

ASPO-Australia

Australian Association for the Study of Peak Oil & Gas

www.ASPO-Australia.org.au

Convenor, Bruce Robinson

61-8-9384-7409 mobile 61 427 398 708

Bruce.Robinson@ASPO-Australia.org.au

Submission on the 2014 Federal Energy Green Paper

It is crucial that a separate professionally-objective review is undertaken of Australia's high levels of liquid fuel vulnerability.

Summary

The Shorter Oxford English defines "green" as, inter alia,

immature, undeveloped;

raw, untrained, inexperienced;

simple, gullible

The small transport energy component of the Energy Green Paper sadly shows all these features.

From the transport energy point of view, the Green Paper is a major disappointment both in its lack of coverage of most of the important issues facing Australia, and because it glosses over the nation's very serious oil vulnerability.

The Green Paper is also badly diminished by using "Energy" collectively for such disparate and non-equivalent sources as solar PV and liquid fuels for transport. This strategy is apparently used to avoid consideration of our precarious transport energy situation

The current combined "All-Energy" format of the EWP leads to a dramatic underestimation of our oil vulnerability risks. There needs to be a "Liquid Fuels" White Paper, completely separate from the dangerous confusion and misconceptions of the past and current "Energy" White Papers. The remaining "Energy" topics can be covered by a "Stationary Energy" White Paper

The EWP Issues Paper begins with the claim

Australia's abundance of primary energy resources will continue to underpin high living standards and a strong economy.

This statement is clearly false in regards to our very serious vulnerability to overseas oil and liquid fuel supply shortages, although it is true in respect to coal and natural gas,

The Green Paper states

The Energy White Paper is central to the Australian Government's economic reform agenda for a strong and prosperous national economy.

This cleverly avoids the risks to Australian transport from our heavy dependence on imported fuel, which almost completely beyond the influence of any economic reform as discussed in the Green Paper.

91% of our liquid fuel for transport is imported, either as refined products, or as crude oil to be refined in Australia.

The 2013 and 2014 reports for the NRMA by Air Vice-Marshal Blackburn detailed our oil vulnerability, but focussed entirely on the short-term aspects. The longer term global oil-depletion scenarios were not covered in these vital reports, but are probably more serious overall and require much more forward planning with time-lines of decades, but starting now.

Australia's Liquid Fuel Security

A Report for NRMA Motoring and Services

Prepared by John Blackburn AO 28 February 2013

As the world's ninth-largest energy producer, Australia has abundant renewable and non-renewable energy resources. Despite these resources, we are heavily dependent on imports of refined petroleum products and crude oil to meet our liquid fuel demand and our import dependency has increased over recent years. Any major interruption to the supply chain would significantly impact our way of life.

“Unfortunately, our unwillingness to assure our liquid fuel supplies puts at risk many of the societal functions that we take for granted. For example, without an adequate supply of liquid fuels we could not access health services; food production and distribution would be severely curtailed; most businesses could not operate; our personal and much of the public transportation system could not function; and our Defence Forces could not operate. Essentially, our society as we know it would cease to function.”

The NRMA report was summarised in an article in “The Australian”

Doomsday warning on fuel stock

- by: Cameron Stewart [The Australian](#) February 28, 2013
- www.theaustralian.com.au/national-affairs/doomsday-warning-on-fuel-stock/story-fn59niix-1226587222669

AUSTRALIA would grind to a halt within three weeks with almost no deliveries of food or medicine if its overseas oil and fuel supplies were cut off.

An NRMA-commissioned report on the nation's liquid fuel security released today says the government has allowed the country to become too dependent on foreign supply of liquid fuels.

It says there are no coherent contingency plans to deal with the devastating impact of any cut to overseas supply because of war, economic turmoil or natural disasters, instead adopting a "she'll be right" approach.

The report, written by retired RAAF Air Vice-Marshal John Blackburn, finds that 85 per cent of transport fuel comes from overseas crude oil or imported fuel.

This dependency on overseas oil and fuel has increased steadily during the past three decades and will continue to rise as local refinery capacity decreases.

"Almost 95 per cent of our road transport network relies on oil and it would be crippled within weeks if Australia's liquid fuel supply was disrupted," NRMA Motoring and Services director Graham Blight said. "We have about three weeks' worth of fuel at our disposal before the country would come to a standstill."

The report finds that if overseas oil and fuel supplies are cut, the lack of adequate transport will see dry shops run out of chilled, frozen and dry food within seven to nine days; chemists will run out of medicine within a week, hospitals within three days and fuel supplies for motorists will be exhausted in three days.

Liquid fuels vulnerability assessment

ACIL-Tasman 2011 for Department of Resources Energy and Tourism

Vulnerability assessment

“Projections by the IEA and EIA support a conclusion that there should be sufficient global oil production and refining capacity to supply the Australian market over the period to 2035. Periodic capacity constraints and interruptions to supplies could however result in volatile and rising oil prices over the period, as would be expected in a normal functioning market”

National Energy Security Assessment – December 2011

“The 2011 NESAs finds that energy security in our natural gas, electricity and liquid fuels sectors has remained largely consistent with the assessment undertaken in 2009. Specifically, the NESAs finds all three sectors have a ‘moderate’ or above energy security assessment over the short, medium and long term.”

This latter claim is probably true for gas and electricity, but probably badly misleading or deceptive as far as liquid fuels go. If such a statement were printed in a commercial advertisement, company report or prospectus, it would risk prosecution under the Australian Consumer Law (formerly the Trade Practices Act)

Summary

Danish physicist Niels Bohr used the saying *“Prediction is very difficult, especially about the future.”*

This is particularly true about oil supply forecasts (and price estimates)

There is a very wide range of forecasts of future oil supply levels. Both the cornucopians and the Peak Oil fraternity have made predictions which have proved to be badly wrong, or at least premature. Both views are still widely promoted, with only rare attempts at an objective review. The International Monetary Fund staff have prepared two useful working papers (1) and (2) reviewing the conflicting views.

However, it is most unwise for the Federal and State Governments to continue to bet everything on only one side of the debate. Leading US Geological Survey petroleum geologist Les Magoon said about global oil supply concerns in 2003 *“The prudent strategy is to plan for the worst and hope for the best.”*. Sadly, government liquid fuel policies in Australia can be accurately summarised as “No-worries. She’ll be right”. Another summary would be to describe them as “faith-based” rather than “evidence-based”.

The Scientific American article, *“The End of Cheap Oil”*, by Campbell and Laherrère in 1998 raised concern about oil depletion. Coincidentally the oil price rose about tenfold in the decade after its publication. Since that article appeared a lot more data has become available, and “non-conventional” oil is being produced in significant volumes, although not as high as many optimists had predicted. A great many papers have been published, a few of which are included in the reference list below. Many professional-level web blogs also discuss the issues, for instance “The Oil Drum” which provided serious analysis and data supporting the Peak Oil side of the debate.

An example of the shifting forecasts of future oil production levels is shown in the graph of US Energy Information Administration's forecasts over the last decade. It shows a substantial and continual decrease of the EIA estimates of future global oil production, and how actual production been substantially lower than the early forecasts. This was used as an example in the 2012 IMF Working Paper WP/12/109 *The Future of Oil: Geology versus Technology*. This illustrates the risks of relying on a few "authoritative" sources like the EIA and International Energy Association (IEA). The IEA has been criticised by a whistle-blower as being biased by political pressure from the US Government. The ACIL Tasman Liquid Fuel Vulnerability Assessment, as quoted above, unfortunately relies very heavily and unquestioningly on EIA and IEA estimates

A short review of the Peak Oil side of the story is provided as a separate document.

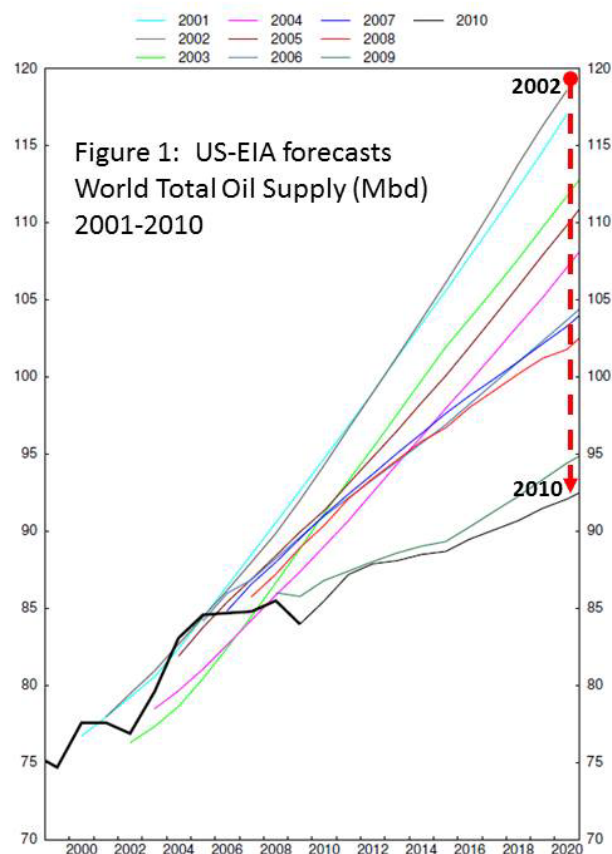
ASPO-Australia does not consider it worthwhile to provide a more detailed submission than this, given the track record of this and previous "Energy White Papers" which gloss over the nation's oil vulnerability. We have in the past arranged international speakers to give seminars in Canberra, the most recent being Prof Kjell Aleklett leader of the Uppsala Global Energy Systems Group who spoke at a BITRE seminar in 2009, and at a Defence Department seminar in 2010 but whose highly-regarded work seems to have completely escaped the attention of the Liquid Fuels Vulnerability Assessment team.

As headlined initially, ASPO-Australia feels an attempt to cover Australia's stationary energy prospects and policies at the same time as reviewing the various oil shortage scenarios and the policies needed to acknowledge and prepare for them is doomed to repeat past failures.

It may be that one reason for these failures is the gulf in backgrounds and required policy-level skills between managing Australian electricity production and pricing, and preparing for low-probability but high impact global oil shortages. The former can be controlled by Federal and State Governments, while the latter is very largely completely beyond Australia's control. Like cyclones, floods, tsunamis, droughts and bushfires, we have to prepare for future oil shortages and to be able to make the best of the situation if (or when) they do occur.

One minor example of the gulf between liquid fuel reality and the authors of the Green Paper is the failure to include any oil & gas industry sector in the questionnaire document provided as part of the Green Paper submission process. (see right) Following our earlier complaint, the on-line questionnaire was changed, but the document form of the questionnaire remains unchanged, as below. Even the on-line version now uses the unusual term "oil and petroleum" instead of either the more common "petroleum" or "oil & gas" terms

However, if there is open discussion of the various oil shortage scenarios as part of a serious look at Liquid Fuel Vulnerability, perhaps via a separate



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White Paper, we will be very keen to assist. We have a considerable network of professionals, in Australia and overseas, upon whom we can call.

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It may be advisable to copy the reference URLs into the browser, in case clicking on the link does not work.

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