From: Peter WylieSent:Friday, 8 June 2007 4:43 PMTo:Committee, ISR (REPS)Cc:Macfarlane, Ian (MP)

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Submission No:	

Submission on Bioenergy

I note that the Industry and Resources committee is to examine the bio-energy sector further and the conversion of biomass in particular.

Although these options are of interest, the total volume of readily available materials would appear to be small relative to Australia's energy needs.

A bigger picture is needed of 'energy plants' which use both grain or sugar and the biomass. The two most productive crops in Australia are sugar and cassava, with potential for both sugar and starch as well as cellulose being converted to fuels such as butanol rather than ethanol.

Canola or sunflower grain in Australia has a yield of around 3 tonnes per hectare, which might just produce 1000 litres of biodiesel per hectare

Irrigated sugar cane can produce 12,000 litres of ethanol from a hectare, and with the conversion of biomass (bagasse) into energy could exceed 20,000 litres per hectare. It could be possible to produce 40% of Australia's fuel needs from a relatively small area of irrigated agriculture in the tropical north.

I have attached two articles relating to this subject.

Please contact me if further information is required.