



# Darebin Climate Emergency Plan 2024-30

CONSULTATION  
DRAFT



# Acknowledgement of Country

This Climate Emergency Plan (Plan) has been written on the unceded lands of the Wurundjeri Woi Wurrung people - the Traditional Owners and custodians of the land, waters and multiple layers of Country we now call Darebin.

Darebin Council wholeheartedly affirm and acknowledge that Wurundjeri Woi Wurrung people have lived on this Country for millennia, practicing customs and ceremonies of celebration, initiation and renewal.

We recognise unreservedly that it is important to move beyond words of Acknowledgement, and to build relationships and connections with Traditional Owners. We will ensure that their wisdom, and holistic ways of understanding Country guide our response to the climate emergency.

Invasion and colonisation disrupted Traditional Owners' custodial and caring responsibilities to and for Country. As a step towards decolonisation and self-determination, the Wurundjeri Woi Wurrung people were the first to see, review and comment upon a full draft of this Plan. We thank the Elders for their generosity in allowing us to listen, understand and incorporate their priorities for caring for Country and the people who live, work and play here.

We pay our respects to Elders past and present and we pay our respects to all Aboriginal and Torres Strait Islander peoples who have a connection to Darebin. We affirm our commitment to respectful collaboration, knowledge sharing and two-way learning that centres caring for Country and cultural practices of the Wurundjeri Woi Wurrung custodians as we work together to mitigate and adapt to the climate emergency.

# Contents

Acknowledgement of Country	ii
Context for Consultation	2
Community voices - A climate safe Darebin	4
Introducing Darebin's new Climate Emergency Plan	6
How to read this plan	7
Four pillars of action	7
<b>1. Caring for Country</b>	<b>10</b>
<b>2. Towards Zero Emissions Darebin</b>	<b>15</b>
<b>3. Community Resilience</b>	<b>27</b>
<b>4. Innovation and Leadership</b>	<b>35</b>
The bigger picture	42
Why is this decade so important?	42
Climate Impacts and social disadvantage	43
What are other levels of government doing?	44
What is our role as a local government?	44
Connection to community	44
Legislative responsibilities	45
Darebin Council's climate emergency principles	46
How we came up with these actions	47
Community engagement process	47
How we will measure our progress	48
What is the community's role?	50
Darebin current emissions profile and projections to 2030	52
Glossary	55



## Context for consultation

In December 2016 Darebin Council was the first jurisdiction in the world to declare a climate emergency and to develop a climate emergency plan.

Council, in partnership with our community, started a movement that now includes declarations in 2,349 jurisdictions and local governments, covering 1 billion citizens. Many leaders, including the United Nations and the Australian Government, now talk about climate change as a climate emergency, and are embedding action across policy, services and projects.

Darebin Council has supported its community and influenced others to accelerate climate action by delivering ambitious and practical projects including Solar Saver, leading the Victorian Energy Collaboration, and building the all-electric, renewable power, 6 green star Northcote Aquatic and Recreation Centre.



But there is more to do. In 2023, the Intergovernmental Panel on Climate Change found that

***“...widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred. Human-caused climate change is already affecting many weather and climate extremes in every region across the globe. This has led to widespread adverse impacts and related losses and damages to nature and people (high confidence). Vulnerable communities who have historically contributed the least to current climate change are disproportionately affected...”<sup>1</sup>***

Locally, Darebin will see an increase in average temperature, more hot days, heatwaves, smoke exposure from bushfires, and storms, and less rainfall. This will have a wide and far-reaching impact on the services Council provides, and on the community's health and wellbeing. Heat is dangerous for everyone, but some people are at higher risk including outdoor workers, children, elderly, and people living with illness or a disability.

<sup>1</sup> AR6 Synthesis Report, Headline Statements, IPCC, accessed on 30 November 2023 at <[AR6 WGI Headline Statements from the Summary for Policymakers \(ipcc.ch\)](https://www.ipcc.ch/report/ar6/synthesis/)>

The global and national economy is transforming into a renewable, zero carbon economy. This is driven by:

- people wanting action on climate
- investors who are transitioning out of fossil fuel investments because of financial risk and the opportunity renewables offer
- large corporations who are committing to a science-based carbon target across their entire supply chain
- governments who are increasingly governing to avoid the worst risks of the climate emergency and to harness the social and economic benefits that are expected from a zero economy.

There are big opportunities for Darebin's local economy through moving to a renewable, circular economy. Many government, industry and climate leaders have described these opportunities and are acting fast to make them happen.

Implementing our 2017-2022 Plan showed us what can be achieved when one committed local government works with its community to take ambitious action on the climate emergency.

Council's commitment to addressing the Climate Emergency continues, and is expressed through Darebin's community vision:

***“Darebin is an equitable, vibrant and connected community.”***

***Darebin respects and supports First Nations People, values country, our diverse communities and places.***

***Darebin commits to mitigating the climate emergency, creating prosperity for current and future generations.”***

This draft plan is a vital part of bringing our community vision to life.

We invite our community to read this draft plan, to think about the climate challenges we are facing, and the thriving, resilient future we want, and then share if this draft plan sets us on the right journey. What have we got right? What might be missing? Does something need to change?

**We look forward to your feedback, which will help Council continue to take urgent action on the climate emergency facing our world.**



## Community voices – A climate safe Darebin

In 2022, Council consulted with the community to help shape this draft Climate Emergency Plan.

We asked participants to describe their vision for a climate safe Darebin in 2030 and beyond. Nearly 300 people responded by sharing their passions and ideas for the place and the community they want Darebin to be.

The words below, which come directly from community contributions, convey a clear vision and a strong ambition to live in a thriving, healthy place enriched by nature, and a connected, diverse community.

Community members painted a rich picture of Darebin's future and this vision inspired this draft Climate Emergency Plan.

*Darebin is green, tranquil and cool. Streets are lined with native trees, and our paths to shops, parks, workplaces and public transport are shaded so that being in our neighbourhoods is a pleasure. Our green spaces and waterways are flourishing. Wildlife thrives in restored habitat corridors and backyards; we hear birds sing in the day and possums and bats at night.*

*We feel safe in Darebin because everyone has somewhere to be that is safe and cool in summer and warm in winter.*

*All buildings, homes and businesses are high quality, energy efficient, fully electric and comfortable places to live and work. Those most vulnerable to the impacts of climate change and those renting or unable to make changes in their homes have been supported and we have achieved a transition to affordable renewable energy where no one has been left behind.*

*We have listened with trust and respect to the invitation from the Wurundjeri Woi Wurrung and other Aboriginal and Torres Strait Islander people living in Darebin to 'listen to our mob, understand our knowledge' about caring for Country and culture and how to be safe and well in the environment. In partnership with Wurundjeri Woi Wurrung custodians, we have learnt to value and protect nature, culture and Country, and to feel deeply connected to the land and the places we love.*

*Streets are safe, liveable places because fewer cars are needed. We use reliable and accessible electrified public transport, walk, ride bikes or access community electric car shares.*

*Businesses have invested in sustainability and circular economy initiatives and people shop locally in support. We are a thriving, connected community working together to reduce emissions. Locally grown food is widely shared. Tools, skills and knowledge to reuse, repair and minimise waste are readily available.*



# Introducing Darebin Council's new Climate Emergency Plan

In this draft Climate Emergency Plan, we outline:

- what we will do as a Council
- how we will support our community to take action and stay safe
- where we will continue to collaborate and advocate for stronger action from the Australian and Victorian governments.

We focus on actions we can take as a local Council and with the community to address and respond to climate change, and foster and harness opportunities for innovation and leadership. An important focus of this Plan is how Council can support a sustained relationship with the Wurundjeri Woi Wurrung Traditional Owners to embed their cultural knowledge and acknowledge their ongoing custodianship, and work together to ensure that our community thrive.

We also recognise that the impacts of climate change are not felt equally, with many members of our community at a greater risk of climate impacts than others (see page 43). We bring an equity lens to our climate work to ensure that those with the fewest resources and least capacity to adapt are supported.

When Darebin Council responded to our community's calls to declare a climate emergency in 2016, we were alone in advocating that climate change be officially considered an emergency. Six years on, this message has been taken up by 2351 governments around the world,<sup>2</sup> resulting in a more focused and collaborative effort to stop runaway climate change and minimise its impacts.

We have made substantial progress to reduce our emissions since we developed our first Climate Emergency Plan in 2017 (see The Bigger Picture at page 42). In Australia, policies have changed significantly since then. We now have ambitious Australian<sup>3</sup> and Victorian<sup>4</sup> emissions reductions targets with tangible and sustained action to tackle climate change over the next decade and beyond. We have agreement that acting on climate change this decade is critical, and we know what needs to be done to shift away from fossil fuels.

The task remains urgent. We are confident that by working together with trust and respect we can heal and protect Country, reduce our emissions, support each other to adapt to climate change, lead by example and foster innovation in a thriving Darebin.

<sup>2</sup> <https://climateemergencydeclaration.org/climate-emergency-declarations-cover-15-million-citizens/>

<sup>3</sup> <https://www.dcceew.gov.au/climate-change/emissions-reduction/net-zero>

<sup>4</sup> <https://www.climatechange.vic.gov.au/climate-action-targets>

## How to read this plan

### Four pillars of action

We have divided the actions into four pillars. These pillars represent the key areas Council will focus on to address climate change and its impacts. These pillars are the result of many discussions with the Darebin community, community organisations, climate and community experts, Traditional Owners and Custodians, and advisory bodies (see page 47 for details of these consultations).

These four pillars will shape our focus over the next decade:

#### 1. Caring for Country

Wurundjeri Woi Wurrung and all Aboriginal and Torres Strait Islander people with a connection to Darebin are empowered and supported to maintain and share their culture and knowledge to protect, preserve, revitalise, and heal Country, which supports self-determination, benefits everyone and maintains a thriving, resilient natural environment.

#### 2. Towards zero emissions Darebin

Darebin homes, businesses, and transport, and Council operations and buildings are efficient, fossil fuel-free and powered by renewables, allowing for a healthy, liveable and thriving community.

#### 3. Community resilience

Darebin's community is connected, safe and resilient to the changing climate, and has safe places to live, work and play.

#### 4. Leadership and Innovation

Darebin Council drives innovation and opportunity through strategic climate advocacy and partnerships across all sectors and is recognised as a Sustainable Climate Economy hub, with a climate-focused and skilled workforce.

Each pillar contains:

- A vision
- A description
- Big picture goals, what we are aiming to achieve by 2030; and
- Actions for the first three years to take us towards the goals.

At the end of this draft Plan we provide the background information on how these pillars and actions were developed, why they are important, and how we will measure our progress.



## Caring for Country

Wurundjeri Woi Wurrung and all Aboriginal and Torres Strait Islander people with a connection to Darebin are empowered and supported to maintain and share their culture and knowledge to protect, preserve, revitalise and heal Country, which supports self-determination, benefits everyone and maintains a thriving, resilient natural environment.

## Community Resilience

Darebin's community is connected, safe and resilient to the changing climate, and has safe places to live, work and play.

## Towards Zero Emissions Darebin

Darebin homes, businesses, and transport, and Council operations and buildings are efficient, fossil fuel-free and powered by renewables, allowing for a healthy, liveable and thriving community.

## Leadership and Innovation

Darebin Council drives innovation and opportunity through strategic climate advocacy and partnerships across all sectors and is recognised as a Sustainable Climate Economy hub, with a climate-focused and skilled workforce.

CONSULTATION DRAFT



# 1. Caring for Country



**Vision:** Wurundjeri Woi Wurrung and all Aboriginal and Torres Strait Islander people with a connection to Darebin are empowered and supported to maintain and share their culture and knowledge to protect, preserve, revitalise, and heal Country, which supports self-determination, benefits everyone and maintains a thriving, resilient natural environment.



## 2030 GOALS

- Wurundjeri Woi Wurrung cultural knowledge is embedded and reflected in Council's approach to conservation, biodiversity and land management
- Darebin's natural environment is diverse, resilient and thriving
- Darebin's neighbourhoods are green, safe and liveable

Bordered by the Merri and Darebin Creeks, the natural songlines of the land, the City of Darebin has diverse ecosystems of plants, animals and other organisms all living together on the unceded lands of the Wurundjeri Woi Wurrung people. Cities are Country too and a thriving and resilient natural environment supports a thriving community. When we care for Country we are also caring for people.

At Darebin Council we are on a journey to acknowledge and address the impacts of colonisation on this Country and the Wurundjeri Woi Wurrung Traditional Owners as reflected in our Statement of Commitment to Aboriginal and Torres Strait Islander

people and our Darebin Aboriginal and Torres Strait Islander Action Plan 2017-2021. In our environmental work this involves placing Wurundjeri Woi Wurrung cultural knowledge and culturally appropriate practices such as storytelling and art at the heart of our conservation and biodiversity work, and identifying opportunities for partnership, collaboration and leadership.

This Climate Emergency Plan is being developed alongside the new Aboriginal Action Plan<sup>5</sup>. Both plans will be important in continuing to bring to life to Council's commitment to Traditional Owners and Aboriginal and Torres Strait Islander people.



<sup>5</sup> Darebin Aboriginal Action Plan <https://www.darebin.vic.gov.au/Community-and-pets/Aboriginal-Darebin/Our-commitment/Action-plans>



Darebin Council’s Caring for Country projects

The Narrap (Country) Unit is the Natural Resource Management team of the Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation. Darebin City Council has been working with the Narrap Rangers since 2021, Caring for Country in three significant conservation areas of grassland remnants – the Cherry Street Grassland Reserve, Ngarri djarrang Grassland and Bundoora Park Grassland.

We have worked together in revegetation activities and controlling weeds. Fire break maintenance for environment and community safety is another ongoing part of our work. A management practice known as ecological thinning has also been undertaken at Cherry Street Grassland Reserve to increase local biodiversity. Ecological thinning consists of reducing the density of regrowth trees in altered environments and restoring the conditions of natural grasslands, a habitat typically dominated by grasses with little tree cover.

Ecological thinning applied to enhance grasslands creates room and sunlight for other indigenous species to grow and flourish. This practice requires sound knowledge of the local environment – combining the skills of the Narrap Rangers and Council officers is key to its success. In the short time that we have been doing this landscape restoration and regeneration work, we can see improvements in ground cover, including greater diversity and increased flowering of native species.

From this partnership, other opportunities for collaboration arise. For example, at Bundoora Park, Council officers recently supported Narrap in preparing for and facilitating a planting day with local schools to reinvigorate the Wurundjeri Garden. The garden will become an important site to display and learn more about indigenous species and their traditional usages.

The Narrap Rangers and the Bushland crew have shown us that Caring for Country involves people coming together, exchanging knowledge, learning about culture and building social connections through shared projects which benefit us all.



We are guided by the principles in the Victorian Aboriginal and Local Government Strategy 2021–2026 which states that partnerships based on mutual control, shared power and decision-making, fairness, respect, and trust are essential for self-determination.

We are also guided by the Caring for Country principles of the Narrap Unit at the Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation. These principles centre Traditional Owner knowledge and recognise that colonisation severely disrupted connections to culture and place. Caring for Country principles ensure that Traditional Owners:

- have first right to identify and deliver natural resource management works
- are engaged early in any project

- can attend Country throughout natural resource management works; and
- are supported in ongoing building of knowledge and skills in caring for Country.

This is a journey of recognition, self-determination, knowledge sharing and two-way learning.

We acknowledge that this work isn’t easy, and Council won’t always get it right. There is a lot to learn, and non-Aboriginal community members can bring colonial cultural assumptions and world views. But we know we will be stronger, fairer and more resilient if we walk side by side with each other.

Wurundjeri Woi Wurrung cultural knowledge is embedded and reflected in Council’s approach to conservation, biodiversity and natural resource management

Number	Actions
1.1	<p>By 2030 Council has made a sustained investment in a strong and respectful working relationship between Council and the Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation that centres Traditional Owner cultural knowledge and rights in relation to natural resource management and climate programs and supports two-way learning.</p> <p>1.1.1 Work with the Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation and Aboriginal and Torres Strait Islander people in Darebin to support the delivery of the actions within this pillar, build strong relationships and identify additional opportunities to achieve climate justice.</p>
1.2	<p>By 2030, Council practices are culturally safe and key Council strategies, processes, programs and resources in relation to biodiversity and land management reflect Traditional Owner knowledge and priorities.</p> <p>1.2.1 Provide Aboriginal cultural training on climate and caring for Country to key staff by 2025 to promote cultural safety in climate and biodiversity work practices and systems.</p>



## Support Darebin's natural environment to be diverse, resilient and thriving

**1.3** By 2030 Darebin has significantly increased its green spaces, tree canopy and biodiversity, with climate resilience as a priority outcome.

**1.3.1** Work with the Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation to develop an agreed framework for integrating Traditional Owner knowledge, caring for Country principles and climate resilience principles into Councils' existing and future conservation and biodiversity focused strategies and services.

**1.4** By 2030 community initiatives that promote connection to, and improvement of, the natural environment, are flourishing and supported by Council.

**1.4.1** By 2027-28 commence program design to support embedding of caring for Country principles into community engagement programs and resources aimed at protecting and enhancing biodiversity.

## Ensure that Darebin's neighbourhoods are green, safe and liveable

**1.5** By 2030, the built environment across Darebin incorporates natural elements that contribute to climate resilience and enhance liveability.

**1.5.1** Continue to increase canopy cover in streets across Darebin, prioritising street planting in locations where there are low levels of in-home cooling, that are priority walking or cycling routes, and where canopy cover is low.

**1.5.2** By 2026 review Council's strategies relating to the urban forest, including identifying a pathway for mitigating risk to our community in areas affected by the urban heat island effect, and for maintaining urban forest and ecological connectivity in the face of extreme heat risk to vegetation.

**1.5.3** Implement the updated Environmentally Sustainable Development (ESD) Building and Infrastructure Policy to integrate nature-based solutions into Council's building and design projects that support habitat creation and increase resilience to drought and heat.

**1.5.4** Continue to implement Darebin's Open Space Strategy Breathing Space, including its key directions to enhance biodiversity within the open space network and to increase nearby access to cooling open spaces for community.

**1.5.5** Advocate to the Victorian Government for funding towards protecting and enhancing urban forests to help facilitate more trees across the northern region to address the urban heat island effect and improve canopy equity.

**1.5.6** Advocate for funding for projects that increase water quality, address urban cooling and/or promote habitat.



## 2. Towards zero emissions Darebin



**Vision:** Darebin homes, businesses, and transport, and Council operations and buildings are efficient, fossil fuel-free and powered by renewables, allowing for a healthy, liveable and thriving community.



## 2030 GOALS

- Darebin has transformed into a clean, liveable city that supports the transition to zero-emissions.
- Achieve best practice environmentally sustainable development outcomes and aim for zero carbon buildings and assets
- Move towards zero-emissions transport, reducing congestion and dependence on cars
- Build a local circular economy that reduces waste and supply chain emissions

Darebin Council is committed to reducing emissions to tackle climate change. We're already seeing the effects of climate change with more frequent bushfires, floods, and extreme weather events. It's more important than ever to reduce greenhouse gases and keep global warming below the 1.5°C target, as established in the Paris Agreement.<sup>6</sup> This will help maintain a safe and liveable climate for everyone.

We need to act quickly to prevent irreversible damage. If we don't, we'll have to spend more time and resources in the future protecting our community from climate change, instead of being able to take up economic opportunities and build a more positive future.

What does this mean for Darebin? Our community has told us they want to see significant change this decade. Local governments play a major role in helping communities reduce their emissions and stop using fossil fuels. We're aiming to cut emissions in Darebin by 7% each year to meet the Paris Agreement goals.<sup>7</sup> Council's emissions account for less than 0.5%<sup>8</sup> of total emissions in Darebin, so our focus will be on supporting and inspiring everyone in the community to reduce emissions and switch from gas and other fossil fuels to clean, renewable energy.

To develop this Plan we sought expert advice on how we should focus our efforts. The Australian and Victorian governments are already investing substantially in ensuring our electricity grid is powered by renewable energy rather than coal. This will help cut down Australia's emissions from electricity in the next ten years.

But gas use in Darebin, which produces 26% of our emissions, is expected to increase.<sup>9</sup> So our main goal in this Plan is to reduce our use of gas and other fossil fuels. By shifting to electric options, we're not just cutting down emissions; we're embracing a future of cleaner energy and lower bills. The benefits will grow as more of our electricity comes from renewable sources.

This means supporting Darebin households to switch from gas to electric appliances, our businesses to adopt electric technologies, and ensuring our industries are powered by renewable energy. It will also require ambitious policies, programs and investment from other decision makers, including the Australian and Victorian governments, industry leaders and financial institutions.

Council will lead by example, continuing to use 100% renewable electricity in our operations and working towards electrifying our buildings and assets.

<sup>6</sup> Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104.

<sup>7</sup> Ironbark Report 2023 to Darebin Council

<sup>8</sup> Public disclosure statement, Darebin City Council, Organisation Certification FYD021-2022, <https://www.climateactive.org.au/buy-climate-active/certified-members/city-darebin>

<sup>9</sup> Darebin municipal emissions, Snapshot report 2021/22

*To meet the Paris Agreement goals we need to switch 3,700 homes, 374 businesses, and 6,300 cars from fossil fuels to renewable energy every year.*

We are committed to supporting Darebin's residents and businesses to go electric through programs, education, and advice, using our experience from the Solar Saver program.

We will also work on lowering emissions from our supply chains, transport, and waste services through collaboration with other local councils and organisations. Finally, we will continue to strongly advocate to the Australian and Victorian governments to provide the necessary policy, regulations, programs and funding for a smooth transition.

Figure 1 shows emissions reductions achieved to the end of Council's first Climate Emergency Plan and a prediction of how emissions will continue to go down under the new Plan.

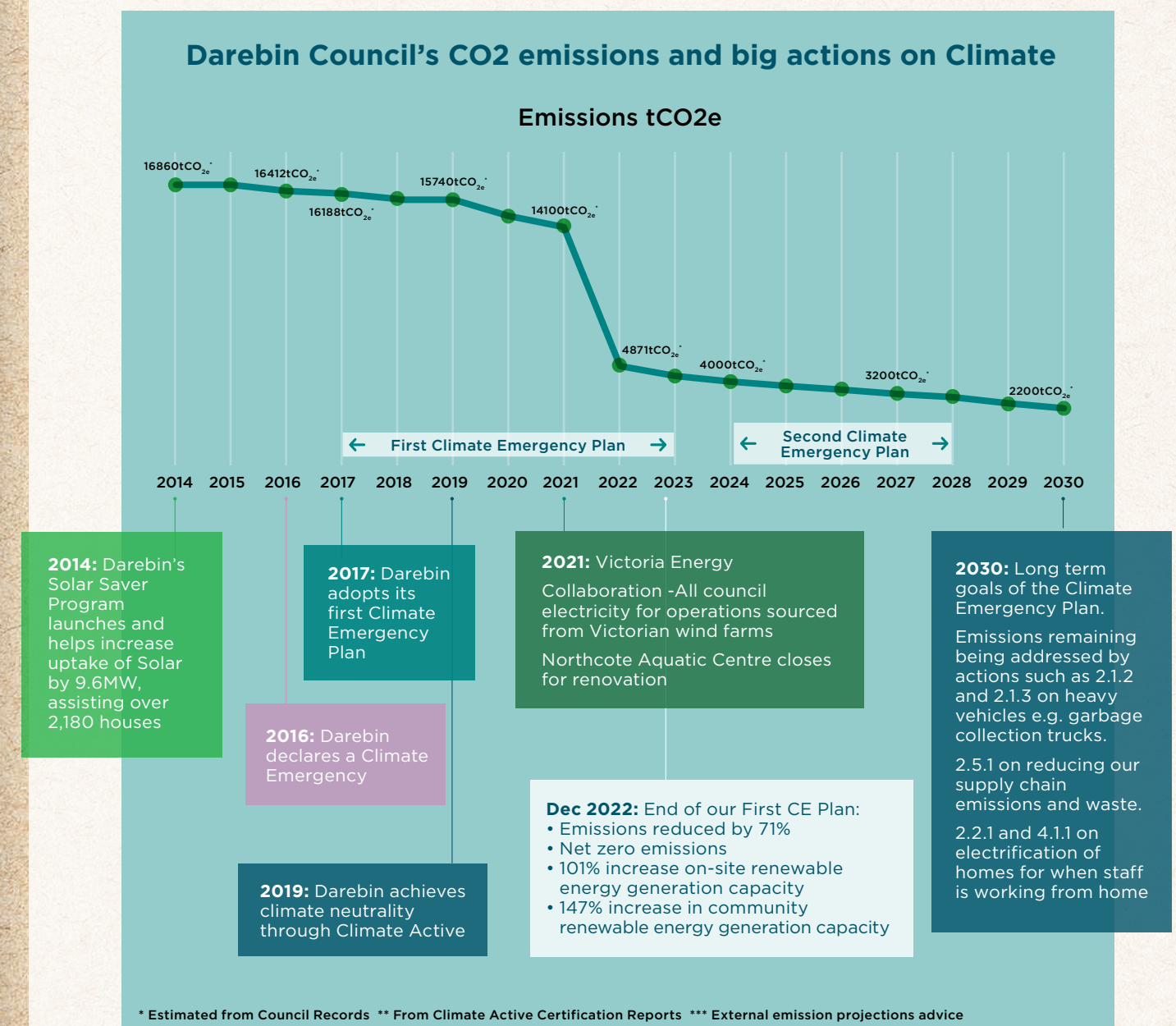





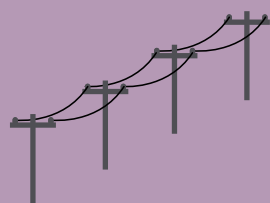
Figure 1: Darebin Council's CO2 emissions and big actions on climate






# Darebin's Pathway to Zero Emissions

## Darebin's current emissions

### ENERGY SOURCES

  
GasCoalOil

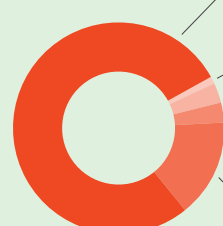
  
WindSolarHydro






68% fossils fuels and 32% renewables in our electricity grid  
(Australia Energy Update, 2023)

### TRANSPORT

~161,000 passenger vehicles

**TOTAL EMISSIONS (tonnes CO2e)**  
**222,000 (20%)**





Cars: 15.6% (173,160)	
Freight: 3% (33,300)	
Buses: 0.6% (6,660)	
Trams: 0.6% (6,660)	
Trains: 0.2% (2,220)	

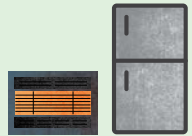
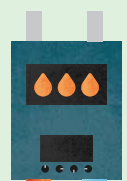
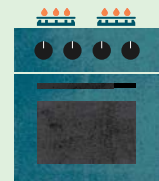
### DAREBIN HOMES

51,958 homes (76%) in Darebin still on gas

**TOTAL EMISSIONS (tonnes CO2e) from residential appliances**  
**295,000 (26.2%)**

**216,000 (19%)**

**79,000 (7%)**



Lower efficiency appliances



### WASTE

**TOTAL EMISSIONS (tonnes CO2e)**  
**49,000 (4%)**


27,000 tonnes of waste sent to landfill each year



### EMBODIED ENERGY

**TOTAL EMISSIONS (tonnes CO2e)**  
**75,000 (6.6%)**


Emissions produced by Industrial Processes and Product





### DAREBIN BUSINESSES

Over 13,000 registered businesses (includes Industry)

**TOTAL EMISSIONS (tonnes CO2e)**  
**326,000 (28.8%)**


**25,000 (2%)**


**301,000 (26%)**



### INDUSTRY


**TOTAL EMISSIONS (tonnes CO2e)**  
**162,000 (14.4%)**

**54,000 (5%)**

**108,000 (10%)**

Manufacturing (4.3%)  
Utilities, Transport and Construction combined (0.7%)

Manufacturing (7.7%)  
Construction, Utilities, Transport, Agriculture and Mining combined (2.3%)





# Darebin's Pathway to Zero Emissions

## Solutions

### ENERGY SOURCES



### TRANSPORT

#### SOLUTION

- All cars, trucks etc are either electric or powered by green hydrogen
- Improved infrastructure for active and public transport

#### WHOSE ROLE IS IT?

- Community
- State and Federal gov support/subsidies
- State gov/Council for infrastructure

### ELECTRICITY GRID

#### SOLUTION

- 100% plus renewable energy in the electricity grid, through improved infrastructure, policy and regulations

#### WHOSE ROLE IS IT?

- State government to improve infrastructure, policy and regulations – with 95% renewables in the grid by 2035

### DAREBIN HOMES

#### SOLUTION

- 51,958 homes swap gas for electricity
- All new builds are electric

- All homes to have solar PV with battery storage or access to renewable energy

#### WHOSE ROLE IS IT?

- Residents with support from Local, State and Federal governments

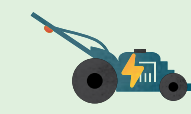
#### Gas appliances are swapped with:



51,958 electric cooktops and hot water systems



66,000 electric heating systems (e.g. dual system heating and cooling)



50,000 other electric household items (e.g. mowers, whipper snippers and other garden gear)

### ENERGY EFFICIENCY

#### SOLUTION

- 7+ star appliances
- Using appliances less and efficiently

#### WHOSE ROLE IS IT?

- Community



★★★★★★★★★  
7+ star. Zero fugitive emissions from air conditioning and refrigerators



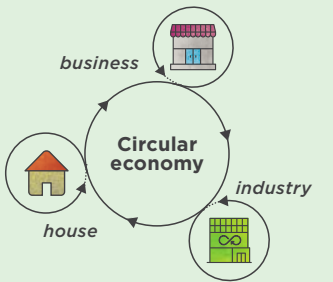
### TURNING WASTE INTO A CIRCULAR ECONOMY

#### SOLUTION

- No resources sent to landfill

#### WHOSE ROLE IS IT?

- All levels of government collaborate to implement incentives and regulations for businesses and industry



### DAREBIN BUSINESSES

#### SOLUTION

- Electrify all appliances
- Solar PV and solar battery storage where possible
- Battery storage for solar

#### WHOSE ROLE IS IT?

- Businesses with support from Local, State and Federal governments

### JOB OPPORTUNITIES AND TRAINING

#### SOLUTION

- New local jobs and training in electric, renewable and circular economy trades

#### WHOSE ROLE IS IT?

- State government, universities and TAFES

### INDUSTRY

#### SOLUTION

- ~400 heat or other electric pumps to replace industrial heating processes
- 600 commercial kitchens to switch to renewable energy

- 500-1000 commercial heating and cooling systems to switch to renewable energy
- Other industrial technologies

#### WHOSE ROLE IS IT?

- Businesses with support from State and Federal

### MULTI-BILLION \$ ECONOMY INTO DAREBIN

#### SOLUTION

- Attracting new and support existing industry and business to Darebin as a sustainable economic hub

### LOCAL COMMUNITIES

#### SOLUTION

- Improved infrastructure makes active transport a real choice and reduces consumption

#### WHOSE ROLE IS IT?

- Local and State government planning schemes and city design



Create a clean, liveable city by leading energy initiatives that accelerate the transition to a zero-emissions Darebin

Number	Actions
2.1	<p><b>By 2030, Council buildings, assets and fleet are electric, efficient, and run on 100% renewable energy.</b></p> <p><b>2.1.1</b> Progressively fully electrify Council buildings currently connected to the gas network with the aim of having all Council owned or managed buildings off gas by 2030, aiming for minimum 40% completion by 2027.</p> <p><b>2.1.2</b> Annually review new technology options to reduce emissions from heavy vehicles in Council’s fleet, acknowledging that for some functions there are not currently readily available alternatives.</p> <p><b>2.1.3</b> Progressively transition to a full electric vehicle fleet and full electric suite of small plant (such as leaf blowers) for the delivery of Council services (both in house delivered or contracted) with the aim of having transitioned by 2030 as technologies become available, aiming for 40% emissions reduction by 2027 of Council’s light fleet.</p>
2.2	<p><b>By 2030, Darebin’s households (including renters), businesses, and community organisations have maximum support from Council, Australian and Victorian governments to electrify, improve efficiency, access affordable 100% renewable energy, and Darebin’s gas emissions are dramatically reduced and approaching zero.</b></p> <p><b>2.2.1</b> Create a program that provides tailored household support and a financing mechanism to support electrification and renewable energy, with a target of engaging 1000 Darebin households per year.</p> <p><b>2.2.2</b> Advocate to other levels of government to accelerate households going electric.</p> <p><b>2.2.3</b> Advocate for funding to electrify and install renewable energy in public and social housing. Access funding from Australian and Victorian government programs. E.g. the \$1 billion Australian government Energy Saving Package.</p>

Supporting households in Darebin to make the switch

The Intergovernmental Panel on Climate Change has shown that we need to stay within 1.5°C warming to reduce the most harm caused by climate change (IPCC 2023).

In Darebin, we need to reduce our emissions by 7% each year to play our part in reaching this target. This is the equivalent of removing the greenhouse gas emissions from 3700 households per year in Darebin. We aim to meet this goal by helping homes in Darebin switch from gas to renewable electricity.

Australia’s electricity grid is shifting to using more renewable energy. In Darebin the use of gas to power our homes is the biggest source of greenhouse gas emissions. 76% of households in Darebin still use gas for cooking, heating, cooling, and hot water. We want to support these households to transition to using renewable energy instead of gas, and electric appliances such as stove tops, hot water systems and split systems for heating and cooling.

Darebin Council has a track record in helping households embrace renewable energy. Council’s Solar Saver program supported 20-30% of all homes in Darebin with solar panels to install solar. We want to expand on the success of the Solar Saver program.

By continuing this level of engagement (1000 households is 27% of our annual 3700 target) and through a combination of tailored household support and a financing mechanism, Council aims to support households to switch from gas to renewable electricity. We also aim to encourage a further 2,800 households per year to make the switch by delivering education campaigns.

Together, these aims will remove greenhouse gas emissions from 3700 households per year, which would be a 7% reduction in emissions in Darebin. Achieving this means Darebin fulfils our part in keeping climate change to below 1.5°C warming.

These are ambitious aims. Council will advocate and seek funding to help achieve our target. What we learn in Darebin can help accelerate the switch to renewable electricity for households across Victoria and Australia.



Renewable energy and electric technologies

Renewable energy is energy from natural sources that are replenished at a higher rate than they are consumed<sup>10</sup>. The most common sources in Australia are the sun (solar power), wind (wind power) and water (hydropower). Running our homes, businesses and industry on electricity generated from renewable sources rather than from non-renewable fossil fuels (such as coal, oil or gas) significantly reduces greenhouse emissions, and is key to tackling climate change.

The Australian and Victorian governments have incentives to encourage this transition from fossil fuels to renewable energy and our electricity grid is rapidly changing to include more renewables.

New efficient technologies also reduce the amount of energy used by common appliances such as hot water services, heating and cooling, and cooktops, so switching to efficient electric appliances is the best way to reduce energy bills and emissions. These include:

- **Heat pump hot water systems**, which absorb warmth from the air and transfer it to heat water. They use around 60 to 75% less electricity than traditional electric hot water systems. Unlike solar hot water systems they don't require roof space or boosting with gas in winter. They have a higher up-front cost but save money over time, especially when programmed to heat up during the day to make use of solar power.
- **Reverse cycle air conditioners**, a type of heat pump. As well as cooling your home, they are the most cost-effective and energy-efficient way to heat your home.
- **Induction cooktops**, which use electro-magnetic energy to heat cookware. They heat up faster than gas or electric stoves, have a wide temperature range and are easy to clean. They are also safe to use as they switch off automatically when cookware is taken off, and don't have a naked flame or hot element. Unlike gas stoves, induction cooktops don't produce harmful nitrogen dioxide which can contribute to asthma and other respiratory illnesses.
- **Electric vehicles**, which are fast replacing internal combustion engine vehicles worldwide. Electric cars use rechargeable batteries instead of petrol or diesel, and they can be used as a backup power source when other sources are not available. They are cleaner, quieter and cheaper to run than petrol or diesel vehicles.

See [darebin.vic.gov.au/go-electric](https://darebin.vic.gov.au/go-electric) for more information on electrifying your home.

10 <https://www.un.org/en/climatechange/what-is-renewable-energy>

Achieve best practice Environmentally Sustainable Development outcomes and aim for zero carbon buildings

- 2.3** By 2030, become a leading Council with zero carbon development requirements.

**2.3.1** Update Council's environmentally sustainable development (ESD) Building and Assets Policy to reflect best-practice and introduce minimum standards for Council building projects, appliances and assets, and share this best practice guide with the community.

**2.3.2** Update the Darebin Design Excellence Guidelines and Program to include environmentally sustainable development principles and improve community builds through an education and compliance program that reduces barriers, and monitors and enforces minimum requirements while celebrating best practice.

Accelerate the move to zero-emissions transport and reduce congestion and dependence on cars

- 2.4** By 2030, Darebin's community has access to infrastructure and programs which make active and sustainable transport a real choice for people, resulting in fewer cars on roads and a transition to zero-emissions vehicles that reduces transport emissions by at least 45%.

**2.4.1** Include a plan for achieving zero carbon mobility and access in the new Darebin Transport Strategy (to be developed after the current strategy sunsets in 2025).

**2.4.2** Continue to implement the Darebin Electric Vehicle Policy to facilitate the expansion of the electric vehicle network by partnering with the Northern Council Alliance to implement the Community Electric Vehicle Transition Plan for public car charging including facilitating the installation of 66 public electric vehicle chargers within Darebin.

**2.4.3** Advocate to the Victorian Government to give people real transport choices through:

  - increased funding for cycling and walking infrastructure and programs
  - improved access to electrified public transport, particularly for underserved communities, including an electric orbital bus route along the proposed Suburban Rail Loop corridor and extending the Number 11 tram to Reservoir Train Station.



Foster a local renewable and circular economy that reduces waste and supply chain emissions

**2.5** By 2030, transition Darebin towards zero waste with a goal of reducing waste emissions by 50%.

**2.5.1** Develop a plan to measure Council's emissions from our supply chain, services, travel and other indirect operational emissions and set reduction targets.

**2.5.2** Through the Economic Development Strategy, support and facilitate businesses in Darebin to transition to renewable energy, electric technologies and circular material use.



## 3. Community Resilience



**Vision:** Darebin's community is connected, safe and resilient to the changing climate, and has safe places to live, work and play.



# How will climate change affect Darebin?

Darebin is getting warmer and drier. In the future we can expect:



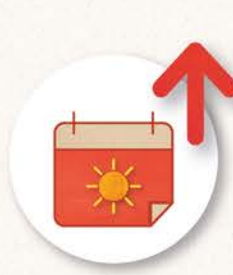
**Temperatures**  
to increase all  
year around



**Days over 35°C**  
to increase from  
7-8 per year to 13-15  
per year by 2030s



**Days over 40°C**  
to increase by 2030



**Number of heatwaves**  
to increase from an  
average of 10 per year to  
14-15 per year by 2030s



**Annual rainfall**  
to reduce



**Increased frequency  
and intensity of  
rainfall events,** leading  
to increased risk of  
flooding



**Increase in bushfires**  
leading to poorer air  
quality in Darebin



**Increase in intense  
storms** resulting in  
more power outages  
and infrastructure  
damage

## What does this mean for the Darebin community?



**Increased likelihood  
of heat exposure/  
exhaustion** and heat  
related systems in the  
community



**Increase in heat-  
related health issues,**  
particularly for older  
people and young  
children, and people  
with chronic illnesses



**Increased need for  
community services**  
and spaces to keep the  
community safe



**Long-term  
drought and water  
restrictions**



**Impacts** on people,  
animals and Country  
of changing natural  
environment



**Drier soils** that  
result in weakened  
infrastructure  
foundations, making  
buildings less safe



**Higher energy bills**  
to keep homes  
and workplaces  
cool and safe



**Increase in insurance  
premiums** for residents  
and businesses

## 2030 GOALS

- Develop and deliver best-practice climate planning for buildings, infrastructure, and public spaces in Darebin.
- Make our community stronger and more connected through climate projects and programs.
- Manage public health risks by improving our emergency response to extreme weather events.

As we work together to tackle climate change, we're already feeling its effects. Our climate is getting hotter, and we're seeing unpredictable rainfall, and more storms, droughts, and flash flooding. The quality of our air is affected by bushfires, and our water sources are under pressure.

A key role for local governments is to plan, prepare and adapt to these climate-related impacts. This pillar contains actions about Council buildings and services, and sets out a plan to address the risks facing our community because of climate change. We aim to ensure our city, people and businesses are as resilient as possible to future shocks and stressors.

Resilience is the ability to avoid, withstand, and recover from climate impacts, and 'bounce forward' to a better adapted state. Focusing on resilience means strengthening our community's capacity to work towards a positive future, as well as ensuring we are prepared for shocks and stressors.

Climate change directly impacts Council services and assets in a number of ways, including:

- safety for staff working outdoors during heatwaves
- maintenance costs for sporting grounds during drought periods
- designing floodwater systems that are fit for purpose
- ensuring we have safe and stable facilities during power outages.

Climate change also impacts residents and business owners. We heard from our community that during heatwaves people are becoming increasingly isolated as they stay home to shelter from the heat. Heatwaves have a negative impact on people's health and wellbeing, and renters are particularly vulnerable as they have less ability to make changes to their homes and businesses. Businesses also face risks from the shift to a net-zero economy including changes in demand for goods and services, and higher energy, material, and operating costs.





At Darebin Council, we bring an equity lens to our work. This recognises that climate impacts are felt differently by different people, and that factors like age, health and mobility, income, social connectedness, housing, migrant and refugee status, and quality and proximity to high-risk flood or bushfire regions affect someone’s vulnerability. Those most at risk of experiencing severe impacts are often those with the fewest resources to address them.

A connected and inclusive community is more resilient to whatever comes its way. That’s why our plan is not just about infrastructure; it’s about strengthening our community to ensure that everyone is informed, safe, and part of our resilient future.

Develop and deliver best-practice climate planning for buildings, infrastructure and public spaces in Darebin.

Number	Actions
3.1	<p><b>By 2030 all Council owned buildings and infrastructure are climate resilient, ensuring safety for our staff and community</b></p> <p><b>3.1.1</b> Use the Victorian Climate Projections 2019 RCP 8.8 high scenario (or subsequent RCP 8.5 projections) to inform planning and delivery of all Council services.</p> <p><b>3.1.2</b> By 1 July 2026 integrate assessment of climate risk and building resilience into building infrastructure renewal and upgrade planning, and strategic property decisions including decisions such as about whether to relocate services or facilities and where to best locate facilities into the future.</p> <p><b>3.1.3</b> Apply a detailed climate risk analysis to service disruption and business continuity planning for all Council services, and by 2025 embed climate risk into business continuity plans for all critical Council services to ensure Council can continue to provide priority services during hot days and extreme weather events.</p>

By 2030, Darebin neighbourhoods and key active transport routes are safe, cool, green spaces, with every home within 500m of shaded greenspace.

3.2	<p><b>By 2030, Darebin neighbourhoods and key active transport routes are safe, cool, green spaces, with every home within 500m of shaded greenspace.</b></p> <p><b>3.2.1</b> By 2027 identify, start to develop, and promote a network of outdoor safe and cool active transit routes, public transport stops and open spaces to provide refuge from the heat in Darebin. We will achieve this by increasing shade, shelter, tree and plant cover and drinking fountains, and prioritising areas with higher heat vulnerability. This action is guided by Council’s Breathing Space – Open Space strategy and Urban Forest strategy.</p>
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Develop and deliver best-practice climate planning for buildings, infrastructure and public spaces in Darebin.

3.3	<p><b>By 2030, Council uses a best practice approach to water management that incorporates climate risk to ensure future resilience.</b></p> <p><b>3.3.1</b> Incorporate 2019 climate projections (RCP 8.5) and climate adaptive water management practices into the new integrated water management strategy (after Watershed sunsets in 2025)</p> <p><b>3.3.2</b> Implement a best practice water sensitive urban design voluntary contributions scheme to improve stormwater quality and promote urban cooling.</p>
3.4	<p><b>By 2030, all new private developments in Darebin are climate resilient with Darebin’s Environmental Sustainable Development (ESD) policies and guidelines fully implemented by all developers and home builders to ensure best practice in Darebin by 2030 and to consider future climate-related development needs in Darebin.</b></p> <p><b>3.4.1</b> Develop Darebin’s ESD Design Excellence Guidelines by the end of 2025 to include best practice climate resilience principles.</p> <p><b>3.4.2</b> As a part of the Housing and Neighbourhood Strategy, consider the sustainability and resilience of the urban form in determining future preferred locations for growth and change.</p>

Strengthen the resilience, connectedness, and capacity of the Darebin community through climate adaptation projects and programs.

3.5	<p><b>By 2030 the Darebin community service sector has developed capacity to support climate resilience both within their own organisations and within the communities they serve.</b></p> <p><b>3.5.1</b> By 2025 work with community service organisations in Darebin to support a network to build capacity, knowledge and to drive community initiatives which increase connectedness and climate resilience. Measure the effectiveness and apply and adapt projects to meet the best outcomes for the community.</p> <p><b>3.5.2</b> Advocate to the Australian and Victorian governments for funding for community service organisations to support communities most at risk of climate change impacts through community sector adaptation initiatives.</p>
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Climate explainer

RCP8.5 definition

The term RCP8.5 refers to the worst-case greenhouse gas emission scenario for climate change. This scenario will happen if rapid changes to policy and practices are not made, resulting in continued and sustained growth in atmospheric greenhouse gas concentrations. The highest-risk scenario is used by Council, and most government agencies to ensure the potential climate risks are accounted for<sup>11</sup> in all our future projects.

Climate risk

Climate risk refers to the potential for negative consequences to occur due to climate change. These can include physical risks like intense rainfall impacting roads, services and households or severe heatwaves increasing the likelihood of heat-related illnesses in the community and making it harder to keep homes and businesses safe and cool, or droughts that cause our parks, sports fields and natural ecosystems to dry up and habitat to be lost. It also includes transition risks that can occur due to the global economy transitioning to low carbon. For example having insufficient resources to support low-carbon transition requirements, and increased risk of liability if an organisation does not incorporate climate into risk management processes.

We measure climate risk by looking at the likelihood that a risk will happen and what the impact will be. The higher the likelihood and impact, the greater the risk. We prioritise risks to ensure the highest risks are reduced as much as possible, to keep our community, businesses, and ecosystems safe.

Climate justice

Climate justice means putting equity and human rights at the centre of tackling climate change (United Nations Development Programme 2024). This involves considering who in our community will be the most impacted by climate change and ensuring that they are prioritised when developing climate solutions. Council’s ***Towards Equality Framework*** includes Climate Justice as its 6th Principle.

In Darebin, Aboriginal and Torres Strait Islander peoples, those who have recently arrived or migrated to Australia, low-income households, people with a disability or chronic illness, older residents, and young children are most at risk of experiencing climate impacts. Without climate justice, climate action is likely to make social inequality worse as those who can afford to take action benefit more from the solutions and others are left behind. Centring human rights in climate action enables us to address and improve social and economic equity in our community.

Climate resilience

Climate resilience is about successfully coping with the impacts of climate change while also continuing to prevent the impacts of climate change from getting worse. A climate resilient community produces very low emissions, uses renewable energy for powering homes, businesses, and transport, ensures people are safe and able to cope during periods of extreme weather (e.g. heatwaves, floods, and droughts) and connected to others to provide support in times of need.

11 <https://coastadapt.com.au/how-to-pages/how-to-understand-climate-change-scenarios>

3.6

By 2030 the Darebin community is connected and resilient with thriving community-led climate projects and programs reaching everyone in the community.

**3.6.1** Deliver community education and capacity-building campaigns on energy literacy and efficiency, electrification, food resilience, and water saving, that reach at least 5,000 residents annually, prioritising areas of Darebin which are most vulnerable to heat stress and energy inequity.

**3.6.2** Develop a scoping study on food resilience and security in the context of a changing climate, to identify opportunities and need in Darebin. This will include opportunities for value-driven urban agriculture initiatives and sustainable food-related enterprises across Darebin.

3.7

By 2030, Darebin residents and business owners are supported by Council, Victorian and Australian governments to become safe and climate resilient, with those most impacted by climate change prioritised.

**3.7.1** Increase climate resilience and energy equity in Darebin Increase climate resilience and energy equity in Darebin through a program (see action 2.2.1) to support low-income households and renters to increase climate resilience, reaching 150 homes per year via direct interventions and engaging with a further 1000 households by 2027.

**3.7.2** Advocate to Victorian and Australian governments for additional funding to support the health and safety of those residents with the least financial capacity to adapt through:

- Enforced minimum building standards for rental properties and incentives for landlords to retrofit their homes.

**3.7.3** By 2025 work with local businesses to:

- Develop a program and materials to support small and medium business to be safe, climate resilient and manage transition risks associated with the shift to a net-zero economy
- Support business continuity planning in the case of extreme weather events
- Advocate to Victorian and Federal governments for funding to support climate resilience in small and medium businesses.



Reduce public health risks by improving Darebin's emergency management response and preparedness for extreme weather events.

**3.8** By 2030 Council has a coordinated response to climate impacts, ensuring that all Darebin residents, community organisations and businesses are safe and resilient to climate impacts, with community members in priority areas no further than 1km (~15-minute walk) away from a place of refuge during heatwaves (cooling centre).

**3.8.1** Develop, facilitate and promote a network of Council-owned buildings and other privately owned facilities that can function as community cooling centres in extreme conditions, prioritising areas with higher heat vulnerability. By 2027 ensure these buildings are accessible and familiar to local communities and are adequately resourced.

**3.8.2** By 2025 develop a comprehensive heat health program to support residents most at risk of extreme heat impacts including: developing a communications campaign to raise awareness of heat health risk; expanding the reach of Keep Cool in Darebin campaign; supporting at least 5 community organisations to build capacity around heat health; and working with 5 community organisations including one health service to develop resources/campaigns on heat health for at risk groups.

**3.8.3** Through Emergency Management Planning ensure Darebin residents are aware of, and know how to respond to, unexpected shocks and where to go to get help during extreme events. By 2025 integrate all climate adaptation actions related to human health risks and extreme weather events in core emergency management practice.



**Keep Cool in Darebin map** ↓

## 4. Innovation and Leadership



**Vision:** Darebin Council drives innovation and opportunity through strategic climate advocacy and partnerships across all sectors and is recognised as a Sustainable Climate Economy hub, with a climate-focused and skilled workforce.



## 2030 GOALS

- Drive innovation and impact in climate response through strategic advocacy and collaboration.
- Darebin is a leader in climate focused and innovative economic solutions.
- Our climate commitment is integrated into every aspect of Council work, inspiring community action.

Tackling climate change is an opportunity for us to rethink, reinvent, and reimagine a sustainable Darebin. We're proud to have been the first government to declare a climate emergency, and we're committed to being pioneers in creating a greener future. Our focus is on collaboration and innovation, bringing together governments, communities, and businesses to make a lasting impact.

We advocate for changes at higher levels of government for renewable energy targets, improved planning policies, and higher standards for homes, buildings, and vehicles. We're also advocating for support to establish a net-zero precinct for the LaTrobe National Innovation and Employment Cluster, establishing a world-leading approach to transitioning a regional economic hub into a thriving, resilient precinct.

Working together with other levels of government, councils, education providers, business and industry groups, and community organisations is key to making real changes. And we're also working at the grassroots level to inspire and engage everyone in Darebin. We're committed to creating a hub of sustainability and innovation, where businesses and residents alike can thrive in a zero-carbon, circular economy.

***Our vision for Darebin is a community that stands at the forefront of climate action that leads by example.***

We're embedding this commitment across all Council operations and inspiring each other to be part of this journey. Together, we're not just facing climate change, we're leading the way to a brighter, more sustainable future.



Foster innovation and maximise impact through strategic climate advocacy and partnerships across all sectors.

Number	Actions
4.1	By 2030 Darebin has trialled a place-based, replicable model to create a low-emissions, climate resilient and economically viable neighbourhood supporting residents and businesses most at risk of experiencing climate impacts. Model is scalable and replicable in other local councils and takes a partnership, whole of community approach.
4.1.1	By 2027 research and launch a pilot program in collaboration with external partners for a place-based, replicable model to create a low-emissions, climate resilient neighbourhood that creates economic, social and cultural opportunities. Seek partners and external funding to help design, implement, roll out and evaluate pilot program.

Foster innovation and maximise impact through strategic climate advocacy and partnerships across all sectors.

4.2	By 2030 Council's advocacy has played a pivotal role in Victorian and national decision-makers accelerating climate action across the state and country.
4.2.1	A strong climate lens shapes all Council advocacy and partnerships.

By 2030 Council has amplified climate action through strategic and trusted partnerships

4.3	By 2030 Council has amplified climate action through strategic and trusted partnerships.
4.3.1	Lead, contribute to and make new key alliances/networks and cross-sector partnerships in Victoria and nationally that align with Council priorities, add value, and achieve high levels of impact. Continue partnerships and develop new strategic collaborations and actions including electrification, creating a net zero precinct pilot and how to remove residual emissions from council and community emission profiles.
4.3.2	Seek partnership opportunities with the Victorian and Australian governments for innovative programs that align with Council priorities. Leverage external funding and partnerships to maximise Council's action on climate by resourcing a position tasked with researching and applying for grants to resource further climate adaptation and mitigation actions.



Climate resilient neighbourhood

One of the opportunities presented by climate change is to rethink our neighbourhoods through a resilience lens. Resilience means being able to withstand the impacts of increased heat and other extreme weather events, and building a more positive future.

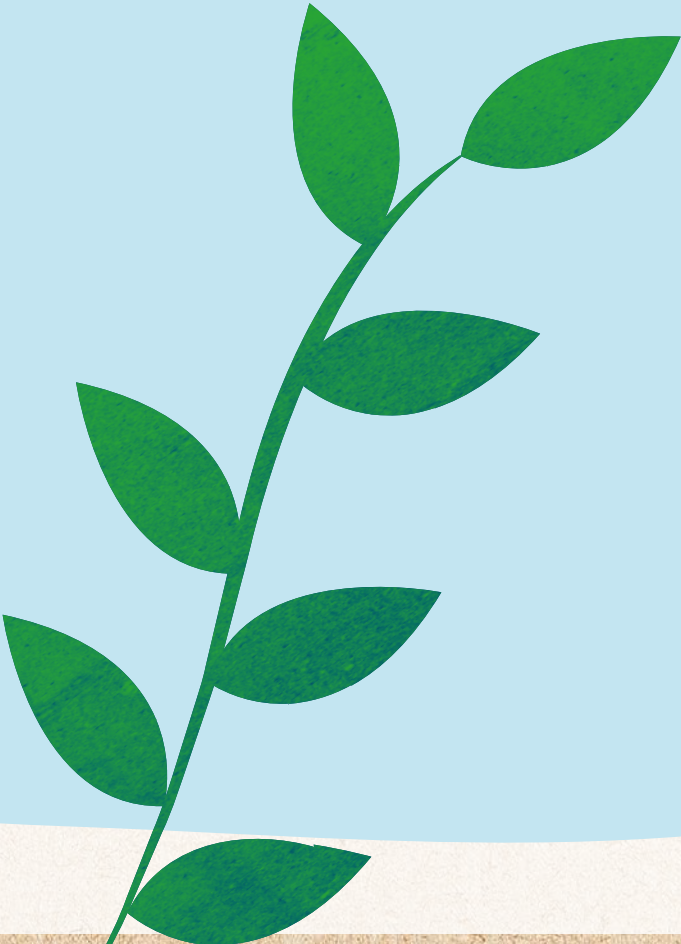
In this ambitious trial initiative we will seek opportunities to work with community and industry partners to develop a thriving climate resilient neighbourhood. Our intention is to scope and trial a range of initiatives such as:

- electrification and increased efficiency and comfort of homes and businesses
- access to renewable energy
- enhancing greener and safer transport corridors to encourage cycling and walking
- enhancing biodiversity and landscaping to reduce urban heat effects and manage water flows
- improving urban design to improve amenity.

Our intention is that residents in this neighbourhood will experience:

- lower household energy bills
- improved thermal comfort
- reduced impact of heat on health and wellbeing
- high social cohesion and connectedness

The outcomes from this trial will inform future work within Darebin and beyond.



Establish Darebin as a Sustainable Climate Economy hub to cultivate innovation and support our workforce and businesses' transition to a zero-carbon circular economy.

Number	Actions
4.4	<p><b>By 2030 Darebin is a thriving hub for zero-carbon and climate-focused businesses.</b></p> <p><b>4.4.1</b> Through the Economic Development Strategy, develop and deliver initiatives that progressively positions Darebin to become a Sustainable Climate Economy Hub, attracting, retaining and supporting sustainable and climate-focused businesses.</p> <p><b>4.4.2</b> Advocate for the LaTrobe National Employment and Innovation Cluster to evolve as a nationally significant renewable and climate resilient economic and education precinct.</p>

By 2030 all Darebin businesses are supported to grow and transition to be renewable, circular and climate resilient

4.5	<p><b>By 2030 all Darebin businesses are supported to grow and transition to be renewable, circular and climate resilient</b></p> <p><b>4.5.1</b> By 2025 develop annual audits of Council's large and small contracts and suppliers to ensure our Social Sustainable Procurement Policy process is meeting Council's climate goals. Expand Council's supplier directory with information to help staff access information about local, sustainable and socially responsible suppliers.</p> <p><b>4.5.2</b> Focus on leveraging climate best practice from industry-based research and global advances, education, funding and awards that recognise leadership and innovation. Identify and work with key, influential local businesses to set, meet and celebrate ambitious climate and circular economy actions to foster peer to peer inspiration and learning.</p>
4.6	<p><b>By 2030 Darebin's workforce is supported through local education, training and certification programs with the skills necessary to support the transition to a zero-carbon circular economy.</b></p> <p><b>4.6.1</b> Advocate for funding to support increased training opportunities, including free TAFE programs, for local residents to take up job opportunities in the zero-carbon economy. Encourage greater focus on this workforce training in our local training organisations and create programs to promote them.</p> <p><b>4.6.2</b> Pilot program/s to support sustainable and climate ready skills development and emerging industries and technology in Darebin.</p>



## La Trobe National Employment and Innovation Cluster (NEIC) and climate resilient neighbourhood

With over 35,500 jobs, 10,000 businesses and an economy of \$9.5B, the La Trobe National Employment and Innovation Cluster (NEIC) will be a community connected precinct that will embrace Aboriginal cultural heritage and strengthen the environmental and economic resilience of Darebin.

The NEIC is a strategic precinct where businesses will be encouraged to work together with educational institutions to achieve an integrated and hyper productive city. This synergy will result in a strong, resilient workforce seeded by nearby institutions to startups and businesses. This is an opportunity to align the research directions of the major education institutions with businesses and startups. This two-way partnership will strengthen their value as retail, services, commercial and social spaces.

Planning and investment within the precinct is an opportunity to provide community infrastructure such as transport, schools, community centres and sporting facilities. Sustainable transport infrastructure options could include exclusive public transport lanes, safely connected bicycle networks, safe pathways for pedestrians and secure arterial roads for cars.

Furthermore, development within the precinct should be climate-change resilient using the latest environmentally sustainable designs. This will ensure that it is financially viable, with increase liveability and integrated water cycle management and high environmental benefits.

The precinct will have mixed development, which allows for working spaces to be close to housing. This will ensure the easy access through a range of transport options such as walking, micro mobility, public transport and sustainable transport. This will optimise economic and social participation of the community and will provide choice of employment and housing.

Embed Darebin's climate response across Council and inspire the community to take action on climate.

- |            |  |
|------------|--|
| <b>4.7</b> | <b>By 2030 all of Council's key policies and strategies embed climate leadership principles and climate risk and council staff have a high level of climate literacy.</b>                      |
|            | <b>4.7.1</b> By 2024 all new and revised policies, strategies, programs and plans are informed by climate principles included in this plan, and by a service-specific climate risk assessment. |
|            | <b>4.7.2</b> Identify training needs and develop climate training programs that empower Council staff to embed climate in their work.  |
| <b>4.8</b> | <b>By 2030, All Council staff and community workers have a strong understanding of climate and how it is relevant to their role, and are confident communicating it to the community.</b>      |
|            | <b>4.8.1</b> By 2024, develop key messages to be used in external communications to show how Council is helping to address climate change and inspire the community to take action.            |





# The bigger picture

## Why is this decade so important?

Taking strong action on the climate emergency this decade is critical if we are to retain a chance to limit Earth's warming to 1.5°C above pre-industrial levels and minimise the climate impacts we are already facing. Climate change has increased at an unprecedented rate over the past decade, resulting in more extreme weather events including flooding, bushfires, droughts and extreme storms, with these events becoming increasingly common in Australia and globally (IPCC 2022).

Climate change is already impacting everyone within the Darebin community, and every part of Council's operations and services. The impact of extreme weather events could include:

- long heatwaves with several days in a row over 40oC making it difficult to leave your home
- lower air quality from bushfire smoke over summer
- major flooding reducing access to places and community and creating severe damage to homes and businesses
- storm events cutting out power, damaging property and risking lives.

For Council's operations and services, climate change could mean reduced service delivery during extreme events, difficulty accessing community members to provide support, and increased costs to ensure our buildings and infrastructure are safe for the community.

We have heard from our community that extreme weather events have a range of impacts:

- social impacts such as social isolation
- cost of living pressures due to increased energy bills
- health impacts for members of the community who cannot cool or heat their homes adequately during extreme heat and cold
- financial impacts such as increased insurance premiums for properties that are in areas more prone to floods and bushfires

Mental health is also a major impact of climate change, with many people in the community, particularly younger people, experiencing increased anxiety over the impacts of climate change and what the future will hold.

## Climate impacts and social disadvantage

Some members of our community face a greater risk of climate impacts than others. According to the 2021 Census, Darebin has a significantly higher proportion of people renting - both in private rentals (33%) and social housing (4%) - than the Greater Melbourne average (27%/2.3%).<sup>12</sup> Compared to the Greater Melbourne average, Darebin also has:

- a higher proportion of residents who receive JobSeeker payments (3.9% vs 3.6%)
- a higher proportion of low income workers (21.6% vs 19%)
- a higher proportion of people needing assistance with daily tasks (6.5% vs 5.5%); and
- a higher proportion of people with a long-term health condition (32.4% vs 29.5%).

Darebin has a significant culturally, linguistically and religiously diverse community. According to the 2021 Census, 31.4% of Darebin residents were born overseas<sup>13</sup> and 58.9% have either one or both parents born overseas<sup>14</sup>. Almost 33% of our community speak a language other than English at home<sup>15</sup>. Around 6% of these residents do not speak English well at all, which is a higher proportion than in Greater Melbourne (5.4%).

These groups are more at risk of climate change impacts because of their circumstances. For example, members of these communities often have lower incomes, are more likely to rent and therefore not able to make changes to their home, and experience barriers to accessing information. Climate change can reinforce and worsen existing patterns of disadvantage in our community.

In addition, we know that older people, pregnant women, babies and young children are particularly susceptible to heat stress.

The Traditional Owners, the Wurundjeri Woi Wurrung people, are deeply affected as their Country has been and continues to be severely impacted by colonisation, and have had limited opportunities to be at the table and share their cultural knowledge to heal Country.

In this Plan we acknowledge and seek to address these disparities to support everyone in our community, recognising that an equitable approach means that different groups may need more or different supports to others.

12 Home | City of Darebin | Community profile (id.com.au)

13 <https://profile.id.com.au/darebin/birthplace>

14 2021 Darebin, Census All persons QuickStats, Australian Bureau of Statistics (abs.gov.au)

15 <https://profile.id.com.au/darebin/birthplace>



## What are other levels of government doing?

Council's previous Climate Emergency Plan was launched in 2017, in an era of minimal action from the Victorian and Australian governments on climate.

In the past couple of years, we have seen increasing efforts from Victorian and now Australian governments. The Victorian Government has a new and ambitious target to reach 95% renewable energy in Victoria by 2035. Reaching this ambitious goal means closing several coal fired power stations early and a complete exit from coal by 2035. This is exciting news for Victoria.

The Victorian and Australian governments, along with market forces, will play a major role in reducing emissions over the next decade. Yet our role as a Council and community is as important as ever.

## What is our role as a local government?

Local governments have a crucial role in making our homes, businesses and organisations fully renewable in the next decade and ensuring that our community is safe and thriving. As part of our previous Climate Emergency Plan, Darebin Council and other progressive councils led by example with initiatives such as the Victorian Energy Collaboration, a local government power purchasing agreement, and our Solar Saver program which has been replicated across the state. We also advocated strongly for faster climate action at all levels of government.

### Connection to community

As a local government, we have close connections to our community. We know who in our community is more in need of support and which organisations to work with to reach all community members and ensure they are safe and thriving. We also maximise our impact by collaborating with other councils to develop programs and campaigns, and advocate to the Victorian and Australian governments to take more urgent action and to target resources where they're most needed.

It is also essential that we continue to lead by example, and we will do this by ensuring climate action is embedded throughout Council's operations and services. All teams within Council will play a role in the climate emergency response, just as all members of the community do.

Some of the critical roles Council can play in addressing climate change are:

- invest in and work towards a strong and sustainable relationship with the Wurundjeri Woi Wurrung Traditional Owners
- ensure our own Council operations and services are run on 100% renewable energy
- support the community to increase their use of renewable energy and electrify their homes
- support industry, local businesses and community organisations to electrify and become more climate resilient
- work collaboratively with other councils and advocate for stronger actions and funding at the Victorian and Australian levels
- support and protect our community to ensure they are safe in the face of climate extremes (this speaks to the core of Council's role to care for and serve our community)
- advocate strongly for the needs of Darebin's most at risk of climate impacts
- ensure Council's programs and services align with positive action on climate and provide co-benefits that reduce emissions while also reducing energy costs, increasing the empowerment of residents and increasing air quality through removing gas connections.

## Legislative responsibilities

Victorian local governments also have a legislative responsibility to consider climate risk and mitigation and to protect, promote and improve the public health and wellbeing of their communities. Failure to do so may amount to a breach of duty of care.

Under the Victorian *Public Health and Wellbeing Act 2008*, local governments are required to develop a Municipal Public Health and Wellbeing Plan which outlines actions to enable residents to achieve maximum health and wellbeing. The Victorian *Climate Change Act 2017* requires local governments to consider climate change when undertaking this public health and wellbeing planning. Council must include goals and strategies concerning climate change mitigation or adaptation in relation to public health and wellbeing matters. The *Local Government Act 2020* also requires Council to promote the economic, social and environmental sustainability of the municipal district, including mitigation and planning for climate change risks.

This Plan reflects both our legislative responsibilities and our role as a local council to listen to and address our community's priorities.





## Darebin Council's climate emergency principles

**The following principles guide our thinking, frameworks and policy reviews** to ensure climate emergency is embedded in all Council practices:

1. Centre Wurundjeri Woi-Wurrung cultural knowledge in our climate, biodiversity and conservation work.
2. Council's services, practices and policies support the community to be connected, safe and resilient to the changing climate.
3. Council operations are efficient, fossil-fuel free and powered by renewables.
4. We foster and support innovation and leadership – all Council's services and operations are considered relevant to climate action and resilience.
5. We mitigate climate risk for Council and the community and build resilience for the future.

Using these principles we will make informed decisions, engage community, and consider relevant local state legislation relating to the environment, equity, planning and public health and wellbeing.

Read more about local government roles and responsibilities here: [climatechange.vic.gov.au](https://climatechange.vic.gov.au)

## How we came up with these actions

This Climate Emergency Plan has been built from the ground up.

Every vision, goal and action is informed by the priorities and visions of the Darebin community. We received over 1000 contributions from the Darebin community through workshops, surveys and in-depth community conversations over the past year. The Plan also had input from the Wurundjeri Woi Wurrung Traditional Owners, community advisory committees, Council partners, community groups and local businesses as well as drawing on research and expert advice.

Our community will continue to play an important role in ensuring Darebin is on track to reach the visions and goals we have set out in this Plan.

### Community engagement process

We delivered the first phase of community engagement in August 2022, with more than 1,000 community members participating both in person and online. We focused on consulting with a range of different language groups and groups in different parts of Darebin to ensure everyone within Darebin is represented within the actions of this Plan.

We reached out to and heard from community members at increased risk of climate impacts including Aboriginal people living in Darebin, people with a disability and elderly community members. These conversations helped shape Council's actions on community resilience and adaptation, including ensuring we achieve equity and safety, and strengthen our advocacy to support those most at risk of climate impacts.

Through the consultation we heard overwhelming support for Council to continue to take strong action on the climate emergency including mitigation (reducing emissions), adaptation (supporting those most impacted by climate change in the community) and centring caring for Country at the core of this Plan.

This Plan benefitted greatly from the input of the Elders and staff members from Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation, who were the first to see, review and comment upon a completed draft of this Plan. We thank them for their time and their willingness to engage in this process with us.



## How we will measure our progress

We developed this Climate Emergency Plan to guide Darebin Council's strategic direction and response to climate change to 2030. We will review and update the 3-year action plan in early 2027 to ensure we are responding to issues as they arise and taking advantage of the most up to date technology and policy developments.

Council will monitor, evaluate and report against the actions in this Plan to:

- share Darebin's achievements and progress with the community
- identify challenges, opportunities and key lessons for the future
- continue our collaboration with the community in taking climate action
- demonstrate how we are using Council resources to meet our objectives
- support community-led work in climate action
- increase our chances of Victorian and Australian government funding; and
- support decision-making within Council so we can continue to be ambitious and take strong action

We will measure and report our progress on the Plan's actions every year through the Council Plan and through Council's other communication channels, including Council's website, Your Darebin magazine, Sustainable Darebin e-newsletter, social media and through other community channels.

This Plan is a broad and deep response to climate change. We will need to use a range of data to measure progress in reducing greenhouse gas emissions, and achieving our aims to build community resilience, caring for Country, innovation, and leadership. This may include:

### Quantitative data

- Amount of greenhouse gas emissions reduced
- Number of households and Council buildings switched from gas to electricity
- Number of cooling centres
- Number of trees and native plant species planted
- Number of solar panels installed
- Number of businesses Council supported to become more sustainable and climate resilient
- Number of sustainable businesses that have moved to Darebin.

### Qualitative data

- How safe the community feels in the event of an extreme weather event
- How connected the community feels to their natural environment and community
- How supported and empowered the Aboriginal community and Traditional Owners in Darebin feel to care for Country
- How likely businesses are to identify Darebin as a Sustainable Climate Economy hub

These different approaches to measuring our success will enable Council to work closely with the community to understand how we are progressing, and what areas we need to improve on for each of our targets.

As the 2027 review approaches, Council will again work with the community to ensure we continue to be ambitious and responsive to the needs of the community.





# What is the community's role?

In consultations many of you told us that there is a lot more you want to do to live sustainability and to reduce emissions at home, in businesses, and as you travel around Darebin and beyond. This guide gives you some suggestions.

## At home and in businesses

- **Make a plan** to electrify your home or business
- **Be inspired by others on the electrify journey**
- Save energy with Sustainability Victoria's ideas on **how to save energy at home**
- **Install solar** through our **Solar Saver** program and **save on your energy bills**
- Check out these **Energy Efficiency Tips** for renters (hint: these work for everyone too!)
- **Review your banking, insurance and superannuation** and make your money count by switching to companies investing in climate change mitigation initiatives rather than fossil fuels
- Register for Council's **Sustainable Business Programs** and check out our tips and support for running a sustainable business
- Explore ways you can **live more sustainably**

## Out and about

- Swap driving your car for **sustainable transport alternatives** such as cycling, public transport and walking where possible
- **Ride your bike to work** - the **Darebin Travel Smart Map** will help you plan your journey
- Consider a local holiday and visit some of the incredible national parks and beaches we have in Victoria reducing your travel miles and connecting to nature

## Get together and speak up

- Join a **local climate action** or biodiversity (e.g. Friends of...) or local food growing group
- **Want to start a new group in your neighbourhood?** We can help you get going
- At work try out these **tips for creating a more sustainable work-space** from 1 Million Women
- Encourage your child's school to join the **Victorian Government's Resource Smart Schools Program**
- Check out the **Australian Parents for Climate Action** website and join one of their local groups
- Participate in and share local climate events with your family and friends! Find out what is happening at: **City of Darebin** - Facebook, **Darebin Libraries** - Facebook, **@darebincouncil** - Instagram; **Sustainable Darebin** E-newsletter and **Sustainable Darebin** - Facebook

## Read up

- **Register for Council's Sustainability News** and **Sustainable Darebin Facebook** group for local events and tips on taking local climate emergency action
- Learn about the climate emergency and solutions. The following examples are a small selection to get you started<sup>16</sup>:
  - **The Climate Council**
  - **Climate Works Australia**
  - **Beyond Zero Emissions**
  - **Energy Efficiency Council**
  - **NAGA**
  - **VECO**
  - **Australian Conservation Foundation**
  - **Environment Victoria**
  - **Climate Change Victoria**
  - **Department of Climate Change, Energy, Environment and Water**

## Look after yourself

93% of consultation participants shared that they are anxious or worried about the impacts of climate change. Taking any of the actions above can be useful if you are feeling down or anxious about the climate emergency. As **Greta Thunberg** says,

**"The one thing we need more than hope is action. Once we start to act, hope is everywhere."**

If you are still feeling overwhelmed:

- check out the Australian Conservation Foundation's **list of guides, books and videos about self-care and coping with climate distress**
- Find a specialised mental health professional and other resources **through the Australian Psychological Society**.

<sup>16</sup> Darebin provides links to these external organisations to assist our community in having access to relevant information from organisations working in the field of climate change. Council does not necessarily endorse the work of these organisations or align with their views.



# Darebin current emissions profile and projections to 2030<sup>17</sup>

Council engaged with a technical expert to estimate Darebin's emissions profile and projections by 2030 and provide an understanding on what would be required to reach zero emissions. Council goals for this plan were based on this expert advice to avoid catastrophic change in climate. The graphics below are an extract of the information provided by the consultant and were the basis of the mitigation goals.

Figure 2 shows the current emissions profile for the City of Darebin and its brake down by source and sector.

The figures below reflect the emissions profile and it's projection to 2030 considering business as usual (BAU). BAU refers to no further action being taken by Council and do not reflect any emissions reduction due to the actions in this plan.

Figure 4 compares the BAU emissions projection profile with the science-derived target to achieve the Paris Agreements targets of a 1.5°C and a 2°C scenarios. Targets are considered 'science-based' if they are in line with what the latest climate science deems necessary to meet the goals of the

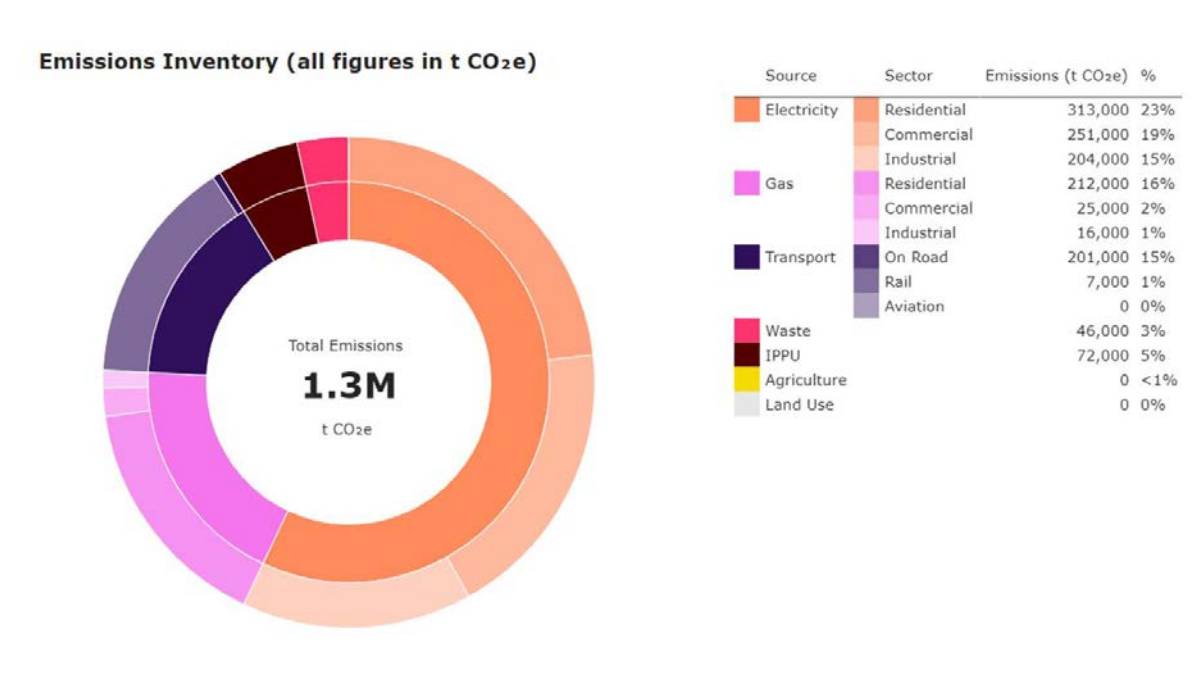


Figure 2: 2020-2021 emissions profile for City of Darebin<sup>18</sup>. Source: Ironbark Sustainability.

17 Darebin Pathway to Zero Emissions, Intervention Analysis Report, Ironbark Sustainability, July 2023. (report completed for Darebin City Council)  
18 This information is updated on an ongoing basis. For the latest emission profile refer to <https://snapshotclimate.com.au/locality/municipality/australia/victoria/darebin/>.  
19 <https://sciencebasedtargets.org/>.

Paris Agreement – limiting global warming to 1.5°C above pre-industrial levels by 2100.<sup>19</sup> Darebin commits to a 1.5°C scenario and the mitigation actions in this plan aim to achieve the emissions reductions required to succeed.

Figure 4 shows that the gas emissions are expected to increase which will a high impact on Darebin. This will not only result in higher emissions, but also higher cost of living for residents. The

electricity emissions, on the contrary, are expected to reduce. As a result, there has been a strong focus on moving away from gas as part of the Climate Emergency Plan.

Similarly, Figure 5 shows that the residential sector will struggle the most to reduce their emissions. The Climate Emergency Plan has also focused on the residential sector for this reason.

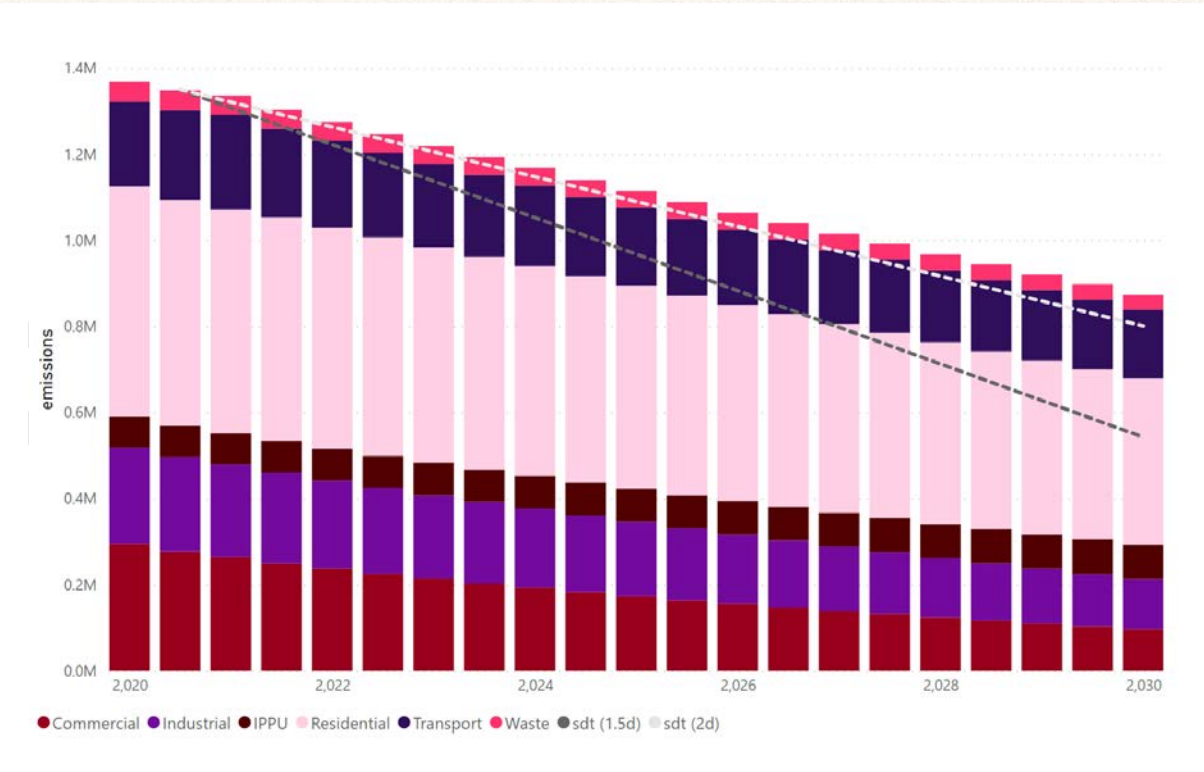


Figure 3: Emissions projections by sector, including the 1.5 degree science-derived target (sdt 1.5d) and 2 degree science-derived target (sdt 2d).



Sector	Estimated change in emissions	
Electricity	478,000 tCO <sub>2</sub> e reduction	-60%
Gas	24,000 tCO <sub>2</sub> e increase	+9%
Transport	37,000 tCO <sub>2</sub> e reduction	-19%
Waste	11,000 tCO <sub>2</sub> e reduction	-24%
IPPU	9,000 tCO <sub>2</sub> e increase	+13%

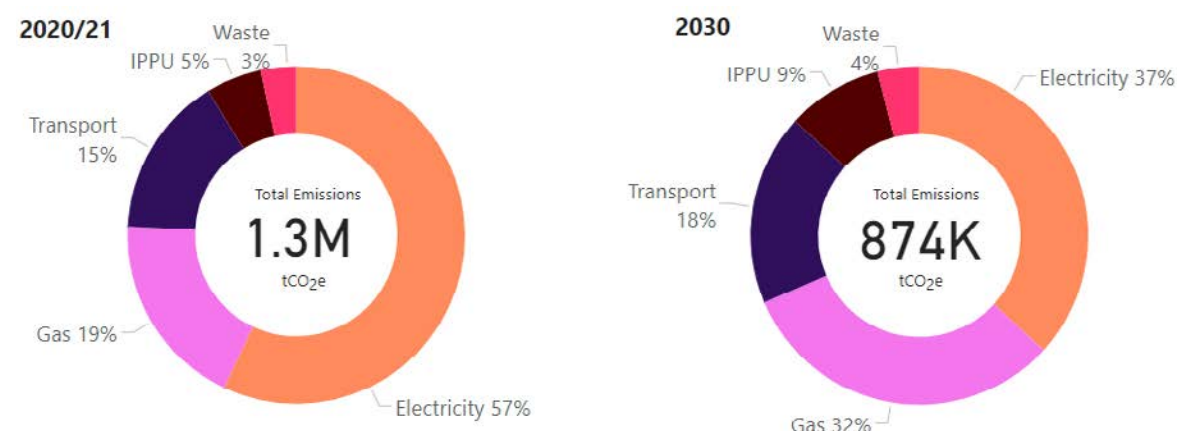


Figure 4: Projected business as usual emissions profile for 2020/2021 and 2030, by source.

Source	Estimated change in emissions
Residential	-28%
Commercial	-67%
Industrial	-48%

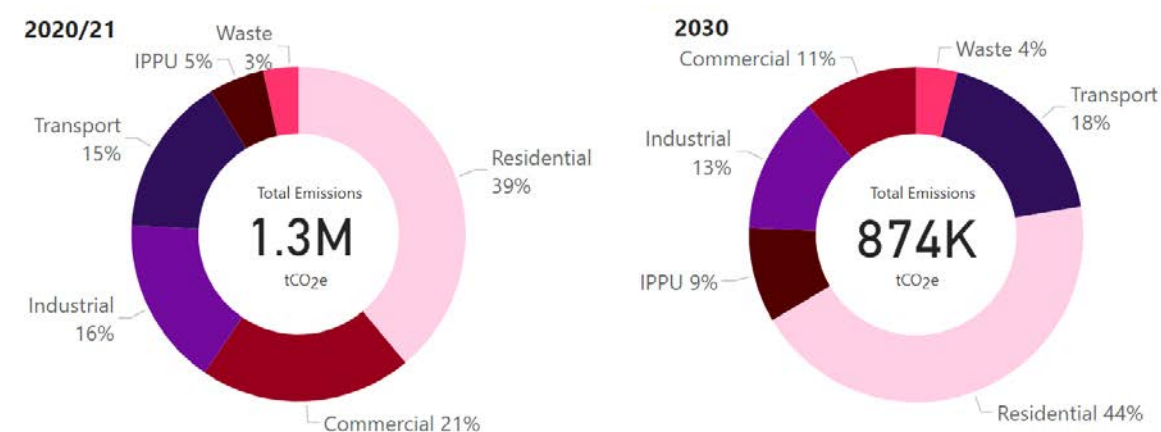


Figure 5: Projected Business as Usual emissions profile for 2020/21 and 2030, by sector

## Glossary

### Adaptation

Adaptation refers to adjustments in ecological, social or economic systems in response to actual or expected climatic stimuli and their effects. It refers to changes in processes, practices and structures to moderate potential damages or to benefit from opportunities associated with climate change. In simple terms, countries and communities need to develop adaptation solutions and implement actions to respond to current and future climate change impacts.<sup>20</sup>

### Circular economy

The circular economy is a system where materials never become waste and nature is regenerated. In a circular economy, products and materials are kept in circulation through processes like maintenance, reuse, refurbishment, remanufacture, recycling, and composting. The circular economy tackles climate change and other global challenges, like biodiversity loss, waste, and pollution, by decoupling economic activity from the consumption of finite resources (Ellen Macarthur Foundation).

### Council assets

Refers to all Council owned buildings, machinery and appliances.

### Environmentally Sustainable Development (ESD)

Refers to improving the energy and water efficiency of new buildings that supports affordable living, contributes to reduced greenhouse gas emissions and reduces stormwater pollution of our rivers and bays. Our quality of life is enhanced by building design features that make it easier to recycle, support more sustainable transport options and minimise waste and the intrusion of air pollution and noise.<sup>21</sup>

### Mitigation

Refers to efforts to reduce or prevent emission of greenhouse gases. Mitigation can mean using new technologies and renewable energies, making older equipment more energy efficient, or changing management practices or consumer behavior. It can be as complex as a plan for a new city, or as simple as improvements to a cook stove design. Efforts underway around the world range from high-tech subway systems to bicycling paths and walkways.<sup>22</sup>

<sup>20</sup> United Nations definition: <https://unfccc.int/topics/adaptation-and-resilience/the-big-picture/introduction>

<sup>21</sup> Victorian Government: Department of Planning: [chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.planning.vic.gov.au/\\_\\_data/assets/pdf\\_file/0038/638399/Environmentally-sustainable-development-of-buildings-and-subdivisions-A-roadmap-for-Victorias-Planning-System.pdf](chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.planning.vic.gov.au/__data/assets/pdf_file/0038/638399/Environmentally-sustainable-development-of-buildings-and-subdivisions-A-roadmap-for-Victorias-Planning-System.pdf)

<sup>22</sup> United Nations definition: <https://www.unep.org/explore-topics/climate-action/what-we-do/mitigation>



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**Natural resource management (NRM)**

Refers to the integrated management of the natural resources that make up Australia's natural landscapes, such as land, water, soil, plants and animals.

Effectively managing these resources requires a landscape or catchment approach that coordinates a range of land, water and biodiversity programs - in conjunction with traditional owners, local communities, state and territory governments and the Australian Government. Australia's environment provides cultural and spiritual sustenance and is the foundation of our national identity, lifestyle and economy. We rely on our environment for essential services such as food, water and clean air - alongside other crucial ecosystem services such as climate regulation, absorbing and transforming wastes, preventing disease and providing the genetic resources that are the basis for many medicines.<sup>23</sup>

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**Producer responsibility**

Extended producer responsibility schemes are a type of product stewardship that places primary responsibility on the producer, importer and sometimes the seller of the product. Under this approach, producers or importers are required to fund activities to reduce the environmental, health and safety impacts of a product. It is a strategy designed to promote the integration of environmental costs associated with goods throughout their life cycles into the market price of the products.<sup>24</sup>

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**Product stewardship schemes**

is an approach to managing the impacts of different products and materials on the environment and human health and safety. Product stewardship schemes help to manage these impacts over a product's life-cycle.

These schemes can be:

- industry-led voluntary schemes
  - co-regulatory arrangements between industry and government
  - mandatory schemes under law.
- 

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**Resilience**

"Resilience is the capacity of a system, be it an individual, a forest, a city or an economy, to deal with change and continue to develop".

Resilience expresses the idea that there are complex interdependencies between people and ecosystems and that relationship is central to our future. It is about how humans and nature can use shocks and disturbances like a financial crisis or climate change to spur renewal and innovative thinking.<sup>25</sup>

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**Supply chain emissions**

Emissions which occur as a consequence of the activities of a facility, from sources not owned or controlled by the facility. For example, the emissions produced from the extraction and production of purchased materials, transportation of purchased fuels, use of sold products and services. These emissions are difficult to calculate and often represent the majority of emissions related to a business or facility (Clean Energy Regulator).

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**Zero vs net zero: 'Net zero emissions'**

Refers to achieving an overall balance between greenhouse gas emissions produced and greenhouse gas emissions taken out of the atmosphere. To avoid a climate catastrophe, greenhouse gas emissions must be as low as possible. In other words, we need to get as close as possible to **real zero**, which means avoiding the release of greenhouse gas emissions in the first place. We must only rely on carbon offsetting when it is absolutely necessary.<sup>26</sup>

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<sup>23</sup> Based on <https://nrmregionsaustralia.com.au/what-is-nrm/>

<sup>24</sup> Ibid.

<sup>25</sup> Stockholm Resilience Institute

<sup>26</sup> Adapted from Clean Energy Council definition: <https://www.climatecouncil.org.au/resources/what-does-net-zero-emissions-mean/>





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