

ZERO CARBON MERRI-BEK – CLIMATE EMERGENCY ACTION PLAN 2020/21 – 2024/25



Adopted by Council: 13 November 2019

Revised February 2022 (to reflect 2035 target adopted by Council on 8 December 2021) and October 2022 (to reflect municipality re-naming to Merri-bek).

Aboriginal and Torres Strait Islander peoples have lived sustainably off this land since time immemorial. Protection of country is at the very core of our culture and connection to the land and sea. It is the teaching of the Dreaming.

Climate change is one of the greatest threats facing humanity, but we also know it is an opportunity to create a more just and sustainable world.

In Australia, Aboriginal and Torres Strait Islander people are at the forefront of climate change, and as young people it's our generation with the most at stake. It's our communities on the frontline who need to be at the forefront of change; leading the solutions and building a society that is healthier, cleaner, more just and puts people before profits.

From the website of Seed, Australia's first Indigenous youth-led climate network (seedmob.org.au)

Acknowledgements:

Merri-bek City Council acknowledges the traditional owners of the land on which we live, work and play – the Wurundjeri people. We recognise their continuing connection to the land and community. We pay our respect to the Wurundjeri people, and to their Elders past, present and future.

Table of Contents

1. Merri-bek Council and community – responding together for a safe climate
2. About this ZCM Climate Emergency Action Plan for 2020/21 – 2024/25
3. Our 2040 Zero Carbon Vision for Energy, Transport and Waste
4. Mobilisation and campaigning for climate emergency response
 - Community 2025 goals
 - Council 2025 targets
 - Key programs & initiatives for 2020 – 2025
5. Energy Transition
 - Community 2025 goals
 - Council 2025 targets
 - Key programs & initiatives for 2020 – 2025
6. Sustainable Transport
 - Community 2025 goals
 - Council 2025 targets
 - Key programs & initiatives for 2020 – 2025
7. Waste and consumption
 - Community 2025 goals
 - Council 2025 targets
 - Key programs & initiatives for 2020 – 2025
8. Complementary strategies and actions
9. Longer-term opportunities
10. Monitoring our progress to 2025

Appendix 1: Priority ‘advocacy asks’ across energy, transport and waste

Appendix 2: Notes related to 2030 target for corporate emissions reduction

Merri-bek Council and community – responding together for a safe climate

Climate change is a dangerous threat to earth's people, plants and animals.

More extreme heatwaves, flash floods and loss of reliable seasonal rains are just some of the impacts hurting our people and wildlife.

However, more and more households, businesses and councils are facing the urgent challenge of responding to the climate emergency, together.

Merri-bek City Council is ramping up action to support neighbourhoods, businesses and organisations rapidly reduce their climate pollution by: introducing kerbside collection of food waste; creating and upgrading shared paths to make cycling and walking easier; supporting sustainability action in local schools; facilitating community food gardens in our parks; installing electric vehicle charging stations for resident use; piloting community owned solar energy systems and much more.

There is much we can do collectively at a local and regional level to reduce our carbon pollution. Importantly, we can all play a role in demanding State and Federal Governments put in place key policies to enable Merri-bek (and Australia) to transition to Zero Carbon at emergency speed.

By joining together to respond to the climate emergency and play our part in transforming our society and economy to restore a safe climate, we can help ensure our city and our planet is a place we can all enjoy.

About this Action Plan for 2020/21 – 2024/25

It is Council's adopted goal for Merri-bek to achieve 75 per cent emissions reduction by 2030 (against 2011/12 baseline), net zero by 2035 and drawdown ('negative emissions') by 2040. This Zero Carbon Merri-bek Climate Emergency Action Plan 2020/21 – 2024/25 (ZCM Action Plan) outlines key initiatives and programs for the first five-year period of the Zero Carbon Merri-bek 2040 Framework, adopted by Council in September 2018. Before being finalised it was subject to extended consultation with our community and stakeholders.

The ZCM Action Plan summarises key activities to influence and reduce community-wide greenhouse gas emissions across Energy, Transport and Waste sectors.

The ZCM Action Plan proposes specific and measurable goals for Community and Council (with our partners) to strive to achieve by 2025. Council will continue to partner and collaborate with others, including Australian Energy Foundation (formerly MEFL), CERES Environment Park and other neighbouring councils, to bring people together to learn, engage and act.

As always, Council will continue striving to 'walk the talk' in its own services, facilities and operations, with key initiatives in waste services, fleet and buildings.

In December 2021, Council endorsed a highly ambitious ZCM 'target range' for Council (corporate/operational) emissions:

- 80 - 100 per cent emissions reduction by 2030 (precluding offsets, against 2011/12 baseline).

Council has taken significant actions to reduce its operational emissions by 70 per cent from the 2011/12 baseline and has also been certified as 'carbon neutral' (or 'net zero') since 2012 under the Climate Active scheme, whereby Council annually purchases carbon offsets for all its remaining emissions.

Refer to Appendix 2 for conditions related to achievement of the 2030 corporate emissions target

Because Council cannot 'control' many of the sources of greenhouse gas emissions within our municipality, we are inviting everyone: individuals, community groups, schools, businesses and not-for-profit organisations, to plan and act – within their sphere of control and influence - to reduce carbon emissions and join the campaign to demand action for a safe climate.

Climate Emergency: We are committed to urgent action

Moreland Council is one of thousands of governments and organisations acknowledging that we are in a state of climate emergency that requires urgent action by all levels of government and society. Moreland has a long and proud history of leadership action on climate change and environmental sustainability. We acknowledge the need to step up further. We will be engaging more deeply to support our community to take individual and collective action and collaborating in our advocacy to State and Federal Government for urgent and effective policy and legislative reform.

We acknowledge the scale and speed of transformation needed to change our energy markets, our economy, our legislation, and our lifestyles to eliminate and draw down greenhouse gas emissions. This requires a nationwide and global emergency response.

We recognise that effective engagement and mobilisation of civil society and businesses in campaigning to demand emergency-mode action on climate change is critical. It is the foundation for the 'political will' required to prioritise action for a safe climate above the vested interests of the fossil fuel lobby. We aim to play our part in moving beyond an incremental approach to transitioning our society.

<p>VISION</p> <p>Zero Carbon Moreland – 2040 Framework</p> <p>By 2040 Moreland has transitioned to become a zero carbon community.</p>	<p>Facilitate a just and inclusive transition</p>			<p>Boost resilience and livability</p>	<p>Plan ahead and invest for the future</p>	<p>Build cohesive, healthy and sustainable urban systems</p>	<p>Work collaboratively and learn from others</p>		
	<p>Leadership and innovation</p>		<p>Mobilising the community</p>		<p>Advocacy</p>			<p>Partnerships</p>	
<p>PRINCIPLES</p> <p>How we will increase our impact</p> <p>Strategic direction and 2040 goals</p> <p>Key priorities in Moreland</p>	<p>Energy Transition: Efficient and 100% renewably powered energy</p> <p>2020–2025</p> <ul style="list-style-type: none"> Increase environmentally sustainable design outcomes for energy efficiency and renewables via planning, enforcement and advocacy Assist low income households and renters to overcome barriers to energy transition (e.g. test financial models and targeted programs) Encourage switch from using gas for cooking and heating to high-efficiency electric alternatives Continue reducing Council’s residual emissions: reduce electricity and gas use, only buy 100% renewable generated electricity, and continue installing rooftop solar Test models for brokerage and aggregation of energy services that could be scaled Support and showcase residents and businesses undertaking the energy transition Lead the community conversation to drive local action <p>Longer term</p> <ul style="list-style-type: none"> Develop a clean tech incubator hub Pursue a policy pathway for a Zero Carbon Moreland Planning Scheme Test new ideas for zero carbon buildings with developers Scale up effective models 			<p>Sustainable transport: Active or zero emissions transport</p> <p>2020–2025</p> <ul style="list-style-type: none"> Transition Council’s fleet to low or zero emission vehicles Invest in infrastructure to support active travel and public transport Collaborate to deliver travel behavior change campaigns Amend the Planning Scheme to reduce car parking requirements and enable funding for sustainable transport Increase design standards in Planning Policy to create more walking and cycling friendly developments Support public access to renewably powered electric vehicle charging <p>Longer term</p> <ul style="list-style-type: none"> Disincentivise use of private cars Reallocate space used for private vehicle travel and parking to support sustainable transport use and other purposes Advocate to ensure new mobility technologies (e.g. autonomous vehicles) deliver broad environmental and social benefits Explore options for digital delivery of relevant Council services (reducing unnecessary car trips) 			<p>Waste and consumption: Circular economy with zero waste</p> <p>2020–2025</p> <ul style="list-style-type: none"> Drastically reduce the amount of organics sent to landfill Ensure excellence in municipal waste service contracts Assist Moreland food businesses to avoid and divert food waste from landfill Drive down waste and increase use of recycled content products through Council’s procurement policy and practice Foster expansion of local sharing groups Engage and activate the community as conscious consumers Support responsible waste management in new developments via Planning Scheme standards and enforcement <p>Longer term</p> <ul style="list-style-type: none"> Promote Moreland as a hub for sustainable design and manufacture Support local recycling and reuse-focused businesses Collaborate to encourage adoption of low carbon plant-based diets Facilitate trials of promising emerging technologies 		

OUR VISION FOR A ZERO CARBON MERRI-BEK

Our *Zero Carbon Merri-bek – 2040 Framework* sets out our Vision for what a zero carbon Merri-bek might look like.

Efficient and 100% renewably powered energy:

- The buildings we live and work in are highly energy efficient – well insulated and built or retrofitted for comfort
- Households and businesses generate, store and export renewable electricity locally
- The national grid is powered by 100% renewable energy
- Homes and businesses are powered only by electricity, following a supported phase-out of gas
- Residents and businesses are proactive and engaged energy users and help to manage demand by smart use of electricity and local storage
- Energy is often generated and traded at a community level, so everyone can access local, renewable energy even if they cannot produce it on their home.

Active and zero emissions transport:

- Most people choose to walk or cycle to get around locally because its healthy, free, safe and convenient
- Merri-bek is known for its pedestrian and cycle-friendly streetscapes
- Many residents work, play and access services close to home, in ‘20-minute neighbourhoods’ designed to suit people (rather than cars)
- Renewable-powered buses, trams and trains provide a quick, reliable and affordable way to travel
- Use of electric ‘car/ride share’ services complement active travel and public transport options, helping to reduce private vehicle ownership
- Low rates of private car ownership have seen some car parks converted to green and public open spaces
- Clean and quiet freight trucks (fuelled by renewable hydrogen or electricity) complement ‘last mile’ freight delivery by bikes, electric scooters and vans.

Circular economy with zero waste:

- Households and food businesses avoid generating food waste (and save money!)
- A ‘conscious consumer’ mindset is the norm and waste is seen as a resource. Consumption is reduced as the community reduces what it purchases, then re-uses, repurposes, recycles, and buys recycled
- People enjoy low-carbon diets
- Local reuse, exchange, share and recycling groups and services are thriving
- Local businesses prosper by creating or providing sustainable goods and services
- Many products are made from recycled materials and are easy to recycle in Australia
- All organic waste is composted or processed to create other useful products (such as mulch, compost, biogas, biochar).

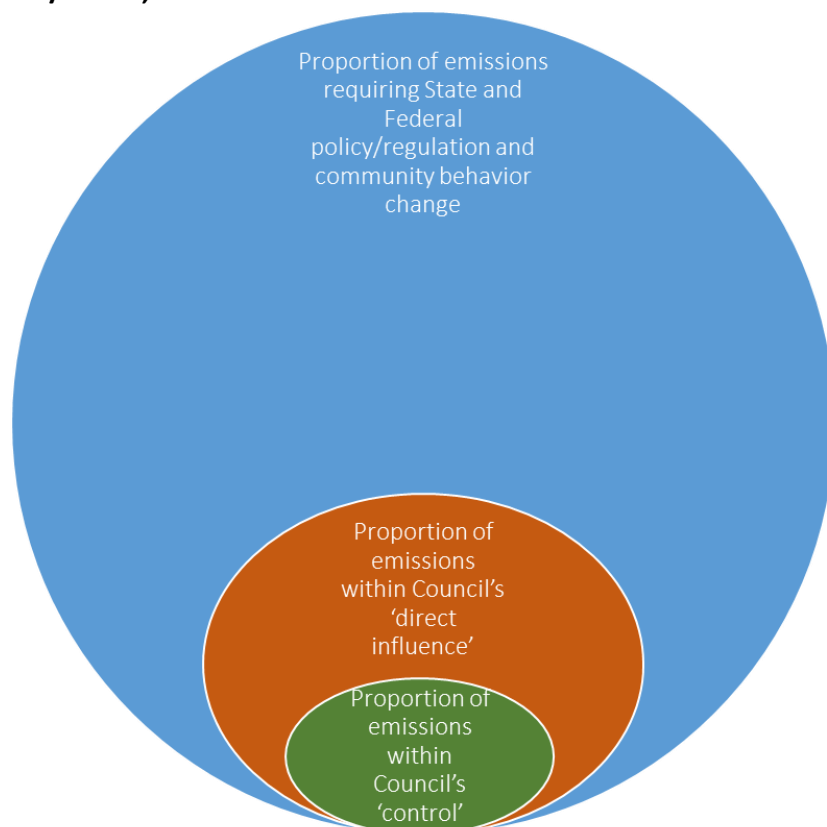
About our goals and targets for 2025

In the ZCM Action Plan we have set measurable goals and targets across our strategic directions:

- **Community 2025 goals** — *we invite everyone to adopt and help achieve these goals* - these reflect desired outcomes from our community's collective action, including actions by residents, businesses and all levels of government. We invite all individuals and levels of government to adopt the 2025 community goals and play their part in achieving them.
- **Council 2025 goals** – *we will strive to achieve these targets* - these are tangible outcomes from actions and programs that are within the control of Council and/or our delivery partners (given adequate resource allocation). Achievement of these targets will depend on annual resource allocation to deliver planned actions and initiatives. Achieving these targets directly contributes towards realising the Community goals and the overall emissions reduction target.

Community emissions

2017/18 = 1,810 kt CO₂e



To achieve our Vision of a Zero Carbon Merri-bek we need to expand our partnerships and collaboration with others to continue building the social movement required to transform our lifestyles and our politics to recognise and address the climate emergency. State and Federal Governments control some key policy levers that must be enacted for Merri-bek (and Australia) to transition to zero carbon at emergency speed. This is why we are increasing our focus on advocacy campaigning and on supporting our community to adopt low carbon lifestyles.

COMMUNITY MOBILISATION AND CAMPAIGNING FOR CLIMATE EMERGENCY RESPONSE

Community 2025 goals - we invite everyone to adopt and help achieve these goals:

- Most of Merri-bek’s citizens and business community members are acting to reduce their carbon emissions and/or have supported climate-related advocacy campaigns (Note: new measure based on household/business survey questions)
- Merri-bek (meaning Council, collaborators and citizens, institutions and business community etc) is recognised for our leadership in collaborative campaigning for a safe climate, in partnership with other local councils and community groups.

Council 2025 goals – we will strive to deliver on these goals:

- Staff across Merri-bek Council acknowledge the climate emergency and understand the role they can play and are integrating climate action within their service area, strategies and policies. [Note: new measure based on staff survey]
- Merri-bek continues to be recognised as a national leader in demonstrating the pathway to a zero carbon society.

Ref #	Action / program	Description / activities	Potential collaborators and partners	Resources
1.1	Undertake community mobilisation and advocacy campaigns to grow the social movement for climate emergency response within communities, businesses and all levels of government	<ul style="list-style-type: none"> • Communicate with Merri-bek’s diverse communities about the risks and impacts of climate and ecological breakdown, and foster positive engagement in lifestyle change, community-level initiatives and campaigning for systemic change • Facilitate networking and capacity-building amongst local and regional community groups and agencies active in campaigning for climate action. • Collaborate with other local councils and regional groups/alliances to run targeted and visible advocacy campaigns to impact state and federal policy to facilitate transition to zero emissions energy, transport and waste management • Support community-led campaigns through promoting grassroots campaign actions / events 	Community services organisations Local councils and LG alliances Peak industry and community organisations Community environment and campaigning groups	Est \$114k/pa from 2020/21 for a Zero Carbon Mobilisation and Campaigns Officer (fixed term) plus campaign funds from within the ZCM programs and initiatives budget (ref 2.1)

ZERO CARBON MORELAND – Climate Emergency Action Plan 2020/21 – 2024/25

Ref #	Action / program	Description / activities	Potential collaborators and partners	Resources
		<ul style="list-style-type: none"> Engage University (Masters) students in applied project work to develop creative engagement and campaigns to ‘cut through’ to create impact with different audiences. <p>Refer to Appendix 1 for high priority ‘advocacy asks’ of State and Federal Governments under Energy Transition, Sustainable Transport and Waste and Consumption.</p>	Australian Religious Response to Climate Change (ARRCC)	
1.2	Establish an integrated program of behaviour change initiatives across energy, transport and waste	<ul style="list-style-type: none"> Collaborate with behaviour change experts and delivery partners to develop and deliver targeted programs and initiatives to engage local communities – beyond the already committed – in adoption of sustainable living behaviours and technologies. Early concepts for key behaviour change initiatives to foster sustainable transport and keeping food waste out of landfill are outlined at Action 3.2 and 4.2 below. Invest in the development of ‘best practice’ social change initiatives. Fostering tangible and lasting lifestyle change through new initiatives will require investment in social research, careful program design, planning, trials, evaluation and continuous improvement. 	AEF BehaviourWorks (Monash University) CERES Metro Waste Schools Sustainability Victoria	Within proposed \$410k p/a allocation from 2020/21 for City – Change Integrated Behaviour Change
1.3	Engage staff across Council to raise awareness and integrate climate emergency response (including climate resilience) within Council strategies/policies, planning and services	<ul style="list-style-type: none"> With support from Council leaders, raise staff awareness of the imperative for societal transformation and gain buy-in to embed climate mitigation and resilience-thinking into day-to-day service delivery, strategic policies and strategies, workplans and performance measures. Techniques to engage staff may include speaker presentations, facilitated workshops tailored to each service area, lunchtime film screenings, peer-to-peer engagement etc. As well as external benchmarking of ‘best practice’, Council will seek expert feedback when reviewing policies, strategies and services. 	Universities, state government agencies, other local councils, MAV, VLGA	Est. \$104k p/a from 2020/21 for Climate Emergency Integration Officer (fixed term) plus funds within ZCM programs and

ZERO CARBON MORELAND – Climate Emergency Action Plan 2020/21 – 2024/25

Ref #	Action / program	Description / activities	Potential collaborators and partners	Resources
		<ul style="list-style-type: none"> • Where relevant, new objectives and measures (KPIs) would be included in Position Descriptions and performance plans. • Engage with staff across community-facing service units to open up new opportunities and channels for directly and meaningfully engaging community members in climate-related advocacy (ref 1.1) and behaviour change (ref 1.2). 		initiatives budget (ref 2.1)

ENERGY TRANSITION: TOWARDS EFFICIENT AND 100% RENEWABLY POWERED ENERGY

Community 2025 goals - we invite everyone to adopt and help achieve these goals:

- Double the amount of solar photovoltaic (PV) capacity across Merri-bek (Note: being 44MW up from 22MW as at early 2019)
- Responding to community advocacy, the national Renewable Energy Target (RET) will be reset so that at least 80 per cent of Australia’s electricity generation by 2030 will be from renewable sources
- Responding to advocacy, by 2025 the Energy Efficiency provisions in the National Construction Code (NCC) will be updated to set an 8-Star Standard for thermal performance of a home (Note: currently 6-Star Standard)
- Average residential energy use in Merri-bek to be less than 4kWh per person per day (Note: currently 4.8kWh/pp/day)
- Merri-bek continues to be recognised for its innovation and leadership in the energy transition

Council 2025 targets – we will strive to deliver on these targets:

- 11MW of solar PV installed through Council-supported initiatives and services since 2014 (Note: 3.1MW as at early 2019)
- 15,000 ‘lifetime tonnes’ of GHG emissions reduction through Council-supported energy efficiency initiatives (Note: 8,305 at early 2019)
- Council (with the Council Alliance for a Sustainable Built Environment) has played a leading role in Victorian local government efforts towards zero carbon buildings via Planning Scheme standards, enforcement and advocacy
- Pending external co-funding, our ‘Cooling Communities’ initiative will have resulted in home upgrades (for thermal comfort and/or solar PV) for around 500 social housing or low-income households across Merri-bek, reducing their exposure to energy poverty and extreme weather events
- Council remains certified ‘Carbon Neutral’ for its operations and buys all its electricity from Crowlands Windfarm.

Ref #	Action / program	Description / activities	Potential collaborators and partners	Resources
2.1	Ensure Merri-bek residents, community organisations, schools and businesses have access to trusted information and advice, services and funding options that support their adoption of energy	<ul style="list-style-type: none"> • Provide residents, community organisations, schools and businesses with free access to comprehensive and trusted renewable energy and energy efficiency information and advice • Run seasonal promotional campaigns and information sessions to increase awareness and confidence to take action (eg summer solar, home retrofits for winter, speed date a sustainability expert etc) 	AEF (Energy Advice Service) Beyond Zero Emissions CERES	From within the ZCM programs and initiatives budget of est. \$536k/pa from 2020/21

Ref #	Action / program	Description / activities	Potential collaborators and partners	Resources
	<p>efficiency and renewable energy</p>	<ul style="list-style-type: none"> Continue supporting commercial building owners (and tenants) to improve their buildings’ environmental performance (renewable energy and/or water and energy efficiency upgrades) at no upfront cost through facilitating Environmental Upgrade Finance (EUF) Encourage community groups that are leasing Council facilities to install solar PV at no upfront cost via Council’s ‘Solar on Leased Facilities’ program Support Merri-bek Schools and Early Learning Centres (ELCs) to install solar PV, save electricity, and involve children and their families in the energy transition Encourage and support community groups to apply for a Merri-bek Community Grant to undertake energy efficiency or renewable energy initiatives that benefit the Merri-bek community. 	<p>Renew Schools and ELCs Victorian Government</p>	<p>Merri-bek Community Grants Program</p>
<p>2.2</p>	<p>Collaborate with others to <u>investigate</u> feasibility and then <u>pilot / trial innovative concepts, technologies, products, financial and contractual models that could enable a more rapid transition to a smart, decarbonised, decentralised and socially just energy system.</u></p>	<ul style="list-style-type: none"> Assess the opportunities and feasibility for the Brunswick Design District to evolve as Merri-bek’s first ‘zero carbon and circular economy’ precinct. Progress next steps of the AEF ‘Moreland Power’ pilot that is testing the feasibility of using community-owned renewable energy to deliver benefits to investors and households struggling to pay their energy bills. <p>Other concepts requiring further investigation include:</p> <ul style="list-style-type: none"> Microgrids and community energy storage – potential pilot sites include CERES and Halpin Street in Brunswick West Solar + Battery integration and targeted Energy Demand Management (especially in areas with identified grid constraint) The potential for ‘impact investment’ to finance beneficial disruption. 	<p>RMIT & Creative Victoria State Government AEF, BZE, Renew Ecological Justice Hub Jemena and CitiPower Energy retailers Energy sector innovators</p>	<p>Est. \$117k/pa from 2020/21 for a Zero Carbon Implementation Lead (5-yr fixed term) plus innovation funds within the ZCM programs and initiatives budget (ref 2.1)</p> <p>Council will seek external co-funding to support energy pilots and scale up.</p>

Ref #	Action / program	Description / activities	Potential collaborators and partners	Resources
2.3	Provide grant funding to Australian Energy Foundation (AEF) for agreed activities supportive of ZCM 2040 goals	Pending finalisation and execution of a 5-year Funding Agreement, AEF will undertake grant funded activities: <ul style="list-style-type: none"> • Establish the Mike Hill Fellowship • Deliver world’s best practice energy innovation and pilots in Moreland 	AEF	Up for \$200k/pa via 5-year Funding Agreement
2.4	Lead the collaborative project to raise the standards of Environmentally Sustainable Design (ESD) required in new homes, commercial and industrial development (Towards Zero Carbon in the Planning Scheme)	<ul style="list-style-type: none"> • Lead a collaborative project, with Council Alliance of the Sustainable Built Environment (CASBE) and other interested councils, to develop the strategic rationale for a Planning Scheme Amendment to raise the ESD standards in new developments. • Establish the pathway (policy and implementation tools) for zero carbon buildings and precincts through the Planning Scheme and related assessment and compliance processes. <p><i>Note: Changes to Planning Scheme policy require the approval of the Victorian Planning Minister.</i></p>	CASBE and interested member councils Victorian Government (DELWP)	Est. \$200k in 2020/21 for Planning Scheme Amendment process. Co-contributions from CASBE and interested member councils TBC.
2.5	Partner with others to advocate for and provide targeted support for low income and vulnerable households to avoid ‘energy poverty’ and be more comfortable in their homes during extreme weather	<ul style="list-style-type: none"> • Investigate delivery and funding options for supporting community housing providers to upgrade the energy efficiency of housing stock and install solar PV through extension of ‘Cooling Communities’. • Pending enabling state legislation for residential Environmental Upgrade Finance (EUF), seek to partner with State Government (DELWP) and others to pilot use of residential EUF as mechanism to support thermal upgrades for low income / vulnerable households. • Ensure low-income home-owners are aware of options to finance home environmental upgrades at no upfront cost, such as No Interest Loan schemes or residential EUF (pending legislation). • Advocate for Victorian Government investment in the accelerated roll-out of thermal upgrades for public and community housing. 	Community health, housing and social services providers and peak bodies (eg. VCOSS, CHIA Vic, Brotherhood of St Laurence and Jesuit Social Services) AEF, Renew State Government, Solar Victoria	Within the ZCM programs and initiatives budget (ref 2.1) Roll out at scale of thermal upgrades for low income households will require external co-funding and delivery partnerships to be secured.

ZERO CARBON MORELAND – Climate Emergency Action Plan 2020/21 – 2024/25

Ref #	Action / program	Description / activities	Potential collaborators and partners	Resources
2.6	Ensure Council builds highly energy efficient facilities, including onsite renewables and ‘no new fossil gas’	<p>Council’s building program (new builds, upgrades and renewals) will be delivered to meet (or exceed) ESD standards set in the Sustainable (Council) Buildings Policy (as revised from time to time).</p> <p>In addition, over the five-year period, Council will:</p> <ul style="list-style-type: none"> • Aim for ‘Passive House’ certification for the Wheatsheaf Hub in Glenroy. Passive House is a rigorous, voluntary standard for energy efficiency in a building, which reduces the building's ecological footprint. It results in ultra-low energy buildings that require little energy for space heating or cooling. • Pursue ESD excellence in the design and redevelopment of 33 Saxon Street and 420 Victoria Street in Brunswick • Consider outcomes of an investigation (during 2019/20) into the feasibility and timing of an accelerated ‘phase out’ of fossil gas from Council facilities (including aquatic centres), with particular consideration in the planned refurbishment of the Fawkner Leisure Centre. • Review opportunities for energy efficiency upgrades at Council’s many small buildings (including the potential for Neighbourhood Houses and Early Learning Centres (ELCs) to function as zero carbon ‘demonstration hubs’). 	Council building users and tenants	<p>Within Capital Works forward budgets (between 5% - 10% marginal cost depending on ESD standard, with payback via operational saving on utilities)</p> <p>Merri-bek Community Grants Program (Capital Works Partnerships grants)</p>
2.7	Buy 100% of Council’s electricity demand from Crowlands Wind Farm	<ul style="list-style-type: none"> • Through a 10-year Power Purchase Agreement (PPA) with Pacific Hydro and Tango Energy, Council will continue to buy renewable energy from the Crowlands Windfarm, near Ararat, to meet Council’s electricity demand (ie. for all buildings, facilities, street and park lighting where Council pays the electricity bill). Install signage at key sites to showcase Council’s cost-effective purchase and use of renewable energy. 	Melbourne Renewable Energy Project partners	Within existing (Corporate) Operational budget

ZERO CARBON MORELAND – Climate Emergency Action Plan 2020/21 – 2024/25

Ref #	Action / program	Description / activities	Potential collaborators and partners	Resources
2.8	Maintain Council’s certification as a ‘Carbon Neutral’ organisation	<ul style="list-style-type: none"> Undertake an annual GHG emissions inventory and maintain Council’s ‘Carbon Neutral’ certification by offsetting ‘residual emissions’ (from use of natural gas and liquid fuels) with ‘Gold Standard’ carbon offsets. 	Australian Government (Carbon Neutral Team)	Within existing Operational budgets
2.9	Continue to upgrade public lighting to be energy efficient	<ul style="list-style-type: none"> Continue to progressively upgrade public lighting in Council parks and reserves to energy efficient LEDs. Continue collaborative advocacy for a regional / state program to upgrade major road lighting. 	Sports clubs Northern Alliance for Greenhouse Action (NAGA) VicRoads Victorian Government	Within existing Capital Budgets (for public space lighting) Upgrade of major road lighting would require external co-funding.

SUSTAINABLE TRANSPORT: TOWARDS ACTIVE OR ZERO EMISSIONS TRANSPORT

Community 2025 goals - we invite everyone to adopt and help achieve these goals:

- The proportion of people living in Merri-bek travelling to work by car (as driver) has decreased significantly (as mid-way progress towards Moreland Integrated Transport Strategy (MITS) mode-shift goals for 2029) (Note: Household survey data)
- Merri-bek has significantly higher rates of ownership of Electric Vehicles than the Melbourne metropolitan average

Council 2025 targets – we will strive to deliver on these targets:

- 5 kms of new shared path constructed (Note: based on 2019/20 baseline)
- Average emissions across Council’s light vehicle fleet of less than 100g/km CO₂-e (combined average as per Green Vehicle Guide)
- Council’s heavy vehicles (eg waste trucks) transitioning to zero emissions – pending commercial availability of suitable vehicles and refuelling infrastructure

Ref #	Action / program	Description / activities	Potential collaborators and partners	Resources
3.1	Facilitate ‘mode shift’ to active travel and public transport through implementation of the Moreland Integrated Transport Strategy (MITS)	<p>The Moreland Integrated Transport Strategy (MITS) addresses the impact of strong population growth by seeking to facilitate a demonstrable shift to sustainable modes of transport and long-term reduction in private car use. Key MITS implementation strategies include:</p> <p>Sustainable transport priority</p> <ul style="list-style-type: none"> • Prioritise access for sustainable transport modes over car travel, including through road space reallocation. <p>Parking management</p> <ul style="list-style-type: none"> • Expand parking restrictions around activity/neighbourhood centres • No longer specifying how much car parking needs to be provided within new developments in Coburg, Brunswick and Glenroy Activity Centres (pending Planning Scheme Amendment outcome) • Expand paid all-day parking in Activity Centres 	<p>Victorian Planning Minister Department of Transport (VicRoads and PTV) Neighbouring councils Traders and businesses VicTrack</p>	<p>As per MITS Implementation Plan and budget</p>

Ref #	Action / program	Description / activities	Potential collaborators and partners	Resources
		<p>Advocacy to state government for improved public transport</p> <ul style="list-style-type: none"> Refer Appendix 1 for advocacy focus areas <p>Protect local streets from increasing vehicle traffic</p> <ul style="list-style-type: none"> Limited trial of 30km/h speed limits Continued rollout of 40km/h Selected road closures <p>Encourage community to use sustainable transport modes</p> <ul style="list-style-type: none"> Education / behaviour change programs - See 3.2 below 		
3.2	<p>Encourage community adoption of sustainable transport modes (behaviour change initiatives)</p>	<ul style="list-style-type: none"> Council will develop and support sustainable travel behaviour change initiatives and foster increased rates of walking and cycling (as well as public transport use). A priority initiative – to be designed in partnership with stakeholders – will engage and empower young people (likely Grade 5 – 6) to become active travellers (biking, walking, scooting etc) to and from school. Fostering the skills, confidence and a ‘social norm’ amongst young people has potential to drive generational change towards sustainable transport. A tailored school-by-school approach is anticipated, ideally also addressing local infrastructure barriers to active travel and emphasising benefits for children’s health/fitness and self-confidence through independent mobility. <p>Other concepts requiring further investigation include:</p> <ul style="list-style-type: none"> An E-bike loan scheme – providing interested people with the chance to trial an e-bike or cargo bike over a period of time before purchase. Public events such as Cyclovia or Car Free Days to foster a cycling culture and highlight co-benefits of sustainable travel. 	<p>School communities CERES VicHealth Bicycle Network YMCA Department of Transport (VicRoads) Dr Crankies Brunswick Cycling Club Moreland Bicycle User Group (BUG)</p>	<p>Within the City Change Integrated Behaviour Change budget (ref 1.2)</p>

ZERO CARBON MORELAND – Climate Emergency Action Plan 2020/21 – 2024/25

Ref #	Action / program	Description / activities	Potential collaborators and partners	Resources
3.3	Continue to expand the network of public and private Electric Vehicle (EV) charging stations across Merri-bek and beyond.	<ul style="list-style-type: none"> • Council installation of renewably powered charge stations to service the public and Council’s expanding fleet of EVs • Promotion of EV charging infrastructure within or adjacent to new private developments via ESD Policy implementation and seeking to raise standards for ‘future proofing’ developments for broader take-up of EVs (ref 2.3) • Collaborate with ‘car share’ businesses (eg GoGet, Flexicar etc) to accelerate transition to electric vehicles • Share expertise with other local governments and stakeholders to foster expanding the charging network across Melbourne and key regional and interstate routes. 	Department of Transport (VicRoads) Private developers ‘Car share’ businesses Other councils	Within existing Capital & Operating Budgets
3.4	Transition Council’s light vehicle fleet to low or zero emissions vehicles and optimise fleet size	<ul style="list-style-type: none"> • Reduce year-on-year emissions from Council’s passenger and light commercial fleet through application of Council’s Light Vehicle Policy which prioritises the switch to zero emissions vehicles. 	EV manufacturers and importers Council staff	Progress within existing Capital budgets and seek future budgets to fund any gaps via business cases.
3.5	Continue testing feasibility and pathways for the transition from diesel to zero emissions for Council’s light commercial and heavy vehicle fleet	<ul style="list-style-type: none"> • Continue demonstrating Council leadership and commitment to stimulating development of zero emissions hydrogen fuel cell technology in the transport mobility space. 	State Government Heavy vehicle manufactures Hydrogen Mobility Association (HMA)	Progress within existing Capital budgets, with any significant new initiatives subject to Business Case.
3.6	Foster sustainable travel and commuting by Council staff	<ul style="list-style-type: none"> • Continue promoting and incentivising sustainable travel and commuting by Council staff. 	Council staff	Within existing Operating budgets

WASTE AND CONSUMPTION: TOWARDS A CIRCULAR ECONOMY WITH ZERO WASTE

Community 2025 goals - we invite everyone to adopt and help achieve these goals:

- Increase in the proportion of Merri-bek households composting or worm farming (against 2020 levels)
- Increase in community-based ‘share economy’ groups/initiatives (eg. tool libraries, food swaps, repair cafes etc)

Council 2025 targets – we will strive to deliver on these targets:

- Council’s food and garden organics waste service is delivering ‘best in class’ outcomes in Victorian context
- Merri-bek businesses and commercial generators of food waste have access to the required information and technologies and/or service options to responsibly manage their food and organic waste

Ref #	Action / program	Description / activities	Potential collaborators and partners	Resources
4.1	Design and roll-out a municipal-wide food and garden organics kerbside service	Expanding on the current ‘opt-in’ food and garden organics service, design and introduce a ‘best practice’ municipal-wide food and garden organics kerbside collection service. Consistent with the Waste and Litter Strategy and Council’s aspiration to see zero waste to landfill by 2030, a food and garden organics service is ultimately expected to be part of a redesigned ‘universal 3-bin service’ – including collection of residential food and garden organics (weekly), mixed recycling (switched to fortnightly), and garbage to landfill (switched to fortnightly).	Veolia Metro Waste Group	Est. \$7M (TBC) in 2020/21 for operational roll-out Proposed to be funded via Waste Charge
4.2	Design and deliver extensive community education and behaviour change initiatives to maximise diversion of food and other organics from landfill	To complement the kerbside service (4.1 above), develop and implement ‘best practice’ food and organic waste education and behaviour change initiatives (leveraging digital platforms, intermediaries, face-to-face engagement and grass-roots campaigning). Focus areas include: <ul style="list-style-type: none"> • Fostering community support and compliance with the universal food and garden organics kerbside service • Helping residents to avoid food waste in the first place (through conscious shopping, food swaps, food prep and storage etc) 	CERES Ecological Justice Hub Community Gardens 3000Acres Cultivating Community	Est \$800k (TBC) in 2020/21 for Towards Zero Food Waste program including dedicated Food Waste role and extensive education/compliance program

ZERO CARBON MORELAND – Climate Emergency Action Plan 2020/21 – 2024/25

Ref #	Action / program	Description / activities	Potential collaborators and partners	Resources
		<ul style="list-style-type: none"> Increasing adoption of home / community composting/worm farming (via Community Composting Hubs, subsidised compost bins/worm farms from www.compostcommunity.com.au etc) 	Neighbourhood Houses	Proposed to be funded via Waste Charge
4.3	Foster tailored solutions for recycling of organic waste from medium- and high-density residential developments	<p>Space constraints and shared services in many medium- and high-density residential developments make kerbside pickup of food waste more challenging. Council will work with neighbouring councils and stakeholders to find and develop solutions, including:</p> <ul style="list-style-type: none"> For existing residential developments, investigating on-site or local area composting systems/technologies and tailored food waste collection services (Council or private providers) For new/future private developments, seeking to ensure better waste management infrastructure (including for organic waste stream) through application of best practice guidance in refined planning standards, permit conditions and pro-active enforcement. 	Metro Waste Developers Building owners / tenants Technology providers and social enterprises	Within proposed Towards Zero Food Waste program budget (ref 4.2) External co-funding likely required for trials of on-site waste management technologies.
4.4	Facilitate solutions for food waste avoidance and organics recycling from food businesses (cafes/restaurants, fresh food markets, food manufacturers etc) and other medium-scale organic waste generators	<p>Collaborate with neighbouring councils and stakeholders to enable businesses to minimise and divert food waste from landfill:</p> <ul style="list-style-type: none"> Investigate and (where feasible) support trial(s) of on-site composting systems and other potential localised solutions (eg biogas digesters), and share successes Actively promote food waste avoidance and re-use businesses (such as Reground and Yume Foods) and social enterprises (such as Second Bite and FareShare etc) Review Council’s Commercial Plus waste service to consider introduction of an organics collection service. 	Metro Waste Developers / food businesses Ecological Justice Hub (Jesuit Social Services) Social enterprises and technology providers	Within proposed Towards Zero Food Waste program budget (ref 4.2) External funding likely required for trials of on-site waste management technologies.

ZERO CARBON MORELAND – Climate Emergency Action Plan 2020/21 – 2024/25

Ref #	Action / program	Description / activities	Potential collaborators and partners	Resources
4.5	Promote and foster waste minimisation and ‘circular economy’ principles within communities, businesses and schools	<p>Through implementation of the Waste and Litter Strategy 2018, develop and deliver ‘best practice’ behaviour change and initiatives for a ‘circular economy’. Key implementation initiatives include:</p> <ul style="list-style-type: none"> • Community engagement and education focused on contamination of kerbside recycling and reduction in single-use plastics. • Promote participation in local sharing economy groups and platforms (eg Good Karma Networks, ShareMelbourne, repair cafes and tool libraries etc) • Promote Council’s Community Grants Program as a way to support groups, organisations and individuals to implement zero waste initiatives that benefit the Merri-bek community. • Business Merri-bek support for businesses to be environmentally-friendly and resource efficient, and foster emergence of social enterprises and entrepreneurs applying circular economy principles (for example, within the Brunswick Design District and 420 Victoria Street). 	<p>CERES Schools Council building tenants and users Community sharing economy initiatives Neighbourhood Houses EcoActiv</p>	<p>As per Waste and Litter Strategy implementation funding</p>
4.6	Act to reduce Council’s operational waste and the ecological footprint of Council’s facilities and services	<p>Lead by example (and influence our supply chain) to reduce Council’s operational waste and ecological footprint, including by:</p> <ul style="list-style-type: none"> • Specifying use of recycled content and/or ‘carbon positive’ materials in Council construction projects eg recycled-content bollards / benches, cement and asphalt, cross-laminated timber etc • Ensuring Council events, festivals and offices are ‘waste-wise’ and eliminating use of single-use plastic items • Increasing use of local and environmentally-friendly caterers for Council meetings and Civic events, avoiding packaging waste and prioritising seasonal and vegetarian selections. 	<p>Council building users / tenants Council suppliers Manufacturers of recycled content materials State Government Metro Waste</p>	<p>As per Waste and Litter Strategy implementation funding and existing operational budgets (eg catering).</p>

COMPLEMENTARY STRATEGIES AND ACTIONS

The implementation of the Zero Carbon Merri-bek 2040 Framework over the next five years is primarily driven through this ZCM Action Plan. Council is also pursuing aligned objectives through a number of other strategies and plans, with key documents and links summarised below.

Strategy / Plan / Policy	Strategic links (in brief)
Municipal Health and Wellbeing Plan	'Liveable Neighbourhoods' is one of two focus areas in Health and Wellbeing Plan 2017 – 2021. The next four-year plan will have a stronger focus on climate change. 'Tackling climate change and its impact on health' is one of the top focus areas within the new Victorian Public Health and Wellbeing Plan 2019 – 2023.
Urban Forest Strategy	Aims to increase vegetation throughout Merri-bek to cool and green the urban environment, including through planting of 5000 street and park trees across the municipality each year, providing carbon 'drawdown' (sequestration) of an estimated 984 tonnes CO ₂ -e each year.
Food Systems Strategy	The Food Systems Strategy fosters a sustainable, just and vibrant food system within Merri-bek. There are strong links to food waste avoidance, organics recycling, healthy plant-rich diets, food security and resilience in a changing climate.
Urban Heat Island Action Plan	Multiple links including an action to investigate protection of significant trees on private land to assist in reducing the reliance on mechanical heating and cooling in buildings through tree canopy cover. In 2020/21 an investigation report that identifies significant trees for protection will be subject of a Planning Scheme Amendment process.
Human Rights Policy	The Merri-bek Human Rights Policy provides an overarching framework for delivering accessible, equitable and inclusive programs, services and decision-making processes. The impacts of climate breakdown will not be borne equally or fairly, between rich and poor, women and men, and older and younger generations etc. Consequently, there is a growing focus on 'climate justice', which looks at the climate crisis through a human rights lens and on the belief that by working together we can create a better future for present and future generations.

LONGER-TERM OPPORTUNITIES (2025 – 2030)

Several longer-term opportunities (beyond those prioritised for implementation during 2020/21 – 2024/25) were also noted in the Zero Carbon Merri-bek - 2040 Framework and through stakeholder consultations. Keeping up to date on emerging opportunities is an ongoing activity. Council and our collaboration partners will retain flexibility to investigate the feasibility of emerging solutions and undertake pilots as the external opportunities emerge (e.g. new grant funding programs, new business or financing models etc). This could mean that work on a longer-term concept is brought forward and other initiatives (that are not proving effective) are put on-hold or revised.

Longer term concepts include:

- Facilitating engaged residents/investors to invest in 100% renewable energy – solar gardens / solar farms / Power Purchase Agreements
- Facilitating residents to participate in and benefit from energy trading
- Directly incentivising EV uptake – e.g. parking permit fee-waiver etc.
- Testing integration of EVs into grid management
- Developing partnerships and project plan for a clean-tech incubator hub
- Developing 'real-time' monitoring and disclosure of municipal-wide emissions and the impact of actions taken over time.

MONITORING OUR PROGRESS TO 2025

With funding support from Sustainability Victoria, Council has worked with stakeholders to develop an overarching 'Program Logic' for the ZCM Action Plan, and sub-logics for Energy Transition, Sustainable Transport and Waste and Consumption. These program logics graphically summarise how our programs and initiatives to progress towards zero carbon in Merri-bek are intended to work.

The Program Logic models are a critical input to a ZCM Monitoring and Evaluation Framework, which will guide how Council captures and shares the impacts, successes and lessons learnt as Council implements the ZCM Action Plan over the next five years. The ZCM Monitoring and Evaluation Framework will be finalised and published by December 2019.

Key activities and achievements through implementation of the ZCM Action Plan 2020/21 – 2024/25 will be reported to Council in June each year, including progress against the goals and targets for 2025 (pending data availability).

Appendix 1 – Priority ‘advocacy asks’ across energy, transport and waste

Council’s strategic approach to advocacy in response to the climate emergency is in early stages of development, including via collaboration with other councils and community organisations. The below is a non-exhaustive list of actions Council is seeking from Victorian and Australian governments to support the vision of a Zero Carbon Merri-bek.

Energy Transition

That the Australian Government establish:

- A strong, long term, stable energy policy and carbon price aligned with the science and principles of climate justice (‘No new coal, oil or gas projects’)
- A national Renewable Energy Target (RET) of 100% by 2030 (‘100 per cent renewable energy generation and exports by 2030’)
- An ambitious pathway towards zero carbon buildings through the National Construction Code (NCC)
- A national strategy to support the orderly and just transition away from coal and gas-fired power (‘Funding for a just transition and job creation for all fossil fuel industry workers and communities’).

That the Victorian Government establish:

- A strong ESD policy within the State Planning Policy Framework
- Mandatory minimum standards for and disclosure of energy performance of residential properties at point of sale and lease
- Strategies to ensure Victoria’s 40% renewable energy target by 2025 is met and (in absence of a strong national renewable energy target) a Victorian RET of 100% by 2030
- Funding mechanisms and programs to scale up thermal retrofits for low income households vulnerable to extreme heatwaves
- Regulation to ensure disclosure of aggregated real time data from electricity distribution businesses.

Sustainable Transport

That the Australian Government:

- Introduce stringent minimum vehicle emissions standards
- Provide tax incentives for lowest emissions vehicles and remove tax incentives that encourage unnecessary driving and vehicle purchase
- Prioritise and commit funding to significant public transport infrastructure over road infrastructure spending
- Develop an electric and autonomous vehicle strategy to embed positive social and environmental outcomes.

That the Victorian Government:

- Continue investment in improved public transport services, in particular:
 - More frequent buses for more hours of the day, particularly in the north of Merri-bek and east-west bus routes, including that buses should run from first train and tram to last train and tram in a 24-hour period.
 - More reliable bus, tram and train services, including ensuring buses and trams don't get held up in traffic as much.
 - More capacity on train and tram services to carry more people, including increased frequency on night time trams and trains.
 - Improved accessibility of all public transport services, for people of all abilities.
 - Better connectivity between different modes of public transport.
- Increase funding provided to local councils for active transport projects
- Develop a statewide policy on speed limits in urban areas.

Waste and Circular Economy

That the Australian Government:

- Coordinate a national response to the crisis in the Australian recycling industry, urgently prioritizing 'circular economy' opportunities
- Expand the product stewardship scheme to include more products, e.g. packaging, making goods so that they can be repaired
- Ensure labelling of carbon emissions on products.

That the Victorian Government:

- Acknowledge waste services as an 'essential service' and urgently invest landfill levy funds to develop financially and environmentally sustainable waste management in Victoria
- Build regional facilities and processes for high-capacity recycling and advanced organics processing
- Build a publicly-owned recycling facility to ensure the sustainability, the accountability and the safe operation of such a facility
- Integrate use of recycled products in government purchasing policies and specifications, and support councils and businesses to do likewise.

Appendix 2 – Notes related to 2030 target for corporate emissions reduction

As noted in the Report and resolution at the Council Meeting on 8 December 2021, the following conditions relate to achievement of the 2030 corporate emissions target range of 80 - 100 per cent reduction (precluding offsets):

- a) Achievement of 80 per cent emissions reduction by 2030 is contingent on additional funding allocation and re-scoped capital works forward plan (to bring forward a transition of Council's light fleet to zero emissions and converting approximately 27 Council buildings to 'all electric'). High-level cost estimate to deliver these actions may be up to \$16M over the 9 years to 2030.
- b) Progress beyond 80 per cent, towards 100 per cent reduction (the upper end of the target range) is also contingent on commercialisation and availability before 2030 of suitable new or emerging technologies (that is, zero emissions waste trucks and construction materials).