4</sup>, Australia does not have large reserve public stocks, nor is there any minimum stockholding requirement imposed on oil companies operating in the country. The Australian government relies on the normal stockholding practices of the domestic oil industry to meet its 90-day net import obligation as a member of the IEA.

Clearly this suggests that this obligation has been ignored.

According to the 2011 NESAs, the import price outcome for consumers from a 30-day shutdown of Singapore supply would spike around 18 cents per litre. In Canberra today this could see the price per litre of 91 Unleaded petrol at \$1.70.

It has also been found from experience that high oil prices have a significant economic impact that on a global scale, are capable of undermining world economic growth.

In our national security, urgent attention should immediately be directed at legislation to ensure that all existing fuel storage in Australia is maintained as part of any future national fuel energy security plan,

The direct and indirect employment impacts of oil refinery change will be difficult, but could be recovered and further advanced should Australia commit to the active growth and deployment of our nations available and proven domestic alternative fuels.

These measures must include biofuels, cleaner burning gaseous fuels and electric propulsion vehicles.

---

<sup>4</sup> IEA Table explanation of Closing Oil Stock Levels in Days of Net Imports 2011, <http://www.iea.org/netimports.asp>

In the U.S. alone over 200 biofuels plants already provide 10 percent of America's domestic petrol fuel demand along with 400,000 direct and indirect jobs in rural and regional America. These jobs help add \$42.4 billion to America's Gross Domestic Product (GDP) and pump \$30 billion into the budgets of hundreds of thousands of American households.

Ethanol in Brazil provides 50 percent of its petrol market demand and 980,000 jobs for its workers.

Unlike conventional and unconventional oil-based transport fuels (petrol and diesel), Australia's domestic alternative fuels also offer significant net reductions in adverse health and CO<sub>2</sub> transport (climate change) emissions.

Eight years has now passed since the last Energy White Paper, and now NESA expects the loss of another 4 years (to 2016) before any serious threats are likely to confront Australia's energy security.

In the short term (3 to 6 months) Australia and the world may have to deal with a 1970's type of world energy crisis. Iran has threatened to block the movement of oil through the Strait of Hormuz and direct attacks on Israel should the U.S. and/or Israel attack their emerging nuclear weapons facilities.

Close to 50 percent of the oil used by Singapore's refinery comes through the Strait of Hormuz, and Australia remains bereft of any planning for a global transport energy crises.

An Australian Strategic Fuels Policy that does not take these factors into consideration would represent a significant threat to national energy security

Your offer to present a Submission is appreciated.

With regards,

Bob Gordon   
Executive Director