Yarra Climate Emergency Plan 2024-2030

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Acknowledgement of Country

Wominjeka.

Yarra City Council acknowledges the Wurundjeri Woi Wurrung people as the Traditional Owners and true sovereigns of the land now known as Yarra. We also acknowledge the significant contributions made by other Aboriginal and Torres Strait Islander people to life in Yarra. We pay our respects to Elders from all nations and to their Elders past and present.

Introduction

We are in a climate emergency.

The dire predictions of climate scientists are being realised at an alarming rate, with each year bringing a distressing range of broken records and natural disasters. 2023 was our hottest recorded year by a huge margin, with the preceding nine years being the warmest on record.[1] Bushfire seasons are lengthening and intensifying, threatening the lives and livelihoods of more and more people and wildlife. Many scientists argue that we are in the midst of a sixth mass extinction event, with extinctions occurring at 100–1000 times the naturally occurring rate.[2] Globally, prolonged drought, extreme weather and food insecurity are driving political instability and mass migration.

And yet, this moment of crisis is a moment for hope. For from crisis, comes transformation.

The climate and ecological crisis are an opportunity to rethink everything. To transform our relationship with one another and with the natural world, of which we are part and upon which we depend. Due to the effects of colonisation, the dispossession of Aboriginal and Torres Strait Islander peoples on this continent, and of First Nations peoples around the world, a worldview of interdependence of all life was replaced by a worldview that separates humans from nature. This is an opportunity to critically examine the logic that drives the crisis: that the natural world is ours to extract from, that endless growth on a finite planet is possible, that financial systems can replace communities of care. We cannot address these crises with the same thinking that caused them.

In rethinking our worldview, we must also rethink the way we organise our society. We recognise the need to drastically reduce greenhouse gas emissions, and at the same time, we know that net zero is not enough. A transformation to a zero emissions society requires us to revise our human-centric worldview and remedy the fundamental inequalities of our economic system. Responding to this crisis presents an opportunity to build the kind of communities where everyone thrives, including our natural world, with safe housing for all, fair distribution of resources, and shared decision-making.

In 2020, Yarra City Council (Council) adopted its first Climate Emergency Plan (2020-2024), which outlined our ambitious response to the climate crisis.[3] To ensure this subsequent Climate Emergency Plan (2024-2030) builds on this first plan and responds to the

challenges across our community, natural environment, and economy - all of which are exacerbated by the climate emergency - Council has focused on five key perspectives. These five perspectives have informed our engagement approach and strategic thinking.

The perspectives

Centering Aboriginal and Torres Strait Islander experiences and knowledges

For over 60,000 years, Aboriginal and Torres Strait Islander nations have cared for Country across this continent. In this moment of crisis, we must adopt Aboriginal and Torres Strait Islander knowledge and practices to guide the way towards a regenerative relationship with our environment. The effects of colonisation, including the climate emergency, directly and disproportionately threatens the ongoing practices of Aboriginal and Torres Strait Islander peoples' way of life, including the capacity to care for country. We must act and partner with the Traditional Owners of the land that Yarra occupies, the Wurundjeri Woi Wurrung nation, to further build resilience to climate impacts and share in the benefits of a transition to a greener economy.

Fostering social justice and equity

People are not inherently vulnerable; it is the failures of our social and economic systems that make them so. We recognise that while the climate emergency affects everyone in our community, it is having a disproportionate impact on some. This includes those in our community who are unable to access adequate housing or income, have accessibility needs or chronic health conditions, work in unsafe conditions or who experience marginalisation due to culture, language or gender identity. Additionally, the climate emergency is one of great inequity, with those least responsible – those on lower incomes, from low and middle-income countries, and children and generations to come – facing the greatest climate and health impacts. We will commit to and advocate for a climate emergency response which centres justice and equity, ensuring that our entire community – particularly those at greatest risk – are resilient, connected, empowered, and share in the benefits of our investments.

The rights of young people and future generations

The climate emergency is an issue of intergenerational injustice. Children and young people have done the least to contribute to the climate emergency yet will inherit the worst impacts and experience disproportionate risk, both physically and psychologically. We recognise the current and future rights of every child and young person to a healthy environment and safe

climate. We will work to ensure our children and young people are represented and can meaningfully participate in decision making. Additionally, we will work towards and advocate for climate mitigation and adaptation strategies which limit the exposure of children and young people to climate impacts.

The rights of nature

As the impacts of the climate emergency accelerate, natural ecosystems are being driven towards collapse. The inherent resilience of these ecosystems is being tested by bushfires, extreme heat, and changes to precipitation patterns, among other impacts. We recognise that humans depend on functioning ecosystems for our survival, while also acknowledging the intrinsic value and rights of nature. In its climate emergency response, Council will advance the rights of nature through minimising harmful environmental impacts while acting to improve the stability and resilience of local ecosystems.

A commensurate climate emergency response

The science is clear and unequivocal; without immediate and deep emissions reductions across all sectors, limiting global heating to 1.5°C will be beyond reach. Global heating has increased at an unprecedented rate over the past decade with Australia warming faster than the global average, resulting in more extreme weather events including flooding, bushfires, droughts and storms.[4] The Intergovernmental Panel on Climate Change noted that “there is a rapidly closing window of opportunity to secure a liveable and sustainable future for all.”[5] A commensurate response to the scale of this challenge requires rapid decarbonisation alongside efforts to adapt to and build resilience in the face of worsening climate impacts. In the development and implementation of this Plan, we aim to deliver a climate emergency response which is commensurate with the scale, urgency, and severity of the crisis.

Our Climate Emergency Plan

This Climate Emergency Plan (the Plan) is our assurance that we’ve heard the calls for climate action, and for a more equitable and just society.

We recognise the multiple, intersecting crises that threaten the stability of human and non-human life on this planet. Six of the nine ‘planetary boundaries’ have been exceeded, including biosphere integrity (related to biodiversity loss), land system changes, and

freshwater change.[6] Simultaneously many in Yarra and beyond are denied adequate access to food, healthcare, housing, and energy, as well as social and gender equity, threatening the social foundation of our local and global community. While no one plan can remedy all these challenges, we strive to respond to the climate emergency with an intersectional understanding of the broader context. Where possible, we will work towards mitigating our contribution to the nine planetary boundaries, while consciously contributing to a just and equitable society.

Recognising the scale of ambition required to match this moment of crisis, this plan outlines seven transformations across society which will bring forth our collective vision of a climate-safe, sustainable and just society.

Our seven transformations

1. In Yarra every choice we make and every action we take responds to the climate emergency.
2. In Yarra, community members at greater risk from climate impacts are connected, supported, and empowered to build resilience.
3. Yarra is active, empowered and raising our voice together for a stronger climate emergency response.
4. Yarra is a leading and prosperous zero emissions city.
5. Yarra is Caring for Country. Our landscapes and waterways are healthier, greener, and more biodiverse, and our communities feel at one with nature.
6. In Yarra, everyone lives and works in comfortable and climate-safe homes and buildings, supported by climate resilient public spaces and infrastructure.
7. Yarra is transitioning to a circular economy by consuming less, reusing, repairing, sharing, and recycling more and sending less waste to landfill.

At this time of collective anxiety, frustration, and suffering in the face of the climate crisis, this plan signals our role in these key transformations from now until 2030. Within this timeframe, we will deliver two three-year action plans, which will map the actions we plan to take to achieve the seven transformations outlined above. These transformations are not inevitable or easy to achieve but will be the result of united action towards a shared vision.

To move forward we need to look backwards. Around the country, Traditional Owner knowledge and practices are being adopted to inform and improve land management and

promote sustainability. The revitalisation of the *Budgj Bim* cultural landscape of the Gunditjmara people restored traditional fishing practices, demonstrating how Traditional Owners worked with the natural resources and environment in that region over the past 30,000 years and beyond.[7] This example shows how the narrative can be rewritten to rejuvenate an entire ecosystem and change the relationship between the wider community and the environment.

The land that Yarra occupies is a small proportion of the lands of the Wurundjeri Woi Wurrung people. Yarra sits at the lower end of the Yarra River (Birrarung in Woi Wurrung language) in a highly urbanised landscape that bears witness to the ongoing effects of colonisation. While these effects are all around us, if we are in tune with the land, we can find different possibilities. We need to change the narrative, and the way we look at our environment, adjusting our view to align with Wurundjeri Woi Wurrung knowledge and practices, passed on through stories. The most astounding transformations happen right before our eyes, like the Bullum Bullum (white butterfly in Woi Wurrung) emerging from its cocoon. We see on the horizon the fruits of this endeavour - the more beautiful world we know is possible.

Yalinguth (Looking to the past)

This is Wurundjeri Country

The Wurundjeri Woi Wurrung nation has a history that extends over 60,000 years, to the beginning of time when the creator spirit, Bunjil the eagle, formed the Wurundjeri people, the land, and all living things.

Long ago Bunjil, the Wedge-Tail Eagle, was the headman of the Kulin. Bunjil had two wives and a son whose name was Binbeal, the Rainbow, whose wife was the second bow. Bunjil has also six other "Young Men", who were together in pairs, looking after the people for him, and carrying out his orders.

The six young men were: Djurt–Djurt, the Nankeen Kestrel and Thara, the Quail Hawk; Yukope, the Green Parakeet, and Dantum, the Blue Mountain Parrot; Tadjeri, the Brush-tail Possum, and Turnung, the Glider Possum, both of whom lived in the trees.

After Bunjil had made the mountains and rivers, and man and all the animals, he taught the men how to make weapons, how to fight with them, and how to behave with one another. When he had finished he became tired of staying upon the earth. So he gathered about him his wives and sons, and told Bellin-bellin, the Musk Crow, who had charge of the winds: "Open your bags and let out some wind." So Bellin-bellin opened one of the bags in which he kept the whirlwinds and let out a blast that blew great trees into the air, roots and all. Bunjil said, "That is not enough, let out more wind." Bellin-bellin opened all his bags at once, and a terrific whirlwind came out, and blew Bunjil and all his people to the sky where they live in plenty and look down on the world as stars.[8]

River Red Gums were dotted across the land, with an understory of grasses, herbaceous plants, and some small shrubs. Along the waterways, the River Red Gums were joined by Swamp Gums, and a rich variety of shrubs, sedges, rushes, herbs, and grasses that changed with the seasons. The Birrarung (Yarra River) supported wildlife like quolls, plains wanderers, bandicoots, bettongs, and perhaps even diprotodon, a large wombat-like marsupial the size of a hippopotamus.

The Birrarung was central to the livelihood and identity of the Wurundjeri people. The Wurundjeri respected and cared for the land which provided food, water, resources, medicine, and shelter, and knew the land intimately. They understood the ecosystems and lived their lives according to the six seasons. In cooler months they regularly camped in the higher areas, as the land near the river flooded. In warmer seasons, crops such as mirr-n'yong (yam) were ready for harvesting, birds' eggs were plentiful, and it was time to eat wildfowl, eel, fish, and game. In these ways, people and country were interconnected - providing, nurturing, and caring for each other for tens of thousands of years.

Despite resistance from Wurundjeri people, colonisation disrupted this way of life and caused devastating changes to the lands and waters. Wurundjeri people were forced from their lands, with their population suffering a dramatic decline due to frontier violence and diseases introduced by the colonists. Sacred sites were desecrated, and Aboriginal people were forcibly isolated from family, community, language, and culture, under government policies over successive generations.

Colonisation brought with it a new worldview, one which saw humanity as separate from nature, and nature as something to control. The colonisers brought industrial technologies and practices that extracted resources from the land without replenishing them. Ecosystems were altered to better align with the priorities of people and financial wealth, rather than nature. The course of the Birrarung was altered, and industrial waste began to pollute the lands and waterways. These shifts were the start of global heating and the climate and ecological emergencies.

Yarra City Council: Altering the course

Over time, Yarra City Council has taken big steps towards repairing the harm done to our environment since colonisation. Though we still have much to do, we have improved the health of the Birrarung, reduced waste sent to landfill and worked towards restoring and protecting our local biodiversity. Council is committed to its formal relationship with the Wurundjeri Woi Wurrung. This Climate Emergency Plan is an opportunity to strengthen this relationship by embedding Wurundjeri Woi Wurrung knowledge and practices in the ways that we care for Country, and by collaborating on and co-designing projects.

We have made significant progress in our commitments to responding to the climate emergency. Since 2001, we have achieved a 70% reduction on the emissions included in our organisational baseline inventory, despite an increasing population and demand for services. Additionally, in 2012 we became the first Victorian council to be certified carbon neutral, meaning all remaining emissions since that year have been offset to bring our net emissions to zero. The recent increase in emissions (see Figure 1) represents a recovery from COVID-19 to business-as-usual, the inclusion of additional emissions sources in line with best practice carbon accounting methods, and higher emissions calculation factors for some sources.

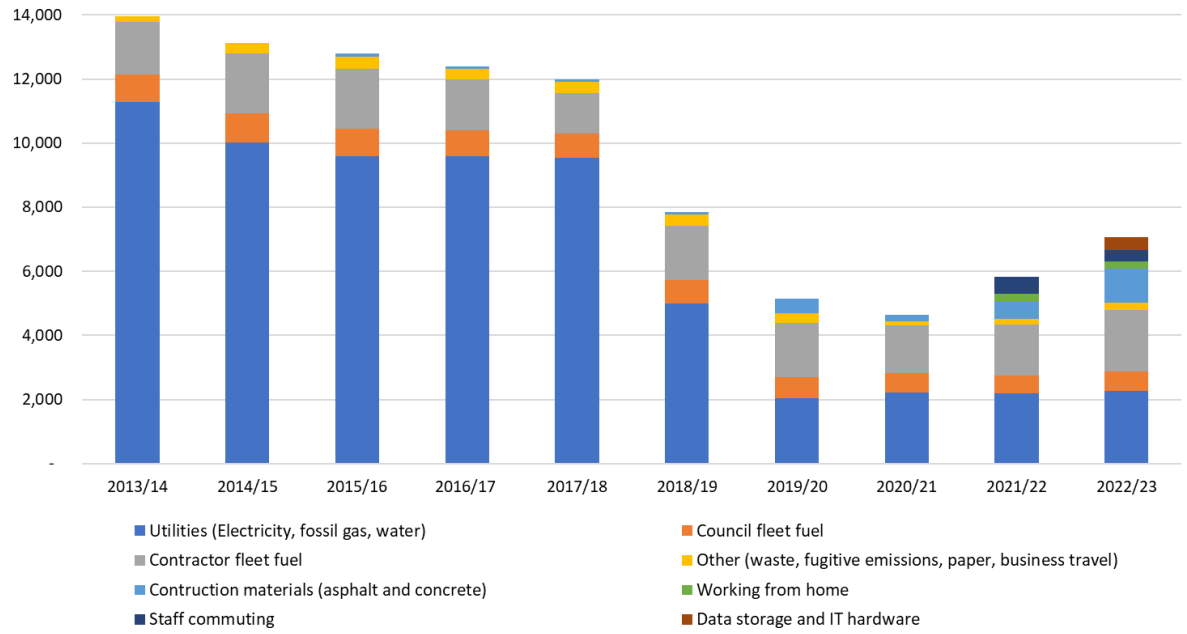


Figure 1 Yarra Council's organisational emissions trend from 2013/14 to 2022/23 [9]

Over the past decades, as our community's calls for climate action grew stronger, so too did our response. We have built partnerships locally with community organisations, businesses and industry, across other councils, and with other levels of government to maximise our impact. Additionally, we have been stepping up to support our community in taking climate action and assisting community members at greater risk from climate impacts to adapt.

Year	Yarra City Council	Yarra Community	Other
2002	Council was a founding member of the Northern Alliance for Greenhouse Action, a partnership between nine neighbouring councils. Council joins Cities for Climate Protection – a five milestone program.	Despite the impacts of colonisation, today Wurundjeri and other First Nations people are active in the Yarra community – practising culture, performing ceremonies and passing on knowledge to younger generations.	
2005	Council delivered multiple Sustainable Transport behaviour change programs, such as ride to school day.		
2006			Al Gore launched An Inconvenient Truth and the Climate Reality Project – bringing discussion about greenhouse gas emissions and global heating into the mainstream.
2007	Implemented Travel Smart Program in partnership with business, schools, and staff.		Australia became a Party to the Kyoto Protocol, setting our first emissions reduction target.
2009	Council developed the first Waste Management Strategy.		
2010	Council established the Yarra Energy Foundation as a not-for-		

Year	Yarra City Council	Yarra Community	Other
	profit providing energy services and advice to homes and businesses. First solar system installed on Council buildings.		
2011	Council published Yarra's first Climate Change Adaptation Plan.		
2012	Council was certified as Victoria's first carbon neutral council.		
2013	Council implements first-Victorian bulk change of all residential streetlights to energy efficient alternatives.		
2014	Council initiated Victoria's first comprehensive Energy Performance Contract – reducing organisational emissions by over 2,000 tCO_2e per annum. Council becomes Australia's first certified One Planet Living council Council developed the first Waste Minimisation Strategy		
2015	Council led the development and delivery of Australia's first ever food waste avoidance program, Food Know How, in partnership with four other Councils.		
2016			Australia signs onto the Paris Agreement,

Year	Yarra City Council	Yarra Community	Other
			reconfirming emissions reduction targets.
2017	Council adopts its first Urban Forest Strategy which aims to enhance Yarra's healthy and growing urban forest, improve liveability and mitigate the impacts of the urban heat island effect.		
2018	Council declares a climate emergency. Council developed the second Waste Minimisation Strategy.		
2019	Council begins trialing a four-stream waste and recycling service, including separate glass and Food Organics and Garden Organics (FOGO) service, across 1,300 households in Abbotsford with great results. Over the first 12 months of the trial, 1,269 tons of glass and 102 tons of FOGO was recovered or diverted from landfill. Council acquired Australia's first electric powered tipper truck.	Yarra's first School Strike for Climate was held.	The Victorian government identified "tackling climate change and its impacts on health" as a priority area in the state public health and wellbeing plan.
2019	All Council's electricity needs met by 100% renewable power via the Melbourne Renewable Energy Project.		The Victorian Climate Change Act 2017 sets a net zero emissions by 2050 target, alongside a range of interim targets.

Year	Yarra City Council	Yarra Community	Other
2020	Council adopted its first Climate Emergency Plan in November 2022 Council adopted its first Yarra Nature Strategy. One of the four goals is to “increase the diversity, connectivity and resilience of Yarra’s natural environment to resist the impacts of climate change on biodiversity values”. Council rollout of a separate glass waste stream across the municipality. Since then, 7,598.51t glass has been made into new jars and bottles.		The new Local Government Act was passed, requiring Councils to prioritise consideration and mitigation climate risk, emissions reduction and the resilience of their communities and natural environments. The Act also requires Council’s to consider climate change in the development of their Municipal Health and Wellbeing Plans. Victoria beat its first target - to reduce emissions 15-20% below 2005 levels by 2020 – with a cut of almost 30%.
2021	The number one strategic objective in the 2021-25 Council and Municipal Health and Wellbeing Plan was the climate and environment.		
2022	Launched the Solar for Apartments Guide and Unlocking Sustainable Strata Guides to help apartment communities participate in a zero emissions, climate adapted future.		Victorian Government delivered a set of Adaptation Action Plans, seeking to drive vital adaptation action across seven essential systems.

Year	Yarra City Council	Yarra Community	Other
2023	Launched Yarra's Circular Economy Map, making it easy for people to shop for package-free groceries, repair or borrow items. Reached 537kw (~1,800 panels) solar power capacity on council-owned & operated facilities.	Reached 238kW (~800 panels) solar power capacity on council-owned, community-operated facilities.	Victorian Government strengthened its emissions target, now aiming for net zero emissions by 2045. Victorian Government announced a gas connection ban for new developments.

Yaalingbu (Today)

As shared by Woi Wurrung leader Beruk Barak, the creation story of the Birrarung river, meaning ‘river of mists’, goes as follows:

Two boys were playing when one of them climbed a wattle tree to find wattle-gum. He began throwing lumps of gum down to the other boy, but they disappeared. The boy noticed a hole in the ground and poked his spear into it in search of his gum. An old man sleeping beneath the ground woke up very angry and carried off the frightened boy.

The path he made became the river. When Bunjil heard the boy’s cries, he threw sharp stones in the path of the old man, causing him to fall and cut himself badly. The boy escaped and ran home. Bunjil appeared before the old man and said: ‘Let this be a lesson to all old men. They must be good to little children.[8]

The First People of Melbourne, the Wurundjeri have been caring for this Country since time immemorial. Their songlines have been sustained through profound and devastating changes to the Birrarung; these songlines now persist alongside significant collaborative efforts to restore and heal the Birrarung.

A collaboration involving the Wurundjeri Woi-Wurrung Cultural Heritage Aboriginal Corporation’s Narrap ranger team is making strides in restoring waterways along the Birrarung river, including the Bolin Bolin Billabong. The billabong was bone dry as recently as 2017, however it now flows with water and supports a flurry of biodiverse life thanks to the rehabilitation efforts.[10]

The Wurundjeri invite all Victorians to think of the Birrarung as a complex, living system rather than a resource to be exploited. Today, we have the opportunity to renew our perspective on the Birrarung and take remedial action - as is underway in the Bolin Bolin Billabong - to reverse the damage of the past and bring the river back to environmental, cultural, ceremonial and spiritual health.[11]

Our community

Despite the devastating impacts of colonisation, Wurundjeri Woi Wurrung and other Aboriginal and Torres Strait Islander peoples have survived, with strong connection to Country persisting. It is a testament to their resilience that Wurundjeri Elders and community members continue to share their ancestral knowledge and engage with us on their traditional lands.

The City of Yarra is home to a diverse community of approximately 103,000 people. Among these are the successive waves of refugees and migrants who have been welcomed into the community, beginning in the post-war era with our Greek and Italian communities. From the 1970s, our Vietnamese, Chinese and East Timorese communities grew, and in the last 15 years, our east African community. There is great cultural and linguistic diversity in Yarra, with 20% of people using a language other than English at home.[12]

Yarra is home to many sites of natural and cultural significance. There are 38 conservation bushland sites that are actively managed by Council, making up over 40 hectares of open space. Yarra is bordered to the east by the Birrarung and Merri Creek corridors. Across Yarra there are at least 603 different plant species, including seven threatened species. Over 275 of these species are indigenous to the area. More than 278 animal species, including 21 threatened species, rely on local habitats for food and shelter.[13]

Yarra is home to one of the largest economies in metropolitan Naarm Melbourne, with more than 16,600 businesses operating.[14] The highest employing sectors are healthcare and social assistance, professional, scientific and technical services, and retail trade. The past century has seen a shift away from heavy industry, with significant growth in small businesses and large commercial enterprises. Our community is supported by a great diversity of community service organisations, which operate to ensure the connectedness, safety, and wellbeing of our community members. Among these are Yarra's Neighbourhood Houses, community health services, Aboriginal community-led organisations, and a range of other service providers. These organisations play a pivotal role in building community health and resilience amid worsening climatic conditions.

Our community has a long history of climate and social change activism. We are also proud to host many climate and environmental groups, artists and arts organisations, volunteer

organisations and community groups all actively taking climate action and advocating for change.

Climate impacts today

While future projections of global climate change are alarming, we are already witnessing the breakdown of essential climatic functions, the collapse of ecosystems, and widespread human displacement and migration due to sudden and ongoing environmental stress. These impacts are being acutely felt in low and middle-income countries, who have contributed least to the issue.

Locally, accelerating climate impacts are placing immense pressure on the environment, threatening the health and wellbeing of our community, and interrupting the provision of essential goods and services. These climate impacts and emerging public health risks are anticipated to worsen without significant investment in climate mitigation and adaptation.

It's hot: The number of unusually hot days has increased, as have overall temperatures. Between 1981 and 2010, Yarra experienced an average of eight days each year with temperatures above 35°C. By the 2050's, this is expected to rise to between 13 and 21 days each year.[15]

- 2023 was the planet's hottest year on record by a large margin, with 2024 forecast to be hotter.[16]
- In 2022, excess deaths associated with extreme heat in Europe exceeded 15,000 across Spain, Germany, the UK, France, and Portugal.[17]
- In East Africa, rainfall has been below average in five consecutive wet seasons, contributing to acute food insecurity for an estimated 37 million people across the region.[15]
- Summer heatwaves in Melbourne now start on average 17 days earlier and are more frequent, long-lasting and intense.[18]
- In 2014, Victoria experienced its first ever four-day period above 41ºC. This led to an estimated 167 excess deaths associated with heat, corresponding to a 24% increase in the number of deaths during the week of the heatwave.[19]

It's dryer: The average annual rainfall in Yarra has declined by 100-200mm since 1950.[20]

- The millennium drought persisted from 1996 to 2010 across much of southern Australia, with Narrm Melbourne experiencing major water scarcity and strict restrictions on water use.[21]

Fires are more frequent and intense: In Victoria, the number of very high fire-risk days are increasing, and fires are becoming more intense. It is estimated that the number of days where there is a high fire risk in Narrm Melbourne will increase by 42% by the 2050's.[14]

- In 2019-2020, Australia experienced its catastrophic Black Summer of bushfires, with more than 24 million hectares burned, over 450 deaths as a result of the fires and smoke, and an estimated 3 billion animals killed or displaced.[22]
- In January 2020, Narrm Melbourne's air quality was the worst in the world due to smoke from bushfires.[23]

Weather is extreme and patterns are changing: Heavy rainfall events are becoming more frequent in Yarra, despite annual overall rainfall dropping**.**[14] Additionally, the climate emergency threatens to increase the frequency of thunderstorm asthma, which carries substantial health risks.[24]

- In 2016, Narrm Melbourne experienced the largest recorded epidemic thunderstorm asthma event, with an additional 3,365 respiratory-related emergency department presentations which led to ten deaths.[25]
- Record-breaking rain in Pakistan in 2022 led to at least 1,700 deaths, with 8 million people displaced.[14]

Mental well-being is impacted: mental health and well-being can be negatively impacted by climate-related anxiety and grief, as well as acute impacts to mental health of those experiencing extreme weather.

- Two thirds of young Australians report that climate concerns are having a negative impact on their mental health.[26]

Infectious diseases are exacerbated: a hotter and more unstable climate poses risks of increased proliferation of pathogenic diseases. There are many ways this occurs, including through an expansion of suitable climates for pathogen vectors such as insects and birds, and climate impacts such as heat increasing the reproduction rates of pathogen vectors like mosquitos.

- Research suggests there are over 1,000 ways in which the climate emergency increase risks from pathogenic diseases, with 58% of infectious diseases being aggravated by climate hazards.[27]

Who in our community is at greater risk from climate impacts?

Across Yarra, there is a spectrum of socio-economic advantage and disadvantage. While many Yarra residents experience relatively high socio-economic advantage, there is a

substantial portion of our community who experience significant disadvantage and face elevated risk from climate impacts. In our extensive consultations, we heard loud and clear that a major focus of Council should be on supporting those in the community facing the greatest risks. While we all face the same climate impacts, they affect at-risk communities more intensely and sooner than those whose incomes, abilities, residences, or other factors provide greater protection.

Communities at greater risk include:

- Community members who are experiencing or at risk of homelessness
    - People who are experiencing homelessness are acutely exposed to extreme weather. This, in combination with other factors such as social isolation, prejudice, or inadequate access to goods and services, can threaten health and wellbeing. Recent research led by The Guardian calculates the average age of death for a person who is experiencing homelessness as 44 years.[28] A notable factor in this disparity is the health impacts arising from exposure to extreme weather.
    - Yarra has the fourth highest rate of homelessness of any Victorian municipality, more than double the state average.[29]
    - “We get a number of clients who are homeless… they're particularly vulnerable to extreme weather and it can have long-term physical health ramifications for them.” Food relief organisation in Yarra
- Social housing residents
    - Community members in social housing can be at greater risk from climate impacts, particularly extreme heat or cold, due to the lack of investment in climate resilient and thermally comfortable infrastructure. Even where measures such as air conditioning are present, tenants’ incomes may limit their ability to use them. Substantial investment in increasing the climate readiness and thermal comfort of these buildings is urgently needed. These community members deserve to have the option to remain safely in their homes during extreme events, which requires investments to ensure thermal comfort and climate resilience.
    - 8% of Yarra’s population are in social housing, compared to just 2% for Greater Naarm Melbourne.[30]
    - “The impact that heatwaves were having on our young people who live in the [public housing] towers: their ability to be able to learn, their ability to be able to manage their emotions was really impacted because kids are just not able to sleep. The kids swelter and as a result they just don't sleep." - School principal in Yarra

- People who are newly arrived as refugees and seeking asylum, and culturally and linguistically diverse community members
    - Many community members in this group face barriers to preparing for and coping with climate impacts. Noting that this is a diverse group, with risk factors that do not apply uniformly, there are a range of factors which may compound exposure to climate impacts. These can include constrained financial resources, limited social connection, linguistic barriers, and an unfamiliarity with local processes, services, and climate.
    - 29% of Yarra residents were born overseas, with 4.1% reporting difficulty speaking English.[12]
    - “In my country we just have two seasons – winter and summer. Since I was young to maybe 10 years ago, but now I’m hearing about the changes and it’s very dry and not raining and too many animals dying. The animals don’t have food to eat. The government doesn’t look after the farmers and… we lose the trees and plants.” – Adult student in an English language class
- Aboriginal and Torres Strait Islander communities
    - In 2021, there were 512 Aboriginal and Torres Strait Islander community members living in Yarra.[31]
    - Due to the ongoing effects of colonisation, Aboriginal and Torres Strait Islander peoples are disproportionately affected by climate impacts, with threats to traditional practices, cultural knowledge, and the destruction of traditional lands. Many Aboriginal and Torres Strait Islander peoples have strong cultural connection to Country, and damage to natural environments can have a significant impact on mental, cultural and spiritual wellbeing.
    - Impacts of racial discrimination contribute to the structural and systemic inequalities experienced by Aboriginal and Torres Strait Islander peoples.
- People with disabilities, and those living with chronic health conditions
    - People with disabilities can be at greater risk of climate impacts, often sustaining higher rates of mortality during extreme weather events. This can be the result of several factors, including inaccessible emergency-related information, inadequate housing, or disrupted access to food, water, medication, and healthcare services. Additionally, extreme heat and rapid temperature changes can be a major risk for people with temperature-related health sensitivities.
    - In Yarra, 31% of the population has a long-term health condition, with 4% of the population needing assistance with daily activities due to disability.[32]

- “I live with an autoimmune disease (HIV) – whenever we get towards summer, my immune system starts to drop. I’m getting older too. It wears you down physically and mentally.” – Yarra community member

- Older adults, children, and young people
  - Older adults are particularly sensitive to temperature extremes and are more likely to have additional risk factors such as living alone, experiencing underlying health conditions, and having lower socioeconomic status. The climate emergency also threatens the physical, psychological, and emotional wellbeing of children and young people, particularly regarding long-term exposure to extreme weather during the development of their brains and bodies. Heatwaves are correlated with a heightened demand for ambulance services, with considerable increases for people under five, over 65, and those from areas with higher disadvantage.[33]
  - People aged 65 years or more make up ~12% of Yarra’s population, with ~3% being 80 years or older. Children under five make up 4% of our community, while those under 25 make up ~20%.[31]
  - “Many older people live in old houses that are draughty – we’re equally as vulnerable in many ways [as other at-risk cohorts]. I remember at the height of the heatwave not that long ago being unable to find funding for a pensioner who lived in her own home who had cancer and needed an air conditioner.” Older adult in Yarra
  - "I live in the old high rise [public housing]...When there are 2-3 consecutive hot days, children are really suffering. We go to the shopping centre to cool off. But we can’t go to the shops or library at night. ... The children can’t sleep, and then can’t focus at school." Yarra community member
- At-risk workers
  - Climate impacts are disproportionately experienced by workers in certain at-risk sectors. Notably, those who work outside, in environments with poor temperature control, or are exposed to situational extreme weather or environmental risks such as thunderstorm asthma. These can include construction workers, gardeners, manufacturing workers, paramedics, and delivery riders.
  - Of this cohort, delivery riders face heightened risk due to factors including the physical nature of the work, cycling in extreme weather, income being linked to productivity, a lack of places of refuge, and fewer financial resources to support adaptation. Additionally, delivery riders often lack protections which other workers receive, and are incentivised to work through extreme weather (due to surge pricing from increases in demand and decreases in worker supply).
  - In Victoria, there were 917 injuries among delivery riders over the past seven years.[34] Further, 73% reported being worried about being “seriously hurt or killed” at work.[35]

- “Delivery riders recognise bouts of bad weather as meaning a lower supply of riders, and therefore a good time to go out and work. It's only when wind or rain becomes really severe that people will temporarily wait for adverse weather to die down.” Delivery rider

Potential graphic element	Annotation/quote
Social housing tower or a child	“We know that the day after a hot night is going to be a tough day." - School principal in Yarra
Person of colour	“There's no fish! Used to find lots of mussels and now there’s none.” - Yarra community member
Older person	“There’s power cost, people won't want to pay for power, so we need to think about how we financially support people even when they do have cooling systems. I've been to many places where people leave the oven door open as their heating.” – Yarra community member
Veggie garden and/or gardener	“I used to have heaps of melons but now only a few, and very late (in the season). I used to share with friends, go to temple, but now I have nothing to donate." – Yarra community member "You don’t know when you can grow your own veggies – all the gardeners are having the same problem - not only me" – Yarra community member
Person standing outside a community centre	"Most clients either walk or take some form of public transport. So if the weather is isn't agreeable, we definitely see an impact or reduction in numbers of people that come." – Yarra Food relief service professional
Person sitting on the sidewalk or sleeping on a park bench	"People experiencing homelessness wouldn't know when it was going to be hot and it would be the last thing on their mind. By the time it's a thought it is too late... Need refrigeration for medication" – Social services professional
Groups of young people	“It’s more of an emotional impact…it’s distressing. At some point the effects of climate change are going to be irreversible.” (14 y.o)

Potential graphic element	Annotation/quote
Public housing tower	“Harvest Festival at Collingwood public housing estate cancelled today because of hot weather. Food was wasted from the cancelled event and an important day for the community was missed.” – Yarra community member
Community centre	“The first thing that occurred to me in terms of climate and how it is impacting our operations… flooding in Queensland and Victoria impacts our clients because everything got expensive, clients weren't able to afford to buy them, and we didn't have as much of a supply” – Food relief service professional
Food delivery rider on their bike riding in the street	“Delivery riders, especially of gig workers, are the most exposed workers in our society. Who else is outside as often? All it takes is going outside in a day of extreme weather to see countless riders waiting out rainstorms underneath the front of restaurants, or similarly, waiting in shade when it's too hot.” – Delivery rider
Older person	“I will not go outside when it’s too hot but when its ok weather I go out visiting. It affects social life.” – Yarra community member
Person on a balcony of an apartment	“We live in an apartment, so we need a dryer to dry our clothes in winter, and we need heating and air con a lot. Our electricity bill – everything keeps going up!” – Yarra community member
Single home	“I don’t use AC because it’s expensive. Big bill when I did use it” – Yarra community member
Flying fox hanging asleep in a tree	In 2019, more than 2,000 native flying foxes in Naarm Melbourne died during a heatwave. [36]
Tree or shrub	Extreme heat is killing our trees, shrubs, and grasses. 90-100% of the trees and shrubs planted in Australian capital cities could be at risk by 2050.[37]
Tram or railway track or road	Transport is interrupted when roads and railways melt and buckle in extreme heat.
Commercial shop front or shopkeeper	Victoria’s economy is predicted to lose $179 million by 2030 from heatwaves.[38] This decade, bushfires in Australia will cost the economy $17.2 billion.[39]

Potential graphic element	Annotation/quote
Someone eating	Drought and dryer seasons impact farming and reduces the availability of affordable, healthy food.
Sports field or someone jogging	Drought, and associated extreme heat, compacts our sporting fields, leading to an increase in injuries for players or training and game cancellations.
Tree or park or creek/river	Our parks and gardens dry out, reducing greenery and further exacerbate urban heat. Water quality in rivers and creeks worsens
Pregnant woman	Bushfire smoke increases the risk of pregnancy complications including high blood pressure, gestational diabetes, low birth weight and premature birth.[40] Smoke from the Australian bushfires of the 2019-20 summer caused an estimated 445 deaths and put more than 4,000 people in hospital.[41]
Ambulance	The smoke which blanketed Naarm Melbourne during the 2019-20 bushfire season provoked respiratory issues across the state, with Ambulance Victoria reporting increases of up to 51% in calls from people needing help for breathing problems.
Is here some way to visually represent bushland beyond Naarm Melbourne? Native animals	3 billion animals - mammals, birds, reptiles and frogs - were impacted by fires including 60,000 koalas during the 2019-20 mega-fires.[22]
Person	Climate anxiety - concern for the environmental, political, and health effects of climate change – is increasing across the community, with implications for health and wellbeing.
Council building or community hall	Costs of maintaining and repairing our homes, buildings and other infrastructure are increasing because of extreme weather.
Road	Critical council infrastructure including roads and drainage, is being damaged by more frequent and/or severe extreme weather, and state and federal assistance is falling short of what is required.

Potential graphic element	Annotation/quote
A home	We are experiencing higher insurance premiums. Average home insurance premiums have risen by 52% across Southern Australia in the decade between 2007-08 and 2018-19.[42]
A fire service responder	“As extreme events increase, so will the demands on full-time and volunteer emergency service workers and agencies. There will be requirements for larger numbers of staff and volunteers to be involved in emergency response activities for prolonged periods, at increased frequencies, and responding to more extreme events. This will result in greater strains on emergency management organisations, volunteers and communities.”[43]

The emission reduction challenge

Council is committed to responding to this crisis at the scale and urgency required. This means acting to rapidly reduce emissions through our operations and across the municipality. As a local government, Yarra must step up our crucial role in facilitating emission reductions in our homes, businesses, industry, and transport system, while ensuring that our community is safe, resilient, and thriving. Simultaneously, we must work to ensure that the benefits from the transition to a zero emissions society are shared equitably, and the costs are borne by those most responsible and most able to contribute.

To design programs and allocate resources with maximum impact, it is necessary to understand how and where our municipality's emissions are generated. Accounting for a municipality's emissions in a way that fairly reflects the responsibility for those emissions is not a straightforward task. In particular, there are challenges associated with capturing and quantifying the emissions embedded in goods and services consumed in Yarra but produced outside the jurisdiction. Though accounting for embedded emissions at a municipal level is challenging, Council has taken steps to expand our organisational emissions inventory to adequately reflect emissions embedded in the goods and services we consume, and we strive to continue in this direction.

Yarra's municipal emissions inventory focuses primarily on emissions derived from energy use, transport, and waste. We acknowledge that this approach significantly underplays the contribution of our residents, businesses and organisations to global heating, failing to capture much of the emissions intensive goods and services consumed in Yarra but produced in other regions or countries. At this municipal level, we will investigate opportunities to measure and reduce emissions related to goods and services consumed in the municipality, for example through construction and food-related emissions.

Council's organisational emissions

Council has made great strides in reducing our organisational emissions, most notably through sourcing 100% renewable electricity through the Melbourne Renewable Energy Project (MREP), investing in energy efficiency, and making progress towards electrifying our buildings and fleet. In 2012, Yarra was certified as Victoria's first carbon neutral council. Since this year, we have maintained net zero emissions by purchasing carbon offsets for any emissions we haven't been able to eliminate.

In 2022/23, the majority of our 7,070 $tC0_2e$ of emissions came from the use of fossil gas (27%) in our buildings, the transport fuels from our vehicles (9%), our contractors' vehicles (27%) and staff commuting (5%) (Figure 5). Beyond working towards reducing Council's direct emissions, we also have been improving our quantification of the significant 'indirect' emissions which are embodied in the products we buy. Methods to identify and quantify these indirect emissions will continue to improve, informing our future emissions reduction strategies.

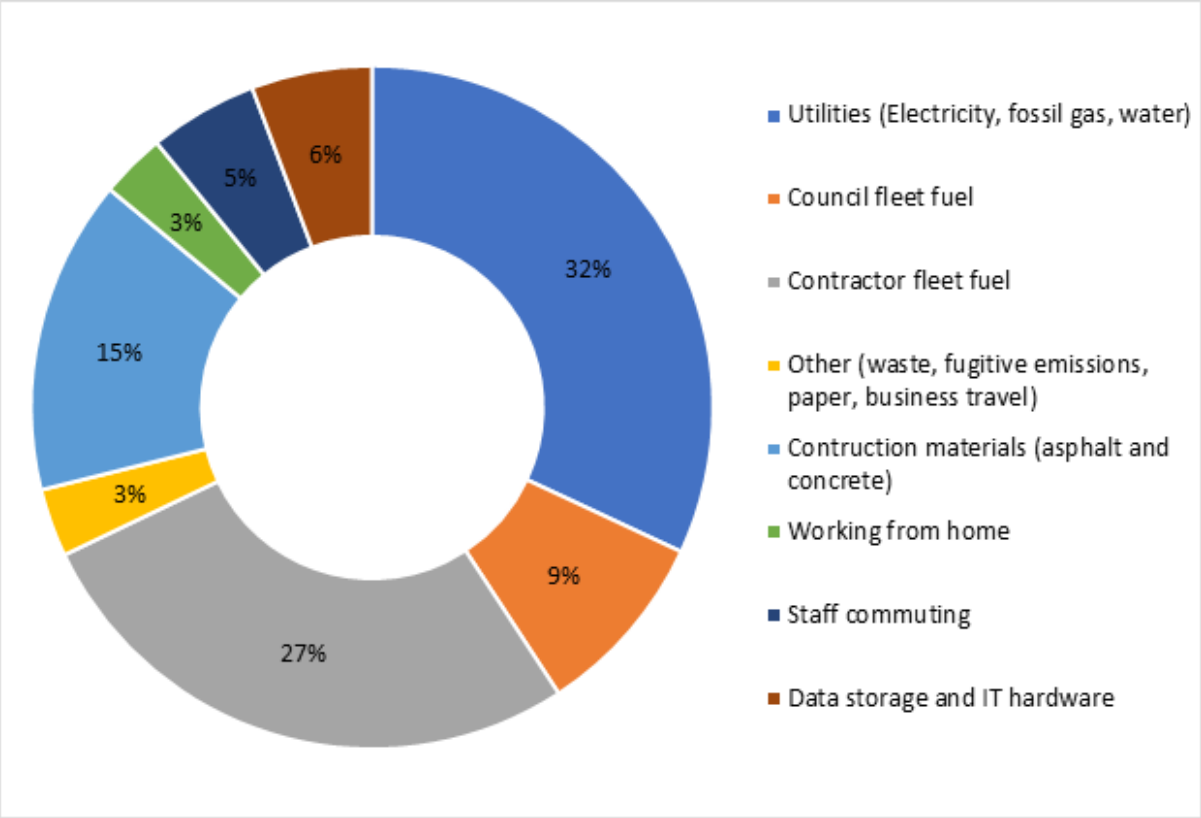


Figure 2: Yarra City Council's organisational greenhouse gas emissions profile 2022/23 (7,070tCO_2e)

Our municipality's emissions

While we have made significant progress in capturing the emissions deriving from our organisation's consumption of goods and services, at the municipal level the available data is more limited. This means the municipal inventory below is limited to emissions derived from energy use, transport, and waste.

In 2021/22 residents, organisations and industry within the City of Yarra produced approximately 1.1Mt$C0_2e$. The largest sources of community emissions (74%) are from

residential and commercial energy use (electricity and gas) as well as from transport (15%), with the remaining (11%) arising from waste, industrial processes, and refrigerants.

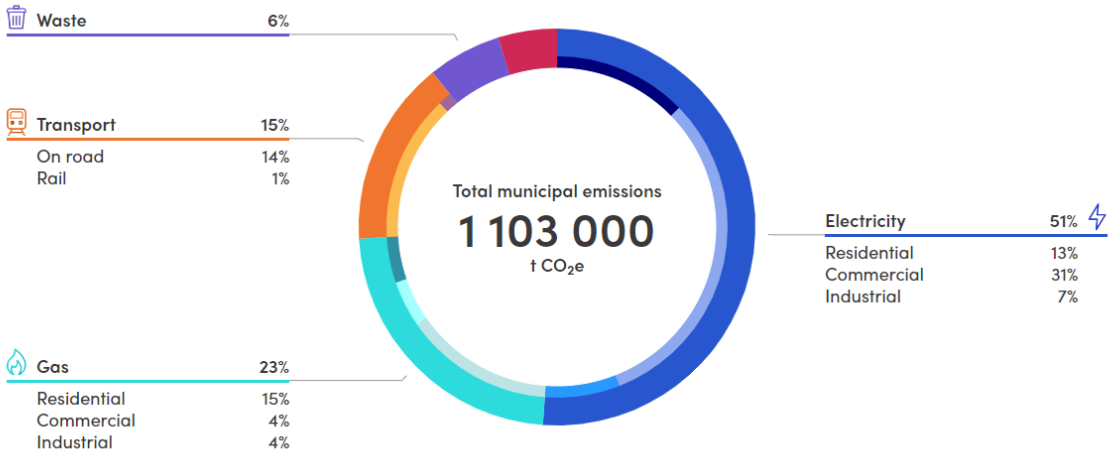


Figure 3 City of Yarra Municipal Emissions Profile 2021/22 – Snapshot Climate[44]

Just over half of Yarra's emissions are from electricity use – down significantly from just a few years earlier, primarily due to Victoria's electricity grid being increasingly powered by renewable energy. Updated renewable energy targets and significant investments in renewable energy generation are continuing to shift our electricity grid towards being powered by renewable energy. By 2035, we expect 95% of the electricity in Victoria's grid to derive from renewable energy. Fossil gas use however has remained stubbornly steady given Victoria's high reliance on gas which has historically been a cheap and abundant source of energy.

To reduce emissions, we must rapidly reduce energy consumption and accelerate the transition to all-electric homes, businesses, industry, and transport. Doing so will allow our communities energy needs to be fully met through renewable electricity generation and distribution, such that legacy fossil gas systems can be removed. This must be a major focus across the community, industry, and from all levels of government.

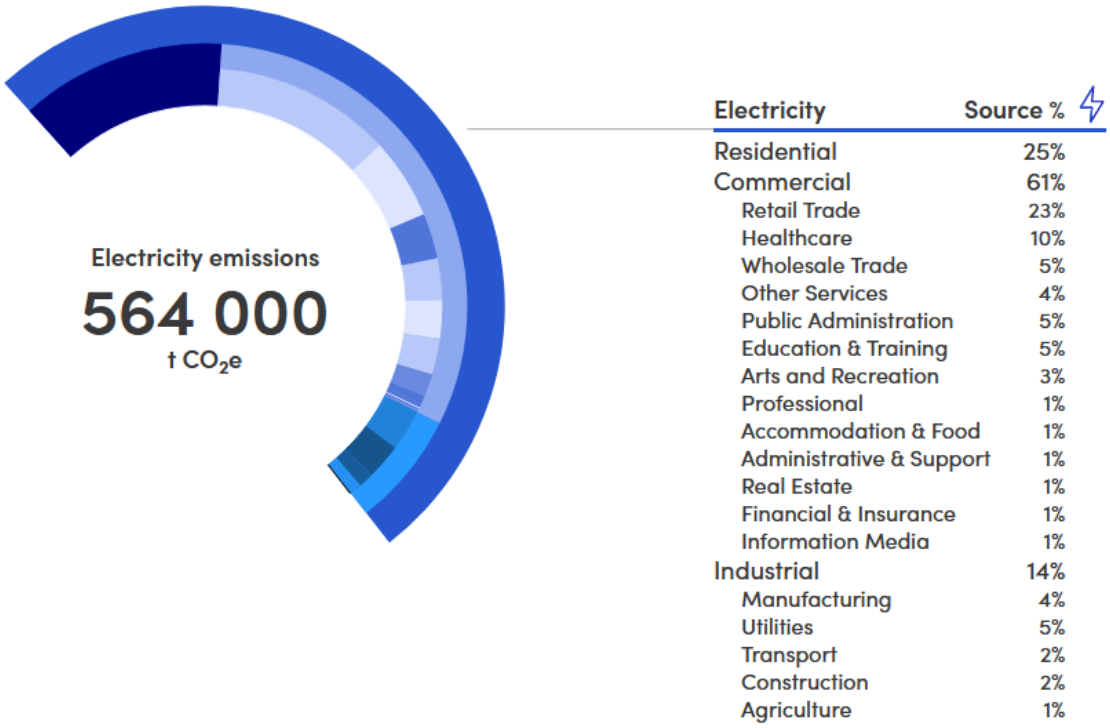


Figure 4: City of Yarra breakdown of electricity emissions by subsector 2021/22 (Snapshot Climate)

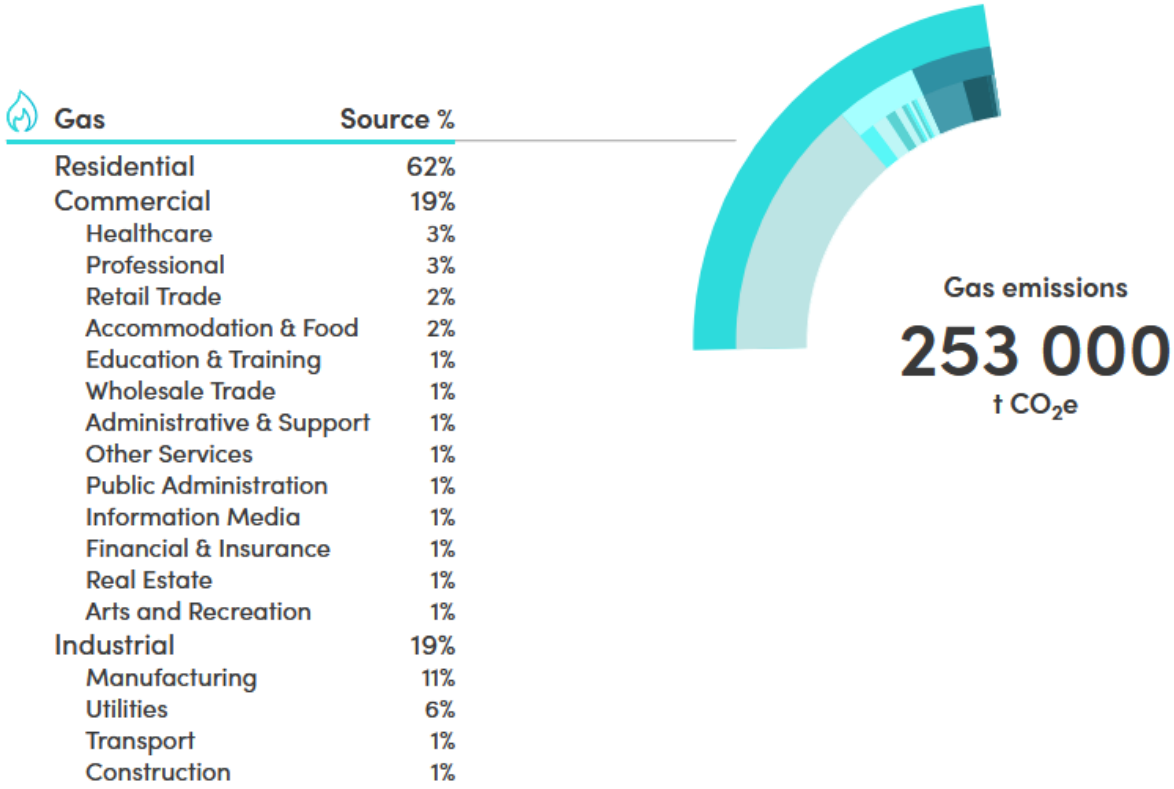


Figure 5: City of Yarra breakdown of fossil gas emissions by subsector 2021/22 (Snapshot Climate)

Targets that are ambitious and achievable

In 2023, the Climate Council released their analysis of the latest climate science which highlighted that Australia must achieve net zero emissions by 2035 for us to collectively limit global heating to 1.5°C.[45] This means the Australian Government's current plan to reach net zero by 2050, and Victoria's newly legislated target of reaching net zero by 2045, are not ambitious enough to safeguard our climate.

Australia has the technology, resources, and geography to drastically reduce our emissions, including through accelerating the transition to renewable energy, swiftly electrifying our infrastructure and transport, and shifting towards regenerative land management and agricultural practices. This transition holds the potential for a vast expansion of clean industries and jobs.

In 2020, Yarra City Council set an ambitious objective for the municipality to achieve net zero emissions by 2030. Given the current policy and economic conditions, and our learnings over the past four years, we have revised our objective in line with latest scientific findings: to reach net zero emissions as a municipality by 2035.

Impacts of animal agriculture

A major source of emissions which are not captured in the municipal emissions inventory are those associated with food consumed within Yarra. There is substantial evidence to suggest that the emissions associated with current dietary patterns - particularly the high and increasing rate of consumption of animal products - are likely to make it impossible to limit global heating to 1.5˚C, even if fossil fuel emissions were eliminated completely.[46] The emissions impacts from animal agriculture arise from deforestation for the expansion of pasture for ruminants, methane emissions from livestock, the refrigeration and transportation of products, as well as the vast amount of land and resources directed towards producing crops for livestock consumption.

Australia is now a global hotspot for deforestation, with widespread land clearing being a central driver of biodiversity loss and a key factor driving world-leading rates of mammal extinctions. Between 2016 and 2021, 2 million hectares (4.94 million acres) of bushland in Queensland has been cleared, including large swathes of habitat for koalas and other threatened species. It is estimated that more than 90% of this deforestation was to facilitate beef production.[47]

Deforestation also has significant implications for the availability of fresh water. Animal agriculture is responsible for around one-third of global freshwater consumption, and pollution associated with animal agriculture is a major source of freshwater contamination.[48]

It is widely understood that a shift to plant-based diets is a critical in responding to the climate emergency.

Much more than reducing emissions

Efforts to transition towards a zero emissions society provide a range of benefits, including improvements to health and wellbeing, economic opportunities, and the potential to minimise existing inequities and disadvantages.

Efficient, all-electric homes are more comfortable year-round and can save thousands each year on energy costs. Additionally, fossil gas appliances like heaters and stovetops emit a range of air pollutants. As a result, our indoor air is often more polluted than outdoor air, which can trigger and exacerbate respiratory conditions like asthma and allergies. This transition provides opportunities to improve health and comfort while reducing expenses, enabling our homes and community to be more resilient. Critically, we must collectively ensure that communities are empowered to make decisions about their lives, and that the benefits from this transition are shared across the community, particularly among those most exposed to climate impacts.

The transition also offers significant opportunities for Yarra's businesses and workforce to participate in decarbonisation, reduce energy costs, and become employers of choice. Yarra has the opportunity to enhance its reputation as the municipality where sustainable businesses are supported in their efforts to be renewable, circular and climate resilient.

Our climate emergency response is shaped by an understanding of our community, and where our emissions come from. We will work towards supporting those in our community most exposed to climate impacts. Simultaneously, in our efforts to limit the severity of global heating, we will prioritise eliminating the dominant sources of emissions at both organisational and municipal levels.

Yirramboi (Looking forward)

The following story was shared with primary school students by Wurundjeri elder Uncle Ian Hunter:

A long time ago, mum and dad black duck had a clutch of eggs, and they sat on them, and they all hatched. One of them happened to be a little girl duckling and the rest were boy ducklings. Mum and dad black duck called them together and they said 'Whatever you do don't swim below the waterfall. You can swim above the waterfall and when you can fly, you can fly over the waterfall, but never swim in the bottom of the waterfall.'

The boy ducklings, now ducks, flew away. But the little girl duckling stayed, and she flew right over the waterfall and then landed in the water below the waterfall. Coming out from under the water was a water rat. She wasn't afraid of him – her and the water rat became the best of friends. They dove under the water and swam on top of the water and had lots of fun together. Finally in the afternoon she thought, "I've got to go back to mum and dad." She took off out of the water, over the top of the waterfall and landed near mum and dad.

Time went by, and the duckling thought, "I need to build a nest because I need to lay some eggs too." She went into the water reeds and built her nest and laid on her eggs. The little black duck kept sitting on her eggs and when they hatched – what a surprise! They didn't look like the other ducklings. They had a bill like her. They had webbed feet like her. But they had no feathers and no wings. Instead they had beautiful waterproof fur. That's the story of how the platypus came about.[49]

The Wurundjeri people hold deep connection to and respect for the Birrarung, for Country, and for the community of living beings like the platypus. The health of these lands and waters underpin the health of Wurundjeri people, while the ecological harms done to Country are deeply felt.

This origin story of the platypus illustrates how beautiful things can come from embracing change, and from unexpected meetings. To restore and repair the harms done to Country over the past two decades, we must all embrace a new relationship to these lands and waters. This must be a joint effort, where we all accept the responsibility and collaborate towards a shared vision of the future.

What if we decided to build a better future?

It's 2030.

People told us and our community that the transformation we envisioned was impossible. They told us that it wasn't technically feasible. That it was happening too fast. That protecting the environment was a lost cause.

But together, we did it. With unprecedented collaboration and commitment across all levels of government, business, and the community, we transformed our community and our environment.

We reflected on our worldview - which saw nature as a resource for us to use – and understood that this needed to change. We were guided by the expertise of the Wurundjeri Woi Wurrung nation. From this understanding, we could no longer sit by idly while the environment was harmed.

Collectively, we mobilised to demand a rapid shift to zero emissions and a circular economy. It was a big task but eventually it became clear that this transition was good for workers, communities, and the environment. We swiftly set out to electrify our homes, workplaces, and infrastructure, and are increasingly powering them with abundant energy from the sun and wind. We started to show the world what a just transition to zero emissions and a circular economy could look like, with representative decision making, decent work opportunities and no one left behind. And we shared technology like advanced solar equitably across the community, so that those who previously struggled to pay their energy bills could cool and heat their homes. At this rate, it is looking like we will achieve our net zero by 2035 target ahead of schedule!

We also made our homes comfortable and resilient. We retrofitted our homes so that they are now thermally safe through extreme heat or cold. And we didn't just retrofit existing housing; new, efficient developments were built right across the municipality so that everybody has access to safe and affordable housing. With these investments, community members who were experiencing homelessness were finally able to shelter from extreme weather.

How we travel has also changed. The streets look different now, with protected bike lanes and shady trees, so that more people are cycling and walking. Major investments in public transport mean it is more accessible, affordable, and reliable. Those who drive do so in electric vehicles, which they recharge easily with cheap renewable energy. The health of our community has improved as indoor and outdoor air pollution is reduced, with rates of childhood asthma plummeting.

There are still extreme weather events locked in by past emissions, but when they happen now, the effect on our community is manageable. Our physical infrastructure is resilient, and so are our people and organisations. There are warning systems in place to alert us to extreme weather, and we make sure these messages reach everyone across the community. We are connected to each other and to the community services we rely on. Neighbourhood houses and other community service organisations are supported to continue their critical work of bolstering wellbeing and connection across our community.

Where before we were producing an enormous amount of waste, we now embed circular economy principles into everything we do. A sharing economy is flourishing, with shared ownership of things we only use every now and then. And a booming industry has emerged in the reuse, repair and resale of resources that would have been destined for landfill.

We all played a role in restoring our ecosystems, and now our biodiversity is flourishing. Threatened species have recovered. Native bird populations have expanded. Greenery and flowers are everywhere. Yarra Bend Park's grey-headed flying fox colony numbers have increased as our street trees provide ample nectar resources right through winter. Now our community has shelter from the sun under our growing tree canopy and more areas of open space. And best of all, the restored Birrarung welcomes swimmers and biodiversity alike.

Along with flourishing native plant and animal species, hundreds of food gardens have popped up all over the community. These gardens play a central role in connecting the community and ensuring that there will always be enough fresh produce to eat. Our food choices have become more considered too, and we eat more and more plant-based foods.

Council played a leadership role in many of these transitions, forming partnerships across the community and with other local governments. We continue to ensure that everyone has

a say in how our community functions. Children and young people, who once experienced the heaviest eco-anxiety, now feel empowered by the contributions they make to our society. Others who were once excluded now have a seat at the table and shape the decisions and projects affecting their lives.

The first step towards this future was taking the time to imagine the transformations that needed to happen.

Better together: The importance of government, industry, and community partnerships

Achieving these transformations requires a collective effort across all levels of government, business, and the community, in line with their level of influence, capacity and resources. Council is committed to partnerships that will help build resilience among those most in need, amplify climate action, and use resources wisely. To facilitate effective partnerships, and support the broader climate emergency movement, Council will collect and actively share information and report the results of its climate emergency work and investments.

The role of the Federal Government

In Australia, the Federal Government has the greatest opportunity, and legislative powers, to tackle the climate emergency on a systemic level, and build a climate-proof economy to keep us thriving. As of 2024, our federal targets and action are not commensurate with the level of threat posed by the climate emergency.

Australia is a signatory to the global Paris Agreement, which seeks to limit global temperature increase to below 2 degrees Celsius, while pursuing efforts to limit the increase to 1.5 degrees. Despite this, our current Federal Government emissions reduction targets - 43% below 2005 levels by 2030 and net zero by 2050 – fall short of meeting the Paris Agreement.[50]

Australia has a long history of supporting the fossil fuel industry - an unsustainable position in a climate-damaged world. At the 2023 UN Climate Change Conference (COP 28), Australia committed to phasing out offshore financing and support for coal, oil and gas within

12 months. However, the Federal Government continues to provide subsidies to the local fossil fuel industry and to approve new fossil fuel projects in Australia.[51]

The Federal Government has produced a National Climate Resilience and Adaptation Strategy, along with a National Health and Climate Strategy to help anticipate, manage, and adapt to climate change.

Through the Nature Positive Plan, the Federal Government has a goal of zero new extinctions. It has committed to protect 30% of Australia's land and seas by 2030, and to create a nature repair market to leverage private investment to help halt environmental destruction and regenerate nature.

The Federal Government has also established a Circular Economy Ministerial Advisory Group to guide decisions and investments on Australia's transition to a circular economy. However, no formal strategy, policy or plan has been released at the time of this plan's development.

The Federal Government must significantly and rapidly strengthen its targets and climate response to support a safe climate and Yarra's climate ambitions. Council will use all available opportunities to positively influence the Federal Government's response to the climate emergency which must reflect the scale and speed that the crisis requires.

The role of the Victorian Government

The Victorian Climate Change Act 2017 outlines the State's climate response. Victoria has taken a proactive approach to climate action, surpassing its first emissions reduction target to reduce emissions 15-20% below 2005 levels by 2020, with a reduction of almost 30%. Subsequently, the net zero target was brought forward to 2045, along with a 95% renewable energy target for 2035.[52] The Victorian Government has mandated that all new developments be all-electric, springing forward progress towards electrifying our energy consumption. However, support remains for the fossil fuel sector in the State, with a ban on onshore gas exploration being lifted in 2020.[53]

The Victorian Government's plan for a circular economy has a strong focus on recycling, but misses opportunities presented by a fully circular approach. Notable initiatives include the four-stream waste and recycling system for households (implemented by Council), the Container Deposit Scheme, investment in innovative waste management solutions, and a State-wide ban on single-use plastics.[54]

Alongside its emissions reduction work, the Victorian Government is also promoting climate resilience and adaptation. It has developed a set of seven sectoral Adaptation Action Plans, covering the built environment, education and training, health and human services, natural environment, primary production, transport, and water cycle. In addition, the Victorian Government has worked with councils and communities to develop Regional Climate Change Adaptation Strategies. These five-year, practical strategies address the unique challenges and opportunities the climate emergency poses to different regions. Yarra is covered by the Greater Melbourne Regional Climate Change Adaptation Strategy.

The intersection between climate change, public health, and emergency management has been recognised at the state level. Emergency Management Victoria's vision and impact statement identifies the climate emergency as a primary factor impacting Victoria's risk profile. The Strategic Roadmap for Emergency Management in Victoria 2022–28 sets out a pathway to strengthen emergency management responses, alongside adaptation efforts and investment in reducing the exposure of state-wide infrastructure and systems to climate impacts.[55] The Victorian Public Health and Wellbeing Plan 2023–2027 identifies responding to the impacts of the climate emergency on health as a major priority and sets out strategies to respond.[56]

While there are many positive elements to Victoria's climate response, further strengthening of the targets, funding, and approach is needed to support a safe climate and Yarra's climate ambitions.

The role of local government

Local governments have legislative obligations under the Victorian Local Government Act 2020 and Climate Change Act 2017.

The Local Government Act requires Council promote the economic, social, and environmental sustainability of the municipal district, including mitigation and planning for climate change risks. We are also required to prioritise delivering the best outcomes for our community, including for future generations.

The Climate Change Act sets out objectives for our decision-making, including reducing greenhouse gas emissions, building resilience to climate change, managing ecosystems, and supporting vulnerable communities to promote social justice and intergenerational equity. The Climate Change Act also requires that we consider climate change in our Municipal Public Health and Wellbeing Plan.

The role of business and industry

Business and industry are accountable for approximately half of the emissions in our municipality and have a significant role to play in the local climate emergency response. While many local businesses recognise the implications of the climate emergency, there are significant barriers to action, including a lack of time, money, resources, or knowledge. This is especially true for small businesses whose resourcing limitations often challenge their capacity to understand and navigate decisions around reducing emissions and building climate resilience. Additionally, government policy is not strong enough to drive the level of action required.

Large businesses with substantial resources should be setting and working towards ambitious targets in line with the Paris Agreement. Community pressure to this end is likely to increase from 2024/2025, when financial institutions and large listed companies will need to commence mandatory climate reporting in Australia.[57]

Some large businesses with a presence in Yarra have committed to climate-related targets and begun reducing emissions. While several businesses have announced their target to reach net zero by 2050 or earlier, others are aiming to procure 100% renewable electricity by 2030 or earlier. While positive, these targets need to be accelerated to support Council and community's climate ambitions.

Alongside emissions reduction efforts, business and industry must increasingly focus on managing climate risks and understanding the opportunities to deliver climate-positive goods and services.

The role of community

For over a decade, our community has made clear its desire for Yarra to be a climate leader. We are fortunate to host a long list of passionate, knowledgeable, and active people, groups, clubs, and community organisations who play important roles in reducing emissions, Caring for Country, and increasing community resilience.

We recognise the critical role of community groups and organisations in fostering sustainability and social justice across Yarra. Whether it is the neighbourhood houses building more sustainable, connected and resilient communities, or our community health organisations driving better health outcomes for our diverse communities, our success in achieving the seven transformations will be underpinned by collaborative work across the community sector.

Purposeful connection and collaboration at different scales - involving neighbours, groups, organisations and government - forms the bedrock of a resilient, engaged and trusting community. When communities are heard and actively involved in issues that impact their lives, and are co-creating solutions, the outcomes are often improved. Additionally, deeper connection between community members, and with local organisations such as neighbourhood houses, can bolster a sense of solidarity. This solidarity and care is essential to improving quality of life and ensuring that mutual aid and support prevail as climate impacts accelerate.

In a world that’s already impacted by climate change, it’s going to take all of us to reach our vision of Yirramboi (the future). We all have a role to play in bringing the transformations to life. Of course, no one person or organisation can do it all. Instead, we can each play to our strengths, work together, raise our voices, support each other, grow our community connections and, ultimately, accelerate our collective impact.

Step into the future: stories looking forward

Deng arrived at the neighbourhood house, arms laden with zucchinis he was donating for local food relief. The zucchini were dripping, as was he. “Is it that hot already?” gasped Marjie. “No”, laughed Deng, “I just walked through the pop-up splash park – kids are having such a great time! I bumped into my friend there, cooling down before a hot day on the bike. He said might pop by later on.”

Deng put the zucchinis on the bench and picked up a knife to help Marjie slice up the mountain of veggies. Many locals donated or swapped their excess produce, and donated their time, too, while other locals relied upon the meals for their own nutrition – not to mention the company and connection. Like all neighbourhood houses, this place buzzed with life, and it was a lifeline to many.

Another local wandered past and emptied a bucket of food scraps into the communal compost bin and grabbed a Council map of the free, cool spaces accessible to everyone before moving off. Its removal exposed one last flyer translated into Oromo, flapping on the notice board. It was two years old, from the time when Council had supported locals in public housing to advocate for more thermally safe homes. The Youth Advocacy Group had joined in the campaign, adding a call for more cool, natural spaces on the estates. Now residents could take refuge from heatwaves in their own homes, but also enjoy the green space and mist just at the bottom of their buildings when their children needed a run around.

As Deng finished putting the veggies in a big pot, the enticing smell of onions and garlic spreading, the manager came around the corner with the Mayor. They were discussing the expansion of the community leaders program. For the last four years, Council had provided funding and resources to train up locals to be community leaders that could support social connectivity and resilience for those at greater risk from climate impacts. With more climate refugees being welcomed into the area, from different language backgrounds, there was always need for more community leaders in this successful program.

Nehemiah wandered over to Romy with his lunch, smiling. She moved over to make space on her small picnic rug - there had been a deluge the day before, but today the grass around them was almost glowing green. "Do you remember how flooded this used to get?" Nehemiah asked as he plonked himself down with barely a squelch of the ground. Since the nearby carparks had been converted to a permeable surface, with more trees planted for shade, the risk of flash flooding had been greatly reduced. He had been seeking a compliment from Romy because it was his team that removed the asphalt, but he knew that she deserved the praise equally, as it was her team that then converted some of that space into vegetation which eagerly soaked up the rainfall. In fact, it was this project that had brought them, and their teams, together.

Every job was a climate job at Council, and it felt so rewarding to be part of something so much bigger - and so much more collaborative, too! Another colleague rode past. It was a pleasure cycling beneath the canopy, and much cooler than on the roads. Since the Cool Routes project was completed, getting around Yarra a pleasure, even in the warmer months. They stopped at one of the many sheltered spots along the way to drink from a water fountain and take a seat. As they watched dozens of people go past them, they could see that their work in Strategic Transport was making a difference to the people in this City.

A child ran past them, gleefully chasing butterflies but then stopped still to watch as the butterfly landed on a Sticky Everlasting. She took her shoes off and let her soft bare feet rest on the native violets that covered the earth. The childcare educator walked over with a small group of children to see what she was looking at. “A Yellow Admiral Butterfly!” one child exclaimed. The Council childcare educator felt a rush of emotions, remembering how she had supported her children and their families to advocate to bring nature back to this park near their centre. The children had been involved in the design and planting stages, and she knew that there was more hope now than ever – this generation were so deeply connected to the land, that they would always care for it.

Collecting his cloth shopping bags, Leroy heads out his apartment door to do his weekly shop. On the way to the lift, he stops at Abel’s door, knocks and calls out “Hey Abel, it’s Leroy. I’m heading to the shops. Do you need anything?”.

Shuffling sounds come from inside before Abel’s head pops out. “I’m short on oat milk. I would appreciate you grabbing me some. Come in and I’ll give you some money.”

“Don’t worry about it, you more than pay for oat milk with those home-grown veggies you keep dropping at my door. Lucky I know how to cook hey?” Abel smiles and Leroy turns for the lift.

As Leroy steps out of the building, the sweet and earthy smells of nature enfold him. This continues to surprise him. Moving from regional Victoria a few years ago, he expected hard, hot surfaces that would make him homesick. Instead, he was surprised and delighted to see how green the city had become. He immediately felt at home and connected to the Country, which is gradually being regenerated.

Coming home, Leroy again stops at Abel’s door to deliver the oat milk. “It’s pretty hot out there” says Leroy “how are you coping in here?”

“I haven’t even turned the air con on yet. This is a good apartment, especially when you put the blinds down early. Cool, even when it’s hot outside” replies Abel.

Taking the oat milk from Leroy’s hand, he replaces it with another laden bag. “I’ve been down the community garden” he says with a wink and a smile.

At the shops, Trish loads up her shopping cart, with the help of her 4-year-old, Archie. She recalls how stressed shopping used to make her environmentally conscious mother. Every purchase was a big decision. Was it designed in a way that it can be repaired and reused and then recycled at its end of life? How much packaging did it have? Would it end up in landfill? Was it ethically produced?

Nowadays, she doesn’t battle those decisions. Packaging and product laws means she can confidently buy locally produced products that she and Archie need without concern. Polluting plastic and unnecessary packaging just don’t exist. Regenerative style farming and local food production and distribution is becoming the norm, and like the much older days, things are made to last, be shared, repaired, and recycled when no one can use them anymore.

Riding his bike home, Archie points from his seat and delightedly yells “Bullum Bullum” at a butterfly landing to drink nectar from a blossom. Trish smiles and thinks how lucky she is live in a beautiful city where she can ride home under the shade trees and arrive home to her small but lush garden.

Turning off the path, she rides down the middle of the road, feeling safe on the one-way street. There were only a handful of EVs in sight but all along the street and side verges, there are pockets of people. Some gardening, some on their phone, some chatting, people walking, and other cyclists. A couple of kids were investigating the insect life near the swales that carried and purified stormwater. Trish and Archie shout hello to a neighbour as they roll by.

Connie stepped off the tram and walked towards the Birrarung. Even after a few years as a Councillor, she still loved the Council meetings that were held on Country by the Birrarung. It was a reminder of all the great work they’d done, in collaboration with other councils, the State Government, Wurundjeri Traditional Owners and Custodians, and a bunch of community groups.

Right up and down the length of the river, it was cleaner than it had been since colonisation. So clean that on a hot summer day, it was as full of swimmers as any local pool. Sections of the

riverbank has been specially designed so the swimmers could enjoy this special place without eroding the bank or damaging the ecosystem.

Below the surface, she knew the eels were breeding, and the fish were swimming. And above that, birds were dipping themselves into the water to cool off. She could hear the thrum of insects and noticed bats asleep high up the trees. She was proud of the way the bushland that lined the Birrarung also extended out, into nearby streets and lanes. It really was becoming like the Kakadu of the south, and a rich opportunity for everyone to learn from Wurundjeri knowledge and culture.

As she walked, Connie considered the first thing on the meeting agenda, a discussion around community health services. This was always a challenging topic as the needs of the Yarra community were diverse. During discussions and decisions like this, she was often thankful for the hard work of those that had come before her. Her generation had inherited housing stock and a municipality that really was taking steps to being climate resilient and zero emissions. A community that was connected, caring, and passionate. Without these things, she knew they'd be facing a full blown and completely unmanageable community health crisis, not just a discussion of how best to invest resources to meet community needs.

It's Monday morning and Xuan is off to work. After shouting goodbye to their two teenage kids, they step into their much-loved electric van, ready for a day of installing highly efficient solar panels.

Going to work these days was a breeze. Yes, the roads were smaller but that didn't matter because there were less cars on the road. And because all homes and businesses are electric and powered by renewable energy, they hardly had to travel outside of Yarra to get enough clients.

First stop was to pick up Beth, their apprentice. 10 minutes later, they were at their first job. They would be pulling down and replacing a very old, ineffective solar system on the local cafe. Xuan loved these jobs. They knew the shop owner would see a quick financial return on this investment, and with this new solar system, could continue to provide sustainably-produced and delicious plant-based sandwiches, cakes, and drinks.

After installing the new system, Xuan and Beth loaded the old solar system back into the van. Grabbing an ice cream for the road, they headed to Merri-Merri Solar Cycle, a local business that recycled old solar systems. It felt good to feed the local circular economy, certainly better than the guilt Xuan used to feel disposing of solar panels some years ago.

Next stop, lunch. They were close to their favourite café so they dropped in and then walked to nearby pocket park to eat. This was one of their regular lunch spots. It had everything, nice seats, good outlook, a public toilet, easy access to delicious plant-based food, and Beth's favourite, the yarning circle space.

There were often interesting people gathered here - discussing ideas, swapping cultures, and eating together. Lunching here, Beth felt her world expand. She learned new words, met people she now considered friends, and had even gathered a new client or two.

Making progress visible

In Yarra's Climate Emergency Plan 2024-2030, we will transparently monitor and report on our progress towards the seven transformations, and on our delivery of actions in the action plans. We are committed to evaluating our work, and sharing what we learn. By making our progress visible and sharing our learnings widely, we intend to demonstrate that transformation is possible, acknowledge barriers and limitations, and spur climate action across the community, the corporate sector, and across other municipalities and levels of government.

Progress monitoring and reporting

We will prove our commitment to transformation by transparently tracking and reporting on progress against the action plan. This includes demonstrating how we are changing our processes to centre the climate emergency, including in our asset management, operations, service delivery and financial decision making. We will publicly report our progress against the Plan through an annual Climate Emergency Plan report, in addition to our ongoing Quarterly Community Reports.

Outcomes monitoring and reporting

Our community has shared the changes they want to see in an equitable, climate-resilient and zero emissions future. The seven transformations describe the outcomes that will lead us to Yirramboi (the future), and we are committed to delivering on them. Each of the transformations include indicators and targets which will be used to measure our progress towards these outcomes.

We will establish a means to provide accessible information to show Yarra's transformation so we can be held accountable for our progress, celebrate success, learn from what has worked well and inform decision-making.

Evaluation

The Plan will be evaluated, with evaluation reports published at the three-year mark and upon completion. The mid-term evaluation will inform any revisions to the Plan, and the development of the next three-year action plan. Agreeing when and what we will be evaluating is part of how we are demonstrating our commitment to taking bold action on the

climate emergency. It means we are dedicated to learning along the way, improving on our efforts, and sharing our learnings so others can build on our successes.

The mid-term evaluation will assess our progress towards Yirramboi through the key transformations, objectives, and actions. This evaluation will inform the next three years of delivery against the Plan, and the development of the next action plan. It will consider:

- Are we progressing as planned towards the transformations and objectives through implementation of the action plan?
- Do we require any revisions to the transformations, objectives, indicators, or actions to achieve the future we want?

Additionally, at the mid-term evaluation we will assess how well we are implementing the Plan in alignment with the five key perspectives (see Introduction). The evaluation will consider:

- Is the delivery of the Plan appropriately aligning with the key perspectives?
- Are there opportunities to further integrate the key perspectives in the subsequent action plan?
- Do we require any revisions to the key perspectives?

At the mid-term evaluation, we will develop a final evaluation approach and key evaluation questions for use at the end of the Plan.

Transformation 1: In Yarra every choice we make and every action we take responds to the climate emergency

Ambition

Acting on the climate emergency requires that we change the way we think, make decisions, and prioritise action. We must embed proactive climate responses in the ways we govern, live our lives, and conduct our work. Every choice we make today and into the future will have an impact; this is true for Council and the community.

Our community has plenty of opportunities to consider the climate emergency in the decisions they make. For example, people can act on the climate emergency by choosing to use active and public transport, consume resources consciously, shift their banking and superannuation away from fossil fuel investments, and increase plant-based eating.

For Council, consideration of the climate emergency must be embedded into all decision-making, so our assets, services, operations, and policies actively reduce emissions and build resilience against climate impacts. Acknowledging the scale of this crisis, Council is committed to making every job a climate job, meaning that each staff member will play a key role in shaping our climate response.

This new approach - where the climate emergency is considered in everything Council and community does - requires relevant, timely and accurate data so we can make informed choices towards the future we want. This data will inform important decisions like our financial management, how we allocate resources, invest in assets, or refine our service provision. Making this data publicly available will assist community members and groups in making climate-informed decisions.

To survive, adapt and thrive in our rapidly changing world, we must also learn from the Traditional Owners of the land Yarra occupies, the Wurundjeri Woi Wurrung nation. We are collectively responsible for the health of Country and the wellbeing and prosperity of future generations.

Making choices that consider climate implications, and investing in solutions now, will prevent considerable future harm and costs. Our individual and collective choices to reduce emissions and build resilience will create a more sustainable and just Yarra for everyone.

Objectives

1.1 Our individual and collective choices and behaviours reduce emissions, conserve resources, and build climate resilience

While addressing the climate emergency requires systemic change, individual choices matter in reducing emissions, protecting biodiversity, and creating a climate-adapted future. Individuals and groups can make choices to use active and public transport, reduce food waste, move our banking and superannuation away from fossil fuel investments, and shift to plant-based eating.

Those with the means can also invest in adaptation and build their resilience by doing things like installing double-glazing, planting shade trees, or putting in a water tank; even choosing to learn about climate change helps prepare for the future.

1.2 Every Council decision and action responds to climate emergency

Council must demonstrate leadership in reducing Yarra's emissions and building a climate resilient future. Our existing processes need to further embed climate considerations, and we will do so by ensuring that every role and member of staff at Council considers the climate emergency in the work they do. Knowing the climate emergency is a significant risk to the financial viability of local government, our risk and financial management processes must actively plan for and, where possible, minimise future costs and climate impacts.

Indicators and targets

Indicators	2030 target
Annual percentage of participants in Council climate emergency engagements who then take steps to reduce household emissions (Social Impact Tool)	75%

Indicators	2030 target
Uptake of active and public transport, reported every three years	In accordance with the Transport Strategy: • 20% increase in total number of bicycle and scooter trips by 2027 • 40% increase in total number of bicycle and scooter trips by 2032 • 30% increase in commuters walking, cycling or scooting to work by 2026 • 40% increase in commuters walking, cycling or scooting to work by 2032 • 35% increase in commuters travelling to work by public transport to work by 2026 • 40% increase in commuters travelling to work by public transport by 2032 • 25% increase in commuters travelling to work by active transport by 2030
Annual volume of rubbish produced per capita	15% reduction on baseline
Annual percentage waste diverted from landfill	80%
Annual food waste per capita	50% reduction on baseline
Annual recycling contamination rates	5% reduction
Annual progress against Council's operational and strategic climate risks reported to Audit and Risk Committee	N/A
Council progress on Climate Emergency Plan actions, reported in the Quarterly Community Report	N/A

Transformation 2: In Yarra, community members at greater risk from climate impacts are connected, supported, and empowered to build resilience

Ambition

The diversity of ages, abilities, housing status, health literacy, and cultural backgrounds in Yarra means that climate change is experienced in different ways across our community. The climate emergency highlights and exacerbates existing social injustices and inequalities.

For some community members, the experience of extreme weather is mitigated by durable, thermally comfortable housing, and leafy, green streets. Others are more exposed to the hazards of progressively worsening climatic conditions due to existing vulnerabilities, challenges and inequities. This may include community members experiencing isolation, without adequate housing or income, or who have additional accessibility needs, work in unsafe conditions, or are experiencing marginalisation and exclusion from decision making.

Among these community members - and for the community more broadly - there is a need to build collective climate resilience and empower them to shape what this looks like. Climate resilience can be understood as the ability to avoid, anticipate, absorb, adapt to, recover from and transform in response to climatic shocks and stresses, so as to mitigate the underlying drivers of risk while continuing to perform their essential functions.

Our community's ability to prepare for, respond to, and recover from extreme weather is shaped by our connectedness to each other and our access to information, resources, and services. The network of services which support our community - delivered by Council and a wide range of community organisations - are critical to resilience in the face of worsening climate impacts. Council needs to invest in building our operational and social infrastructure to deliver when it is most needed, while empowering communities to generate their own responses to the climate emergency.

People are not inherently vulnerable; different levels of vulnerability are created by our economic and social structures and systems, resulting in greater levels of risk for some. We

need to use our platform to advocate for changes to these systems, such that people are not disadvantaged or marginalised in ways that put them at risk. Our interconnectedness is key to climate resilience.

Objectives

2.1 Understand and support the diverse needs of our community to bolster their climate resilience

There is great diversity in the ways in which our community is at-risk from and resilient to climate impacts. People who are resilient to some hazards may be at risk from others, due to characteristics like language(s) spoken, ability, housing status, employment type, and age. We acknowledge that there are community members who are currently, or are likely to become over time, significantly exposed to climate risk. We know these people, and the nature of the risks they face, will change as the climate emergency progresses. Further, we recognise that identified strategies for supporting and empowering people and communities who are at risk will need to evolve in response to the changing context, and through engagement with community members.

2.2 Council works collaboratively with community organisations that service those at greater risk from climate impacts

Council recognises the critical role of trusted community organisations such as neighbourhood houses, Aboriginal community-led organisations, and community health organisations, in building the social infrastructure that underpins a climate resilient Yarra. Through strategic partnerships and support mechanisms, Council aims to assist Yarra's diverse community organisations to integrate climate resilience into their own operations, and increase preparedness and adaptivity among the communities which they support.

2.3 Climate resilience is embedded across Council services

We envision a Yarra where community members, particularly those most exposed to climate impacts, are prepared for, connected during, and supported to recover from chronic and extreme weather events. Council will act to embed climate resilience considerations across our assets and services, such that the services community rely on, and which underpin their resilience, are not disrupted by climate change.

2.4 Council advocates for policies and programs which facilitate climate resilience among community members at greater risk

Ensuring all community members are safe in the face of worsening climate impacts will require significant investment, by industry and all levels of government, in the physical and social infrastructure across our community. Further, systemic inequities and marginalisation from decision-making must be addressed to ensure existing disadvantages are not exacerbated by climate impacts. We will use our platform to advocate for policy interventions which improve climate resilience across the community.

Indicators and targets

Indicators	2030 target
Annual climate-related disruptions to critical Council services in excess of service-level standards	No disruptions outside of the service-level standard to critical Council services due to the physical and transition impacts of climate change
Number of Community Service Organisations (including neighbourhood houses and community health organisations) which have implemented climate resilience planning annually	All partner Community Service Organisations have developed and implemented climate resilience planning
Annual number of at-risk community members indicating confidence preparing for and coping with climate impacts	All
Annual number of at-risk community members indicating they have community members or organisations they can rely on for support during emergencies	All
Frequency with which Council uses bicultural workers/ interpreters to ensure information is available regarding climate impacts. Availability and comprehensibility of translated material, assessed annually	Interpreters and/or bi-cultural workers are used in all in-person interactions with multicultural communities about climate impacts. Written translations are available for all climate impact information, with translations reviewed for accuracy and comprehensibility.

Indicators	2030 target
Accessibility of climate-related communications and resources, assessed annually	Digital and hard copy information is always available, particularly at known places of low digital access (e.g. public housing estates). Hard copy information is always available at libraries and neighbourhood houses.
Annual dissemination of vouchers to community members experiencing homelessness to access pools and showers, cool places, and groceries.	Vouchers (for leisure centres, cool places, and/or groceries) are available during all periods of extreme weather to community members experiencing homelessness
Number of cool places available to community members experiencing homelessness during periods of extreme heat	20 cool places available to community members experiencing homelessness during periods of extreme heat
Reasonable efforts made to ensure all community members experiencing homelessness are aware of which cool places are available during periods of extreme heat	Information on cool places is shared in a coordinated effort through our networks of service providers
Annual number of people seeking food relief and the capacity of food agencies to meet this demand	Surveys (or other mechanisms) undertaken regularly to determine demand for food relief in Yarra, and food agencies capacity to meet this demand
Annual number of businesses providing water and cool spaces to delivery riders during periods of extreme heat	All businesses which deliver food through food delivery services provide water and cool spaces (where feasible) to delivery riders
Annual submissions to government inquires related to the climate resilience of Yarra community members	Yarra makes a submission to all relevant government inquires (where feasible) advocating for resilience on behalf of community members at greatest risk of climate impacts
Annual number of at-risk residents engaged through Yarra home and support services, who have undertaken emergency preparedness planning	All at-risk residents engaged through Yarra home and support services have undertaken emergency preparedness planning

Transformation 3: Yarra is active, empowered and raising our voice together for a stronger climate emergency response

Ambition

We are on the precipice of climate and ecological collapse. Each year is bringing worsening storms, frequent floods, devastating bushfires, and unbearable prolonged heat. The impacts on our community are intensifying, including on people's mental and physical health, homes, wellbeing and quality of life. The landscapes and wildlife we cherish are also suffering. The natural ecosystems which underpin all life are at risk of collapse due to the scale and speed of climatic changes, and the consequent extreme weather events, as well as land clearing and habitat loss.

Given the unprecedented challenge that the climate emergency poses, and the magnitude of the response required, we cannot respond to, nor solve the climate emergency alone. It is imperative that we join with others to advocate for stronger climate policies, targets and actions, and an equitable future for all.

Given these unprecedented challenges, it's increasingly clear that bold ambition and systemic change is required. Changes of this magnitude will not occur through small actions in our day-to-day lives – though these are important – nor through one organisation or one community sector acting alone. These systemic changes will be the result of thousands of us locally, and millions globally, joining together to demand, and act towards, dramatic change.

We envision a Yarra community equipped with the civic knowledge and advocacy skills to participate in a movement of people demanding stronger climate policies, targets, and actions. Alongside this, we see Council and a network of other local governments, organisations, alliances and associations, and community groups, joining this chorus and similarly demanding stronger climate policies, targets and actions. Through coming together around a shared vision and a strategic approach, we can seize this pivotal moment to change course and create a just and climate-safe future.

Objectives

3.1 Our community is actively and consistently leading and participating in collective climate action

Our community wants strong action on the climate emergency. Council has a significant role in bringing our community together, and building their capacity to lead and participate in collective climate action, to effectively advocate for change. We need everyone in our community and across Council to understand the urgency of the climate crisis, recognise that we will not all be impacted in the same ways, understand the opportunities for action, and feel empowered to contribute to, and demand, the future we all want.

3.2 Council, community, and other partners are advocating on climate emergency issues together

As the tier of government closest to the community, Council is best-placed to build partnerships with other councils, alliances, business, and community. We can use existing Federal, State and metropolitan peak bodies, other government levers, and direct action, to influence council partners, other levels of governments and industry to respond to the climate emergency. This must be at the scale, speed, and level of commitment the crisis requires and based on the most up-to-date climate science and information.

3.3 Young people are supported to engage in democratic processes and decision making

Young people have contributed the least to the climate emergency, yet will inherit its worst impacts. Many are experiencing mental health impacts from the sense of disempowerment that comes from being insufficiently included in decision making, and through the inaction, or insufficient action, of leaders and governments. Beyond simply consulting to ‘hear their voice’, we need to recognise their right to have a say in decisions that affect them, recognising that the climate emergency is about their future. Young people must have agency and a seat at the table to genuinely shape decisions and influence action.

Indicators and targets

Indicators	2030 target
Yarra participates in all relevant opportunities to influence State and Federal Government policies and commitments including: • Being members of Government Advisory Committees and Working Groups • Submissions / input to all relevant Parliamentary Inquiries and formal Policy consultation/participation • Seeking to meet at a minimum twice yearly with relevant Ministers and advisors • Grant applications to all schemes of relevance, including those that provide funding for additional open and green space.	N/A
Annual percentage of participants in Council climate emergency engagements who then join with others to take collective action	75%

Transformation 4: Yarra is a leading and prosperous zero emissions city

Ambition

To achieve Yarra's net zero ambitions and play our role in meeting Victoria's accelerated renewable energy target of 95% renewable energy by 2035, we need to show leadership in innovation and investment, prioritising and delivering programs that reduce energy use and support the transition to all-electric homes, businesses, industry and transport. We must also build partnerships and collaborations so that we can scale up our efforts and collectively advocate to government and industry for strong targets and policies to facilitate this transition.

We want to ensure the transition to a zero emissions future is fair and just, with an equitable distribution of the benefits of the transition across our community. The transition to a zero emissions future provides opportunities to improve the thermal comfort of our homes, the health and resilience of our community, and reduce household expenses. We recognise that this transition has an upfront cost, and that many in our community are currently unable to benefit from new technologies due to housing, financial, regulatory, health and social barriers. We will support the uptake of energy efficient, electric technologies powered by renewable energy across our entire community, with additional targeted support for those in our community most at-risk of climate impacts and with fewer resources to respond to these.

The transition also offers opportunities for businesses in Yarra to participate in a thriving zero emissions economy. We envisage Yarra as the destination for zero emissions and climate and circular economy focused businesses, and a workforce equipped with the skills required to bring this transition to life.

Objectives

4.1 Zero emissions homes

Council will develop, deliver, and lead on programs, policies, and support to enable Yarra homes to become all-electric, energy efficient and powered by renewable energy by 2035. Additional support and investment will be directed towards those most at risk from climate impacts and with reduced ability to adapt. Council will continue to advocate for ambitious

renewable energy targets, policy interventions, and investment to enable an equitable energy transition.

4.2 Zero emissions businesses

We envision a vibrant and connected Yarra business community participating in a thriving zero emissions economy. Council will foster an environment of collaboration and innovation to drive ambitious climate action across the business sector. Local businesses will be supported to reduce emissions through innovative energy upgrades and carbon accounting processes, and in responding to customer demand for sustainable, low emissions products.

4.3 Zero emissions transport

We are actively working towards ensuring electric and other zero emissions vehicles are commonplace, with a network of publicly and privately available chargers throughout Yarra. The transition to electric vehicles and zero emissions transport must be accessible to all community members. Additionally, advances in vehicle technology, and an electricity grid increasingly powered by renewable energy, mean that all public transport is net zero emissions.

4.4 Zero emissions organisation

As Council has direct control over our own emissions, we must lead by example in our emissions reduction efforts, and demonstrate options for overcoming obstacles hindering community emissions reductions. Guided by our Organisational Roadmap to Zero Emissions (2022), Council aims to reduce emissions from our operations to zero (without offsets) as rapidly as possible. Key areas of focus include:

- Transitioning buildings off fossil gas with a priority on energy-intensive aquatic centres
- Transitioning our fleet to zero emissions
- Working with procurement policies and our contractors to transition contractor fleets to zero emissions vehicles – priority on heavy kerbside collection trucks
- Our new electricity contract (from 2029) will continue to purchase 100% renewable electricity and demonstrate leadership in ‘next’ practice, such as time-of-use energy use that matches renewables generation.

Beyond our direct emissions, there are significant 'indirect' emissions which are 'embodied' in the products and services we purchase such as fuel, asphalt and concrete used by our contractors. Strengthening supplier requirements and supporting suppliers to reduce their emissions is therefore another key focus area for Council. As methods to identify and quantify these indirect emissions continue to improve, we commit to transparently reporting a comprehensive emissions profile which will inform our future emission reduction strategies.

To address emissions we cannot yet reduce, or eliminate entirely, Council will continue to purchase carbon offsets to achieve net zero emissions. This includes investigating how we might, in partnership with others, be involved in developing or supporting innovative greenhouse gas emissions offset and drawdown projects; projects which measurably reduce emissions, have other environmental and/or social benefits, and are in line with Council's climate emergency priorities. We will regularly evaluate this approach to ensure that purchasing offsets remains the best mechanism to achieving our commitment to net zero emissions.

Indicators and targets (by 2030)

Indicators	2030 target
Annual municipal greenhouse gas emissions	Net zero emissions by 2035 (*Noting that this ambition relies on significant acceleration of action from state and federal governments)
Annual fossil gas usage in Council-owned buildings	No fossil gas usage in Council-owned buildings by 2035
Annual installed municipal solar capacity	A doubling of installed municipal solar capacity from 2023
Annual percentage of Council-owned and contractor vehicles and equipment that is zero emissions	100% (where feasible and fit for purpose)
Annual household fossil gas usage	A reduction of 40% from 2023 usage
Annual business (commercial and industrial) fossil gas usage	A reduction of 20% from 2023 usage
Annual percentage of vehicles registered in Yarra that are zero emissions vehicles	25%

Transformation 5: Yarra is Caring for Country. Our landscapes and waterways are healthier, greener, and more biodiverse, and our communities feel at one with nature.

Ambition

An adequate climate emergency response means rethinking our relationship with nature. It means facing up to the harms caused to Country since colonisation and working towards remedying these harms with the knowledge and support of the Wurundjeri Woi Wurrung. It means providing ample habitat for biodiversity to thrive, and ecosystems to heal. It means ensuring that everyone in our community feels connected to the natural environment, has access to cool, green spaces and waterways, and is protected from extreme heat through nature-based interventions.

This requires a collaborative effort across Council to facilitate further innovation in our approach to urban design, open space, biodiversity, and water management, to maximise benefits for the natural environment and our community. There are profound opportunities here, whether in restoring a healthy, swimmable Birrarung in which biodiversity can thrive and community members can cool down, or in developing nature corridors which support biodiversity, facilitate connection with nature, and provide cool routes to essential services.[58]

A crucial element of rethinking and revising our relationship with nature is the decolonisation of our landscape, so that our city increasingly reflects Wurundjeri land. This means prioritising climate-resilient indigenous and native vegetation, including trees, grasses, and ground covers, which will provide suitable habitat for our native wildlife, while minimising resource-intensive maintenance practices. Simultaneously, decolonising our outdoor spaces means ensuring that the knowledge and practices of the Wurundjeri Woi Wurrung are embedded into land management.

Throughout these endeavors, we aim to encourage all members of our community to feel a connection to, and appreciation of, the cultural and ecological richness of this Country. We envision a collective nurturing of our precious lands and waters, and from this, nature will nurture us in return.

Objectives

5.1: Collaborate with Traditional Owners as decision-makers and partners in caring for Country

To foster social and environmental justice and improve land and water management across Yarra, it is essential to collaborate with and empower the Wurundjeri Woi Wurrung and other Aboriginal and Torres Strait Islander community members. This collaborative approach will facilitate opportunities to decolonise our streetscapes and public spaces through plant selection and cultural land management practices, so that our natural environment increasingly reflects Wurundjeri land. Through this partnership, all Yarra residents will have opportunities to learn about and care for Country.

5.2: Expand opportunities to access biodiverse, natural spaces in and around the places we live, work and play

Everyone has the right to experience the positive mental and physical effects of spending time in nature, and we all benefit when this right is fulfilled. Ensuring this right is satisfied requires a diverse and equitable distribution of biodiverse, natural spaces across the municipality. Guiding this work is an understanding that our diverse community requires and utilises different spaces in different ways, due to factors such as age, gender identity, physical ability, and cultural background. We aim to offer all Yarra residents everyday experiences of nature around their homes, schools, and places of work, whether in pocket parks or by a healthy, swimmable Birrarung. We will work to promote tree equity so that everyone has access to natural spaces.

A Yarra community where residents have opportunities to learn about and deeply connect with our local flora and fauna is one which cares for nature. We aspire to nurture a community in which every resident actively protects and improves our natural environment through conscious gardening, volunteering, and caring for the street trees and open spaces within Yarra and beyond.

5.3: Invest in a climate-resilient natural environment which mitigates climate impacts and improves biodiversity and urban agriculture outcomes

As climate impacts accelerate, it's essential that Yarra's open spaces and natural environment reduce the severity of these effects and promote resilience for the community and local ecosystems. The way we design and manage our streetscapes and natural spaces

has significant implications for the health, wellbeing and resilience of people and natural systems. Across Council, teams will continue to develop innovative approaches for managing our open spaces, so outcomes for nature and community are maximised.

Delivering this objective means green spaces across the municipality act as connective, natural bridges to improve biodiversity outcomes. These connected, natural environments also help to cool the city, mitigating the severity of extreme heat on our human and non-human residents. We will strategically implement nature-based urban cooling in areas with greater disadvantage and intensified urban heat.

5.4: Council advocates for policies and programs which improve outcomes for nature, within and beyond Yarra

The restoration of our natural environment, within Yarra and beyond, requires substantial policy changes and significant investment from all levels of government. Such transformative changes necessitate a fundamental rethinking of our relationship to the natural environment, so that the intrinsic rights of nature are respected.

Council will develop systems to ensure that ecological outcomes are considered in relevant decision-making processes. Simultaneously, we will provide opportunities for nature experts and passionate community members to scrutinise and influence Council policies and programs. We will leverage our platform to advocate for stronger environmental protection laws and initiatives, while empowering our community to advocate on behalf of nature.

Indicators and targets

Indicator	2030 target
Percentage of space allocated to canopy cover in the public realm, assessed annually	Annual increase
Native biodiversity in Council-managed natural spaces (based on annual biodiversity audits), assessed annually	Annual increase in the health of biodiversity in Class 1 and 2 vegetation sites managed as bushland (assessed via annual audits)
Annual percentage and distribution of canopy cover across Yarra	21.25% by 2040 (this target aligns with the target in the Urban Forest Strategy and will be reviewed when the Urban Forest Strategy is reviewed in 2027).

Indicator	2030 target
	New Urban Forest Strategy canopy target reflects the amount of canopy required to significantly improve biodiversity outcomes and mitigate UHI risks, or similar
Annual percentage and equitable distribution of shaded routes to essential services, schools, active and public transport	Annual improvement
Annual percentage and distribution of urban heat islands	Annual reduction
Equitable access to nature for all Yarra residents	Annual improvement
Amount of open space managed for biodiversity, assessed annually	Increase of 5% annually (currently have approx. 40ha, 5% is approx. 2ha, or 20,000m^2)
Annual number of plantings in open space areas (noting number of indigenous, Victorian native, Australian native)	100,000 plantings per year (for a range of purposes including shade/cooling, biodiversity, habitat, pollination).
Number of advanced trees, ground and understory species planted that are local native, Victorian native and Australian native, in line with DEECA 'Biodiversity revegetation with provenance mixing for climate change adaptation guidelines, assessed annually	75%
Annual number of local native trees planted specifically to provide winter foraging opportunities for threatened Grey Headed Flying Fox	200 annually
Annual number new local extinctions of flora or fauna; and number vulnerable or near-threatened species that have become endangered	0
Annual stormwater nutrient loads into the Birrarung (Yarra)	1.6mg/L nitrogen and 0.05mg/L for phosphorous in line with the ANZECC Guidelines for Fresh and Marine Water Quality

Transformation 6: In Yarra, everyone lives and works in comfortable and climate-safe homes and buildings, supported by climate resilient public spaces and infrastructure

Ambition

We must create homes, public infrastructure, and public spaces that are safe and comfortable in a climate ravaged future. This is especially critical for those in our community at greater risk from climate impacts, and those who will become at risk as climate change progresses. How well we integrate climate considerations into our built environment will influence our ability to support climate-positive behaviours, and to cope with increasingly volatile weather.

Many of the most severe climate hazards will impact on the physical safety and comfort of our homes, workplaces, and communities. In the past years, we have experienced serious heatwaves, bushfire smoke, and damage from flash flooding. For people in insufficient housing, those with chronic health conditions, older and very young people, and those on low incomes, extreme weather can quickly become life-threatening. Improving the quality of our buildings, while promoting retention and adaptive reuse of heritage buildings, will avoid those significant impacts that are already occurring, and which will become worse as the climate emergency progresses.

Our public infrastructure underpins our climate resilience and connectivity. It influences how water moves through and is consumed in our city, our access to electricity and communications, and how we get food, medical care, and other essentials. The vital services our public infrastructure provides are exposed to accelerating climate hazards it is not designed to withstand current and future climate impacts. We cannot afford to continually rebuild infrastructure as it is damaged, or regularly lose critical services. Given the significant social and economic implications of disruptions to critical services, we must design, build, and retrofit public infrastructure to meet our community's changing needs in a climate damaged world.

Public infrastructure and public spaces shape our lives, including how easy it is for us to access critical services, connect with our community and make daily choices that reduce

emissions. We must create public spaces that make it easier to safely access services, connect with neighbors and nature, foster social cohesion, and make climate-conscious choices like using active or public transport options.

Objectives

6.1 Yarra's homes and workplaces are climate-safe, resilient and thermally comfortable

Our homes, workplaces and other private buildings are often inadequate to protect us from current climate impacts, let alone more frequent and severe hazard events. We need to build and retrofit homes and workplaces to withstand our changing climate, while ensuring new developments and redevelopments do not lock-in risk for future residents and businesses. We must support those currently in inadequate housing and with vulnerabilities that increase their risk.

6.2 Yarra is building, upgrading and maintaining safe and resilient public infrastructure

Though we rely on our public infrastructure to provide essential services, it is often critically exposed to the impacts of climate change. Some of this infrastructure is managed by Council, but much of it is outside Council's direct control. Council needs to make important decisions about how and where it invests in critical infrastructure to avoid significant future costs and impacts, while working with other public infrastructure owners and operators to improve the resilience of their assets. Council must identify and prioritise the resilience of its facilities necessary to deliver the critical services that support community resilience, including health and emergency services.

6.3 Yarra's public spaces and streetscapes are connected, climate resilient and create an enabling environment for climate conscious living

As the climate crises accelerates, we need public spaces that protect us from the impacts of climate change, build our resilience, and make it easier and safer to live climate conscious lives. This means creating public spaces that reduce urban heat and provide safe and shaded active and public transport routes to our jobs, schools, grocery stores, doctors, and other services. It also means creating and expanding public spaces that connect us to nature

and each other, including parks and social spaces. Safe and welcoming public spaces will help us connect and support each other during difficult times.

Indicators and targets

Indicator	2030 target
Elevating ESD Targets Amendment gazetted in Planning Scheme	By 2026
Percentage of people reporting that their homes are adequately insulated, heated, and cooled	Increase on baseline established in 2024
Annual percentage and equitable distribution of shaded routes to essential services, schools, active and public transport	Annual improvement
Annual percentage and distribution of canopy cover across Yarra	21.25% by 2040 (this target aligns with the target in the Urban Forest Strategy and will be reviewed when the Urban Forest Strategy is reviewed in 2027).
	New Urban Forest Strategy canopy target reflects the amount of canopy required to significantly improve biodiversity outcomes and mitigate UHI risks, or similar.
Annual percentage and distribution of urban heat islands	Annual reduction
Average annual walking time to food and other essential services	Annual reduction
Uptake of active and public transport, reported every three years	In accordance with the Transport Strategy: • 20% increase in total number of bicycle and scooter trips by 2027 • 40% increase in total number of bicycle and scooter trips by 2032 • 30% increase in commuters walking, cycling or scooting to work by 2026 • 40% increase in commuters walking, cycling or scooting to work by 2032

Indicator	2030 target
	• 35% increase in commuters travelling to work by public transport to work by 2026 • 40% increase in commuters travelling to work by public transport by 2032 • 25% increase in commuters travelling to work by active transport by 2030
Three-yearly change in the quantity of hard, sealed surfaces vs. permeable surfaces (assessed through GIS imagery)	Three-yearly change reduction in hard, sealed surfaces
	Three-yearly change increase in permeable surfaces
Annual number of incidents and geographic locations of flooding, flash flooding and water over road incidents from weather events which Council is called to respond to	By 2027, establish baseline and set 2030 target
Annual Council buildings closures due to weather-related events	By 2027, establish baseline and set 2030 target
Annual number and value of claims against Council from weather damage due to Council infrastructure failures	By 2027, establish baseline and set 2030 target
Annual spending on critical repairs to Council built assets due to weather-related damage	By 2027, establish baseline and set 2030 target
Annual percentage of insurance premiums spent on Council property damage from weather events	By 2027, establish baseline and set 2030 target

Transformation 7: Yarra is transitioning to a circular economy by consuming less, repairing, sharing, and repurposing more, and sending less waste to landfill.

Ambition

Moving to a circular economy is critical to acting on the climate emergency. Globally, material extraction, use, and disposal accounts for 70% of emissions[59]; we can reduce our contribution to this by repairing, renting, recycling, and remanufacturing materials. Adopting circular practices for cement, steel, plastics, and aluminium can reduce global emissions by 40% by 2050. Within the food system alone, we could achieve as much as a 49% reduction in global emissions.

Unlike the post-industrial linear economy of make-use-dispose, the circular economy is a transformative model. It mirrors natural systems, reduces emissions, avoids use of unnecessary materials, and does not produce waste or need new inputs. Necessary products and materials are designed to last, be sharable, repairable, reusable, or recyclable.

In a circular economy, everything we do will be based on three principles:

- Avoid and design out waste and pollution
- Keep products and materials in use at their highest value
- Regenerate natural systems.

A circular economy benefits us all, individuals, communities, businesses, and nature. Moving to a circular economy would create six million jobs globally by 2030[60]. Circular practices also foster community connection and equitable access to resources, allowing us to better support vulnerable community members. It also reduces impacts on our natural systems as they are no longer used as recipients of our ‘waste’.

Objectives

7.1 Yarra is transitioning to a circular economy by demanding circular design, buying less, borrowing, reusing, repairing, repurposing and recycling more

We can create a future in which everyone is making fewer material purchases, and instead borrows, reuses, repairs, repurposes, and recycles more. In this future, materials are used at their highest value before being reused, repaired, or repurposed. Recycling only happens when materials are at the end of their usable life. Achieving this requires that we connect with our community to pass materials on, or borrow from each other, rather than sending things to landfill. It is a model that supports access to materials for everyone, significantly reduces emissions from making, using, and disposing of products and creates economic opportunities via reused, repaired, and repurposed items.

7.2 Waste to landfill and recycling contamination are eliminated

By adopting circular practices, we will be avoiding the production of ‘waste’, diverting most waste from landfill, reducing the emissions associated with making products, and avoiding it impacting our natural systems. This starts at the beginning, when we make conscious choices to borrow or buy second-hand rather than buy new, or to buy less material-intensive products. We will also reduce the incidence of recycling being contaminated with non-recyclable materials.

7.3 Council and local businesses are implementing circular economy principles across supply chains

Council and local businesses have a significant part to play in the transition to a circular economy. Council’s own practices and purchasing choices, including in the materials it uses to build and renew our public infrastructure, must reflect circular principles. Local businesses have the power to influence how materials move through Yarra, through their own practices and the choices they make along their supply chain. Reducing the material inputs into the cycle has financial benefits to Council and businesses as they must manage less waste and associated costs through product life cycles.

7.4 We are advocating to government and key stakeholders to embed circular economy principles in the design and manufacture of goods and services

Though we can change our purchasing choices, how we use materials within our community and the quantity of 'waste' produced, we are limited by the way many goods are produced. Goods are often not made to last, are single-use, or are difficult to repair, repurpose, or dispose of. However, we can advocate to government and industry to embed circular economy principles in manufacturing, such that goods are made to last, and manufacturers are required to take responsibility for the entire life cycle of their products.

Indicators and targets

Indicator	2030 target
Annual volume of rubbish produced per capita	15% reduction per person
Annual percentage waste diverted from landfill	80%
Annual food waste per capita	50% reduction in food going to landfill
Annual recycling contamination rates	5% reduction
Annual use of raw material in Council operations	10% reduction
Annual proportion of second-hand, repair, reuse and recycled content in material used in Council capital works	One third

Appendix 1: Climate Emergency Action Plan 2024-2027

See attachment

Glossary

Adaptation

Adjustments in ecological, social, or economic systems in to reduce or avoid potential damages or to benefit from opportunities associated with climate change.

Carbon offset

The action or process of compensating for carbon (or greenhouse gas) emissions arising from industrial or other human activity, by participating in schemes designed to make equivalent additional reductions in carbon emissions. Examples include tree planting to sequester carbon, methane capture and use and renewable energy projects.

Carbon neutral

Carbon neutral refers to the balance achieved when carbon (or greenhouse gas) emissions created by human activity are calculated and offset by an equal amount.

Climate crisis

See climate emergency.

Climate emergency

Climate emergency can be understood in two ways. Firstly, it refers to the catastrophic changes to the climate brought about by human activity that poses a dangerous threat to all life on the planet. Secondly, a climate emergency response can be considered taking effective action at a scale and speed commensurate with the magnitude of the crisis.

Circular economy

A circular economy aims to keep materials in use at their highest value for as long as possible, before being recycled. This differs from the 'take-make-waste' of a linear economy.

Drawdown

The removal of excess greenhouse gases from the atmosphere with the aim of restoring a safe climate.

Carbon emissions

See Greenhouse gas (GHG) emissions definition.

Environmentally Sustainable Development (ESD)

Environmentally sustainable development is the integration of environmental considerations in urban planning, development, and construction, with the aim of protecting the environment while meeting current and future community needs. The term also refers to building performance in relation to the use of environmentally sustainable design and orientation, low-impact materials, reuse and recycling of materials, energy efficiency, waste management and the use of closed loop systems.

Greenhouse gas (GHG) emissions

Carbon dioxide, methane, nitrous oxide, and other gases that contribute to global heating. Also referred to as carbon emissions.

Integrated Water Management

Integrated Water Management (IWM) is a holistic approach to water management that considers the interactions of all elements of the water cycle including potable (drinking quality) water, rainwater, stormwater, recycled water, and groundwater to ensure they support and enhance social, ecological and economic outcomes.

Just transition

The transition to an ecologically sustainable, zero greenhouse gas emissions world in a way that fairly distributes the economic burdens and benefits of the transition, and that ensures those most exposed to climate impacts are protected.

Mitigation

Action to limit climate change. Mitigation action either reduces emissions of greenhouse gases or removes those gases from the atmosphere.

Net zero

Net zero is the internationally agreed-upon goal for mitigating global heating. It goes beyond carbon neutrality as it demands real and significant reductions first and supports investing in projects that go above and beyond (like additional investments in biodiversity projects or wetland restoration). This means rapidly reducing all emissions as close to zero as possible (generally 90%), then offsetting residual emissions (with high-quality, permanent carbon offsets), and exploring values-aligned investment opportunities that respond to the climate and biodiversity emergency.

Resilience

The ability of social and ecological systems to avoid, anticipate, absorb, adapt to, recover from and transform in response to shocks and stresses, so as to mitigate the underlying drivers of risk while continuing to perform their essential functions.

Safe climate

A climate that allows the natural environment, current and future generations, and communities, to survive. The current climate conditions are not safe for a large range of species and increasingly unsafe for millions of people.

Social capital or ties

The networks of relationships among people who live and work in a particular society, enabling that society to function effectively.

Tipping point

The point at which a series of small changes becomes so significant it causes a larger, more important change that is harder to stop and usually drives a cascade of other changes. Tipping points can be positive or negative. An example of a negative change is going from a substantial Greenland ice sheet to a largely ice-free Greenland, which would trigger wide-reaching negative changes. On the other hand, a positive tipping point is when renewable energy takes hold and starts to dominate an economy once driven by fossil fuels.

Tree Equity

Tree equity is the idea that all communities have equitable access to the benefits of trees and nature where they live.

Urban heat island (UHI)

An urban heat island (UHI) is an urban area that is significantly warmer than its surrounding areas. This increased warmth is due to heat being retained by roads, buildings, footpaths made of concrete and asphalt, and waste heat created by cars, industry, and people. The urban heat island effect can negatively impact the natural environment and human health.

Water sensitive urban design treatments (WSUD)

Water sensitive urban design (WSUD) attempts to mimic the natural water cycle as closely as possible, such as by slowing down, intercepting and reusing stormwater and improving the quality of water discharged to waterways. Examples of WSUD treatments include raingardens, rainwater tanks, swales, wetlands, and sediment ponds.

Climate Action Playlist

Throughout our consultations with our community and across Council, we asked each person we engaged with to contribute a song to our Climate Action Playlist. This might be a song which motivates them to take climate action, it might be a song which reminds them of a beautiful place in nature, it might be a song which in some other way, connects them to the issue of climate change.

You are welcome to listen to and add to our Climate Action Playlist, and we hope that you find it inspirational, motivating, soothing, or whatever you need it to be as you take climate action and drive a better future for all.

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