



GLEN EIRA
CITY COUNCIL

BENTLEIGH
BENTLEIGH EAST
BRIGHTON EAST
CARNEGIE
CAULFIELD
ELSTERNWICK
GARDENVALE
GLEN HUNTLY
MCKINNON
MURRUMBEENA
ORMOND
ST KILDA EAST

GLEN EIRA CIRCULAR ECONOMY PLAN 2022–2026



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ACKNOWLEDGEMENT

TRADITIONAL OWNERS

Glen Eira City Council acknowledges the Boonwurrung/ Bunurong and Wurundjeri Woi Wurrung peoples of the Kulin Nation as Traditional Owners and Custodians, and pays respect to their Elders past, present and emerging. We acknowledge and uphold their continuing relationship to land and waterways. Council extends its respect to all Aboriginal and Torres Strait Islander peoples.

Council honours the rich histories and cultures of First Nations peoples and recognises and values the important contribution of Aboriginal and Torres Strait Islander peoples in enriching our community. We support the Uluru Statement from the Heart and are committed to a Reconciliation Action Plan which is underpinned by the principles of self-determination. We work towards improved outcomes and long-term generational change, and to consolidate Glen Eira as a culturally safe place for Aboriginal and Torres Strait Islander peoples. We are committed to achieving equality for Aboriginal and Torres Strait Islander people to live healthy and prosperous lives and to improve life outcomes for current and future generations.

Glen Eira resides on country that always was, and always will be, Aboriginal land.

CULTURAL

SAFETY

Djilbruk / respect is more than a word.

Glen Eira City Council acknowledges that Boonwurrung language and concepts contained in this document are the cultural Intellectual Property (IP) of the Boonwurrung people. Council has been granted permission to include the cultural content contained in this document, with acknowledgment of its authors, N'arweet Dr Carolyn Briggs and David Tournier. It is shared for the purposes of this strategic report and associated communications and must not be used for other purposes without the appropriate permissions of N'arweet Carolyn Briggs and the Boonwurrung Land & Sea Council.



“Swift Parrots have a relationship with the River Red Gum as shelter, food and protection. Then the Boonwurrung relate to the tree, with its wood being used to make shields, fires and homes, and eucalyptus oil used to clean ourselves. The Parrot needs the tree, and the tree needs the Parrot to groom the tree, and people need the tree to breathe and for our wellbeing.”

Senior Cultural Advisor David Tournier, Boonwurrung Land & Sea Council.

TOWARDS A CROSS CULTURAL APPROACH TO CIRCULAR ECONOMY

“That’s your challenge: finding ways that customary law in Boonwurrung culture can somehow weave together with Western culture.” N’arweet Professor Carolyn Briggs AM, Senior Boonwurrung Elder.

Listening and working across cultures can open fresh, new ways to approach big challenges that our community is facing. Waste is one of those systemic challenges. So, as part of the collaborative process of developing our *Circular Economy Plan*, members from our team participated in a series of workshops with First Nations Elders and Culture carriers from the Boonwurrung community.

After being inducted into cultural safety protocols, we began a process called ‘Listening Both Ways’. This involved our team describing the circular economy from a Western perspective:

“It’s like the ‘Circle of Life’ in the Lion King.”

“We’re trying to transition to an economy where we’ve designed ‘waste’ out of the system.”

“There’s the idea of sharing, we don’t need to own everything. We need to embrace a greater sense of community.”

Simple examples of circular practices included reusable coffee cups and repairing broken items to keep products in use for as long as possible. Then it came time to listen to Boonwurrung interpretations of how we can see life through circular, interdependent relationships.

N’arweet Professor Carolyn Briggs, Senior Boonwurrung Elder, shared with us:

“We should be instructed into our life ways. We need to change our extractive relationship with the land and start a path of respectful engagement through understanding what assets of ours have come out of Country but never get replaced into Country.”

Senior Cultural Advisor David Tournier explains: “When I’m doing smoking ceremonies or making boomerangs and wooden tools, all parts of the plant are used — the wood and then the leaves are used for the smoking. It’s our responsibility to care for Country and this is one of the ways we do it.”

It became clear that circular economy principles are built into both First Nations and Western cultures but in different ways and with different language. As we move forward and strive towards Glen Eira’s vision of a circular economy, we’re excited to keep learning and working with First Nations, Western and other diverse cultural perspectives. We now better understand that science, culture and spirituality are all interrelated and can help us achieve our goals as one whole Djeembana/Community.

EXECUTIVE SUMMARY

Glen Eira’s *Circular Economy Plan 2022–26* is a commitment to partner and support our community transition to a circular economy, moving away from the current take-make-waste extractive model.

This plan is informed by *Our Climate Emergency Response Strategy 2021–25* [Dhumbali Wurrungi-biik Parbin-ata and the commitment to develop a *Circular Economy Plan* to support a circular economy.



SUPPORT A CIRCULAR ECONOMY

In partnership with our community, we have been at the forefront of waste minimisation and recycling in Victoria

Building on this success, we will look beyond the pervasive take-make-waste extractive model and investigate ways to support a circular economy

We will up-skill our staff and our community so together, we can explore how to design out waste and instead, keep products and materials in use

A circular economy holds immense potential to combat climate change by changing the way we design, produce, use and dispose of products. It integrates stakeholders at every level of production and influence, and produces holistic, systemic change by:

- > eliminating waste and pollution;
- > circulating products and materials at their highest value for as long as possible; and
- > regenerating nature.

These circular economy principles reflect natural, closed-loop systems that do not generate waste.

This *Circular Economy Plan* was developed with the input of stakeholders across Council. Internal staff engagement sessions highlighted that Council has already adopted practices and policies that support circularity and demonstrate the journey towards a circular economy has already begun. However, more ambitious action is required to accelerate progress.

Pillars to support the transition to a circular economy

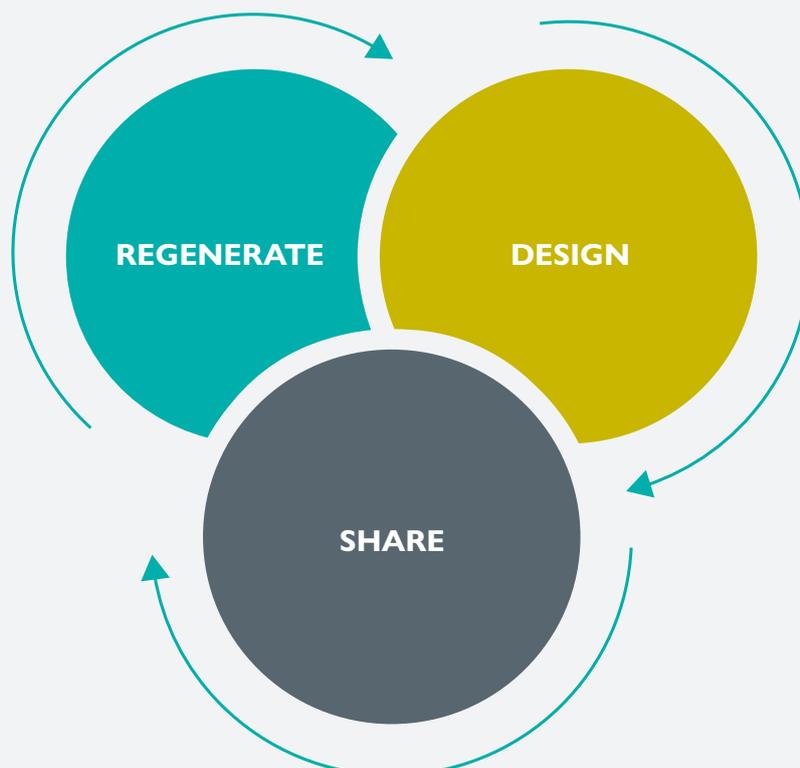
During the development process, three main pillars were identified as principles that intersect with Boonwurrung knowledge:

- > **Design** products, business and programs with diverse benefits in mind, for current and future generations, for people, Culture and Country;
- > **Share** resources and knowledge through collaboration and partnerships to develop measures that acknowledge the interconnected nature of our systems; and
- > **Regenerate** natural systems by recirculating materials at their highest value with repair and reuse, preventing unnecessary consumption of virgin materials and creating opportunities with waste.

DEVELOPING A SPECIFIC GLEN EIRA CIRCULAR ECONOMY

To define the circular economy for Glen Eira, a range of factors were considered, including:

- > initial actions needed, such as collecting data and building awareness, which may not have an immediate impact on the circular economy but are needed to track progress;
- > Council must lead by example. By committing to more circular actions, Council can mobilise our communities to collaborative action;
- > development of a circular economy is a lever to ensure products and materials remain in circulation for much longer, and waste generation is avoided;
- > procurement of goods and services is a key part of Council activities. Council's purchasing power can be used to support and foster a circular economy;
- > fostering a culture of circular economy is broader than the sustainable management of waste. However, Council recycling and waste services contributes 20.3 per cent to Council's expenditure and therefore presents a significant opportunity and an intuitive pathway to boosting the local circular economy; and
- > collaborative storytelling is important to explore and share how caring for Country is deeply connected with creating a circular economy, regenerating biodiversity and acting on climate change.



EXECUTIVE SUMMARY

GLEN EIRA'S CIRCULAR ECONOMY IS A SYSTEM WHERE:



Council shares responsibility to cultivate a circular economy with actors across a range of activities.



Council advocates for circular economy design and outcomes in the broader economy.



Council collaborates and fosters partnerships with other councils to implement circular solutions.



Local communities and businesses are educated, motivated and supported to keep products and materials in use indefinitely.



Council leads the way by implementing and promoting practices that encourage and support circular products, markets, industries and knowledge.

The image shows four grey recycling bins with green lids arranged in two rows. The bins in the front row are more prominent, with the one on the right having a label on its lid. The bins in the back row are partially obscured. The scene is set on a light-colored wooden floor. In the bottom left corner, there is a small white card with a yellow graphic and some text. The overall lighting is bright and even.

**WHAT IS A
CIRCULAR
ECONOMY?**

DEFINING CIRCULAR ECONOMY A KULIN NATIONS' PERSPECTIVE

“Look after Country and Country will look after us.”

Senior Cultural Advisor David Tournier, Boonwurrung Land & Sea Council.

According to Boonwurrung custom, Djilbruk/Respect and reciprocity are core values that have guided human life in our area for millennia. Everything is connected in the circle of life. Nowadays when people are afforded a Tanderrum/Rite of Passage as part of a Welcome to Country ceremony by First Nations Elders, abiding by these values becomes a person's Dhumbali/Commitment to help maintain this sacred balance.

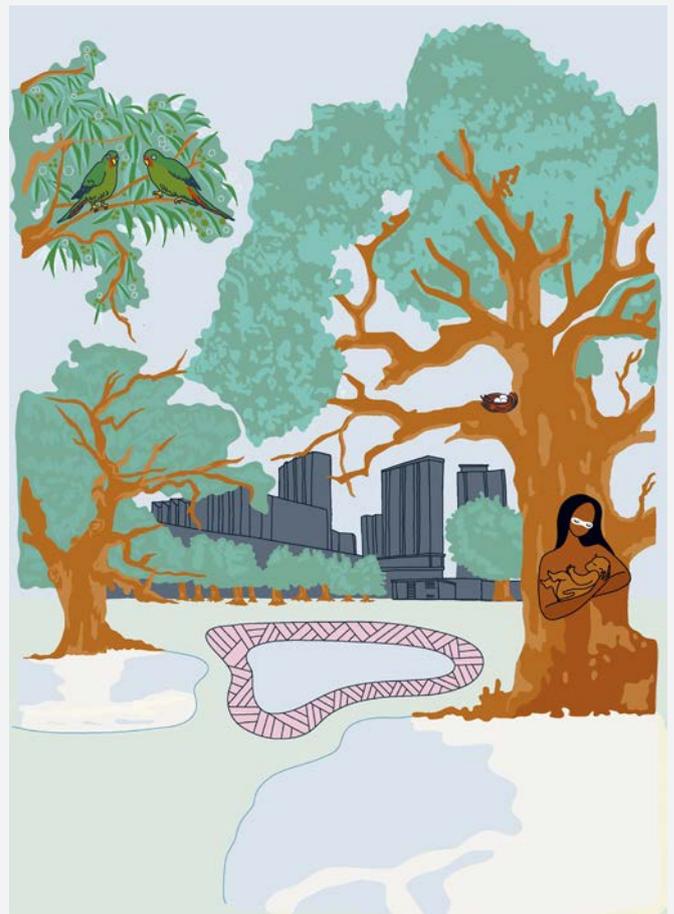
An example connects to the Cumbungi (Bull Rush), a reed which traditionally grows in the water bodies in our area. Boonwurrung and Bunurong People use this plant for food and spears but if you don't harvest and nurture it then it can become a weed and grow out of control. When managed properly Cumbungi reeds can fulfil their purpose of filtering water and act as a symbol of an ecosystem's health.

Another example that Senior Cultural Advisor David Tournier shares are the relationships between Swift Parrots, River Red Gums and First Peoples.

“Swift Parrots have a relationship with the River Red Gum as shelter, food and protection. Then the Boonwurrung relate to the tree, with its wood being used to make shields, fires and homes, and eucalyptus oil used to clean ourselves. The Parrot needs the tree, and the tree needs the Parrot to groom the tree, and people need the tree to breathe and for our wellbeing.”

N'arweet Professor Carolyn Briggs, Boonwurrung Senior Elder, teaches us that “All humans want health, wellbeing and respect.” When we think about the circular economy from a First Nations perspective, we need to recognise that our health depends on the health of Country.

David gives a practical example that we can all learn from — “It's related to identity. When I take my kids to the park, I pick



This illustration by First Nations Artist David Tournier talks about the circular relationships and economy between Swift Parrots, River Red Gums and Boonwurrung People.

up the rubbish. I feel a deep care, no-one else is going to do it. This is something that my kids and I now do on a regular basis, which gives us a sense of accomplishment.”

The same principles of care and Djilbruk/Respect can be applied to all kinds of decisions, like when you remember to take your Keep Cup when you go to get a coffee and save the waste of single-use cups, or you source local and ethically made products for your home or business.

“It’s important to think about that connection, between us as consumers and what materials are made of,” David explains. “We need to be more aware of where things come from, where they end up and the processes by which things are made. It’s about the pathway of what we need and what nature needs, and how we can align those two up.”

N’arweet Carolyn explains that the circular economy means that we negotiate with the land and also the Traditional Owners connected to that land. Western organisations, including local councils, have the opportunity and responsibility to invest back into rekindling Indigenous knowledge systems. “The land has been victim and taken on pain” through the processes of colonisation, so we need a new era defined by healing and reciprocal relationships. That includes healing between Kulin and European people and culture.

“We have 80,000+ years of knowledge” and this can help us build resilience together. A Kulin perspective of circular economy calls for meaningful engagement in the short-term as we work towards our continual intergenerational Dhumbali/ Commitment for the long-term.

“Parbin-ata / Mother Earth is a living breathing entity that needs to be cared for”.



Cumbungi (Bull Rush), a culturally significant plant for the Boonwurrung and Bunurong communities. Remnants can still be seen in the Lake at Rippon Lea Estate.

THE LINEAR ECONOMY

Presently, our economy relies on a linear mode of production and consumption that follows a take-make-dispose pattern. In this model, resources are harvested and extracted, manufactured into products, sold to consumers and disposed when a product no longer serves its specific purpose.

The linear economy behaves as if finite natural resources will always be readily available for consumption and able to be easily disposed. This approach guarantees more

resources will be used than the Earth has the capacity to provide and results in more materials used than needed. In a linear economy excess waste is a sign of successful economic growth.

In short, a linear economy prioritises short-term gains over the long-term feasibility of the Earth’s capacity to provide for its citizens. This is the take-make-waste extractive model.

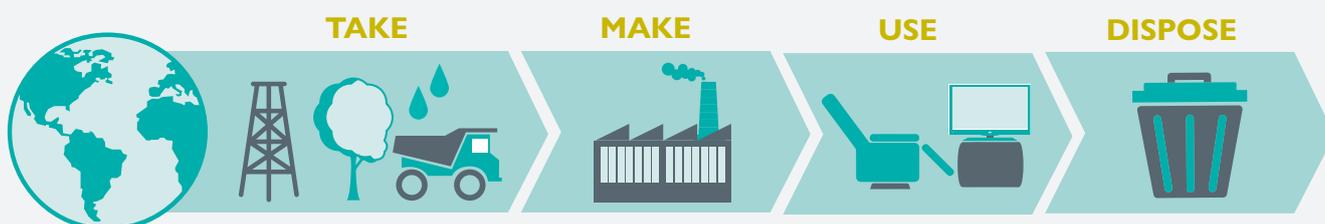


Figure 1 Linear economy model (Source: Vision.org)

CIRCULAR ECONOMY AS A PATHWAY TO SUSTAINABLE DEVELOPMENT

The circular economy approaches resource management with a holistic, systems approach that measures the value of materials at every stage of their extraction, production, recirculation and the resulting impact of this cycle on other interconnected systems.

Waste is designed out of circular economy systems. Instead, wasted materials are recognised as another resource to be repurposed, reused and recirculated back into the system.

Materials are not only reused and recirculated but remain at their highest possible value for as long as possible.

A circular economy is therefore a pathway to sustainable development; one that can help achieve human wellbeing within the boundaries of the Earth’s capacity to provide. Systems and processes are designed so that current development and growth will not disadvantage the resource needs of future generations.

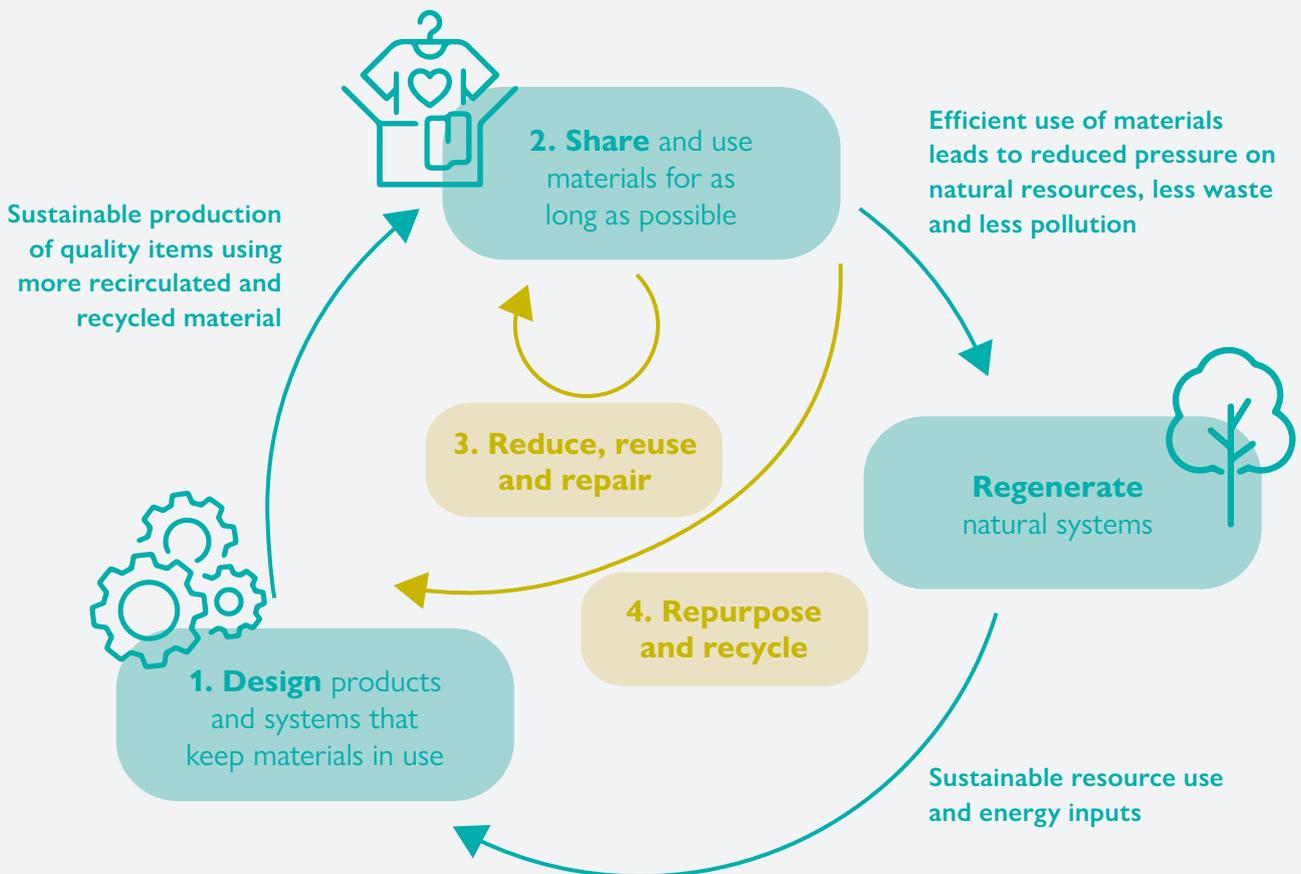


Figure 2 Circular economy model

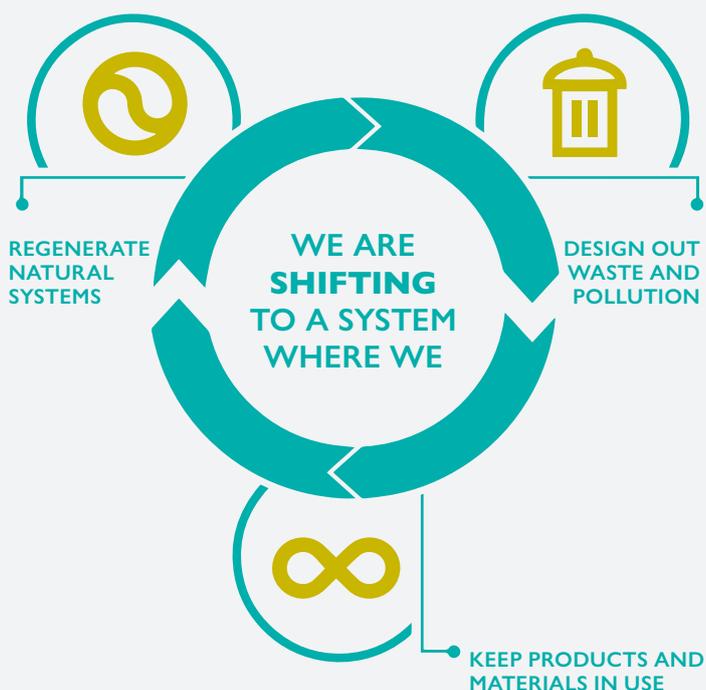
DEFINING THE CIRCULAR ECONOMY

Our *Climate Emergency Response Strategy 2021–25* | Dhumbali Wurrungi-biik Parbin-ata defines the circular economy as ‘a system in which all resources are highly valued and remain in the system through re-use, re-purposing and recycling’.

As Senior Cultural Advisor David Tournier, of the Boonwurrung Land & Sea Council, explains “it’s about the pathway of what we need and what nature needs, and how we can align those two up.”

A broader definition of circular economy defined by the Ellen MacArthur Foundation, a leading not-for-profit organisation committed to creating a global circular economy and evidence-based research to support the movement towards more sustainable growth and resource management, defines it through three principles:

- > **Eliminate waste and pollution:** designing out waste and pollution or treating them as a design flaw. By eliminating waste and emissions at the source, the cycle is broken, and waste and pollution are not generated in the first place.
- > **Circulate products and materials (at their highest value):** keeping materials in use either as the intended products or when they can no longer be used, as raw materials. For example, recycling glass bottles back into glass cullet and then new bottles which is a more circular outcome than processing the old glass into a sand used in construction, also referred to as ‘down-cycling’.
- > **Regenerate nature:** helping natural processes and letting nature thrive, such as improvement of green spaces, more biodiversity and better soil conditions. The circular economy seeks to reflect natural systems which do not generate waste.



A successful circular economy needs to be included in every aspect of how our society operates, from design and manufacturing to long-term use of materials and natural environments. The transition to the circular economy will vary for different communities and industries.

The Glen Eira community is part of the broader Melbourne community and therefore our activities do not stay within the boundaries of our local government area. Manufacturers and businesses across Victoria and Australia contribute to our local economy. The inputs they provide are mostly outside of the control of the Glen Eira community. Glen Eira also generates outputs such as waste, which cannot be managed within Council’s boundaries. As a result, the definition of a circular economy for Glen Eira needs to be adapted.

Figure 3 Circular economy defined by Ellen MacArthur Foundation
(Source: Ellen MacArthur Foundation)

DEFINING THE CIRCULAR ECONOMY FOR GLEN EIRA

However, a key challenge of transitioning to a circular economy is the collective, collaborative action required to ensure materials can be successfully recirculated back into the system. Therefore, *Glen Eira's Circular Economy Plan* must acknowledge the strong and interdependent links to economies outside of Glen Eira's conceptual and physical boundaries.

This perspective strongly aligns with First Nations perspectives on circular economy. Remember David Tournier's example of the relationships between Swift Parrots, River Red Gums and First Peoples.

"The Parrot needs the Tree, and the Tree needs the Parrot to groom the Tree, and People need the Tree to breathe for our wellbeing."

In a similar way, we recognise that Glen Eira doesn't exist in a silo, we're part of the living entity that is Melbourne, and Melbourne is just one community on planet Earth.

Ultimately, three main pillars were identified that bring together the Ellen MacArthur Foundation definition and local Boonwurrung knowledge to inform Glen Eira's approach:

- > **Design** products, business and programs with diverse benefits in mind, for current and future generations, for people, Culture and Country;
- > **Share** resources and knowledge through collaboration and partnerships to develop measures that acknowledge the interconnected nature of our systems; and
- > **Regenerate** natural systems by recirculating materials at their highest value with repair and reuse, preventing unnecessary consumption of virgin materials and creating opportunities with waste.

GLEN EIRA'S CIRCULAR ECONOMY IS A SYSTEM WHERE:

- > Council shares responsibility to cultivate a circular economy with actors across a range of activities;
- > Council advocates for circular economy design and outcomes in the broader economy;
- > Council collaborates and fosters partnerships with other councils to implement circular solutions;
- > local communities and businesses are educated, motivated and supported to keep products and materials in use indefinitely; and
- > Council leads the way by implementing and promoting practices that encourage and support circular products, markets, industries and knowledge.

Incorporating the Traditional Owner perspectives with Ellen MacArthur Foundation definition and the needs of Glen Eira City Council has led to a refined definition of Circular Economy.

"We need to change our extractive relationship with the land and start a path of respectful engagement through understanding what assets of ours have come out of Country but never get replaced into Country."

-N'arweet Professor Carolyn Briggs, Senior Boonwurrung Elder

CASE STUDY

CIRCULAR ECONOMY IN ACTION: FOOD WASTE RECYCLING

Recycling food and garden waste in Glen Eira’s green bins is a great example of a circular system.

WHAT HAPPENS TO FOOD WASTE?

Food and green waste are transformed into compost and used on Victorian farms and gardens.

WHY IS THIS A CIRCULAR SYSTEM?

Rather than going to waste in landfill, the nutrients in food and organics are kept in circulation as compost. The compost replenishes soil and helps grow more plants and food.

All food scraps can be reused as a resource in an ongoing cycle — creating a circular system.

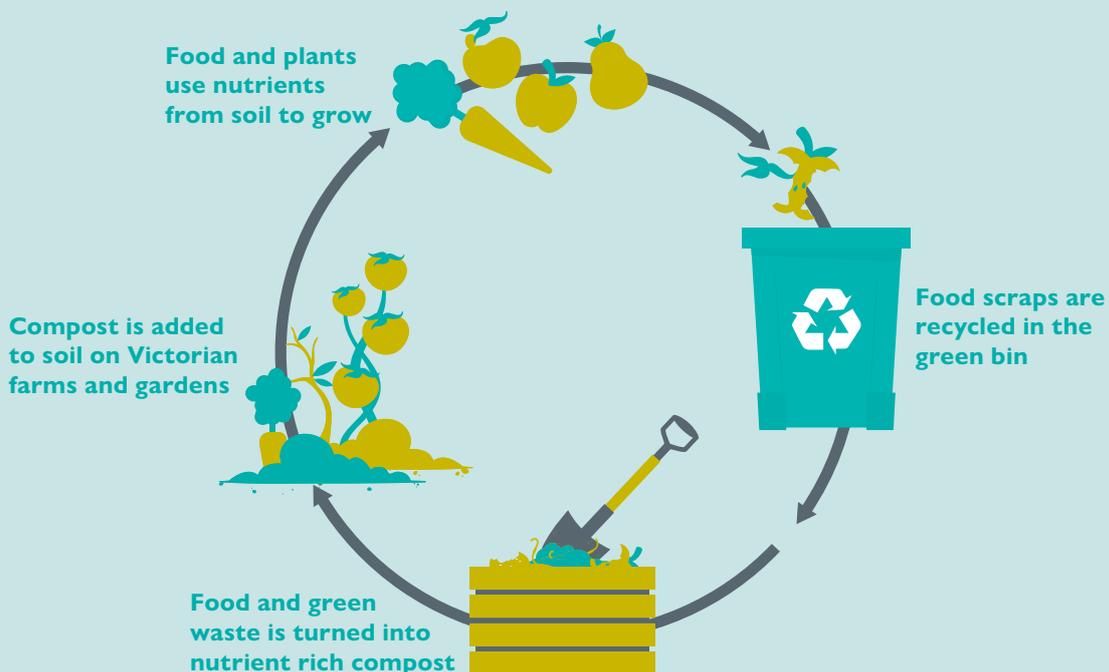


Glen Eira kitchen caddy used to collect food scraps



Compost made from recycled food waste ready to be used on a Victorian vineyard

Food waste recycling in Glen Eira’s green bins is part of a circular system



SPHERES OF INFLUENCE

Cultivating a circular economy is a collaborative challenge. Council has varying levels and spheres of influence that can create different elements of the circular economy. Similar to our role in the climate emergency, there are four main roles Council can plan to advance circular economy outcomes:

- > **Upwards:** advocate to State and Federal Governments to support the transition to a circular economy through policymaking that influences the actions of manufacturers and other industry makers;
- > **Sideways:** collaborate with and support other councils to transition to a circular economy;
- > **Outwards:** work in partnership with residents, businesses and Traditional Owners to initiate local education on circular economy. The population of Glen Eira is approximately 160,000 residents, with workers and visitors to the municipality every day. Council can lead the way and encourage the community to collaborate and share knowledge and resources, contribute to caring for Country and change behaviours to influence the community to become more circular; and
- > **Inwards:** align internal operations, such as procurement, recycling and waste services, and capital projects with circular economy principles.

Roles for Council in the circular economy

UPWARDS



SIDEWAYS



OUTWARDS



INWARDS



Figure 4 Roles for Council in the circular economy

BENEFITS OF A LOCAL CIRCULAR ECONOMY

“Circular Economy sounds similar to taking care of Country.
Taking care of Country makes us feel better too.”

Senior Cultural Advisor David Tournier, Boonwurrung Land & Sea Council.

The linear mode of production presents numerous resource management, environmental and market risks, as natural resources continue to be depleted causing volatility in the production of goods, market accessibility to essential products and the rise of regulatory risks as governments implement more environmental regulations.

A circular economy creates resilience by reducing reliance on finite resources and strengthening:



PROSPERITY

of local business as circular initiatives promote local solutions, shorter supply chains and reduction of unnecessary waste.



PEOPLE

through the support of local communities and neighbourhoods, encouraging practices of sharing, improving amenity and pollution reduction, and increased access to goods and services for marginalised communities.



PLANET

through rebuilding local ecosystems and caring for Country, enhancing biodiversity and improved soil quality, reduced reliance on raw materials, less waste produced and landfilled, and reduction of emissions that helps to mitigate the impacts of climate change.

CASE STUDY

CIRCULAR ECONOMY IN ACTION: REDUCING COUNCIL'S USE OF VIRGIN MATERIALS

Did you know some of the poolside seats at Glen Eira Sports and Aquatic Centre (GESAC) are made from recycled plastic items and packaging? There are park benches and dog agility equipment in Glen Eira that are also made from recycled plastic. By reusing and recycling existing materials, we are able to reduce the pressure on virgin resources and reuse products we already have.



Bench seats at GESAC made from recycled plastic



Dog agility equipment at Pawfield Park made from recycled plastic. Equipment is durable and splinter free; perfect for dog paws



**STRATEGIC
CONTEXT**

CLIMATE EMERGENCY

In May 2020, Glen Eira City Council declared a climate emergency and set targets to reach net zero carbon emissions from Council operations by 2025 and for the community by 2030.

Our Climate Emergency Response Strategy 2021–25 | Dhumbali Wurrungi-biik Parbin-ata identified that the transition to a circular economy is a key goal in supporting our community to reach net zero carbon emissions by 2030.

Circular economies help mitigate the impacts of climate change as over half of greenhouse gas emissions worldwide come from food and material production systems. Closed loop systems that ensure resources and materials remain in circulation for as long as possible reduce the climate impacts of the linear take-make-waste extractive model on our environment.

Urban regions have a critical role to play in transitioning to a circular economy, as 50 per cent of the world's population resides in cities and produce 50 per cent of the world's waste, and account for 60–80 per cent of all greenhouse gas emissions.



ALIGNMENT OF COUNCIL STRATEGIES AND PLAN WITH CIRCULAR ECONOMY PLAN OUTCOMES

Glen Eira’s *Integrated Strategic Planning and Reporting Framework* shows the relationship between our community vision, Council planning and reporting, and community outcomes. This *Circular Economy Plan* is a tier two four-year *Plan* associated with *Our Climate Emergency Response Strategy*.

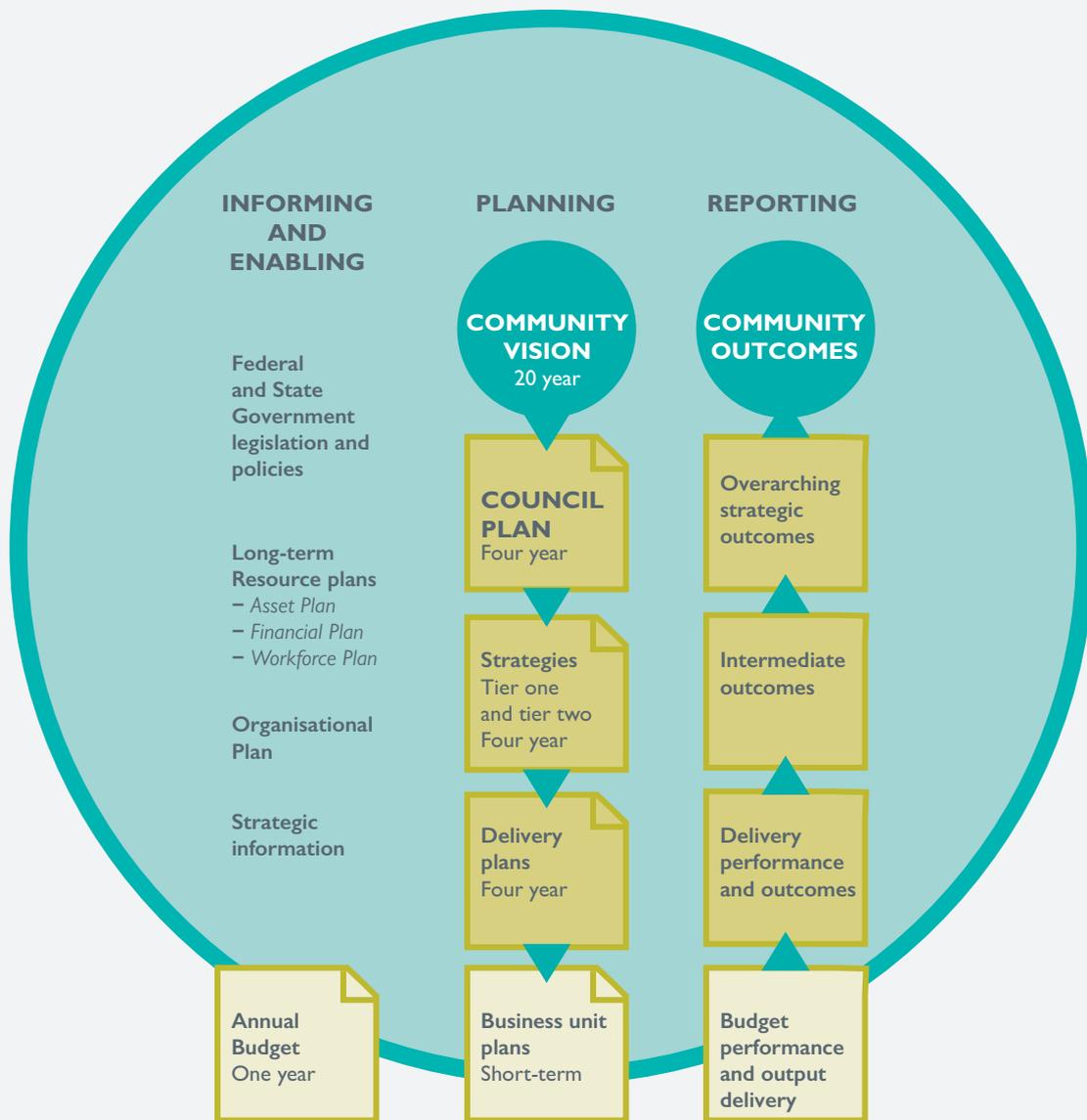


Figure 5 Glen Eira’s *Integrated Planning and Reporting Framework*

STRATEGIC CONTEXT

The *Plan* also contributes to a range of other Council strategies and plans as illustrated in Figure 6.



Figure 6 Council strategies and plans with a role in delivering circular economy outcomes

STATE CIRCULAR ECONOMY POLICY

The Victorian Government is guided by the state's circular economy policy, *Recycling Victoria: A New Economy*. Released in February 2020, *Recycling Victoria* is a 10-year policy that shows a pathway to create a better recycling system and transform the way our economy uses materials. The four goals of the policy are:

- > **Make:** design to last, repair and recycle.
- > **Use:** use products to create more value.
- > **Recycle:** recycle more resources.
- > **Manage:** reduce harm from waste and pollution.

To complement this, Sustainability Victoria is expected to release a circular economy framework in 2022. The framework is expected to show how Victoria measures its progress towards a circular economy. Where possible, this *Plan* aligns with Sustainability Victoria's framework.

NATIONAL POLICY AND LEGISLATION

The Federal Government's *National Waste Policy 2018* provides a framework for collective action to improve resource and waste management until 2030. The policy identifies five principles for waste management in a circular economy, including:

- > avoid waste;
- > improve resource recovery;
- > increase use of recycled material and build demand and markets for recycled products;
- > better manage material flows to benefit human health, the environment and the economy; and
- > improve information to support innovation, guide investment and enable informed consumer decisions.

In 2021, the CSIRO released the *Circular Economy Roadmap for Plastics, Glass, Paper and Tyres*. The *Roadmap* outlines five challenges that are currently stifling progress towards a circular economy nationally:

- > loss of source material through sub-optimal product design, consumption and collection;
- > lack of reprocessing capacity;
- > lack of end markets for secondary materials;
- > lack of consistency across jurisdictions; and
- > lack of system-wide capability to support a circular economy.

The *Roadmap* highlights that these challenges can only be overcome by building a national culture that values the re-use of secondary materials. This *Plan* is Glen Eira's response to addressing these challenges.

INTERNATIONAL FRAMEWORKS

Internationally, there have been many more studies on the circular economy. The European Union (EU) set circular economy as a development priority and published the *Circular Economy Action Plan (CEAP)* in March 2020. The *CEAP* presents 35 actions across the entire life cycle of products; design, processes, use and end of life. The *CEAP* focuses on areas where action at the EU level will bring valuable change. Likewise, this *Plan* seeks to make change where it is most effective for us to do so.



Local food swap events at community gardens enable excess home grown produce to be shared among the community



EXISTING PATHWAYS AND OPPORTUNITIES

EXISTING PATHWAYS AND OPPORTUNITIES

This *Plan* is not the beginning of Council's journey towards a circular economy, as Glen Eira is a recognised leader in the delivery of our recycling and waste services and programs.

There is a range of actions that contribute to the Design, Share, Regenerate framework across the organisation. Existing actions outside of this *Plan* are outlined in the next sections.



E-waste recycling stations at Glen Eira libraries facilitate recycling and reuse of materials

EXISTING ACTIONS

A circular economy covers many of the choices we make each day. Recent Council strategies, such as *Our Climate Emergency Response Strategy*, have committed Council to actions that will help our transition to a circular economy. This *Plan* builds on that, adding actions or tasks to ensure the transition to a circular economy is holistic and effective. Table 1 below outlines what Council is doing or has committed to that supports a circular economy.

Table 1 Existing actions

STRATEGY/PLAN	ACTION
<p><i>Glen Eira 2040 Community Vision</i></p>	<p>The <i>Community Vision</i> is: ‘A thriving and empowered community working together for an inclusive and sustainable future’. The <i>Vision</i> shows there is active support for sustainability within the community, which signifies the transition towards circularity will also have support.</p>
<p><i>Glen Eira City Council Plan 2021–25</i></p>	<p>Key measures outlined in the <i>Council Plan</i> which will drive circularity in Glen Eira include:</p> <ul style="list-style-type: none"> > net zero Council greenhouse gas emissions by 2025; > eighty per cent of Council energy supplied by renewable sources by 2025; > increase in reused or recycled content used in Council operations; > achievement of 20 per cent reduction in waste to landfill by 2025; and > work with Recycling Victoria on alternative options for the future of landfill. <p>Other actions that include circular economy principles include strategic advocacy priorities to be promoted through a dedicated advocacy approach. The advocacy approach should include circular economy principles and detail who the target of such advocacy roles is.</p>

EXISTING ACTIONS

Table 1 Existing actions continued ...

STRATEGY/PLAN	ACTION
<p><i>Our Climate Emergency Response Strategy</i></p> <p>These actions have been included in this <i>Plan</i>.</p>	<p>Actions in <i>Our Climate Emergency Response Strategy</i> for the circular economy include:</p> <ul style="list-style-type: none"> > roll-out the lessons from the Plastic free Elsternwick Trial to help more businesses go plastic free; > engage and support the community to reuse, repurpose and share through initiatives such as repair cafes, tool libraries, training on the use of sharing and second-hand platforms; > develop a public campaign that promotes local businesses participating in the circular economy; > develop a precinct-based circular economy pilot to test potential for local and regional resource sharing, reuse and innovation between businesses. Seek to expand based on initial results; > support local businesses to access circular economy grants and incentives from other levels of government; > support the roll-out of the State-led container deposit scheme; and > use Council’s purchasing power to stimulate the circular economy. <p>Other actions that include circular economy principles include:</p> <ul style="list-style-type: none"> > empower our community to reduce their emissions at home, work and school, and as a community; and > support the community to choose zero or low emissions transport.
<p><i>Integrated Transport Strategy</i></p>	<p>The <i>Integrated Transport Strategy</i> has an overarching goal to: ‘Strive for a 50:50 mode share of car and non-car trips by 2031’. This goal supports the circular economy progress by reducing emissions from vehicle trips and promoting the use of public transport and active travel.</p>
<p><i>Urban Forest Strategy</i></p>	<p>The <i>Urban Forest Strategy</i> seeks to achieve tangible increases in tree canopy cover across the municipality. Increased tree cover can provide circular benefits, such as reducing air pollution, stormwater capture, carbon storage and supporting biodiversity.</p>

EXISTING ACTIONS

Table 1 Existing actions continued ...

STRATEGY/PLAN	ACTION
<p><i>Sustainable Building and Infrastructure Policy</i></p>	<p>The <i>Sustainable Building and Infrastructure Policy</i> promotes the inclusion of environmentally sustainable design (ESD) principles into building and infrastructure projects. The <i>Policy</i> acknowledges that incorporation of ESD requirements may incur additional upfront costs and the costs represent an investment that will return benefits over the life of the asset. This is similar for embedding circular economy principles into Council procurement where increased capital costs may be expected, but social, environmental and financial benefits may be realised over the life of the procurement. As described in this <i>Policy</i>, circular economy principles should be included for capital works and other Council projects across the various stages of procurement including:</p> <ul style="list-style-type: none"> > bidding and planning; > design; > delivery; > procurement and tendering; > reporting and evaluation; and > ongoing implementation, maintenance and monitoring. <p>The <i>Policy</i> also recognises that external expertise may be required to support the delivery of the principles, objectives and requirements within the <i>Policy</i>.</p>

CASE STUDY

CIRCULAR ECONOMY IN ACTION: REPAIRING EQUIPMENT

Glen Eira's school crossing team uses equipment, such as stop signs and flags, to help our community move around safely. When these items get damaged, they are sent to be repaired rather than replaced. By repairing what we already have, we can extend the life cycle of the equipment and get the most out of the resources used to make them.



Broken school crossing equipment gets repaired and reused rather than replaced

CURRENT PROGRAMS AND INITIATIVES

In addition to the strategies and plans outlined above, there is a range of specific programs and initiatives that Council already offers or participates in that support a circular economy. A summary of these is provided in Table 2 below.

Table 2 Current programs and initiatives

INITIATIVE	DESCRIPTION
Kerbside collection service changes	<p>In May 2018, food was introduced to Council’s green waste service where the collected material is turned into compost and used in parks, gardens and farms. In July 2021, Glen Eira’s kerbside waste collection changed to a weekly green bin and a fortnightly schedule for general waste and recycling bins.</p> <p>The combination of food waste and weekly green bin collection has shown improvements in reducing the amount of waste sent to landfill.</p>
Educational bin inspection program	<p>Glen Eira is implementing a two-year program covering all residential properties. The program includes visual inspections of the organics and recycling bins. The inspection provides feedback to the community through tags left on bins that inform residents of the level of contamination in their bins (none, low or high contamination).</p> <p>By educating the community on how to correctly dispose of items through the kerbside collection service, we can support better waste management outcomes.</p>
Waste Champions	<p>The waste champions program supports residents that use shared bins. The program aims to obtain information about shared bin use, encourage improvements and uncover opportunities for further support by Council to multi-unit developments.</p>
Plastic free Elsternwick	<p>Over a six-month period in 2019 and 2020, Council supported 18 Elsternwick businesses to reduce and replace commonly used single-use plastic items with reusable or compostable alternatives. Over the trial period, more than 25,000 pieces of plastic were eliminated. This pilot will be expanded to other activity centres.</p>

CURRENT PROGRAMS AND INITIATIVES

Table 2 Current programs and initiatives continued ...

INITIATIVE	DESCRIPTION
Best Practice Reusable Nappy program	Glen Eira is among 12 councils working together to research a best practice program to reduce waste to landfill. The program is a feasibility study that seeks to engage with parents to understand attitudes and barriers to using reusable nappies.
Multi-Unit Development Best Waste Practice project	Multi-unit developments (MUDs) such as apartment blocks, typically have higher levels of contamination and residual waste generation than single-use developments. This project will research and identify effective waste management and education practices for a range of MUDs. It will also develop a best practice guide for Council.
Free mulch facility	Council provides mulch to the community for free. The mulch facility offers untreated mulch mostly from shredded tree prunings. The facility is a circular opportunity, returning the organic waste generated by tree pruning in the community back to the community for reuse.
Eastern Alliance for Greenhouse Action (EAGA) recycled content in council buildings and infrastructure project	The councils of Glen Eira, Boorondara, Knox, Maroondah, Monash, Stonnington, Whitehorse and Yarra Ranges, via EAGA, have grouped together for a research project to investigate opportunities for councils to increase the use of recycled materials in buildings and works projects. The report commissioned will support councils to better understand the market for recycled materials and changes to procurement practices to drive the uptake of recycled materials.
Victorian Energy Collaboration (VECO)	A total of 46 Victorian councils have pooled their electricity needs into one long-term contract with Red Energy, which will provide the VECO group with renewable energy generated from wind farms in Victoria. Glen Eira has recently taken over from Darebin as the lead council on the project.
Council Alliance for a Sustainable Built Environment (CASBE) ESD targets	Glen Eira is one of 31 Victorian councils collaborating on a joint research project that aims to elevate ESD targets for new development.
Climate Conversations	In October 2021, Council launched the Climate Conversations program to support the delivery of actions in <i>Our Climate Emergency Response Strategy</i> . The program is a six-month pilot, which has trained 11 people as Climate Conversations facilitators.

GAP ANALYSIS

The development of this *Circular Economy Plan* has identified areas where Glen Eira needs more data so progress can be measured more accurately and/or additional actions can be developed to reach circular economy indicators, including a reduction in greenhouse gas emissions.

In some areas data is of poor quality, missing or not recorded. Fixing these data gaps will provide Council with a rounded perspective on circular economy progress and highlight areas where improvement can be targeted.

The internal Council data gaps included:

- > Procurement data: While the available procurement data included detailed records of spending across Council's business units, more detailed information is required on the specific items that Council is procuring, such as tonnages of virgin materials for capital works projects, office furniture items and IT equipment. Having this information would enable Council to accurately measure 'material circularity', review key procurement items and investigate alternative options with better circular outcomes.
- > Council waste generation: Waste generation data for Council offices was available through two sources: calculation of volume from bin collection schedules, and audit data for GESAC and Town Hall. An overarching audit of Council offices and facilities that encompasses more types of facilities should be conducted to obtain an accurate understanding of waste management within these places. The audit should be conducted more regularly across more facilities to enable tracking of progress and identifying areas for improvement.

Note: Regular scheduled waste audits of Council facilities have been impacted by COVID-19 due to lockdowns and decreased occupancy during the pandemic.

The community data available is largely high level and indicative. While it can be useful to understand high-level waste and emissions data, there is a lack of specific community data for Glen Eira that shows where circularity is lost or where specific resources are being used, such as:

- > vehicle usage (mileage per week, fuel usage, number of vehicles per person, number of electric vehicles);
- > utility usage (energy, water and gas usage per person or per household, solar panels per household etc); and
- > other carbon impacts per person or household such as amount of material composted at home, air travel mileage, public transport usage etc).

There are existing actions in other plans that can be leveraged to achieve circular economy outcomes. A key goal in *Our Climate Emergency Response Strategy* is for 'all staff to embed climate action into their work'. The approach of embedding climate action into new and existing work through communicating roles and responsibilities, educating and training staff and inclusion of accountabilities within position descriptions should also include the circular economy transition. Spreading the responsibility of driving circular economy actions and initiatives across Council will help embed these principles within the organisation at all levels.

Council is also committed to updating the existing *Procurement Policy*, process and templates to further embed climate change action. Incorporation of circular economy principles into these updates should be completed concurrently.

Our Climate Emergency Response Strategy also seeks to advocate for stronger climate action by other levels of government and engage with the community directly, honestly and frequently. Council's advocacy and engagement practices for climate change should include circular economy principles.

A photograph of a row of recycling bins. The foreground bin is dark grey with a yellow lid. Behind it is a bin with a green lid. The background shows more bins and a grassy area. A white diamond-shaped graphic is overlaid on the image.

**MEASURING
COUNCIL'S BASELINE
CIRCULAR ECONOMY**

MEASURING COUNCIL'S BASELINE CIRCULAR ECONOMY

Measuring the baseline for our journey towards a circular economy is an important first step. By setting the baseline, Council can set achievable and aspirational goals to work towards. The baseline performance data below is divided by areas that Council maintains and those maintained by the Glen Eira community.



Toy Libraries help toys and play equipment be shared and kept in use for longer.

COUNCIL EMISSIONS

Council generated emissions include things that Council directly buys and uses, such as electricity and gas usage in Council buildings, office paper, construction materials for municipal works and fuel for our vehicles.

This *Plan* focuses on circularity not captured by *Our Climate Emergency Response Strategy (Strategy)*. Therefore, although greenhouse gas emissions are an output of a circular economy, as these emissions are captured and monitored by the *Strategy*, only waste-related emissions are noted here.

Council controlled waste emissions are shown in Table 3 below. The table shows that collection of kerbside waste from the community produces the most emissions within Council's sphere of influence. Collecting kerbside waste uses approximately 510,000 litres of diesel per year.

Note: Emissions from processing or landfilling kerbside waste are shown in later sections as Council does not control how much waste is generated by the community.

Table 3 Waste emissions from Council operations in 2019

EMISSION SOURCE	DESCRIPTION	EMISSIONS (t CO ₂ -e)
Recycling and waste collection services	Fuel usage associated with the collection of kerbside waste, street cleaning, hard waste and street bins collection.	1,606.39
Waste to landfill	40.21 tonnes of waste generated at Town Hall and GESAC facilities and the lifetime emissions from waste degradation in landfill.	40.21
Recycling tonnes ¹	113.81 tonnes of recycling collected from Council buildings and the processing of that material at the sorting facility.	50.08
Organics tonnes ²	38.54 tonnes of organic material collected from Council buildings and the processing of that material at the composting facility.	1.77
Total		1,698.45

1. Emissions factors for the processing of recycling material were obtained from the New South Wales Department of Environment, Climate Change and Water 'Environmental Benefits of Recycling' Appendix 7 (22kWh/tonne electricity use for recycling processing)

2. Emissions factors for organics processing obtained from National Greenhouse Accounts Factors 2021

COUNCIL GENERATED WASTE

Minimising waste generation is a key factor to the circular economy, especially minimisation through the avoidance of waste in the first place. This is also a key principle to Victoria's waste hierarchy as shown in Figure 7.

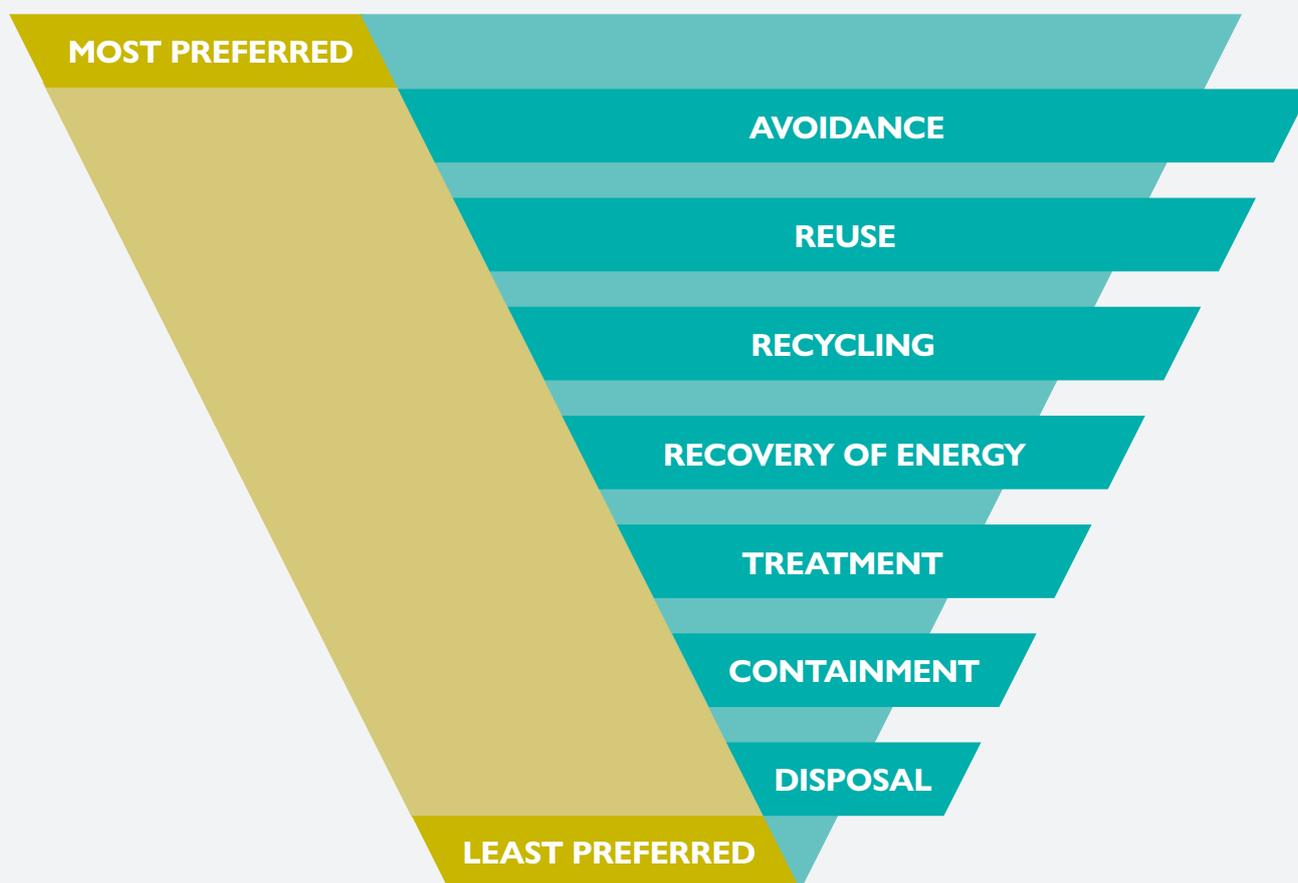


Figure 7 Waste hierarchy (Source: Environment Protection Act 2017)

COUNCIL GENERATED WASTE

Council's waste generation is measured by the tonnes collected from Council facilities. The facilities were audited in 2019 to estimate total waste generated. The waste was also split between commingled recyclables, FOGO and residual waste (garbage). The total tonnes generated at Council facilities are shown in Table 4 below, with residual waste contributing approximately 62.9 per cent to the overall waste stream.

Table 4 Council generated waste 2019

TOTAL WASTE VOLUME PER YEAR FROM COUNCIL FACILITIES	TOTAL TONNES	% CONTRIBUTION
Commingled recyclables	113.81	27.7%
Residual waste	258.18	62.9%
FOGO	38.54	9.4%
Total	410.5	100%

COUNCIL GENERATED WASTE

The audit of the two largest facilities, Glen Eira Town Hall and GESAC, showed that we can sort waste better within these Council facilities. Table 5 summarises the results of the audit and shows a large amount of recyclable waste placed in the wrong bins, such as recycling and organic material put in general waste bins, as well as residual waste (contamination) in the recycling bins and food organics and garden organics (FOGO) bins.

Table 5 Waste summary for GESAC and Glen Eira Town Hall 2019

FACILITY	WASTE STREAM	TOTAL COLLECTED	POTENTIAL RECYCLABLES (TONNES)	CONTAMINATION - RESIDUAL WASTE (TONNES)	% CONTAMINATION
GESAC	Residual waste	579.68	403.35	N/A	0.0%
	Commingled recycling	110.5	2.67	9.88	8.9%
	FOGO	1.85	0.03	1.24	67.0%
Town Hall	Residual waste	644.85	462.47	N/A	0.0%
	Commingled recycling	235.09	11.45	17.19	7.3%
	FOGO	20.26	0.44	0.14	0.7%

COMMUNITY EMISSIONS

Similar to Council emissions, while all community emissions are an output of a circular economy or ‘waste’, actions to reduce these emissions are covered in *Our Climate Emergency Response Strategy*.

COMMUNITY GENERATED WASTE KERBSIDE COLLECTION

Waste to landfill also contributes to community emissions. Council records data on this and is in an advantageous position to influence outcomes, given our role in delivering recycling and waste services. The volume of kerbside collected recycling and waste has been projected based on population growth rates. Figure 8 shows that Glen Eira will generate 9 per cent or 5,000 tonnes, more kerbside waste per year in 10 years’ time. These estimates show that Glen Eira generates approximately 354 kilograms of kerbside collected waste per person, which is similar to the Victorian average of 353 kilograms.¹

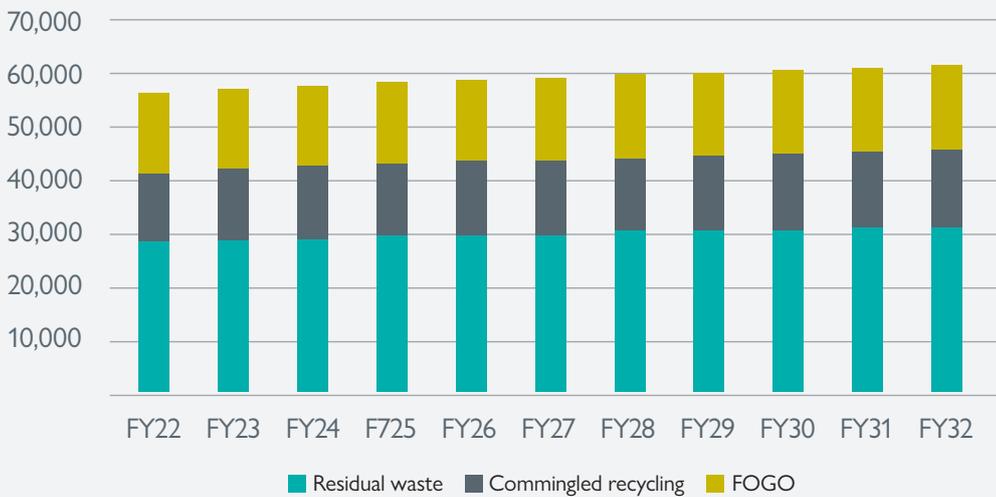


Figure 8 Recycling and waste volume projections (tonnes)

Kerbside bins were audited in March 2022 to gain a better understanding of how residents separate household waste. A summary of the results is provided Table 6.

Based on the March 2022 waste audit, Glen Eira households generate an average of 15.4 kilograms of waste per week with approximately 37 per cent of the material going to landfill, 26 per cent recycled in the yellow commingled bin and 37 per cent recycled in the green FOGO bin. This means the average

Glen Eira household is diverting approximately 63 per cent of waste from landfill.

Table 6 also separates the results against single unit developments (SUDs) and multi-unit developments (MUDs). MUDs divert 12 per cent less material to recycling bins than SUDs. This shows that recycling in these types of developments is more difficult to achieve. MUDs also have a higher rate of contamination (materials placed in the wrong bin) in the commingled recycling and FOGO bins.

1. Sustainability Victoria, Waste and Recycling in Victoria, *Local Government Waste Services Report 2019–20*

COMMUNITY GENERATED WASTE KERBSIDE COLLECTION

Table 6 Kerbside bin audit summary 2022

	OVERALL			SUDs			MUDs		
	Total (kg)	Avg. Weekly (kg/ HH)	% of waste stream	Total (kg)	Avg. Weekly (kg/ HH)	% of waste stream	Total (kg)	Avg. Weekly (kg/ HH)	% of waste stream
Residual waste (general waste)	2,101	4.2	37%	1,597	4.1	35%	504	4.4	47%
Not recyclable	1,302	2.6	62%	974	2.5	61%	328	2.9	65%
Recyclable items in general waste bin	700	1.4	33%	533	1.4	33%	167	1.4	33%
Not accepted in kerbside bins	99	0.2	5%	90	0.2	6%	9	0.1	2%
Commingled recycling	1,469	2.9	26%	1,173	3.3	26%	296	2	27%
Accepted material	1,158	2.3	79%	949	2.7	81%	209	1.4	71%
Contamination in recycling bin	312	0.6	21%	224	0.6	19%	87	0.6	29%
Food organics garden organics	2,069	8.3	37%	1,793	8.3	39%	276	8.3	26%
Accepted material	1,903	7.6	92%	1,661	7.7	93%	242	7.3	88%
Contamination in FOGO bin	166	0.7	8%	132	0.6	7%	34	1	12%
Total waste	5,639	15.4	100%	4,563	15.7	100%	1,076	14.7	100%

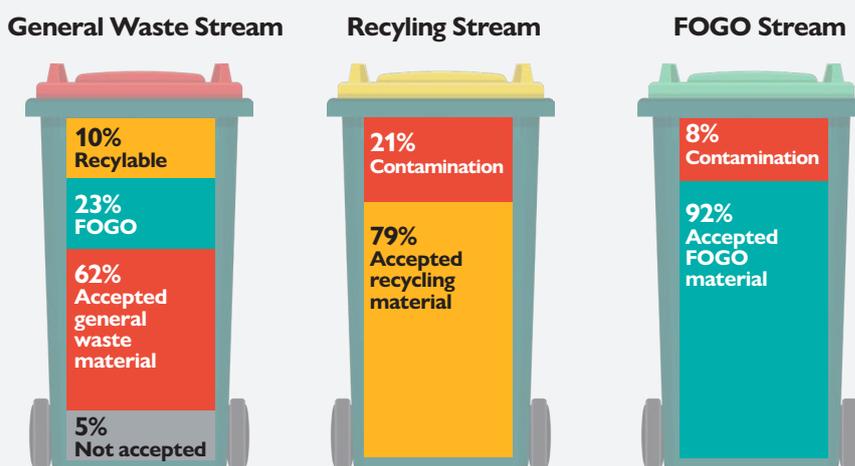


Figure 12 the amount of Glen Eira’s kerbside waste going into each bin type (Table 6)

COMMUNITY GENERATED WASTE KERBSIDE COLLECTION

Kerbside waste (municipal solid waste or MSW) is not the only waste generated in the community. In fact, kerbside waste is only 19 per cent of all the waste generated in Victoria. Waste from businesses, referred to as commercial and industrial (C&I) waste accounts for approximately 33 per cent and construction and demolition (C&D) waste accounts for 48 per cent. While C&D waste makes up almost half of the waste generated in Victoria, it has the highest resource recovery rate of 86 per cent. Approximately 62 per cent of C&I waste is recycled, while only 43 per cent of municipal waste is recycled. These proportions indicate that C&I and MSW waste sources have greater opportunity for improvement than C&D sources.

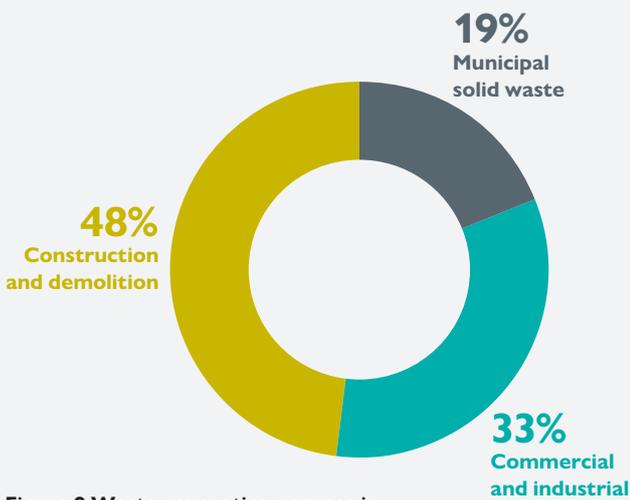


Figure 9 Waste generation sources in Victoria — 2022 project data (Source: Sustainability Victoria, Waste Projection Model)

COMMUNITY GENERATED WASTE HARD WASTE

Hard waste collections are another service provided by Council, where there are significant opportunities to influence better circular economy outcomes. In the 2020–21 financial year, Council collected a total of 4,065 tonnes of hard waste or 25.27 kilograms per resident. The majority of this material (70.4 per cent) was residual waste (general waste) that is sent to landfill. A breakdown is provided in Figure 10 below. The high proportion of general waste in the hard waste collection indicates there are opportunities to increase resource recovery rates.

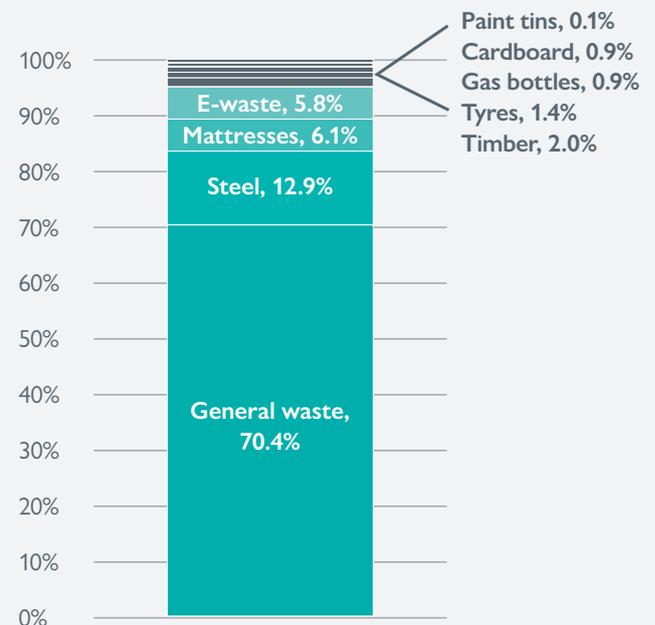


Figure 10 Hard waste breakdown by waste type 2020–21

COMMUNITY KNOWLEDGE

Glen Eira’s Community Voice panel was surveyed in early 2022 to gauge its level of understanding and knowledge about the circular economy. The survey showed almost 22 per cent of respondents had not heard of the term ‘circular economy’ before and only 36 per cent of respondents were familiar with what the term means. These survey results reveal a need for further community education on the circular economy.

How familiar are you with the term ‘circular economy’?

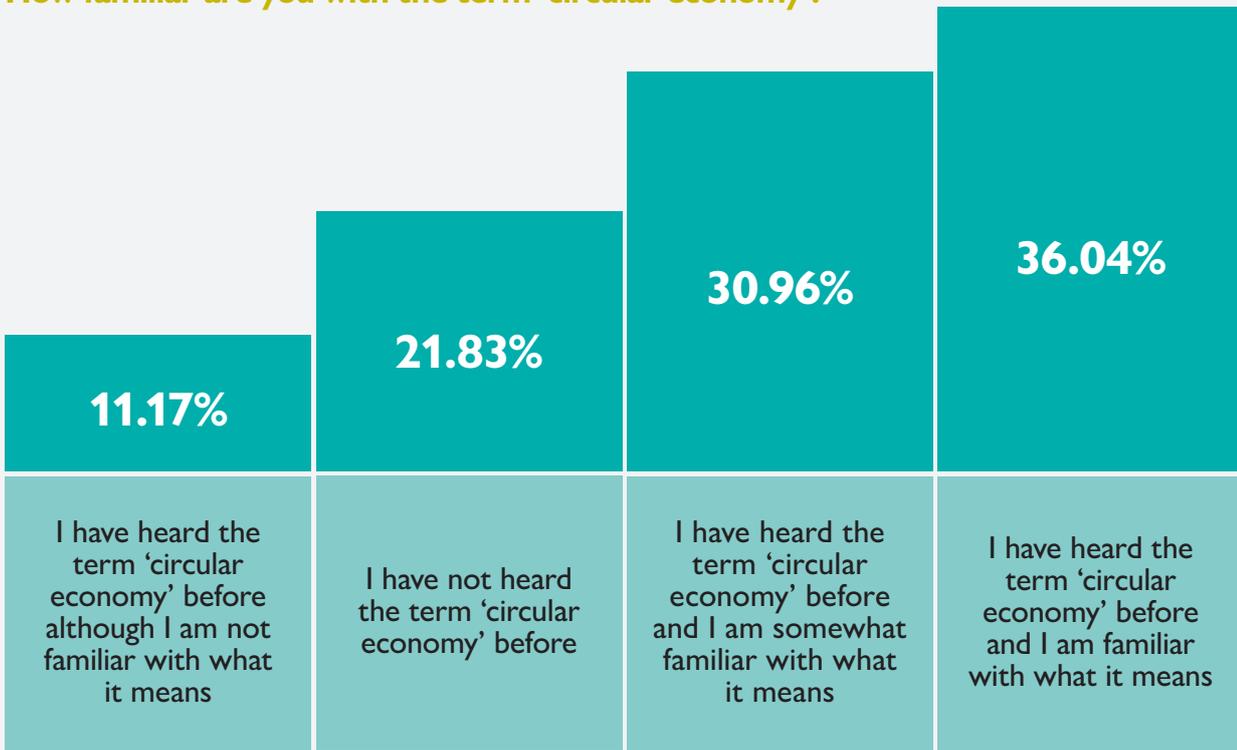


Figure 11 Community’s familiarity of circular economy 2022

TARGET PERFORMANCE AREAS

The baseline measurement assessment identified areas where Council can have the most impact in our operations and support our community to move towards a circular economy. These areas are:

AREA	IMPROVEMENT
Community knowledge	Survey results show there is a need for community education and awareness building about the circular economy.
Community waste: high density areas	Waste management in MUDs is not as good as in other types of housing. There are poor resource recovery rates and higher contamination levels from these sources.
Community waste: commercial and industrial	C&I sources account for over one third of waste generation for Victoria and only approximately 62 per cent of this waste is recovered and not sent to landfill. C&I waste is therefore a key target for waste management improvement.
Community waste: hard waste collection	There is a high proportion of waste sent to landfill from the hard waste collection. Landfilled waste generates more emissions than recycling.
Council waste: kerbside collection	There is a large amount of recyclable waste placed in the wrong bins, such as recycling and organic material in the garbage bins, as well as residual waste (contamination) in the recycling and FOGO bins.



OUR ACTION PLAN 2022–2026

OUR ACTION PLAN 2022–2026

Glen Eira’s first *Circular Economy Action Plan* aims to support and empower our community transition to a circular economy by building communities of practice, circular networks, and promoting community initiatives. The *Action Plan* also aims to review and enhance Council services and contracts to become more circular. Existing projects will be evaluated while baseline and measurable targets are developed. Annual actions will be designed to achieve the vision of a circular economy with a value for money approach and advocates for shared responsibility and community wide change.



Pillar 1: Design products, business and programs with diverse benefits in mind, for current and future generations.

ACTION	LEAD	2022–23	2023–24	2024–25	2025–26
1.1 Council strategies, policies and planning, support circular economy principles. Council operations are designed to deliver diverse benefits for current and future generations, for people, Culture and Country.					
1.1.1 Map and review relevant Council strategies, plans, and policies to ensure circular economy principles are embedded including Council’s Procurement Policy.	Sustainability and Infrastructure Transformation and Corporate Performance	Implement	Ongoing	Ongoing	Ongoing
1.1.2 Develop waste and materials baseline and finalise measurable targets including an annual action plan.	Sustainability and Infrastructure	Implement	Implement		
1.1.3 Include circular economy principles in appropriate capital works and other Council projects across all stages of procurement.	Project management Office Procurement	Design/ Review	Implement	Implement	
1.1.4 Review all waste services contracts to align with circular economy measures and identify opportunity for integrated actions through contract initiatives and specifications.	Sustainability and Infrastructure	Design/ Review	Design/ Review	Implement	Implement
1.1.5 Ban the use of unnecessary single-use plastics in all Council facilities and events.	Sustainability and Infrastructure	Implement	Implement		
1.1.6 Investigate the use of renewable fuels for kerbside and hard waste collection vehicles to incorporate into future tender specifications.	Sustainability and Infrastructure	Design/ Review			
1.1.7 Investigate ways to improve construction waste management.	Sustainability and Infrastructure Urban Planning		Design/ Review		



OUR ACTION PLAN 2022–2026

ACTION	LEAD	2022–23	2023–24	2024–25	2025–26
<p>1.2 Development of policies and programs to support growth of a network of circular communities, businesses and platforms. Community members and businesses are supported to access, create and benefit from circular economy opportunities.</p>					
<p>1.2.1 Develop a network of community champions to consult and collaborate on circular economy initiatives and commitments.</p>	<p>Sustainability and Infrastructure</p>	<p>Design/ Review</p>	<p>Implement</p>	<p>Ongoing</p>	<p>Ongoing</p>
<p>1.2.2 Develop a precinct-based circular economy pilot to test potential for local and regional resource sharing, reuse and innovation between businesses. Seek to expand based on initial results as committed in <i>Our Climate Emergency Response Strategy</i>.</p>	<p>Sustainability and Infrastructure</p>	<p>Design/ Review</p>	<p>Implement</p>	<p>Implement</p>	
<p>1.2.3 Engage with local community to design partnership programs that support and encourage local food production. This could include permaculture programs and initiatives to support local producers and businesses.</p>	<p>Sustainability and Infrastructure</p>		<p>Design/ Review</p>		
<p>1.2.4 Review and update the way we measure community material circularity.</p>	<p>Sustainability and Infrastructure</p>		<p>Design/ Review</p>		
<p>1.2.5 Explore knowledge sharing initiatives that connect community members and enable circular skill sharing. This could include a ‘veggie garden consultant’ program where skilled community members help beginner gardeners.</p>	<p>Sustainability and Infrastructure</p>		<p>Design/ Review</p>	<p>Design/ Review</p>	<p>Ongoing</p>



OUR ACTION PLAN 2022–2026

ACTION	LEAD	2022–23	2023–24	2024–25	2025–26
1.3 Advocacy for policies and programs that promote and widely implement sustainable and circular design of products.					
1.3.1 Advocate to the State Government to ensure appropriate investment of the landfill levy to support the shift of the recycling and waste sector to a circular economy, including investment in essential resource recovery infrastructure.	Sustainability and Infrastructure Communications, Engagement and Advocacy	Ongoing	Ongoing	Ongoing	Ongoing
1.3.2 Advocate to State and Federal Governments for extended product stewardship and producer responsibility, including policies and programs that reduce planned obsolescence in design and improve the longevity, repairability and recyclability of products.	Sustainability and Infrastructure Communications, Engagement and Advocacy	Ongoing	Ongoing	Ongoing	Ongoing



OUR ACTION PLAN 2022–2026

Pillar 2: Share resources and knowledge through collaboration and partnerships to develop measures that acknowledge the interconnected nature of our systems.

ACTION	LEAD	2022–23	2023–24	2024–25	2025–26
2.1 Council strengthens collaborative partnerships with community, government and industry to develop measures to transition to a circular economy. Council shares responsibility and resources across departments and with the community.					
2.1.1 Develop a partnership for collaborative storytelling with First Nations people to share with the community the intersection of caring for Country and circular economy.	Sustainability and Infrastructure	Design/ Review	Ongoing	Ongoing	Ongoing
2.1.2 Develop a library of template circular economy specifications for a range of Council procurement activities for all staff.	Procurement Sustainability and Infrastructure		Design/ Review	Design/ Review	Implement
2.1.3 Update relevant position descriptions to include circular economy responsibilities.	People and Culture	Design/ Review			
2.1.4 Build organisational capacity and knowledge to embed circular economy principles.	Sustainability and Infrastructure		Design/ Review	Implement	Implement
2.1.5 Develop collaborative networks across Council and community to amplify and promote existing circular initiatives in the community.	Sustainability and Infrastructure	Design/ Review	Design/ Review	Ongoing	Ongoing
2.1.6 Review data management within Council and implement procedures to streamline the capture of data necessary to inform our circular economy measures.	Sustainability and Infrastructure Transformation and Corporate Performance	Design/ Review	Design/ Review	Ongoing	Ongoing
2.1.7 Ensure data on key procurement items are captured and investigate alternative options with better circular outcomes.	Transformation and Corporate Performance	Design/ Review	Design/ Review	Ongoing	Ongoing
2.1.8 Conduct waste audits every two years for Council-owned/operated facilities.	Sustainability and Infrastructure	Implement		Implement	



OUR ACTION PLAN 2022–2026

ACTION	LEAD	2022–23	2023–24	2024–25	2025–26
<p>2.2 Implementation of programs that equip community and businesses with education, support and tools to actively participate in the circular economy. Community members are motivated and empowered to share resources, knowledge, skills and stories — building strong connections to each other, our materials and environment.</p>					
<p>2.2.1 Develop and deliver a communications strategy to increase circular economy awareness in the community.</p>	<p>Sustainability and Infrastructure</p>	<p>Design/ Review</p>	<p>Ongoing</p>	<p>Ongoing</p>	<p>Ongoing</p>
<p>2.2.2 Develop a public campaign that promotes local businesses participating in the circular economy as committed in <i>Our Climate Emergency Response Strategy</i>.</p>	<p>Sustainability and Infrastructure</p>	<p>Ongoing</p>	<p>Ongoing</p>	<p>Ongoing</p>	<p>Ongoing</p>
<p>2.2.3 Engage with local businesses to provide education and support services on circular economy opportunities. This could include support for grant applications external to Council, data sharing, marketing, subsidies or workshops.</p>	<p>Sustainability and Infrastructure</p>	<p>Design/ Review</p>	<p>Design/ Review</p>	<p>Ongoing</p>	<p>Ongoing</p>
<p>2.2.4 Partner with schools, child care, universities and other forms of education in Glen Eira to develop and promote circular thinking.</p>	<p>Sustainability and Infrastructure Family Youth and Children Services</p>	<p>Design/ Review</p>	<p>Design/ Review</p>	<p>Ongoing</p>	<p>Ongoing</p>
<p>2.3 Council advocates for a collaborative approach, including shared government and industry responsibility to implement circular systems.</p>					
<p>2.3.1 Advocate to the State Government for the provision of funding for circular businesses and projects.</p>	<p>Sustainability and Infrastructure</p>	<p>Ongoing</p>	<p>Ongoing</p>	<p>Ongoing</p>	<p>Ongoing</p>
<p>2.3.2 Collaborate with other local governments to deliver circular solutions for our communities.</p>	<p>Sustainability and Infrastructure</p>	<p>Ongoing</p>	<p>Ongoing</p>	<p>Ongoing</p>	<p>Ongoing</p>
<p>2.3.3 Advocate to the State Government for circular economy education campaigns that raise awareness through wide-reaching channels, including translated information and resources for CALD communities.</p>	<p>Sustainability and Infrastructure</p>	<p>Ongoing</p>	<p>Ongoing</p>	<p>Ongoing</p>	<p>Ongoing</p>



OUR ACTION PLAN 2022–2026

Pillar 3: Regenerate by recirculating materials at their highest value with repair and reuse, preventing unnecessary consumption of virgin materials and creating opportunities with waste.

ACTION	LEAD	2022–23	2023–24	2024–25	2025–26
3.1 Council reviews and develops opportunities to recirculate materials and keep them at their highest value. Council operations are conducted with material circularity and waste avoidance as a priority.					
3.1.1 Include recycled content in procurement processes, such as minimum requirements for recycled content where standards and specifications are available.	Procurement	Design/ Review	Design/ Review	Implement	Ongoing
3.1.2 Investigate further means of improving and measuring circularity of Council assets and resources. This includes leasing products, sharing across departments and reviewing Council’s asset disposal procedure.	Procurement	Design/ Review	Design/ Review	Implement	Implement
3.1.3 Investigate and promote community initiatives for reuse and resale of products locally, including a gap analysis for material streams.	Sustainability and Infrastructure	Design/ Review			
3.1.4 Support the community to reduce contamination in the yellow recycling and green food and garden waste bins.	Sustainability and Infrastructure	Ongoing	Ongoing	Ongoing	Ongoing
3.1.5 Investigate models to reduce waste to landfill through kerbside waste streams.	Sustainability and Infrastructure		Design/ Review		
3.1.6 Investigate potential levers to require greater justification for demolition of residential and commercial buildings in permit applications.	Sustainability and Infrastructure City Futures			Design/ Review	
3.1.7 Investigate pathways to improve resource recovery in multi-unit dwellings without a Council kerbside waste service.	Sustainability and Infrastructure	Ongoing	Ongoing	Ongoing	Ongoing



OUR ACTION PLAN 2022–2026

ACTION	LEAD	2022–23	2023–24	2024–25	2025–26
<p>3.2 Council supports businesses and the community to keep materials circulating at their highest value. Community members engage with programs, platforms and services that prevent unnecessary consumption by increasing repair and reuse. Recycling and residual waste management are understood and used as a last resort.</p>					
<p>3.2.1 Support and promote local repair, leasing, sharing, swapping and reuse platforms, markets, events, libraries and businesses.</p>	<p>Sustainability and Infrastructure City Futures</p>	<p>Design/ Review</p>	<p>Design/ Review</p>	<p>Design/ Review</p>	<p>Ongoing</p>
<p>3.2.2 Roll-out the lessons from the Plastic free Elsternwick Trial to help more businesses go plastic free as committed in <i>Our Climate Emergency Response Strategy</i>.</p>	<p>Sustainability and Infrastructure City Futures</p>	<p>Design/ Review</p>	<p>Ongoing</p>	<p>Ongoing</p>	<p>Ongoing</p>
<p>3.2.3 Connect businesses, community groups and community members to circular solutions, such as programs that offer waste as resources.</p>	<p>Sustainability and Infrastructure City Futures</p>	<p>Design/ Review</p>	<p>Implement</p>	<p>Ongoing</p>	<p>Ongoing</p>
<p>3.2.4 Promote knowledge of specialist recycling programs and Container Deposit Scheme facilities.</p>	<p>Sustainability and Infrastructure</p>	<p>Ongoing</p>	<p>Ongoing</p>	<p>Ongoing</p>	<p>Ongoing</p>
<p>3.2.5 Identify and support community initiatives and innovation such as repair cafes.</p>	<p>Sustainability and Infrastructure</p>		<p>Design/ Review</p>	<p>Design/ Review</p>	<p>Ongoing</p>



**CIRCULAR
ECONOMY DESIGN
AND MEASURING
PROGRESS**

CIRCULAR ECONOMY DESIGN AND MEASURING PROGRESS

Design of products and systems in a circular economy requires ongoing measurement to ensure the net impact of activities are circular and sustainable.

Measuring Council's progression towards a circular economy facilitates the development of actions, policies, investment and education that will improve the circularity of our economy. Measuring progress towards circularity ensures systems are designed to meet the ongoing and future needs of our community and highlight achievements we make along the way.

The Australian Circular Economy Hub (ACE Hub) has developed three indicator types to measure circularity. This

holistic framework has been adopted to track Glen Eira's circular economy progress and outcomes.

The indicators for this *Plan* have been developed using stakeholder feedback and circular economy experiences across Australia and the other international territories.

Several circular economy indicators are captured by existing Council strategies and plans (eg. community greenhouse gas emissions) and therefore the measurement of their progress will not be addressed by the below indicators. Indicators strongly focus on measuring material circularity, waste avoidance and minimisation. These indicators provide valuable insight on upstream inputs.



HEADLINE INDICATORS

To provide a high-level indication of how circular an economy is, expressed by a percentage or resources consumed by a unit.



IMPACT INDICATORS

To observe the effect of resource consumption and use on systems, including the economy eg. Gross Domestic Product (GDP), the environment (eg. greenhouse gas emissions, biodiversity), and society, (eg. jobs).



TRANSITION INDICATORS

To observe how the economy is tracking against markers of progress towards the desired future state, eg. training programs to build skills needed for a circular economy or businesses providing products aligned with circular economy principles.

HEADLINE INDICATORS

Headline indicators provide a high-level, simple measurement of how circular an economy is, expressed by percentage of resources consumed. Two headline indicators have been developed that provide a high-level view of how circular our economy is.

Table 7 Headline indicators

INDICATOR	ASSOCIATED ACTIONS
<p>Headline indicator 1: Council material circularity (recycled content consumption/recycled commodity production)</p> <p>A headline measure of how well Glen Eira City Council keeps materials in use. This combines the quality of the recycled material produced from waste with how much recycled material Council purchases. Council currently tracks how much recycled material is purchased in construction works and encourages purchasing of materials with recycled content.</p> <p>This indicator will further estimate how much recycled material is produced from data provided by our resource recovery contractors. Where data is not available, industry benchmarks will be used eg. on average 86 per cent of construction and demolition waste is recycled.</p>	<p>1.2.4, 2.1.6, 2.1.7, 3.1.2</p>
<p>Headline indicator 2: Waste diverted from landfill</p> <p>Waste diverted from landfill as a percentage of total waste generated is an important measure. The data is available across local, state and national levels and is tracked by Council monthly. This measure shows how well our system is working to avoid waste and the degree to which we recycle the waste we produce. The more we keep resources in use (either by reusing or recycling), the less waste we need to send to landfill. A higher rate of waste diversion can indicate better product design, where waste has been minimised or eliminated from products.</p>	<p>3.1.3, 3.1.4 3.1.5, 3.2.4</p>

IMPACT AND TRANSITION INDICATORS

Impact indicators show the effect of resource consumption and use, and how we are improving in specific areas of the economy eg. emissions or employment. Our impact indicators have been developed to measure the most important materials and activities in our economy and clearly demonstrate how we are moving towards a circular economy.

Transition indicators show the change in attitudes towards circular economy and measure the effort we are making to help everyone understand circular economy and make less wasteful choices. These indicators are focused on building awareness, education and participation in the circular economy.

The impact and transition indicators are explained in Table 8.

IMPACT INDICATORS

Table 8 Impact and transition indicators

IMPACT INDICATOR 1: Amount of recycled content in Glen Eira projects

Council projects include road resurfacing, construction of playgrounds and pathways, and open space improvements. By using more recycled content in these projects, we can encourage more recycled materials to be produced.

IMPACT INDICATOR 2: Reduce greenhouse gas emissions from Council waste services

Lower greenhouse gas emissions demonstrate that Council and the community are making choices that have better environmental outcomes, including using renewable and recycled materials (such as renewable energy).

IMPACT INDICATOR 3: Amount of contamination in the FOGO and commingled recycling streams

Contamination of kerbside commingled waste or FOGO waste can lead to higher processing losses at the recycling processing facilities, resulting in more waste sent to landfill. A lower contamination rate in the kerbside recycling bins will help more material to be recycled and make sure it is better quality, making it easier to produce and sell recycled products.

IMPACT INDICATOR 4: Reduced volume of virgin raw materials consumed by Council

Council procures a wide range of virgin raw materials, especially for construction works. Replacement of raw materials with products made of recycled content, such as recycled glass sand to replace other sands, will reduce extraction of new, virgin materials.

IMPACT INDICATOR 5: Number of new circular products purchased by Council

Increasing the number and types of circular products purchased by Council will support more businesses in the circular economy. It will also require consideration and research by those responsible for the procurement of products, thereby increasing awareness of the circular economy within Council.

IMPACT INDICATOR 6: The amount of waste sent to landfill per resident

A reduction in the waste to landfill per resident shows there is either less waste produced overall or improved separation of recyclable waste into the right bins.

IMPACT INDICATOR 7: Reduced volume in hard waste collection

While hard waste collection is an important community service, it does not support investment in or use of household items that are long-lasting and repairable. Reduced volumes in hard waste collections will indicate the community is using products more efficiently and for the longer term.

TRANSITION INDICATORS

Table 8 Impact and transition indicators continued ...

TRANSITION INDICATOR 1: Number of relevant Council strategies and policies specifically linked to circular economy

Circular economy is a broad reaching and complex field that has an impact on many areas of Council's activities. When this is reflected in existing strategies and plans, it will be clear that circular economy has been effectively incorporated into our activities.

TRANSITION INDICATOR 2: Number of circular businesses operating within the community

An increased number of businesses involved in or supporting circularity helps our community choose products and services that support the circular economy.

TRANSITION INDICATOR 3: Circular economy advocacy and publications occurring internally/externally

While Glen Eira has developed its own definition of a circular economy, more work needs to be done at a regional, state and national level to support circular outcomes. As a leader, Council can advocate for circularity and publish information on opportunities and outcomes within the community.

TRANSITION INDICATOR 4: Number of relevant Council position descriptions referring to circular economy responsibilities

Council must be a leader for the community in how we adapt and transition to a circular economy. The transition will require a concerted effort from within Council and that effort must be spread over the different Council roles. By including circular economy responsibilities within staff position descriptions, we can ensure the load is shared.

TRANSITION INDICATOR 5: Availability of circular economy training modules for Council staff and number of staff that complete training

Engagement with staff showed a need to ensure there is a general understanding of the circular economy, what it means for Glen Eira and how everyone can make choices in their work that support a circular economy. This will also help us support our residents in the circular economy.

TRANSITION INDICATOR 6: Increased participation in circular economy events and programs

Encouraging participation in circular economy events and programs in the community can lead to better awareness and help to transition the circular economy from a concept to a way of life.

TRANSITION INDICATOR 7: Increased availability of recycling and reuse locations

By providing more opportunities for people to recycle, recycling can be made easier and we can avoid materials going to landfill. For example, the RedCycle program for soft plastics is effective because it has many locations at supermarkets; locations where the community frequently visits. Incorporating recycling into other activities, such as shopping, means residents do not need to make separate trips specifically to recycle items. Additional recycling locations may include soft plastics, batteries, e-waste and Container Deposit Scheme facilities.

IMPACT AND TRANSITION INDICATORS

Both these indicator types measure progress towards the pillars of a circular economy. We will measure our performance across all three pillars as outlined in Table 9 below. The actions that are expected to contribute to each indicator are also identified.

Table 9 Indicators with associated actions

Pillar 1: Design products, business and programs with diverse benefits in mind for current and future generations.

INDICATOR		ASSOCIATED ACTIONS
1.1 Council strategies, policies and planning, support circular economy principles. Council operations are designed to deliver diverse benefits for current and future generations.		
Impact 1	Amount of recycled content in Glen Eira projects	1.1.2, 1.1.3, 2.1.2, 2.1.6, 2.1.7, 3.1.1
Impact 2	Reduce greenhouse gas emissions from Council waste services	1.1.6, 1.1.4, 3.1.4, 3.1.5
Transition 1	Number of relevant Council strategies and policies specifically linked to Circular Economy	1.1.1
1.2 Development of policies and programs to support the growth of a network of circular communities, businesses and platforms. Community members and businesses are supported to access, create and benefit from circular economy opportunities.		
Transition 2	Number of circular businesses operating within the community	1.2.2, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 3.2.2, 3.2.3
1.3 Advocacy for policies and programs that promote and widely implement sustainable and circular design of products.		
Transition 3	Circular economy advocacy and publications occurring internally/externally	1.3.1, 1.3.2, 2.3.1, 2.3.3

IMPACT AND TRANSITION INDICATORS

Table 9 Indicators with associated actions continued ...

Pillar 2: Share resources and knowledge through collaboration and partnerships to develop measures that acknowledge the interconnected nature of our systems.

INDICATOR		ASSOCIATED ACTIONS
<p>2.1 Council strengthens collaborative partnerships with the community, government and industry to develop measures to transition to a circular economy. Council shares responsibility and resources across departments and with the community.</p>		
Transition 4	Number of relevant Council position descriptions referring to circular economy responsibilities	2.1.3
Transition 5	Availability of circular economy training modules for Council staff and number of staff that complete training	2.1.4
<p>2.2 Implementation of programs that equip the community and businesses with education, support and tools to actively participate in the circular economy. Community members are motivated and empowered to share resources, knowledge, skills and stories — building strong connections to each other, our materials and our environment.</p>		
Transition 6	Increased participation in circular economy events and programs	1.2.1, 1.2.3, 1.2.5, 2.1.1, 2.1.5, 2.2.1, 2.2.4, 2.3.2
<p>2.3 Council advocates for a collaborative approach, including shared government and industry responsibility to implement circular systems.</p>		
Transition 3	Circular economy advocacy and publications occurring internally/externally	1.3.1, 1.3.2, 2.3.1, 2.3.3

IMPACT AND TRANSITION INDICATORS

Table 9 Indicators with associated actions continued ...

Pillar 3: Regenerate by recirculating materials at their highest value with repair and reuse, preventing unnecessary consumption of virgin materials and creating opportunities with waste.

INDICATOR		ASSOCIATED ACTIONS
3.1 Council reviews and develops opportunities to recirculate materials and keep them at their highest value. Council operations are conducted with material circularity and waste avoidance as a priority.		
Impact 3	Amount of contamination in the FOGO and commingled recycling streams	2.1.8, 3.1.4
Impact 4	Reduced volume of virgin raw materials consumed by Council	1.1.5, 2.1.7
Impact 5	Number of new circular products purchased by Council	1.1.5, 3.1.2, 1.1.2, 2.1.6
3.2 Council supports businesses and the community to keep materials circulating at their highest value. Community members engage with programs, platforms and services that prevent unnecessary consumption by increasing repair and reuse. Recycling and residual waste management are understood and used as a last resort.		
Impact 6	The amount of waste sent to landfill per resident	1.1.7, 3.1.3, 3.1.4, 3.1.5, 3.1.5, 3.1.7, 3.2.4
Impact 7	Reduced volumes in hard waste collection	1.1.4, 3.2.1, 3.2.5
Impact 3	Amount of contamination in the FOGO and commingled recycling streams	3.1.4, 3.2.4
Transition 7	Increased availability of recycling and reuse locations	3.2.4

PERFORMANCE SNAPSHOT

The indicators outlined above should be measured and reported on annually. Most of these indicators are either already measured or can be implemented via the procurement system.

Table 10 shows how much we currently know about our circular economy performance. Given the circular economy is an emerging approach, not all data is currently available and collected. As this *Plan* is implemented, these gaps will be filled as we develop a greater understanding of our circularity.

Table 10 Performance snapshot 2022

	INDICATOR	CURRENT PERFORMANCE (COUNCIL)	CURRENT PERFORMANCE (COMMUNITY)	UNIT OF MEASUREMENT
HEADLINE				
Headline 1	Material circularity	TBD	TBD	%
Headline 2	Waste diverted	37%	63%	%
IMPACT				
Impact 1	Amount of recycled content in Glen Eira projects	TBD	N/A	tonnes
Impact 2	Greenhouse gas emissions per resident	1.37	7.64	t CO2-e
Impact 3	Amount of contamination in the FOGO and commingled recycling stream	TBD	15%	%
Impact 4	Amount of virgin raw materials consumed by Council	TBD	N/A	tonnes
Impact 5	Number of new circular products procured by Council	TBD	N/A	number
Impact 6	Waste to landfill per or resident	473.9	354.0	kg/person/year
Impact 7	Amount in hard waste collection	N/A	25.3	kg/resident/year

PERFORMANCE SNAPSHOT

Table 10 Performance snapshot 2022 continued ...

	INDICATOR	CURRENT PERFORMANCE (COUNCIL)	CURRENT PERFORMANCE (COMMUNITY)	UNIT OF MEASUREMENT
TRANSITION				
Transition 1	Number of relevant strategies and policies specifically linked to circular economy	TBD	TBD	number
Transition 2	Number of circular businesses operating within the community	N/A	TBD	number
Transition 3	Circular economy advocacy and publications occurring internally/externally	TBD	N/A	number
Transition 4	Number of relevant Council position descriptions referring to circular economy responsibilities	TBD	N/A	number
Transition 5	Availability of circular economy training modules for Council staff and number of staff that complete training	TBD	N/A	number
Transition 6	Increased participation in circular economy events and programs	N/A	TBD	number
Transition 7	Increased availability of recycling and reuse locations	TBD	TBD	number



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