
A NATIONAL WASTE POLICY: MANAGING WASTE TO 2020

AIIA response to DEWHA
Consultation Paper

Australian Information Industry
Association

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VALUEICT

1 Background

The Australian Information Industry Association (AIIA) is Australia's peak technology industry body. AIIA's role is to lead and represent the ICT industry in Australia to maximise the potential of the Australian economy and society. AIIA's membership encompasses all sectors of the ICT sector including hardware, software, services and telecommunications. It has almost 500 member companies, from individual consultants, small to medium enterprises to the world's leading multinational corporations.

AIIA member companies employ over 100,000 Australians, generate combined annual revenues of more than \$40 billion (approximately 5% of GDP) and export more than \$2 billion in goods and services each year.

AIIA has for many years been engaged with governments and the community on the critical issue of collecting and processing IT waste equipment. AIIA also supports government efforts to reduce greenhouse gas emissions and reduce carbon footprints across the economy generally. AIIA's focus has been to facilitate waste management (collection, reuse and recycling) and to support appropriate energy efficiency programs through relevant regulations and standards.

AIIA's response to the issues posed in the Consultation Paper will focus on electronic waste management and industry efforts to introduce schemes aimed at reducing e-waste and ensuring adequate community awareness of best practice behaviour.

ICT and Greenhouse Gas Emissions

The transformational role of ICT products and services in the future carbon-constrained economy represents a huge opportunity for the sector and energy/ICT users as a whole. Our research would indicate that the ICT sector itself is responsible for up to 6% of GHG emissions, including

the use and support of major data centres, the proliferation of networked equipment and personal devices. (This level may well increase however, with demand from developing nations outstripping the significant inroads into equipment energy efficiency already being undertaken by the industry). While this is of concern, the industry is working constantly to improve its own footprint and emissions through design for sustainability, voluntary recycling programs, responsible procurement and use, and product design using improved materials.

The 6% equation also represents a '94% opportunity' for the use of ICT to reduce carbon footprints across the economy and in other industries. ICT products and services enable other sectors to take control of their environmental footprint, facilitating energy efficiencies that conservatively could deliver savings five times larger than total ICT emissions by 2020 (SMART – 2020).

The Role of Governments

AIIA welcomes this initiative by the Department to commence a public policy debate on the need for a national approach to waste management and to explore best practice approaches. AIIA agrees with the preliminary findings of the Productivity Commission in its 2006 Report on Waste Management that differing state and territory waste management policies contain inappropriate and inconsistent objectives, which add to overall industry costs and thus consumer costs. AIIA also shares the Commission's cautionary note against the introduction of mandatory product stewardship or extended producer responsibility schemes *before genuine disposal problems have been adequately demonstrated and quantified in a cost-benefit analysis.*

In this regard AIIA notes the publication of a draft consultation paper by

the Victorian government allegedly setting out the basis for a national framework for product stewardship schemes; the genesis and status of the draft was not adequately explained to industry and while it contained many worthwhile points, it nevertheless highlighted the disparate policy approaches between the states and federal government. AIIA understands this Victorian government paper will be input to the EPHC meeting on 22 May but this has yet to be clarified for industry.

AIIA supports recognition in the Consultation Paper of the COAG National Partnership Agreement to Deliver a Seamless national Economy and urges the Department to ensure these principles underpin all aspects of the development of a national waste policy. Currently, differing waste schemes across the states and federal jurisdictions are causing uncertainty and extra costs for industry; the Department's stated objective to set out a basis for collaboration between jurisdictions and articulate the respective roles of governments (page 3) is not clearly spelt out in the Paper and AIIA would suggest that this is fundamental to the success of any national approach.

Government Goals and Tactics

The five goals articulated at page 3, accompanied by the various methods of achieving those goals are supported by AIIA, however we note that considerable work has yet to be completed before complementarity between sustainability and climate change policies is reached; the many and varied GHG reporting schemes in state jurisdictions are at odds with the national NGERs reporting scheme and insufficient focus has been given to industry concerns in this area.

State Approaches

AIIA does not agree that the patchwork of state legislative and policy

instruments 'share common principles' as alleged at page 6 of the Paper. Rather, the differing and conflicting regimes add to the complexity of managing a business nationally (across, and transparent to, state borders), adding to costs for consumers and industry alike. AIIA also notes that state schemes based on the waste hierarchy have already been criticised by the Productivity Commission because of the inherent policy shortcomings of such a hierarchy (PC Overview XXXII).

The diversity of approaches noted at page 6 of the DEWHA Paper have in fact led to confusion of roles, objectives, and leadership. In this context the need for a genuine national approach is critical and imperative; *further delay will erode what support currently exists in industry to work with government to address the waste management policy issues.* AIIA is also strongly of the view that if 'local differences' as mentioned in the Paper are allowed to stifle a genuine national approach to waste management, government will lose industry support and *consumers will be the immediate victims as costs and prices rise.*

Electronic Waste

Discarded electrical and electronic equipment is one of the fastest growing types of waste in the waste stream. Definitions of e-waste include TV's, computers, stereos, mobile phones, lighting products, batteries and peripheral devices. The main method of disposal for the majority of e-waste is to landfill, and issues of leachate discharge, emissions, loss of amenity and economic waste through not re-using valuable chemicals and metals are the key concerns for the community.

Manufacturers of electrical and electronic equipment are continuously improving the design and materials use in an effort to reduce both their own carbon footprint and to increase efficiency in their products. This in

itself has led to reductions in the use of hazardous substances (reinforced and further focused by the EU RoHS Directive) and thus to the levels of chemicals and valuable materials ending up in landfill. But the increased demand for these products as developing nations come on stream means there will simply be more of those products in circulation. The challenge for policy developers is thus to strike the correct balance between waste avoidance, resource recovery, user demand and social cost/benefit.

AIIA believes the most optimal approach at this stage in the rapid development of climate policies and product changes, is to implement a national, comprehensive take-back and recovery program for consumers. AIIA is proposing an alternative to landfill disposal that allows for the recovery of metals and other valuable materials. AIIA considers it critical that this scheme be established by 2010 and the federal government implement regulatory mechanisms urgently to ensure a scheme based on shared responsibility and no free riders.

In this regard, AIIA's pilot Byteback scheme in Victoria could serve as an appropriate model. The program is based on the concept that organisations pay for their share of the actual physical waste needing to be recycled "today". Industry refers to this as a "waste arisings" model. The Byteback program illustrates a real-time application of this model. Byteback is discussed in more detail later.

An Advance Recycling Fee model/levy (ARF) is not considered a wise option and the reasons are detailed at the end of this document.

Today, ewaste is broadly divided into three groups:

1. Branded
2. Whitebox
3. Orphan (the brand Is no longer trading in Australia)

Byteback data for last three months of 2008 shows the following approximate percentage share of these groups:

- Recognised Brands 70%
Comprising: - 10 companies participating in Byteback accounting for 44%
- other major recognised brands (approx 17 brands) accounting for 29%
- White box and less recognised brands: 20%
- Orphan 10%

The Program - Three Major Components

1. ALL companies wishing to sell IT products in Australia must “register

Companies will choose to register as one of two types, either;

a. Registered “Manufacturers”

These companies are willing to cover the cost of recycling their own brand of products when presented for recycling. They will also provide a financial guarantee to cover future products, should they withdraw from the Australian marketplace for any reason. These are typically large multinational brands.

These manufacturers will pay for their ewaste either within their own approved scheme (*Individual producer responsibility*) or via a PRO (*Producer Responsibility Organization*). (see point 3 for more detail).

The naming of this group reflects the type of the majority of companies that will likely choose to register as in this category, i.e. the large manufacturers. Being in this group is not contingent upon being a “large manufacturer”. Smaller manufacturers and assemblers of white box products are free to choose to register as this type, it’s the company’s choice as to how they take responsibility for their share of ewaste.

OR

b. Registered “Importers”

These are companies that choose to pay their share of the recycling costs (based on actual waste arisings) at the beginning of the product’s life rather than at its end. Ideally this would be at point of entry, (Australian Customs) or soon after,

These companies are typically smaller companies that import and onsell computer equipment and parts to the local white box assemblers and other organisations. The products produced by this group tend to be unbranded or difficult to visually identify once built to order by the local whitebox assemblers.

It may not be viable for these organisations to operate their own scheme. They may not want the future liability of their products at end of life. Data from “Byteback” suggests that a large proportion of these companies are no longer operating in Australia when their product becomes available for recycling.

2. Product Flow at Point of Entry (Australian Customs)

When product enters Australia there are two outcomes;

i) Products from Registered Manufacturers

Products from Registered Manufacturers pass through Customs in the usual manner, on to the distribution point and ultimately the customer.

ii) Products from Registered Importers

These companies will be charged a proportional share of the cost (based on waste arisings) of recycling the whitebox group of products.

The following example is provided to demonstrate the concept and should not be seen as an indicative cost to an importer.

e.g. BDC Company is a mid size distributor of computer monitors and imports around \$200,000 worth of equipment in a designated period, say one quarter. In the same quarter \$10,000,000 of product was imported by the all Registered Importers. BDC Company is deemed to have an imported share of 2% (2% of the Registered Importers).

In the same quarter or perhaps the previous, the cost of recycling the same category of products (the "whitebox"/less recognised brands, is \$80,000. BDC Company would pay 2% of the \$80,000. A cost of \$1,600.

There are several options for the physical collection of these monies. The fees paid by the Registered Importers could be collected at Customs and forwarded to the PRO to cover this group of products or Customs could provide data to the relevant PRO via DEWHA or the appropriate regulatory authority and the PRO would invoice the Registered Importer. Both options (and perhaps others) require further investigation.

3. Product End of Life – Recycling

Product is delivered to a collection/recycling location and the product is recycled and paid for as follows;

a. Products belonging to Registered Manufacturers (approx 70% of total ewaste based on data from the last three months of 2008 from the Byteback trial)

This product will be recycled as follows:

a1. Manufacturer's Own Scheme

A company may choose to run its own program. Today, several companies with demonstrated extended producer responsibility

already have established programs in place. For a company to run its own scheme it must demonstrate it meets the requirements of a registered scheme as defined by the legislation.

OR

a2. Producer Responsibility Organisation (PRO).

A Registered Manufacturer can pay via the systems set up within a PRO. A PRO is a not-for-profit “intermediary” which bills companies for their ewaste, handles reporting obligations to government and its members and generally manages the scheme on behalf of the participating companies. Any number of PRO’s can operate limited only by what the market will tolerate.

As some of the ewaste today comes from companies which are no longer operating in Australia, Registered Manufacturers would have to provide a financial guarantee to cover their products, should they withdraw from the Australian marketplace for any reason. Several mechanisms to address this issue have been suggested but require further investigation, such as bank bonds and insurance products.

b. White Box/ less recognised Brands (approx 20% of total ewaste*)

Products in the “white box” category are paid for by the Registered Importers according to their import market share.

c. Orphan items (approx 10% of total ewaste*)

These items belong to recognized brands which are no longer in business in Australia and are seen as a shared responsibility. This means the requirement to share the responsibility for waste collection and recovery with registered manufactures, importers and government. Shared responsibility is important in ensuring that product stewardship schemes are fair and equitable. Government could pay for the diminishing group of

products. Further discussion is required.

Insights from the Byteback Trial

The major brands involved in the development of this proposal are also the founding members of the Byteback trial in Victoria. Apple, Brother, Cannon, Dell, Epson, Fuji Xerox, Fujitsu, Hewlett Packard, IBM, Lexmark, Lenovo have voluntarily paid for their own ewaste in for the last 18 months.

Consumers drop off unwanted computer equipment at one of four large permanent locations in Melbourne, two smaller locations and several temporary locations across regional Victoria. This trial draws to a close at the end of 2009.

The trial has allowed industry, councils and the recyclers to test the waste arisings model and has provided good insight to the make-up of ewaste (as detailed in point 1).

Under this voluntary program, the Byteback founding members accounted for around 44% of the ewaste collected. Despite repeated attempts by both industry and government to encourage other brands to join the program, many chose not to participate. Industry believes underpinning legislation must ensure everyone participates and pays their share of waste arisings.

For the last three months of 2008, the rough cost of running this program was \$300,000.

Working with the TV Industry

Whilst the program suggested by the TV industry is different to that proposed by the IT industry it is recognised that there is a desire to work together where it make sense to do so. Examples include using the same drop off points, recycling facilities etc.

Advance Recycling Fee (ARF) Model/Levy -- Why it is not the preferred model

In an ARF model, a set fee or levy is collected “up front” at either point of entry to the country or at point of sale. The funds collected applied to “all” the items being recycled.

Industry experience outside Australia and recent WEEE developments indicate that the ARF model is impractical and costly to implement. The administration costs associated with the system far exceed the actual cost of recycling the products in question while placing an additional burden on businesses. In countries which adopted the levy based system, the cost of recycling was higher. Indications from some EU countries suggested that the visible fee has far exceeded the waste management costs leading to massive accrued funds. This suggests is that industry and, ultimately the consumer, pay much more than is required.

http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/nr_costofrecycling.pdf?jumpid=reg_R1002_USEN for more detail)

It is extremely difficult to determine an appropriate levy which will closely track the cost of products being recycled at any time. The levied amount changes regularly and in some cases stops as the build-up of funds becomes excessive.

Computer equipment does not have a well defined “expiry date” making it almost impossible to predict future volumes presenting for recycling. In the tyre industry for example, it is reasonable to expect to see a tyre presenting for recycling after say 40,000km or 2.5 years. Hence future volumes for recycling are easier to predict.

Most importantly, a set fee or levy applied to new sales discourages companies from investing in “designing their products for the environment”. If a company that designs products which are simpler to dismantle, simpler to separate and are made from the products which are prized in the recycling industry, they should be rewarded with cheaper recycling costs. Applying a levy discourages this behaviour and offers no reward for environmental consideration. Based on these examples and our experiences in other jurisdictions, the industry would caution the Government against adopting a mandatory approach to Advance

Byteback as a national program

Byteback™, is an initiative of Sustainability Victoria, the Australian Information Industry Association (AIIA) in association with founding partners Hewlett Packard (HP), Apple, Canon, Dell, Epson, Fujitsu, Fuji-Xerox, IBM, Lenovo, and Lexmark. Byteback is being piloted by Sustainability Victoria in partnership with HP and has been operating since June 2005.

When disposed of in landfill, the materials and chemicals components used to make computer equipment can leach into, and harm, the environment. Personal computer systems including desktops, laptops, computer mice, monitors, printers, scanners, keyboards, computer power supplies, printed circuit boards, motherboards, network & memory cards, disk and CD drives are accepted as designated Byteback centres. At present there are four centres which will increase in number as the scheme grows. A limit of 10 items per visit applies to visitors to Byteback recycling centres. The recycling service is free and available to residents and small businesses throughout Victoria.

After collection, equipment is transported to a specialised electronic recycling and recovery centre. Equipment is disassembled into its parts (plastic, precious metals, batteries, cathode ray tubes, printed circuit boards, insulated wiring) and sent off to various parts of Australia and the world for recovery and recycling.

To date, AIIA has received enquiries from outside Victoria from state governments and regional centres, by those people who are interested in establishing Byteback-style recycling processes in their region. It is a particularly expensive exercise for those manufacturers involved to take-back their end-of-life products.

The main concern for AIIA in this scheme is the existence of so-called 'white box'

or no-name computers which flood the Australian market annually.

It is for this reason that AIIA considers a possible way forward is for Byteback to become a national program, run in co-operation with the Commonwealth Government. In order for this to occur and to co-opt other legitimate manufacturers into taking part in the program, the Government would need to monitor and tax white box manufacturers at the point of entry into Australia (This will have Customs implications with the necessity to scan shipping containers at the point of entry into Australia). The ICT sector is cognisant of its corporate social responsibility with respect to product stewardship. It is essential that ICT products, as the end of the shelf life, do not end up in landfills across the nation. A universal Byteback program would alleviate much of this problem.