Submission to the ACT Climate Change Inquiry

Reduction of Waste to Landfill

Background

Landfill is one of the largest contributors to greenhouse emissions in urban areas. The major gas produced from landfill is methane. According to a 2009 US EPA report, methane from landfills accounted for 23% of total human-related greenhouse gas emissions in 2007 (US EPA, 2009).

In 2005, the Australian Greenhouse Office reported:

> Emissions from waste disposal in landfills increased by 8.96% (0.67Mt) from 1990 to 2003. This trend was due to an increase in waste disposal per capita. (AGO, 2005: 1)

Currently, 56% of waste going to landfill in the ACT is organic (compostable) waste. Diverting this waste from landfill to an anaerobic composting system such as in-vessel composting, would be a significant step in reducting in the ACT's total emissions. Since the abandonment of the ACT Government's *No Waste by 2010* strategy, it appears that further diversion of waste to landfill beyond the current kerbside recycling program has been shelved. Indeed, an email to one of the signatories of this submission from an ACT government waste policy officer states that "a government run organics service does not appear to be on the (ACT Government's) immediate radar".

Submission

The signatories to this submission believe that 100% diversion of organic waste from landfill in the ACT is an achievable target. It is more cost-effective and efficient that alternative capital-intensive landfill gas capturing technology such as bioreactors. The AGO 2005 report gave a 'best estimate' on the efficiency of landfill gas capture systems at 55% (AGO, 2005: 2) and a recent report in the leading industry journal, *Waste Management and Environment*, reiterated the government's misgivings about methane capture as a solution to emissions reduction from landfills:

> Landfill gas extraction may be considered an inefficient means of recovering energy or reducing greenhouse emissions compared with other pre-burial energy recovery options, because not all the gas is recoverable and it continues to be generated at declining rates for years after practical exploitation has been discontinued. (Arens, 2009)

The current contractual arrangements for waste disposal in the ACT mean that the contractor receives a payment for each tonne of waste taken over the weighbridge at the landfill. There is therefore no commercial incentive for the waste industry to reduce waste to landfill and every reason for the industry to work towards an increase in waste to landfill.

This submission calls for the ACT Government to:

- consider reduction of waste to landfill as a major component to any broader emissions reduction program;
- investigate the viability of collection of organic household waste and in-vessel composting;
- revisit the *No Waste* strategy as a means of engaging the business community in waste reduction, in particular the hospitality and catering sector of the business community which produces a large proportion of organic waste currently going to landfill;
- cease to regard organic waste as a commodity to be disposed of, but as a valuable resource in rehabilitating our local soils for better water retentiveness and productivity;
- ensure that in future contracts for waste collection and disposal in the ACT a commercial incentive be incorporated to reduce waste to landfill at the waste industry level;
- support community initiatives that aim at reducing waste to landfill and reclaiming organic waste as a resource.

References

- Arens, M. (2009) “Managing for greenhouse”, *Waste Management and Environment*, http://wme.com.au/categories/waste_managemt/march2_01.phpAustralian
- Greenhouse Office (2005), “Methane to Markets Partnership: Landfill gas Technical Subcommittee Country Specific Profile: Australia”, Australian Government Department of Environment, Heritage and the Arts, Canberra
- US Environment Protection Agency (2209), *Landfill Methane Outreach Program*, http://www.epa.gov/lmop/overview.htm

Signatories

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