

Editorial Opinion piece

Turning e-waste into profit

In Australia, according to the Environmental Protection Heritage Council, more than 16 million tonnes of electronic appliances are disposed of in landfill each year, and the volume is increasing.

Collectively known as e-waste, these devices encompass everything from mobile phones, laptops, printers and personal computers to washing machines, fridges and air conditioners.

The environmental challenges posed by this waste are several. For the most part, they are bulky, dense items that don't crush easily in normal refuse handling, so they take up valuable landfill space. They are heavy, adding to transport costs and greenhouse gas production when they are moved to landfill sites by trucks or cars, they often contain heavy metals and toxic chemicals that can leach into water tables and the atmosphere. They also don't break down easily once buried.

Until recently there has been no national e-waste management strategy or government regulation to mitigate the unique effects of e-waste on the environment, although there have been a number of ad-hoc and one-off schemes put in place by various proponents of e-waste recycling and reclamation.

This changed in December 2009 when the Australian Federal Government formulated its e-waste recycling policy and began building regulations for the management, recycling and disposal of e-waste.

In response, and as a first step, Fuji Xerox Australia coordinated a round-table meeting with key industry, government and environmental groups to understand what the changes will mean, how they can be best adopted, the opportunities they will create and the challenges they will pose.

Organisations attending the three-hour meeting included the Total Environment Centre, Australian Information Industry Association, Planet Ark, Australian Council of Recycling, Department of the

Environment, Water, Heritage and the Arts, Department of Environment, Climate Change and Water NSW, Product Stewardship Australia and Sony Australia.

With such a diverse group present there were passionate discussions from all quarters on many issues ranging from industry readiness to adopt new regulations through to regulatory enforcement.

It was recognised that, as with all structural change, there will be many challenges to be overcome to ensure the proposed national e-waste recycling scheme is successfully implemented and works effectively.

However, all participants agreed that the key to success was positive engagement and collaboration on the scheme's development by all parties over the next six to 12 months. This would lead to a much greater likelihood of developing a solution that was likely to permanently influence attitudes and behaviour by consumers and producers of electronic products and lead to a sustainable environmental solution.

Clearly, it's essential that this new national scheme is fair. Fair to manufacturers, their business partners, consumers and the environment. It's a hard balance to strike, but with consultation between all parties and leadership and support from the largest enterprises in the sector, lasting change is more likely to be achieved.

Equally, populist, unscientific and one-sided regulation is likely to become mired in controversy, create unintended and inconsistent imposts on business, manufacturers and investors and result in a poor compromise that will reduce environmental sustainability overall. That's not in anyone's interest.

During the discussion, all parties recognised the challenges this new scheme posed are not just business oriented, they are cultural as well. While environmental awareness and positive attitudes towards recycling are at historic highs in the home, businesses are less willing to participate, particularly if there are extra costs involved.

However, the reality is that e-waste recycling can make very good business sense, particularly for manufacturers and those who seek to participate directly in the recycling industry.

Our own example, the Fuji Xerox Australia's Eco-manufacturing Centre in NSW, has pioneered e-waste recycling by locally remanufacturing parts and removing sub-assemblies from equipment during servicing. Our centre has created jobs, helped design products with a reduced environmental footprint and all but eliminated the need for any components to end up in landfill (here or overseas). And while achieving all this, our Eco-manufacturing centre has converted a \$22 million investment into a \$240 million return.

This simply demonstrates what is possible with the right strategic focus and business model.

The meeting then turned to more practical dimensions of working within a new regulatory environment.

The main concerns from the panel were the need for the industry to have a common understanding of the legislation and businesses to have answers for their customers on procedures for recycling, and understanding expectations on cost and changes required to individual businesses.

Much of the discussion focused on the likely impacts of the new e-waste regulation on ICT brands, recyclers and customers and how we subsequently fund and adapt our businesses to this new reality.

I firmly believe, and the panel shared the view, that monitoring and penalty systems are required to ensure our environment benefits from the changes.

A national scheme with strict guidelines and rules will ensure that future generations will benefit from established recycling programs, and recycling of e-waste will simply become part of the national consciousness.

Strict recycling guidelines will also stimulate product and materials innovation and encourage greater consideration during the early stage of product design. A product designed to be efficiently and effectively recycled is going to reduce its overall impact on the environment compared to a product requiring more time and effort to recycle. Simple design features such as easily-dismantled parts and using labels and packaging that are more environmentally friendly can instantly improve environmental outcomes.

If all businesses change manufacturing standards and processes to consider a product's entire life cycle, including reusability, then the next generation will have better and more cost effective means to reduce waste and recycle.

The panel discussion also highlighted the success of a scheme that has already driven some change towards more positive behaviour towards e-waste recycling.

The ByteBack scheme is a free computer take-back program that is being trialled in Victoria to encourage the public to dispose of unwanted computer equipment responsibly. It is the most comprehensive and sustained trial of its kind in the southern hemisphere and a great illustration of the sorts of challenges industry will face.

Overall, attendees at the roundtable were very aware of the significant change required to minimise e-waste. However, while the larger and more specialised recyclers are ready, the broader recycling industry is not thought to be, and many attendees expressed the need for more education, consistent recycling standards encompassing all types of products, and transparency across the industry.

The roundtable highlighted what Fuji Xerox Australia and others like us have known for some time: that sustainability has a good business case. It is and will become increasingly critical to the growth and longevity of business.

Consumers are becoming more aware of the environmental impacts stemming from the manufacture of the products they use. They are also realising that their own efforts to minimise their personal environmental footprint cannot succeed without accompanying changes of attitude of from corporate Australia.

While the details of the proposed scheme are still unclear at this stage, the panel expects to see innovation in the market place and savvy individuals to build niche recycling businesses very quickly with the most innovative seeking to collaborate closely with manufacturers to become remanufacturers rather than just recyclers.

The legislation is due later this year and all the panellists are looking forward to watching innovative Australian businesses rise to this exciting challenge.

No doubt there will be many more discussions between all those involved before all the promised benefits of this scheme are realised, but the wheels are finally turning and business, consumers and the environment should all benefit as a result.