



Ethanol Fuel is not so Green

Posted by [Phil Hart](#) on February 6, 2008 - 8:32pm in [The Oil Drum: Australia/New Zealand](#)

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The Australian Department of Parliamentary Services has released a research paper on "The economic effects of an ethanol mandate". Published on 22 January 2008, it is available from the [Parliamentary Library website](#).

Paul Syvret, in the Brisbane Courier Mail article [Ethanol fuel is not so green](#), expressed his view on ethanol and summed up the paper by saying:

ETHANOL is not the answer for Australia's future fuel needs.

It is not green, it is not economically viable, and any move to mandate its inclusion in fuel would have enormous repercussions for other sectors of Australian industry.



Here are a few of the highlights from the report:

- Reduced oil imports are only one effect of an ethanol mandate on the trade account. Any diversion of feedstock from exports or increased imports of feedstock needed to meet the mandate would increase the trade deficit.
- A mandate is only one way of reducing reliance on imported oil. Importing ethanol, for example, would be less economically costly than a mandate, and would

diversify geographic supply sources and the composition of fuel.

- The evidence suggests that the costs of creating jobs under an E10 mandate would be high. A mandate could also adversely affect other rural industries.
- The Biofuels Taskforce that the Howard Government established concluded that greenhouse gas benefits alone would not warrant further assisting biofuels given the availability of much cheaper carbon reduction options.
- The additional demand for feedstock under a mandate might lead to competition for land from other uses such as food and exports. Views differ on the potential for competition for land use in Australia.
- A mandate could benefit the economy if domestic ethanol could compete with imports without government assistance.
- Even though a comprehensive cost-benefit analysis of an ethanol mandate has not been undertaken, no prima facie economic case for a mandate has been established.

The research paper was fairly blunt about the competitiveness of ethanol:

How would a mandate work

A mandate increases demand for ethanol above what market forces (supply and demand) would otherwise determine. It generally costs more to produce ethanol than petrol (allowing for the fact that ethanol contains less energy than the same volume of petrol).

In the absence of a subsidy to encourage the use of ethanol, and with a tax regime that is neutral between petrol and ethanol, motorists would prefer to buy petrol rather than fuel ethanol because petrol is cheaper.

A mandate is thus a form of 'compulsory demand' because it obliges motorists to buy ethanol even when ethanol is uncompetitive with petrol. Because it generally costs more to produce ethanol than petrol, a mandate would increase the price of fuel in the absence of an ethanol subsidy. The price increase is a redistribution of income from motorists to ethanol producers.

A mandate is, in effect, a subsidy to ethanol producers paid by fuel users.

Given such a dim opinion from the Government on the economics of ethanol, it makes you wonder what the structural differences are between Australia and the United States that makes corn ethanol so profitable there [*Edit: This clearly depends at what point time in you do the analysis - see the posts by Robert Rapier and Stuart Staniford linked below*].

While the U.S. is now converting more than one third of it's corn crop to ethanol, the number of production scale biofuel plants in Australia could probably be counted on one hand. At the moment, bagasse, largely a waste product from the sugar cane industry (and therefore cheap) is the main feedstock for the local industry.

Do the economics not support conversion of primary sugar and wheat crops to ethanol in Australia? Or is the [Dalby bio-refinery \(top image\)](#), apparently Australia's first grain-to-ethanol facility and due to come onstream this year, a taste of things to come; Mandate or No Mandate?

Other TOD articles on Ethanol:

[Fermenting the Food Supply](#) by Stuart Staniford

[The Economics of Corn Ethanol](#) by Robert Rapier



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