

Climate Response Plan 2021-2031

(Revised 2026)



ACKNOWLEDGEMENT OF COUNTRY

Yana djerring ba ngarrnga djerring – Walking together and listening together*

Knox City Council acknowledges the Wurundjeri Woi-wurrung people and Bunurong people of the Kulin Nation as Traditional Owners of the City of Knox, and we pay our respects to their Elders past and present, and to their future leaders as well.

Located at the foothills of the Dandenong Ranges, Knox has many places of historic significance to the Kulin Nation. Important cultural and historical sites within Knox hold both the traditional knowledge of First Nations peoples and the traumatic stories of colonisation. Knox's waterways, wetlands, bushlands, foothills, stony rises, wildlife, plants and indeed the air itself are important indicators for the health of Country.

Healthy Country equals Healthy people. Healthy Country affects the health, Culture and Ceremony of Aboriginal people and enhances the liveability of the City for all.

Caring for Country prioritises Indigenous species of plants and animals to thrive, ensures clean waterways, increases Cultural understanding, and encourages a deeper connection to Country, history of place and Ceremony.

The journey ahead recognises that climate related events and emergency responses will benefit from strong partnership with the Traditional Owners and inclusion of Aboriginal management practices.

Walking together and listening together to create a sustainable future in Knox.

**Woi-wurrung language used with permission of Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation*

Introduction



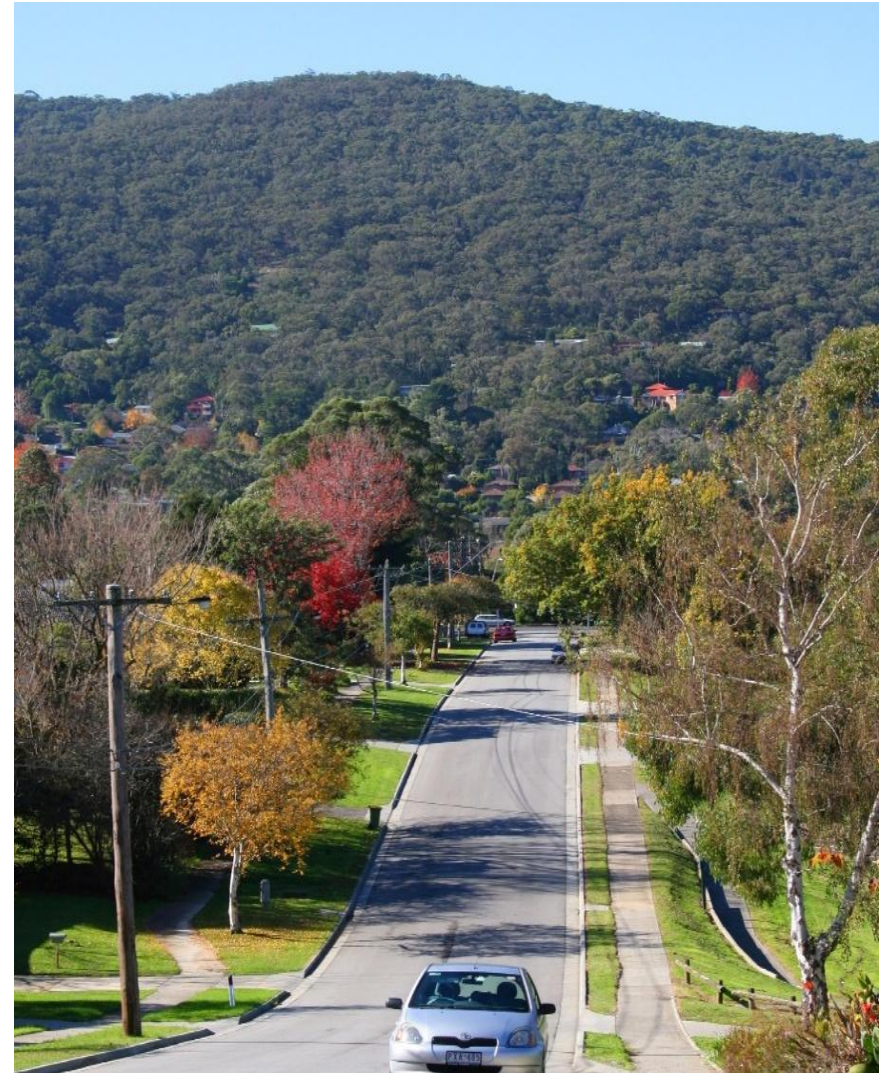
Understanding the effects of climate change

Knox City Council declared a climate emergency on 29 August 2022. As a community, we need to take action to reduce our impact on the environment and to prepare for the effects of a changing climate.

Many residents have begun to reduce their impact on the environment and Council is working to reduce its emissions – but we will be more effective if we work together.

Knox City Council is committed to reducing our emissions and adapting to the impacts of climate change guided by our Climate Response Plan 2021-2031. The Plan sets our targets and provides a roadmap with measurable actions on how this will be achieved in partnership with the Knox community.

This report reflects the review of the Knox Climate Response Plan that was originally adopted by Council in 2021.



Understanding the effects of climate change



Climate change is one of the biggest threats to the future of our community and country. We are starting to see some of its effects and will continue to see an increase in hotter and drier conditions, which will have negative consequences for health, infrastructure, agriculture, water, and biodiversity. This is due to increased frequency and intensity of heatwaves and storms.

Atmospheric carbon dioxide concentrations have risen from around 280 parts per million at the start of the industrial revolution, to above 430 parts per million today (Source: National Oceanic and Atmospheric Administration, NOAA, USA). The increasing concentration of carbon dioxide, along with other greenhouse gases, is trapping heat in the Earth's atmosphere and warming the planet because of the enhanced greenhouse effect.

To date, the following key measures have been undertaken by Council to lower our emissions:

- Since 2016, Council has replaced over 12,800 streetlights to LED, to reduce energy use by more than 75%;
- Energy efficiency upgrades and Solar PV installations in Council buildings have reduced Council's emissions by 49% since 2015/16;
- Introduced eight electric cars to Council's fleet, to reduce fuel emissions. In addition, facilitated the installation of 14 public electric car charging stations in Council car parks;
- Purchased 100% renewable energy for all of Council's buildings and streetlights through Green Purchase Agreements;
- Provided sustainability programs for residents to lower community emissions. Programs include Solar Savers, Compost Community, National Tree Day, Ride2Work Day, and Walk Safely to School Day; and Helped businesses become more sustainable by providing programs such

as, Business Energy Savers, Business Renewable Energy Buying Group and Environmental Upgrade Finance Agreements.

About Knox Climate Response Plan (2021 – 2031)

The Climate Response Plan sets out a pathway to a net zero emissions Knox City Council by 2030 and actions to support our community reach net zero emissions by 2040.

It outlines:

- How Knox City Council will adapt and improve its resilience to the climate hazards that impact the city now and in future climate scenarios.
- The social, environmental, and economic benefits expected from implementing the Plan.
- Council's role, powers and the partners who need to be engaged to accelerate the delivery of Knox's emissions targets and resilience goals.
- Actions to support the community transition to a net zero and resilient society.



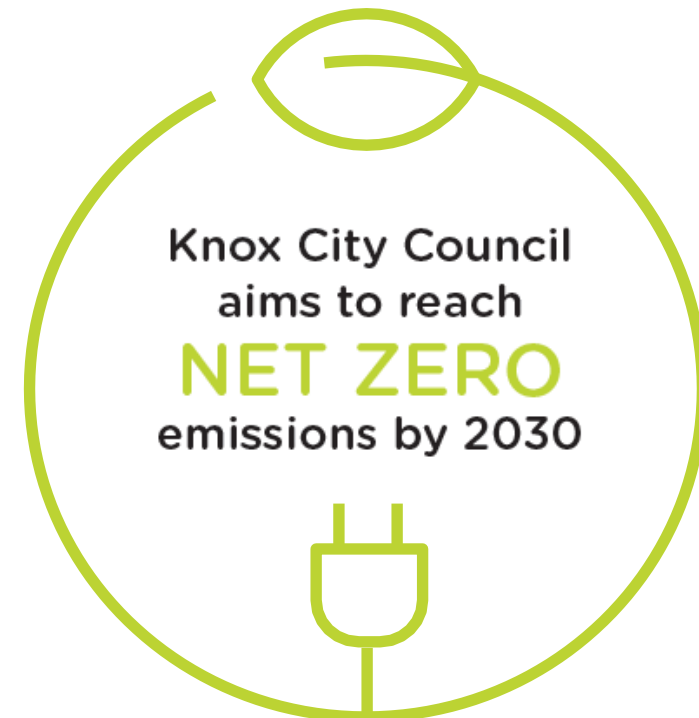
Council's targets are aligned to the urgent global effort required to limit global warming to below a 2°C increase (i.e. above pre-industrial levels). The latest science shows that a 1.5°C increase is inevitable based on the current trajectory (Source: NOAA).

At the mid-term review of this Plan, the National Climate Risk Assessment report (Australian Climate Service, 2025) indicated that Victoria's average temperature has increased by 1.2 degrees, with the Australian average being 1.6 degrees hotter than the 1910 average (National Risk Assessment, Adaptation Plan).

Australia now has a new emissions reduction target of 62-70% (from 2005 levels) by 2035.

A net zero Knox City Council means:

- Net zero greenhouse gas (GHG) emissions from gas use in Council owned buildings.
- Net zero GHG emissions from use of grid-supplied electricity in Council owned buildings.
- Transitioning to an all-electric vehicle Council fleet.
- Wherever possible, net zero GHG emissions related to indirect emissions



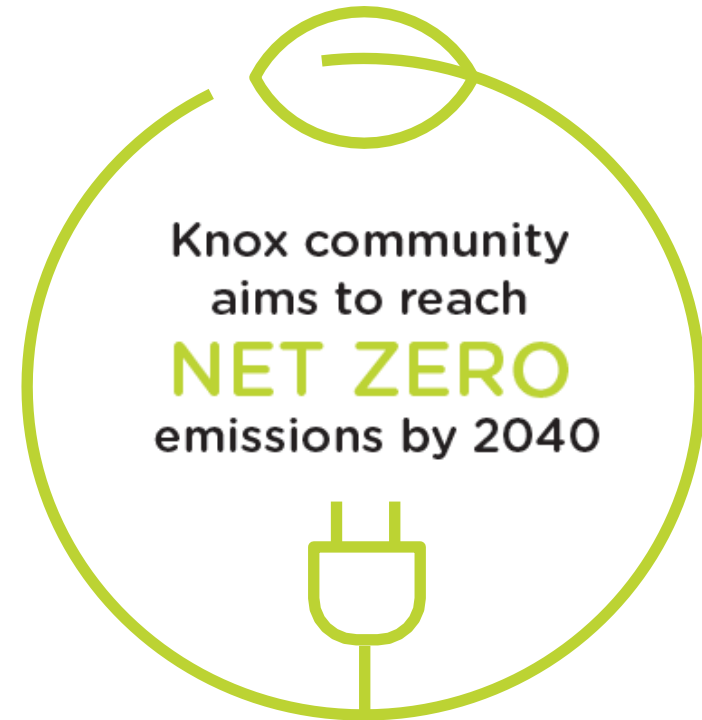


A net zero Knox community

Reducing emissions is a shared responsibility between all levels of government, business and the community. Council's role as a community leader will support and help drive emissions reduction in our municipality.

This Plan outlines the actions that Council will take to assist the community in reaching its net zero emissions by 2040 and where Council can assist the community in choosing everyday actions that will help move towards a low emissions and resilient future.

Council's role is to support the community via advocacy, education programs, access to public electric vehicle chargers, provision of recycling and the food and garden bin collection (FOGO) service and other initiatives to assist the community to meet the community target. At the mid-point of the Climate Response Plan (2026), changes to Council's bin collection frequency (now collecting rubbish every fortnight rather than every week), coupled with the addition in 2023 of the food and garden bin service, has seen the reduction of community emissions by an average of 1,920 tonnes per month, diverting 71% of organic waste and recyclables from landfill.



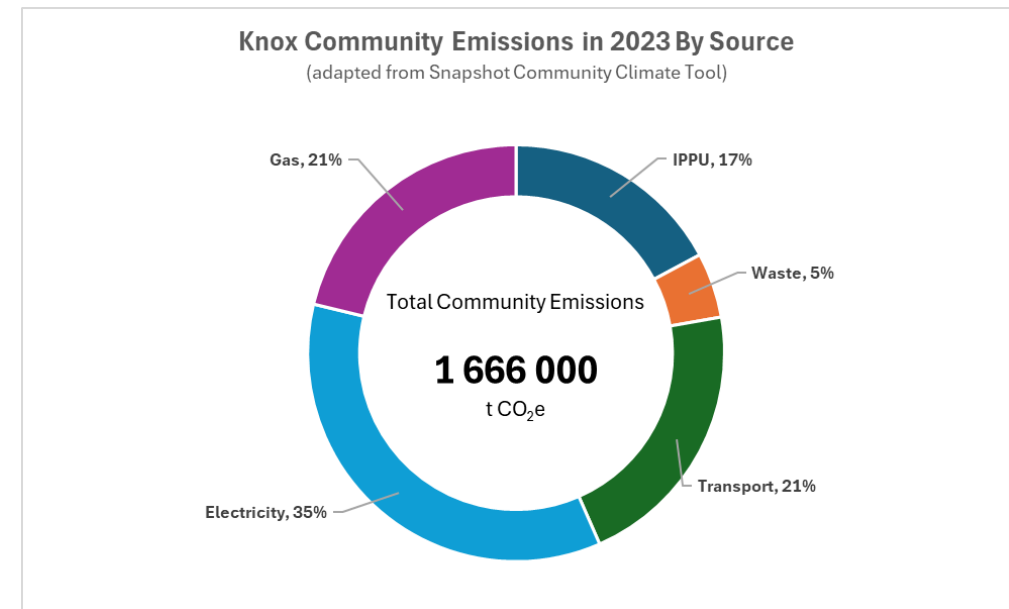
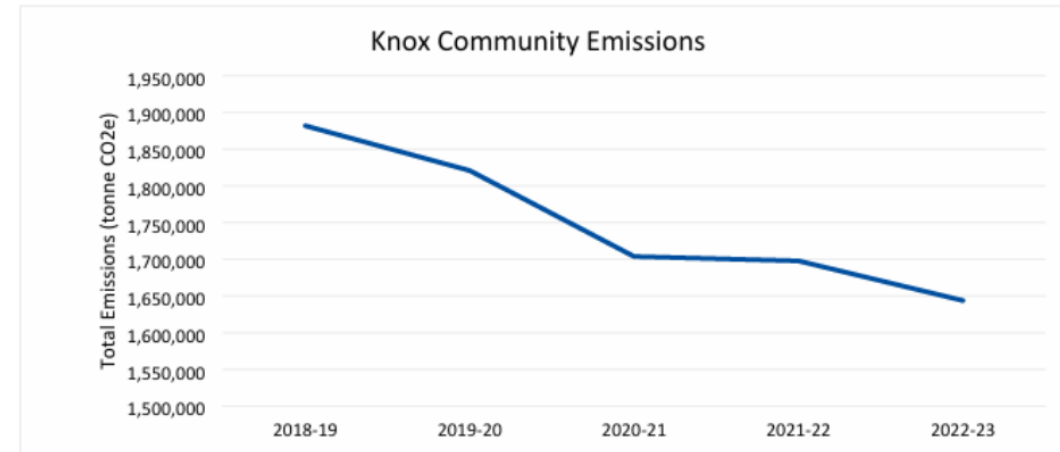
Knox community emissions profile



The 'Snapshot Community Climate Tool' ([Snapshot Climate](#)) developed by Ironbark Sustainability and Beyond Zero Emissions provides a national database of community emissions for all local government areas in Australia. This tool has been used to obtain data on Knox community emissions for 2023. As illustrated in the "Knox Community Emissions" chart, community emissions have declined by 12.1% since 2018-19 and throughout the first 5 years of the Climate Response Plan.

The industrial and commercial sector is the largest contributor to emissions in Knox, accounting for 39% of total emissions. Achieving a Net Zero industrial sector will require a switch from gas to electricity, energy storage utilising batteries and the use of renewable energy generated by solar and windfarms. The actions of Federal and State Governments and the energy industry more broadly will be key to achieving the Net Zero goal for the community.

The industrial processes and product use (IPPU) sector covers greenhouse gas emissions resulting from various industrial activities which are not directly the result of energy consumed during the process. This includes emissions from industrial processes that physically or chemically transform materials (for example emissions associated with concrete production), and the use of man-made greenhouse gases in products – namely refrigerants. Other examples of IPPU emissions include the blast furnace in the iron and steel industry, and ammonia and other chemical products manufactured from fossil fuels and used as chemical feedstock. During these processes, many different greenhouse gases can be produced. (Source: [Snapshot Climate](#))





INDUSTRIAL SECTOR

accounts for

39%

of total emissions



HOUSEHOLDS

accounts for

18%

of total emissions



KNOX COUNCIL

accounts for

<1%

of total emissions

Council's emissions profile in 2026



Council's corporate carbon emissions are categorised as follows:

- **Scope 1:** Emissions from a facility or site under the direct control of the Council (examples include emissions from mains gas and fuel used in Council's Fleet).
- **Scope 2:** Indirect emissions created off-site for facilities under the direct control of the Council, from metered electricity purchased for Council's facilities. Council purchases 100% renewable energy for all its buildings, which reduces Scope 2 emissions to zero.
- **Scope 3:** Emissions from off-site facilities or activities, not under operational control of Council (e.g. unmetered electricity such as streetlights, emissions from contractor vehicles and emissions from leased buildings).



Managing Governance and Climate Risk



Climate change is already affecting Council operations, assets, and communities. Managing climate risk is now a core governance responsibility under the Local Government Act 2020.

Knox City Council will undertake the following actions to ensure we address this risk across Council's operations:

- Guide in-depth engagement across Council to assess climate risks and improve adaptive capacity.
- Continue to report on Council's strategic risks relating to climate change.
- Investigate the benefits of carbon offsets for meeting Council's net zero target

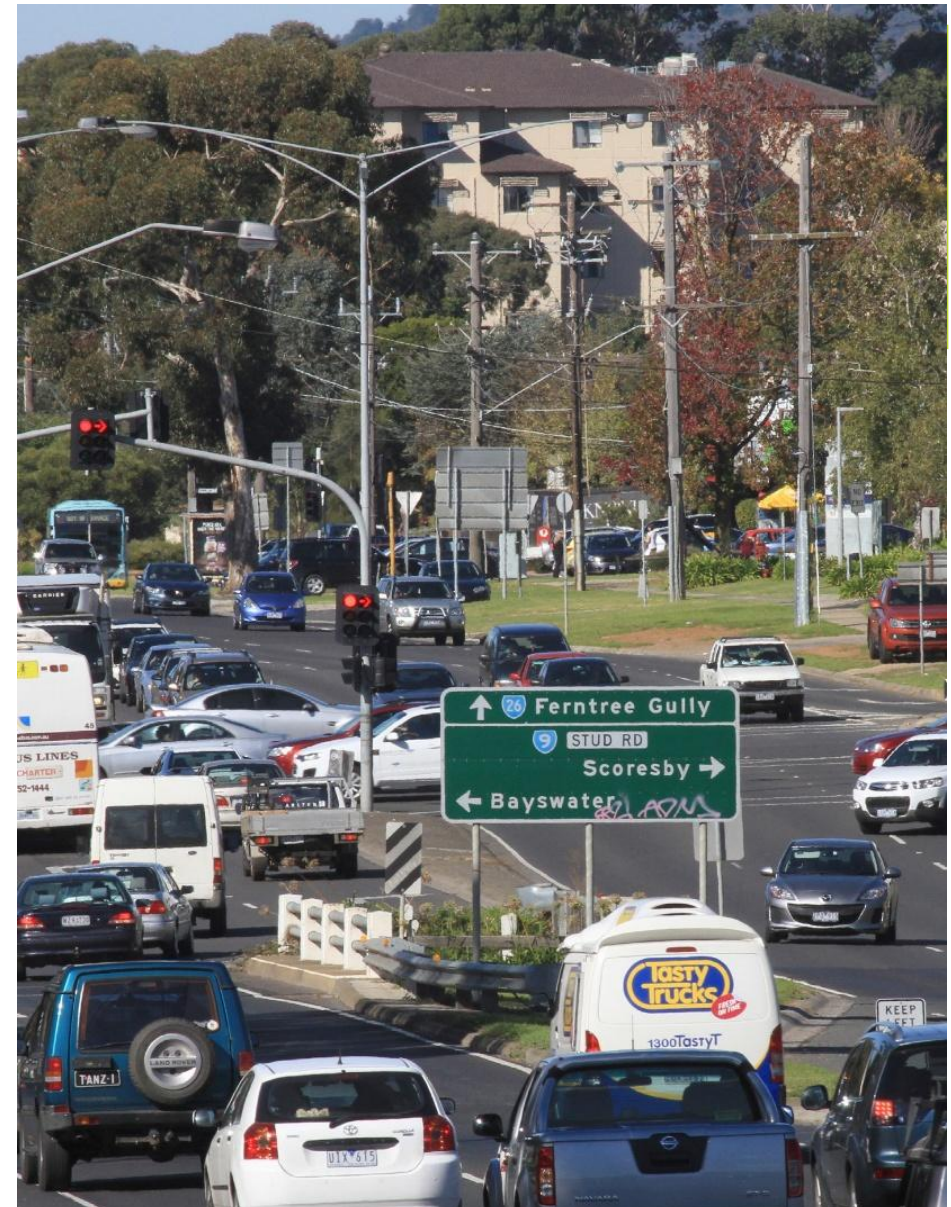
Guiding principles



These guiding principles helped Council to develop actions to minimise climate impacts, build a resilient community and protect the ecosystems that sustain us. These principles will assist in addressing the important social, economic, and environmental challenges and develop the solutions that are required to meet the climate challenge.

The actions included throughout the Climate Response Plan are intended to be:

- **Acknowledging Country:** Actions that recognise the intricate relationship between health of country and health of all people.
- **Ambitious:** Set goals and implement actions that evolve towards an ambitious vision.
- **Inclusive:** Involve community, business, and other stakeholders in finding solutions, with an emphasis on the inclusion of Priority Populations (defined further below).
- **Fair:** Seek solutions that equitably address the risks of climate change and share the costs and benefits of action across the community.
- **Relevant:** Deliver local benefits and support local priorities.
- **Actionable:** Propose cost-effective actions that are realistic.
- **Evidence-based:** Reflect best practice scientific knowledge and local understanding.
- **Transparent and verifiable:** Set goals that can be measured, reported, and evaluated.



Community advocacy



An engagement process was developed to incorporate the ideas of the Knox community and respond to their priorities and aspirations about how we tackle climate change together. Between May and July 2021, over 370 people provided feedback through pop-up events, a workshop, survey, or other online activity, providing a total of just over 3,000 comments and votes. One of the strongest results from the community consultation was for Council to adopt a more ambitious community net zero target. Based on this feedback and the science that supports this ambition, the community target was brought forward from the originally proposed 2050 to 2040.

Some of the other suggestions from the Knox community that have been incorporated into the plan actions are:

- Providing community education programs on actions to reduce emissions.
- Making sustainable transport options more accessible and appealing, including enhancing cycle and walking paths, providing better links between transport mode and advocating for more efficient public transport to the region.
- Reviewing key Council policies to ensure climate change impacts are considered during decision making.
- Updating the Council report template to introduce a new section titled 'Climate Change Considerations' so that all future Council reports are assessed against the Climate Response Plan and relevant mitigation and adaptation considerations.





Council's adoption of the Climate Response Plan in 2020 included a requirement for review of the Plan at the mid-point of its implementation, by 2026. In 2025 further engagement was conducted to conduct this review, including exploration of three gaps identified by Council in a separate resolution - Indigenous knowledge, CALD communications and sustainable transport, as well as how best to improve the incomplete actions for the most effective Plan outcome by 2031.

The aim was to achieve a balanced engagement approach of broad community input to the review of the Plan, coupled with inclusive engagement approaches that ensure the participation and input of Traditional Owners and CALD communities. This was intended to help develop a revised Plan which is more effective at achieving stated targets, through internal and community informed review.

Council sought to hear from people who identify as Aboriginal and Torres Strait Islander and specifically engaged with the Aboriginal Land Council representing the Wurundjeri Woi-wurrung and invited the Bunurong Land Council as well.

Additionally, Australia's National Climate Risk Assessment, which was released in September 2025, identifies that Aboriginal and Torres Strait Islander peoples will experience unique impacts from climate change and that they are expected to be impacted by at least 7 nationally significant climate risks. The report states that "(t)he changing climate threatens the health of country, access to Country and could challenge self-determination and have flow-on impacts on their social and physical health and wellbeing".¹

¹ Australian Climate Service, 2025b: Climate risks to Aboriginal and Torres Strait Islander

Peoples, Commonwealth of Australia 2025



The consultation period also identified a gap in acknowledging and shaping the role of other major stakeholders in mitigating emissions for the City of Knox. Council’s efforts alone will not be sufficient to address the threat of climate change. It is imperative that changes occur at other levels of government, within the community, and by major business and industry, in order to reach a target of community net-zero emissions by 2040.

Significant reductions in emissions are anticipated as a result of the decarbonisation of the electricity grid and actions taken at the local level such as the installation of solar and the uptake of electric vehicles. Together, with the emissions savings resulting from Council interventions, emissions in Knox are anticipated to be reduced by almost half of what they would otherwise be, by 2030.

The remaining emissions persist as a challenge in mitigating climate change and achieving a net zero emissions target. The State and Federal Government have key roles in funding, regulating and influencing the energy sector, transport, and the economy, and as such, actions taken by them will influence the emissions trajectory within the City of Knox. Council has identified some key advocacy opportunities to help shape and advance these necessary actions and to lend our voice to the groundswell of organisations within Victoria and the nation calling for greater action on climate change.

Council already has close ties with some organisations working on climate change advocacy, such as the Eastern Alliance for Greenhouse Action (EAGA) and the Council Alliance for a Sustainable Built Environment (CASBE). These partnerships will need to continue. Council has identified advocacy opportunities and estimated the potential emissions savings to the municipality by 2030 for a number of these.

Advocacy initiative	Estimated emissions savings to Knox by 2030
Electric Vehicle Ready Built Environment	190,000 tCO ² e
Increased Minimum NatHERS Standard	130,000 tCO ² e
Net Zero NatHERS Standard	720,000 tCO ² e
Net Zero Gas Districts & Renewable Transition	80,000 tCO ² e
Mandatory Energy Efficiency Standards for Rental Properties	250,000 tCO ² e



Protecting community health and resilience

Supporting the health and well-being of priority populations within the community is a strategic priority for Council. This includes Aboriginal and Torres Strait Islander Community, Culturally and Linguistically Diverse Community (CALD), including migrant and refugee community, Lesbian, Gay, Bisexual, Transgender, Queer/Questioning, Intersex, Asexual, Plus (LGBTQIA+) community, Older people, people from a low socio-economic background, people who experience homelessness, people with a disability, women who experience family violence and young people. The potential impacts of climate change, specifically increased frequency of heatwaves and storms, may exacerbate existing health sensitivities, accommodation stress, and isolation. Safe spaces are identified by community members as being important for building community resilience in the case of emergencies, particularly extreme heat in Knox. Gambling and other unsafe venues are often used as cooling spaces especially in the absence of alternatives. Family violence and elder abuse risks, Alcohol and Other Drug (AOD) use and gambling are particularly heightened during emergencies and disasters, highlighting the importance of safe spaces in the community especially during extreme weather.

Collaboration across Knox programs will help to integrate climate related programs and resources into health and wellbeing services provided to the community, such as disability and housing support services. Designing communications methods for different audiences has been recognised as being essential to connecting with different sectors of the community – for example young people are often reachable through social media and online platforms. Similarly, communicating in language and in culturally relevant ways is also helpful for multi-cultural community members to connect with climate resilience information and support. Council supported programs such as

Solar Savers will consider the interests, needs and communication preferences for priority populations, including First Nations and CALD communities.

- Developing community education programs in areas such as:
 - Climate sensitive planting
 - Adaptation and climate resilience
 - Legal rights around climate events
 - Growing your own food, including plant-based diets
 - Link between climate change & Aboriginal cultural values
 - Creative sustainability practices, i.e. upcycling
 - Cultural awareness training
 - Local cycling and walking programs & information
 - Climate & biodiversity conservation, including advocacy
 - Renters rights and efficiency standards
 - Retrofitting homes and buildings to ensure high performance
 - Available subsidies and accessing renewable energy
- Developing inclusive and effective education materials about local climate actions for community to take, with key stakeholders (including First Nations and multi-cultural stakeholders).



The National Climate risk assessment released in 2025² identifies Aboriginal and Torres Strait Islanders, the elderly, the very young and those with pre-existing health conditions and outdoor workers as being most at risk from the effects of climate change

Wurundjeri Woi-wurrung Elders acknowledge that there is a clear link between physical health and the health of the environment. This is reflected in Knox's Council and Health and Wellbeing Plan 2025-29. This is also supported by Wurundjeri Woi-wurrung Elders, who have advised us that Healthy Country equals healthy people. For First Nations people, an important way to support the health and wellbeing of people and connection to Country is through ceremony.

Ceremony connects people to Country and spirit. This physical reality/experience enhances wellbeing, health and deepens Cultural understanding and safety. Examples of these ceremonies include:

- Welcome to Country
- Smoking Ceremony
- Tanderrum
- Dance
- Scarring trees and shields
- Water Ceremony
- Yarning circles
- Cultural practices
- Corroborree
- Walking Country site visits
- Sorry business.

The promotion and development of education programs will consider the interests, needs and communication preferences for Priority Populations, including First Nations and CALD Communities.

We will support our community by:

- Providing communication materials to inform about designated safe spaces and emergency refuge centres available during extreme weather events.
- Identify priority areas for urban cooling using heat vulnerability maps – to keep the community cooler.
- Delivering an annual campaign to help Priority Populations prepare for heat health alert days, including:
 - Confirming access and communication channels with all Priority Populations, for extreme heat events and power outages.
 - Check-in and support at-risk community members and Priority Populations during extreme cold days.
 - Broadening reach and formalising communication channels to promote existing rebates and programs such as Solar Savers, Victorian Energy Upgrades scheme, home energy assessments and other targeted assistance available to Priority Populations.
 - Connecting community with communication materials including guidelines for households in the event of power outages.

² Australian Climate Service 2025



The municipality of Knox is bounded by the Dandenong Ranges National Park to the east, by Churchill National Park and Lysterfield National Park to the south, and by the Dandenong Creek Valley Parklands to the west, however, the natural environment within the municipality is extremely fragmented due to both residential and commercial development. Council managed bushland reserves are an important part of the remaining network of natural habitat and provide important food and shelter for a wide variety of wildlife, including many bird species, bats, frogs, reptiles, and insects. There are over 40 threatened species within the municipality, and extreme weather events have the potential to lead to local extinctions.

Some of the impacts of climate events on biodiversity include:

- direct fauna casualties,
- habitat loss,
- reduced 'functional biodiversity' (ability for fauna to move for food, breeding and protection),
- reduced long-term survival and resilience of species, and new diseases.

Given the large degree of fragmentation, it is essential for us all to work collaboratively. This means Council, community groups, residents, state and national agencies working together to ensure:

- A consistent approach to the management of pest plants and animals, and
- Continuous improvement of the quality and connectedness of natural environments within the municipality.

Through the CRP and the Knox Biodiversity Resilience Strategy, it is recognised that Aboriginal cultural values, Care for Country and a healthy environment for all are intricately linked and are important priorities for Traditional Owners. Traditional Owners have also noted that their ability to utilise a 'whole-of-Country' approach to the protection and revitalisation of culture and Country is impacted by Council municipal boundaries. Wurundjeri Elders have noted that an important area of action is to protect and buffer the current areas of high biodiversity and cultural value from the effects of climate change, while also enhancing the natural environment.



Healthy Country = Healthy People

Wurundjeri Woi-wurrung Traditional Owners have noted that the impacts experienced through climate change also have an effect on cultural practices. Ceremony has an important role in helping to heal Country and it is important to recognise that Ceremony will be impacted by extreme weather events and long-term weather and environmental changes through climate change.

The restoration of Blind Creek and enhancement of Platypus habitat at Stamford Park wetlands, demonstrates the environmental and cultural benefits of restoring waterways and banks, Caring for Country and our climate. Traditional Owners and their natural resource management teams (such as the Wurundjeri Narrap team) have an important role in advising and working with Council on projects and events that utilise sustainable Aboriginal management practices such as traditional burns and promote a healthy environment and climate.

Wurundjeri Woi-wurrung Traditional Owners have said that this is grounded in the understanding that Traditional Owners hold unceded cultural rights and responsibilities and it is therefore crucial that they are engaged in planning, decision-making and management of Country.

Sharing of imagery and stories also helps to tell a story about changes underway and projects being completed. Knox's Reconciliation Action Plan identifies the importance of building respect and awareness of Aboriginal and Torres Strait Islander cultures' Connection to Country and integral role/knowledge in relation to healthy country and climate.



Eels and platypus are signs of healthy Country, according to Wurundjeri Woi-wurrung Elders.

The design of streetscapes including the planting of native street trees that mimic natural biological processes while also providing shade, inclusion of water sensitive urban design assets, vegetation and grassed areas can all help to reduce urban temperatures and provide biodiversity, habitat and cultural benefit.

Canopy tree coverage plays an important role in reducing the urban heat island affect, reducing impacts of flooding, and supporting local biodiversity and carbon storage.



Adapt and preserve our natural environment

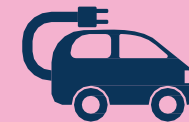
A key area of action is to protect and buffer the current areas of high biodiversity and cultural value from the effects of climate change, whilst also enhancing the natural environment.

The design of streetscapes including the planting of street trees, inclusion of water sensitive urban design assets, vegetation and grassed areas can help to reduce urban temperatures and provide biodiversity and habitat benefit. The Biodiversity Resilience Strategy 2024-2034 prioritises indigenous planting, the restoration of waterways and other natural habitats, which are also recognized as a key component of climate response by Wurundjeri Elders.

Increasing Connection to Country through creating more walkable cities provides an opportunity to understand the Country you live on, thereby promoting care and respect, as well as a healthier environment and healthier people” (Wurundjeri Woi-wurrung Elders)

We will protect our natural environment by:

- Continue to support monitoring and increasing tree canopy coverage on Council land through the Tree Management Framework and other Council policies.
- Advocating to power authorities for lower impact vegetation management near power lines to minimise damage to canopy trees.
- Reviewing and revising the Liveable Streets Plan and the Green Streets Policy to promote ‘tree-friendly’ streetscapes that promote healthy canopy tree growth and reduce the harmful effects of urban heat islands.
- Investigating incentives, enforcement and planning options that help retain and increase tree canopy cover on private land, and advocate for stronger controls through existing council partnerships such as Australian Local Government Association (ALGA) and Council Alliance for a Sustainable Built Environment (CASBE).
- Investigating opportunities (timers, lighting types) to reduce negative impacts of lighting on biodiversity and identify areas for implementation, through the Sustainable Buildings and Infrastructure policy, public lighting policy and advocacy to electricity providers.
- Scoping a detailed erosion risk assessment for the Dandenong Foothills and other relevant areas with implications for the Erosion Management Overlay.
 - Commission a preliminary erosion risk assessment (landslide and debris flow susceptibility) for the Dandenong Foothills and other relevant areas of Knox.
 - Pending the outcomes and recommendations of a preliminary erosion risk assessment, investigate and scope a detailed erosion risk assessment.



On-road transport is a significant source of emissions in the City of Knox contributing 21% to the municipal profile. A mode shift towards alternative forms of transport is the most important part of reducing car travel and lowering emissions from transport.

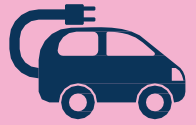
Expanding the electric vehicle charging network

Electric vehicles (EVs), even when charged through the electricity grid, are a lower emissions alternative than a petrol or diesel vehicle. To support our community transitioning to EVs, this initiative seeks to expand the network of rapid charge stations across Knox.

We will support sustainable transport by:

- Facilitating the roll-out of EV charging, via Council’s EV Charging Infrastructure Policy.





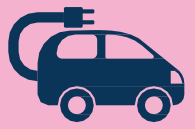
Changing the future of transport

Supporting diverse modes of transport will increase travel convenience, provide more travel options for our community, and potentially reduce car-ownership in Knox. The community consultation process told us that our community has ideas on how we can enhance the attractiveness and safety of our footpaths and other active and public transport options. Improvements to accessibility and reliability also support Priority Populations to better utilise public transport.



We will support sustainable transport by:

- Advocating for improvements to public transport including:
 - More frequent bus services
 - More efficient bus routes and connections to train stations
 - More bus shelters, which are also safe, accessible and comfortable
 - Visible bus timetables and map information
 - Longer bus service operating hours
 - Bus services are reliable and on time
 - More accessible bus stops and train stations
 - Buses to transition to an all-electric fleet
- Implementing the Cycling Action Plan (expanding bike and walking pathways with connections to bus shelters, with improved safety for cycling, wheelchair and mobility scooter users. This includes stable surfaces, lighting, vandal-proof and shaded seating, e-bike learning and water fountains).



Expansion of Council's electric vehicle fleet

Currently, transport fuels are responsible for 40 percent of Knox City Council's corporate emissions. Council's Fleet Policy will establish a framework to guide Council staff when purchasing new vehicles and designing fleet infrastructure such as parking bays and recharging stations. This will ensure that Council's investments in fleet and fleet infrastructure are future proofed for the EV transition.



We will transition Council's fleet by:

- Reviewing Council's Fleet Policy to ensure that sustainable technologies are embedded.
 - Reducing fleet emissions, to be guided through development of a Fleet Transition Plan.
- Providing staff driver training which includes sustainable/ efficient driving techniques and practices.
- Installing EV charging stations to meet Council's operational needs as demand increases.
 - Supporting Council's planned fleet transition, in line with Council's EV Charging Infrastructure and Sustainable Buildings and Infrastructure policies, consider opportunities to include enabling infrastructure for EV charging during infrastructure works.
- Investigating and implementing the use of Telematics as appropriate.
- Exploring and trialling heavy plant electric vehicles with a view to incorporate and convert heavy fleet when viable.
 - Investigate financing alternatives for the transition of heavy vehicles e.g. lease agreements or similar to increase access to *low carbon heavy vehicles and plant*.
- Where practicable, transition all fossil fuel-powered small plant equipment to alternatives powered by batteries.



“Buildings that connect with and respect Country will support sustainable low emission planning” (Wurundjeri Woi-wurrung Elders)

In the Knox municipality, 35% of emissions come from the use of electricity.

Low emissions building through design

This program aims to address the energy efficiency of buildings as they are being designed and built. The outcome would be buildings that are well insulated, well oriented, more comfortable, and resilient to increasing temperature and designed for low-energy use.

Housing design affects health, comfort and climate outcomes, and demonstrates the importance of trees, gardens and natural drainage.



We will achieve low emissions building design by:

- Working with CASBE and other Local Government partners to advocate for strong ESD outcomes in both Residential and Non-residential developments as part of the reforms underway to both Planning and Building codes.
- Identifying elevated ESD targets for new developments and leverage planning reforms to influence developers to pioneer these targets, and zero net emission buildings and housing.
- Investigating planning scheme and rates incentives for positive outcomes such as faster processing of planning permits that meet specific requirements, or discounted rates.
- Building on existing public reporting requirements to implement a communications program that will actively apply pressure to developers to raise the energy efficiency performance through greater public awareness of the emissions footprint of new buildings.



Increase energy efficiency in Council buildings

Knox Council adopted an Energy Performance Contract (EPC) in 2019 to reduce energy use across larger Council facilities. Through this program Council invested \$1.85 million into energy efficiency upgrades at Knox Leisureworks, Rowville Community Centre, Ferntree Community Arts Centre and Library, Knox Community Arts Centre, and Knox Regional Netball Centre. The energy efficiency upgrades include 2,200 lights replaced, solar panels, building management systems and upgrades to cooling/heating systems.

Council will continue to implement energy efficiency upgrades at facilities consuming the highest energy with initiatives such as installing solar photovoltaics (PV), battery storage, electrification, lighting upgrades and gap sealing.

We will increase energy efficiency in Council buildings by:

- Undertaking energy efficiency opportunities for Council buildings.
 - Where possible prioritising energy efficiency and electrification through Council's building renewal program, to reduce emissions.
 - Continuing to implement energy efficiency opportunities in the capital works program in accordance with the Sustainable Building and Infrastructure Policy.
- Installing solar PV across remaining viable sites.
 - Identify remaining viable sites for new solar PV and battery installation and develop program of installation on priority sites.
 - Establish plan for renewal of existing solar panels as they reach end of life and/or no longer meet minimum efficiency thresholds.



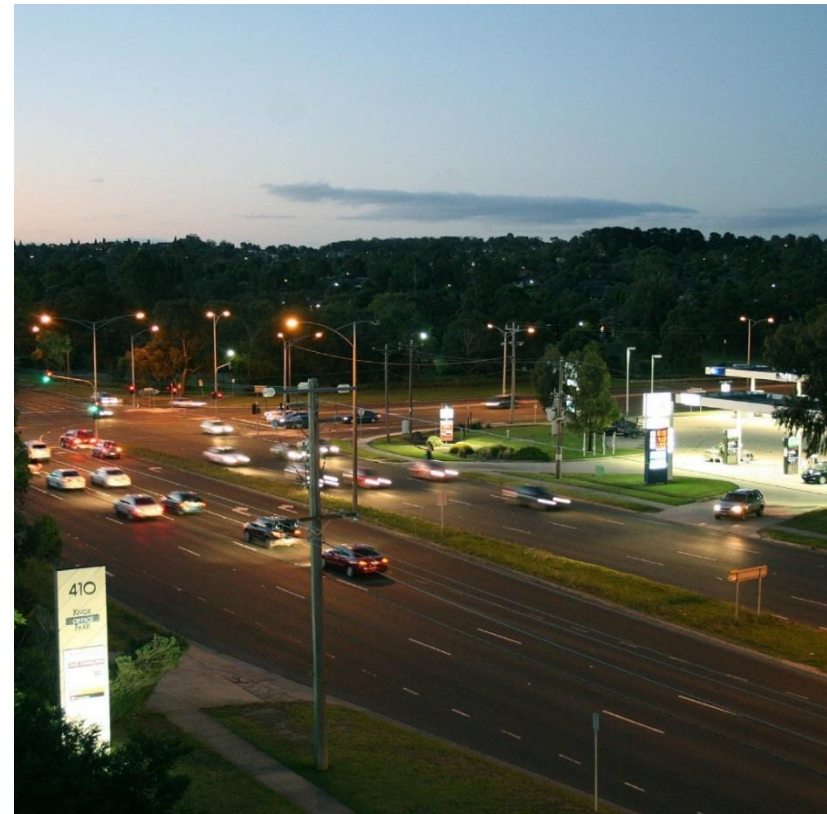
Change public lighting to LED

Knox Council has already undertaken a bulk changeover of around 12,800 street lights to LED, reducing energy use by over 75% and resulting in significant savings to operating and maintenance costs and greenhouse gas emissions.



Sustainable roads

Council constructs and repairs many kilometres of road each year. This program will lower emissions by using sustainable materials for the construction and maintenance of roads and footpaths and changing construction processes.





Adapt and protect our buildings

Ensuring the continued operation of council facilities, the quality and effectiveness of associated services and the safety of users is of paramount importance to Council. The increased frequency and intensity of extreme weather events, including floods, bushfires, and storms, may lead to increased maintenance or operational requirements and costs.

We will adapt our buildings by:

- Guide risk assessments of Council facilities for safe operating levels during extreme heat, bushfire or rainfall events, with thresholds tailored to each facility's age, design and user demographics.
- Developing and implementing site-specific strategies for water harvesting of open space including sporting facilities to reduce demand and reliance on potable water usage.
- Embedding future planning and design criteria that ensure critical facilities and emergency services are in accessible and resilient locations.
- Reviewing and updating climate hazard mapping to ensure that planning decisions account for areas of future and current risk.
- Ensuring that electrification of Knox Leisureworks is considered in the 2025/26 Aquatics Review.



Climate Resilient Infrastructure

Our community relies on the continued provision of public infrastructure. The safety of the people who use this infrastructure is the highest priority of Council. Adapting to increased pressure on this infrastructure due to climate change, means that care needs to be taken now in preparing for future impacts.

We will increase the resilience of our infrastructure by:

- Developing detailed financial impact analysis studies to assess future external capital to support risk mitigation works linked to climate change.
- Identifying 'at risk' infrastructure that may require long-term adaptation measures due to flood or fire risk, such as retreat or relocation.
 - Identifying potential mitigation measures and conduct a cost-benefit analysis on 'at-risk' infrastructure to support funding of risk mitigation measures.
- Undertaking a feasibility study of the avoided costs of future-proofing the stormwater system via the renewals process rather than large-scale stormwater upgrades.
- Including drainage upgrades in future Capital Works Program business cases of all relevant asset types, to deliver climate resilient infrastructure.
- Investigating opportunities to integrate ESD design into the Knox Central development agreement.

Renewable energy



Traditional Owners acknowledge that actions that move towards sustainability and away from pollution support the principle of Caring for Country and recognise the importance of healthy Country.

Council currently participates in the Solar Savers program, which supports residents of Knox to install rooftop solar by providing advice and streamlining decision making about products and services.

Solar for rentals

Council supports and facilitates solar installation for rental properties, which is an untapped market. Rental properties in Knox make up approximately 16.9% of the housing tenure.

The Solar for Rentals program in Victoria offers eligible landlords rebates of 50 per cent of up to \$1,400 for the installation of solar panels. Eligible rental providers can apply for an interest-free loan of up to \$1,400 to further reduce the upfront cost of the solar panel system. These opportunities for rental properties are promoted by Solar Savers as part of the suite of rebates available for solar installation and energy efficiency upgrades.

Switch to Renewable Energy

As over 80% of Council's emissions were from electricity use at the beginning of this Climate Response Plan in 2021, Switching to Renewable Energy has been a major part of achieving the Net Zero Target. Council is currently committed to sourcing 100% renewable energy through the VECO power purchase agreement, which is contracted through to 2030.

The support of people during extreme heat and cold are also important, including provision of advice and other programs that assist such as blankets, clothing and food. Programs that support and reduce costs for

community members will be targeted towards priority populations, including First Nations people, CALD community members and people with limited finances to assist with a just and equitable transition to sustainable heating, cooling and insulation for all.

We will pursue renewable energy options by:

- Investigating financial mechanisms or partnerships for development of a solar farm and/or community-based battery storage project in 2029/30.
- Advocating for enforcement of minimum energy efficiency standards in rental properties.





The industrial and commercial sector accounts for 39% of the total emissions in Knox. This sector is comprised of small to medium-sized manufacturing businesses, with some larger businesses also present. The largest opportunities for deep emissions cuts in the Knox community will be from these sectors.

Traditional Owners acknowledge the importance of partnership with First Nation businesses to support economic development and social enterprise. This is particularly important for collaboration and respectful engagement in relation to Culturally sensitive work sites. The Knox RAP encourages engagement with organisations that support the growth and development of Aboriginal and Torres Strait Islander businesses, such as Kinaway, Supply Nations and Indigenous Business Australia, as a tangible means of contributing towards Closing the Gap outcomes. The Knox RAP recognises that research shows that investment in Aboriginal economic development, procurement, and social enterprise, has been shown to increase health and finance outcomes for Aboriginal communities

The Heritage Act provides an important framework for the engagement and protection of cultural heritage in Victoria.

Transition to a zero-carbon economy

Council will support businesses and industry to achieve emissions reductions through energy efficient technology, degasification, and renewable energy. This support will be delivered through working groups with businesses, key industry bodies, research organisations, and advocacy to State and Federal governments.

A zero-carbon economy program will consist of 3 key areas:

- Transitioning towards more energy efficient technology: This includes simple changes, such as transitioning lighting at industrial sites away from high-pressure sodium and metal halide to LEDs, and more complex changes such as air compressor systems, refrigeration systems and other industrial equipment.
- Transitioning away from gas as an energy source: Replace gas-powered machinery with viable clean energy alternatives e.g. renewable electricity, electromagnetic technology, bioenergy, solar thermal, geothermal and hydrogen.
- Sourcing all electricity from renewable sources: Including onsite solar PV systems and purchased grid renewables. In Knox, numerous businesses operate out of large warehouses, many with an ideal amount of roof space that could be used for renewable energy capture.

We will assist the transition to a zero-carbon economy by:

- Promoting efficient technologies, Power Purchase Agreements (PPAs), energy efficiency and degasification to business and industry through workshops, case-studies and referrals to existing state and federal programs such as the Business Renewables Buying Group (BRBG).

Culture & Ceremony – incorporating Indigenous Knowledge



First Nations people connect with and relate to the natural environment through Culture and Ceremony. Indigenous Knowledge shared as part of the review of the Climate Response Plan in 2025 included examples of the important link between a healthy natural environment and a healthy climate, the benefits of connecting people to their local environment through sustainable practices and the unique needs and interests of Indigenous community members in relation to services and support for climate resilience.

Cultural ceremony and connection to Country is also directly impacted by climate change, for example through disruptions caused by extreme weather events and changes to plant and animal species. This section is thus aimed at providing a specific focus on activities of importance to Indigenous people in relation to climate response. We will be guided by priorities of and in consultation and relationship with Traditional Owners, noting partnership with First Nation business for Culturally sensitive work and to ensure respect of finds is important. Knox City Council's Reconciliation Action Plan contains Council's specific, actionable directions to embed the principles of reconciliation in everything we do. It aims to provide tangible and substantive benefits for our First Nations communities. The Knox Reconciliation Action Plan (RAP) provides further actions to directly provide cultural awareness training and cultural events. Through the RAP, Council remains committed to building respect and awareness of Aboriginal and Torres Strait Islander cultures' Connection to Country and integral role in relation to healthy country and climate. Council will also partner with Traditional Owners to deliver cultural events and ceremony that recognise the link between climate change and reconciliation.

Facilitating opportunities for Traditional Owner Culture and Ceremony are important ways that we can support an increased connection to Country.

- The place of Cultural education is important in understanding
- Aboriginal natural resource management
- Traditional Owner Cultural burning
- Aboriginal Farming and aqua farming practices
- Health of Country through the presence of plants and animals and the changes in the seasons
- The connection of story to place and increased respect of Country

The role connection to place and identity plays in health and wellbeing Healthy air is another critical component of a Healthy Country, and this is particularly significant for Wurundjeri because this is where their Creator Bunjil (eagle) and Protector Waa (crow) live.



These actions will benefit from ongoing collaboration with Wurundjeri to further incorporate Wurundjeri knowledge and priorities in relation to climate change, including future and emerging climate risks that may not yet have been incorporated into Council planning. At the mid-point review of this Plan, the Wurundjeri Corporation initiated a Climate Change

We will incorporate Indigenous Knowledge by:

- Investigating how to embed and reflect Traditional Owner cultural knowledge in Council's approach to climate change (guided by priorities of and in consultation and relationship with Traditional Owners).
- Consulting with Traditional Owners on emergency management arrangements for Aboriginal people in the municipality.

Impact Assessment Project to identify, prioritise, and create mitigation strategies to respond to the various risks to cultural values, waterways, significant and totemic species, and the various sub-regions of Wurundjeri Country.

Tracking our progress



The impact of the actions in this Plan will be measured in terms of the reduction in emissions, the reduction in climate risk and the inclusive delivery of wider social, environmental, and economic benefits.

Tracking our progress and the indicators we use to determine if the action Plan is effective will inform regular revisions of the Plan.

To ensure that we are using the best data, innovations and responding to major changes in policy, the Climate Response Plan will be evaluated at regular intervals and in line with emissions inventory reporting updates, or as new information on climate risks becomes available. Similarly, the budgets required for individual actions in the Plan will be subject to the normal Council business case processes.

Actions will be assessed and reported on under the Council and Community Plans and State of Knox reporting processes.

Monitoring, evaluation, review and learning (MERL) will be implemented to track our progress in achieving our targets and measuring the effectiveness of programs. This analysis will allow Council to optimise programs and redirect the course if necessary. This not only allows Council to address risks associated with program failures, but it also provides confidence that resources are being used effectively to achieve the planned outcome. Without undertaking MERL activities, inefficiencies or misdirection may not be realised until the end of the program or project.





- Rediplan: [Red Cross Rediplan Disaster Preparedness Guide](#)
- Easy English: [Australian Red Cross Rediplan](#)
- Australian Climate Service, 2025: Delivering the National Climate Risk Assessment, DCCEEW, Canberra.
- Australian Climate Service, 2025b: Climate risks to Aboriginal and Torres Strait Islander Peoples, Commonwealth of Australia 2025
- Department of Climate Change, Energy, the Environment and Water, 2025: *National Adaptation Plan*, Australian Government, Canberra.
- Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation, 2025: Whole of Country Plan 2025-2035.



Knox City Council
511 Burwood Highway
Wantirna South, VIC 3152
knox.vic.gov.au

T 9298 8000

E knoxcc@knox.vic.gov.au

 [knoxccouncil](https://www.facebook.com/knoxccouncil)

 [knoxcc](https://twitter.com/knoxcc)

 [knoxccouncil](https://www.instagram.com/knoxccouncil)

 Interpreter
131 450

National Relay Service
133 677

Knox City Council acknowledges the traditional custodians of the city of Knox, the Wurundjeri and Bunurong people of the Kulin Nation.

