

Independent Review of Container Deposit Legislation in NSW: Response to C4ES Pty Ltd Concerns

The following points are a response to issues raised in a letter dated 22 March 2002, from Paul Coffey, the Managing Director of C4ES Pty Ltd, addressed to Stuart White, and copied to the NSW Minister for the Environment and the Chief Executive Officer of the Beverage Industry Environment Council. The major points raised in that letter have been presented in Appendix 1. C4ES Pty Ltd provided advice to Access Economics Pty Ltd in the preparation of its Assessment of the report of the Independent Review on behalf of the beverage industry and the Australian packaging sector. The response to the C4ES Pty Ltd letter has been reproduced here following the release of the Access Economics report in the interests of transparency.

1. Claims that ISF's inquiry is the first comprehensive examination of impacts of CDL in NSW

The Independent Review is the first analysis of CDL internationally that combines a full analysis of the costs and benefits in all reasonable categories, particularly including the impacts on kerbside collection costs, as well as a life cycle assessment and valuation of the environmental impacts. A Tellus Institute draft analysis considered environmental impact using its own 1992 packaging study as a basis, but did not analyse kerbside impacts. The C4ES report did not analyse the impacts on kerbside costs except for the impact on recyclate value, nor did it consider environmental impacts beyond energy. This is not to suggest that the C4ES work is not a useful contribution, it is just a recognition of the fact that the environmental costs and benefits as determined by an LCA and associated economic evaluation is a crucial component, especially given the results of the *Independent Economic Assessment of Kerbside Recycling in Australia* (Nolan ITU/SKM 2001) which demonstrated that the valuation of the environmental benefits of recycling used container materials is the major benefit, that dominates the cost-benefit analysis of recovery of containers, by whatever means.

2. Incorrect Depot Establishment Costs

In our report (Volume II, Table 3.3-17, p122) we cite the following costs from the C4ES report:

New depots: capital cost (\$300,000) and operating cost (\$150,000)

Existing depots: capital cost (\$200,000) and operating cost (\$150,000)

These results are derived from the Executive Summary of the C4ES report (pxii) where the following paragraphs appear under the heading “Establishing a Network of Collection Depots”:

“If the NSW Government introduced a deposit on containers, particularly an amount high enough to ensure high return rates, there may then be an inherent obligation to ensure convenient opportunities for consumers to obtain refunds. To serve the same population base per depot as South Australia’s would require the establishment of 114 collection depots in metropolitan Sydney at an estimated establishment cost of at least \$34.2 million and operations and maintenance costs of \$17.1 million per annum.

Given cost, siting difficulties and environmental impacts of such a system, an alternative approach would be to modify the 34 existing Council and Waste Service NSW facilities to add container redemption at a minimum establishment cost of \$6.8 million and operations and maintenance costs of \$5.1 million per annum.”

Dividing \$34.2m by 114 gives \$300,000 and dividing \$17.1m by 114 gives \$150,000. Similarly, dividing \$6.8m by 34 gives \$200,000 and dividing \$5.1m by 34 gives \$150,000. These are the results summarised in the table on p122 of the Independent Review report. It is hard to imagine another way to interpret these results arithmetically.

3. Inconsistent Use of Available Information

Employment estimates

Contrary to the claim in the C4ES letter, the Independent Review report did not claim the increase in employment as an overall benefit to society in the cost benefit analysis, rather they were quantified for the purpose of the distribution analysis only. In the case of the ISF Review, in contrast to the South Australian study cited, or the C4ES study, the net loss of jobs in the kerbside collection and MRF sorting sectors as well as in the beverage industry (based on an assumed demand elasticity) was quantified, thus the jobs analysis actually took into account movements in jobs in the economy to the extent possible.

Use of Refillable Containers in Australia

The C4ES report deals with the empirical experience in the decline of refillables in Australia, that is, in the absence of a mandatory deposit and refund system or refillable quotas. The Independent Review report also cites data for the decline in refillables in s2.4. The issue of relevance here relates to the potential environmental benefits of refillables, which has been demonstrated in recent comprehensive life cycle assessment studies in Denmark and Germany, and form the basis for the advanced policy position of both countries. Certainly the details will differ if such a study were done in Australia, but the fact remains that there is strong evidence of significant benefits of refillables over recycling, and recycling over disposal.

Impacts on Material Quality

The Independent Review report did not claim that the higher quality of used container material collected through the South Australian CDL system would result in increased revenue for the recycle. However, the existence of a 30,000 tonne stockpile of contaminated glass fines at Chullora MRF is proof enough of the additional costs imposed on used container material recycling by contamination arising from our current collection methods.

Recycling Behaviour and Motivations

The Independent Review cited and used a number of survey results which demonstrate citizen support for deposit and refund systems. A comprehensive social research exercise was also undertaken as part of the Independent Review, which confirmed previous findings, including BIEC-commissioned surveys, showing a majority support amongst citizens for a deposit and refund system. The Independent Review relied on original research for the NSW population, and on ABS data for methods of return in South Australia. The C4ES report did not cite data for South Australian citizens' support for CDL, so the Independent Review relied on SA EPA data in that case. That survey data indicates 95% support for the deposit and refund system in South Australia.

Reverse Vending Machines

The Independent Review report states that RVMs 'are considered a potential cost saving option for retailers'. This means that, were CDL to be introduced in a point-of-sale configuration (the most economically efficient option), then it may be the case that RVMs would offer a cost-effective and convenient alternative to over-the-counter return in high turnover situations. This is the experience in Europe, Michigan and California. The report of the Independent Review did not pursue the issue of RVMs in detail, considering it as merely an alternative point-of-sale technology. However, contrary to the claim in the C4ES letter, Appendix J (referred to on page 125 of Volume II) describes costs of RVMs and discusses the issue of fraudulent redemption.

Location and Siting of Facilities

This comment reflects a misunderstanding of the report of the Independent Review and the issues involved in the cost benefit analysis. The viability of depots is primarily dependent on the level of the handling fee, and will differ depending on the spacing of depots or the method of redemption eg point-of-sale or the California-style system which relies on shopping centre car parks. In the Independent Review, the approach was to model a range of options, rather than merely the South Australian depot collection model. The cost of these options was estimated, and the respective handling fees (including a reasonable profit margin) were calculated.

Kerbside Yield

This comment demonstrates a serious misunderstanding of the results of the *Independent Economic Assessment of Kerbside Recycling in Australia* (Nolan ITU/SKM 2001) and confuses the economic value of environmental benefits with the financial costs of kerbside collection – a common mistake, but the entire point of that study. Kerbside recycling makes a financial loss in any case, and reducing the collection of high volume low mass containers in fact improves its financial performance, as demonstrated by both Nolan ITU/ SKM (2001) and the Independent Review.

The Nolan ITU/ SKM (2001) report shows that increased yield certainly increases the benefits of kerbside recycling, *because of the environmental benefits associated with the increase in materials being recycled*. If the materials are collected by other means, in fact if more of them are collected due to the use of an economic instrument such as a deposit and refund system, then the environmental benefits are similarly increased. It is an outcome of the recycling of the materials, not the kerbside

collection. This is demonstrated in the Nolan ITU/SKM (2001) report in s6.1.4 where a hypothetical change in the mix, to collect paper and glass only at kerbside, is shown to reduce the cost (ie reduce the financial loss) of kerbside collection, but the environmental benefits are reduced. As shown in this section this is only because the materials are not being recycled, which of course is contrary to what would happen if they were being diverted because a deposit and refund system were in place.

Inconsistent Referencing

The C4ES report was sent to ISF by BIEC as a submission to the Independent Review, and was treated as a submission from BIEC. It was on this basis that it was referenced as BIEC (2000). Apologies have been offered if this was inappropriate or has offended.

4. The Independent Review not addressing the impacts on NSW kerbside recycling

This is a misrepresentation. The modelling of the impact on kerbside recycling was one of the most detailed components of the cost benefit analysis, precisely because this is a point of such contention. The Independent Review used the Australian Waste Recycling and Cost model, as did the *Independent Economic Assessment of Kerbside Recycling in Australia*. The C4ES study did not do this, erroneously assuming that kerbside collection costs would remain unchanged.

I have expressed my objections in the strongest possible terms to the claims in the C4ES Pty Ltd letter that the report of the Independent Review is not a 'balanced and comprehensive discussion' or a 'balanced approach' and that the report contains 'misleading information that reduces the balance of the ISF argument'. The C4ES letter presented no evidence of this and representatives of C4ES Pty Ltd have been asked to not repeat these claims.

The Independent Review was conducted with no pre-judging of the outcome of the cost benefit analysis or the social research. Both these components were externally reviewed and evaluated. Significantly, the results of the Independent Review are consistent with the results of the *Independent Economic Assessment of Kerbside Recycling in Australia* and the recent Multi-Stakeholder Recovery Project conducted by Business and Environmentalists Allied for Recycling in the U.S.

It is of interest to note that the C4ES report itself states that:

“(Under these assumptions), a traditional CDL system, with an optimum 20¢ deposit and assuming that depot recovery rates similar to South Australia’s could be achieved, would provide a net benefit of \$11.6 million compared to the kerbside base case” (pxi)

APPENDIX 1: Major points raised in C4ES Pty Ltd Letter of 22nd March 2002

1. *Claims that ISF's inquiry is the first comprehensive examination of impacts of CDL in NSW*

A copy of the C4ES report was provided directly to you in December 2000, at the same time the report was submitted to Minister Debus. Notwithstanding, the ISF report (Volume II, p.3) states that "The last major studies into CDL were conducted in NSW over a decade ago" We are also aware of your claims in various interviews that ISF was the first to investigate this issue. ISF had the finished C4ES report in hand three months before completion of your "preliminary draft for review of methodology" (Volume II, document history), so at a minimum the above claims by ISF appear difficult to justify.

2. *Incorrect Depot Establishment Costs*

The C4ES report (pp. 85, 86) assumed, based on established methodology and stakeholder consultations, that annual costs to establish and operate a collection depot or modify Council facilities to become depots are \$250,000 pa.

The ISF report (Volume II, Table 3,3-17, p.122) attributes a range of costs for collection depots to the C4ES report that are simply wrong and do not reflect the \$250,000 estimate. The estimates used by ISF and attributed to C4ES are not presented in, nor can they be construed from, the C4ES report.

Not all of ISF's references have been verified for this letter, so it is not clear whether such inappropriate use of data is isolated or pervasive throughout the report. If other reference data has been similarly misinterpreted, the credibility of ISF's findings may come into question.

We reaffirm our concern cited to yourself early in the ISF inquiry that although C4ES was making all references (both opposed to and in favour of CDL) available to ISF, your staff appear to have dismissed pertinent references that in our view would have added to the robustness of the ISF report.

3. *Inconsistent Use of Available Information*

The ISF report appears to be selective and may be considered misleading in its use of available reference information, particularly the C4ES report and South Australian Government review of its CDL program¹ ("the SA report"), both of which had been provided to ISF and are referenced in ISF's report.

- *Employment Estimates*

Of specific note is the ISF determination that CDL in NSW would create 1,500 jobs, while the C4ES report and the SA report clearly show that while CDL does create jobs, such jobs should not count as benefits due to the concept of benefits transfer. Benefits transfer is briefly raised, then dismissed by ISF (Volume II. p. 177) in this regard. In the same section, the SA report is referenced to support

¹ Phillip Hudson Consulting Pty Ltd in association with Cole, Solicitors (2000) *Container Deposit Legislation Public Report on the Review of the Economic and Environmental Impacts of the Beverage Provisions of the Environment Protection Act 1993 (Container Deposit Legislation) in South Australia* Prepared for Environment Protection Agency.

employment claims, although the position of the SA report that job creation should not count as a benefit due to benefits transfer is not addressed by ISF.

- *Use of Refillable Containers in Australia*

We are disappointed that the ISF report section dealing with refillable containers (Volume II, s.24) failed to reference the C4ES report's section on refillables even though the C4ES report is directly relevant with regard to use in Australia.

Specifically, the C4ES report showed clear lack of consumer preference for refillable containers (p. 27), not adequately addressed in the ISF report (Volume II, s. 2.4.5) The C4ES report (p 28) also raised a number of costs, implementation concerns and environmental impacts relating to refillables that are not considered in ISF's support for refillables (Volume II. p. 30).

Economics and environmental impacts for refillables are location and situation specific. ISF's support of refillables is questionable without developing a more plausible argument based on a detailed understanding of how implementation would work in Australia.

- *Impacts on Material Quality*

The ISF report highlights that CDL systems produce high quality recovered containers (Volume II, p.25), but fails to identify that higher quality recovered materials would not result in increased revenue for recycling systems under current circumstances and is therefore of little importance.

- *Recycling Behaviour and Motivations*

Based on a lack of current information on attitudes towards CDL we are surprised that ISF (Volume II, s.2.6) did not take advantage of C4ES's survey of South Australian residents on why and how they recycle (p. 4 and throughout report). Relevant results that should have been addressed by ISF include South Australian views on deposit amount (s. 3.3) and methods of return (s.3.4).

- *Reverse Vending Machines (RVM)*

The ISF view of reverse vending machines as a cost saving option for retailers (Volume II, p. 125) could be compared against the current situation, which is no container return to retail. Even in South Australia, retail represents less than 1% of container returns under CDL (C4ES, p.33). Additional RVM impacts not addressed in the ISF report include costs, impacts on market value and potential for fraudulent redemption.

- *Location and Siting of Facilities*

The ISF report does not address the turnover in deposits and containers necessary for each depot to be viable (C4ES, p. 35).

- *Kerbside Yield*

The ISF report argues that CDL would provide cost savings by reducing yield and collection frequency in kerbside recycling programs (Volume II, p. 103), which is erroneous. The *Independent Economic Assessment of Kerbside Recycling in Australia* by Nolan-ITU² calls kerbside yield the 'single most important factor in

² Nolan-ITU & Sinclair Knight Merz (2001) *Independent Assessment of Kerbside Recycling in Australia* prepared for the National Packaging Covenant Council.

the environmental performance' of kerbside recycling.

The Nolan-ITU report clearly shows that decreased yield would be detrimental to economic viability of kerbside recycling programs, as well as significantly decreasing the environmental benefits of kerbside. The C4ES report (pp. viii, 39, 40) uses the Nolan-ITU report to show how decreased yield under CDL would impact kerbside recycling and may in fact be responsible for increasing costs.

- *Inconsistent Referencing*

At various points throughout the ISF report, the C4ES report is incorrectly referenced as a BIEC report. It is doubtful whether ISF would want your report to be referred to as a NSW Government report. Based on the effort and diligence that formed the basis of our report, we had expected a professional approach that at least gave credit where credit is due.