



# Whitehorse Climate Response Strategy 2023-2030

## Acknowledgement of Country

Whitehorse City Council acknowledges the Wurundjeri Woi-wurrung people of the Kulin Nation as the Traditional Owners of the land. We pay our respects to their Elders past, present and emerging.

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# 1. Executive Summary

The Intergovernmental Panel on Climate Change's (IPCC) latest report<sup>1</sup> released in March 2023 is the most comprehensive review of climate change and contains over eight years' worth of peer-reviewed science. The message is clear. Strong, immediate action by all levels of government across the world is needed to rapidly reduce greenhouse gas (GHG) emissions this decade and address both current and future climate impacts. If action is not taken, current ways of life will irreversibly change.

Climate change impacts are being felt across the Whitehorse community right now and are forecast to increase. Climate change related extreme weather and changed weather patterns have widespread impacts such as:

- Increased stormwater runoff and flash flooding,
- Increased damage to buildings and infrastructure, leading to higher maintenance costs,
- Increased pressure on emergency services,
- More heat-related deaths, particularly among the elderly and other vulnerable members of the community,
- Loss of biodiversity due to decreased habitat quality and availability, and
- Interruptions to supply chains and food production.

Climate action is essential and urgent to minimise these impacts, reduce emissions to limit temperature rise to 1.5 degrees Celsius above pre-industrial levels, and achieve the Whitehorse 2040 Community Vision.

An effective response to this challenge requires a collective effort, with everyone working together and playing their part. Under the Paris Climate Agreement, countries across the world are acting. Here in Australia, collaboration and partnerships between all levels of government, the community and local stakeholders is the best way to address this challenge. Everyone in Whitehorse can be part of the solution.

Previous successes demonstrate what is possible. In Victoria, emissions fell 24.8 per cent between 2005 and 2019, achieving its 2020 emissions reduction target ahead of

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<sup>1</sup> AR6 Synthesis Report: Climate Change 2023

schedule. Locally in 2021, Council started powering six Council and community buildings with 100 per cent renewable electricity, as one step in reducing its corporate emissions.

Recognising the community's strong and sustained support for Council to lead and act on climate change, Council declared a Climate Emergency on 12 September 2022. A Climate Emergency Declaration highlights that urgent action is needed by all levels of government, including local councils, and at a scale that is required to address the current and future challenges of a changing climate.

This Climate Response Strategy 2023-2030 (the Strategy) sets objectives and targets for Council's corporate operations, as well as how Council will support the community to reduce its emissions and adapt to climate change.

### **Council's Approach to Climate Action**

Council will be a local leader, to actively reduce its corporate emissions and adapt its buildings and infrastructure to be climate resilient. It will support, enable and encourage the community to act. Council will advocate for the needs of the community in matters that are beyond its control.

- To deliver efficient and effective outcomes Council will:
- Work in partnership with the community and other levels of government,
- Build on its previous achievements from implementing its Sustainability Strategy 2016-2022 and Interim Climate Response Plan 2020-2022, and
- Learn from others and quickly follow in their successes.

Council is committed to climate action to drive better outcomes for the community and to fulfil Council's obligations under the Local Government Act which includes:

- Giving priority to achieving the best outcomes for the municipal community, including future generations, and
- Promoting climate change mitigation and planning for climate change risks.

### **New Targets and Actions**

This Strategy commits Council to a new set of energy and emissions related targets:

- Maintain carbon neutral status for corporate emissions,

- Source 100 per cent renewable electricity for Council operations by 2025,
- Achieve net zero corporate emissions by 2032, and
- Aspire for net zero community emissions by 2040.

Although it is difficult for Council to directly reduce community emissions, Council can support the community to act. The aspirational target will help inform the design and delivery of community projects and programs, while also motivating action.

These new targets, together with those in Council's other sustainability and environmental strategies, will help drive a broad range of environmental, sustainability and climate outcomes within Whitehorse. These existing strategies include:

- Rubbish to Resource! Waste Management Strategy 2018-2028,
- Urban Forest Strategy 2021-2031,
- Integrated Water Management Strategy 2022-2042, and
- Cycling Strategy 2016.

Refer Figure 8 in the *Council's Climate Response* section to see how these strategies interact with each other.

An effective climate change response requires three types of action:

- **Adaptation actions** that reduce the impact of climate change, from hazards such as increased storm events and extreme heat,
- **Mitigation actions** that help address the root cause by reducing emissions, and
- **Systemic actions** that lay the foundations for change within Council and in its service to the community.

The Climate Response Plan 2023-2026 (the Response Plan) supports the first three years' implementation of this Strategy and includes 40 actions. Tracking progress and sharing success stories is an essential part of Council's climate response. Council will report on the objectives, targets and actions contained in this Strategy and supporting Plan so that the community can celebrate progress and plan for future deliverables.

By working together, Council and the community can help future-proof Whitehorse, tackle climate change at the local level and make a meaningful contribution to Victoria's climate response.

## 2. The Climate Challenge

### A Collective Effort

In 2015, at the United Nations (UN) Climate Conference in Paris, governments from around the world including Australia, became signatories to the Paris Climate Agreement. This Agreement calls for limiting the global average temperature rise in this century to well below two degrees, while attempting to limit the temperature rise to 1.5 degrees above pre-industrial levels.

For warming to be limited to 1.5 degrees, global emissions need to be controlled and peak by 2025, then reduce by at least 43 per cent by 2030<sup>2</sup>.

The World Health Organisation, International Monetary Fund, World Bank and other global institutions have all recognised the severity and urgency of climate action and are mobilising their resources to support the coordinated global effort. The UN has increasingly been calling for more ambition to drive deeper cuts in emissions, take drastic action and respond immediately to ensure warming is limited to 1.5 degrees.

In October 2021, the UN Climate Conference in Glasgow saw a renewed push to increase action on climate change, seeing the first ever statement to phase down coal, stop deforestation by 2030 and reduce methane emissions (responsible for a third of human-induced warming) by 30 per cent by 2030<sup>3</sup>. In November 2022, the UN Climate Conference in Sharm el-Sheikh reaffirmed the need for rapid, collective action to limit warming again to 1.5 degrees.

### Roles in Climate Action

Responding to climate change is a global challenge with local solutions. From governments to businesses, organisations, families, community groups and organisations, right down to the individual, everyone can be part of the solution.

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<sup>2</sup> <https://www.ipcc.ch/2022/04/04/ipcc-ar6-wgiii-pressrelease/>

<sup>3</sup> <https://www.bbc.com/news/science-environment-56901261>

## International

Every country across the globe has contributed to the climate crisis. In general, high-income countries, including Australia, have higher per capita emissions than lower income countries.

To respond to climate change, countries and global bodies need to:

- Rapidly reduce emissions,
- Advocate for meaningful action by other governments and corporations to reduce emissions and adapt to climate change,
- Adapt and build climate resilience, including supporting vulnerable populations in countries without adequate resources to protect their communities,
- Acknowledge and reward international leadership, and
- Openly share solutions.

## Federal Government

The Federal Government is best placed to swiftly drive cost-effective emissions reduction efforts at a national level, and build a climate-resilient economy.

As a signatory to the Paris Climate Agreement, the Federal Government has committed to keeping global temperature rise this century well below two degrees above pre-industrial levels and to pursue efforts to limit temperature increase even further to 1.5 degrees. The Federal Government has legislated to reduce emissions by 43 per cent below 2005 levels by 2030, and achieve net zero emissions by 2050.

## State Government

In 2017, the Victorian Parliament passed a new Climate Change Act which set out a clear policy framework and a pathway to net zero emissions by 2050, a target which has since been brought forward to 2045. Following this, the Victorian Government has committed to a range of additional targets including:

- 25 per cent renewable energy generation by 2020. This was achieved when Victoria generated more than 26 per cent of its energy from renewable sources in 2020, and
- 95 per cent of Victoria's electricity from renewable sources by 2035.



## Local Government

The remit and powers available to Victorian local governments are defined by the Victorian Climate Change Act 2017 and the Local Government Act 2020. The Local Government Act contains overarching principles, where councils are required:

- 9(2)(b) To give priority to achieving the best outcomes for the municipal community, including future generations, and
- 9(2)(c) To promote the economic, social and environmental sustainability of the municipal district, including mitigation and planning for climate change risks.

To respond to climate change, Whitehorse and other local governments are working to:

- Collectively advocate for increased support and action from other levels of government,
- Demonstrate local leadership, reduce corporate emissions and embed climate action across their operations,
- Encourage their supply chain to reduce emissions by giving preference to procurement of carbon neutral products and services,
- Continue to form alliances, build partnerships, and collaborate across all levels of government to deliver shared projects to scale up action,
- Amplify climate change messages and stories of success,
- Use their role as a planning authority to advocate for and embed climate change and sustainability into land use planning, policy and decision-making, and
- Support vulnerable populations to take preventative action to ensure they are safe and healthy, and
- Ensure Council owned buildings, infrastructure and services are resilient to climate change impacts and will be able to service its community during extreme weather and other emergency events.

Together, councils can reduce duplication of effort, work to its strengths, rapidly test solutions and scale up successes, and call for change with a strong, united voice.

Council is one of eight member councils of the Eastern Alliance for Greenhouse Action (EAGA). The Alliance works collaboratively on regional programs that reduce greenhouse gas emissions and facilitate climate adaptation.

## Community

The Whitehorse community is made up of businesses, households and individuals, local groups, schools, and community organisations. Everyone has a role to play in reducing emissions, working together, and helping to ensure our communities remain strong, healthy and safe in a changing climate.

To support climate action, the Whitehorse community can:

- Reduce energy use,
- Switch from gas to all-electric appliances,
- Aim for zero carbon electricity by installing solar or buying renewable electricity,
- Make homes and businesses sustainable and climate resilient through actions like draught proofing, installing insulation and buying more efficient appliances,
- Avoid, reduce, reuse and recycle to minimise waste,
- Walk, cycle, rideshare or take public transport instead of driving,
- Connect with, support and share information with friends, neighbours, colleagues and family, and
- Advocate for stronger climate change action by State and Federal Governments.

Not everyone in the community has the knowledge, time and resources to take big actions. However, everyone can contribute in their own way. Council will develop a range of initiatives to support the community to live more sustainably and participate in climate action.

## Other Stakeholders

A variety of bodies and agencies manage services and assets within Whitehorse, including United Energy, Department of Transport and Planning (includes PTV and VicRoads), VicTrack, Yarra Trams, Metro Trains, Parks Victoria, Yarra Valley Water and Melbourne Water.

To respond to climate change, these organisations need to:

- Rapidly drive down their corporate emissions,
- Facilitate others to reduce emissions (for example through providing the enabling infrastructure to support rapid electric vehicle (EV) uptake),
- Adapt their assets to ensure they are resilient to climate change impacts,

- Continue to form alliances, build partnerships and deliver shared projects to scale up action, and
- Communicate success stories to their partners, customers and users.

### **The Whitehorse community wants Climate Action**

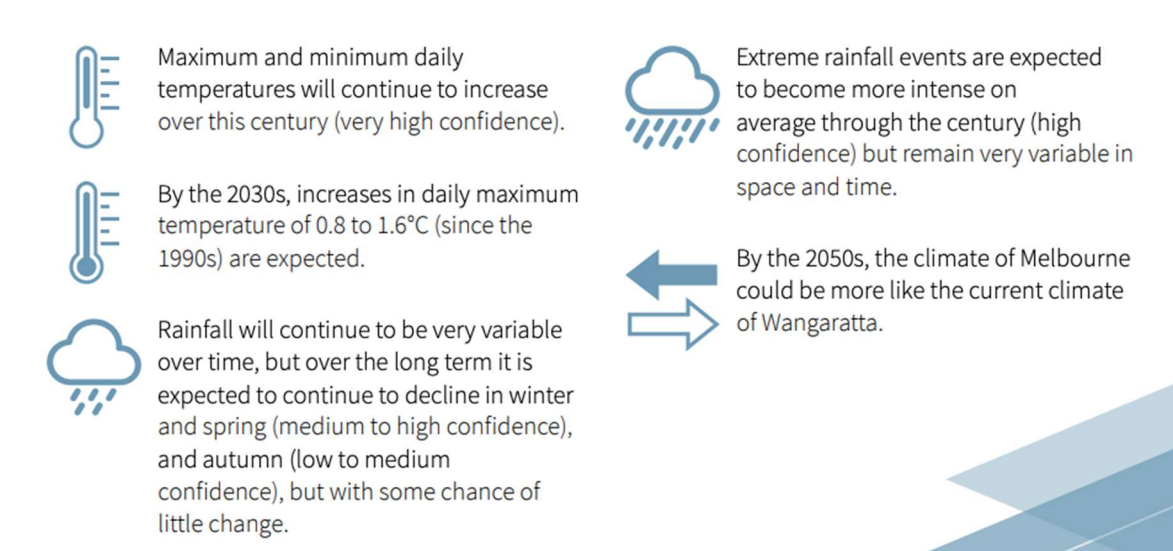
The words 'green' and 'sustainable' were amongst the top five most used words in the Whitehorse 2040 Community Vision engagement. The Whitehorse community is passionate about these issues and understands that climate change is impacting the municipality's trees and plants that help sustain and beautify Whitehorse.

This drive for a more sustainable future is echoed across Australia. A poll of more than 15,000 people conducted by YouGov in January 2022 found that 7-in-10 people recognise that taking meaningful action on climate change will deliver long term economic benefits. Additionally, almost half of all people said the benefits outweigh the costs to them personally, while another 19 per cent support greater action even if it costs them in the short term.

### 3. Climate Change in Whitehorse

#### Local Climate Impacts

Greater Melbourne is facing a range of climate hazards such as extreme heat and higher intensity rainfall, which will be experienced locally in Whitehorse.



**Figure 1:** Climate projections for Greater Melbourne<sup>4</sup>

The community is facing very real impacts on health and human services, the physical environment, transport, the local economy, and the natural environment. Council provides services in each of these areas.

The 2019/20 bushfire season demonstrated the far-reaching impacts of extreme weather events and the devastation that was felt far beyond the communities directly impacted by the fires<sup>5</sup>. Climate change is already impacting food systems, with increasing temperatures, changing rainfall patterns and more extreme weather events. The global COVID-19 pandemic has highlighted reliance on global supply chains and the impacts that a significant event can have on the ability to source basic food supplies, to building materials and luxury items.

Without urgent action at all levels (from Federal Government to local community action), the severity and likelihood of extreme weather events will continue to increase and a range of climate impacts will be experienced across the community.

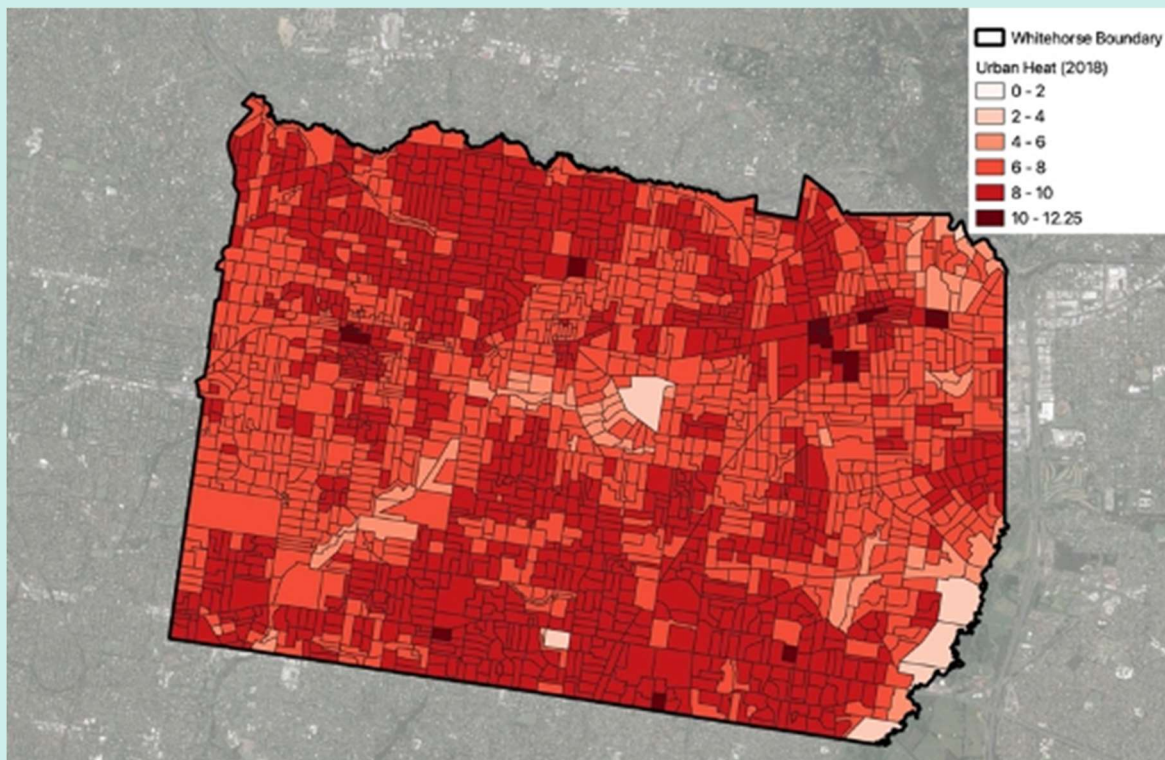
<sup>4</sup> Image source: Greater Melbourne Climate Projections 2019 (Department of Environment, Land, Water and Planning)

<sup>5</sup> According to evidence presented to the Royal Commission by Associate Professor Fay Johnston from the University of Tasmania, more than 4,000 people were admitted to hospital due to the smoke. Bushfires were linked to more than 445 deaths, of which only 33 were a direct result of the fires.

## It is hot in Whitehorse

Whitehorse has similar levels of exposure to urban heat to other middle metropolitan councils, although temperatures are slightly lower in areas such as Blackburn Lake Sanctuary, Morack Public Golf Course, Mullum Mullum Creek and surrounds, and along Gardiners Creek. Temperatures are higher in denser residential and industrial areas of the municipality.

This makes sense as urban heat is higher when there are lots of hard surfaces and less greenery. Whitehorse has more older people than the Victorian average and older people are more vulnerable to extreme heat. This makes it even more important to increase greenery and reduce hard surface areas to keep everyone cool and healthy as temperatures continue to rise.



**Figure 2:** Increases in local temperature (degrees Celsius) compared to a non-urban baseline in 2018 (Source: Data from DELWP).

Examples of local climate impacts include:

- Increased damage to buildings and infrastructure, leading to higher maintenance costs,
- Stress and demand on energy and communication networks,
- Increased stormwater runoff and flash flooding,
- Loss of biodiversity due to decreased habitat quality and availability,
- Loss of service from sports fields being too dry or too wet,
- Reduction in open space amenity due to vegetation decline,
- Insurance cost increases and coverage decreases,
- Changed distribution of pests and diseases,
- Damage to popular environmental sites,
- Increased pressure on emergency services,
- More heat-related deaths, particularly among the elderly and other vulnerable members of the community, and
- Interruptions to supply chains and food production.

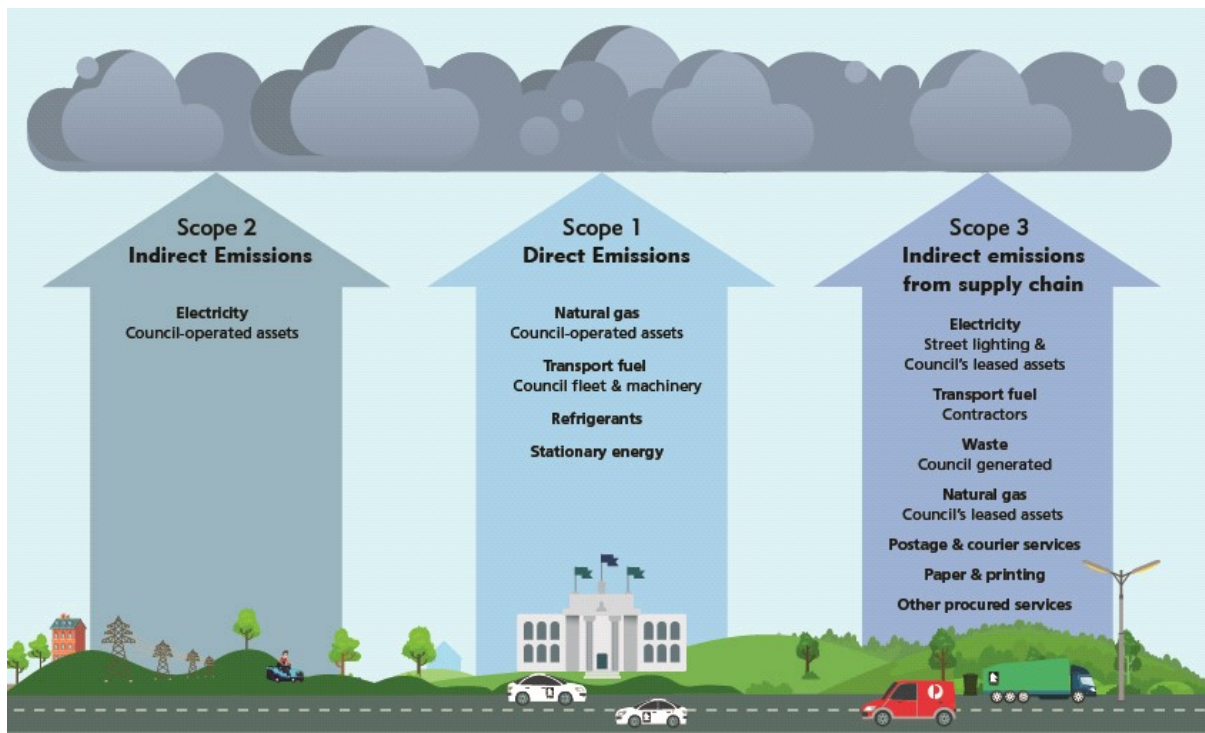
### **Council's Corporate Emissions**

In the 2021/22, Council's corporate emissions were 11,528 tonnes CO<sub>2</sub>-e (carbon dioxide equivalent). This figure is likely to be lower than usual as facilities were not running at full capacity and travel was limited due to the COVID-19 pandemic.

While this might sound like a lot, Council's corporate emissions only represents less than one per cent of the emissions generated in Whitehorse. The vast majority of emissions in Whitehorse come from business and homes.

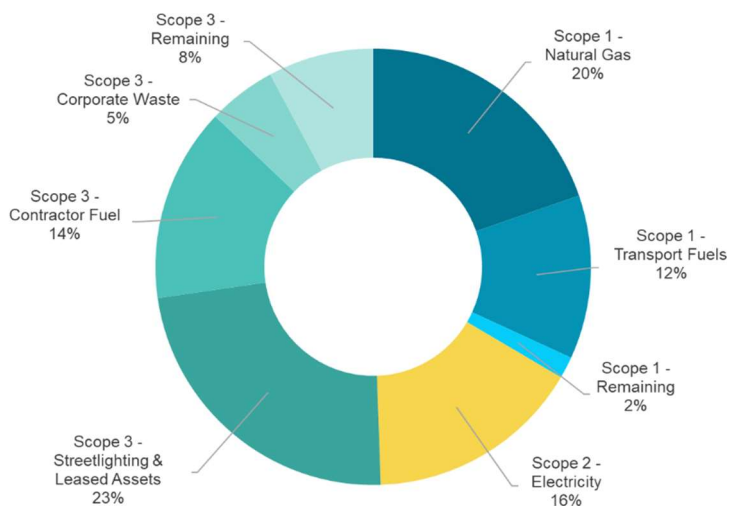
Learn more about local emissions in the ***Community Emissions in Whitehorse*** section.

## Where Are Council's Corporate Emissions Coming From?



**Figure 3.** Infographic on Council's corporate emission sources.

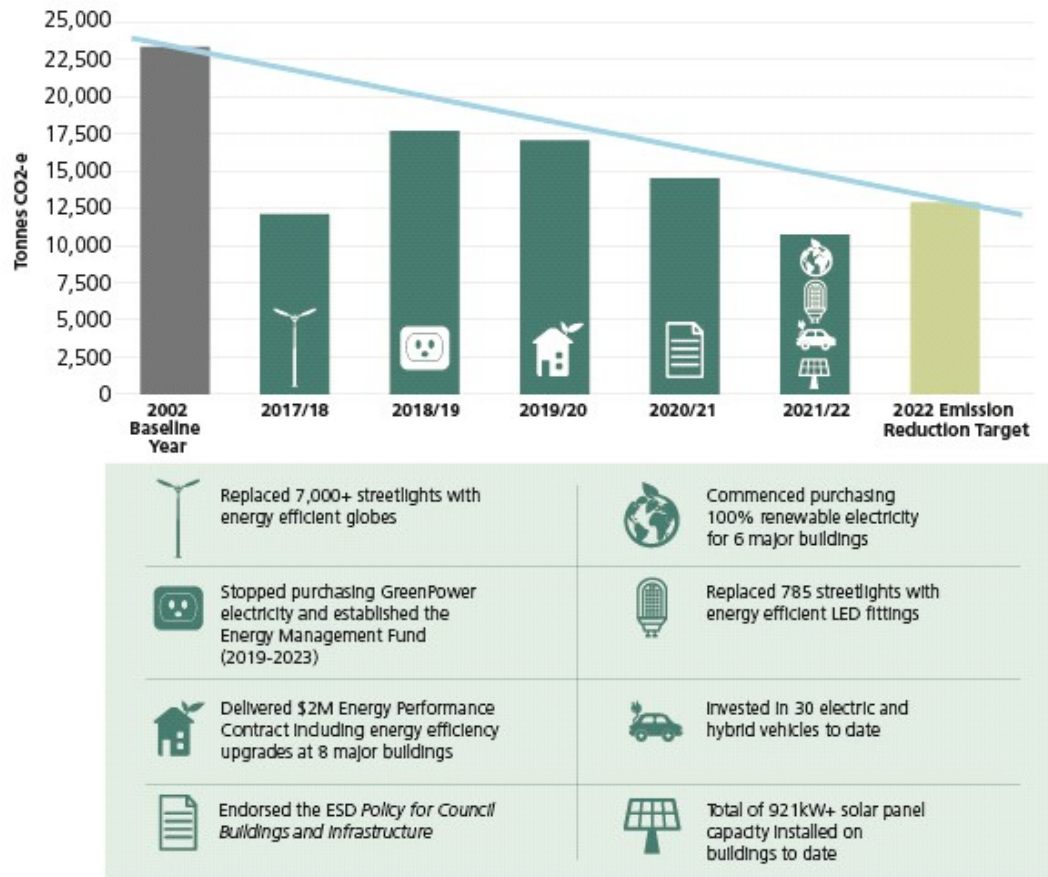
Indirect emissions from Council's supply chain represents more than half of Council emissions from its operations. Electricity, natural gas and transport fuels are the other major emission sources (Refer to Figure 4).



**Figure 4:** Council's corporate emissions by source for 2021/22 (Source: Graph produced using Council's GHG inventory).

## Council's Emissions into the Future

Significant inroads to reducing emissions have already been achieved. Figure 5 shows how current initiatives have reduced Council's emissions and that without further investment, emissions reductions will begin to plateau over time.



**Figure 5:** Council's corporate emissions trend and energy reduction projects (Source: Graph produced using Council's GHG inventory).

Council can further reduce its emissions and work towards achieving net zero emissions by implementing further initiatives listed in the Response Plan. This includes developing a Net Zero Emission Reduction Plan, and addressing the need to:

- Reduce Council's reliance on gas,
- Broaden Council's purchase of 100 per cent renewable electricity for all Council and Council leased sites, and
- Transition towards a low emission fleet.



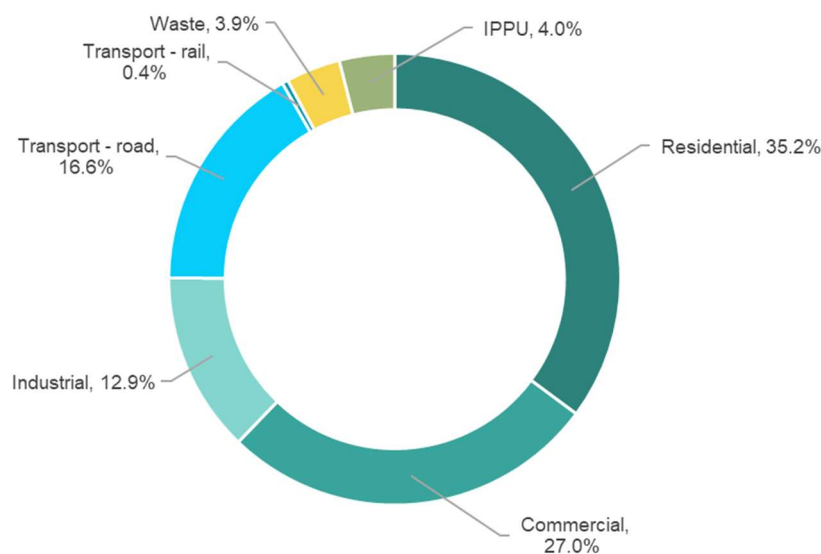
## Community Emissions in Whitehorse

Whitehorse residents performed well compared to the Victorian and national averages in 2020, as shown in Table 1. However, to limit global warming to 1.5 degrees, it is estimated that global per capita emissions need to be approximately 2.3 tonnes of emissions per person per year in 2030<sup>6</sup>.

**Table 1:** Average Emissions Per Person Per Year.

Region	Average emissions (t CO <sub>2</sub> -e per person per year)
Whitehorse	9.2
Victoria <sup>7</sup>	12.4
Australia	19.4

In 2020/21 according to the Snapshot tool<sup>8</sup>, the Whitehorse community's emissions were estimated to be 1,618,000 tonnes. Figure 6 shows the proportion of emissions attributed to each sector.



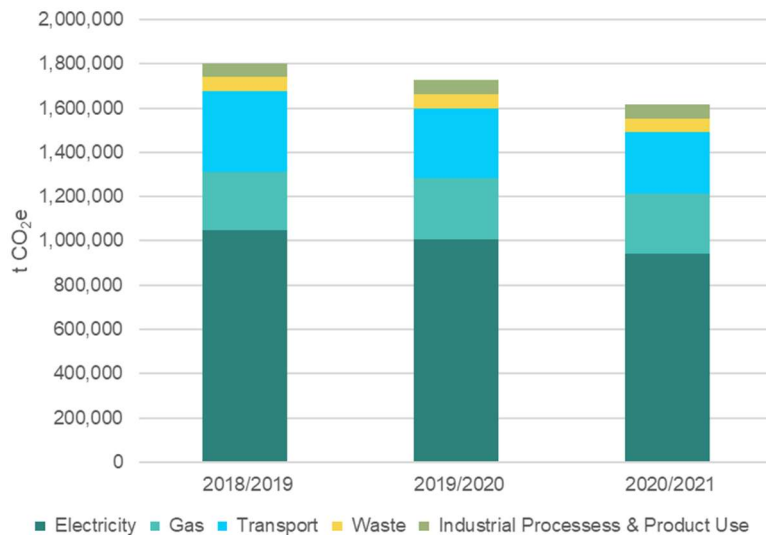
**Figure 6:** Community emissions by sector in 2020/21 (Source: Data from the Snapshot Tool).

<sup>6</sup> <https://www.oxfam.org/en/press-releases/carbon-emissions-richest-1-set-be-30-times-15degc-limit-2030>

<sup>7</sup> Victorian Greenhouse Gas Emissions Report 2020 (Department of Environment, Land, Water and Planning)

<sup>8</sup> <https://snapshotclimate.com.au/locality/municipality/australia/victoria/whitehorse/>

Like most metropolitan communities, electricity is the largest emissions source, followed by gas and transport (Refer to Figure 7). Waste, while still very important to manage and reduce, accounts for only four per cent of community emissions. Industrial Processes and Product Use (IPPU) emissions, those from non-energy related industrial activities, account for four per cent of community emissions.



**Figure 7:** Community emissions by source (Source: Data from the Snapshot Tool).

Therefore, the most effective way to drive down emissions is through actions that prioritise these sources. This would include energy efficiency measures, uptake of solar photovoltaic panels and battery storage, and purchase of renewable electricity, as well as using sustainable transport, like walking, cycling and public transport. As the Victorian energy grid continues to decarbonise, the community can further reduce emissions by transitioning away from gas appliances to all-electric appliances such as heat pumps for hot water, induction cooking and split systems for heating and cooling.

## 4. Council's Climate Response

While tackling climate change can feel like a big challenge, by working together Council can achieve meaningful change for the benefit of everyone who lives, works, studies, or enjoys Whitehorse.

This Strategy builds on Council's work to date and learns from the implementation of the Whitehorse Sustainability Strategy 2016-2022 and Interim Climate Response Plan 2020-2022.

This Strategy sets objectives, targets, and actions for Council's corporate operations, as well as how Council will support the community to reduce emissions and adapt to climate change leading up to 2030.

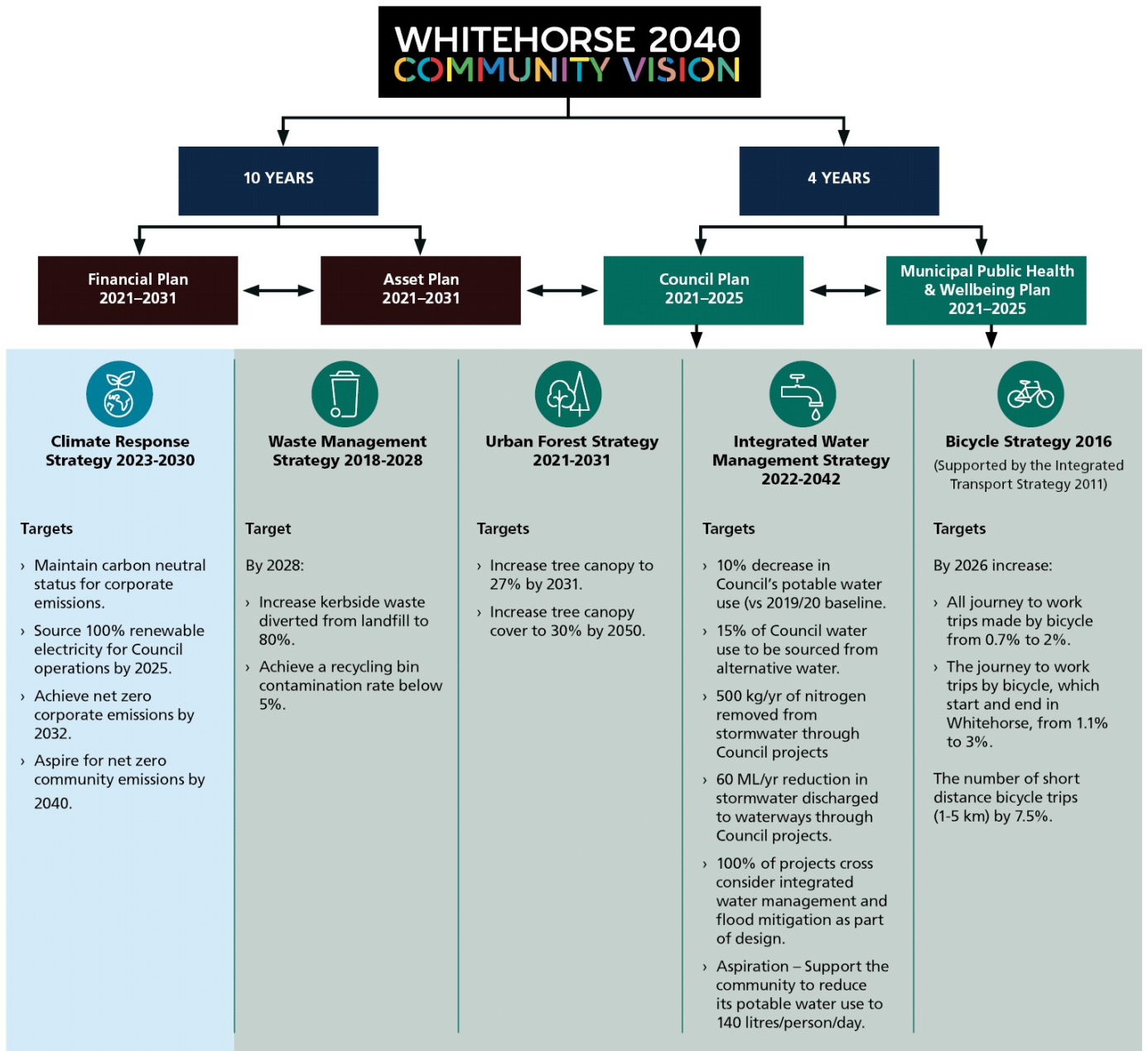
## How This Strategy Was Developed

Three streams of work came together to ensure this Strategy meets the needs of Council and the community:

<p>Current state and best practice review</p>	<p>A comprehensive review of existing Whitehorse strategies and plans uncovered current relevant commitments, along with areas of strengths and opportunity. This process helped to avoid duplication across Council's suite of strategies.</p> <p>Insights from the delivery of the Sustainability Strategy 2016-2022 and the Interim Climate Response Plan 2020-2022, have also helped to shape this Strategy, along with best practice initiatives that have been tested by other Victorian councils.</p>
<p>Hearing from the community</p>	<p>The Current State Review included the Whitehorse 2040 Community Vision and associated engagement reports to understand the community perspective on environmental sustainability and climate change.</p> <p>Following a tailored survey, community conversation series were delivered for community members to come together and discuss their climate change and sustainability priorities. Two phases of community consultation were delivered.</p>
<p>Hearing from staff and councillors</p>	<p>Councillors, staff and senior leaders participated in a series of workshops to consider how climate change and sustainability intersects with other work areas. These workshops helped shape the objectives, targets, and actions in this Strategy and Plan.</p>

## Strategic Direction

The Whitehorse 2040 Community Vision, Council Plan and Whitehorse Health and Wellbeing Plan set the high-level direction for Council. As shown in Figure 8, this Strategy sits under and helps deliver these key strategic documents.



**Figure 8.** Council's strategic plans and supporting sustainability strategies.

## Climate Emergency

Recognising the Whitehorse community's sustained support for Council to lead and act on climate change, Council declared a Climate Emergency on 12 September 2022. Whitehorse joined over 100 Australian councils which have declared, acknowledged or recognised a Climate Emergency.

A Climate Emergency Declaration highlights that urgent action is required by all levels of government, including local councils, and at a scale that is required to address the current and future challenges of a changing climate.

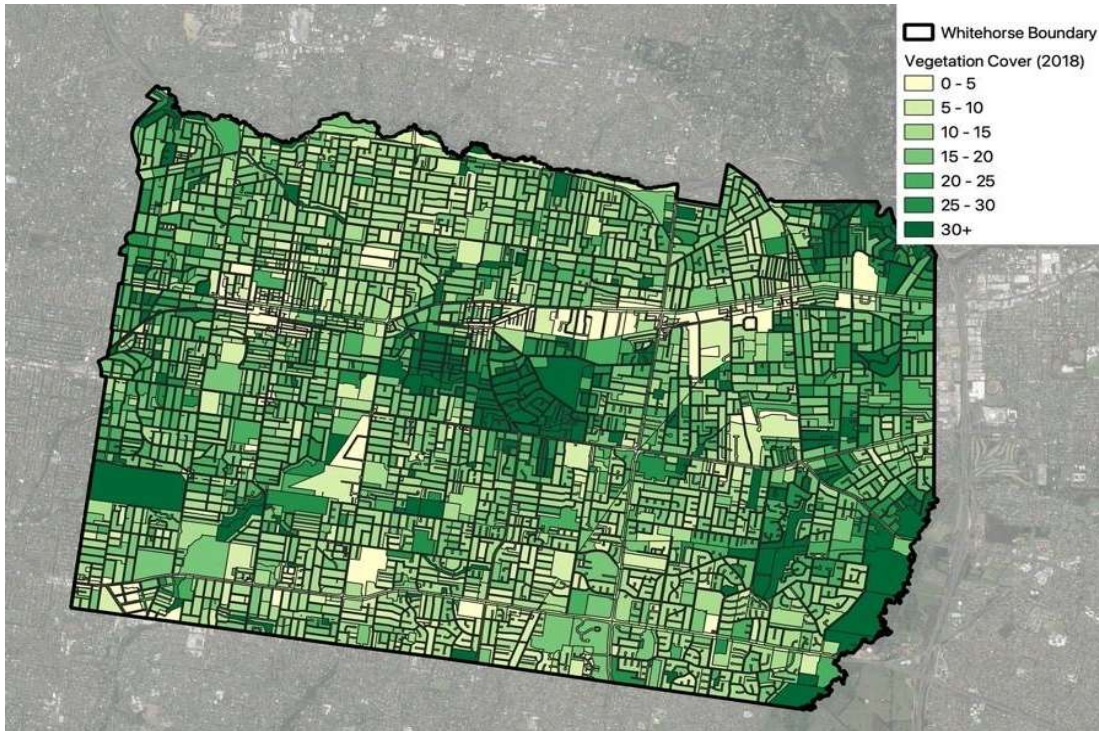
## **Key Challenges and Opportunities**

### Key Challenges

Whitehorse faces several key challenges, many of which are shared with Greater Melbourne and other local governments, including:

- **Vegetation loss on private land**

With increasing density of development, there is ongoing loss of existing vegetation on private land (Refer to Figure 9). Additionally, less space is available for new vegetation on private land, in particular for larger trees to provide shade and reduce heat stress. Council will continue to increase its urban forest on public land and support improved flora and fauna across the municipality, supported by its Urban Forest Strategy 2021-2031.



**Figure 9:** Tree Canopy Cover in Whitehorse in 2018. (Source: Data from Victorian Department of Transport and Planning)

- **Sustainability of new developments**

Increased development helps cater for a growing local population, but can also have a range of environmental impacts. Council will continue to apply its Environmentally Sustainable Development Planning Policy to improve sustainability outcomes in medium density and non-residential development and explore opportunities to further strengthen the planning scheme to achieve more sustainable and climate resilient outcomes.

- **Influence and control**

It is difficult for Council to directly reduce community emissions as these reductions are primarily driven by an aggregation of individual investment decisions and behaviours of community members. State and Federal Governments play an important role in guiding these investment decisions and supporting the community to reach emissions reduction targets, for example through more extensive financial support and legislative interventions.

However, Council is responsible for delivering services and infrastructure in a way that responds to climate change and ensures that assets are resilient. Council will enable and encourage the community to act, supporting to influence behaviour through programs. Council will work in partnership with the community and other stakeholders and continue to advocate for strong climate action to State and Federal Governments.

### Key Opportunities

There are significant opportunities to be leveraged as part of Council's response to climate change.

- **Adaptation action**

Past actions have mostly focused on mitigation action with the aim of reducing emissions. Given the range of existing and predicted climate impacts for Whitehorse, Council must support the community to adapt, prepare and respond to these impacts. Council can increase its resilience to climate change through a range of adaptation measures including, for example urban greening and reducing localised flooding.

- **Early investment**

Research indicates that early investment in climate action makes financial sense. For example, it is estimated<sup>9</sup> that while climate-resilient infrastructure adds about three per cent to upfront costs, it provides \$4 in benefits for every \$1 spent. Councils cannot always fund these types of investments on their own and may require support from other levels of government. Advocacy for increased funding is an ongoing priority.

- **Improved climate change communication**

Increased and more targeted communication to the community can support improved awareness and education, better uptake of sustainability programs and a better understanding of how Council's efforts to respond to climate change are tracking against its targets and Plan.

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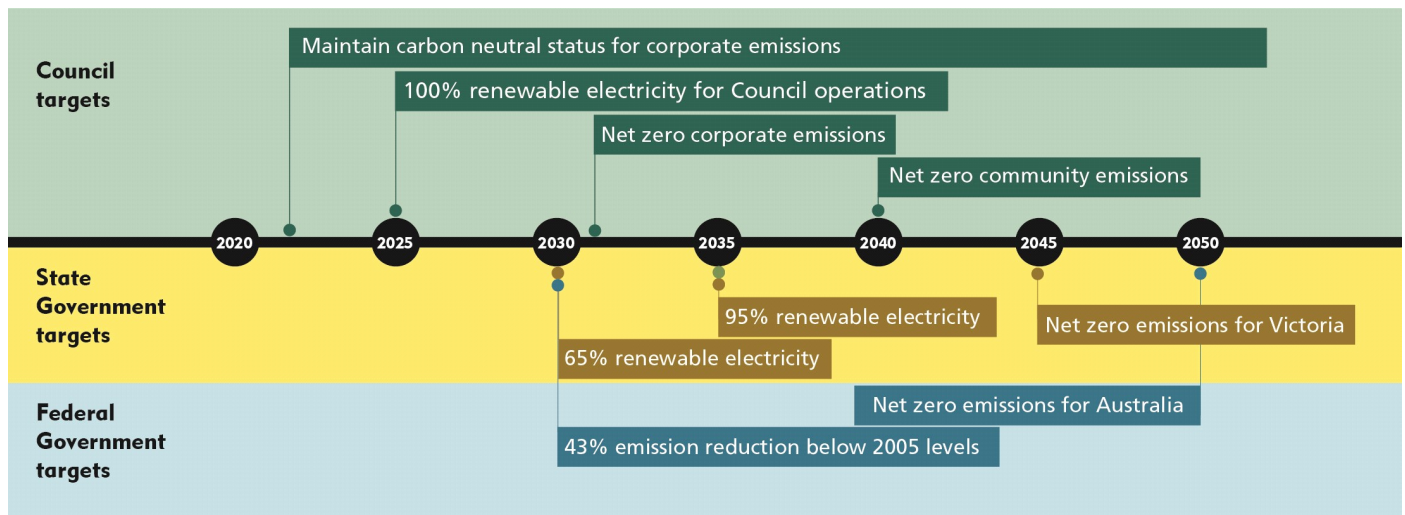
<sup>9</sup> [https://cdn.gca.org/assets/2019-09/GlobalCommission\\_Report\\_FINAL.pdf](https://cdn.gca.org/assets/2019-09/GlobalCommission_Report_FINAL.pdf)



## Climate Response Targets

This Strategy commits Council to a new set of energy and emissions related targets:

- Maintain carbon neutral status for corporate emissions,
- Source 100 per cent renewable electricity for Council operations by 2025,
- Achieve net zero corporate emissions by 2032, and
- Aspire for net zero community emissions by 2040.



**Figure 10.** Strategy targets relation to State and Federal Government targets.

Council has existing targets relating to resource recovery, tree canopy cover, water management and cycling. These are embedded in separate strategies as shown in Figure 8.

### **Carbon neutral and net zero emissions – What is the difference?**

**Carbon neutral** is achieved when the greenhouse gas emissions associated with an organisation's activities, products, services and events are 'balanced out' by removing an equivalent amount from the atmosphere, typically through purchasing carbon offsets on an annual basis.

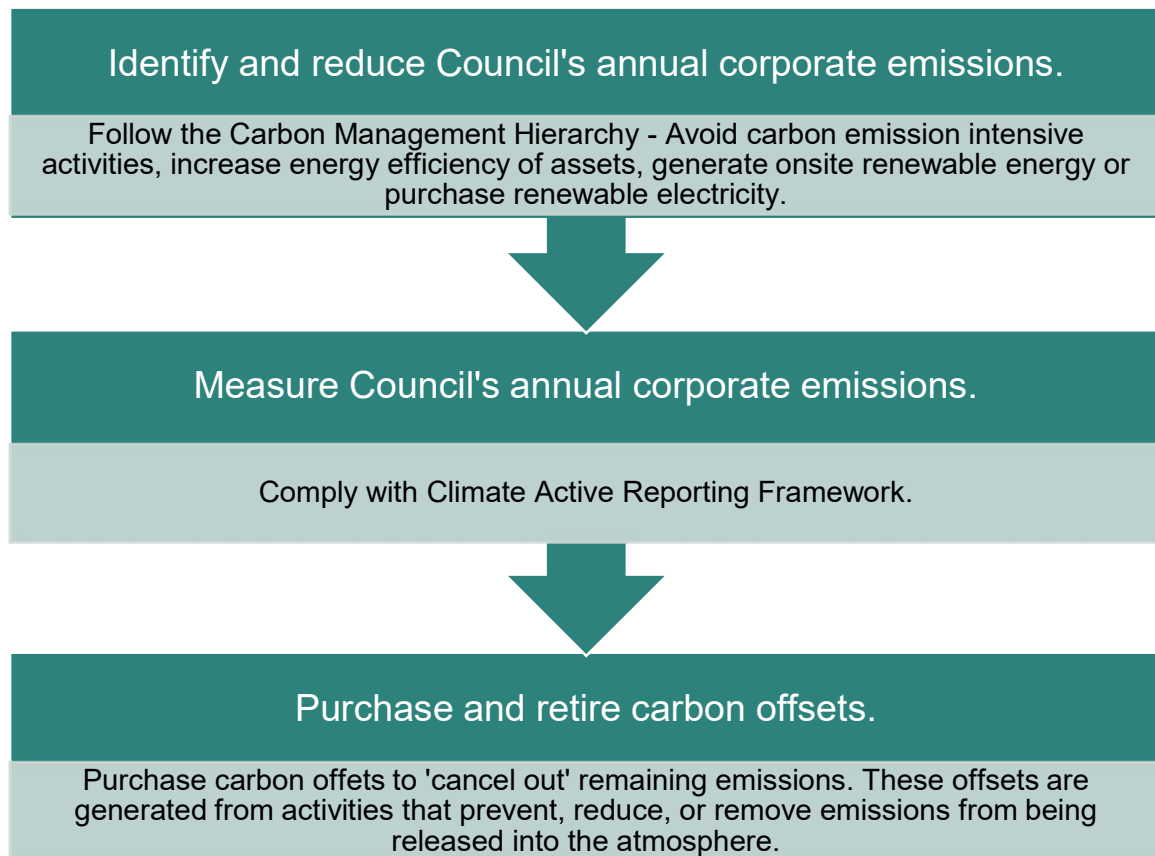
**Net zero** emissions involves making major upfront changes to reduce carbon emissions as much as possible, typically through energy efficient design, generating on-site renewable energy, buying off-site renewables, eliminating fossil fuels such as gas or petrol, and minimising transport and waste emissions. Only then are small amounts remaining and unavoidable emissions balanced out through purchasing carbon offsets on an annual basis.

## Carbon Offset Purchasing Principles

Council will seek and maintain carbon neutral certification under Climate Active, the only government accredited carbon neutral certification scheme in Australia.

Council's Carbon Management Hierarchy priorities how it will manage its emissions, and become carbon neutral.

To become carbon neutral, Council will follow these steps:



Carbon offset projects go beyond emission reduction, avoidance or removal – They can also achieve a range of environmental, economic, cultural and social benefits, called non-carbon benefits (formerly co-benefits). This can include greater biodiversity, local employment, and improved health and education outcomes.

The following Carbon Offset Purchasing Principles will guide Council's decision-making to ensure it purchases high-quality offsets to ensure that its carbon neutral claims are genuine, while ideally supporting additional non-carbon benefits and avoiding harm. These Principles align with and complement the values and

expectations in Whitehorse 2040 Community Vision, Council Plan, and other related policies, strategies and plans. The Principles include:

1. Compliance with the Climate Active Carbon Neutral Standard.
2. Compliance with the Whitehorse Procurement Policy.
3. Prioritise offsets that deliver a high level of confidence in carbon emissions reductions, integrity and additionally.
4. Prioritise offsets from projects that deliver non-carbon benefits and avoidance of harm, in particular:
  - a. Improve social and health outcomes
  - b. Improve biodiversity and ecosystem services
  - c. Supporting Aboriginal and Torres Strait Islander communities and businesses.
  - d. Supporting local (Australian) communities and businesses.
5. Prioritise offsets that are cost-effective, achieving the most significant emissions reductions at the lowest cost.

Over time it may be appropriate for Council to investigate the viability of investing in a project designed to offset emissions, either on its own or as a collaboration with other councils or organisations.

### **Climate Response Plan**

The Climate Response Plan 2023-2026 supports the first three years' implementation of this Strategy and its targets. It includes 40 actions which include systemic actions as well as those that deliver mitigation or adaptation responses. It has been developed in response to current priorities and ambition, reflecting the most relevant and highest impact action for the first half of the Strategy.

EAGA has completed its Community Net Zero Emissions Analysis<sup>10</sup> identify and prioritise the collaborative work required by councils to help reduce community emissions. This analysis quantifies the lowest cost emissions reduction opportunities across the EAGA region, including Whitehorse. It examines the various emission reduction interventions that councils can undertake to unlock these opportunities in the areas of planning, waste, transport, households and businesses. These interventions have been reflected in this Response Plan.

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<sup>10</sup> <https://eaga.com.au/projects/community-net-zero-emissions-strategy/>

Specific initiatives, programs or projects are integrated into annual work plans right across Council to ensure climate change and sustainability action is truly embedded. The Response Plan informs those annual work plans.

Council's strategies and action plans all work together. Where opportunities to strengthen actions outside of this Plan have been identified, this will inform the review of other relevant strategies and plans. The Response Plan is aligned to the Whitehorse 2040 Community Vision themes (with an additional 'Governance and Leadership' theme).

The Response Plan should be read alongside the Monitoring and Evaluation section, which includes a framework to track progress.

Refer to the separate Plan document for detail of each action.

When reviewing any additional investment or resourcing required for the implementation of actions of this Strategy, multiple factors should be considered. This includes environmental, social and financial impact, with prioritisation given to those actions and interventions with the highest overall impact and benefit to the community.

## **5. Monitoring and Evaluation**

Transparent monitoring, evaluation, and reporting on progress against the targets and actions within the Strategy and Response Plan is critical to understanding effectiveness of the activities, delivering the best outcomes, and informing the community.

Progress against the Response Plan will be tracked annually using the following Monitoring and Evaluation Framework. This Framework seeks to balance timely and accurate measurement and monitoring with what is achievable in a resource intensive process.

The Strategy and Response Plan will be reviewed mid-cycle in 2025/26 to ensure that the Strategy remains relevant and that the next Response Plan 2026-2030 can be developed.

## Monitoring and Evaluation Framework

Council will track achievements and share the progress and lessons learned from the implementation of the Strategy and Response Plan.

There are four key areas of the Strategy and Response Plan that will be monitored and evaluated to ensure effective and efficient delivery:

1. **Targets** relating to Council's climate response
2. Individual **action status** including progress against the implementation timeframe
3. **Indicators** which inform future climate responses but are not targets
4. **Community reach and engagement.**

### Governance

To ensure accountability and transparency of the Strategy and Response Plan, communication of progress towards targets is required. Implementation progress will be communicated through a range of reporting tools and channels appropriate for different audiences, such as councillors, Council staff and the community. This will be determined through the development of a Communications Plan.

Additionally, Council will continue to collaborate with the community and seek their feedback on progress and potential future actions.

### Monitoring and Evaluation Processes

The regular tracking and annual reporting against key indicators will allow Council and the community to reflect on action progress, investment and priorities implementing the Response Plan. The following key processes will guide monitoring and evaluation:

- Annual reports
  - Council report on all Strategy targets, actions and supporting indicators.
  - Incorporation of specific indicator data as part of Council's Annual Report, where relevant to align with the Council Plan.
  - Climate Active Public Disclosure Statement (PDS) as part of maintaining Council's carbon neutral certification.
- Detailed mid-cycle review of Strategy targets, Response Plan and supporting indicators in 2025/26.

## Annual Review

Monitoring and evaluation against each action and target will be undertaken annually.

Specific indicators and methods for data collection will be developed as part of the project plan for each action.

Progress on actions will be captured in Council's reporting system and incorporated into Council's annual report and will be aligned to the relevant indicators required for the report.

Council is committed to Climate Active carbon neutral certification. As part of this, Council will publish a PDS showing its corporate emissions. In addition, Council will report on the following indicators (Table 5):

**Table 5:** Council corporate emissions reduction indicators

Target	Indicators	Unit
Maintain carbon neutral status for corporate emissions	Carbon offsets purchased to abate corporate greenhouse gas emissions	tonnes CO2-e
Source 100 per cent renewable electricity for Council operations by 2025	Electricity consumption from renewable sources	%
	Solar PV installed on Council assets	Total kW
	Council operations powered by on-site renewable generation	%
	Battery storage installed	kWh
Achieve net zero corporate emissions by 2032	Council corporate greenhouse gas emissions	tonnes CO2-e
	Gas consumption	MJ
	Electric vehicles in Council fleet	%
	Number of all-electric Council buildings	Number

Indicators related to community emissions reduction are listed in the table below. As Council has limited direct control over community emissions, a broad set of

indicators focus on the reach and engagement of Council programs. A consistent approach, including appropriate indicator selection will be utilised in the evaluation and reporting of individual Council programs to assess and compare its effectiveness.

**Table 6:** Community emissions reduction indicators

Target	Indicator/s	Unit	
Aspire for net zero community emissions by 2040	Community greenhouse gas emissions	t CO2-e	
	Domestic solar PV installations	KWh	
	Commercial solar PV installations	KWh	
	Electric vehicle (EV) registrations	Number	
	Council funding for the community* to deliver climate response activities	\$	
	Investment leveraged by Council funding for climate response activities, including in-kind contributions	\$ equivalent	
	Emissions avoided or reduced by the community* from Council funded climate response activities	t CO2-e	
	Savings by the community*	\$	
	<b>Council program reach indicators</b>		Number engaged
	Households, community groups, organisations, businesses, schools assisted		
	Partnerships and collaborations formed and continued		
	Participation in Council programs or activities by the community*		
	People exposed to sustainability messaging or information		
	<ul style="list-style-type: none"> <li>- Face to face</li> <li>- Via social media</li> <li>- Subscribers to digital newsletters</li> </ul>		
	Unique/new users		



\*Note that “the community” in the table above includes households, community groups, organisations, businesses, and schools.

### **Detailed Mid-Cycle Review (2025/26)**

The first three-year Response Plan details actions for implementation from 2023-2026. The Response Plan will be reviewed in 2026/27 to inform the development of the next Plan 2027-2030. The Strategy will also be reviewed to ensure relevance to the context at that time and updated if required.

Council will lead the mid-cycle review in partnership with the community. This will include:

- Re-evaluation of climate change data and projections, for the purposes of ensuring emissions reduction targets and actions and adaptation responses are suitable,
- Re-testing community priorities and needs for sustainability and climate action in Whitehorse,
- Audit of Council policies, programs and plans to ensure alignment with sustainability and climate objectives,
- Reviewing changes in State and Federal Government policies or programs and evaluation of Council’s advocacy priorities, and
- Reviewing current available research, technology and other information (in particular the maturing of key solutions).

The output of this mid-cycle review will be a revised Climate Response Strategy if required and new Plan 2027-2030 that reflects changes in the policies, scientific and technological context, and responds to new challenges and opportunities.

## 6. Acknowledgements

The development of this Strategy and Response Plan was aided by the ideas, expertise and passion of many people. Whitehorse City Council would like to thank everyone involved for their time and insights.

### **Community Engagement Activity Participants**

Over 300 community members have participated in surveys, workshops, conversations and presentations to support the development of this Strategy and Response Plan.

Community groups and organisations disseminated information and encouraged their members to get involved and share their thoughts. Council thanks all the groups, organisations and individuals that increased community participation in this project and ownership of the Strategy.

### **Officer Contribution**

Council officers from the following departments attended workshops to provide input into the Strategy and Response Plan. City Services, Parks and Natural Environment, City Planning and Development, Engineering and Investment, Leisure and Recreation Services, Community Safety, Project Delivery and Assets, Community Engagement and Development, and Finance.

### **Consultants**

The Strategy and Response Plan was prepared in collaboration with

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## 7. Glossary

**Adaptation:** The Intergovernmental Panel on Climate Change (IPCC) defines adaptation as “*the process of adjustment to actual or expected climate and its effects.*” It’s doing what we can to live with and minimise the destruction and suffering from climate change.

Imagine you are on a ship that is sinking because of a leak. If you want to stay afloat, you’ve got to act. You grab a bucket and pour water out as it gushes through the hole. This response is adaptation - addressing the effect (the water in the boat), but not the cause of the problem (the hole).

**Carbon dioxide equivalent (CO<sub>2</sub>-e):** Describes different greenhouse gases (definition below) in a common unit. For any quantity and type of greenhouse gas, CO<sub>2</sub>-e signifies the amount of CO<sub>2</sub> which would have the equivalent global warming impact.

**Carbon emissions:** Greenhouse gas emissions released by the process of consuming fossil fuels and the production of materials.

**Carbon neutrality:** Carbon neutrality is achieved when the greenhouse gas emissions associated with an organisation’s activities, products, services and events are 'balanced out' by removing an equivalent amount from the atmosphere, typically through purchasing carbon offsets on an annual basis.

**Circular economy:** A system in which all resources are highly valued and remain in the system through re-use, re-purposing and recycling. A circular economy aims to use resources more efficiently rather than sending them to landfill.

**Climate Active:** Climate Active certification is awarded to businesses and organisations that have credibly reached a state of achieving net zero emissions, otherwise known as carbon neutrality. This means that the activities associated with running a business or producing a particular product have no net negative impact on the climate. Climate Active is the only government accredited carbon neutral certification scheme in Australia. (See also **National Carbon Offset Standard**)

**Climate change:** Climate change refers to a change in the state of the climate that can be identified (e.g. by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer.

**Climate change adaptation:** See Adaptation

**Climate change mitigation:** See Mitigation

**Emissions:** Shorthand for carbon emissions (see Carbon emissions).

**Emissions reduction:** Also known as mitigation (see Mitigation).

**Fossil fuels:** Any of a class of hydrocarbon-containing materials of biological origin occurring within Earth's crust that can be used as a source of energy (i.e. coal and oil).

**Greenhouse gases (GHGs):** There are six GHGs which are key contributors to global warming. These are Carbon dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), Nitrous oxide (N<sub>2</sub>O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), and Sulphur hexafluoride (SF<sub>6</sub>). Carbon dioxide is considered the most significant GHG due to its increasing prevalence within the atmosphere.

**(Climate change) Impacts:** These are the subsequent consequences, or effects on natural and human systems from climate change.

**Industrial processes and product use (IPPU) emissions:** Greenhouse gas emissions occurring from: industrial processes that chemically or physically transform materials; and produce use such as refrigerators.

**Mitigation (emissions reduction):** Imagine you're on a ship that's sinking because of a leak. Sealing the leak to stop more water coming in is mitigation. In other words, it's addressing the root cause of the problem rather than dealing with its effects.

The IPCC describes mitigation as "*human intervention to reduce the sources or enhance the sinks of greenhouse gases*".

**National Carbon Offset Standard (NCOS)** (Replaced by Climate Active Program): Sets minimum requirements for calculating, auditing and offsetting the carbon footprint of an organisation or product to achieve 'carbon neutrality'; and it provides guidance on what is a genuine, additional voluntary offset.

**Net zero emissions:** Also referred to as 'zero carbon' is the process of achieving an overall balance between greenhouse gas emissions produced and greenhouse gas emissions taken out of the atmosphere. Net zero emissions involves making major upfront changes to reduce carbon emissions as much as possible, with unavoidable emissions balanced out through purchasing carbon offsets on an annual basis.

**Net zero pathway:** A process that an organisation will take to reduce and offset its carbon emissions in order to reach 'net zero emissions' or 'carbon neutrality'. A net zero pathway will often be unique to each organisation and is determined by rigorous assessment of an organisation's operating context.

**Renewable energy:** Comes from natural sources or processes that are constantly replenished such as solar, wind and water (hydro). Also called 'clean energy'.

**Resilience:** The capacity of individuals, institutions, businesses, communities and systems to adapt, survive and thrive no matter what kind of chronic stresses and acute shocks they experience.

**Safe climate:** Refers to the enjoyment of a safe, clean healthy and sustainable environment accessible by all global citizens.

**Stationary fuel:** Stationary fuel combustion sources include, but are not limited to, boilers, simple and combined-cycle combustion turbines, engines, incinerators, and process heaters.

**(Climate) Vulnerability:** Propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adapt.