RECHARGING STEWARDSHIP

Removing 353 million batteries from the nation’s waste stream for recycling makes good sense, and ABRI is determined to lead the charge. By Helen Lewis.

As federal, state and territory governments finally move ahead with a national co-regulatory scheme for computers and televisions, it is timely to start planning product stewardship schemes for other high priority waste products.

The Australian Battery Recycling Initiative (ABRI) was established in 2008 to promote responsible environmental management of batteries at end-of-life. Batteries contain valuable metals and they’re a potential hazard in landfills and alternative waste facilities, so they should be recovered.

In 2010, ABRI commissioned consultancy Wannkae BSE to develop a mass balance for batteries in Australia. The aim was to develop a better understanding of battery stocks and flows, in particular how many batteries of different chemistries we consume each year and how many of these we recycle or send to landfill.

The study looked at all categories of batteries – hand-held, automotive and industrial – and estimated about 353 million are consumed each year. Hand-held batteries (weighing less than 1kg) make up the largest proportion by number, accounting for about 345 million or 98 per cent of the total. This category includes all of the common household batteries, such as AAA, AA and D alkaline and carbon zinc batteries, as well as more specialised batteries for laptops, mobile phones, power tools, MP3 players and hearing aids.

Only four per cent of these are recycled at present. The majority are disposed to landfill at the end of their life (about 183 million), or informally ‘stockpiled’ in defunct electrical and electronic products (69 million).

The situation is quite different for the larger automotive batteries. Australians consume some six million each year and recycle approximately 87 per cent. While there is a well-established recovery infrastructure, the report highlighted some important gaps, including collection of batteries from remote and regional areas.

Why recycle batteries?
There are a number of arguments for recycling that collectively support the need for a national product stewardship scheme.

Many of the materials used to make batteries, such as lead, cadmium, mercury, lithium, manganese, nickel and zinc are non-renewable. They can, however, be recycled an indefinite number of times and have a commercial value.

Some of these materials, particularly lead, cadmium and mercury, are potentially hazardous to human health and the environment. Disposal in landfill runs the risk of heavy metals leaching into surrounding groundwater and surface water. Like all other products containing hazardous materials, including computers, mobile phones, paints and fluorescent lights, it is more resource efficient to recycle them.

Finally, alternative waste facilities are becoming more common, but batteries present a problem for the organic materials they depend on. Lead acid batteries are often damaged in waste collection vehicles or the early stages of processing, contaminating the organics before they can be removed, while the smaller household batteries are difficult to separate from mixed waste. All batteries should therefore be removed from the mixed waste stream to support increased diversion of organics from landfill to high value applications such as compost.

Next steps for stewardship
Data from the ABRI report will inform the development of an active program this year to promote battery stewardship.

One of the priorities is to expand the infrastructure for collection and reprocessing of hand-held batteries, building on existing programs that operate on a relatively small scale.

The most active program is in Perth, where local and state governments have established a network of more than 150 drop-off points for batteries. Battery World stores offer a recycling service for their customers nationally and Sustainability Victoria...
is running a pilot program in Melbourne. Single use alkaline batteries are recycled at
a pilot facility in Port Kembla, NSW, and rechargeable batteries are exported under
licence for reprocessing overseas.

In the absence of industry and
community-wide support for voluntary
battery recycling programs, some form of
government regulation may be required.
ABRI will be engaging with federal, state
and territory governments this year on the
most appropriate form of regulation for
hand-held batteries, with a national policy
required to support the establishment of a
viable long-term recycling solution.

Over the next 12 months, ABRI will
develop product stewardship plans that
identify actions required by governments,
industry and consumers to ensure batteries
of all types are removed from the waste
stream for recycling.

For automotive batteries, for example,
ABRI’s objectives include recovering the
approximately 135,000 batteries
disposed to landfill each year; working
with government agencies to stop illegal
exports; and taking steps to recover
batteries informally stockpiled around
the country.

The business case

ABRI is seeking to expand its membership
to include companies involved in the
manufacture, use and recovery of batteries.
Product stewardship is based on the
principle that organisations at every stage
of the supply chain, as well as governments
and consumers, share responsibility for
environmental management, including
recovery at end of life.

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ABRI’s membership already includes
battery manufacturers, consumer
electronics suppliers, recyclers, government
agencies and environmental organisations,
but there are some important gaps. It is
keen to involve other manufacturers and
retailers as it moves into the next stage
of its program. There are many benefits
of working through ABRI to develop
product stewardship programs. One is that
taking an active role in the development
of national policies and programs ensures
they support your business goals.

State governments in NSW, Queensland
and Western Australia have identified
batteries as products of concern in the
waste stream. The NSW Government’s
draft implementation plan for the
Waste Avoidance and Recovery Strategy
proposes national schemes for priority
wastes, including lead acid and hand-held
batteries, but in the absence of such
schemes proposes producer responsibility
schemes by 2013.

The second key reason for companies
to join ABRI is to support their corporate
sustainability and social responsibility
goals. Consumers and other stakeholders
expect companies to take responsibility
not just for their operations but their
products at the end-of-life. This includes
batteries, as shown by Planet Ark’s
‘Recycling Near You’ website in receiving
more than 120,000 queries on how to
recycle batteries in 2009–10, a 20 per cent
increase on the previous year.

Helen Lewis is chief executive of ABRI.
Download a summary of the research
findings at www.batterycycling.org.au.

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