BUILDING PRODUCTS INNOVATION COUNCIL

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Waste Generation and Resource Efficiency Inquiry
Productivity Commission
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Dear Commissioner

The Building Products Innovation Council Limited (BPIC) is pleased to have the opportunity to provide this submission to assist in your current inquiry. BPIC represents the collective of building materials suppliers through their discrete industry associations. A list of our members is provided at Appendix A.

Where appropriate BPIC has offered specific comment on the questions posed by the discussion paper however we would also offer the following more general observations.

Perhaps most importantly BPIC would like to encourage the Commission to fully explore the recommended and appropriate concentration on a life cycle perspective in this inquiry. While not in a position to comment on other materials, the manufacturers and supplier of building materials are united in the acknowledgement of full life cycle assessment (LCA) as the only appropriate determinant of the environmental impact of a particular material or building. Any consideration of waste generation and its current and future costs must, in our view, be based on a full LCA approach. BPIC understands that this is perhaps a little more complex than other well meaning yet flawed environmental assessment approaches. Further comments on life cycle assessment follow in response to particular questions posed by the Commission's discussion paper.

A further point on the broader aspects of this inquiry relate to the highly aggregated nature of the data available on waste generation. Given that the focus of the inquiry is to be guided by the significance of issues across different sources of waste generation this poses a difficult analytical task when considering particular, as opposed to aggregated, materials. BPIC believes that this is an important issue to address up front as there are very different impacts for different materials across the range of products produced by BPIC members. In short, if the inquiry is to guide the Government(s) in developing a policy response it would be difficult, without specific data, to conduct a particularly thorough regulatory impact statement to drive the government's considerations.

That said, the Commission acknowledges the need to question the cost versus the benefits of collection of better quality data. BPIC finds this a particularly interesting point as it basically underscores the essence of the inquiry, i.e. if the cost of collecting the data is too high

compared to the application of the analytical results from the data then we should not proceed (on economic grounds). In our view it is preferable to estimate the costs involved in the data collection and then compare this to the benefits that might be achieved through redirection of the funds that would otherwise be spent on data collection to encouragement of research or practices that aim to reduce waste regardless of the finite amount actually disposed. BPIC recognises this approach departs from traditional measurement however there may be underlying environmental/social driver to justify this diversion.

BPIC also believes it is important for the Commission to understand that there are competing demands for efficiency in building and construction that while leading to increased waste also leads to significantly increased efficiency. For example, it is common for the builder or contractor to overestimate the requirements for materials (e.g. brick, tiles, timber) as the expense involved in running out of materials is quite significant. However, this approach obviously leads to increased amounts of unused material on site, some of which may not be recycled. So we have a very efficient building process aided by a safety margin in materials supply.

To some extent this can be overcome by pre-site activities such as more sophisticated estimating of materials requirements and also pre fabrication of components. Again there are other aspects to the supply chain which must be recognised in this respect such as the standardisation of product size coupled with the increased customisation of housing. It would be unrealistic to expect manufacturers of many products to produce to a single specification, although of course this does occur with windows and certain other products, as it would be equally unrealistic to advise purchasers that their product (house, office, etc.) must be of particular dimensions without variation. Extending this a little further we could suggest that all buildings be built to fit say gypsum board specifications which may in fact lead to bigger buildings which is not necessarily environmentally sound, but there would be no or at least much less waste.

Finally before moving towards the specific questions raised in this discussion paper, BPIC has some general comments on the concept of extended product responsibility and/or product stewardship. There is a suggestion that if the cost of recovery and recycle/disposal were included in the prime product cost then this would assist environmental outcomes as it would lead to consumers choosing the cheapest or lowest cost product for a particular purpose. BPIC understands the evolution of this line of thought however we do not necessarily agree that it applies in the case of building materials. This is due to the need for consideration of the full life cycle of the installed product as opposed to the environmental aspects of the product itself. For example, there will be instances where timber and aluminium are substitutable products and the discussion paper suggests inclusion of the cost of recovery in the prime cost of those products would drive consumer choice in material selection. However assessment of the product/material specifications alone will not deliver the required ecologically sustainable assessment required. In fact, due to the variety of uses and climates that affect a products performance it would be difficult to develop, let alone enforce, a pricing matrix that would satisfy the ultimate cost approach to pricing. In simple terms, the environment and particular application of a material directly effects its life cycle consideration.

BPIC will now provide specific comments on a number of questions raised in the Commission documents. Please feel free to contact us for more information as necessary on any of these points.

To what extent is the lack of disaggregated data a problem?

As touched on briefly above there is a very direct relationship between the quality of any policy initiatives and the concurrent quality of the data feeding that consideration. While some limited sectors of the building materials industry have relatively good data sets that could be used in place of the highly aggregated ABS data this is not the norm. BPIC is of the view that the lack of data often tends toward reliance on anecdotal evidence. BPIC cautions against use of such evidence as a driver for reform.

How has the waste hierarchy influenced waste management policy?

In order to respond to this BPIC provides the following comments in respect of each step of the suggested hierarchy.

1. Avoidance – self imposed in a free market economy
2. Reuse – technically a "no brainer" if economic
3. Recycling – an economic basis that often requires the provision of a convenience aspect to ensure participation
4. Recovery of energy – relative to virgin energy price
5. Treatment – often determined by residual after treatment
6. Avoidance – as number 1 above
7. Disposal – an economic consideration

BPIC does not believe that the hierarchy is a strict order of approach but that in consideration any one choice all others are in mind. Further, the evolving treatment technologies and manufacturing choices will demand constant revision of any solutions in this chain. BPIC believes that the combination of market forces and regulation lead to consideration of the waste hierarchy options.

Costs and benefits of the different approaches to waste management?

BPIC considers that the tendency toward recycling of materials has a significant impact on demand and a subsequent meeting of demand and supply at a price point substantially higher than would often otherwise be the case. This can be seen in cases such as the demand for recycled paper in the USA. However, there are other products where the demand is manufacturer driven due to alternate manufacturing technologies or basic costs of production. Reuse, recycling and energy recovery will have particular benefits yet the variability across building materials is enormous. Costs and benefits will vary according not only to choice theory but also physical location and use of waste or recyclable material.

Do negative externalities of waste disposal warrant a government response?

As with many entrenched practices in society there is often a role for government to cause a fundamental shift in activities that cause significant negative externalities. With respect to landfill, the BPIC position tends towards encouragement of waste reduction practices rather than penalisation of the landfill. If the correct incentives are applied either through the consumer or the regulator, best practice will be followed. It is not appropriate to penalise producers who make use of landfill (for example) despite adopting a best practice approach to reuse and recycling. Importantly, in the building and construction industry the creation of waste is technically driven by contractors or other parties installing the material. Hence when combined with the principle of EPR there are some interesting policy considerations when deciding on ways to meet negative externalities of waste disposal.

Are there barriers to entry in the markets for collecting and recycling waste?

BPIC believes that there are significant barriers to entry in the market for recycled building materials. The examples provided in the discussion paper are based on the economics of collection of well known and regularly used products by nearly every household and business. In building materials, the reality is that there is no such consistency of product and supply. There are diverse locations, each finishing with different materials at different stages.

In terms of the producer or supplier of virgin product also picking up waste for recycling this again would require a trip to a different site in most cases plus the probability of a different vehicle configuration. For example, a brick truck delivering pallets of bricks is not equipped to collect broken or scattered product.

What case is there for using waste management policies to improve the sustainability of 'resource use'?

BPIC is of the view that a number of policy initiatives have certainly encouraged more recycling but that others have basically increased the cost of landfill. Bearing in mind the need to maintain affordability in construction there is a limit to the landfill levies that should, under economic considerations, be applied, particularly where there are no readily available, affordable, alternate materials.

It is worth noting that some consideration of the explicit subsidy approach may be worthwhile. At present there is a disconnect between the producer and the usual occurrence of the cost of disposal. The introduction of positive assistance to draw people together along the supply chain to reduce waste may be worthwhile.

How useful is full life cycle analysis in determining the environmental and economic costs and benefits of recycle product?

As mentioned earlier full life cycle assessment is the only appropriate environmental assessment tool for building materials and buildings. In terms of the economic benefits assessment BPIC is of the view that these are incorporated into the full LCA process through consideration of prime cost, maintenance and replacement schedules. Another, perhaps more

complete way to approach these issues is the selection on merit principle for materials specifications, which includes consideration of the environmental impact under an LCA approach, the fitness for purpose in the current instance and the economic considerations or cost effectiveness.

Are there particular products or locations where disposal rather than recycling might be more efficient?

For building materials there will be many instances where this is the case simply due to locality or the quantity of materials to be recycled. For example, a renovation in the North West of Western Australia will have a very different recycling efficiency compared to a new commercial high rise in the Sydney CBD.

What are the advantages and disadvantages of extended producer responsibility and product stewardship schemes?

Clearly the major disadvantage with these schemes is the inability to ensure there equitable treatment to both overseas and local manufacturers. Further, it could be argued that these approaches tend to both undermine the concept of responsibility with ownership and distance end users from the responsibility for their actions.

While BPIC has been considering the impact or relevance of these schemes to building materials for quite some time, there is a need to undertake more research to enable a full and proper analysis of impacts. One of the immediate questions is the economic realities of having individual suppliers responsible for their own products with certain materials indistinguishable of origin without detailed analysis (e.g. glass, timber).

BPIC believes that while such schemes may reduce waste at one end of the spectrum they do nothing to ensure efficiencies at the other. A subcontractor fixing gypsum board may have a very different approach to sustainable practices compared to the manufacturer and unless very direct connections between installation and manufacture are maintained schemes such as EPR can falter. Regardless, the cost of such schemes is no doubt significant. They would, at first pass, also need to be accompanied by a legislative alternate for application of sanctions to those that do not participate in any industry driven co-regulatory approach.

BPIC acknowledges the international trends in other material sectors in this area and also notes the use of such mechanisms to limit the disposal or use of materials with acknowledged or dubious toxicity. BPIC members are actively involved in consideration of these types of schemes with the Federal Department of Environment and Heritage.

Finally it should be noted that the introduction of such schemes can have significantly different impact on producers of like goods due to the individual producer's relative size or position in the market. Therefore, if schemes were introduced there would be a need to consider inclusion of provisions to ensure some form of equity across the different entities.

What should be the relative role of industry and government in development of such arrangements?

While not accepting the value of such schemes (EPR) for building materials the market and manufacturing processes are so diverse and competitive that an industry developed co-regulatory approach supported by Government enforced safety net would at this point be our preferred approach.

What is the role of levies in EPR and Product Stewardship schemes?

The discussion paper suggests that the role of the levies might be to cover the ultimate recovery cost. BPIC suggests that this would be the driver behind any levy but does not agree this leads to consumer choice of the least harmful products. There are many different drivers for recovery cost which are not environmentally related. In other words the suggestion that the product with the lowest price inclusive of some recovery cost component is the most environmentally sound choice is not necessarily fact. Also as mentioned earlier there is, in consideration of building materials, no one single recovery cost for each material which inevitably leads to cross subsidisation should such levies be introduced.

How could national co-ordination be further improved?

Acknowledging that there may be regional issues that will require particular attention BPIC is aware that some state administrations have already moved to introduce EPR style initiatives for a range of materials. BPIC sees significant value in an approach that leads to a least cost implementation of any measures, which may be achieved through a nationally consistent platform.

Having said this there are obvious economic variances around Australia that should probably drive the policy development over and above the need for consistency.

BPIC again thanks the Commission for the opportunity to put this submission and welcomes any feedback or questions.

Kind regards

Tony McDonald
Chief Executive

21 February 2006

APPENDIX A

List of BPIC MEMBERS

MEMBERS

AUSTRALIAN STEEL INSTITUTE
AUSTRALIAN WINDOW ASSOCIATION
CEMENT CONCRETE & AGGREGATES AUSTRALIA
CLAY BRICK AND PAVER INSTITUTE
CONCRETE MASONRY ASSOCIATION OF AUSTRALIA
GYPSUM BOARD MANUFACTURERS AUSTRALASIA
HOUSING INDUSTRY ASSOCIATION
INSULATION MANUFACTURERS ASSOCIATION OF AUSTRALIA
PLASTICS AND CHEMICALS INDUSTRIES ASSOCIATION
ROOFING TILE ASSOCIATON OF AUSTRALIA INC
STEEL REINFORCEMENT INSTITUTE OF AUSTRALIA
THE NATIONAL MANUFACTURERS COUNCIL OF HIA
TIMBER DEVELOPMENT ASSOCIATION

ASSOCIATE

NATIONAL PRECAST CONCRETE ASSOCIATION AUSTRALIA

AFFILIATE

BUILDING DESIGNERS' ASSOCIATION OF AUSTRALIA