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19 April 2006

Committee Secretary
Senate Environment, Communications, Information Technology and the Arts Committee
Department of the Senate
PO Box 6100
Parliament House
CANBERRA ACT 2600

EMAILED

Dear Dr. Holland

Submission on Renewable Energy (Electricity) Amendment Bill 2006

Bioenergy Australia is a government-industry alliance of some 50 organisations, established to foster biomass as a source of sustainable energy and for value-added bioproducts. Its broad objectives are to:

- Promote an awareness and understanding of the economic, social and environmental attributes of sustainable energy and chemicals from biomass.
- Broaden the market for biomass by enhancing opportunities, and by helping to reduce financial, regulatory, fuel supply, technical and institutional barriers to enable widespread adoption of biomass energy.
- Facilitate the development and deployment of biomass energy business opportunities and projects.

Bioenergy Australia is the vehicle for Australia's participation in the International Energy Agency's Bioenergy program, an international collaborative agreement involving some 22 countries plus the European Union. Bioenergy Australia acts as a forum for general and authoritative information dissemination on bioenergy, including drawing on international best practice experiences through its IEA Bioenergy participation.

It is possible that several of Bioenergy Australia's member organisations will provide their own submissions, highlighting their experiences under, and preferences for the future of the Mandatory Renewable Energy Target (MRET). Please note that this submission may not represent the views of all Bioenergy Australia's members.

As was noted in the Bioenergy Australia submission to the original MRET Review Panel on 5 May 2003, a key driver for the renewable energy industry, including bioenergy, has been the Renewable Energy (Electricity) Act and its Regulations. While the legislation has generally provided a fillip for the renewable energy industry, several bioenergy industry members who are developing substantial bioenergy projects have been experiencing difficulties with the Regulations as they currently stand and pertain to the use of biomass. (It is recognised that the Regulations are to be amended to accept various bioenergy related recommendations from the MRET Review). This has created uncertainty for bioenergy proponents and has inhibited the growth of bioenergy in the evolving renewable energy market.

I would like to raise one particular issue in the Renewable Energy (Electricity) Amendment Bill 2006 that I believe requires further consideration and amendment. In the current Section 17 of the Renewable Energy (Electricity) Act 2000, a diverse list of 'eligible renewable energy sources' are listed. Several of the listed items are technologies and not renewable energy sources. Items (d), (e), (f), (g), (h), (i), (j), (k), (l), (s) are in effect biomass energy related.

It is noted that the proposed Renewable Energy (Electricity) Amendment Bill 2006 has taken steps to consolidate various solar energy and hydro energy sources into a simpler, more coherent list under Section 17, as follows (to quote):

"17 What is an eligible renewable energy source?

(1) The following energy sources are *eligible renewable energy sources*:

Schedule 1 Amendments

Part 1 Amendments

- (a) hydro;
- (b) wave;
- (c) tide:
- (d) ocean;
- (e) wind;
- (f) solar;
- (g) geothermal-aquifer;
- (h) hot dry rock;
- (i) energy crops;
- (j) wood waste;
- (k) agricultural waste;
- (1) waste from processing of agricultural products;
- (m) food waste;
- (n) food processing waste;
- (o) bagasse;
- (p) black liquor;
- (q) biomass-based components of municipal solid waste;
- (r) landfill gas;
- (s) sewage gas and biomass-based components of sewage;
- (t) any other energy source prescribed by the regulations.

- (2) Despite subsection (1), the following energy sources are not eligible renewable energy sources:
- (a) fossil fuels;
- (b) materials or waste products derived from fossil fuels."

It would appear that generic forms of renewable energy, with the exception of bioenergy related sources (items i to s) have been placed in well recognised and general categories, e.g. hydro, wave, tide, ocean, wind and solar. However, biomass has been placed into items (i) to (s) which does not capture all possible sources of biomass.

Biomass is very diverse in its nature. There potentially many other forms of biomass resources that would meet the policy objectives and sustainability criteria, yet are not listed explicitly in Section 17. An example is high lipid content algae, capturing carbon dioxide from power station stacks. As such, forms of sustainable biomass may be unintentionally excluded under the Act. Item (t) in the above list would not provide much comfort to a proponent, as it may take time to modify the Regulations, and one could land up 'arguing the toss' with the Regulator whether a particular source of biomass fits into one on the categories, (i) to (s). Section 17 effectively excludes biomass sources if they are not explicitly in the list.

This difficulty and the uncertainty it creates could be very simply overcome (as was done for solar, hydro and wind) by replacing items (i) to (s) above with one simpler item "biomass" and qualifying the compliant forms of bioenergy in the Regulations. This is currently effectively done in the Regulations for the sources of biomass requiring additional consideration, such as biomass from native forests.

Part of the concern is that States are trying to adopt MRET type schemes, and could well rely on the MRET legislation for guidance on compliant forms of renewable energy.

I would like to reiterate the Bioenergy Australia MRET submission recommendation of May 2003 and request its adoption:

Recommendation: The various forms of *eligible renewable energy sources* be consolidated into major categories of: hydro, wind, solar, biomass, ocean and geothermal in Section 17 of the Act.

I would also like to reiterate another item from Bioenergy Australia's 2003 MRET submission:

"Greater impetus would be given to bioenergy projects under MRET if the 'cliff' at 2020 were softened or the MRET extended well beyond that date. The project life of a bioenergy plant would typically be in excess of twenty years and capital recovery is typically fifteen years or more. The longer the period for capital recovery, the less this cost affects the electricity selling price. As the target only reaches 9,500 GWh/a in 2010, many proponents see this 'cliff' at 2020 as being a disincentive for a project

with an economic life of 20 to 30 years. MRET would have a greater impact in bringing forth bioenergy projects if the 2020 horizon were extended. **Recommendation:** That the MRET conclusion date be extended beyond 2020 to at least 2030".

This situation still persists, and if anything the passage of three years has exacerbated the situation. I would like to bring to the Committee's attention that the 'cliff' at 2020 for bioenergy projects remains, and the non-expansion of MRET has resulted in several bioenergy projects under development struggling to go ahead without an expanded and extended MRET scheme.

Yours Sincerely

Stephen Schuck PhD, MBA (Technology Management) Bioenergy Australia Manager