27 November, 1998

Dr Neil Byron  
ESD Inquiry  
Productivity Commission  
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Dear Dr Byron

ESD Inquiry

Government Recycling Policies & Programs
which Waste Resources, not Save them

I apologise for the lateness of making this submission and trust the points we make can still be incorporated in your considerations.

Kimberly-Clark Australia has observed recent developments in Commonwealth and State jurisdictions in regard to wastes and recycling with strong views of disquiet, moving to dismay.

Most of our concern is related to domestic waste and urban solid waste generally. A notional *National Environment Protection Measure* (NEPM) on *Used Packaging Materials* has been published as a recent Government publication ‘of officers’ (6 July 1998). Our interpretation of the data in the notional NEPM leads to a dismaying conclusion - that current government and council policies & programs vigorously promoting kerbside recycling are operating at a net loss of around $120 million a year.

The numbers in the attached chart and table\(^1\) are based on the NEPM data but may be a bit rubbery in parts. But the indisputable outcome is that current kerbside recycling practices run at a large net loss.

Given that the costs represent the embedded values of all the resources used in the various processes and also presuming that the data provided here do include reasonable charges for environmental externalities associated with landfilling (eg,

\(^1\)HW notes, 2 Nov 98, *Kerbside Collection; Costs, Benefits & Loss*
via landfill levies) the net loss is in fact a full net loss which considers the values of resources used and environmental impacts.

We consider this continuing large loss to be a sorry situation, particularly given that the underlying objective seems to be 'to conserve resources'. We support this basic objective but the current Notional NEPM does not seem to address this in a rational, problem-solving manner. It seems to be prescribing more of the same which it acknowledges will make the situation worse by an extra $25 million a year.

We strongly support the government endorsed approach in 'A Guide to Regulation', 1997. The key elements of the RIS (regulatory impact statement) checklist in that publication are most pertinent to the notional NEPM on Packaging Materials. Unfortunately these elements and the rational methodology proposed for an RIS do not seem to have been fulfilled in the notional NEPM on Used Packaging.

One major problem we have with the notional NEPM is the argument that it is not feasible to undertake a conventional cost / benefit analysis of the options set out in part 2. The argument appears to be that because the NEPM is but a small part of the whole kerbside recycling issue (the voluntary 'Packaging Covenant', being the major component of the whole approach) it is premature to commence a cost / benefit exercise.

Yet the key issue the government policy and programs is addressing is the hefty loss in kerbside recycling as a whole (not just the NEPM) which the government figures state is about $120 million a year.

We have indicated much of our concerns in the attached submission to the NEPC (National Environment Protection Council) and related attachments. These note how government policies and programs for recycling, by running at a large loss and increasing the waste of resources, seem to contravene key Government positions in the IGAE and the NEPC Act.

Many government people close to the action acknowledge the policy and programs are wasteful. The NEPM being developed, provides a great opportunity for governments to do what is sorely needed - viz tell the public that recycling is not always beneficial, everywhere, at all times.

Your Inquiry into government policies and programs related to ESD is a most appropriate opportunity to review all government policies and programs related to recycling and waste reduction generally.

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2 Office of Regulation Review (ORR), Oct 1997
3 Notional Impact Statement, page 5
4 HW notes, 2 Nov 98, Kerbside Collection; Costs, Benefits & Loss
5 H Wright to I Newbury, NEPC, 23 Jul 1998
We can appreciate that the lay person may think that all recycling is good and so is waste reduction but, as the Industry Commission has often pointed out, such activities are themselves not costless.

We therefore see a need for need better education - particularly by economists - to point out that a loss is in effect an unwise use, indeed a waste, of resources as we currently value them.

Further we consider that the whole issue would get more responsible government treatment in a resource focussed department, eg, Department of Industry Science and Resources. Environment portfolios should of course be responsible to prevent harm from waste disposal but let's have the whole life cycle of resources - their use, management and conservation - managed holistically by the resource professionals.

As a prelude to such a change in portfolio responsibility, we note our earlier suggestion to the NEPC for an inquiry. We said then;

"It behoves government to initiate a full inquiry into domestic and municipal waste management and recycling policies in Australia. The development of the NEPM should be postponed until the inquiry reports. Some suggested terms of reference for the inquiry might include;

1. That a committee of appropriate portfolios and authorities (eg, treasury, finance, Industry Commission, Environment Australia, minerals and energy) investigate and report on Australia’s policies and practices relating to municipal solid waste management and domestic recycling,

2. That the committee

a) consider whether the key policies for managing these matters should be conservation of resources and protection of the environment, or any other appropriate key policies

b) recommend the appropriate mix of managing these matters, particularly in regard to three key means; viz, 1) education and exhortation, 2) economic measures and, 3) direct regulation, including targets, compulsory recycling or reuse and prescription of materials used in production,

c) where economic measures are appropriate, recommend the key principles by which they should, and should not, be developed and applied, "

We still support such an inquiry and commend the idea to you as one means of having this expensive and wasteful issue resolved more economically. For historical interest we note two policies which perpetuate public perceptions and political responses on this issue. Firstly, as a supposed 'green' measure, the Hon Ros Kelly introduced the Australian 50% reduction target for urban solid waste in 1991. To
its credit, the then Industry Commission in August 1991 issued a strong criticism of this policy\textsuperscript{6}. This was a notable action given that it had no Ministerial brief to do this. No doubt it felt so strongly about the impending full economic (and resource) waste which this policy could cause.

The policy remained, and then about 3 years ago, Pam Allan promised ‘one better’ in NSW, a 60\% urban waste reduction which was formalised when she was elected and became Minister. Neither of these waste reduction policies were supported by a clear or rational process like the ORR’s Guide to Regulation recommends. These waste reduction policies are surely part of the current political momentum to implement wasteful domestic recycling programs? We recommend they be critically reviewed in any inquiry on waste management and recycling

We wish you well with your ESD inquiry and would be happy to elaborate on any aspect of this submission (ph 02-9963 8068)

Yours sincerely

Dr Harley Wright
Environmental Manager

Encl

A HW notes, 2 Nov 98, Kerbside Collection; Costs, Benefits & Loss
B H Wright to I Newbury, NEPC, 23 Jul 1998


**KERBSIDE COLLECTION,**
**COSTS, BENEFITS & LOSS**
Annual, Australia (refer Table & Notes)

see diagram on page 4
available for inspection at the Commission’s Melbourne and Canberra Libraries
KERBSIDE RECYCLING - ANNUAL BENEFITS, COSTS & NET LOSS

Nb; Numerical order of footnotes shows sequence of calculation from the NEPM data.

<table>
<thead>
<tr>
<th>COSTS</th>
<th>$M</th>
<th>BENEFITS</th>
<th>$M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collect, sort, deliver¹</td>
<td>235</td>
<td>Materials recovered⁷</td>
<td>95</td>
</tr>
<tr>
<td>0.92 Mt¹ᵃ x $254/t¹ᵇ</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry subsidy³</td>
<td>20</td>
<td>Avoided landfill costs⁶</td>
<td>40</td>
</tr>
<tr>
<td>Difference of $120 M - $100 M</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL⁴</td>
<td>255</td>
<td>TOTAL⁵</td>
<td>135</td>
</tr>
<tr>
<td>NET LOSS²</td>
<td>120</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ The gross cost includes landfill levies, which more than cover the environmental externalities of landfilling. In the USA a 'host fee' is sometimes paid to communities near landfills as compensation for perceived disamenity and is typically about $2/t.

¹ᵃ page 57

¹ᵇ Table 2.1, page 68

⁷ By difference, Materials value of $95 M = Total benefit $135 M - Avoided landfill benefit $40 M

³ page 66

⁶ We assume the marginal cost to collect, transport and dispose of the current recyclables in the normal waste collection as $45/t. The average cost is of the order of $100/t

⁴ Sum of 2+3

⁵ $135 M = Total of $255 M - Net loss of $120 M

² The net loss includes an industry subsidy of ~$20 M, p66
Dear Mr Newbury

Kimberly-Clark makes the following brief submission on the Discussion Paper for the NEPM for Used Packaging Materials (6 July 1998).

The notional National Environment Protection Goal gives as part of the goals (NEPM, p5);

- optimise resource use and recovery; and
- encourage the conservation of virgin materials as indicated by a per capita reduction in the amount of used consumer packaging material going to landfill.

We fully support the first dot point, as does everyone we know. But the second dot point goal includes an unjustified and unjustifiable indicator of conservation of virgin materials. To say in one breath that a reduction in packaging materials is an indicator of resource conservation leaves one breathless with incredulity. Yet this point is the key driving force for the whole process. It is naive, simplistic and can in no way be substantiated or accepted as a reasonable goal for resource conservation. We are appalled that this costly process is founded on such an irrational and unsubstantiated foundation.

The whole 'rationale' for this NEPM appears to be based on this false premise and related misperceptions. The goal effectively becomes to reduce the amount of packaging going to landfill. This is not just simplistic, this is illogical and not a reasoned approach. Based on this false premise it naturally leads to a highly flawed and unreasonable document.
Why hasn’t the document considered the resources used and the wastes generated in the whole train of the collection, sorting and delivery of recyclables? Why doesn’t it note that the Industry Commission has pointed out that recycling is not costless. Where is a reasonable economic appraisal of the existing and proposed process?

The document does note that kerbside recycling in Australia has a "net cost gap" of "just under $120 million a year" (p 66 Notional Impact Statement). The data attached has been derived from the discussion paper and estimates that the full cost of kerbside recycling is around $255 million a year.

Why doesn’t the paper clearly state that the $120 million ‘net cost gap’ is a loss from a $255 million program? Why does it effectively ignore the current $120 million a year loss as though it was not related to the use of virgin resources (which it is ostensibly trying to conserve) and the generation of a diverse range of wastes in other parts of the economy? Presumably if the $255 million a year process runs at a loss of $120 M a year it might be inferred roughly that recycling uses twice as much resources, goods and services as it recovers in the recyclables. This is surely in contravention of the IGAE and the NEPC Act.

Why does the paper propose processes to increase the losses and subsidies from recycling from around $120 million a year - to even higher levels - up to $145 M a year in 5 years (including industry’s subsidies)?

Why don’t these papers, and governments generally, publicise the unsustainable and wasteful nature of the current recycling programs and explain that changes, including less recycling, are needed to optimise it and make it sustainable, and that recycling has to be profitable to be sustainable?

Our overall feeling is one of dismay that one part of government could be going down an increasingly costly and wasteful path while ignoring sensible, rational and economic analysis that has been evident in other parts of government.

Sadly, the process evidenced by the discussion paper appears to be driven by political considerations and in ignoring a rational approach is actually-promoting programs which far from conserving resources, are promoting increased wastefulness of resources.

We respectfully consider the process is so seriously off the rails that it behoves government to initiate a full inquiry into domestic and municipal waste management and recycling policies in Australia. The development of the NEPM should be postponed until the inquiry reports. Some suggested terms of reference for the inquiry might include;

1. That a committee of appropriate portfolios and authorities (eg, treasury, finance, Industry Commission, Environment Australia, minerals and energy) investigate and report on Australia’s policies and practices relating to municipal solid waste
management and domestic recycling,

2. That the committee

a) consider whether the key policies for managing these matters should be conservation of resources and protection of the environment, or any other appropriate key policies

b) recommend the appropriate mix of managing these matters, particularly in regard to three key means; viz, education and exhortation, economic measures and direct regulation, including targets, compulsory recycling or reuse, and prescription of materials used in production,

c) where economic measures are appropriate, recommend the key principles by which they should, and should not, be developed and applied,

Clearly, we object strongly to further development of the NEPM as it is currently proposed.

Yours sincerely

Dr Harley Wright
Environmental Manager

Encl Stone Soup - comments on NEPM on Used Packaging Materials

cc

Hon Peter Costello MP, Treasurer
Hon John Moore MP, Minister for Industry, Science & Technology
Gary Banks, Chairman, Industry Commission
Hon Michael Egan MLC, Treasurer, Minister for State Development and Vice President of the Executive Council
Hon Mark Birrell MLC, Minister for Industry, Science & Technology
Stone Soup

or Why Recycling can be Wasteful,
and Should be Optimised,

The old swaggie knocked on the farm kitchen door and said to the farmer’s wife "I need shelter and I can pay for my board by making you a lovely soup." "The good part is I have this magic stone which I put in the pot with water and hey presto, there’s the soup!"

Soon he was boiling the water and put in his magic stone. "I need to stir it with that ham bone you've just cut the meat off." And a bit later, "I'll just use some of these chick peas and barley you have here". While outside having a smoke he picked some herbs and put those in the big pot too; plus some salt and pepper for good measure.

When the farmer came in for dinner his wife explained. Look at this wonderful soup this clever swaggie has made using his magic stone. "Voile" said the swaggie, removing the magic stone and they all sat down and enjoyed the thick nutritious soup, "made only with his wonderful magic stone" enthused the farmer’s wife. "you must stay longer with us and keep us fed with your magic stone which can be used again and again - how wonderful!"

Kerbside Recycling - a Big Net Loss

So it is with kerbside recycling in Australia. The governments’ environment portfolios seem to think that the current loss making program is a net benefit to the environment. Yet the governments’ current discussion paper* shows the total cost to the country is around $255 million a year but with annual benefits of only $135 M; Hence a whopping net loss of about $120 million a year. Amazingly, the paper proposes measures which will further increase the net costs to consumers, increase the net use of primary resources and increase the overall wastage from Australia * recycling programs.

The proponents seem to completely ignore the fact that the annual cost of the kerbside program, an estimated $255 million, itself uses many primary resources and generates wastes through the many supporting sectors of the economy - just like the ingredients used by the swaggie but ignored by the farmer’s wife.

It is understandable that the general public think that recycling is a good thing when they believe it is saving resources and reducing landfill volumes. However government authorities should surely have a more holistic view and understand that the net benefit is a big minus - around $120 million a year and will get worse if the environment portfolios have their way.

Background 'Rationale'


One of its aims is to "enable stakeholders to provide input on the potential environmental, economic and social impacts of the proposed NEPM, both positive and negative......".

Clearly though the overall thrust of the NEPM is to increase the level of kerbside recycling, an action which the paper estimates will increase the losses further by about $25 million a year, particularly by driving recycling to higher loss making levels, by compelling industry and local government to engage in extensive and unnecessary data collection; by coercing industry to further increase its subsidies; and by forcing non-complying industries into practices such as takeback of packaging. In NSW there is the further threat of product bans and levies.

All of this adds costs to the product, packaging and recycling systems and thereby adds to consumers’ net costs. The paper estimates the net loss will increase from $120 million by about $25 million in 5 years (includes industry subsidies).

Resource Conservation is universally supported

A key goal of the NEPM is "conserving virgin resources ". This goal is well supported by everyone. Yet the paper lacks any well reasoned analysis that the whole process, and the NEPM part of it, is "conserving virgin resources".

Economics has long been a tool to increase efficiency and provide practical mechanisms to use and develop competing diverse resources and produce goods and services for society. Surely then a competent economic appraisal should be conducted on the whole process. It is not sufficient for the discussion paper to say that the NEPM is only covering the management outside of the Industry Waste Covenant. The paper itself discusses the full process, but then inexplicably says that is not appropriate for an economic appraisal.

The simple outline below suggests that losses, when viewed as a measure of average economic activity, can be taken as a reasonable surrogate for average consumption of virgin resources in the economy as a whole.

All the virgin resources we use have costs associated with them, including extraction costs and generally royalties, paid to the crown for the use of communal resources. These costs combine and flow through the complex economic web to produce goods and services at appropriate prices for final consumption by consumers.
Materials collected by kerbside collections are neither virgin resources nor goods and services of final consumption. They are intermediate goods and have the appropriate costs of each of the many ultimate raw materials used in their production - assuming we have an ideal market. When kerbside recycling runs at a continual high loss (as it is) it is surely telling us that we are spending more in many parts of the economy than the value of the intermediate goods we recover. This is a ‘misallocation of resources’ which by our understanding is really a waste of resources based on their socially and politically accepted values. Current kerbside recycling is putting good money after bad.

**But people ’want’ their Recycling ’Service’**

Lots of people think kerbside recycling is good for the environment and hence want their local council to provide the ‘service’. But they often have this view based on faulty information and misunderstanding of the situation.

Recycling in Australia is at high levels, both domestically and industrially / commercially. Australia’s paper industry uses around 60% of recycled fibre in its production. Commercial and industrial recycling is almost invariably cost effective. It involves large quantities of generally high quality material at single collection points. Australia has a wealth of productive and worthwhile recycling systems. But the domestic system as a whole is not one of them.

Current domestic kerbside recycling doesn’t share the resource and cost saving attributes of most commercial recycling. The materials are of low quality and value and are generally widely dispersed and costly to collect (remember the stone soup?). We have generally moved to the added expense of weekly collections. All the indications are that to get sustainable and profitable kerbside recycling which gives a net saving in resources we should be reducing the coverage and frequency of collection and the range of materials collected. But, inexplicably, the environment portfolios are pushing in the opposite direction!

Surely we should be seeking to *not only* make kerbside recycling *profitable*, but to *optimise* it? We suggest that the net benefit varies against the single dimension of "amount of material collected" roughly as indicated.

(See diagram at bottom of page 3 of this attachment)
There are of course other variables and they all can be adjusted to gain the optimum result.

Public Education needed

We consider that the appropriate role for government is to educate people that recycling is worthwhile when it is profitable (and helps conserve resources), but when it is not profitable it is wasteful to recycle and the program should be modified, even stopped if necessary.

The economic optimum will vary with many factors, yet there are many aspects such as infrastructure and contracts which are not readily varied. While the slow responsiveness limits optimisation, at least we should be heading in that direction, not the direction of greater cost, loss and waste.

Oh yes, what about saving landfill volumes?

A holistic view shows that the total municipal solid wastes production in Australia is about 0.8% of all solid wastes generated". Society has little trouble or angst dealing with the remaining 99% so it is amazing that environment departments have set targets for recycling and municipal waste reduction. This is certainly contrary to the recommendations of the Industry Commission at various times. Environment protection is important at landfill sites and this can be achieved by licensing controls.

But the key goal of resource optimisation would surely be better managed by industry and resource portfolios who deal with all aspects of resource use.

Conclusion

A radical change is required in how we manage domestic waste and recycling in Australia and we look to the economic arms of government to help bring about the improved outcome needed.

Dr Harley Wright
23 July 1998

O’Connor, Hurse & Evans, Strategies for the Disposal of Solid Waste in Australia, University of Melbourne, Nov 1995