CARTRIDGES (4 PLANET ARK

About the program

Your small actions have BIG imapets!



Recycle your printer cartridges here

WYCHOW WASHING

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Canon



CARTRIDGES 4 PLANET ARK

CLOSE ELOOP

brother at your side

Canon





Introduction

This program toolkit is available to all Original Equipment Manufacturers (OEMs), partners, and users of the Cartridges 4 Planet Ark program. The contents of this document will outline how the program works and **what we do to maintain our Zero Waste to Landfill commitment to grow a circular economy.**

This document can be used to build your knowledge of the program, inform others within your organisation about the program, or to inform any communications about the program you may wish to produce.

ABOUT THE PROGRAM

Cartridges 4 Planet Ark is an innovative recycling program that provides Australians with a **free**, **easy and environmentally-accredited** way to recycle their used printer cartridges.

As cartridges are made up of a complex mix of plastics, metal, inks and toners they represent a significant investment in resources. When they are disposed of into landfill these resources are lost.

That's why Planet Ark joined with Close the Loop and the participating manufacturers - Brother, Canon, Cartridge World, Epson, HP, & Kyocera - to set up the innovative Cartridges 4 Planet Ark program. Our Melbourne-based recycling partner, Close the Loop, is **independently audited on an annual basis for its zero waste to landfill guarantee.**

Cartridges 4 Planet Ark's audit certificate can be found here.

Close the Loop is dedicated to making the circular economy a reality by its commitment to zero waste and its application of an internationally accredited Environmental Management System.



How the program works

Signing up for Cartridges 4 Planet Ark is completely free!

It's an easy recycling resource that has a big impact and a zero waste to landfill quarantee.

1. FIND OUT IF IT'S RIGHT FOR YOU...

A Cartridges 4 Planet Ark box can be set up in workplaces, universities, businesses, community groups, or schools. It is best recommended if they use **more than three inkjet, toner cartridges, or toner bottles, from our participating sponsors, in a month.**

2. REGISTERING FOR A BOX

You can contact our recycling partner, Close the Loop, by calling **1800 24 24 73** or completing a registration form.

3. GET YOUR CARTRIDGES COLLECTED

Our collection bags come with **FREE Reply Paid** stickers from Australia Post. Take it to your closest Australia Post or collected from your mail room.

Metropolitan customers can also **book their collections online** through Close the Loop's website or by calling 1800
24 24 73 to arrange a courier pick-up within five days.

4. DROP THEM OFF INSTEAD

Using the public drop-off boxes from our retail collection partners can help users who don't print that often.

Find your closest drop-off box at **Recycling Near You.**



What's accepted?

All inkjet cartridges, toner cartridges and toner bottles from participating industry members can be placed in the Cartridges 4 Planet Ark box.

Accepted items includes:

- Mixed cartridges
- Inkjet cartridges
- Laser cartridges
- Unused cartridges
- Toner bottles
- Fuser and drum units
- Print heads
- Waste hoppers / containers, collectors, & kits

Each OEM pays for the recycling of their collected cartridges, which help keeps the program free. It is recommended that only branded inkjet cartridges, toner cartridges and toner bottles.

Each Cartridges 4 Planet Ark box will include:

- Folded cardboard box
- Cable ties for full bags
- Heavy duty collection bags, with affixed Reply Paid Australia Post stickers.







Returning your cartridges

IF YOU HAVE A WORKPLACE BOX

Once your collection box is full, our partners at Close the Loop will take charge of collection and processing! Tie the bags up with one of the cable ties provided and organise with your office to have it collected.

SEND IT THROUGH AUSTRALIA POST

- Take the bag to your local Australia Post outlet and it will be returned via Reply Paid at no cost to you!
- Take the bag to your internal mail room to be processed along with your other mail. Your Australia Post contractor will pick up the bag and it is sent through Reply Paid post at no cost to you!

GET IT COLLECTED BY CLOSE THE LOOP

- Metropolitan customers can also book their collections online through <u>Close the Loop's website</u> or by calling 1800 24 24 73 to arrange a courier pick-up within five days.
- You need to know your company ID number to arrange a bag collection online. If you don't know your company ID number, please email info@closetheloop.com.au and it will be sent to you.

New collection bags, cable ties, or collection boxes can be ordered through your account on <u>Close the Loop's website</u>.

IF YOU USE A DROP-OFF

Using the public drop-off boxes from our retail collection partners can help users who don't print that often enough to have their own box.

Find your closest drop-off box at **Recycling Near You**



Case study

CARTRIDGES 4 PLANET ARK

Cartridges 4 Planet Ark is an example of what **product stewardship and a circular economy** can achieve. The following case study outlines how Cartridges 4 Planet Ark is an example for future sustainable solutions. Use this resource to learn more about the program and share it with your stakeholders.

Printer cartridges are made up of a complex mix of plastics, metal, inks and toners they represent a significant investment in resources. When they are disposed of into landfill these resources are lost.

Though useful when recovered, these materials pose environmental hazards when sent to landfill, as they erode chemicals leech into soil and groundwater.

Printer cartridges are collected from all over Australia to be repurposed into new products. **Product**stewardship scheme are often free to consumers!

They are great opportunities to make **recycling convenient and accessible** whilst also attracting commitment to sustainable business practices.



The future aim for Cartridges 4
Planet Ark is to become a formally accredited scheme. **Voluntary accreditation** will formalise the commitment of businesses involved in product stewardship schemes and help maintain valuable contributions to recycling goals.

This process has already begun with the *Recycling and Waste Reduction Act 2020*, which has improved the voluntary product stewardship framework, including reducing the cost and time frame involved in becoming accredited.



"Voluntary accreditation is the next step to ensuring a meaningful commitment to product stewardship. A process where we can all benefit."

Other benefits for voluntary accreditation include:

- having a competitive advantage because the public knows that your industry has worked to reduce the negative impacts from its products
- demonstrating sustainability claims when competing in government procurement activities.
- use of the Australian
 Government's product
 stewardship logo to tell
 consumers that your product is
 sustainable and a good
 environmental choice.
- maximising the value of product and material streams.



Our **participating manufacturers** cover the cost of collecting, transporting and recycling of their own cartridges as well as promoting the program to workplaces and to the general public.

By supporting Cartridges 4 Planet Ark, and covering the costs of the program, it remains completely free for end users looking to recycle their printer cartridges.

You can help us make sure we can continue to provide a free recycling service by reducing the number of non-participating manufacturers' cartridges in your collection boxes.

One of the most significant accomplishments that Cartridges 4 Planet Ark can boast is our **zero** waste to landfill guarantee. The resources within each cartridge can be separated and repurposed for continued use.

Cartridges 4 Planet Ark recycled over 55 million printer cartridges and diverted almost 20,000 tonnes of waste from landfill between 2003 and 2023!



Aside from recycling used print materials into new cartridges, inks and pens, there has also been the development of **eWood, a timber alternative** made from recycled rigid plastics.

TonerPlas ™ has been developed to turn plastic waste into a high-performance asphalt road.

Similarly, **Lousy Ink, a sustainable art supplier,** has grown using a business model that revolves around the reuse of collected cartridge ink. This ink is supplied by Close the Loop and Cartridges 4 Planet Ark.

By supporting stakeholders along the entire supply chain, we hope to change the way people think about product circularity and recyclability.



Case study CLOSE THE LOOP

Since 2000, Close the Loop has been delivering world class product stewardship and resource recovery solutions to manufacturers of consumer products and their customers. The company makes end products — a premium asphalt additive and the world's first fully recycled pen are examples — from their **zero waste-to-landfill recycling processes.**

Close the Loop's simple but ambitious vision is **"a circular world"**.

And they are already well on their way. What started as a small operation in the Melbourne suburb of Thomastown in 2000 has now expanded into the USA and Europe.

The company's services include all aspects of product stewardship:

- Designing products with circularity in mind
- Effective collection programs
- Keeping products and materials in circulation for as long as possible
- Developing innovative end use solutions

Collection and processing is just the start, companies like Close the Loop must rally support from government and industry to embrace new materials, change outdated barriers to entry and change counterproductive relationships that block progress.

"The foundations of circularity — design out waste, keep products and materials in circulation and build regenerative businesses — are empowering to me."

Steve Morriss, founder of Close the Loop



Close the Loop has diverted millions of products from landfill and converted them into valuable new materials.

They were also among the first to promote the idea of product stewardship - an approach to managing the impacts of products and materials that acknowledges producers, retailers, users and disposers have a shared responsibility for their impacts - in Australia.

One of their earliest product stewardship schemes in the country, **Cartridges 4 Planet Ark,** was established in 2003 in collaboration with Planet Ark. The program offers Australians a free, easy and environmentally accredited way to dispose of their printer cartridges.

That single commitment has driven significant innovation at Close the Loop including the development of eWood, a timber alternative made from recycled rigid plastics.

Other notable innovations include what is possibly the world's first ever recycled pen made with 100 per cent recycled printer cartridge ink. This recycled ink is popular among consumers and is now promoted and also used by the funky brand Lousy Ink, owned by Melbourne street artists Mike Eleven and Oli Ruskidd.



However, Close the Loop's proudest innovation to date is a newer product called **TonerPlas TM**; an award-winning asphalt additive invented by Close the Loop and refined in partnership with Downer over more than eight years of intense research and development, lab testing, road trials and monitoring. The real breakthrough of TonerPlas TM, according to Steve, is the circular supply chain model which has been developed to turn plastic waste into a high performance asphalt road.

"Used 'waste' toner cartridges are collected via the Cartridges 4 Planet Ark program. These toner cartridges are then recycled by Close the Loop. Waste soft plastics are also collected and shipped to Close the Loop where they are blended with waste toner powder via an advanced manufacturing process.



The result is 100 per cent recycled asphalt additive that improves the performance and life span of asphalt roads. Testing of numerous asphalt samples shows the addition of TonerPlas TM increases the lifespan of a road by around 15%.

One of the company's more recent innovations is rFlex, a new polymer for injection moulding made from 100 per cent post-consumer mixed soft plastics.

Post-consumer mixed soft plastics are often called the 'mongrel' mix. Close the Loop has developed an advanced process to turn this mix into a homogenous polymer that performs similar to virgin plastics. Small amounts of known additives can transform the mix into a polymer to mimic either PE or PP. This technology development has global export potential and is a direct result of Close the Loop's innovative culture.





Case study

LOUSY INK

Lousy Ink is the **world's first 100% recycled artist ink**. Started as a two-person commitment to reducing unconscious waste, they promote more sustainable forms of art-making and provide an alternative to your leftover ink. Lousy Ink started in 2017 as a solution to the ink waste that was generated as a by-product of printer cartridge recycling.

- Lousy Ink is a prime example of the circular economy in action.
 It helps facilitate the zero waste to landfill guarantee of Cartridges
 4 Planet Ark and Close the Loop.
- Over 85,000 litres worth of ink
 has been collected and stored
 since day one. Diverting it from
 landfill prevents it from
 leeching toxic chemicals into
 ground soil.
- Lousy Ink gives artists of all levels the platform to flourish, whilst helping keep our planet green along the way.

Since 2003, Cartridges 4 Planet Ark and its program partner, Close the Loop, have been delivering world class product stewardship and resource recovery solutions for printer cartridge waste.

From these products, Close the Loop makes end products like TonerPlasTM, a premium asphalt additive, and eWood, a plastic timber alternative. What makes this process truly great, in terms of the circular economy, is its ability to inspire innovative business solutions to our waste as was the case with Lousy Ink.





Lousy Ink's vision is to turn waste into inspiration by recycling printer cartridge ink into sustainable art materials. Working in collaboration with Close the Loop and Cartridges 4 Planet Ark's collection program, they help divert waste generated by millions of printer cartridges across Australia.

By engaging with the creative community, they can not only inspire others with shared passions to engage with the circular economy, but they can also educate on the benefits of using waste as a resource.

Having already diverted thousands of tonnes of waste ink from going to landfill, Lousy Ink is helping show that repurposing waste is simply a new way of creating something different – and that sometimes different is better.

WASTE INK

"Encouraging an innovative approach to waste materials changes perceptions on the value of our resources and how we can do so without continuing the strain on our environment."

Oli Ruskidd Lousy Ink Co-Founder

The circular economy works when manufactured resources are designed to no longer generate waste when they meet their end-of-life. Product stewardship schemes, like Cartridges 4 Planet Ark, are one of the methods that ensures there is a solution for even the hardest to recycle products.

Through the product take-back, resource recovery, and reuse initiatives with Close the Loop, millions of products have been diverted from landfill and converted into valuable new materials.



Once at Close the Loop, the printer cartridges are crushed down into their baser components of metal and plastic.

A by-product of this process, however, is that the 'waste' cartridges come with leftover reserves of ink. This ink is filtered, to separate it from the plastic, and sent to Lousy Ink where it becomes their range of pens and ink. Having avenues for reuse in the market creates incentives for innovation in these areas, allowing for other businesses to follow suit.

Running a sustainable and community-first business has provided Lousy Ink the opportunity to grow as a modern business in a circular economy. The benefit of having businesses aware of the life cycle of their products encourages more responsible practices in the market.

By hosting a range of art exhibitions, they not only raise funds for charitable organisations but also inspire artists to create using Lousy Ink. Making the connection between meaningful change and personal engagement allows tangible and approachable examples of the circular economy to make its way into mainstream consciousness.

In recent years, Lousy Ink has expanded their offerings from artist ink, available in bottles and vials, to a range of fineliner pens, which are made from recycled plastics.

Finding a local manufacturer to work with waste plastics was initially difficult for Lousy Ink but, with the support of businesses in this space, will become easier as the ongoing development of re-purposed materials enters the market.

"We saw Lousy Ink as an opportunity to do more than what we could've done alone, and reach more people with a positive message. Even though we're 'just artists', we're trying to fight the climate crisis alongside the experts, activists and younger generations who will inherit this planet after us."

> Oli Ruskidd Lousy Ink Co-Founder





This is to certify that operations of

CLOSE THE LOOP

SOMERTON, VICTORIA, AUSTRALIA



for the 'Cartridges 4 Planet Ark' program have been found through a waste audit conducted by Exis Pty Ltd to produce

ZERO WASTE TO LANDFILL

This certificate is valid to September 30, 2025

Authorised by:

Md

Aaron Westwood Director, Exis Pty Ltd Exemplar Global Lead Environment Auditor No. 112925



Taking Responsibility











