

30 March 2012

Standing Council on Environment and Water Secretariat  
GPO Box 787  
Canberra ACT 2601

Via email [SCEW.secretariat@environment.gov.au](mailto:SCEW.secretariat@environment.gov.au)

Dear Sir/Madam

**Subject: Packaging RIS**

Lake Macquarie City Council (LMCC) would like to thank the Standing Council on Environment and Water for the opportunity to provide feedback on the data, information and recommendations within the Packaging Impacts Consultation Regulation Impact Statement (RIS) that was released in December 2011.

With Lake Macquarie City population fast approaching 200,000 residents, it is the Hunter Region's largest city and 8<sup>th</sup> most populous city in Australia. Lake Macquarie City covers an area of 784.4 square kilometres, which includes highly urbanised areas and small villages as well as the lake, beaches, forests and mining industry.

The city has one operating landfill for municipal and general waste at Awaba that is expected to reach its capacity limits within the next three years.

Accordingly the city has developed a Waste Strategy that emphasises the four principles of avoid, reduce, reuse and recycle. While the largest projects within this strategy are the procurement of a green bin collection and processing service and possible extension of the existing landfill operation, smaller projects include reviews into waste collection for multi-unit dwellings and public place recycling, illegal dumping and anti littering campaigns.

The proposed packaging regulation options have the potential to further assist the city's initiatives to increase recycling rates and reduce waste to landfill. In addition, there is an opportunity to further reduce litter and increase recycling in public places.

Over 7,700 residents of the City recently participated in Clean-up Australia Day. Beverage containers, fast food wrappers and cigarette butts were a significant component of waste collected on the day. We expect that a container deposit scheme (CDS) together with the proposed Advanced Disposal Fee (ADF) would reduce littering of beverage containers, and possibly food wrappers.

However, while studying the RIS, several questions arose regarding the validity of the assumptions and data, the intended objectives and the effectiveness of controls.

Please find following an outline of our concerns, questions and recommendations regarding the RIS, and responses to the questions posed at the end of each chapter in the RIS.

126-138 Main Road Speers Point NSW 2284 • Box 1906 Hunter Region Mail Centre NSW 2310  
Phone: 02 4921 0333 • Fax: 02 4958 7257 • ABN 81 065 027 868  
[council@lakemac.nsw.gov.au](mailto:council@lakemac.nsw.gov.au)  
[www.lakemac.com.au](http://www.lakemac.com.au)

Our Ref: F2004/06990 Your Ref:

## Background and Context

### RIS Questions

- What do you think are the future challenges relating to packaging and packaging waste?
- What packaging materials do you think will dominate in the future? What are the likely impacts?
- Do you think that designing packaging with recyclability in mind is desirable?
- What changes will occur with secondary packaging?
- How will the trend for on line shopping affect packaging consumption or choice of packaging material?

### Waste Avoidance

One major challenge relating to packaging waste is the continuing lack of application of the avoidance principle to packaging and packaging waste. The proposed Advanced Disposal Fee (ADF) is positive step to applying that principle.

While increasing the recycling rates for packaging and packaging waste is a very important objective that needs to be pursued, the ultimate goal has to be to reduce and avoid packaging waste. As stated in the RIS, consumers are aware of the different packaging options in supermarkets and will change their buying behaviour, preferring recyclable over non-recyclable packaging.

However, this behaviour may lead to the incorrect perception that all packaging is good and acceptable as long as it is recyclable and the message of waste avoidance is pushed into the background. This seems to be backed by the statistics that say that not only the recycling rates will increase over time but also the amount of recyclable packaging that enters the market.

Similarly, to promoting reusable shopping bags, the use of re-usable and refillable containers for non-food items like detergents and household cleaners could be promoted.

### Non-recyclable Packaging

Another challenge that needs to be addressed in these options is the increasing amount of non-recyclable packaging (soft packaging and plastic composites). Previous initiatives to reduce packaging have successfully led to a weight decrease, volume decrease and overall reduction in waste, i.e. by using PET instead of glass or shrink wrap instead of rigid containers and cardboard, but in many cases this has also meant that easily recyclable packaging products were replaced by products that were not recyclable. These measures benefit manufacturers, though as lighter and smaller packaging materials reduce transport and storage costs.

## Packaging Design

Packaging materials can never be avoided completely, but as stated above, they should be designed with recyclability in mind.

Ideally, manufacturers should use a multi-step process when designing packaging. It should be fit for purpose, minimalistic, recyclable and not create a health hazard.

In addition, the introduction of biodegradable and compostable packaging should be promoted. A significant amount of secondary and tertiary transport packaging, that currently ends up in landfill could thereby enter the recycling market, for example bubble wrap, padded envelopes, Styrofoam pellets and similar filling and padding materials.

## Online Shopping

The increasing trend for online shopping will affect packaging in two ways:

- for one, the packaging waste will occur at the consumer's home location rather than at the retail outlet, as the goods are shipped directly to the consumer, rather than to a retailer; and.
- at the same time it is likely that the overall packaging waste will increase, as goods are being repackaged and sent to the consumer instead of being packed into a shopping trolley and taken home by the consumer.

Experience also shows that online shops tend to over-package goods to minimise breakage, but also to minimize postage variations.

## **Nature and Extend of Problems**

### RIS Questions

- Do you agree with the packaging resource recovery and litter management problems identified above?
- Are there any problems with packaging resource recovery and litter management that have not been identified in Chapter 3?
- What impacts do fragmented and inconsistent frameworks for packaging resource recovery and litter management have on your business? What are the scale and scope of these impacts?
- Would inconsistent state-based CDSs impose a cost on your business? How significant would this cost be?

We agree that the Federal government's stated objectives and community expectations for the recovery and recycling of packaging and management of litter are not currently being met. While at-home recycling has increased, away-from-home recycling has not increased significantly and littering has not decreased significantly either. Accordingly, public perception regarding littering continues to be poor.

## Shift in Cost for Packaging Waste

The movement away from traditional packaging materials led to the introduction of composite plastics and soft packaging that cannot be recycled and ends up in landfill. At the same time, the cost for the waste shifts from the manufacturer (decreased material and transport cost) to the end user or local government area (increased waste charges, landfill levies, disposal costs). This shift is not acceptable.

## Lack of Priorities

It is acknowledged that there can be conflicting demands, i.e. design for efficient transport, recyclability, reduction of waste material, material cost and availability. However, it is the role of Federal policy in this area to seek to optimise environmental and societal outcomes through application of the waste hierarchy.

Currently ratepayers contribute a disproportionate amount to kerbside recycling costs while the packaging industry's contribution is minimal. CDS addresses this imbalance by capturing away from home beverage consumption, and could save the average family about \$30 per year without undermining the economic viability of either kerbside recycling or the manufacturing industry.

There should also be a clear priority between conflicting demands, i.e. waste avoidance as first priority, use of recyclable packaging where unavoidable, followed by reduced transport and manufacturing costs. According to a study conducted by the Supply Chain Consortium in 2009 [*Packaging Sustainability – Evaluating the Benefits of Environmentally Friendly Packaging, Supply Chain Consortium, September 2009*], over 70% of the surveyed companies saw transport efficiency as the most important criteria for evaluating packaging materials. This was closely followed by return on investment and handling. Only 40% used recyclability as a criterion and even less looked at the overall sustainability of the packaging including factors such as life cycle cost, energy and water consumption, or carbon footprint.

The final objective should be that if the packaging cannot be avoided it has to be recyclable. That is the only effective way to reduce the residual waste stream.

Government has to be clear about these objectives and act accordingly through improved regulation.

## Insufficient Public Place Recycling

One of the additional problems is the lack of sufficient public place recycling infrastructure in many LGAs, including LMCC. One reason for this is certainly the lack of available funding, as in NSW domestic waste charges collected from rate payers cannot be used for public place waste recovery, which is considered to be of a commercial nature. Another issue is the often high contamination rate of public place recycling bins, which often prevents these collections from being recycled at all.

## Fragmentation of Legislation

Fragmentation of frameworks for packaging resource recovery and litter management has been exacerbated by the lack of progress on implementation of packaging reform. From a Council perspective, fragmented legislation can lead to increased enquiries from ratepayers

and confusion regarding waste management requirements. This is particularly evident in cases where neighbouring LGAs have different waste management frameworks, such as those that border South Australia and the Northern Territory.

Increased costs for fragmented statewide frameworks would be anticipated for industry, both manufacturers and the supply chain, due to additional labelling and infrastructure provisions in some states, but not in others.

## Options to address the problems

### RIS Questions

- Are there any other options that you think would be effective in addressing the problems set out in Chapter 3?
- Will these options achieve the outcomes outlined in this chapter?
- If initiatives in option 2 (c) and option 3 are broadly the same, who would be more effective and/or efficient in overseeing these initiatives to achieve targets: non-government organisations, government or industry?
- The funds created by the ADF (option 3) would be collected and managed by the Commonwealth Government. On what initiatives should the Commonwealth Government invest this funding?
- At what point in the packaging supply chain should the ADF be imposed to achieve the best outcomes?
- Under option 4, should beverage containers be required to be recyclable as part of CDS proposals?
- Are the timeframes for implementation and review of the product stewardship arrangements appropriate?

## Combination of Required Actions

Rather than looking at one aspect of packaging in isolation, all different aspects have to be dealt with at the same time, from initial design and manufacture, through the life cycle to final disposal.

If option 1 is adopted, which in a nutshell means an increase in education to increase recycling rates and reduce littering, manufacturers have no incentive to reduce the amount of packaging they produce. It is left to the goodwill of the consumers to “do the right thing”, which can never be as effective as monetary incentives, penalties and/or waste avoidance.

If option 3, the ADF, is adopted, manufacturers will most probably work to minimise payments by reducing packaging and thereby reducing the total amount of waste. The fee may also be able to cover the cost of recycling. However, this could also lead to more unrecyclable composite materials and soft wrappings, which would lead to a shift from recyclable product to landfilled product. At the same time, there is no incentive for the end consumer to increase recycling rates or decrease littering.

If option 4, the CDS, is adopted, the end consumer has a real incentive to return and recycle the containers. This option has the potential to almost completely eliminate littering of containers that have a deposit attached to them, as private persons will clean up littered containers very quickly to collect the revenue. However, it will not prevent the littering of containers that do not have the deposit attached to them, which leads to the biggest risk in this approach: manufacturers will change portion sizes to avoid the deposit. If, for example, the legislation says that all containers of 375 mL and above have to have a 5c deposit on it, manufacturers will start producing 350 mL containers, only to serve the convenience factor of the end consumer. If the regulation states that all glass containers have to have a deposit attached to them, manufacturers will increase production of PET bottles.

Option 2, co-regulatory packaging stewardship, contains the risk that recycling targets have to be met, so manufacturers could focus on few “big ticket items” that make it easier for them to reach the targets and ignore the small packaging items that cause litter. Furthermore, self-regulation always bears the risk of non-adoption by manufacturers. Again, it does not address the reduction of waste, which should be the ultimate objective, but focuses on recyclability and litter reduction through recyclability only.

Accordingly, for the packaging regulations to be effective the preferred solution should be an integration of elements that optimise both industry and consumer behaviour, for example, option 2c should include options 3 and 4.

### Management of Initiatives

Independent non-government organisations may be best suited to oversee the planned initiatives, as they can be both auditors of the system and mediators between government and industry without being directly affected by the initiatives.

### Use of Revenue

The funds that are created by the ADF should flow back into waste related schemes. They could for example fund public place recycling infrastructure, provide grants for community groups, increase funding for local government infrastructure or even assist with the costs for the implementation of a CDS.

### Imposition of ADF on Manufacturers

The ADF should be imposed on the packaging manufacturer. This way the consumer has the choice to opt for less packaging to reduce his cost, which will in return prompt the packaging manufacturers to offer products that better serve the new market. Imposing it on the consumer side may be difficult to put into practice unless there is a generic charge on all offered packaging that gets charged when the packaging product is bought.

### Recyclability of Beverage Containers under the CDS

Beverage containers under the CDS should, of course, be recyclable. Otherwise, the extra effort to label them, separate them from the general waste and collect them, only to then take them back to landfill, would be an unacceptable waste of resources on all levels.

However, the bottles may, as an option be reusable. Glass bottles in particular can be washed and refilled multiple times.

## Timeframes

The timeframes for the different options seem reasonable although it could be argued that options 3 and 4 could be implemented quicker, seeing that similar schemes exist in other countries, and regarding option 4 a working scheme already exists in South Australia.

## **Impact Analysis**

### RIS Questions

- Are the projected rates for packaging recycling and litter reduction realistic?
- Are the costs and benefits identified for each option realistic? Are there any additional costs or benefits that should be factored into the CBA? Are you able to provide data to back up your views?
- What impact, if any, would the options have on packaging consumption, for example would the options lead to a reduction in consumption levels?
- Do the options provide opportunities for increasing the recycling levels of other materials? If so, to what extent?
- What is the likely impact of the options on costs to households and businesses?
- What is the likely impact of the options on kerbside collection systems?
- What effects are the options likely to have on competition? Are any of the options likely to restrict competition?
- What might be appropriate thresholds for industry obligations under option 2?

First, we would like to acknowledge that it is difficult to factor in impacts of proposed options on costs of packaging and beverage containers. Equally, there are non-market values such as environmental benefits or the “feel-good-factor” of consumers that are hard to measure. Especially for the CDS we would expect that these details are available, as a comparable system has been in force in South Australia since 1975. However, we believe that these in non-market values should be included in evaluation and performance predictions.

## Litter

In addition, the predictions regarding litter reduction seem to be very conservative. Again, South Australia has a working CDS and detailed statistics should be available. While detailed international studies may not be available, most experts in the field agree that CDS significantly reduces littering of beverage containers, with estimations ranging around a 50% reduction of beverage litter e.g. [http://www.umweltbundesamt.de/uba-info-medien/mysql\\_medien.php?anfrage=Kennnummer&Suchwort=3931](http://www.umweltbundesamt.de/uba-info-medien/mysql_medien.php?anfrage=Kennnummer&Suchwort=3931)].

The way littering is calculated is more than questionable. Neither weight nor volume are in our opinion valid denominators for litter, but litter should be counted in pieces. Alternatively both methods should be used together to portray a more accurate picture. A glass bottle alone may weigh 500g and have a specific volume, but still only accounts to one piece of litter in the landscape. The same weight/volume in plastic wrappers, paper towels or cigarette butts may equate to several hundred pieces of litter, with a much higher visual impact and public concern.

### Household Participation

Calculations for household participation in a CDS are disputable. Considering that most return vending machines (RVM) will be located in or near major supermarkets, where the items are also bought, we find it wrong to base household participation cost on the assumption that households will frequently make new trips only to return beverage containers to deposit collection points. These numbers should be revised.

### Other Costs

The cost/benefit analysis lists among the benefits the avoided landfill externalities as well as avoided landfill cost and avoided litter clean up as well as additional market value of resources. Costs include scheme design and implementation, government participation cost, household participation, collection and transport cost, processing at MRF, scheme operation and compliance costs.

In our opinion, there are additional costs that have not been factored into the analysis.

While avoided landfill costs are listed as a benefit, the reduced amount of recyclables in the kerbside collection can equally reduce the revenue streams for local governments. Existing infrastructure for sorting recyclables may become redundant and associated capital costs cannot be depreciated as originally anticipated.

Equally, employment impacts were not separately identified (p.43). Less recyclables in the kerbside collection may also lead to loss of jobs in this area as less collection runs are required to service an LGA. While new jobs may be created for the servicing of the beverage collection machines, they may not be in the same locality or of the same skill set. These changes should also be considered.

We would also prefer to have a clearer differentiation of the different cost carriers. The main document speaks of the cost for "the economy", and only once in Table 9 on page 42 are costs differentiated between government, waste industry, household and businesses. Even here, it is not clear how the cost for scheme operation and compliance will be shared between government, industry and consumers.

It is in the interest of local communities to have a clear assignment of costs for each of the options that are proposed in the document. Equally, the Federal government should require the industry to pay for what they create. The cost of the CDS, for example, should be worn primarily by container and packaging manufacturers and end consumers, not by government. Accordingly, seemingly expensive schemes for industry may be affordable for government and hence quite feasible.



## Other Benefits

One could say that the introduction of a CDS is likely to reduce the amount of recyclables in the kerbside collection. However, recent audits in LMCC showed that 20% of material in the general waste bin is recyclable. One of the reasons for this phenomenon is that residents complain there is not enough space in the current recycling bin, so they dispose of the recyclables in the general waste bin. If beverage containers now leave the kerbside collection through a CDS, this frees up space in the recycling bin and can lead to less contamination in the general waste bin. The document covers this only partly under avoided landfill cost.

## **Recommendation**

We recommend a solution that provides for the integration of elements that optimise both industry and consumer behaviour, for example, option 2c inclusive of options 3 and 4.

We hope that these comments and suggestions are useful. Should you require further information, please contact Stefanie King, Senior Waste Officer, on 02 4921 0561 or [sking@lakemac.nsw.gov.au](mailto:sking@lakemac.nsw.gov.au).

Yours faithfully



Dr Alice Howe  
**Manager Sustainability**