



The Future is Here

Zero Waste to Landfill Resource Recovery



CEO Steve Morriss

“Zero waste is an extraordinary concept that can lead society to innovative breakthroughs that can save the environments, lives and money”. Paul Hawken, author of 'Natural Capitalism.'

“Planet Ark commends Close the Loop for the leadership they have demonstrated in sustainable business practices in the IT and e-waste sectors. They have set new standards that are revolutionising how society deals with the difficult problem of e-waste”.

Paul Klymenko, Director, Planet Ark Foundation.

“The commitment to 'Zero Waste to Landfill' has its origins in my original promise to customers. I look back now and realise that not compromising on that original, somewhat naïve, claim is a crucial part of our success.” CEO Steve Morriss, as quoted in 'The Natural Advantage of Nations' pg 77.

Zero Waste Warriors

Close the Loop Limited is a world class recycler of imaging consumables including inkjet cartridges, laser toner cartridges, drum units, copier bottles and more. Using unique and innovative materials separation processes, all items are recycled with zero waste to landfill.

Close the Loop was founded in 2001 when our Chief Executive Officer, Steve Morriss, developed a solution to the recycling problem he was facing as the owner of an image consumables sales company.

He pioneered the service of taking back everything he sold for recycling. Customers loved the idea, sales increased and a new business was born. In addition, Steve got a glimpse of the European Union's Waste Electrical and Electronic Equipment (WEEE) draft legislation before it became law, which further confirmed the strong trends driving this business model.

Global legislative trends aimed to cut the amount of discarded electronic equipment (e-waste going to landfill) and place the recycling responsibility on the manufacturers, thereby introducing the concept of EPR - Extended Producer Responsibility. The WEEE directive will soon be law and many countries around the world are taking steps towards similar legislation.

The role Steve wanted Close the Loop to play was clear: collect and recycle these items, whose numbers are growing all the time, and provide both the end-user and manufacturer with a solution.

Based in Somerton, in the northern industrial sector of Melbourne, Australia, Close the Loop currently has over 500 shareholders and employs around 50 staff. We have four patents pending and 12 multinational clients. To date, we have recycled in excess of 2 million items and over 2000 tonne of printing consumables and electronic scrap with zero waste to landfill.

By providing a recycling solution for an industry where previously nearly all waste went to landfill or developing countries, our innovative approach is paying dividends for the environment, human health, and businesses. We are proud to have a positive influence on the sustainability performance of every company that implements our zero-waste recycling program.

Key Partners

Close the Loop has united printing manufacturers, major retail outlets, over 20,000 collection sites, waste management companies and high profile not for profit organisations to collect and recycle printer cartridges.

Some of these partners are 'Cartridges 4 Planet Ark', Australia Post, Officeworks, Harvey Norman, Tandy, Dick Smith Electronics, Brother, Canon, Epson, Hewlett Packard, IBM, Konica Minolta, Lanier, Lexmark, Panasonic, Ricoh, Toshiba and thousands of individual businesses.

Zero Waste to Landfill means that Close the Loop doesn't throw anything away, everything is recycled and turned into something else - or reused.



Innovation: Zero Waste to Landfill

Over 20 million printer cartridges are used every year in Australia. Before Close the Loop was founded, all of these cartridges that had reached the end of their working lives ended up in landfill or dumped in countries where cheap labour is used to perform crude recycling.

Globally, the sales market for printer cartridges is growing by 10 per cent per annum.

Close the Loop collects these used printer cartridges - and other electronic consumables and breaks them down into their raw components. Some of these components, like pure streams of plastic and metal, already had markets in place for reselling/reuse purposes.

However components like ink, toner powder, foam, mixed and contaminated plastics didn't have obvious markets to sell into or any existing recycling/resource recovery process available. The environmental ethic of Close the Loop empowered the team to be innovative and our approach of zero waste to landfill led to truly unique solutions.

The Green Machine

At Close the Loop, incoming ink jets and toner cartridges are sorted, with some being cleaned and sent back to the manufacturer. Most, however, are put into the company's Green Machine.

The highly unique Green Machine was specifically designed by Close the Loop to break down the varied and complex parts of printer consumables. Take a look at one of your own toner cartridges they comprise a complex mix of plastics, metals, foam, rubber, inks and dyes and more. This is why they are a challenge to recycle they have so many different parts that all need to be taken apart to recycle. The Green Machine can do it all.

Cartridges are identified by part number and sorted for batch processing in one of two separate production lines - toner or ink.

The process is basically size reduction followed by materials separation. While the actual science is patented and well protected, we can confirm that Close the Loop can recycle any imaging consumable, of any brand, recovering all raw materials for reuse.



The Finished Product: eWood™

Close the Loop's decision to take a zero waste to landfill approach provided an interesting challenge for the Company - what to do with the recycled material that existing industry didn't want? A unique solution was required, and the team came up with a winner, eWood™ an environmentally sound wood substitute, that in certain applications has better properties than wood.

eWood™ is made from 100% recycled printer cartridge plastic. It is very similar to hardwood in terms of strength and feel, as well as density and structure. It can also be worked, shaped and handcrafted like timber

eWood™ is also UV resistant, is available in several colours, weatherproof, tough, non-porous and is resistant to bacteria growth and insect attack.

Due to its unique advantages in terms of durability and versatility, eWood™ is ideally suited for applications such as landscape gardening, outdoor furniture, fencing, sound barriers, packaging and concrete formwork.

"We are the only known company in the world to produce a wood substitute of this type from the mixed and contaminated plastics recovered from eWaste recycling," Steve Morriss.

eWood™ was recently the Winner of ABC TV's New Inventor's Episode Award for the valuable and innovative solution it has provided to this recycling challenge.

Green Practices

“Being Green” is the driving force behind Close the Loop. It produces zero waste from its recycling processes, with environmental impacts minimised by managing internally generated waste such as food scraps etc. as a member of EcoRecycle's Waste Wise Network. In addition:

- The collection boxes used in Close the Loop's collection program are manufactured from post-consumer waste paper
- The plastic bags used in Close the Loop's collection program are manufactured using 93 per cent post-consumer plastic and were designed specifically for the Company; and
- Close the Loop's entire operation, including the industrial plant and equipment, is powered by 100% green electricity.

Even some of our office equipment, such as rulers, are manufactured from recycled toner cartridges!

Cartridges in Australia

Close the Loop's 'Green Machines' currently recycle about seven per cent of Australia's recyclable cartridges and we can do much more. We know that Australians are very willing to recycle products if they are given the chance to, so it's all about keeping people informed.

Close the Loop has set itself a target to collect 10 per cent of the estimated 20 million printer cartridges used every year in Australia.

While this is an ambitious goal, Close the Loop's collection rates are growing at more than 100 per cent per annum: in the past three years the company has recycled about 2 million cartridges, with 100 per cent of recovered materials re-used in environmentally sound applications.

This can be achieved through greater public awareness campaigns and partnering with responsible companies and organisations that can help us make this happen.

'Cartridges 4 Planet Ark'

One of Close the Loop's most successful business partnerships to date is with Planet Ark, through the 'Cartridges 4 Planet Ark' program - arguably the most successful multi-vendor, extended producer responsibility program in Australia.

Under the partnership, recycling bins are provided to over 9000 businesses and 1000 groups. The bins are collected when they are full and the cartridges sent to Close the Loop for recycling. Aust post Harvey Norman etc

In 2004, the Director of the Planet Ark Foundation, Paul Klymenko, commended Close the Loop for its leadership in sustainable business practice in the IT and e-waste sectors: "They have set new standards that are revolutionising how society deals with the difficult problem of e-waste."



Passionate People

Close the Loop has proven that as a Company it has strong values, ethics, and a passion for continuous improvement. These qualities help us attract and retain a team of highly committed people.

Steve Morriss successfully founded Close the Loop based on triple bottom line principles ie consideration for environmental, social, and economic measures of success. Close the Loop's commitment to these principles has been shown in many ways, perhaps best illustrated by our unflinching commitment to the brand promise of 'zero waste to landfill' that is now an ingrained part of our culture.

The Close the Loop team is a tight knit community of passionate people. Within each role a team member fills, they are encouraged to innovate seek solutions to problems, develop sustainable practices, and continuously improve efficiency and customer service.

This rare level of freedom to innovate has directly led to inventions such as the Green Machine and eWood.

Close the Loop is proud of every member of our family and congratulates them on helping the Company fulfil its purposes and vision. In the true spirit of contribution, we believe you receive in proportion to what you give.

We look forward to growing as a Company, driving innovation, proactively seeking solutions, and developing new opportunities for a sustainable future, which will only happen if we have a commercially successful Company.



Winning through Innovation

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