



WHAT'S WRONG WITH THE PATHETIC PACKAGE

In its paper, *The Pathetic Package*, the Boomerang Alliance is claiming that Australia is already well behind international standards in recycling. This statement is based on a comparison with Europe which is inaccurate and misleading. This note is intended to put the record straight.

“Australia has a recycling rate lower than 10 of the 12 EU reporting nations ...”

Beware of trying to make overly precise comparisons. Our report on the impact of the EU Packaging and Packaging Waste Directive, released by the Commission today,¹ warns that *“the Member States have only harmonised their data collection methodologies to a limited extent, so these national returns are not necessarily comparable with each other.”*

“Member States have long had their own systems for collecting data, and if Decision 97/138/EC had imposed strict uniformity, it would have been impossible to compare post-1997 data with data from previous years.... The real issue is how the data are used. The most important thing is to be able to identify trends within a given Member State, as this information can guide national policy. Because of the methodological differences, the data are not a reliable indicator of the relative per capita consumption of packaging across the Member States, and should not be used as such.”

Australian packaging data have not been collected systematically for the purposes of international comparisons, which makes the Boomerang Alliance's exercise highly precarious.

In Europe, the data on packaging recycling is rather more reliable than the data on packaging placed on the market. Among the perverse results thrown up by a comparison of official data on packaging placed on the market are the following:

- Germany's per capita consumption of packaging in 2002 was 187 kg and Austria's 131.3 kg. Given the cultural similarities and commercial links, is it plausible that the average German uses 43% more packaging than the average Austrian? – especially since it is **Germany** which is held up as the shining example of packaging minimization policy!
- In its report to the EU, Ireland (not mentioned in the Boomerang Alliance paper) reports per capita consumption of 219 kg, the highest in the EU. The UK's was 168 kg.² It is odd

¹ Perchards, FFact and SAGIS: Study on the implementation and impact of Directive 94/62/EC on the functioning of the Internal Market, http://europa.eu.int/comm/enterprise/environment/reports_studies/index.htm.

² Less than Germany's, it is to be noted.

that the Irish should use more packaging than anybody else, since 80% of their packaged goods are imported, mostly from the UK, whose reported packaging consumption is 30% less.

Given that the European Single Market is to a large extent a reality for packaged goods (except beverages), and that companies choose the most cost-effective packaging available to them, it is unlikely that packaging consumption varies much between Member States. Cultural differences may allow for some variation, but it is probable that methodological rather than actual differences explain the extreme results.

If a country reports an exaggeratedly high amount of packaging placed on the market, and the tonnage recycled is reported accurately, its recycling rate will have been artificially depressed. Thus countries reporting an unusually low per capita consumption – Finland (87 kg), Greece (94 kg), Sweden (115 kg) and Austria (130 kg) – will in reality be achieving a lower recycling rate than that attributed to them, whereas France (206 kg)³ and Ireland (219 kg) will be recycling a higher percentage than the official figures show.

Therefore, if we assume that the Australian recycling rate given in the Boomerang Alliance paper is of the right order of magnitude, it could be concluded that Australia is in the same 45%-60% recycling band as most of the EU Member States, ahead of Greece, which has been given longer to meet the EU targets, and significantly behind only Belgium and Germany.⁴ The average recycling rate reported by the 15 countries in membership of the EU in 2002 was 52%. Weighting it according to population, it was 55%.

This assumes that the Boomerang Alliance is using European methodology to calculate Australian recycling rates, rather than the Australian legal definition of recycling. In Europe, recycling tonnages are calculated on the basis of material delivered to a recycler, not the recycler's output. By contrast, the Australian legal definition of recycling is to "recover the product *and use it as a raw material to produce another product.*" **There may be a difference of 30% between input and output.**

If the Alliance is calculating Australian recycling tonnages according to the definition in the NEPM, then to make the two sets of data comparable, the European tonnages have to be adjusted downwards to eliminate moisture, contamination and products that shouldn't be part of the packaging collections (broken toys, laddered tights and other small items of waste). In countries where packaging waste is collected free but householders have to pay for their regular garbage collections, consumers have every incentive to mis-sort.

“Australia’s recycling rates are propped up by strong performance from the paper sector at around 65%.”

This is true everywhere. The lowest recycling rate for paper and board in EU-15 in 2002 was 35% in Ireland, all the others exceeded 50% and the average was 68% – which is rather close to the Australian estimate.

³ The Boomerang Alliance for some reason cites 171 kg for France, even though its source, the ASSURRE report, correctly gives 206 kg.

⁴ Although the Boomerang Alliance paper claims to be based on the ASSURRE report which uses official data, in most cases it cites higher recycling rates. The official 2002 recycling rates (*Boomerang rates in brackets where different*) are as follows – Germany 74% (80%), Belgium 70% (72%), Austria 66% (70%), Sweden 65% (64%), Denmark 57%, Luxembourg 57% (65%), Netherlands 57% (60%), Italy 51% (47%), Portugal 50% (-), Finland 49%, France 45% (50%), Spain 44%, UK 44% (42%), Ireland 35% (-), Greece 33% (-).

“All the leading recyclers (Germany, Belgium, Austria, Luxembourg, Sweden, The Netherlands, Sweden and Denmark) undertake significant reuse of packaging, helping to retain the precious resources (energy, water and materials) consumed in manufacture and diverting millions of tonnes of waste from landfill or incineration.”

There is significant reuse of packaging in all EU countries – pallets, roll-cages, metal, plastic and fibreboard drums, crates, trays for bread etc, and beer kegs. Reusable non-household packaging is in fact increasing its market share. Refillable beer and soft drink containers, and the refillable milk bottle in the UK, are losing share.

The Boomerang Alliance is doubtless referring only to refillable beverage containers, where its contentions are questionable. In view of the bottle-washing required, do refillables really save water? Heavier refillable bottles and the requirements of the return system also involve more vehicle movements. In Germany, with its high recycling rates for all packaging, it is by no means certain that the use of refillable beverage containers saves waste.

The German Environment Minister has given a very clear political direction, yet when the German Federal Environment Agency published its LCA on refillable and non-refillable beverage containers in October 2002, it said that the difference between the best and worst packaging options in the study was only 5%. It also said that the environmental performance of one-way containers had improved, so one might infer that this gap will reduce in the future. Improved non-refillable containers can be introduced as technology permits; improvements in refillables are implemented much more slowly, because new bottles have to be compatible with the existing bottle population if they are to run down the same filling line.

Another recent report for the European Commission⁵ concluded that successful reusable packaging systems depend on localised product distribution, and high return rates. These features can be placed under stress by societal changes. Studies on refillable versus non-refillable beverage containers are highly dependent on the assumptions made regarding transport distances, return rates, recycling rates, control mechanisms and incentives such as deposits, but in general, most LCAs find that refillables are environmentally advantageous for distribution distances of up to 100 km and disadvantageous for distances above 1000 km; between 100 and 1000 km, the results depend on the particular packaging systems investigated (e.g. reusable transit trays that fold flat for distribution are not so distance-dependent as reusable PET bottles, which are in turn less distance-dependent than reusable glass bottles).

And our report on the impact of the Directive on the EU Internal Market⁶ noted that no jurisdiction has as yet tried to revive a refillable beverage container system once it has disappeared. Once the infrastructure and consumer habit have been lost, it is just not viable. Mandatory deposits for non-refillables only operate in EU Member States where refillables are still being used.

Even the refill quotas imposed in Germany and Portugal have failed to arrest the decline in demand for refillable beverage containers, despite Germany having available the sanction of mandatory deposits, which industry has been so keen to avoid, as a penalty for failing to maintain the market share of refillables.

⁵ PIRA International and Ecolas: Study on the implementation of the Packaging and Packaging Waste Directive and options to strengthen prevention and reuse, http://www.europa.eu.int/comm/environment/waste/studies/packaging/050224_final_report.pdf.

⁶ Op. cit.

The Boomerang Alliance says that refillable bottles may be used 20-40 times before being recycled. So they may; but bottles are not lost in the order in which they were first put on the market, and the average return rate may be much lower than this. In the UK take-home trade, the return rate was 3 (with a deposit of 12p) when the system was generally abandoned about 25 years ago. One big bottler still uses some refillables in Scotland, with a deposit of 20p, and the return rate is still 3.

“While Australians consume more packaging than their own (average) bodyweight each year (90 kg), Europe boasts a nett consumption that is nearly half our own at just 48 kg per annum.”

Official figures show that in EU-15, 24.975 million tonnes of packaging waste were landfilled. The population was 380 million. On that basis, nett consumption was 66 kg per capita.

“But Europe isn’t satisfied with current levels of performance. Landfill caps for packaging, mandatory recycled content levels in new packaging, expansions of container deposit schemes and increased levels of reuse will drive the performance higher again between now and 2008.”

Let us examine these statements:

- **Landfill caps for packaging** – a few Member States are legislating to keep packaging out of landfill, driven by the EU Landfill Directive which requires a progressive reduction in the amount of degradable material that may be landfilled.
- **Mandatory recycled content levels** – this is simply untrue. There are no moves to introduced mandatory recycled content.
- **Expansions of container deposit schemes** – this must refer to marginal expansion of the scope of some systems to avoid distortions of competition, for instance by covering “alcopops”, a category which did not exist when traditional deposit systems were introduced.
- **Increased levels of reuse** – in the beverage sector, this has not happened and will not happen. The introduction of mandatory deposits on non-refillables in Germany, with a higher deposit rate than for refillables, has led to consumers buying the cheaper refillables but then not returning them. It has been reported that return rates for some categories have fallen below 50% – two trips per bottle, which is lower than trippage in the UK.
- **Recycling performance will be driven higher between now and 2008** – the EU has now set targets for 2012. There is no pressure to increase recycling rates in the Member States achieving the most recycling now, and indeed the recycling rate in Germany can be expected to fall as a result of changes in the status of DSD, the national producer responsibility organisation for household packaging. There will however be continued convergence as Greece, Ireland, Italy, Portugal and the UK, and the ten new Member States, develop their recycling systems.

Closing the loop on packaging waste will ... reduce the overall cost of managing waste ...

Whether increasing recycling will reduce the overall cost of managing waste depends on whether outlets can be found for the collected material. There is no point collecting, sorting, transporting and reprocessing waste if industry can find no further use of it.

Our report for the EU Commission on the impact of the Packaging and Packaging Waste Directive⁷ comments that Europe is highly dependent on Asian recyclers to achieve its targets. *“It makes sense to export a certain amount of packaging waste for recycling in Asia, as Europe is a major importer of packaged goods from Asia. But there is a risk. Large-scale exports of recyclable materials could threaten the future of European recycling plants, particularly for paper and plastics. These recycling activities may need subsidies to survive, but subsidies from recovery organisations may decrease or cease completely in a more market-based scenario in future. And as Asian countries develop their own recycling legislation, they may no longer want so much European packaging waste as a feedstock. By that time, Europe will have lost some of its recycling capacity and it could become difficult to meet the Directive’s targets.”*

The same could be true for Australia, if it relies on exporting used packaging for recycling elsewhere. Thus, while the Boomerang Alliance’s statement is not necessarily wrong, it is not necessarily right either.

“Australian Environment Ministers need to make a commitment to lift Australia’s performance over time to an overall packaging recycling rate of at least 80% by 2015.”

Germany’s reported 2002 recycling rate was 78%, and as noted above, this is likely to fall. The next highest were Belgium (68%) and Austria (66%).

Even if Australia’s recycling tonnages are calculated in the same way as Europe’s, 80% looks not only unachievable, but also undesirable. There is really no point collecting food-contaminated flexible household packaging, paper bags and so on, but that would have to be done if an 80% target is to be met. If 90% of household packaging is targeted, and collections are made from 95% of Australian households, then 94% of the households served would have to put out all their packaging for collection *every time* for an 80% collection target to be met.

And recycling is an industrial process like any other, and has its own environmental impacts. Flexible packaging is resource-efficient to produce and distribute, so its environmental virtues lie higher up the supply chain. To meet an 80% recycling target, Australia would either have to waste resources recycling packaging not suited to recycling, or use thicker and heavier recyclable packaging where it is not necessary, or try to eliminate packaging in some cases, with a consequent increase in food wastage. The resources required for the contents are typically ten times that required for the packaging, so that would involve a substantial environmental disbenefit.

How then does Germany achieve 78% recycling? Well, DSD reports that it recycled (delivered for recycling) 161% of the paper and board packaging licensed to it, 128% of the aluminium, 121% of the steel, 99% of the glass and 97% of the plastics. Clearly something is wrong with the data

DAVID PERCHARD, 30 June 2005

⁷ Op. cit.