

CLIMATE EMERGENCY ACTION PLAN 2023-28

Draft, September 2023







City of Port Phillip

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Contents

Message from the Mayor	5
Executive summary	6
Purpose	6
What we've done so far	7
Listening to our community	8
Background	9
What is the climate emergency?	9
What impacts are we seeing in Port Phillip and globally?	10
Our priorities	12
	10
1. Enhancing community resilience	
Highlights to date	
Indicators and targets	
Actions	
More information	
2. Minimising greenhouse gas emissions	
Highlights to date	
Indicators and targets	
Actions	
More information	
3. Enabling more sustainable transport options	
Highlights to date	
Indicators and targets	
Actions	
More information	
4. Resilient and liveable public spaces	
Highlights to date	
Target and indicators	
Actions	
More information	
5. Planning for buildings and places	
Highlights to date	
Targets and indicators	37

City of Port Phillip **<Name of document>**



Actions	37
More information	40
Implementation and monitoring	41
Glossary	42



Message from the Mayor

TBC - could include:

- Our Plan outlines our response to the climate emergency, what we are doing to reduce Council's impact, our flagship actions and how we support our community.
- We are reducing Council's emissions and preparing our city and community for a changing environment.
- We strive to ensure a sustainable future for the City of Port Phillip, where our environmentally aware and active community benefits from living in a bayside city that is greener, cooler, cleaner and climate resilient.

Acknowledgement

Council respectfully acknowledges the Traditional Owners of this land, the people of the Kulin Nations. We pay our respect to their Elders, past and present. We acknowledge and uphold their continuing relationship to this land.



Executive summary

City of Port Phillip Council declared a climate emergency in 2019, recognising that climate change is a global challenge and everyone must help to respond. This declaration responds to the critical climate situation and demonstrates our commitment to take action.

The climate emergency impacts everyone in our community. We have joined local, state and national governments worldwide to play our part in reducing global temperature rise and responding to the climate emergency.

The year we declared the climate emergency, 2019, was Australia's hottest and driest on record. Since then, we have had three years of storms and extreme rainfall.

Storm damage in Port Phillip in October 2021 took several weeks to repair. In March 2022, significant erosion occurred at Elwood foreshore. Then in October 2022, we again faced flash flooding in Elwood and South Melbourne, with cars stranded as people drove into flood waters.

Our community is also experiencing the heat-related impacts of the climate emergency, such as hotter urban spaces, disruption to transport and services, power outages and increased power bills.

The science is clear: climate change is already impacting plants, animals and people across the globe, and humanity has a narrow window to prevent further disastrous impacts on our planet.

Locally, both Council and our community can respond. The UN's Intergovernmental Panel on Climate Change (IPCC) says that a liveable future for all is possible if we take urgent climate action (March 2023). The IPCC reports that there are feasible and effective options to reduce greenhouse gas emissions and adapt to human-caused climate change. The solutions and technology exist for the transition to a low-carbon future.

Purpose

This document is Council's action plan for tackling the climate emergency. It outlines how the City of Port Phillip will respond and how we will collaborate with you to cut our community's emissions and prepare for the future. Council can't address the climate emergency alone and we will work to mobilise the community to take action. The Climate Emergency Action Plan (Plan) also includes what you can do as the Port Phillip community and what we call on the Victorian and Australian Governments to do. Our Plan includes measurable targets and practical actions to respond to the climate emergency and adapt and thrive.

We recognise that long-term planning and action are required to bring about change. This document outlines our commitment to action across the next five years.

We are focused on five priorities:

- 1. Enhancing community resilience
- 2. Minimising greenhouse gas emissions
- 3. Enabling more sustainable transport options
- 4. Creating resilient and liveable public spaces



5. Planning for buildings and places

The Plan brings together actions from many Council strategies. It builds on our existing commitments under the following documents:

- Act and Adapt: Sustainable Environment Strategy 2023-28
- Car Share Policy 2023-28
- Climate action update taking action on the climate emergency February 2022
- Don't Waste It! Waste Strategy 2022-25
- Fishermans Bend Water Sensitive City Strategy
- Foreshore Management Plan 2012
- Move, Connect Live: Integrated Transport Strategy 2018-28
- Places for People: Public Spaces Strategy 2022-32
- South Melbourne Market Sustainability Strategy 2023-27
- Greening Port Phillip Strategy

How to read this Plan

This Plan is divided into five priorities. Under each, we describe the priority, list our highlights so far and define our indicators, targets and actions for the next five years. Alongside each action, we detail the Council strategy it comes from. The document concludes with a table summarising all our indicators and targets.

Our role

As a local government, we are uniquely positioned to respond to this climate emergency. Our Plan includes cutting emissions, adapting to a changing climate and increasing our community's resilience. Our transition to a low-carbon future includes ensuring our transport is sustainable and that our buildings and public spaces are climate-resilient.

We are directly influencing as much as we can. Council operations produce 0.6 per cent of the overall carbon emissions in our City. We have achieved net zero greenhouse gas emissions from our operations, continue to reduce our gross emissions and are helping to reduce our community's emissions. Each individual, household, business and visitor has a part to play in our joint response. We want to involve and engage everyone in Port Phillip and support our vulnerable community members to prepare for the changed climate.

Beyond City of Port Phillip, we also need state, national and international action to drastically reduce warming emissions in Australia and worldwide, so we've included advocacy positions – what we want the Victorian and Australian Governments to do.

What we've done so far

While the climate emergency requires accelerated investment in our assets and changes to how we deliver our services, our declaration of a climate emergency comes after many years of action to reduce our impact. We've also worked with our community and partners to prepare for and adapt to climate change.

We've been improving our energy efficiency and reducing greenhouse gas emissions – achieving carbon neutrality for Council operations in 2021. We source 100 per cent of our electricity from renewable energy.



We are upgrading our stormwater drains and using water sensitive urban design to reduce flooding and reduce pollutants in our waterways and bays. Our new food and garden organics recycling service is part of our work to drastically cut waste to landfill. Our fleet is transitioning to zero emissions vehicles and we're switching Council buildings from gas to electricity. We've replaced streetlights with energy efficient LEDs and installed 610 kilowatts of solar panels on Council buildings.

Using new methods to design our roads and buildings, we're making them more efficient and resilient to extreme weather. By promoting shared e-bike and e-scooter trials and extending the bike network throughout our City, we are encouraging active transport. Our urban forest is flourishing, and we've planted 35,000 indigenous plants along our foreshore.

We are five years into our Act and Adapt: Sustainable Environment Strategy (Strategy), first published in 2018 and updated in 2023. The Strategy establishes a pathway to transition Port Phillip into a greener, cooler, more liveable City where we all reduce our environmental impact and are more resilient to climate change. Initial analysis of progress in delivering the Strategy shows that 42 per cent of sub-actions are complete and 41 per cent of actions are in progress.

Listening to our community

We are proud to have an engaged and committed community who are passionate about sustainability. We need to work collaboratively with the community to meet our sustainability challenges head on, so we need your help.

We engaged with our community during the development of the Plan. We held workshops and received formal submissions from our engaged community and advisory groups. We ran three community face-to-face pop-up events, received 30 responses through Have Your Say and received 615 responses to our sustainability survey.

What you told us:

- Focus on what Council can do to support the community to make a difference.
- Focus on increasing access to active transport.
- Focus on increasing greening and the amount of open space within the municipality.
- Provide more detail about Council's initiatives.

We've listened to what you said and combined it with international best practice, current research and what we've already learned, to shape and inform a Plan that will guide us all to achieve our vision together.

Background

What is the climate emergency?

Climate change is already impacting ecosystems and human systems across the globe. We are seeing higher temperatures, increased flooding, rising sea levels, changing rainfall patterns, and more extreme storms. We'll feel even more severe impacts if we fail to mitigate our emissions and adapt as a matter of urgency.

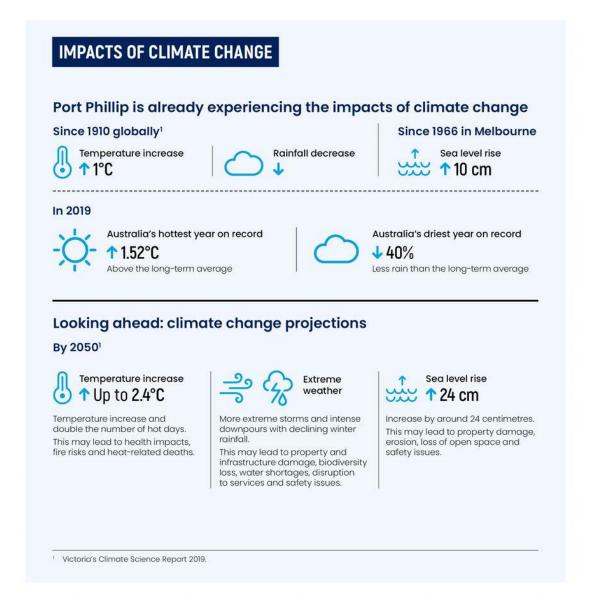
The UN's Intergovernmental Panel on Climate Change (IPCC) released the Synthesis report on the state of the global climate in March 2023. The IPCC states that it is unequivocal that human activities have warmed the atmosphere, ocean and land. Global temperatures are now 1.1°C above pre-industrial levels.

City of Port Phillip Council's Climate Emergency resolution, adopted on 18 September 2019, states that Council:

- 1. Declares that climate change, including sea level rise and mass species extinction, poses serious risks to the people of Port Phillip and Australia and should be treated as an emergency.
- 2. Updates all relevant Council strategies and policies to incorporate and embed this declaration.
- 3. Requests that the CEO considers the impact of the climate emergency as part of organisational decision-making and planning.
- 4. Notes the City of Port Phillip's commitment to the following strategies: Move, Connect Live (Integrated Transport) Strategy 2018-28; Don't Waste It (Waste) Strategy 2018-28; and Act and Adapt (Environmental Sustainability) Strategy 2018-28.
- 5. Notes that the City of Port Phillip, through its Act and Adapt Strategy, has a focus on reducing emissions, reducing contamination of land and water, restoring biodiversity, and adaptation to climate change, including reduction of the heat island effect and other health issues related to a warming climate.
- 6. Notes the City of Port Phillip's membership of the Melbourne Renewable Energy Project and its commitment to generating renewable energy through solar on council assets.
- 7. Requests that regular reporting on the organisation-wide response to the climate emergency be included as a permanent item in the CEO report.
- 8. Advocates to the Victorian and Australian Governments and parliaments to declare a climate emergency and take action to drastically reduce warming emissions in Australia and across the world.



What impacts are we seeing in Port Phillip and globally?



IMPACTS OF CLIMATE CHANGE

The impacts between 1.5°C world and 2°C world will be significantly different.

-			
IM	- 4	1.1	

1.5°C WORLD

2°C WORLD



Extreme heat

of global population affected

of global population affected



Drought

people affected by water scarcity

people affected by water scarcity



Biodiversity loss

global biodiversity will be lost

global biodiversity will be lost



Ecosystem shifting

of global ecosystem shifting to a new environment

of global ecosystem shifting to a new environment



Rise of sea level

of people affected by flooding

of people affected by flooding



Coral reefs

minimum of coral reefs are gone

of coral reefs are gone

Source: ipcc.ch/srl5/chapter/chapter-3/



Our priorities



1. Enhancing community resilience

Port Phillip is already experiencing the impacts of climate change, including higher temperatures and sea levels and less rainfall but more severe flooding. Since 1910, Victoria's temperatures have increased by 1.2 degrees, rainfall has decreased and sea levels have risen. If global emissions continue to increase, by 2050 Victoria may experience average annual temperature increases of 2.4 degrees.

Temperature increases will cause heat-related health issues, death, fire risk, power outages, and increased power bills. In addition, flooding and intense downpours will result in property and infrastructure damage, service disruption, and safety issues.

Our legislated role includes reducing the risk to our community from climate change impacts. We know that heatwaves, floods and storms disproportionality impact our vulnerable community members already experiencing social, economic or health inequity.

To enhance our community's resilience, we are investing in our assets to ensure they are climate-resilient and changing how we deliver our services. Preparation is well underway for a future where extreme weather and drought are more prevalent. Our priority is to support the community by protecting the essential systems and services we rely on daily.

We are improving community preparedness through practical actions, toolkits, education and resources. By mobilising businesses and residents to reduce their emissions and adapt, we are preparing for a changing climate together.

Highlights to date

- Delivering the Environmental Leaders Course for 208 participants and supporting 9,945 participants in our sustainability and school travel programs in 2020/21
- Developing the Building Business Resilience Toolkit with the South East Councils Climate Change Alliance
- Collaborating with Melbourne Water on a self-help guide to retrofitting your home to prepare for flooding
- Installing a flash flood sensor light at Foam and Wave Streets in Elwood to minimise the risk of vehicles driving into flood waters.

Indicators and targets

Council indicators				
Indicator Baseline 2021/22 Target 2028				
Percentage of asset management plans that include details of identified climate risks and measurable actions to	35%	100%		



increase the climate resilience of the		
asset class.		
By 2028, Council has a fit-for-purpose		
risk management, reporting and		
decision-making framework to manage	No framework	Framework complete
climate-related risk to service delivery,		
assets and finances		
	Community indicators	
Indicator	- "	
Indicator	Baseline 2021/22	Advocacy position
Percentage of community members	Baseline 2021/22	Advocacy position
	-	Advocacy position No advocacy position to be set
Percentage of community members		• •
Percentage of community members who have sufficient information to		No advocacy position to be set
Percentage of community members who have sufficient information to make informed decisions about how to	62%	No advocacy position to be set because this is a lag indicator, which
Percentage of community members who have sufficient information to make informed decisions about how to protect themselves and respond in the	62%	No advocacy position to be set because this is a lag indicator, which will be measured to inform

Actions

What we are doing

Action	Description	Source
Cool spaces strategy	Develop a cool spaces strategy with community health and emergency services providers that will identify and create safe locations for the community to access during times of extreme heat	Act and Adapt: Sustainable Environment Strategy 2023-28
Flood risk	Undertake a targeted campaign based on up-to-date flood modelling to ensure residents know of existing and future flood risks and understand the implications for insurance and measures to reduce impacts Explore partnerships to deliver infrastructure and design approaches to protect against flooding and sea level rise	Act and Adapt: Sustainable Environment Strategy 2023-28
Community climate resilience	Assess opportunities to support community resilience to climate change impacts Establish partnerships to improve opportunities for community resilience and adaptation	Act and Adapt: Sustainable Environment Strategy 2023-28



Healthy food	Improve access to healthy food through community gardens and nature strip gardening guidelines and better walking and cycling routes to shops	Community Gardens Assessment Guidelines Nature Strip and Street Gardening Guidelines Move, Connect, Live: Integrated Transport Strategy 2018-28
Library sustainability initiative	Build and maintain library sustainability programs which provide the community with books, interactive displays, lending of sustainability and gardening tools and devices and a seed library	Act and Adapt: Sustainable Environment Strategy 2023-28

Working with our community and partners

Action	Description	Source	Partners
Port Phillip EcoCentre	Support Port Phillip EcoCentre to promote environmental sustainability and community action	Act and Adapt: Sustainable Environment Strategy 2023-28	Port Phillip EcoCentre
Resilient communities program	Deliver the Resilient Communities Program with the South East Councils Climate Change Alliance	Act and Adapt: Sustainable Environment Strategy 2023-28	South East Councils Climate Change Alliance
Back2Bikes	Continue to support Back2Bikes social enterprise volunteers to repair and rehome bicycles	Move, Connect, Live: Integrated Transport Strategy 2018-28	Back2Bikes
Understanding community climate impacts	Build on current work to develop and collate data to understand climate impacts on the community	Act and Adapt: Sustainable Environment Strategy 2023-28	South East Councils Climate Change Alliance
Community led climate action plans	Support the community to build and implement community led plans which include actions to respond to flooding,	Act and Adapt: Sustainable Environment Strategy 2023-28	Community



heatwaves and other	
climate impacts	

Advocacy positions

We call on the Victorian and Australian Governments to:

- declare a climate emergency, recognising that climate change is a global challenge and poses a serious risk to the Australian population
- commit to urgent action to reduce the impacts of climate change and maintain a safe environment for current and future generations
- increase support to reduce utility bills and heat stress impacting vulnerable people, including investing in top-rated energy efficient public housing and aged care facilities
- increase funding for health and emergency services, habitat restoration and infrastructure to respond to heatwaves, droughts, bushfires and floods
- legislate climate-resilient buildings through the Victorian planning scheme.

City of Port Phillip will work to mobilise the community to take action. Some actions you can take include:

- Connect with your community through our Environmental Leadership course and Port Phillip EcoCentre.
- Prepare for climate change impacts such as floods and heat waves with your household and neighbours by having conversations and supporting each other.
- <u>Check if you are in a flood zone</u>. When you prepare a flood emergency plan, share it with your family and speak with your insurer to check if you are covered.
- Join local environment groups such as Beach Patrol, Love Our Street, Port Phillip Emergency Climate Action Network, Port Phillip Bicycle Users' Group and others
- Take part in Councils sustainability programs see our list of programs for more information.
- Work with your friends, neighbours and community to bring about change together.
- Take action as an individual. Join a community garden, compost, plant a tree or create a garden, veggie patch or balcony garden.

Case study: Port Phillip EcoCentre

The Port Phillip EcoCentre in the St Kilda Botanic Gardens is a hub for community-led action to address climate change. City of Port Phillip is proud of our long-term funding partnership with the EcoCentre to promote environmental sustainability and community action.

The EcoCentre educates and empowers students, residents and visitors to care for land, water, wildlife and wellbeing. It works with 153 schools and early learning centres and over 3,000 students, and trains volunteers to care for our coast through the Beachkeepers program. Community volunteers also conduct citizen science, manage the community garden, run the St Kilda Repair Café and protect local wildlife through habitat programs.

The EcoCentre is being redeveloped into a new green building to support the delivery of sustainability programs. Successful advocacy led to a 50 per cent funding contribution from the Victorian Government to redevelop the EcoCentre. The \$6.7 million project will see scientists, educators and volunteers together under one roof. Designed to operate with net zero energy and water usage, the EcoCentre will join an exclusive club of only 500 buildings worldwide that produce more clean energy than it consumes, offsetting all carbon used during construction. The new EcoCentre will open in late 2024.

Final



More information

Act and Adapt: Sustainable Environment Strategy 2023-2028
Climate action update – February 2022
Building Business Resilience Project: Final Report
Sustainable living online series – City of Port Phillip
Prepare for flooding – Melbourne Water
Port Phillip EcoCentre
Local environmental groups
Environmental Leadership course
Enabling climate justice
South East Councils Climate Change Alliance



2. Minimising greenhouse gas emissions



Reducing greenhouse gas emissions is one of the most significant challenges we face in Port Phillip, across Australia and globally. Transitioning from fossil fuels to renewable energy is critical to tackling the climate emergency.

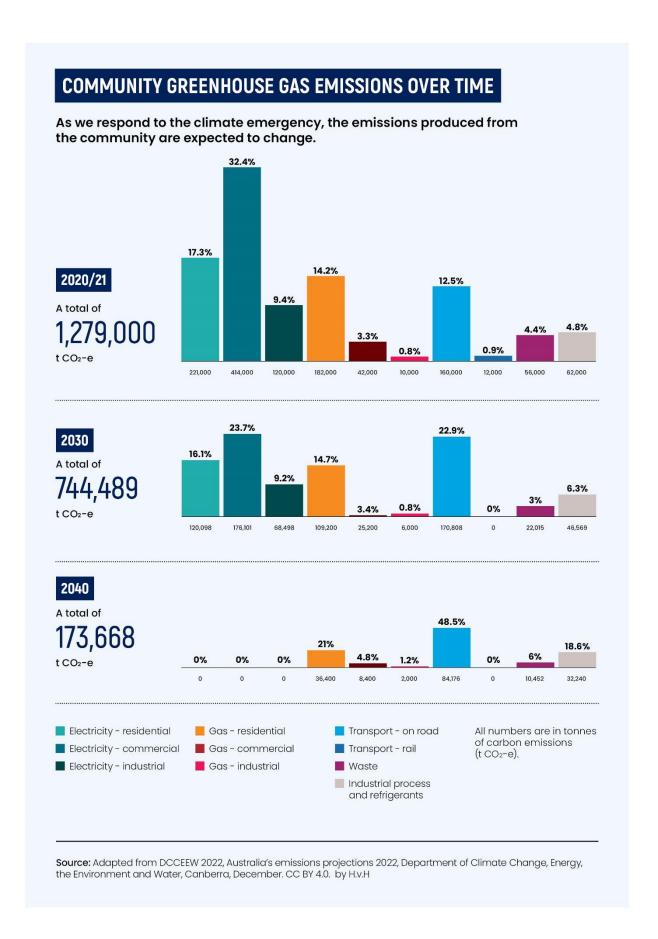
The UN's Intergovernmental Panel on Climate Change states that global temperatures are now 1.1 degrees above pre-industrial levels and they're likely to reach 1.5 degrees in the early 2030s (IPCC Synthesis Report, March 2023).

We are committed to real action and playing our part in keeping global temperature rise to under 1.5 degrees. We have achieved zero carbon emissions from our operations and are helping to reduce our community's emissions. However, everyone must play their part, and we are committed to working with partners, residents and businesses to achieve a low emissions future.

Responding to the climate emergency is possible, and humanity knows what to do. The IPCC says that urgent climate action can secure a liveable future for all. Multiple feasible and effective options exist to reduce greenhouse gas emissions and adapt to human-caused climate change.

By 2040 our most significant remaining community emissions lie in reducing gas use and on-road transport, so a focus on residential gas use and sustainable transport is needed. Switching Council-owned buildings from gas to electricity and powering our operations with 100 per cent renewable energy has significantly reduced emissions. We will deliver programs focused on increasing the community's ability to reduce energy consumption and purchase renewable energy over the coming years.

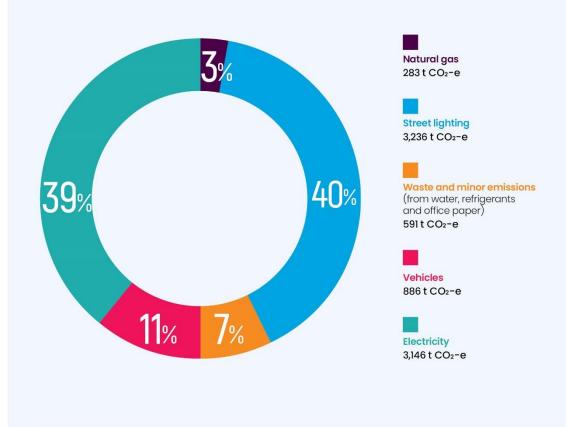






COUNCIL'S GROSS GREENHOUSE GAS EMISSIONS FOR 2021/22

Here is a snapshot of the greenhouse gas emissions for City of Port Phillip's own Council operations.



Source: 383AF_CoPP Council GMG Emissions report 2022

Highlights to date

- Achieving a 25 per cent reduction in our gross carbon emissions between 2016 and 2021
- Powering our operations with 100 per cent renewable energy through the Melbourne Renewable Energy Project
- Achieving net zero emissions for Council operations in 2021, through a mix of emissions reduction, renewable energy and offset purchases
- Replacing 1,500 streetlights with energy-efficient LEDs

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- Installing 610kW of solar panels installed on Council buildings
- Switching 11 Council-owned buildings from gas to electricity
- Implementing the South Melbourne Market Sustainability Strategy, designed to generate 280,000 kWh solar power, avoiding 900 CO2 tonnes CO₂-e and diverting 150,000 coffee cups from landfill
- Involving nearly 10,000 participants in our sustainability programs, including school travel programs, in 2020/21
- Facilitating the Victorian Government's 'Small Business Energy Saver' program with South East Councils Climate Change Alliance to help over 140 small businesses access funding to upgrade equipment to reduce emissions and save money.

Indicators and targets

	Council indicators		
Indicator	Baseline 2016/17	Progress 2021/22	Target 2028
Gross greenhouse gas emissions from Council operations	10,954 tCO ² -e	8,142 tCO ² -e	37% reduction 6,918 tCO ² -e
Net greenhouse gas emissions from Council operations	6,464 tCO ² -e	Zero	Zero
Percentage of Council electricity use from renewable sources	293 kWh	100%	100%
Percentage of waste diverted from Council operations	New target	37.6% waste diversion rate	Target 2025 33 to 50% increase in waste diversion rate 50.1 to 56.4% waste diversion rate
Community indicators			
Indicator	Baseline 2016/17	Progress 2021/22	Advocacy position

Greenhouse gas emissions in the municipality	1,700,000 tCO ² -e	1,279,000 tCO ² -e	Zero by 2045 75 to 80% reduction by 2035 Aligned with state government target, awaiting legislation
Percentage of kerbside waste diverted from landfill (%)	31%	32%	Target 2025 54 to 56%*

^{*}Target from Don't Waste it! Waste Management Strategy 2022-25

Actions

What we are doing

Action	Description	Source
Net Zero	Achieve carbon neutrality for Council operations	Act and Adapt: Sustainable Environment Strategy 2023- 28
Landfill diversion	Divert at least 60 per cent of the City's waste from landfill and rolling out the food and organics service	Don't Waste it! Waste Management Strategy 2022- 25
Emissions reductions from Council operations	Undertake an environmental performance audit and reduce energy use in key Council buildings by investing in renewable energy, energy efficiency and water efficiency initiatives and changing our behaviour in a targeted way Progressively electrify existing Council buildings where feasible	Act and Adapt: Sustainable Environment Strategy 2023- 28
South Melbourne Market Sustainability Strategy	Implement the South Melbourne Market Sustainability Strategy, focusing on reducing waste, transitioning towards zero-carbon	South Melbourne Market Environmental Sustainability Strategy 2023-27



	operations and reducing water use and impact on waterways	
Carbon offsets	Develop a carbon offset policy to guide Council's purchase of offsets to achieve carbon neutrality, including exploring regional opportunities for carbon offsets	Act and Adapt: Sustainable Environment Strategy 2023- 28
Community renewable energy	Understand community needs and barriers and deliver a program to support community renewable energy uptake Provide support to the community to enhance transition away from the use of fossil fuels such as gas	Act and Adapt: Sustainable Environment Strategy 2023- 28
Street lighting upgrades	Deliver an energy efficient street lighting upgrade of 1500 lights for major roads and continue to explore further street light upgrade opportunities	Act and Adapt: Sustainable Environment Strategy 2023- 28

Working with our community and partners

Action	Description	Source	Partners
Port Phillip	Partner with the Victorian	Act and Adapt:	Port Phillip
EcoCentre	Government and Port Phillip	Sustainable Environment	EcoCentre
development	EcoCentre to co-fund a new	Strategy 2023-28	
	carbon neutral facility		Victorian
			Government
Community	Expand delivery of	Act and Adapt:	Port Phillip
emission	sustainability programs for	Sustainable Environment	EcoCentre
reductions	community benefit	Strategy 2023-28	
			Various partners
	Target communications and	Don't Waste It, Waste	including
	resources to help key	Management Strategy	community
	audiences reduce their	2022-25	
	carbon emissions and		
	prepare and adapt to the	Move, Connect, Live:	
	impacts of climate change	Integrated Transport	
		Strategy 2018-28	
		Car Share Policy 2023-28	
Community	Seek partnerships to drive	Act and Adapt:	Inner Metro
renewable	sustainable solutions for	Sustainable Environment	Partnership
energy	apartment buildings,	Strategy 2023-28	
	including supporting Owners		



	Corporations to undertake sustainability retrofits and giving residents access to renewable electricity and energy-sharing platforms Provide support to the community to enhance transition away from the use of fossil fuels such as gas		
Environmental upgrade agreements	Drive the uptake of Environmental Upgrade Agreements for commercial and residential buildings - legislation pending	Act and Adapt: Sustainable Environment Strategy 2023-28	Better Building Finance

Advocacy positions

We call on the Victorian and Australian Governments to:

- commit to science-based emissions reduction targets consistent with keeping warming to 1.5 degrees and fund and deliver a plan to meet these targets
- provide funding, incentives and support to Victorian businesses and residents to reduce energy, water and waste
- phase out gas and develop an electricity network upgrade plan to transition to distributed renewable energy
- create a circular economy, increase demand for recycled content and drive innovation by providing industry incentives
- require zero emission buildings through the Victorian planning scheme.

City of Port Phillip will work to mobilise the community to take action. Some actions you can take include:

- Set goals to act, connect with like-minded people and follow our online list of powerful ways to take climate action
- Become politically active advocate for change with your local members for all levels of parliament
- Convert gas appliances hot water, heating, cooking with electric substitutes such as heat pumps and induction cooktops
- Advocate to your superannuation fund to divest from financial institutions that invest in fossil fuel
- Switch your electricity to certified GreenPower or zero emissions electricity using offsets or install solar panels
- Grow food, join a community garden, eat less resource-intensive foods such as red meat and visit your local bulk buy stores and farmers' markets
- Use sustainable and active forms of transport, such as walking, riding or public transport, instead of driving a car
- Buy second hand, repair existing items and visit the EcoCentre repair workshops
- Reduce waste to landfill by recycling, when waste can't be avoided or reused.



More information

Act and Adapt: Sustainable Environment Strategy 2023-28
Don't Waste It! Waste Management Strategy 2022-25
Climate action update – February 2022
Take climate action – City of Port Phillip
AR6 Synthesis report Climate Change 2023
Victoria's changing climate



3. Enabling more sustainable transport options



Increasing sustainable transport use is one of the most significant opportunities to reduce emissions. Port Phillip's road network is at capacity and cannot expand. Private vehicles already account for 14 per cent of emissions. With current travel patterns, by 2040 on-road travel will make up nearly 50 per cent of community emissions in our City.

We have a long-term plan to tackle the challenges associated with increased congestion. Our Move, Connect, Live: Integrated Transport Strategy 2018-28 prioritises safe and reliable access to transport options. To reduce pressure on our road network, we are creating safe walking routes, working with the Victorian Government on the shared e-bike and e-scooter trials and supporting car share programs. We are also transitioning our Council fleet to zero emissions.

We will deliver separated bike lanes and paths, plans for bike parking facilities at train and tram hubs and community bike confidence courses to encourage bike riding. Our aim is that everyone has access to convenient public and active transport options. Our targets include significantly increasing the number of daily walking, public transport and bike riding trips in our City.

Highlights to date

- Transport emissions reduced by 15 per cent across our City from 189,000 tCO₂-e in 2018 to 160,000 tCO₂-e in 2021
- Car share memberships in our City tripled between 2016 and 2022, from less than 3000 to over 9000
- People travelled a combined distance of 1.5 million kilometres using shared e-scooters and e-bikes in our City in the year to February 2023.

Indicators and targets

Indicator	Baseline 2018	Progress 2021/22	Target 2028
Increase walking trips per day	152,000	N/A*	36% 207,000
Increase bike riding trips per day	17,000	N/A*	151% 44,000

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Increase public transport trips per day	42,000	N/A*	35% 56,000
Increase the number of residents who are car share members	2,500	7,586 Impacted by COVID-19 lockdowns (now over 10,000)	13,500
Increase the use of shared e-share bikes	1 trip per day	1.7 trips per day	3 trips per day

^{*}Based on data that is not readily available. To be changed in updated Move, Connect, Live Strategy Source: Move, Connect, Live: Integrated Transport Strategy 2018-28

Actions

What we are doing

Action	Description	Source
Public electric vehicle charging	Support the uptake of electric vehicles in the community by facilitating the installation of public charging stations, private charging infrastructure and removing barriers to charging infrastructure in new developments and existing buildings	Act and Adapt: Sustainable Environment Strategy 2023-28
Kerbside electric vehicle charging	Undertake an Australian first pilot to test installation of private kerbside chargers for residents without offstreet parking	Act and Adapt: Sustainable Environment Strategy 2023-28
Bike riding	Support all our schools to increase active travel through Ride2School Day, rebates for events and matched grants to plan designated safe routes and provide bicycle education and facilities	Move, Connect, Live: Integrated Transport Strategy 2018-28
Heavy fleet fuel sources	Transition to a zero emissions fleet by 2033 subject to appropriate	Act and Adapt: Sustainable Environment Strategy 2023-28



	alternatives for heavy fleet becoming available	
Zero emissions Council fleet	Undertake a review of the fleet with specialist advice to identify cost effective options to accelerate emissions reductions which could include electrification, transition away from diesel, and extending the life of existing vehicles Transition to a zero emissions fleet by 2033	Act and Adapt: Sustainable Environment Strategy 2023-28

Working with our community and partners

Action	Description	Source	Partners
Shared transport services	Advocate to the Victorian Government to regulate shared transport services and participate in the shared e- bike and e-scooter trials	E-scooter trial	Victorian Government
Fishermans bend – public transport	Advocate to the Victorian Government for the delivery of connections to public transport, public space and bike lanes in Fishermans Bend	Move, Connect, Live: Integrated Transport Strategy 2018-28	Victorian Government
Safe walking routes	Create safe walking routes and advocate to the Victorian Government to reduce barriers to crossing major roads	Move, Connect, Live: Integrated Transport Strategy 2018-28	Victorian Government
Bike parking facilities	Work with Victorian Government to design high quality bike parking facilities at train and tram hubs	Move, Connect, Live: Integrated Transport Strategy 2018-28	Victorian Government
Anzac Station sustainable transport	Advocate to the Victorian Government for support for walking, bike riding and public transport improvements around Anzac Station and along St Kilda Road	Move, Connect, Live: Integrated Transport Strategy 2018-28	Victorian Government

Final

Draft Climate Emergency Action Plan, August 2023



Tram infrastructure	Advocate to Yarra Trams and	Move, Connect, Live:	Victorian
upgrades	the Victorian Government for	Integrated Transport	Government
	a pipeline of tram	Strategy 2018-28	Yarra Trams
	infrastructure upgrades		

Advocacy positions

We call on the Victorian Government to:

- increase the reliability and frequency of tram and bus services
- improve public transport links including train and tram to Fishermans Bend.

We call on the Victorian and Australian Governments to:

• increase investment in pedestrian and bike riding improvements and zero emissions vehicles.

City of Port Phillip will work to mobilise the community to take action. Some actions you can take include:

- Walk, ride, scoot or carpool for short trips to work, the shops and school.
- Champion bike riding, public and shared transport in your neighbourhood.
- Consider a car share membership instead of buying a car.
- Join the Port Phillip Bicycle Users Group.

Case study: Sustainable transport - Garden City bike corridor connection

Across Port Phillip, we are improving bike paths and lanes, making it easier and safer for people to move around. We are also developing links that connect our bike trails and open spaces.

We opened the Garden City bike corridor connection in early 2022, linking Garden City Reserve to the Sandridge and Bay Trail shared path networks in Port Melbourne.

The 1.2-kilometre upgrade means Port Melbourne residents and visitors now have increased access to Garden City Reserve and can also enjoy the views of the 26-metre-high white lighthouse along their bike journey.

Adding an off-road, separated bike path along Beacon Road and Swallow Street has made these areas safer for all users. As part of the upgrade, we improved lighting along the Garden City Reserve shared path and installed additional signage and line marking.

The project has improved cycling access for recreational and local bike riders. By making it safer and more attractive to travel by bike, we're encouraging the community to shift toward more sustainable forms of transport. The new corridor is an action in our Move, Connect, Live: Integrated Transport Strategy.

More information

Move, Connect, Live: Integrated Transport Strategy 2018-28 Active schools – City of Port Phillip Bike riding – City of Port Phillip Victorian Government advocacy priorities – City of Port Phillip Draft Car Share Policy – Have Your Say Port Phillip



4. Resilient and liveable public spaces



Open public space is essential to physical and mental health and wellbeing. Beaches, the foreshore, parks, footpaths, nature strips, urban plazas, gardens and sports fields all count towards our enviable public space network. These areas are for everyone to enjoy and where people gather to exercise, play sports and relax.

We want to maintain climate-resilient public spaces so future generations can enjoy them, but the climate emergency poses a significant risk.

Climate change is leading to higher temperatures, rising sea levels, more extreme storms and intense rainfall events. Located at the bottom of the Elster Creek and Yarra River catchments, much of Port Phillip is less than three metres above sea level and we are already prone to flooding. These impacts threaten wildlife habitats, biodiversity, roads, transport, beaches, parks and buildings.

The latest science projects a reduction in overall rainfall. Combined with population growth, this will put significant pressure on water supply security and make it harder to maintain our green spaces. In addition, rising groundwater levels will heighten the risk of soil salinity.

Despite these challenges, our response is well underway to maintain resilient and liveable public spaces. We are committed to minimising the impact of the heat island effect by increasing the number of trees and overall canopy cover in our City. Within our urban environment, we are enhancing wildlife habitat, strengthening wildlife corridors and increasing biodiversity.

Highlights to date

- Trialling the first woody meadow in 2021 as a cost-effective way to manage open space that requires little maintenance or watering
- Managing 46,000 trees and enhancing their ability to cope with climate change, including through implementing diverse tree stock and water sensitive urban design principles
- Identifying initiatives such as greening and water misters to keep streets cool through the Cooling South Melbourne Study
- Working in partnership to reduce the impact of flooding in Fishermans Bend, clean stormwater before
 it enters the bay and provide a climate-resilient water supply
- Completing the first stormwater harvesting project in Alma Park, with feasibility work underway on two further stormwater harvesting projects to provide water to our parks and gardens.



Target and indicators

Indicator	Baseline 2018	Progress 2021/22	Target 2028
Percentage of street canopy cover	19% (Baseline 2015/16)	Currently being measured	10% increase on baseline 20.9% Revised targets to be developed through Council's new Urban Forest Strategy
Council's potable water use for irrigation Note: replaces the previous indicator	169 ML/y	149 ML/y 12% reduction	97 ML/y 43% reduction
Total nitrogen	15,009 kg/y	13,563 kg/y 10% reduction	12,669 kg/y 16% reduction
Total suspended solids	717,035 kg/y	627,395 kg/y 13% reduction	590,125 kg/y 18% reduction
Total phosphorus	1,880 kg/y	1,699 kg/y 10% reduction	1,599 kg/y 15% reduction
Community potable water use	178 L/p/day	182 L/p/day	150 L/p/da



Break out box:

Water sensitive urban design is an approach to land planning and engineering design that holistically considers water management. Its aim is to reduce environmental impacts and enhance community amenity. Common examples of water sensitive infrastructure include streetscape raingardens, constructed wetlands, sediment ponds, swales, and tree pits.

Guiding principles include:

- reduce potable water consumption
- maximise water reuse
- reduce wastewater discharge
- minimise stormwater pollution before it enters the environment
- maximise groundwater protection.

Actions

What we are doing

Action	Description	Source
Water sensitive urban design projects	Refresh and implement City of Port Phillip's Water Sensitive City Plan, including investigating existing, new and emerging technologies and approaches to help Council use water more efficiently, including efficient and effective irrigation.	Act and Adapt: Sustainable Environment Strategy 2023-28
Foreshore resilience	Make our foreshore resilient to climate change by expanding fenced areas to allow regeneration of dune plants that act to stabilise the sand Update our Foreshore Management Plan and develop a Coastal Adaptation Plan	Act and Adapt: Sustainable Environment Strategy 2023-28 Foreshore Management Plan 2012
Urban forest	Develop and deliver a new Urban Forest Strategy including supporting guidelines and plans.	Places for People: Public Space Strategy 2022-32 Act and Adapt: Sustainable Environment Strategy 2023-28 Urban Forest Strategy 2040
Public green spaces	Create more public green space by transforming road space into green space at the Palais forecourt, Moubray Street Pocket Park, Cobden Street Pocket Park and Glen Eira Reserve in Ripponlea	Places for People: Public Space Strategy 2022-32



Urban heat island effect	Reduce the urban heat island effect by trialling heat reducing materials in footpaths and laneways and planting broad spreading canopy trees to provide shade and capture carbon	Places for People: Public Space Strategy 2022-32 Act and Adapt: Sustainable Environment Strategy 2023-28 Urban Forest Strategy 2040
Permeability	Develop methods and tools to easily quantify permeability Use mapping and analysis to understand potential future changes in permeability across the municipality Implement permeability initiatives such as depaying, increasing green space and building green infrastructure	Act and Adapt: Sustainable Environment Strategy 2023-28
Stormwater harvesting	Continue to investigate stormwater harvesting opportunities and implement where feasible	Act and Adapt: Sustainable Environment Strategy 2023-28 Places for People: Public Space Strategy 2022-32

Working with our community and partners

Action	Description	Source	Partners
Fishermans Bend – urban forest	Co-create functional and vibrant public spaces and a biodiverse urban forest in	Places for People: Public Space Strategy 2022-32	Victorian Government Developers
	Fishermans Bend with the community, Victorian Government and developers		
Fishermans Bend – flood management	Work with Melbourne Water and the Fishermans Bend Taskforce to implement flood modelling	Fishermans Bend Water Sensitive City Strategy	Melbourne Water Fishermans Bend Taskforce
	options		
Port Phillip EcoCentre funding	Support the EcoCentre's biodiversity programs and volunteering initiatives to restore native vegetation and habitats	Act and Adapt: Sustainable Environment Strategy 2023-28	Port Phillip EcoCentre



Anzac Station – canopy cover	Support the Victorian Government's target to double canopy cover by 2040 around the new Anzac train station and help to maximise tree retention in the Metro Tunnel works	Domain Precinct Public Realm Masterplan	Victorian Government
Foreshore resilience	Work with the Victorian Government and coastal land managers to understand and develop ideas to reduce foreshore climate change impacts such as inundation.	Foreshore Management Plan 2012	Victorian Government Coastal land managers

Advocacy positions

We call on the Victorian Government to:

- Improve pedestrian connectivity between public spaces in Fishermans Bend, South Melbourne and Port Melbourne.
- Improve tree canopy cover and regular tree maintenance, and biodiverse understorey planting on State Government roads
- Improve vegetation maintenance and introduce greater floral biodiversity along rail corridors.

We call on the Victorian and Australian Governments to:

 Partner with Melbourne Water and the Cities of Port Phillip, Bayside, Glen Eira and Kingston to help fund and deliver water management infrastructure in the Elster Creek Catchment that increases permeability (such as de-paving), reduces flooding (such as drainage upgrades), improves water quality (such as raingardens) and provides water for trees and vegetation. (e.g., passive irrigation, non-potable water supply).

City of Port Phillip will work to mobilise the community to take action. Some actions you can take include:

- Plant mid-size to large canopy trees and other vegetation on your property and ensure there is space for trees to grow.
- Include rainwater tanks and water sensitive gardens that can withstand drought and capture water to allow it to seep into the soil slowly.
- Get involved in local planting programs and volunteer opportunities through Council and the Port Phillip EcoCentre's biodiversity and greening programs.
- If you're renovating or building a new house, ask your designer and builder to look at sustainable and heat resilient building materials.

Case study: Greening projects

De-paving during footpath renewals



Creating a greener, cooler, more liveable Port Phillip is a priority for the Council. One way we achieve this is by de-paving footpaths and centre medians and planting trees and garden beds.

In Liardet Street, Port Melbourne, we have re-engineered sections of the centre median. We also excavated road base material to create deep root planting zones for large new canopy trees. The new deep-root planting zones provide street trees with access to water and essential nutrients creating ideal conditions for healthy structural roots. The project has been hugely successful, and the new trees are thriving.

Nature strip gardens

When we developed the nature strip guidelines in 2021/22, community members told us they wanted more nature strips and the ability to garden in this public space in front of their homes.

We are now looking at opportunities to include nature strips across the municipality. For example, during footpath renewal works, residents will be asked if they would prefer a nature strip to be created rather than resurfacing the entire footpath area with asphalt. Eastern Road, South Melbourne, was identified as one of these sites, and most residents supported the change, resulting in new gardens in this area.



Liardet Street, Port Melbourne in November 2017



Liardet Street, Port Melbourne in September 2022



More information

Cooling South Melbourne Study Greening Port Phillip Places for People: Public Space Strategy 2022-32



5. Planning for buildings and places



Designing our public spaces and new buildings to withstand future climate impacts will greatly improve our community's future. By incorporating sustainable, climate-resilient design into new developments and structure plans, we can minimise maintenance and reduce emissions. This planning will ensure the community is safe, prepared and resilient.

Breakout box:

What is climate-resilient and sustainable design?

Climate-resilient and sustainable design involves designing a renovation or new building to withstand future climate impacts such as flooding and increased heat, and to minimise the impact on the environment both in the build and operation of the building. For example, you can prepare your property for future weather patterns by building homes of different materials and looking to remove or shade large windows and doors facing west. You can also incorporate flood-resilient building materials or allow floodable spaces and plant drought-tolerant species. (END BREAKOUT BOX)

At City of Port Phillip, we have several roles in helping ensure buildings and places are designed with climate change in mind. For example, we guide how new buildings are constructed and support community members in retrofitting their homes and businesses. We also help the municipality change to become climate-resilient, by creating more walkable communities relying less on fossil fuels and places less vulnerable to flooding, extreme weather events and the urban heat island effect. Our other roles are providing upgrade finance and supporting residents and businesses to switch from gas to renewable energy.

Currently, we are helping to guide the sustainable redevelopment of the Fishermans Bend Urban Renewal Area, the formerly industrial area to the east of the Westgate Bridge. It is planned that the Port Phillip part of Fishermans Bend will be home to more than 68,000 people by 2050, with another 36,000 visiting daily for work. Effective flood mitigation measures and water sensitive urban design are essential to future-proofing the area.

The Victorian planning system is crucial for planning buildings and places. We are calling on the Victorian Government to review the *Planning and Environment Act 1987* and the *Victoria Planning Provisions Act* to embed climate change mitigation and adaptation in the planning system.

Highlights to date

- Implementation of the local environmentally sustainable design policy introduced into the Planning Scheme in 2015, requiring increased sustainability standards for new buildings
- Council endorsing a proposed planning amendment relating to environmentally sustainable development targets and submitting this request to the Minister for Planning
- Converting many of Council's buildings from gas to electricity and undertaking energy efficient upgrades in 26 buildings.



Targets and indicators

Indicator	Baseline 2018	Progress 2021/22	Target 2028
Percentage of Council electricity use from renewable sources	293kWh	100%	100%
Percentage of households with solar power in City of Port Phillip	11% (Baseline 2021/22)	Indicator only	
Number and percentage of private vehicles that are electric in City of Port Phillip	0.14% 20,095 cars (Baseline 2021/22)	Indicator only	

Actions

What we are doing

Action	Description	Source
Fishermans Bend – sustainable development	Adopt the Green Star – Communities Framework to help guide sustainable development in Fishermans Bend	Act and Adapt: Sustainable Environment Strategy 2023-28
Council buildings audit	Undertake an environmental performance audit and reduce energy use in key Council buildings by investing in renewable energy, energy efficiency and water efficiency initiatives and changing our behaviour in a targeted way	Act and Adapt: Sustainable Environment Strategy 2023-28
Council buildings energy efficiency	Transition Council buildings to zero gas and upgrade Council buildings to increase energy efficiency	Act and Adapt: Sustainable Environment Strategy 2023-28
Port Phillip EcoCentre	Build a new 6-Star GreenStar (design and asbuilt) EcoCentre to support community sustainability programs, citizen science and volunteering programs	Act and Adapt: Sustainable Environment Strategy 2023-28



Environmentally sustainable design in Council	Update Council's Sustainable Design Strategy, which sets minimum standards for sustainability in Council buildings	Act and Adapt: Sustainable Environment Strategy 2023-28
Key asset standards	Commit to setting and meeting sustainability standards for key asset types and building individualised resilience plans for building assets.	Act and Adapt: Sustainable Environment Strategy 2023-28

Working with our community and partners

Action	Description	Source	Partners
Elevating environmentally sustainable development (ESD) targets	Participating in the Elevating Environmentally Sustainable Development Targets project with 23 other Councils, to facilitate best practice ESD and support zero carbon development outcomes	Act and Adapt: Sustainable Environment Strategy 2023-28	Council Alliance for a Sustainable Built Environment
Environmental upgrade agreements	Work with partners to drive the uptake of environmental upgrade agreements for commercial and residential buildings, legislation pending.	Act and Adapt: Sustainable Environment Strategy 2023-28	Better Building Finance
Housing strategy ESD	Incorporate sustainable design and climate resilience into our new Housing Strategy and South Melbourne Structure Plan	Act and Adapt: Sustainable Environment Strategy 2023-28	Victorian Government
Flood management	Update flood management and sea level rise planning controls in partnership with Melbourne Water	City of Port Phillip Planning Scheme	Melbourne Water
Fishermans Bend – integrated water management	Implement the Water Sensitive City Strategy in the Fishermans Bend Urban Renewal Area	Fishermans Bend Water Sensitive City Strategy	Fishermans Bend Taskforce



Neighbourhood batteries	Investigate how and where neighbourhood battery energy storage might play a role to support the community's use of renewable energy	Act and Adapt: Sustainable Environment Strategy 2023-28	Inner Melbourne Partnership
Green leases	Introduce green leases and tenant engagement for Council-owned buildings	Act and Adapt: Sustainable Environment Strategy 2023-28	South East Councils Climate Change Alliance

Advocacy positions

We call on the Victorian Government to:

- incorporate the proposed Elevating ESD Targets planning controls into the Victorian planning scheme, as requested by Council and the other participating councils
- review the Planning and Environment Act 1987 to align with the Climate Change Act 2017 and embed climate change mitigation and adaptation in Victoria's planning system and update the Victoria Planning Provisions as required
- implement the Fishermans Bend Framework and Water Sensitive City Strategy.

City of Port Phillip will work to mobilise the community to take action. Some actions you can take include:

- Contact us about an environmental upgrade agreement for your commercial property.
- Integrate sustainability and climate resilience as early as possible in the design stage of new development.
- Consider sustainable design options for buildings retrofits.
- Use our Sustainable Design Strategy to understand how to utilise and manage sustainability initiatives in your building to reduce your impact.
- Make your home more sustainable by planting trees, installing rainwater tanks or solar, insulating and draught-proofing.
- Switch from gas to electricity in your home or business.

Case study: Fishermans Bend

Fishermans Bend is Australia's largest urban renewal project, covering approximately 480 hectares and five precincts across City of Melbourne and Port Phillip. By 2050, Fishermans Bend is forecast to provide for 80,000 residents and 80,000 jobs. This includes 68,000 residents and 36,000 jobs in the City of Port Phillip's Montague, Sandridge and WIrraway Precincts.

City of Port Phillip is working with the Victorian Government, Melbourne Water, City of Melbourne, the community and developers to apply the world's best practices in managing water in Fishermans Bend.

By implementing water sensitive urban design, we will reduce the impact of flooding in Fishermans Bend and capture and clean stormwater before it enters the bay. Fishermans Bend will include a water recycling plant, pumps and levees and a third pipe network to deliver a climate-resilient water supply. Raingardens, Final

Draft Climate Emergency Action Plan, August 2023



tree pits at the street level and smart rainwater tanks in individual buildings will also reduce flooding and support Green Star sustainability measures.

The project is also being designed with a biodiverse urban forest – a network of parks, green walls and green roofs will create natural environments for flora and fauna and connect people to nature.

More information

portphillip.vic.gov.au/sustainability Sustainable Design Strategy



Implementation and monitoring

We are committed to regular monitoring and reporting on the implementation of the Climate Emergency Action Plan and will report annually on our progress. As we measure the targets and indicators we will:

- report against indicators annually (or as indicated)
- use data to evaluate progress and inform decision-making
- re-evaluate our methods for measuring and calculating greenhouse gas emissions, sustainability, water use and water quality impacts
- investigate how to make data accessible
- use data to guide internal actions as well as educate the community to make informed decisions about climate change, sustainability actions and programs.

As we implement the Plan, we will work internally and with partners to ensure that all community members have fair access to the same opportunities and resources.



Glossary

Asset management plans – a means of documenting the key elements involved in managing Council's extensive asset base. City of Port Phillip's assets are categorised across five separate asset portfolios, each which has an individual asset management plan.

Climate-resilient community – a community that can successfully cope with and manage the impacts of climate change, while preventing those impacts from getting worse.

Energy storage – batteries capturing energy for later use.

Environmental upgrade agreements – a form of finance designed to fund building efficiency upgrades, also known as building upgrade finance.

Environmentally sustainable development – development that seeks to reduce negative impacts on the environment and on the health and comfort of building occupants, thereby improving building performance.

Green lease – a lease between the landlord and tenant which aims to ensure that the ongoing use and operation of the building minimises environmental impacts.

IPCC – International Panel on Climate Change — founded in 1988, the IPPC is an intergovernmental body of the United Nations. Its job is to advance scientific knowledge about climate change caused by human activities.

Lag indicator – an indicator that involves a significant delay between when an action is taken and when a difference is measurable.

Net zero greenhouse gas emissions – net zero emissions involve balancing the carbon emitted into the atmosphere and the carbon removed from it.

Permeability – the ability of a material like concrete, asphalt, or soil to allow water or other liquids to pass through it. For example, a garden bed is more permeable than a road

Raingardens – specially designed garden beds that filter stormwater runoff from surrounding areas.

Smart rainwater tanks – tanks connected via a network that enables data monitoring and pump-control commands to be issued to individual tanks. For example, they can be controlled to empty before storms, and then used to reduce runoff during heavy rain.

Sustainable Transport – transport that has low/zero emissions. Includes active transport options such as walking and cycling, using public transport and car share services or driving an electric vehicle.

Total suspended solids – suspended particles that are not dissolved in a water sample. It is a parameter used to assess water quality.

City of Port Phillip < Name of document>



Water sensitive urban design – a land planning and engineering design approach that integrates the urban water cycle – including stormwater, groundwater, wastewater management and water supply – into urban design to minimise environmental degradation and improve aesthetic and recreational appeal.

