



**Submission to the Productivity Commission  
Inquiry into Waste Generation and  
Resource Efficiency**

***Presentation to the Public Hearing held in  
Brisbane on 27 July, 2006.***

**National Office**

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## Key Points – Draft Report Waste Management

- Waste management policy should be guided by best practice approaches to policy development, namely that objectives are clarified; all expected costs and benefits of different options are considered; and the policy selected that gives the best return to the community.
- The focus of waste management policy has recently shifted from disposal externalities to upstream environmental issues. A more effective and efficient way of addressing these issues would be through direct policy intervention.
- Waste management policy should focus on the environmental and social externalities associated with waste disposal, not upstream issues.
- The Commission does not favor any one method of waste disposal over others. Waste policy should be about achieving the best possible outcomes for the community, not prescribing one technical solution at the expense of others.
- States and Territories have adopted a range of policies to minimise waste and maximise recycling. Some aspire to eliminate waste altogether. This is unrealistic and can lead to perverse outcomes if recycling is pursued at any cost.
- Residual levels of externalities from modern, fully complying landfills appear to be small. Any further tightening of regulation would need to be carefully assessed, and preceded by better enforcement of existing regulations.
- Greenhouse gas externalities from landfill should only be addressed within a broad national response to greenhouse gas abatement.
- Getting prices for waste disposal right will help to reduce waste generation and achieve an appropriate balance between disposal and recycling. Basic forms of 'pay as you throw' pricing for municipal waste, such as charging for larger bins or more frequent services, should be more widely adopted.
- The case for using landfill levies to address externalities is weak. They should not be used to drive the achievement of arbitrary recycling targets nor as revenue raising devices.
- Mandatory schemes designed to place more responsibility for end of life disposal on producers should only be introduced where inappropriate disposal is likely to cause substantial externalities and intervention will produce net benefits.
- In large urban centres, scale and planning issues suggest (just as with sewage and electricity) that local governments are no longer the most appropriate authority to be managing waste issues.
- Waste management policy in Australia needs to be refocused. Policy makers and community attitudes need to be guided by open rigorous analysis of costs, benefits and risks, if waste management measures are to best serve the community.

## Introduction

Good morning

Appearing this morning are:

- Michael Kilgariff  
Director, Industry & Technical Policy  
Energy Networks Association
- Stephen Martin  
Manager Environmental Compliance  
Powerlink Queensland

The Energy Networks Association (ENA) welcomes the opportunity to appear before the public hearing on the Productivity Commission draft report on Waste Generation and Resource Efficiency in Australia.

I would like to first give you some background on the Energy Networks Association.

ENA is the peak national body representing gas and electricity distribution businesses throughout Australia.

Electricity transmission network owners, such as Powerlink Queensland, are Associate Members and are full and active participants in the ENA asset management policy agenda, which includes environment issues.

Commencing operation in January 2004, the ENA is one of the industry sector bodies that emerged from changes to the Australian Gas Association and the former Electricity Supply Association of Australia in late 2003.

For the background of the Productivity Commission, I would like to table an ENA policy committee structure and which outlines the ENA asset management policy priorities.

Powerlink is a government-owned corporation that owns, develops, operates and maintains Queensland's high-voltage electricity transmission network, which benchmarks in the top quartile internationally in terms of both cost efficiency and reliability.

Powerlink's \$3 billion network extends 1,700km from north of Cairns to the New South Wales border - approximately half of Australia's eastern seaboard.

As a Transmission Network Service Provider (TNSP) in the National Electricity Market, Powerlink's primary role is to provide a secure and reliable network to transport high-voltage electricity from generators to electricity distribution networks owned by ENERGEX, Ergon and Country Energy, which supply more than 1.6 million electricity customers.

Powerlink also transports electricity directly to large Queensland customers such as aluminium smelters and to New South Wales via the NSW/Qld Interconnector.

Powerlink is recognised by benchmark authorities as a world leader in cost efficiency and reliability.

## **ENA Members**

ENA distribution and transmission members deliver electricity and gas to over 12 million customer connections across Australia through approximately 800 000 kilometres of electricity lines and 75 000 kilometres of gas distribution pipelines.

These distribution and transmission networks are valued at more than \$35 billion, and each year energy network businesses undertake investment of around \$5 billion in network operation, reinforcement, expansions and greenfields extension.

## **Aim of ENA Environment Policy**

ENA has a policy focus on responsible and sustainable environmental management.

To achieve this aim, ENA has a number of objectives for environment policy that include:

1. Achieving a nationally consistent approach and common framework to environment codes, guidelines, standards and performance measures.
2. Maintaining an active engagement with Regulators and other stakeholders in environment matters.

## **ENA Policy on National Consistency**

Since its formation in January 2004, ENA has had a policy objective of supporting a nationally consistent approach and common framework to gas and electricity asset management regulation.

This includes the regulatory environment applied to environment and waste management policy.

The energy supply industry deals with local, state and Commonwealth Government and is of the view that national consistency is not just about better coordination, but also about appropriate allocation of resources and in this particular case, economic efficiency in waste management.

National consistency of environment regulation therefore includes a national alignment of responsibilities and regulations at the national, state/territory and local government level.

With the transfer of economic regulation of energy distribution to a single national regulator by 1 January 2007, it is more imperative than ever to ensure there is national consistency across commonwealth, state and local government jurisdictions.

ENA has a focus on environmental regulations and policy issues that have an immediate impact on electricity and gas networks. However, we do not generally cover Greenhouse and/or climate change policy issues.

Waste management is one such issue.

ENA notes that the terms of reference restrict the Commission's focus to solid, non-hazardous waste.

However, for the electricity supply industry it can be difficult to separate solid from liquid waste issues. For example, with the use of oil in electrical equipment such as transformers.

The electricity supply industry generally recycles electrical equipment where it is both legal and economically efficient to do so.

### **Equipment containing Polychlorinated biphenyls**

ENA is a member of the Stockholm Reference Group, which is implementing the Stockholm Convention on Persistent Organic Pollutants (POPs) to protect human health and the environment from the effects of chemicals such as PCBs.

PCBs have been targeted under the Convention for elimination for its use in electricity supply equipment, including transformers and capacitors.

ENA Members generally do not re-use PCB contaminated oil. Oil that is PCB contaminated generally goes into the waste stream.

PCB free oil and oil that is PCB contaminated can be reconditioned and re-used in electrical equipment.

One outcome of this Inquiry therefore could be to create an economic environment that would provide encouragement and incentive to reprocess and recycle transformer oil from equipment containing both PCB free and PCB contaminated oil, rather than burn or destroy the oil.

For example, one ENA member in Victoria, SP AusNet is in discussions with one recycling operation to sell them all waste transformer oil for recycling.

Oil filled assets with PCB levels less than 2 parts per million are classified as PCB free and sold as scrap metal. Oil filled assets with a PCB level more than 2 parts per million are chemically cleaned and sold to scrap metal merchants.

There are a limited number of facilities licensed to treat PCB oil in Australia. The industry perceives that the presence of a monopoly in the treatment of equipment containing PCB's means that prices are considered to be quite high.

Other waste streams that are considered significant for ENA members include:

**Steel from redundant hardware (substation equipment and towers).**

Decommissioned steel from the electricity networks can sometimes be difficult to recover due to the remote locations. Where there an additional use the hardware, it is considered for reuse in the first instance.

However, the hardware is general at the end of its useful life and recycling options are often limited to offering non-hazardous waste streams to rural property owners.

**Glass, ceramic and polymer insulators.**

Disposal of glass, ceramic and polymer insulators varies depending on the jurisdiction. For example, in Victoria decommissioned ceramic insulators are recycled. In other jurisdictions, there are limited opportunities to reuse or recycle decommissioned ceramic, glass and polymer insulators, with most ending up in landfill.

**Various types of aluminium and copper cables.**

The methods used to recover aluminum and copper conductors and the resale value of the materials means that most conductors are sold to metal recycling companies at the end of their useful life as part of the electricity network across Australia.

**Office waste streams (paper, cardboard, glass and food scraps).**

Most ENA members take advantage of available recycling programs for office waste streams, though opportunities are sometimes limited in regional centres.

**Cable drums and pallets (wood and some steel).**

Steel cable drums are generally sold to scrap merchants at the end of their useful life. Wooden cable drums and pallets are generally treated as industrial waste at the end of their useful life and subsequently go into landfill.

**Packaging (wood, cardboard and plastic).**

Cardboard packaging is recycled where possible, but wood and plastic packaging is generally treated as industrial waste and goes to landfill.

**Construction, industrial and building site waste.**

Construction, industrial and building waste streams separate out materials that have recycling or reuse opportunities, but the bulk ends up in landfills around the country.

**Vegetative waste (mulch and tree cuttings).**

Vegetative waste is generally mulched and given to customers or left in the area in which vegetation management has been undertaken. Other uses for mulch are sometimes explored, but often the environmental benefits of leaving the mulch on site outweigh other alternatives.

In some jurisdictions, vegetative waste is removed due to the need to minimise the risk of adding additional fuel in the event of bush fires.

**Wood poles.**

Wood poles are sometimes reused by property owners for fencing material in remote areas. The disposal of wood poles into landfill is another alternative.

This is becoming an issue for treated poles where some landfills won't take them as some agencies are starting to classify them as prescribed waste.

**Various batteries.**

Batteries used in the electrical network are recycled or treated as hazardous waste. ENA members have also investigated recycling alternatives for instrument and equipment batteries with varying success around the country.

It may be of interest to the Inquiry that Powerlink Queensland has registered with an initiative by the Queensland Government attempting to match waste generators with waste recyclers to try and make better use of various waste batteries generated by industry.

Establishing cost effective methods of recycling, reusing or reprocessing these materials have been considered by ENA members, which ENA will continue to encourage. If additional opportunities were identified through the inquiry, ENA will put forward recommendations to its members to explore other cost effective alternatives.

Many ENA members also undertake waste stream auditing as part of environmental management systems they have in place.

Powerlink has provided a sample of a waste stream audit conducted earlier this year. While it does not cover all of the issues outlined above, it provides some useful background data for the inquiry to consider.

We are pleased to table a copy of the waste stream audit.

### **Conclusion**

In conclusion, the overriding ENA objective for environment and waste management policy is to achieve a nationally consistent approach and a common framework for environment codes, guidelines, standards and performance measures.

Thank you for the opportunity to raise some issues with you this morning and we would be happy to take any questions.