



**PACKAGING AND RECYCLING
FOR A BETTER WORLD.**

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Committee Secretary
Senate Standing Committee on Environment, Communications and the
Arts Committee
Department of the Senate
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Parliament House
Canberra ACT 2600 Australia

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Re: Inquiry into the Management of Australia's Waste Streams

Introduction and overview

Visy welcomes the Senate Environment, Communication and Arts Committee's inquiry into this important part of the Australian economy. The production and management of waste has significant financial, social and environmental implications and opportunities for Australia.

As witnessed through the Productivity Commission's inquiry and report of 2006, this is a complex area for policy intervention and demands a more national and uniform approach in order to deliver the best outcomes for Australian society.

Visy is an integrated packaging manufacturing and recycling company. Through Visy Recycling, the company collects sorts and processes about 2 million tonnes of used materials from more than 2.2 million Australian households (nearly 30% of all households), 20,000 businesses and governments at all levels.

Through Visy Pulp & Paper the company recycles more than 1.1 million tonnes of used paper back into new packaging paper.

With world leading technology at Visy Packaging, the company recycles about 15,000 tonnes of used plastic soft drink bottles back into a US FDA approved full food contact virgin replacement resin.

This provides for a 'closed loop' recycling solution and sustainable manufacturing processes, highlighting Visy's core business philosophy - "We make it, we take it... and we make it again."

Visy has an extensive recycling network, with over 25 Material Recycling Facilities (MRFs) and over 250 regional recycling agents operating across Australia. Each year, Visy collects and processes in excess of 1.5 million tonnes of paper and cardboard, more than 300,000 tonnes of glass, over 30,000 tonnes of plastics and 9,000 tonnes of metals. The recycling and processing of these materials results in significant avoided landfill.

In 2006-2007, Visy manufactured approximately 850,000 tonnes of packaging products, while collecting, sorting or processing more than 1.9 million tonnes of used industrial and post – consumer materials.

Visy Recycling's focus on extracting maximum recyclable materials means it is a major contributor in the reduction of waste going to landfill.

The materials saved and reused generates other environmental benefits as it results in less energy consumption and reduced use of precious virgin materials in the manufacture of packaging.

Visy will continue to invest the necessary capital to improve its recycling technology and to find new and innovative ways to efficiently collect and recycle both commercial and household recyclables.

The benefits to the environment and particularly the role that plays in addressing climate change should not be underestimated.

Recycling reduces greenhouse gas emissions from landfill, can reduce deforestation, saves energy and produces more energy efficient products.

For these reasons, recycling should play an important role in the Australian Government's proposed carbon emissions trading scheme, particularly the treatment of recycling and landfill avoidance as a legitimate greenhouse gas abatement activity.

Visy endorses the estimate that through better waste management, Australia can reduce greenhouse gas emissions by 37.8 million tonnes of CO₂ (e), a 6.7% reduction in total national emissions.¹

Visy also believes that this target can only be achieved by implementing policies to address the amount of materials containing degradable organic carbon going to landfill. This includes food, garden, paper and wood wastes products which produce high levels of landfill gas, consisting mostly of methane.

¹ 'Waste and Recycling in Australia', Hyder Consulting/Department of Environment and Heritage, Canberra, November 2006.

New recycling and waste management policies must be implemented in order to address the current way in which these products are disposed of.

Visy advocates consideration of the following policies and initiatives:

Factor the implications of the greenhouse liability of landfill into national greenhouse gas reduction targets.

- Promote the resource recovery of waste containing degradable organic carbon
- Include recycling as a legitimate carbon abatement and offset activity under the proposed national carbon emissions trading scheme in order to promote increased recycling activity
- Recognition of effort and intent to reduce landfill and recycle in the charging of landfill levies.
- Local and state governments to take greater responsibility in the provision of collection services for waste generated away from home
- Increased use of public education campaigns to promote recycling and in particular highlight those products in the waste stream that go to landfill and contribute the most to CO₂(e) emissions.

a. Trends in waste production in Australia across household, consumer, commercial and industrial waste streams

There is little doubt that over the past 30 years there has been significant progress in the development of the Australian recycling industry and in the value and utilisation of recycled commodities.

Recycled materials are genuinely acknowledged in the market place as being commodities that represent a real present and future value. The manufacture of products that contain 100 per cent recycled materials is evidence of this.

However, Visy is concerned at the trend in Australia towards continued, and in some cases escalating, disposal to landfill of otherwise useful materials such as paper, plastic, glass and metals. An over-reliance on landfills wastes resources and contributes to adverse externalities such as land and air pollution, reduction in amenity, and long-term land contamination.

As a manufacturer who utilises recycled materials in its production processes, Visy values and requires a secure, predictable, long term and cost – efficient sources of recyclable material.

Visy competes with landfill facilities for recycled inputs and the trend has been for waste generators/collectors to direct their collections to landfill than to recycling manufacture. The reason is economic, as the benefit of sending waste to landfill outweighs any cost. While the price of landfill is lower, and the responsibility for generating the associated externalities remains unallocated, then there will continue to be little incentive to recycle and avoid landfill.

Visy believes that this problem has been exacerbated by the presence of state government owned (especially in NSW) waste service entities, that have exclusive infrastructure access and protected landfill capacity. This provides them with an effective monopoly and excludes parts of the private market from providing competitive alternatives to disposal to landfill.

b. Effectiveness of existing strategies to reduce, recover or reuse waste from different streams

In 2007, Visy collaborated with a number of other waste and recycling companies and the Total Environmental Centre to examine the climate change risks from landfill emissions to 2050.² The impact on greenhouse gas emissions of degradable organic carbon such as food, paper, garden and wood wastes disposed to landfill, were specifically studied.

All of these materials when disposed of to landfill emit methane gas, which has a global warming potential 25 times that of carbon dioxide.

If no proactive measures are implemented to deal with this problem, then business as usual projections of greenhouse gas emissions from solid waste disposal in Australia show an increase from 15.4 million tonnes (Mt) of CO₂e in 1990 to 30.7 MtCO₂e by 2020 and a further increase to 46.9 tonnes by 2050.³

Existing strategies to promote the recycling of materials with degradable organic materials need to be overhauled.

Another important issue impacting the effectiveness of existing strategies is the 'co - mingling' of recyclable materials, especially within household collections.

The highest valued recyclable materials are those with the lowest entropy. Mixing recyclables early in the disposal cycle (such as in "single bins") increases entropy and consequently increases the cost of later refining the feedstock into usable components. Therefore, unless there are specific measures or incentives to maintain separation of recyclables, the option value of the material is severely diminished.

² 'The Potential Greenhouse Gas Liability from Landfill in Australia: An Examination of the Climate Change Risks from Landfill Emissions to 2050'. Warnken ISE/Resource Recovery Collaboration, Sydney, August 2007

³ Ibid

c. Potential new strategies to reduce, recover or reuse waste from different waste streams

(1). Promote the resource recovery of waste containing degradable organic carbon

Visy endorses the recommendations contained in the report by the Warnken ISE/Resource Recovery Collaboration '*The Potential Greenhouse Gas Liability from Landfill in Australia: An Examination of the Climate Change Risks from Landfill Emissions to 2050*'.

In particular Visy notes the following recommendations which are aimed at the promotion of resource recovery of waste containing degradable organic carbon and are summarised as follows:

- Phase out the disposal of food paper, garden and wood wastes in landfill with regulatory underpinning through the use of UK style landfill avoidance trading scheme, or some other form of targeted market based instrument. Under a landfill avoidance scheme, municipal authorities would be issued with an allowance in tonnes for the amount of biodegradable municipal waste (from household and commercial activities) that can be sent to landfill. The allocations would be tradable, reducing progressively over a given period. A suitable penalty system can be imposed for exceeding an allowance and failing to purchase appropriate trade offs.
- Use regulation such as a potential ban in capital cities on the disposal of biologically active materials, or a requirement for pre processing of all waste before entering landfill to recover resources and biologically stabilize the waste.

To more effectively manage the waste that is not captured by recycling activity, Visy also supports the installation of mandatory gas capture and recovery systems for all landfills, including the closure of poorly run landfills in favour of fully engineered modern landfills with gas capture.

(2). Include recycling as a legitimate carbon abatement and offset activity under the proposed national carbon emissions trading scheme in order to promote increased recycling activity

Recycling and the avoidance of landfill undoubtedly assist in the reduction of greenhouse gases.

The use of recycled materials in manufacturing processes provides for a reduction in the amount of energy and virgin materials used. For example, By recycling paper and cardboard Australians avoid 51% of the environmental impact of using virgin material.

Correspondingly the avoidance of landfill results in reduced greenhouse emissions, such as methane.

For every tonne of used paper and cardboard recovered each year, Visy prevents 2.08 tonnes of CO₂ being emitted into the atmosphere – in 2006/07 that amounted to preventing 3,300,000 tonnes of CO₂ emissions.

By recycling 1,000 tonnes of paper and cardboard the environmental savings are as follows:

Energy savings –	18,000 Gigajoules of energy or enough energy to power 833 homes
Landfill reduction –	3,231 cubic metres of landfill
Greenhouse benefits -	400 tonnes of CO ₂ , the equivalent of permanently removing 96 cars off the road
Water savings -	23,700 litres of water, the equivalent of 9 Olympic size swimming pools

Recycling is a legitimate greenhouse gas abatement activity and as such should be recognised and accredited as a tradable offset under the proposed national emissions trading scheme.

Such recognition would have a positive effect on the level of recycling, with the offset credits being designed in such a way that they accrue not only to the recycler, but also to the waste generators and others in the supply chain.

If the proposal to establish a national drink container deposit scheme becomes reality, then there is also a valid case for such a scheme to count toward carbon offsets. Among other things, such a scheme would contribute to a reduction in landfill.

(3). Recognition of effort and intent to reduce landfill and recycle in the charging of landfill levies.

The coverage and effectiveness of kerbside recycling collections is undoubtedly significant. In Victoria alone, 95 per cent of household have access to kerbside recycling.

For many households, kerbside recycling is now second nature and through well targeted information campaigns, households consciously separate out recyclables such as paper, cardboard and glass, from non recyclables, such as food and disposal nappies.

However, there is a still a large proportion of non recyclable waste that is often co mingled with recyclable waste. This results in the entire waste, both non and recyclable being disposed of to landfill.

Both Visy Recycling and its manufacturing divisions, notably Visy Pulp and Paper, have to send materials to landfill that are either contaminated, or are the residual from the recycling process. This is in spite of Visy's best intentions and efforts to recycle the material.

There is currently no recognition of such intent to recycle and the fact that such material has been through a process to extract environmental and economic value.

Those who genuinely seek to extract environmental and economic value should be subject to lower landfill costs than those who make little or no attempt to reduce landfill and recycle.

(4). Local and state governments to take greater responsibility in the provision of collection services for waste generated away from home

The generation of away from home waste and the most appropriate way to minimise and collect this waste is a problem that requires investment from local and state governments.

The provision of more waste collection points in public places must be a priority for local and state governments. These should be clearly marked, providing separate disposal bins for paper and cardboard, plastics, aluminum cans and glass. It is imperative that this infrastructure be designed in such a way so as to avoid co - mingling and contamination.

Local and state governments in all jurisdictions already have powers to improve recovery of used packaging – and other recyclables. State Governments have planning laws, development laws, landfill regulations and other mechanisms that could increase recycling and decrease litter if used effectively. For example, if liquor licences required licensed premises to have bottle collections, hundreds of thousands of tonnes of material would be diverted from landfill and into recycling.

(5). Increased use of public education campaigns to promote recycling and in particular highlight those products in the waste stream that go to landfill and contribute the most to CO₂(e) emissions.

Visy has always undertaken extensive educational activities to promote the benefits of recycling. This has included the 'Environmental Detective' initiative, which is a curriculum based education programme to educate students about recycling, continuing sponsorship of National Recycling Week and the Visy Recycling Movement website.

With the Australian Government's signing of the Kyoto Protocol, Australians will continue to develop an increased awareness and appreciation of the need to address climate change.

There is an opportunity to capitalise on this and further educate the Australian public not only of the importance of recycling, but the role that it can play in the fight against global warming.

A suggested starting point for any campaign would be the setting of a target recycling rate for the total amount of waste generated. For example a target rate of 50% could be set for 2010, representing a 4 to 5% increase on current levels. This would also result in a corresponding decrease in the amount of waste going to landfill.

d. The economic, environmental and social benefits and costs of such strategies

The potential costs of landfill to Australia's carbon 'budget' are significant. Unless new strategies and policies are adopted in order to promote greater recycling of waste, then an increasing amount of Australia's carbon budget will not be available for future wealth generation both at the micro and macro levels.

Visy has generated significant economic, environmental and social benefits by diverting so-called 'waste' from landfill and using it to make new products. This approach views any by-product as a potential resource and landfill is a last resort for materials for which no alternative purpose can be found.

This approach to resource efficiency generates jobs, reduces energy and water consumption in manufacturing and reduces greenhouse gases as detailed above.

Visy believes there are major opportunities for additional investment in resource recovery and recycling in areas such as wood residue, waste paper, plastics, glass and metals.

Visy has a large capacity for undertaking new recycling and manufacturing investment within Australia if it can ensure a stable supply of feedstock from the waste stream.

In addition, and consistent with its closed-loop philosophy, Visy is committed to being as energy-efficient and water-efficient as possible. This includes, where feasible, installing new capacity to generate energy from "last resort" materials otherwise consigned to landfills or other non-use fates.

Visy sees that the economic, environmental and social benefits that arise from these activities and opportunities should be considered and incorporated in good waste policy.

e. Policy priorities to maximise the efficiency and efficacy of efforts to reduce, recover or reuse waste from different streams

Please refer to section c above.

f. Consideration of the Drink Container Recycling Bill 2008

Visy fully supports the need to address the issue of dealing with away from home packaging waste, particularly the environmental damage caused by drink containers that are not recycled and end up in landfill.

As a signatory to the National Packaging Covenant, Visy believes that the Covenant is the most appropriate forum in which to address the need to improve packaging recovery systems.

In recent years the Covenant has been extended to incorporate recovery systems that include material generated away from home, including businesses, workplaces and shopping centres.

Visy does not believe the introduction of a national drink container deposit scheme would achieve the desired outcomes, including a reduction in litter and increased recycling.

There is no conclusive data to suggest that the litter situation in South Australia (which currently has a container deposit scheme) is significantly better than in other states that do not have container deposit schemes. Litter from the products covered by the South Australian scheme makes up only a small fraction of the total litter in that state.

Container deposits do have a function to reduce litter however such schemes only target a small proportion of the litter stream. Visy as an integrated packaging and recycling company strives to see a much wider range of litter reduction and material recovery for all packaging types, as well as other non-packaging recyclables such as paper, telephone books and the like. Deposits can act as a disincentive to reducing litter and increasing recovery for those materials that are not covered by the deposit system.

A container deposit scheme would also have a negative impact on other forms of recycling, especially kerbside collections.

The Victorian Environment Protection Authority noted in its report into the financial impact of container deposit legislation⁴, that not only would a container deposit scheme result in a reduction in the use of the kerbside system for deposit containers, but it would also cause some households to reduce or stop their use of the kerbside recycling system for paper and cardboard and non – container deposit bottles and cans.

⁴ Container Deposit Legislation – Environment Protection Authority, Victoria, January 2003

The EPA report assumes that the set out rates of paper and cardboard will be reduced by 10 per cent and non – container deposit bottles and cans will be reduced by 15 per cent.

Combined with a reduction in the recycle value of the material collected, kerbside recycling would become less economically viable for those companies undertaking kerbside collections.

Although Visy does not support the introduction of a national drink container deposit scheme, if such a scheme were to be introduced then Visy strongly believes that the Drink Container Recycling Bill 2008, provides the most appropriate framework for the operation of a national scheme.

Specifically the Bill provides industry with an appropriate level of discretion in order to determine the most efficient and effective way in which to achieve the stipulated recovery rates, whilst also providing for appropriate consultation and input from other stakeholders.

The level of discretion provided to industry in the Bill would also ensure the most cost effective scheme was implemented without undue and unnecessary bureaucratic structures being imposed. This would not only be to the benefit of the producers, but also minimise the additional cost for consumers.

Conclusion

Visy again states its support for this inquiry and would welcome a more uniform and coordinated national approach to waste management and recycling.

If the committee has any hearings or wants any further information from Visy, please do not hesitate to contact me.

Yours sincerely



Tony Gray
Director of Sustainability
Visy