Dear Sir/Madam

Please find attached a copy of my paper as sent previously to the senate. I had previously said I did not wish to have it published however, am now happy for it to be published on your website.

I have spent 8 years in project management in the construction industry for a leading project management firm who have been providing

strategic project management services to both government and industry for 40 years. I have recently become a member of ASPO and I am

keen to have my views published. Further, I would be happy to present this paper to the Senate in the next Expert Forum (Senate Hearing)

in Sydney or Canberra. I can be contacted on 0413 21 24 26.

Yours faithfully Catherine Beck.

----Original Message-----

From: "Catherine Beck" [catherinebeck@unwired.com.au]

Date: 11/04/2006 12:10 AM

Dear Sir/ Madam

I would be very pleased if you would publish my paper on your website along with the other

submissions, the paper is as previously sent by email to the Senate on 3/3/06.

Yours faithfully

Catherine Beck.

----Original Message-----From: "Catherine Beck" [ Date: 03/03/2006 02:57 PM

Dear Sir/Madam

Please find attached a letter to the Senate regarding Peak Oil.

Yours faithfully Catherine Beck.

The Secretary
Senate Rural and Regional Affairs and Transport
Parliament House
Canberra ACT 2600
Australia
Email: rrat.sen@aph.gov.au

23 February 2006

28 Wandeen Rd Taylors Point NSW 2107.

RE: Response to the Senate Inquiry relating to Australia's future oil supply, and alternative transport fuels, with particular reference to:

- a) projections of oil production and demand in Australia and globally and the implications for availability and pricing of transport fuels in Australia;
- b) potential of new sources of oil and alternative transport fuels to meet a significant share of Australia's fuel demands, taking into account technological developments and environmental and economic costs;
- c) flow-on economic and social impacts in Australia from continuing rises in the price of transport fuel and potential reductions in oil supply; and
- d) options for reducing Australia's transport fuel demands.

Dear Sir/ Madam

Please find attached a copy of my paper entitled: "Global Peak Oil and Australia's Preparation for it" by Catherine Beck dated 23 February 2006 for your information and review within the above mentioned Senate Inquiry. I would appreciate the Senate giving me prior warning if it proposes to publish my paper or quote from it.

Yours:	taith	tul.	ly
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Catherine Beck.

## GLOBAL PEAK OIL AND AUSTRALIA'S PREPARATION FOR IT

Submission by Catherine Beck (B. Sc Arch) to The Parliament of Australia, Senate. 23 February 2006.

## 1. THE PROBLEMS FACING AUSTRALIA FROM GLOBAL PEAK OIL:

- 1.1. There is mounting credible evidence based on sound geological data that Global Oil production has or is about to peak, and will decline steadily over the next three to four decades. Highly respected authorities like Kenneth Deffeyes put the peak at 2005. Australia's oil production also appears to have peaked in 2000 and is now in decline (Robinson, Fleay & Mayo).
- 1.2. It is also clear that world oil demand is continuing to rise, particularly with the industrialization and rapidly growing middle classes in developing countries like China and India.
- 1.3. The Middle East which produces a large percentage of the world's oil production is politically unstable and is likely to suffer disruption to supply.
- 1.4. The combination of rising demand, falling production, and potential interruptions is likely to cause the cost of oil to increase dramatically, much as it did during the oil shocks of the early seventies.
- 1.5. Australia has a high reliance on oil for its economy. Oil is consumed for transport, for heating and cooling, for fertilizer and for many plastics across all industries.
- 1.6. The rapidly rising cost of oil is likely to have a strong inflationary effect on Australia's and the world economy.
- 1.7. With the exception of coal and gas, the alternatives to oil (wind power, biofuels, solar, hydrogen, tidal energy) are many years and in some cases even decades from approaching commercial competitiveness with oil, and require a great deal of R&D to reach that state.
- 1.8. Current legislation does little to encourage development of alternatives to oil and coal.
- 1.9. Coal is an alternative to oil, but is not as efficient or portable as oil and has the greatest impact on greenhouse gasses.
- 1.10. Consumption of both oil and coal is dramatically increasing the volume of greenhouse gasses, and there is an increasing credible body of evidence that this is causing rapid global warming.
- 1.11. The Coal, Oil, Power and Transport Industries have massive investments in infrastructure that will take 20-30 years to write off and are unlikely to cooperate with any regime that does not take this into account.

## 2. WHAT SHOULD THE GOVERNMENT BE DOING?

- 2.1. The first thing that should be done by Government is to acknowledge that the disparity between world oil supply and world demand is imminent. The Government should foster discussion and research on this issue immediately and raise public awareness in a calm, professional manner without arousing panic.
- 2.2. The government should prioritize the use of oil, and develop planned uses of remaining reserves so that maximum community benefit is derived, as previously done in world wars. This plan should be accompanied by a timetable for the planned reduction in reliance on oil.
- 2.3. The Government needs to understand that the solutions to Global Peak Oil can not be implemented quickly because of the huge investments already made in oil and coal technologies. Industry needs to be given time to change, and therefore Government legislative actions are needed immediately.
- 2.4. There is a need to implement legislative changes to encourage R&D and the commercialization of alternative energy and infrastructure to reduce the consumption of oil over the next 5-10 years across all industries.
- 2.5. In particular, the Government needs to legislate to encourage the development and introduction of more fuel efficient vehicles within the next 5 years. This technology is already commercially available e.g. Toyota Prius.
- 2.6. Also it needs to improve public transport and encourage its use by community through the awareness of the issues surrounding Peak Oil.
- 2.7. The Government should consider imposition of initially mild, but progressive oil rationing either by increased taxation or by some form of equitable rationing or both.
- 2.8. The Government should encourage the use of alternative energy sources over oil by means of differential taxation.
- 2.9. Encourage the development and use of more energy efficient transport modes eg rail by imposing progressively increasing taxation on road transport, in such a way that it reduces reliance on road transport over the next decade.
- 2.10. Encourage R&D on CO2 sequestration with the objective of increasing reliance on coal without the impact of global warming.
- 2.11. The Government should not encourage the export of large volumes of Australian oil and gas at very low world prices and should encourage more domestic use of Australian oil and gas reserves.
- 2.12. Australia should look to secure a significant portion of Australia's long term demand for oil now while it is still possible to do so, through long term

- contracts with a number of suppliers in different regions (as China is currently doing).
- 2.13. The Government should legislate that all new infrastructure and equipment across all industry sectors should be designed with a view to minimizing the use of oil. This requirement should be a component of all approvals.
- 2.14. The Government should encourage the development of standards for the minimization of use of oil in future developments/infrastructure and equipment.
- 2.15. Australia should look to Europe to see their use of sustainable energy for powering up whole cities.
- 2.16. The timetable for the reduction of Australia's reliance on oil needs to take account of the very long lead times for the impact of iniatives to become effective (in the order of 10-30 years) eg If improved vehicle petrol consumption was leglislated tomorrow, it would take about 3-5 years for the new vehicles to come onto the market and 15 years before half of Australia's fleet met the new standard. Therefore it is urgent that the Government acts quickly to legislate for the proposed changes.

## References:

- 1. Beyond Oil The View From Hubberts Peak Kenneth Deffeyes
- 2. The End of Oil- Paul Roberts
- 3. The Impact of Oil Depletion in Australia Robusa, Fleay & Mayo
- 4. ASPO Australia's Main Submission to the Senate Convener Bruce Robinson
- 5. An Introduction to Peak Oil Phil Hart
- 6. ABC's catalyst programme featuring Peak Oil available on ABC's website.