Comments on IPA's submission: "The Costs to Australia of Renewable Energy: Submission to the Senate on the proposed 20 per cent energy requirement"

The submission addresses many more issues than just the Renewable Energy (Electricity) Amendment Bill 2009. AGEA's submission is focussed on issues relating to the RET.

The pervading assumptions behind IPA's arguments are:

- Australia does not need renewable energy
- Electricity generated from renewable energy is more expensive than that generated from coal

If there were to be no penalty for the emission of carbon dioxide then the IPA's assumptions have validity. On the basis that there will be a penalty imposed on the emission of carbon dioxide then all generation cost comparisons should be undertaken with the penalty included.

The following table, produced by McLennan Magasanik Associates in February 2009, and included in AGEA's submission, shows their prediction of the comparative costs of all forms of electricity generation technologies in 2030. Clearly from this table, renewable energy, in particular geothermal, will be the lowest cost.

## Comparison of long run marginal cost of generation technologies in 2030

	\$/MWh
Coal technologies	
Post-combustion capture	174
Supercritical coal (dry cooling)	117
IGCC	110
Supercritical coal with oxyfiring and CC	109
IGCC with CC	98
Natural Gas technologies	
CCGT - small	104
CCGT –with CC	102
CCGT - large	95
Cogeneration	80
Renewable Energy technologies	
Roof Top PV	397
Concentrating PV	259
Solar Thermal	229
Solar Hot Water	150

Biomass	105
Geothermal – Direct Heat (i)	100
Wind	96
Geothermal - Hot Rocks	95
Geothermal - Hot Sedimentary Rocks	93

Produced by McLennan Magasanik Associates:

In their final paragraph before their concluding comments, IPA confirm, that on the basis that an emission trading scheme is in place, and renewable energy were the lowest cost option, then the impact of the Renewable Energy (Electricity) Amendment Bill 2009 would add no cost to the economy. They state "the expanded MRET would entail some reductions in the cost of the ETS (100 per cent in the unlikely event that the renewables were the lowest cost option)". With renewable energy the predicted lowest cost energy source, then IPA's arguments are nullified.

The submission ignores the fact that we have to move to clean energy, we have no choice and it is going to cost. The new technologies will be cheaper however than refitting carbon and capture technology to existing coal fired power stations once we come down the development costs curve.

The question that each country has to ask itself is how to do this in its own national interest taking into account:

- resource base
- indigenous technology capability
- export potential

Hence AGEA's view is that we must develop the emerging technologies with baseload and other benefits.

In addition, IPA totally ignore the cost to the economy, and civilization generally, on the impact of carbon emissions and the economic benefits of developing a renewable energy industry in Australia.

<sup>&</sup>quot;Comparative Costs of Electricity Generation Technologies" -February 2009