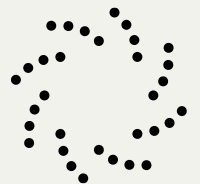


Sircel ESG Impact Report

July 2023 – June 2024



Report Contents

1. Context
5. Key achievements
6. Plugging the e-waste gap report
8. Impact & progress review
10. Our focus areas
11. How we're tracking
16. Where to next?
17. Appendix: Definitions & key terms



Context

We're a green-tech company tackling the global challenge of e-waste. Our mission is to eradicate e-waste from landfill and redirect the valuable commodities back into the circular economy.

E-waste is the fastest-growing domestic waste stream, increasing by about 2.6 million tonnes annually. In 2022, global e-waste generation reached 62 million tonnes, and it is projected to grow to 82 million tonnes by 2030, a 33% increase. Australia, one of the highest per capita producers of e-waste, generated 511,000 tonnes in 2019 (20 kg per person), significantly above the global average of 7 kg per person. Australia's e-waste generation is expected to rise nearly 30%, reaching 657,000 tonnes by 2030. It's a big problem and one that recycling isn't keeping up with.

So where does Australia's e-waste go? Currently over 46% of e-waste in Australia ends up in landfill. The remaining 54% is sent to recycling processes which typically recover approximately 35% of the material inputs. Legislation is seeking to change this, and many states have implemented e-waste to landfill bans. It is a slow process. Keeping e-waste out of landfill (and into alternative systems) will require an all-in effort from governments, community groups, organisations and citizens.

Sircel's world-leading proprietary system enables up to 100% diversion of e-waste from landfill. Our process enables the materials within e-waste to be redirected back into the economy. As part of this process, we are committed to transparent reporting and remaining accountable for our role in the e-waste system. This Impact Report demonstrates our progress and achievements during our operations from 01 July, 2023 – 30, June 2024.

Key Achievements

“Sircel focused on three critical advancements to strengthen our ESG contributions during the FY2023-24 period. The first involved the successful design of a hydro-metallurgy process that delivers copper at above 99% purity, with other outputs refined to a form suitable for reintegration into industry manufacturing processes. This innovation has enabled trading arrangements with industry partners, ensuring our output materials are utilised effectively and avoid waste.

The second focus has been identifying solutions to achieve the best quality and use for our outputs, including plastics and solar panel wafers, further enhancing our contribution to the circular economy.

Lastly, we have made significant progress toward securing globally recognised Verra accredited carbon credits under the Verified Carbon Standard (VCS) based on our processing flowsheets.

These achievements reflect the unwavering commitment of our technical, commercial, and operational teams to deliver meaningful and scalable improvements in the ESG space, underscoring Sircel’s role as a leader in sustainable innovation.”

- Anthony Karam, CEO

Key Achievements Continued

‘Our FY24 ESG achievements were focused on advancing our processing capabilities, improving the quality of our output materials, and increasing e-waste awareness, while also building our partnerships to further grow our impact.’

Increasing e-waste awareness

Many people don’t realise when they put their devices, appliances and gadgets into the bin they often end up in landfill. Nor do manufacturers always design products with recycling in-mind. From coverage in mainstream media to sponsoring the Waste 2024 conference in Coffs Harbour and Impact X Sydney 2024, while also attending the Endeavour Energy Expo – we continued to raise awareness about the challenges facing e-waste recyclers.

Please note – since the FY2023-24 reporting period has concluded, we have sponsored and attended additional events to those mentioned here and these will be discussed further in our FY2024-25 ESG Report.

Focus on partnerships

We established partnerships with local councils and some of Australia’s largest and most influential organisations. These partnerships are critical to preventing electronics from ending up in landfill.

Innovating our process

We’re continuing to innovate our process to expand the types of e-waste (and materials) our system can address. Plastics are one of the challenging materials to recycle. We’ve been improving and refining our processes to increase efficiency in processing these materials.

Plugging the E-Waste Gap: Key Findings & Insights

Early in FY2024-25 we also released our [Plugging the E-Waste Gap](#) report which analyses both the top 200 ASX company's pledges and actions with regard to their e-waste management and the public's overall understanding of the e-waste crisis in Australia.

A summary of the e-waste problem and solution discussed in the report are summarised below. Ultimately, the report highlighted that only a fraction of e-waste in Australia is properly recycled, highlighting the urgent need for businesses, consumers, and policymakers to take responsibility, embrace circular economy solutions, and close the e-waste gap.

The Problem: Australia's Growing E-Waste Crisis

Fastest-growing waste stream: E-waste is rising rapidly, yet only 17.4% is properly collected and recycled.

Lack of corporate action: Less than 20% of ASX 200 companies mention e-waste in sustainability reports.

Missed Scope 3 emissions link: While 76% discuss Scope 3, only 1 in 200 address e-waste's contribution.

Consumer awareness gap: 48% of Australians don't know what e-waste is, and 35% didn't know recycling options exist.

Environmental & health risks: Toxic materials from e-waste contaminate land & water, and poor disposal can lead to data security breaches.

The Solution: Circular Economy & Corporate Responsibility

Reuse, repurpose, recycle: Only 15% of companies include e-waste in their recycling definition.

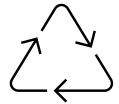
Consumer demand for action: 73% prefer e-waste to be recycled in Australia rather than shipped overseas.

Corporate opportunity: Businesses can lead by adopting robust e-waste recycling strategies.

Policy & regulation: A nationally consistent e-waste framework is needed to drive change.

Sircel's role: As Australia's only end-to-end e-waste recycler, Sircel ensures 100% landfill diversion, supporting a circular economy.

Impact and progress overview | July 2023 to June 2024



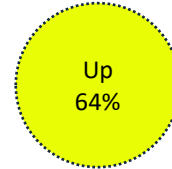
1,877 t
Diverted from landfill



From phones and laptops to circuit boards and telecommunication exchanges, we've kept these items out of landfill and transformed the output into new materials.



2,350
Items reused



A significant amount of laptops and desktop computers we receive are in working condition. First, they are data-erased and then distributed for reuse via partners.



202
Partners



Through take-back schemes, community drop-off points or one-off collections our partners play a key role in enabling us to divert e-waste from landfill.



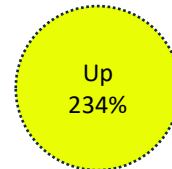
119,239 KG
Plastic diversion



We divert plastic from landfill in two ways. We supply clean hard plastic to several partners. Any remaining lower quality plastic is diverted via thermal degradation (pyrolysis).



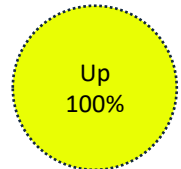
1,081,422 KG
Processed metals output



Our main outputs were steel, aluminium, and copper, mixed metals fractions. Each metal offers an alternative source to raw materials.



6
Operational sites



We have operational sites in Queensland, Victoria and NSW.

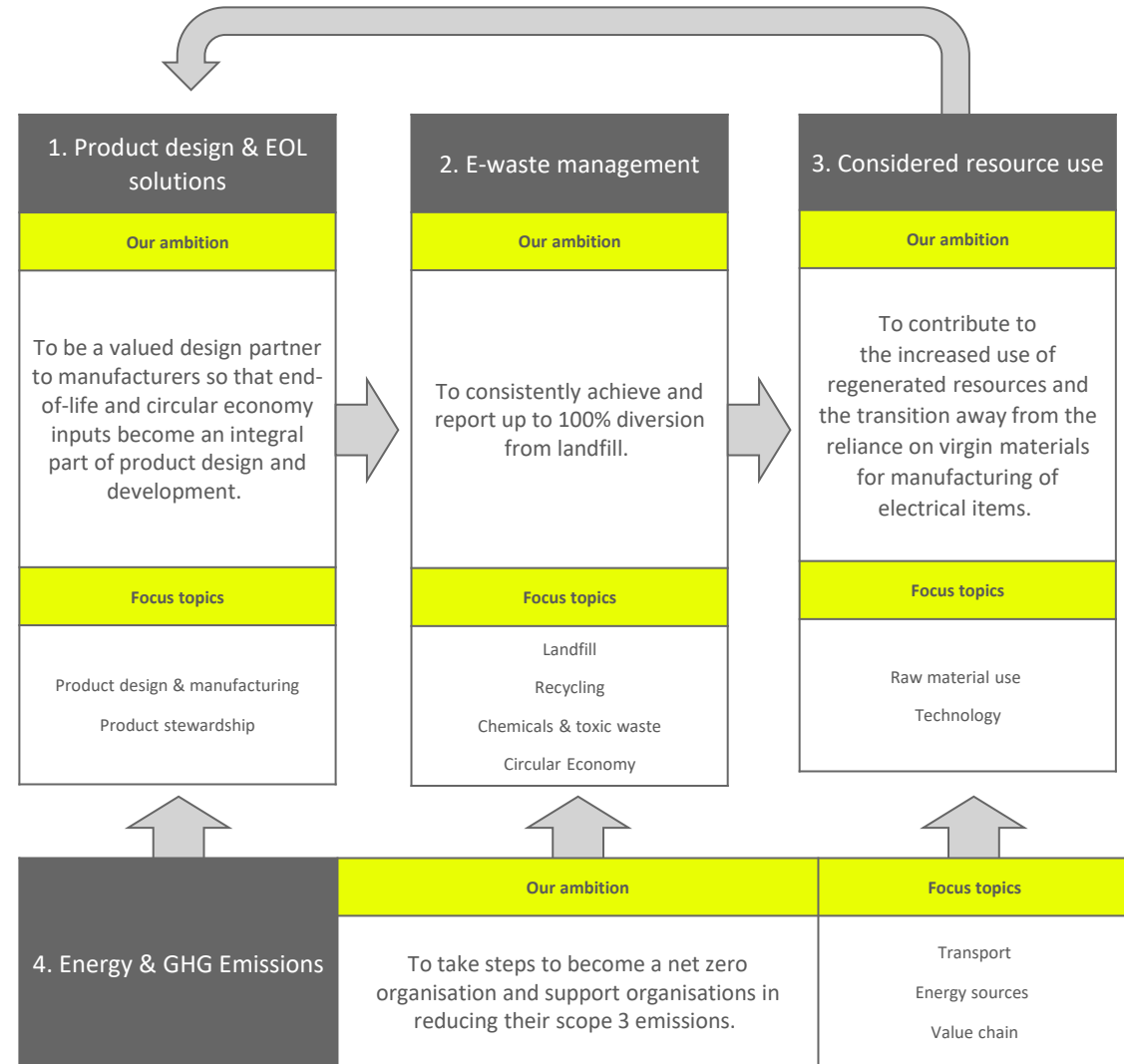
Note – Percentage increases relative to Sircel's FY23 Progress Report which covered the six-month period from 01 January 2023 to 30 June 2023.



Our Focus Areas








Our mission is to eradicate e-waste from landfill and redirect valuable commodities back into the circular economy. To achieve this our focus is directed into four key areas.

Our impact areas represent the material issues we prioritise for sustainability measurement, reporting, and innovation.







How we're tracking: E-waste management

Goal: To consistently achieve and report up to 100% diversion from landfill with the resources which enter a Sircel facility.

Initiative	Achieved	In-progress	Not started	Progress
Measure the total amount of e-waste processed by Sircel in a financial year.				We achieved a total of 1,877 t of e-waste diversion from landfill during the period July 1, 2023, to June 30, 2024.
Measure the efficiency of our machines to ensure up to 99% of diversion remains consistent.				<p>We are working towards achieving 100% diversion from landfill of the e-waste processed through our machines. We have a particular focus on achieving this efficiency for phones, laptops, PCB's and communication hardware.</p> <p>We are seeking to achieve granular visibility on machine volumes processing e-waste weight and this capability is currently being built. The volume of weight processed by Sircel's machines in FY2023-24 was 1,065,999 kgs.</p>
Identify the types of material items diverted from landfill and take steps to quantifying the amounts of each processed.				There are several categories of e-waste. During the FY24 period we processed items including: laptops, desktop computers, printers, phones, TV & computer accessories, street lamps, light fittings, coffee machines, hard drives, switchboards and cables. We're focusing on improving our data systems to provide increased transparency on the types of items we are processing.
Set targets for the total amount of e-waste processed within a financial year.				<p>Since our FY2022-23 progress report, we have refined our waste processing targets and have now set 3 internal targets (commencing from FY 2024-25) for the following waste types:</p> <ul style="list-style-type: none"> • Site generated weight (the overall weight received to Sircel processing sites). • Machine processed weight (volumes processed through our machines). <p>We will review and refine these targets accordingly during the FY2024-25 period and disclose relevant metrics and progress against the targets from FY2024-25 onwards.</p>
Become a processing partner to organisations with a sizeable e-waste footprint.				We serviced 202 clients within the FY24 reporting period. This included local councils and some of Australia's largest and most influential organisations.
Establish partnerships with local councils for involvement in their waste collection days.				We worked with councils in Victoria, NSW and QLD to support e-waste drop-off days and provide community members with a clear drop-off point for their broken or unwanted electrical items. We participated in 16 Council drop-off days between July 1, 2023, to June 30, 2024.
Generating national interest in why e-waste to landfill is a major challenge.				Key achievements during FY2023-24 included Sircel's submission to the Senate Inquiry into Waste Reduction and Recycling Policies and establishing memberships with Circular Australia and the Australian Council of Recycling (ACOR.) Our insights were featured in the Waste Management Review, the Sydney Morning Herald, and the Australian Financial Review. Next steps include senate inquiry attendance and presentation of evidence as well as contributing to the "Plugging Australian E-waste Gap" report in The Australian.






How we're tracking: Energy & GHG Emissions

Goal: To take steps to become a net zero organisation and support organisations in reducing their scope 3 emissions.

Initiative	Achieved	In-progress	Not started	Progress
Assess and quantify, where feasible, the emissions reductions achieved by sourcing recycled metals from Sircel compared to using raw materials.				We are currently undertaking an emissions analysis to calculate the carbon footprint of our processing approach. In future we aim to be able to quantify the average volume of avoided emissions from the Sircel process (compared to raw mining).
Measure the emissions impact of our company-wide operations across scope 1, 2 and 3 emissions.				Our current focus is on understanding the emissions associated with the Sircel process in comparison to raw mining of the same materials. This work has significant overlap with understanding our corporate emissions profile, but we have not yet commenced analysing or reporting the data according to the GHG Protocol's corporate standard. Once the process audit is complete, we will look to use this data to assess our company-wide operations.
Reduce the energy impact of our operations.				One of our key focuses was to expand solar capacity. We installed 830kW at our Melbourne site during the previous reporting period and planned for Villawood and Parkes. However, unfortunately our solar partner went into administration, delaying these plans in FY2023-24. In due course, once we have more visibility on our emissions profile (refer earlier comments) we will have increased understanding of the most emissions intensive parts of our operations and be able to identify opportunities to reduce or change them.
Evaluate what it will take to achieve net zero operations.				As above, our current focus has been on quantifying the emissions associated directly with the processing of various metals. In future, we aim to measure the emissions impact of our company-wide emissions across scope 1, 2 and 3. We understand that achieving net zero emissions according to a best practice standard such as the Science-based Targets initiative (SBTi) Corporate Net Zero Standard will be a long-term and whole of organisation challenge – made harder still by the changing sector-specific guidelines, and reporting requirements. For this reason, we are focused on tacking our emissions journey in a phased approach, focusing first on what we can control, where we are able to access quality data, and where our material impacts lie.






How we're tracking: Product design & stewardship

Goal: To be a valued design partner for manufacturers to ensure waste reduction and circular economy inputs are factored in at the design phase of product development.

Initiative	Achieved	In-progress	Not started	Progress
Establish the product types Sircel can provide material input for.				Our focus for this period remained on understanding and quantifying the metals we can process while clarifying the output quantities we can reliably produce. Primary outputs from the previous period included aluminium, steel, copper, and plastic.
Quantify the impact of Sircel's material processing vs extracting raw materials.				We are currently quantifying this from an emissions perspective. Please refer to 'energy & GHG emissions' progress.
Develop a partnership program with manufacturers and designers of electrical and consumer goods.				We have received several types of items which posed challenges to our machines. For example, some items contained multiple types of plastic. Typically, these items were difficult to break down which made them costly and time-consuming to achieve recycling outcomes.
				When we learn something we share it with our partners. This might be an observation around the number of plastics used within a product. Or the challenges with disassembling an item. These informal feedback loops provide our partners with visibility around what happens to the products at their EOL. In turn, this demonstrates how choices at the manufacturing process can improve diversion rates. While we provide this feedback to our partners where possible, developing a formal partnership program with manufacturers has not been identified as a priority action in the short-term (but is something we may consider in the future).
Educate consumers on purchasing items made from repurposed materials or those with an EOL strategy.				Our focus has first been on organisations where we have established partnerships. Over time, we hope to extend out communication directly to consumers, too.

How we're tracking: Regenerated resources

Goal: To contribute to the increased use of regenerated resources and the transition away from reliance on virgin materials for manufacturing of electrical items.

Initiative	Achieved	In-progress	Not started	Progress
Measure the material output Sircel generates within a financial year including plastic, metal and critical minerals.				<p>In FY2023-24 we prepared 792,638 KG of metals to re-enter the economy. We also provided 118,514 KG of extracted plastic to our plastics partner Plasmar who use it to manufacture bollards, fence posts and sleepers. In addition, we diverted the following materials and items from landfill:</p> <ul style="list-style-type: none"> • 58,854.15 KG of batteries • 10,740.01 KG of wood • 1,714.00 KG of fluro tubes • 1,445.00 KG of light bulbs • 1,280 KG of ink • 1,023.00 KG of cardboard • 34,253.00 KG of dust • 41,411.40 KG of other reuse items
Set annual targets for tonnes of metals Sircel are contributing to the circular economy.				<p>We have set our FY2024-25 targets for contributing to the circular economy, aiming to process:</p> <ul style="list-style-type: none"> • 8,174 tonnes of Waste Electrical and Electronic Equipment (WEEE) • 1,000 tonnes of Printed Circuit Boards (PCB) • 500 tonnes of copper cable.
Develop a process for diverting items to reuse.				<p>We formalised our process for diverting items to reuse, focusing on IT Asset Disposition (ITAD) from July 2023 to June 2024. ITAD is a comprehensive approach to managing unwanted IT equipment in an environmentally responsible way. It includes secure data erasure, refurbishment, and the reuse or recycling of electronic assets.</p>
Measure the quantity of items Sircel diverts from landfill to reuse in a financial year.				<p>During the FY2023-24 period we processed a total of 2,350 assets, ensuring data erasure with Blancco software before redirecting suitable items for reuse through consumer-facing organisations.</p>
Increase transparency on the outcome of our metal output and the types of items it is used within.				<p>At this stage, we have visibility on our total metals output and who it is sold to. In future we're exploring opportunities for closed-loop partnerships in which our reprocessed materials are used in the manufacturing for the same organisations who supplied them.</p>



Where to next?

“The landscape for waste and recycling is changing rapidly and we need legislation at all relevant levels of government to keep pace with that change. Increased transparency and accountability of e-waste management practices is much needed so we can continue on our journey to make finite resources infinite.”

- Anthony Karam, chief executive.

For the next twelve months, until the end of FY25, we have committed to three key areas as highlighted below. These areas are in addition to maintaining our current broader ESG focus as described in this report.

1. Increasing e-Waste advocacy.

To keep driving awareness related to Australia's e-Waste challenges and to promote legislative and product stewardship changes, we will continue to increase our e-Waste advocacy efforts in FY25, involving further engagement with government and industry.

2. Quantifying the GHG emissions footprint of our process.

We are working towards being able to demonstrate the emissions benefit of our process (vs mining of raw materials). In doing so we are seeking to achieve VERA/GOLD standard Carbon accreditation. We are working through with this process in support from OBH Partners.

3. Increasing our use of renewables and decarbonising our own operations.

Evaluating additional solar feasibility at two of our operational sites – Villawood and Parkes.

Appendix: Definitions

Diverted from landfill: This figure is calculated by the total weight of items that come into a Sircel facility, from here they are assessed to determine if they are fit for re-use or if they will move through the recycling process.

Plastics diversion: All plastic goes through our machine process and is diverted from landfill. This figure includes two plastic outputs. The first type of output is clean hard plastic. We supply several partners with clean hard plastic who turn it into wood replacement products, such as fence bollards and carpark car stops. Any remaining lower quality plastic is diverted via thermal degradation (pyrolysis). Our pyrolysis process is highly controlled.

Reuse: This figure is calculated by the total number of items that are distributed to partners for re-use. We supply several partners with working laptops, desktop computers and hard drives. Our visibility on their outcome ends once they become part of our partner's operational control.

Critical minerals: Critical minerals face potential supply risks and projected demand increases. A sub-set of these, known as critical energy minerals, play a key role in low-emissions technologies including solar and EVs. See: [CSIRO Critical Energy Minerals Roadmap](#).


Circular economy: An economic system that replaces the 'end-of-life' concept with reducing, alternatively reusing, recycling and recovering materials in production/distribution and consumption processes (Kirchherr et al. 2017).

Net zero: Net refers to a state where an organisation has reduced its greenhouse gas emissions as far as possible (by a minimum of 90-95% against their base year) and have compensated any unavoidable trailing emissions through investment in projects that generate permanent removal and storage of carbon from the atmosphere.

Scope 1: Scope 1 emissions are direct emissions generated from sources owned, produced, and controlled by an organisation including manufacturing /processing of materials, company vehicles, and refrigerants.

Scope 2: Scope 2 emissions are indirect emissions generated by the purchase of electricity, heating, steam or cooling by the organisation.

Scope 3: Scope 3 emissions are indirect emissions generated in an organisations' supply chain including business travel, freight, waste, employee commuting and purchased goods & services.



Better for business,
better for the community
and better for the planet.

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