

ENERGY FROM WASTE SUSTAINABILITY PROJECT CANBERRA AFTERNOON SESSION NOTES OF MEETING

Date: 18 September 2002

Time: 2.00 pm – 5.00 pm

Venue: Environment Australia

John Gorton Building,

King Edward Terrace, Parkes, ACT

For more information on the Energy from Waste Sustainability Project please visit the project website:

www.wmaa.asn.au/efw/home.html

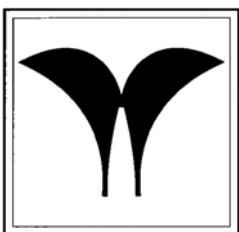
Or contact the Project Manager,
Matthew Warnken
Phone: (02) 9571 4800
Email: matthew@warnkenise.com.au

Disclaimer: This project has the support of Commonwealth Government funding through the Australian Greenhouse Office. The Commonwealth Government of Australia holds copyright for this document. The Commonwealth is pleased to allow the reproduction, in part or in whole, of this document provided that the meaning is unchanged and that the authorship of the Waste Management Association of Australia is acknowledged. This document does not necessarily represent the views of the Commonwealth Government of Australia; of other sponsors of the Energy from Waste Sustainability Project or of the Waste Management Association of Australia. This document presents many points of view from differing stakeholder groups that were recorded during workshop sessions. No attempt has been made to confirm or deny any of the statements put forward by workshop participants.

This project is an initiative of the:

***Energy from Waste Division of the
WASTE MANAGEMENT
ASSOCIATION OF AUSTRALIA***

*Commonwealth Government funding through the
Australian Greenhouse Office supports this project.*



Introduction

There are a number of issues and concerns associated with energy from waste projects. On the positive side, recovering energy from waste can generate renewable electricity, reduce the amount of waste disposed of to landfill and reduce greenhouse gas emissions. However, there are also potential negative environmental and human health effects associated with energy from waste projects.

The Energy from Waste Division of the Waste Management Association of Australia, with assistance from Commonwealth funding through the Australian Greenhouse Office, initiated the process of developing a Sustainability Guide to resolve these issues. Part of this process was a national series of eleven stakeholder workshops.

The purpose of the stakeholder workshops was to ensure that all of the positive and negative factors associated with Energy from Waste (EfW) projects were identified. The intention being to incorporate them into a Sustainability Guide for EfW. It is intended that the Guide will be used to ensure that Energy from Waste projects maximise benefits and minimise negative impacts in a way that supports the sustainable development of Australian society.

After the Canberra Workshop a smaller group was invited to discuss and debate these issues in light of the draft Sustainability Project Scoping Principles that had previously been prepared by the Working Group of the EfW Sustainability Project. A list of the participants in this afternoon session can be found in Appendix 1. Another focus of discussion was the potential requirements for an EfW Industry Code of Practice.

The results of this discussion are presented below. The information is presented exactly as scribed by the facilitators in the afternoon session, and as grouped by the participants of the afternoon session.

The information will be used by the Working Group of the EfW Sustainability project in the preparation of the Sustainability Guide and an Industry Code of Practice.

Project Scoping Principles

The issues that were identified at the Canberra Stakeholder Workshop were discussed and, where possible, grouped under the relevant project scoping principle. This indicated that in the Sustainability Guide the discussion related to that principle should adequately identify and resolve the issue.

Issues that were not covered by a project scoping principle were grouped and either a new principle was suggested or a recommendation as to how those issues should be dealt with in the Sustainability Guide was made.

Note: 'xxx' denotes an unreadable word in the workshop materials, the superscript is for archival purposes to aid the project managers to track these items

Project Scoping Principle #1: Best Use of Available Resources

Below are the issues that were covered by PSP 1.

Waste Pricing

- Should encourage other activities first such as recycling

Sustainable Agriculture

- Preference for multiple products especially organic

Optimising Resource Value

- Energy recovery low on waste hierarchy
- No single solution
- Is EfW the best outcome?

Economic Issues

- LCA on highest value use
- Inappropriate use of available resource

Waste Materials

- Quality Assurance
- Supply security
- Material handling
- Level of expertise / specialists
- Create resource rather than reduce

Project Scoping Principle #2: Selection of Optimum Conversion Technology

Below are the issues that were covered by PSP 2.

Technology Issues

- Technology

Economic Issues

- Efficiency and Effectiveness of Scale
- Installation costs for small communities

Technology

- Not always replicable – customisation
- Easily made redundant

Project Scoping Principle #3: Systems Quality Control for Assurance of Optimum Environmental Outcomes

Below are the issues that were covered by PSP 3

Technology Issues

- Heterogeneity of waste streams and difficulty of producing suitable inputs

Air Emissions

- Potential to reduce some eg. Sulphur Methane
- Uncontrolled emissions when buried
- Dioxins

Technology

- Hazardous and non-hazardous fuels
- Short term and long term
- Employ short term solution to allow development of higher environmental benefit of the resource

Regulation

- Local, state, federal consistency
- Xxx² intra state jurisdiction consistency?
- Specific programs
 - Renewable energy certificates (RECs)
 - Generator Efficiency standards
 - Green power
- Policy slow to change

Project Scoping Principle #4: Management of the Commercial Interface between Waste Generation and Energy Requirements

Below are the issues that were covered by PSP 4

Economic Issues

- Transport costs (remote communities)
- Geographic context
- Resource security, especially negative feedstocks
- Tying up of resource through contractual mechanisms

Technology

- Not always specialist technology required
- Process efficiency

Project Scoping Principle #5: Measures to Compensate for the Inadequacies of the Prevailing Market Conditions

Below are the issues that were covered by PSP 5

Waste Pricing

- Level economic playing field

Sustainable Agriculture

- Preference for multiple products especially organic

Social Issues

- Appropriate Resource Pricing
 - Needs xxx³ at end
 - Charge real cost of disposal xxx⁴ other options xxx⁶ more viable xxx⁵ instruments

Financial

- Competitiveness between fuels
- Complex
- Competition between companies

Suggestions for New Project Scoping Principles

Public Education / Perception

- Community Involvement
- Sparking community interest
- Job creation greater in alternatives to EfW
- Social xxx⁷

Costs / Funding

- Social

Social Issues

- Selling benefits of EfW to community
- Employment opportunities
- Public health issues (nuisance noxious odours etc)
- Equity in resource ownership
- Community benefits

Education Issues

- Poor understanding of available technologies
 - Benefits
 - Dis Benefits
- Fear / Unwillingness to change disposal routes
- Unrealistic expectation of processing technologies including EfW

Community Awareness and Understanding

- New technologies lead to uncertainty

Social Expectations

- Defining and managing
- True cost question of landfill versus EfW

Getting policy right

- xxx⁸
- Issues of regulator

Conclusions on the Project Scoping Principles

PSPs and sustainability guide

- Benefits of EfW need to be more clearly elucidated to stakeholders
- Need for clarity of scope of projects
- Need to evaluate social costs and benefits
- Need to examine the lack of competing technologies ie. energy production versus other use
- Management of intractables should be included in PSPs
- There may be a need to look at environmental / social / economic costs of all potential disposal technologies
- Internalisation of all costs would clarify most beneficial end use
- Need to identify a regulatory framework to underpin (?) PSPs
- Need to institute processes to meaningfully involve community in decision making – should this be a PSP or merely discussed.
- Need to include optimisation of social outcomes in PSP

Other Suggestions for the Sustainability Guide

Definition / Drivers

- Actual word “waste”
- Definition of waste
- Drivers (financial, environmental, social?)
- Need for clarity of definition scope

Costs / Funding

- High costs (technology and to the community)
- Limited funding
- Renewable energy credits

Sustainable Agriculture

- Returning resources - to farming
- Who determines when a product has no further value (and on what basis) – LCA?
- Shouldn't turn organics to ash

Technology Issues

- Perception that EfW can solve intractable waste problems
- Biodiversity impact
- Air pollution potential
 - Can gases be cleared up?
- Water and soil pollution
 - Measurement?
 - Avoid xxx¹

Renewable energy

- How is resource value quantified?
- Fossil fuel replacement – environmental impact
- Renewable consideration

Need for chapter discussion

- If not xxx⁸ will not get it right
- Philosophy

Suggestions for an Industry Code of Practice

- Underpinned by Sustainability Guide
- Prescriptive
 - Ethics
 - Social responsibility, local community involvement
 - Environmental
- Identification
 - Signature
 - Members
- Enforcement
 - Part of WMAA
 - Legality
 - WMAA as holder

- Self regulated
- Will not knowingly withhold relevant information – (who assesses relevancy) eg. toxic discharges
- Responsible reporting
- How often is cop updated
- Obligatory involvement of industry in industry issues (forced interaction)
- Competency standards
- If signing CoP need to be member of WMAA
- How will ongoing information sharing revision be funded?
- Industry commitment to R&D eg. environmental impacts
- Benchmark against worlds best practices
 - Goal of CoP
 - How to describe
 - Aspiration to fit
- International Codes of Practice
- Standards 14000? EMS?
- What is incentive benefit to participate?
- Open communication within industry. Common industry leads to common goal
 - Workability
 - Enforcement (business will do that as soon as Govt.
- Commitment to work between government and industry
- Period of review
- Reference Panel
 - Independent scientists and industry reps
 - Government, others
- Sphere of application
 - Heat versus power – different issues eg. use of alternative materials at manufacture with heat as by product

- Waste recovery
 - Issues of waste facility
- Resource user alternate materials
- Voluntary
- Bargaining / Leverage
 - Providing credibility
- What does it give user?
 - What does it give external stakeholders?
- Legal implications
- Liability
- Certification testing

Appendix 1 – Canberra Afternoon Session Participants

<i>Name</i>	<i>Organisation</i>
Sara Beavis	Centre for Resource and Environment Sciences - ANU
Margi Bohm	Canberra University
Mark Bowman	ACT No Waste
Phil Corkhill	Corkhill Bros.
Rob Dyball	Centre for Resource and Environment Sciences - ANU
Gerry Gillespie	Resource NSW
Mark Glover	Renewed Fuels P/L & Chairman of the Energy from Waste Division
Raymond Kidd	Environment Australia
Graham Mannall	ACT No Waste
Craig Midson	Australian Greenhouse Office
Kathryn Turner	Cement Industry Federation
Matthew Warnken	Warnken I.S.E. P/L - Project Manager and Workshop Facilitator