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**SUBMISSION**

**TO THE**

**WASTE MANAGEMENT BOARD**

**IN RESPONSE TO**

**STRATEGIC DIRECTION FOR WASTE MANAGEMENT  
IN WESTERN AUSTRALIA**

**WEDNESDAY 24<sup>th</sup> DECEMBER 2003**

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The Western Australian Sustainable Energy Association (WA SEA) Inc. welcomes the opportunity to comment on the Strategic Direction for Waste Management in Western Australia and congratulates the Gallop Government on this initiative.

WA SEA Inc. is the peak body of the Western Australia sustainable energy industry. The Association promotes the development and adoption of sustainable energy technologies and practices that minimise and/or displace fossil fuel use. The Association has over 60 individual and company members representing a broad spectrum of the sustainable energy industry including waste, solar hot water heating, renewables and energy efficiency.

There are a few specific issues raised in the ‘*Strategic Direction for Waste Management in Western Australia*’ document which will be addressed in this submission.

#### 1.0 The priority of ‘waste based bioenergy sources ’

WA SEA is concerned that the strategy relegates all ‘waste to energy’ processes to a low priority.

*Energy recovery has often been claimed as a form of recycling but under the Zero Waste Model and the Waste Management Board Strategy it is highlighted as a treatment option for managing residual wastes. These wastes represent failings in our ability to recover resources. (Page 41)*

WA SEA considers there is scope for waste based bioenergy sources to contribute significantly to the renewable energy mix, particularly in any transition phase. This is in line with current European trends. For example, the European Union views bioenergy as the dominating source of renewable energy potential and The European Renewable Energy Study - II report indicate equal potential from forest, agro and waste based bioenergy sources.

Among the renewable energy sources, waste based bioenergy sources and other biomass technologies have an advantage over existing wind, solar, wave and tidal technologies in that the source can be stored and made available on demand.

The *Strategic direction for waste management in Western Australia* document states that ‘waste-to-energy’ is a ‘failure’ without providing a good argument for this conclusion. This lack of scientific argument gives the impression that the authors have not investigated the fundamental scientific base that underlies the wide acceptance of waste based bioenergy and its role in the renewable energy mix.

WA SEA believes that the *Strategic direction for waste management in Western Australia* document should address a serious shortcoming and clearly articulate the scientific facts around waste based bioenergy sources and based on this information the authors should draw their conclusions and explain them. To do otherwise is to potentially make decisions that ignore the hard science that underlies renewable energy and potentially promote ignorant strategies that act against the best interests of our community. Methodologies aimed at defusing and neutralizing an important potential form of renewable energy by using quantities of fossil fuel do not serve the community and only act to further potentiate global warming.

## 2.0 The importance of lifecycle analysis

WA SEA agrees that life cycle analysis should be the basis for decision making, as discussed on Page 34. However, this analysis should include energy as well as material products, and be based on current technologies and practices. Wasted energy may be the most significant of all the resources. Transport energy and greenhouse gasses in particular need to be included, because of the likelihood of a shortage of oil and global warming within the time frame under consideration.

## 3.0 Outcomes and Strategies

To this end energy should be specifically included in the Strategies listed to achieve **Outcome 6** (page 23) by amending the first strategy to read:

‘Develop waste auditing protocols **which include both material and energy waste**’.

The Strategies for **Outcome 5** (page 22) should refer to:

‘resource **and energy** recovery’, not just ‘resource recovery’.

## 4.0 Composting

Composting is seen as benign and potential pollution elements are not dealt with in the document. Composting of organic material can provide a resource that would greatly improve local soils, but it is not necessarily always the best method of disposing of organic waste. Contamination of product can occur and greenhouse gas emissions are high. Present indications are that the market for compost is saturated, and the price would have to be lowered, even to zero, for much more product to be used. This implies a significant subsidy. It is simplistic to assume that composting will be the best treatment for all organic waste.

## 5.0 Compatibility of State Government policies

It is important for State Government policies to be compatible. The Greenhouse Strategy has recently been released and states that:

*Waste management plans should include greenhouse concerns as a key parameter in all waste management decisions. (page 44)*

Stationary energy sources are by far the largest source of greenhouse emissions, and waste-to-energy can reduce greenhouse not only by reducing N<sub>2</sub>O and methane emissions, but also by substituting for fossil fuels.

## 6.0 Development of a realistic and achievable vision

The vision for 2020, outlined on pages 1 and 2, is utopian and achievement of this vision will be impossibly challenging. Western Australia is a small player in world commerce and unlikely to be able to influence the packaging of consumer goods produced overseas and interstate. The task of educating people to universally adopt the Waste Hierarchy within 16 years is overwhelming.

Perhaps the best illustration of the difficulty of training people to reduce waste is the document itself. The document was provided electronically on the Web and readers were specifically asked to comment on the Strategies to achieve the Key Objectives. Yet the only way to study these strategies, printed sideways on the screen, is to waste paper and ink and print them out. If the Waste Management Committee cannot adopt Waste Minimisation practices who can?

By adopting a purist approach and refusing to use waste to energy technologies, particularly waste based bioenergy sources, even as a transitional strategy, the Committee is setting the Strategy up for failure.