

Banksia Awards: Business and the Environment

IT heavyweights tackle hazard

It seems like a humble thing, that little cartridge that you put in the printer or fax machine—hardly the sort of thing to cause much of a concern to the environment, surely.

But in fact printer cartridges, like much computer hardware, present a real problem. The plastic container remains in the environment almost permanently, and the residue of ink or pigment—and even an "empty" cartridge retains about 10 per cent of its original contents—constitutes a significant hazard if it finds its way into the ecosystem from a landfill site.

One Australian company is tackling this problem head-on, and with the help of 11 major IT companies, is beginning to make headway.

Close the Loop, in Somerton on the fringe of Melbourne, has developed technology aimed at recycling toner and inkjet cartridges with zero waste to landfill.

The idea was developed by founder Steve Morris, who started with a printing supplies business. When he offered a cartridge take-back option to customers, he found that it worked very well, and he saw the idea as a way of helping the environment as well as creating a viable business. So Close the Loop was created.

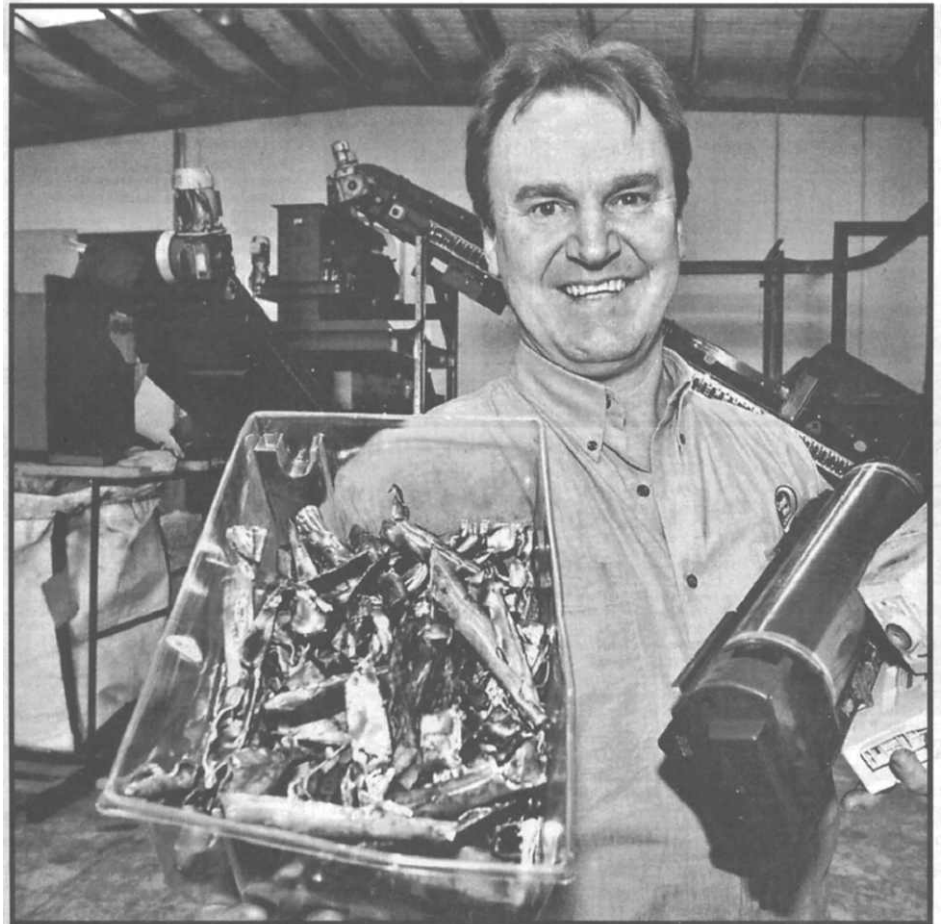
The process begins with the collection of used cartridges, taking place through a variety of avenues.

Companies and organisations are encouraged to collect used cartridges in a central point. They are then collected by Close the Loop for processing. Another collection method is through display boxes, under the logo "Cartridges 4 Planet Ark", in retail outlets such as Harvey Norman, Dick Smith, and, most recently, OfficeWorks.

This is based on research showing that when customers went to buy a new cartridge, they often took the old one with them, to ensure that they buy the right type.

Another collection avenue is linked directly to purchase of a new cartridge. Hewlett-Packard, one of the strongest supporters of Close the Loop, includes a postage-paid stick-on address label in the re-useable product box, so the used cartridge can be sent directly to Close the Loop.

At the Close the Loop facility, incoming cartridges are sorted, with some being cleaned and returned to the manufacturer for re-use. Most, however, are put into the company's "Green Machine".



Steve Morris: tackling the waste problem head-on

One stage of the process separates the ink—with dye-based ink and powdered pigment being treated separately—while the plastic casing and components are broken down by impact and heat.

The recovered pigment is supplied to the printing industry for low-quality printing tasks. The dye is mixed with the output stream, which is then extruded and molded into plank-like lengths. This material is called eWood, and it is a durable timber replacement product, with the tensile strength of high-quality wood.

As a result, the amount of waste sent to landfill is zero. The financial viability of Close the Loop is based on its industry partners—Hewlett-Packard, Canon, Brother, EPSON, IBM, Konica Minolta, Kyocera, Lanier Australia, Lexmark, Matsushita Group, and Ricoh Australia—paying an amount for each of its products which is returned or recycled. The program operates across Australia, as well as serving New Zealand and several countries in south-east Asia.