

# Climate Emergency Plan 2023 - 2030



## **Table of Contents**

Acknowledgement of Country	1
Mayor's Message	1
Executive Summary	2
Why do we need to take action?	4
Our climate journey	6
Our emissions profile	6
Community action	7
Council action	8
Collaborative action	8
Our collective response	10
Who this plan for?	10
How was this plan developed?	10
Principles and Priorities	12
The Plan	14
Nurturing Nature	15
Climate-ready Communities	21
Post Fossil Fuels	28
Health and Wellbeing	34
Waste and Circular Economy	38
Response and Recovery	41
Monitoring and Evaluation	45
Council's Advocacy Commitments	47
References	48
Abbreviations	48

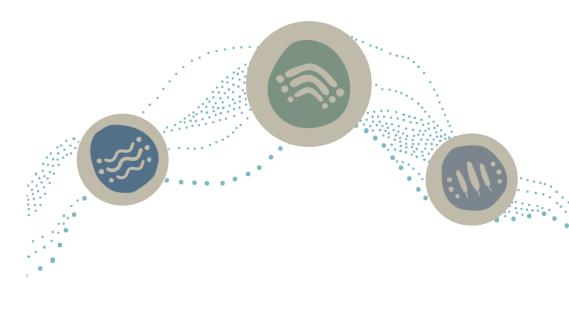


## **Acknowledgement of Country**

Macedon Ranges Shire Council acknowledges the Dja Dja Wurrung, Taungurung and Wurundjeri Woi Wurrung Peoples as the Traditional Owners and Custodians of this land and waterways.

Council recognises their living cultures and ongoing connection to Country and pays respect to their Elders past, present and emerging.

Council also acknowledges local Aboriginal and/or Torres Strait Islander residents of Macedon Ranges for their ongoing contribution to the diverse culture of our community.



## Mayor's Message

In recognition of the urgent need to address climate change, and through the shire increasingly experiencing the impacts of climate change, a Declaration of Climate Emergency was made by Council on 21 March 2021. On behalf of Council, I am now pleased to present the first Climate Emergency Plan for the shire, as a guide for Council to work in partnership with the community in enacting the declaration.

The plan represents the end point of the journey taken for its development, and the next step in the bigger journey of addressing the many aspects of climate change. Many sincere thanks to the many members of the community who took the time to contribute to development of the plan.

A big thank you also to the many volunteers that work tirelessly at the local level to progress sustainability and build resilience within the community, and to all the staff from across Council for their contributions and work in

addressing climate change in whatever way possible in their roles.

On behalf of Council, I look forward to accelerated action on climate change across the shire through everyone doing what they can in our shared journey to a climate ready future.

- Mayor Annette Death





## **Executive Summary**

Macedon Ranges Shire Council welcomes the opportunity to be a leader in local climate action, however, we also understand that to achieve the impact being called for by the global science community we cannot do it alone. Long-lasting and effective change can only happen with collaboration.

This Climate Emergency Plan (the Plan) aims to accelerate action in the Macedon Ranges Shire to address climate change and will guide the work of all parts of Council, as well as, provide inspiration and opportunity for everyone across the community to take action.

The Plan includes a total of 56 actions, across the six themes of Nurturing Nature, Climate Ready Communities, Post Fossil Fuels, Health and Wellbeing, Waste and the Circular Economy, and Response and Recovery.

The actions included in this collaboratively designed plan stretch across both Council's key operations and services, as well as, outlining opportunities for residents and community groups to take the lead. Interested and passionate residents sat alongside members from local Landcare groups, Friends groups, the Macedon Ranges Sustainability Group action groups, sporting clubs, community health organisations, business owners, farmers, land managers, Council department representatives, as well as, State Government agencies and network agencies to prioritise and develop a collective response to the local impacts of climate change up until 2030. Key flagship actions that will shape, enable and empower climate action in the coming years include:

- 1. A new *Climate Action Grant* stream to enable community groups to implement grassroots projects
- 2. The development of a comprehensive *Integrated Transport Strategy* that will increase active transport and public transport use, guide electric vehicle infrastructure and education and awareness campaigns
- 3. Securing resources to provide continuity to Council's *Recovery and Resilience* programs and build community skills and knowledge for community-led recovery after natural disasters.
- 4. A targeted program that enables an *equitable transition* to solar and energy efficiency upgrades for low-income households ensuring all residents thrive in a low-carbon future

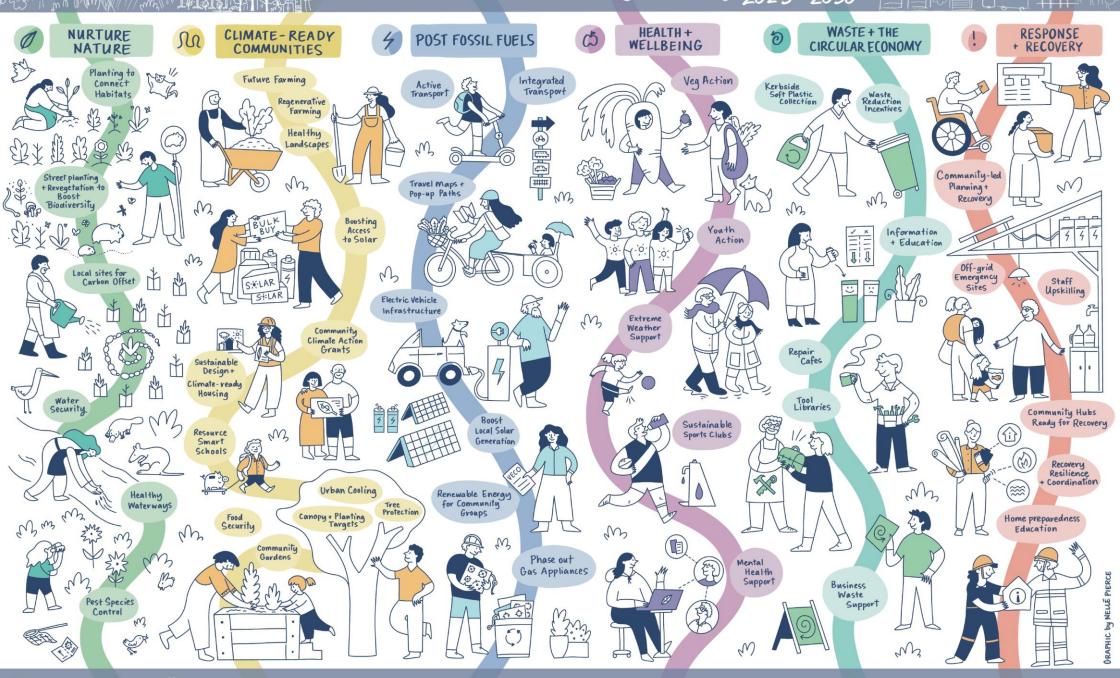
Through the implementation and monitoring of the Plan, Council will be guided by a set of principles to ensure this response will be inclusive and empowering to all - allowing everyone the opportunity to join the journey in these pivotal and transitional years.



# Climate Emergency Plan

Macedon

Ranges Shire Council



PRINCIPLES • Equity • First Nations Perspectives • Mobilisation • Collaboration & Partnerships • Regeneration

## Why do we need to take action?

Climate Science Basic: 1.We know it's warming 2.We know it's us 3.We know it's bad 4.We know how to fix it

https://350.org/science/

#### It's warming

In the Bureau of Metrology's most recent State of the Climate Report 2022, Australia's climate has warmed by approximately 1.4°C since national records began in 1910. (1)

Victoria has also become drier, especially in the cooler months, and has warmed by just over 1.0°C (2). This warming leads to numerous other changes in our day to day weather patterns (see below).

Without major action to address the root cause of climate change (greenhouse gas emissions) global temperature is on track to rise by 2.5 °C to 4.5 °C by 2100 (3)

#### lt's us

Since the industrial revolution, humans have built a reliance on coal, oil and gas. When burning these fossil fuels, we release carbon dioxide (CO2) into our atmosphere, alongside nitrous oxide, methane, chlorofluorocarbons, and water vapour. These are commonly referred as greenhouse gases and have created "the greenhouse effect" around our planet. Whilst the greenhouse effect is a natural process, the increase in greenhouse gases being released into the atmosphere has thrown off Earth's natural atmospheric balance. The rate of CO2 accumulation in the atmosphere has increased every decade since atmospheric measurements began with the global annual mean CO2 concentration in 2021 being 414.4 ppm (4).

In its Sixth Assessment Report, the Intergovernmental Panel on Climate Change (IPCC) concluded that the rise in the world's CO2 levels is unequivocally due to human influence (5).



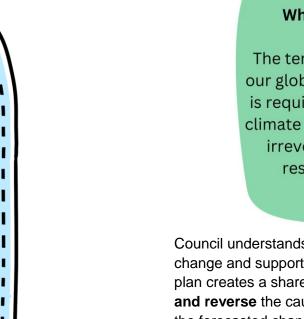
#### It's bad

We are already seeing the impacts of climate change here in the Macedon Ranges, particularly in the form of extreme weather events like storms, floods and bushfires. Outlined below are the localised changes we are expected to see into the future without major decreases to global emissions

## Climate forecasts in the **Macedon Ranges** Decreased annual rainfall **Increased** annual temperatures Decreased frosts Longer, hotter fire seasons **Increased severe weather** events **Increased heatwaves**

#### We know how to fix it

In March, 2021, Council recognised the urgent need to address climate change and stated its commitment to action through a Declaration of Climate Emergency.



#### What is a Climate Emergency?

The term "climate emergency" reflects our global situation, where urgent action is required to reduce the root causes of climate change and avoid the potentially irreversible environmental damage resulting from climate change.

Council understands its responsibility to take strong action on climate change and support the residents in the shire to do the same. This plan creates a shared vision for both community and Council to **stop and reverse** the causes of climate change, help us all to **adapt** to the forecasted changes and ultimately strengthen an already **resilient** community.

Everyone can play a role in addressing both the causes and the effects of climate change, and the time to do so is now.



## **Our climate journey**

The United Nations IPCC has advised that *"we are at a crossroad"* (6). Actions that we take now can either help or hinder the future we want to create. This "crossroads" offers us the opportunity to look ahead, mobilise, and, importantly, participate in the solutions that will bring a safer, healthier and more resilient Macedon Ranges.

#### **Our emissions profile**

Due to our long running reliance on fossil fuels many of the systems we live amongst contribute to the release of greenhouse gases. From lighting our homes to heating our water, driving our cars and disposing of our waste, even the farming of our food and manufacturing our appliances – nearly all of our daily activities inevitably contribute to climate change.

Understanding where our emissions come from is the first piece of the puzzle in shaping our response to climate change.

*Snapshot Climate* has been developed to show emissions based on a standard approach specified in the Global Protocol for Community-scale greenhouse gas inventories. This ensures variables are treated in a consistent manner. As outlined in Figure 1, energy use (both electricity and gas) and transport offer the two biggest opportunities to reduce our collective emissions.

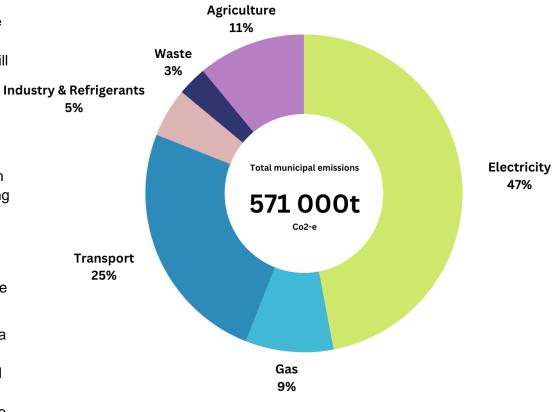


Figure 1: Macedon Ranges Shire municipality emissions profile 2020/2021. Source: <u>https://snapshotclimate.com.au/</u>



#### **Community action**

The passion and drive of our community to create and secure a sustainable and prosperous future cannot be understated.

#### Macedon Ranges Sustainability Group

Since its beginning the Macedon Ranges Sustainability Group (MRSG) has been shaping a community that is aware, engaged and active in addressing climate change. Projects and initiatives such as the Sustainable Living Festival, Edgy Veg Awards, Sustainable House Day, Woodend Farmers Market, Cool Changes in Schools, and the Wash Against Waste trailer all have an immensely beneficial impact in helping the community's transition to a more environmentally and socially just future.

This member-based, not-for-profit community organisation also introduces the possibilities of a more sustainable and climate responsive future, exploring innovative projects such the viability of neighbourhood batteries and Community Energy Parks - all with community benefit at the forefront of its thinking. With 14 action groups working on specific areas of interest, MRSG continues to demonstrate impactful and inspiring community climate action.

#### Macedon Ranges Landcare and Friends Groups

The work of Landcare and Friends groups demonstrates the possibilities of a future that nurtures and enhances ecosystems throughout a changing climate. Whether providing valuable research through citizen science projects such as the Pollinator Project, led by Upper Campaspe Landcare Network, or enabling people to connect *and* reconnect to their local landscapes through activities such as

Wildflower and Weeds walks in Barrm Birrm, led by Riddells Creek Landcare. The 35 Landcare and Friend groups active across the shire help us in creating resilient communities and ecosystems.

#### Cool Changes: Community Climate Action Plans

With the aim of empowering and providing agency to the community, Council developed the Cool Changes program which works with communities throughout the shire to create and implement unique and place-based Community Climate Action Plans.

To date, Cool Changes has resulted in seven Community Climate Action Plans, four new climate action groups and immeasurable community connections and projects that help to build a more aware, more engaged and more resilient community. These plans, projects and people also played a big role throughout the development of this Climate Emergency Plan, providing clear community projects and priorities for action.

#### Climate Conversations

Additionally, to engage younger and older people on the topic of climate change, and recognising the intrinsic links between climate change and physical and mental health, the Bridging the Divide project helps facilitate discussions and action on climate change to be more accessible to the community.



#### **Council action**

Council has long recognised the need to lead by example, and over the years has taken significate action to reduce emissions from its operations, including:

- installing over 355kW of roof top solar panels on 17 Council owned and operated buildings,
- participating in Australia's largest ever emissions reduction project, the Victorian Energy Collaboration (VECO) to procure electricity as renewable energy,
- transitioning all residential street lights to energy efficient LEDs,
- being an early adopter of the Food Organics Garden Organics (FOGO) collection and composting service to reduce emissions from landfills,
- installing Council electric vehicle charging stations at each of the major shire office sites to support the transition to a low carbon future,
- facilitating the installation of five public electric vehicle charging stations,
- trialling innovative kerbside soft plastic collection in Romsey with the ambition of expanding across the shire,
- implementing a Sustainable Building Policy,
- implementing a Sustainable Procurement Policy,
- implementing a Single-use Plastic Policy aiming to eliminate all single-use plastics from council operations, activities and events.

## Counting Down to Zero

Council will continue to work to reduce emissions associated with its operations and services, through implementing the plan 'Counting Down to Zero', to reach Zero Net Emissions for its operations by 2030.

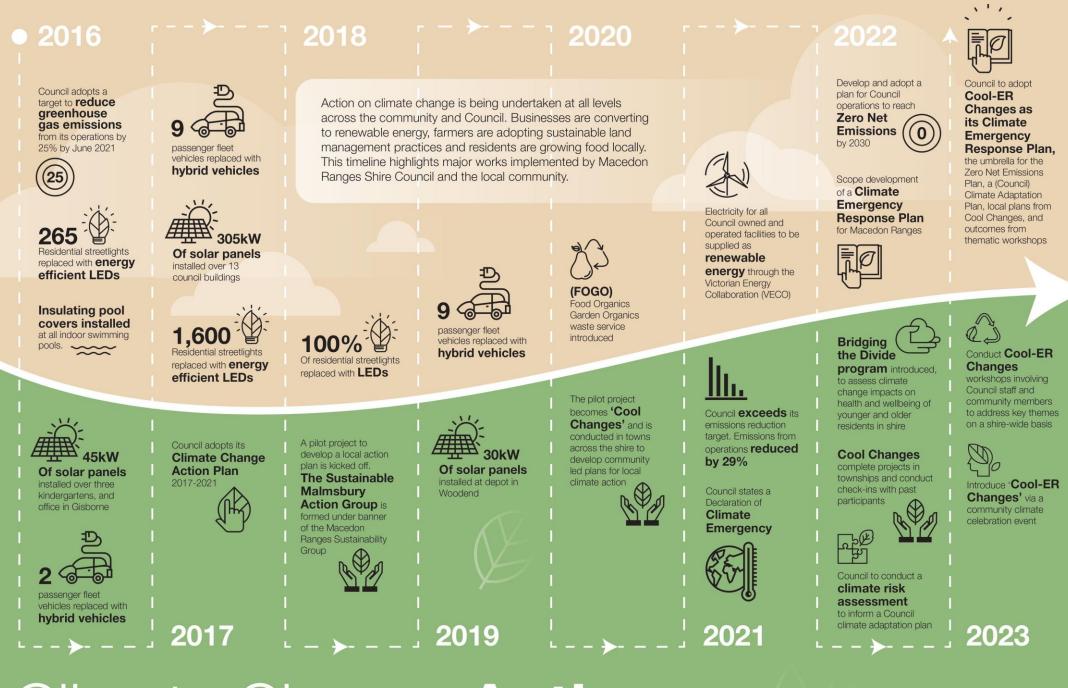
A Climate Risk Assessment was undertaken in late 2022 to inform Council of the risks posed by climate change to its operations and services, and to outline how climate change can be better addressed in council decision making processes. Some key recommendations from the assessment have been incorporated into this Climate Emergency Plan.

#### **Collaborative action**

Effective and impactful actions to addressing climate change requires partnerships and collaboration. This plan looks to bridge the efforts being made by community and Council and to create a shared vision for climate action in the Macedon Ranges Shire.

Addressing climate change offers an opportunity to empower everyone to help shape the future, and by focusing on the collective strengths of people from across the shire, we can create a community that is resilient, adaptive and connected.





Climate Change Actions

Macedon Ranges Shire Council

## **Our collective response**

#### Who is this plan for?

Everyone! Sustainable and ongoing climate action requires us to work together. This plan has been developed on the idea that all community sectors have a role to play and that many hands make light work.

Whilst Council welcomes the responsibility to lead, we all have an opportunity to mobilise and take action to address climate change. Businesses, schools, sporting clubs, community groups, agencies and individuals can all come together to create a groundswell of change.

We hope that this plan inspires participation and provides a clear pathway for everyone to do so.

We are currently living in the crucial transitional period to respond to climate change, whilst that can be an overwhelming prospect it also presents a great opportunity to be a part of humanity's biggest shift.

#### How was this plan developed?

Since its beginning, the Cool Changes program drew out community priorities for action at the local level. Whilst these Community Climate Action Plans were being created, climate change was also becoming increasingly addressed across multiple areas of Council's work– making it evident that valuable work is already underway in the shire. Collectively, the wide range of community and Council actions guided prioritisation and 'gap analysis' conversations to determine the next steps in the shire's climate action journey. Additionally, Council sought expert opinions from local and regional agencies to get deeper understanding of intersecting factors that shape the bigger picture of addressing climate change.

This was all facilitated within six themed workshops, whereby community members, Council representatives and regional agencies came together to create our climate response until 2030.



Overseeing the process was a 'Project Steering Group', comprised of the people listed below:

- Council departments Managers
- Business and Tourism
   representatives
- State government representative
- Traditional Owner consultant
- Youth and Healthy ageing advocates
- Sunbury and Cobaw Community Health representatives
- Macedon Ranges Sustainability Group representatives

Actions in this shire-wide plan will be implemented by both community groups or nominated units in Council. Actions listed as "**Community**" are indicating actions that Council will collaborate with community groups to lead.



#### Significant policies, strategies and reports that influenced our plan

#### Community Climate Action Plans

- Malmsbury: Community Climate Action Plan
- Cool Changes: 3442
- Cool Changes: Romsey & Lancefield
- Cool Changes: Riddells Creek
- Cool Changes: Gisborne
- Cool Changes: Kynetor
- Cool Changes: Macedon & Mt Macedon

#### State and Regional Plans & Strategies

- DJAARA Dhelkunya Dja Country Plan, Climate Change Strategy and Nyauwi Mutjeka (Renewable Energy Strategy)
- Taungurung buk dadbagi Taungurung Country Plan
- Victorian Climate Change Strategy
- Victorian Industry Adaptation Plan
- ADAPT Loddon Mallee
- Loddon Mallee Region Renewable Energy Roadmap
- Recycling Victoria: a new economy
- Victoria Climate Science Report

#### Council Plans & Strategies

- Council Plan
- Community Visior
- Environment Strategy
- Biodiversity Strategy
- Counting Down to Zero Net Emissions for Council Operations Plan 2030
- Council Climate Risk Assessment
- Waste & Resource Recovery Strategy
- Municipal Public Health & Wellbeing Plan
- Youth Strategy
- Positive Ageing Strategy
- Walking and Cycling Strategy



Presented by: Covid Creative Cultural Support Program Jo Mott Social Art

## **Principles and Priorities**

**PRINCIPLES:** Climate change has the ability to exacerbate many of the social, economic and environmental issues we are already facing. How do we ensure *everyone* can access clean, renewable energy? Energy efficient homes are good for our hip-pocket and our health but how do we make sure *all* houses in the Macedon Ranges are performing to a high standard? We know our farmers want to feed local families but how do we forge stronger connections to *our* local food system?

In an effort to address the complex social issues that climate change presents, 'principles' were identified to guide the engagement, development and implementation of this plan.

*Equity:* Ensures that no one is left behind in this transformative decade. Actions within this plan will look to make sure people within our community who are disproportionately affected by the impacts of climate change will be heard and supported to thrive.

**Embed First Nations perspective:** Provides the wisdom of deep knowledge and time. First Nations People's guidance in connecting to climate through spirit and the focus on solutions that advance self-determination, energy justice and biocultural knowledge has the ability to ground a response to the Climate Emergency rightfully with people and the community.

*Mobilisation:* Collective and cohesive action is the most impactful. Everyone has a role to play to address climate change and whether big or small, we hope this plan offers everyone an avenue to get involved in local climate action. **Collaboration and Partnerships:** No one organisation or community group can do it all. To make long-lasting changes, collaboration and partnerships need to be made to effectively address the varying issues presented by climate change.

**Regeneration:** Can be more than planting trees! Of course, we can regenerate ecosystems but we can also regenerate skills and knowledge that have been lost over time, as well as, regenerating community connections. These all play into a resilient and adaptive landscape (for people and place).



**PRIORITIES**: In times of transition we can get paralysed by all the different choices we could make. To guide the implementation of this plan, we'll look to the four key priorities below.

#### Our Climate Emergency priorities

**Pulling the 'emergency brake' on climate change** Number one priority right now are actions that rapidly accelerate the transition away from using fossil fuels and protecting our ecosystems.

Getting buildings and homes off gas, reducing overuse of fertilizer on farms, minimizing food waste and slowing ecosystem degradation all feed into slowing (and stopping) the root causes of climate change.

#### Transitioning to 'low carbon systems'

These are actions that present a pathway to a low or zero carbon alternative.

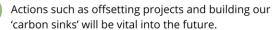
Increasing home energy efficiency, active transport, electric vehicles and regenerative farming practices all produce low levels of carbon emissions and show us our ability to adapt.

#### Social interventions

These actions build awareness and resilience across Council and community.

Education, advocacy, capacity building and storytelling all play a huge role in dealing with climate change.

#### Nature-based emissions removal



Protecting nature's current carbon sinks and adding new ones is a long-game, playing out over decades with steady and gradual increases in carbon stocks in trees and soil.



Project Drawdown': The Drawdown Roadmap

# **The Plan**





#### **TOPIC SUMMARY**

- Biodiversity projects
- Waterway enhancement
- Carbon offsets
- First Nations-led conservation

The topography, range of altitudes and localised climatic patterns of the Macedon Ranges results in rich and unique biodiversity values in the form of many different ecosystems, hosting a wide range of native plants and animals, on both public and private land.

In August 2018, the Macedon Ranges Shire was declared a distinctive area and landscape under Part 3AAB – Distinctive areas and landscapes, Section 46AO of the Planning and Environment Act 1987.

**CHALLENGES** Climate change poses great risks to our landscapes, ecosystems and habitat. Increasing temperatures and decreases in annual rainfall can have a profound impact on our ecosystems' ability to support wildlife and provide humans with our most basic needs like food and clean water. And increases in storm events can alter 100+ year old habitat and diminish the health of our waterways.

In addition to the climate emergency, we must acknowledge that we are also living amongst a biodiversity extinction crisis.

**POSSIBILITIES** Biodiversity is essential to human survival, wellbeing and economic prosperity. Luckily, one of the answers to dealing with climate change also has major co-benefits for our biodiversity – plants! Programs such as <u>BushBank</u> provide inspiring opportunities to restore degraded ecosystems, whilst also drawing CO2 down from the atmosphere to store in our plants and soil.

Macedon Ranges is fortunate to have three strong Traditional Owner groups (Dja Dja Wurrung, Taungurung, Wurundjeri Woi-Wurrung) in the region to walk alongside in the journey of connecting and caring for their Country in these times of change.

#### COUNCIL'S ROLE

- Actively protect, enhance and increase existing natural habitats to best conserve biodiversity using indigenous plantings.
- Use multiple sources of knowledge (science-based, community, Traditional Owner), in planning and delivering and monitoring biodiversity conservation actions.

#### **COMMUNITY OPPORTUNITIES**

- Engage with and increase membership numbers of active environmental community groups.
- Provide opportunities for connection and education for all shire residents to enhance, protect and conserve local ecosystems and habitat.

#### COLLABORATION

- Work closely together to enhance ecological, cultural and spiritual systems.
- Create a tangible pathway to a community net zero emissions shire with carbon offset plantings.

#### WHAT WE WILL MEASURE

- Presence and abundance of biodiversity indicator species
- Number of birds species by biolink area
- Number of mammals and species by biolink area
- Number of community environmental events and attendance
- Progress of carbon planting sites (projected and verified CO2 sequestered).



Key for resources, for action tables in each theme							
Internal	Can be resourced with existing internal staff and						
operational funds							
\$	<\$50,000						
\$\$ \$50,000 - \$100,000							
\$\$\$ \$100,000 +							
All indicative co	All indicative costs and subject to staff resourcing and funding						

Key for status and priority rating							
Ongoing till 2030							
2024-25							
2025-26							
2027-30							
As opportunity arises Actively responding to resource availability							

\*Collaborators yet to be formalised

#### **Theme: Nurturing Nature**

Together; individually and as a community we are connected to and care for Country every day.

We respect and nurture nature and all around us nature is thriving. The buzz of insects and bird calls are louder than traffic and children play and learn in bountiful native ecosystems under shaded canopies. Through restorative and regenerative work, the community is more connected with each other and

COMMUNITY VISION works together as stewards for the environment.

Water is valued and waterways provide biodiverse wildlife corridors where trees form bridges through our towns for possums to clamber over. Nature and the natural environment forms the basis for all future decision making, acknowledging the quality of life nature enables.

#	Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
NN1	Habitat connectivity Increase habitat plantings in priority areas via Biolink Boost grants, Landcare support, connecting landholders to Bushbank, and potentially the North Central Catchment Management Authority (NCCMA) Community Carbon Pilot Project.		Internal	Commenced (ongoing)	Environment	<ul> <li>Biolinks Alliance</li> <li>Parks Victoria (PV)</li> <li>VicRoads and VicTrack</li> <li>Landholders</li> <li>Landcare and Friends groups</li> <li>Melbourne Water (MW)</li> <li>Traditional Owners</li> <li>NCCMA</li> <li>Cassinia Environmental</li> <li>Macedon Ranges Community Enterprises (MRCE)</li> </ul>



#	Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
NN2	Integrated Water Management Work with Water Authorities to develop and implement Integrated Water Management Plans that value water security and healthy waterways, and that address all elements of the water cycle		Internal (with incoming WSUD Officer)	Commenced (ongoing)	Engineering Services	<ul> <li>Environment</li> <li>MW</li> <li>Coliban Water (CW)</li> <li>Greater Western Water (GWW)</li> <li>Southern Rural Water (SRW)</li> <li>Dept Environment, Energy and Climate Action (DEECA)</li> <li>NCCMA</li> <li>Property developers</li> <li>Traditional Owners</li> </ul>
NN3	<b>Future-proof plantings</b> Accelerate public street tree planting and revegetation initiatives, prioritising selection of species that support biodiversity and are adapted to anticipated changes in climatic conditions.		\$\$	Commenced (ongoing)	Open Space	<ul> <li>DEECA</li> <li>NCCMA</li> <li>MW</li> <li>PV</li> <li>Landcare,</li> <li>Traditional Owners</li> </ul>



	Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
NN4	Carbon Sequestration Projects 4.1 Continue to develop a Local Community Carbon Offsets Program with NCCMA and regional partners, and provide opportunity for local community groups, businesses and residents to implement offset plantings 4.2 Investigate the availability of Council-owned land (roadsides, waterway reserves, public space) to provide sites for offsets 4.3 Investigate opportunities to expand the program to offset community emissions		\$	Commenced (ongoing)	Environment	<ul> <li>NCCMA</li> <li>Neighbouring shires</li> <li>Traditional Owners</li> <li>Farmers for Climate Action</li> <li>Landholders and managers</li> <li>Landcare</li> </ul>
NN5	River, creeks and waterway care Continue to develop and implement Waterway Management Plans, support the co-ordination of community contributions to their implementation, and regularly review plans in the context of adaptive management.		Internal	Commenced (ongoing)	Environment	<ul> <li>NCCMA</li> <li>MW and CW and GWW</li> <li>Landcare</li> <li>Landholders</li> <li>Traditional Owners</li> </ul>



#	Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
NN 6	<b>Community education</b> Provide opportunities for all sectors of the community to build their awareness and capacity for conserving biodiversity values, protecting waterways and regenerating ecosystems.		Internal	Commenced (ongoing)	Environment	<ul> <li>Landcare</li> <li>Friends Groups</li> <li>Field Naturalists</li> <li>Traditional Owners</li> <li>Biolinks Alliance</li> </ul>
NN 7	<ul> <li>Protect remnant vegetation</li> <li>1.1 Continue to raise awareness amongst landholders about the legal requirements associated with native vegetation clearing.</li> <li>1.2 Develop and implement an Illegal Native Vegetation Removal Compliance Policy.</li> </ul>		Internal	Commenced (ongoing)	Environment	<ul> <li>Statutory Planning</li> <li>Local Laws</li> <li>DEECA</li> <li>Landcare</li> <li>Friends Groups</li> </ul>
NN 8	<b>Urban Biodiversity</b> Support residents to create gardens that enhance biodiversity values in urban areas.		Internal	Very High	Environment	<ul> <li>Landcare</li> <li>Friends groups</li> <li>Kyneton: Cool Changes</li> <li>MRCE</li> </ul>
NN 9	Adaptive pest plants and animals planning Ensure that the next review of the Pest Plant and Animal Strategy 2024 accounts for the impacts of climate change.		Internal	Very High	Environment	<ul> <li>DEECA</li> <li>Landcare</li> <li>Friends Groups</li> <li>Traditional Owners</li> </ul>



#	Action	Co-Benefits	Resources	Timeframe, Status, Priority	Lead	Collaborators*
NN10	Irrigation Enhancements for Council Open Space Further investigate passive and recycled water opportunities to ensure Council-owned public open space can adapt to anticipated climatic changes		\$\$\$	Medium	Open Space	<ul> <li>Engineering</li> <li>CW</li> <li>MW</li> <li>GWW</li> <li>SRW</li> </ul>
NN11	Continue implementation of the Biodiversity Strategy					





## Climate-ready Communities

#### TOPIC SUMMARY

- Strengthening our local food system
- Better homes, building and developments
- Sustainable living
- Community climate action

The Macedon Ranges Shire is a decentralised, 'peri-urban' municipality, consisting of multiple townships that all have distinct community demographics. The mix of urban and rural communities in and around the towns means that a local and tailored approach is needed when exploring solutions to climate change challenges and related programs and projects.

**CHALLENGES** Decreased frosts, decreased annual rainfall, increased annual temperatures and increased extreme weather events are key challenges for our local food system and farming community. Effectively adapting to forecasted climatic conditions whilst reducing emissions is key to our response to the Climate Emergency. Additionally, forecasted increases in our population cannot be overlooked when developing our response to climate change. We need to be able to find a balance between growth, protecting our farmland and environment whilst ensuring future developments consider its impact on potentially helping or hindering the shires emissions profile.

**POSSIBILITIES** The farming community can play a key role in addressing climate change through modifying their operations. One example of the shift could be embracing regenerative farming practices. This is renowned for building soil health (and carbon), improving biodiversity and reducing reliance on chemical inputs, which ultimately, helps increase farm resilience to the forecasted changed.

It's important to remember that not all development is bad development we have a chance now to shape our townships to be able to better respond to climate changes. Prioritising environmentally sustainable design, 'green infrastructure' and active transport demonstrates that changes to our townships can be designed and built with climate change as the key consideration for future communities.

Our homes also provide a great opportunity for change, but we must ensure the transition to energy efficient homes powered by renewable energy is a socially just transition that leaves no one behind.

#### COUNCIL'S ROLE

- Provide educational pathways
- Provide support to low-income households to increase energy efficiency and entry to the renewable energy market
- Provide financial and in-kind support to community groups and organisation participating in climate action projects.

#### **COMMUNITY OPPORTUNITIES**

- Investigate ways to help households to 'get off gas' and increase energy efficiency.
- Look for opportunities to connect with our local growers.

#### COLLABORATION

 Deliver climate action projects that also provide community connection, cohesion and resilience.

#### WHAT WE WILL MEASURE

- Number of landholders participating in Healthy Landscape program
- Percentage of households with rooftop solar
- Number of households accessing Residential Efficiency Scorecard
- Percentage of township urban canopy
- Greenhouse gas emissions by residential, industry and commercial



Key for resources, for action tables in each theme							
Internal	Can be resourced with existing internal staff and operational funds						
\$ <\$50,000							
\$\$ \$50,000 - \$100,000							
\$\$\$ \$100,000 +							
All indicative co	All indicative costs and subject to staff resourcing and funding						

Key for status and priority rating							
Ongoing till 2030							
2024-25							
2025-26							
2027-30							
As opportunity arises Actively responding to resource availability							

\*Collaborators yet to be formalised

#### **Theme: Climate-ready Communities**

COMMUNITY

Our climate ready community has a well-established sharing culture where we swap and share local food, skills, community resources and knowledge. We are prepared and hopeful with accessible and safe walking and cycling paths, community batteries and local renewable energy.

We have re-localised in every sense of the word. Waste is an outgrown concept - everything is a resource. Our community is caring and kind and our homes are comfortable using renewable resources and passive solar design.

#	Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
CRC1	Healthy Landscapes Continue to deliver and evolve the Healthy Landscapes Program to adapt to future challenges for rural and farming communities under forecast climate scenarios		\$\$	Commenced (ongoing)	Environment	<ul> <li>NCCMA</li> <li>MW and CW</li> <li>Partnering councils</li> <li>DJARRA and Traditional Owners</li> </ul>
CRC2	Bulk buy household solar Develop, promote and implement local bulk buy initiatives of solar and energy efficiency upgrades (eg heat pumps, reverse cycle air conditioners, etc).		\$\$	Commenced (pilot)	<b>Community</b> (MRSG – Go Renewable Energy Group)	<ul> <li>Environment</li> <li>Communications</li> <li>MRCE</li> </ul>

🔯 Nurturing Nature 🌇 Climate-ready Communities 🤷 Post Fossil Fuels 🦃 Health and Wellbeing 🔟 Waste and Circular Economy 💭 Response and Recovery



#	Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
CRC3	Business energy support Promote and increase awareness of support programs that enable businesses to engage or transition to more sustainable practices (eg, Power Purchase Agreements, State and Federal Small Business energy incentives, Zero Emissions Vehicle Transition programs, CitySwitch, programs like Wine Victoria's "Growing Victorian wine into the future", eco-tourism programs and practices).		\$	Commenced (ongoing)	Environment, Economic Development	<ul> <li>Economic Development</li> <li>Business and Tourism Associations</li> <li>Regional Development Victoria</li> </ul>
CRC4	MRSG - Regenerative Farmers Action Group Support the Macedon Ranges Sustainability Group's Regenerative Farmers Action Group to promote the human, environmental and economic benefits to the community of regenerative agriculture, and advocate for regenerative farmers in the Macedon Ranges Shire.		\$	Commenced (ongoing)	Community	<ul> <li>Environment</li> <li>Landholders and Managers</li> </ul>
CRC5	Resource Smart Schools Amplify the Resource Smart Schools program by: 1.1 Promoting and participating in regular networking sessions facilitated by Sustainability Victoria 1.2 Promote school-based projects for sustainability	8 m	Internal	Commenced (ongoing)	Environment	• Sustainability Victoria (SV)



#	Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
CRC6	Embed and Expand Council Sustainable Buildings Policy and Practice 1.1 Lead by example through ensuring that best practice environmental performance standards are met in works to buildings, and embed climate considerations in all new building designs 1.2 Ensure sufficient funds are provided to enable application of sustainable design principles in the design and construction of all works to buildings.		\$\$\$	Commenced (ongoing)	Environment	• Facilities and Operations
CRC7	Water Sensitive Urban Design Build capacity within Council to ensure water sensitive urban design assets are delivered as a part of future subdivisions to maximise storm water treatment. Ensure sufficient maintenance funding is provided to optimise performance of treatments. Explore options to treat stormwater at larger catchment scales.		\$\$	Very High	Engineering Services	<ul> <li>Environment</li> <li>Strategic Planning</li> <li>Melbourne Water</li> </ul>



#	Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
CRC8	Council capacity to collectively address climate change Provide training and resources to staff across all Council departments to enable them to better understand and address the impacts of climate change.		Internal	Very High	Environment	People and Wellbeing
CRC9	Household energy efficiency 1.1 Provide community education to support residents to convert to 'all-electric' homes 1.2 Promote state government programs that enable home energy efficiency upgrades, like the Solar Homes Program and the Residential Efficiency Scorecard.	Q	Internal	High	Environment	• MRSG
CRC10	Climate action grants and support 1.1 Pilot a Climate Action Grant program that provides financial assistance to community groups engaging in grassroots climate action 1.2 Continue providing in-kind support to community climate projects and the implementation of Community Climate Action Plans		Internal	Very High	Environment	<ul> <li>Community Development</li> <li>MRSG</li> <li>Landcare</li> <li>Friends group</li> <li>Cool Changes groups</li> </ul>



#	Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
CRC11	Equitable household transition Develop and pilot a dedicated support program for low- income households to access solar power, for example, a modified version of Solar Savers for council-owned social housing units. Aim to expand the program to all low income households	0	\$\$\$	Very High	Environment	<ul> <li>Property and Valuations</li> <li>Community Strengthening</li> <li>SCCH</li> <li>MRSG</li> </ul>
CRC12	Water Literacy Education Promote the importance of sustainable water management and usage in partnership with water authorities.		Internal	Medium	Environment	<ul> <li>Landcare</li> <li>Friends groups</li> <li>MW and GW and GWW</li> <li>NCCMA</li> <li>Traditional Owners</li> <li>Macedon Ranges Water Think Tank</li> </ul>
CRC13	Urban Cooling Develop an Urban Cooling Strategy that establishes targets for canopy cover and public plantings and which identifies actions to ensure appropriate protections are in place for significant trees across the shire.		\$	Medium	Environment	Open Space



#	Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
CRC14	Community food security Support initiatives that increase local food security and local food production (eg. Community Gardens, Food Forests, food system co-operatives, national, state and regional initiatives such as 'Grow It Local')		\$	As opportunity arises	Community Wellbeing	<ul> <li>Environment</li> <li>Neighbourhood and Community Houses (NHH/CH)</li> <li>Church groups</li> <li>Schools</li> <li>Healthy Loddon Campaspe (HLC)</li> <li>SCCH</li> <li>MRCE</li> </ul>
CRC15	<b>Connecting with local farmers</b> Provide opportunities for communities to meet and connect with local growers and food providers (additional to Farmers Markets).	8	\$	As opportunity arises	Community	<ul> <li>Agricultural show committees</li> <li>Regional business associations</li> </ul>
CRC16	Climate ready housing Explore options to introduce an Environmental Sustainable Design (ESD) policy for new developments into the planning scheme. Embed ESD and sustainable subdivision principles into requirements into precinct structure plans, development plans and subdivisions.		Internal	As opportunity arises	Strategic Planning	Environment





## Post Fossil Fuels

#### **TOPIC SUMMARY**

- Towards zero-carbon electricity
- Community renewable energy
- Active transport
- Zero-carbon vehicle transition

With the 'Energy' and 'Transport' sectors being mostly fuelled by coal, oil and gas, solutions that accelerate our transition to low (and zero) emission alternatives play the most crucial role in '*pulling the emergency brake*' on climate change.

Transport and electricity are the shire's two biggest sources of emissions. 'On-road' transport is responsible for 25% of the shire's emissions whilst 'commercial', 'residential' and 'industrial' electricity use are collectively responsible for 47% of total emissions from the shire.

**CHALLENGES:** Our unique geography and topography present distinct challenges to enabling local renewable energy projects such as solar and wind farms. Alongside the shire's highly valuable farmland, high biodiversity and landscape values, and state planning regulation not allowing wind farms in the shire we need to be creative in our local energy solutions. Additionally, the decentralised nature of our shire and proximity to the Melbourne CBD results in approximately half of residents using their cars to commute to work (7) and having a higher than regional Victoria average car ownership - with approximately 29% of households own 3 or more cars (8).

**POSSIBILITIES:** Tackling electricity and transport emissions present the greatest possibility for a zero-carbon future in the Macedon Ranges. Already, there are approximately 8,000 solar installations, generating approximately 48MW of electricity (9). By increasing this output via rooftop systems, the shire is well placed to investigate and potentially host micro-

grids, Virtual Power Plants and energy trading amongst residents into the future.

Shifting our transport methods to low-carbon options is also an equally important opportunity. This could be through the uptake of electric vehicles and an increase in walking and cycling, supported by safe and enabling infrastructure.

Additionally, DJAARA's Climate Change Strategy and Renewable Energy Strategy paves the way for ensuring the generational energy transition enhancing First Nation's self-determines and energy justice.

#### COUNCIL'S ROLE:

- Provide infrastructure to facilitate active transport
- Facilitate installation of electric vehicle charging stations
- Transition Council's passenger fleet to electric vehicles.
- Respond to innovative transport initiatives that shift communities reliance on cars ownership (car share, e-bikes, e-scooters)
- Advocate for infrastructure upgrades to enable 'energy resilience' projects and improved public transport.

#### **COMMUNITY OPPORTUNITIES:**

- Participate in community-led bulk buy programs (for renewable energy and electric vehicles)
- Shift to active or public transport

#### **COLLABORATION:**

- Work together on large scale renewable energy and energy storage projects.
- Explore what better active transport looks like in the shire.

#### WHAT WILL WE MEASURE

- Number of electric vehicles registered in the shire
- Number and collective output of solar on Council-owned buildings
- Annual distance of new walking and cycling paths



Key for resources, for action tables in each theme				
Internal Can be resourced with existing internal staff				
operational funds				
\$	<\$50,000			
\$\$	\$50,000 - \$100,000			
\$\$\$ \$100,000 +				
All indicative costs and subject to staff resourcing and funding				

Key for status and priority rating					
Ongoing till 2030					
2024-25					
2025-26					
2027-30					
Actively responding to resource availability					

\*Collaborators yet to be formalised

#### **Theme: Post Fossil Fuels**

- COMMUNITY VISION Our community is healthier in so many ways as a result of our post fossil fuel future. We are physically healthier with clean air to breathe and a more active lifestyle including walking and cycling.
- We are comfortable in our passive solar homes that buffer us from weather and climate extremes. Electric vehicles are the norm and charging
- infrastructure is integrated into our towns. Re-localisation consists of community batteries for storing our renewable energy. As a community resource,
- electricity is valued and used wisely.
- The neighbourhoods are alive, full of the sounds of community who feel proud to be walking their talk for future generations.

#	Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
PFF 1	Support Electric Vehicle uptake Provide shire-specific information and activities to promote the benefits of electric vehicles, and facilitate the development of an electric vehicle bulk buy program.	A HI	\$	Commenced (ongoing)	<b>Community</b> (MRSG)	<ul> <li>Environment</li> <li>Regional community groups</li> <li>Private enterprises</li> <li>Residents</li> <li>MRCE</li> </ul>



#	Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
PFF 2	MRSG - Transport Action Group Amplify the work of the Macedon Ranges Sustainability Group's Transport Action Group (TAG), who advocate for and promote walking, cycling/e-cycling, public transport, car-pooling and sharing, and electric vehicles in the Macedon Ranges Shire.		\$	Commenced (ongoing)	Community	<ul> <li>Environment</li> <li>DEECA</li> <li>Central Vic. Greenhouse Alliance (CVGA)</li> <li>Bicycle User Groups (BUGs)</li> <li>Residents</li> </ul>
PFF 3	MRSG – Renewable Energy Action Group Amplify the work of the Macedon Ranges Sustainability Group's Renewable Energy Action Group, who actively work towards the shire becoming carbon neutral by 2030, by leading, supporting and investing in local energy efficiency, generation and offset projects in partnership with community, government and industry.		\$\$\$	Commenced (ongoing)	Community	<ul> <li>Environment</li> <li>DEECA</li> <li>CVGA</li> <li>Residents</li> <li>Local businesses</li> <li>MRCE</li> </ul>
PFF 4	<b>Council's buildings transition</b> Continue to phase out the use of gas at council operated sites. Replace all gas appliances with electric alternatives as they become redundant, or in 2028-2029, whichever comes first.		\$\$\$ (>\$3M for the two aquatic centres)	Commenced (complete by 2028-2029)	Facilities Projects, Facilities Management, Environment	Potential funding organisations



#	Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
PFF 5	Electric Vehicle infrastructure Develop a policy to guide and increase the installation of electric vehicle charging infrastructure across the shire.	S HE	Internal	Very High	Environment	<ul> <li>Engineering Services</li> <li>Economic Development</li> <li>Property and Valuations</li> <li>Industry partners</li> <li>DEECA</li> <li>MRCE</li> </ul>
PFF 6	Pathway to renewable energy for community groups 1.1 Conduct a pilot project with the Halls Committees of Management to establish a process to "bring-in" electricity bills to Council's Power Purchase Agreement for renewable electricity (VECO) in 2023-2024 1.2 Transition all Council owned buildings where community groups pay energy bills to be included in VECO by 2028-2029, through amendments to leasing, licencing, and user agreement processes.		\$\$\$ (1 EFT for 2 years)	Very High (complete by 2028-2029)	Environment	<ul> <li>Property and Valuations</li> <li>Arts and Culture</li> <li>Recreation</li> <li>Community Development</li> <li>Tenants in council owned buildings</li> </ul>



#	Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
PFF 7	<ul> <li>Increase renewable energy generation:</li> <li>1.1 Increase rooftop solar energy generation and storage at council facilities</li> <li>1.2 Explore the possibility of establishing a small-scale solar farm on a closed landfill site within the shire</li> <li>1.3 Seek funding to progress council's solar generation capability.</li> </ul>		\$\$\$	High	Environment	<ul> <li>Facilities Management</li> <li>Facilities Projects</li> <li>Industry partners</li> <li>MRCE</li> </ul>
PFF 8	Uptake and engagement in active transport 1.1 Increase active transport infrastructure and security for pedestrians and cyclists, provide supporting infrastructure like bicycle repair stations and e-bike chargers, and investigate the development of "Travel Smart" maps (extending from the existing series of "walking routes" maps) 1.2 Trial pop-up bicycle paths to popular destinations and services in townships to gather local data for informing infrastructure works.		\$\$	As opportunity arises	Engineering Services, Environment, Strategic Planning, Recreation, Open Space, Community Wellbeing	<ul> <li>BUGs</li> <li>Sporting clubs</li> <li>Schools</li> <li>Healthy Loddon Campaspe</li> <li>SCCH</li> <li>MRCE</li> </ul>



#	Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
PFF 9	Integrated Sustainable Transport Strategy Develop a comprehensive integrated and holistic transport strategy for the shire that increases opportunities for residents to engage with active transport, public transport, and transition to low carbon vehicles.		\$\$\$	High	Engineering Services, Environment, Strategic Planning, Recreation	<ul> <li>VicTrack</li> <li>VicRoads</li> <li>Public Transport Victoria (PTV)</li> <li>MRSG</li> <li>BUGs</li> </ul>
PFF10	Local, community-owned renewable energy projects Continue to investigate opportunities for community energy projects such as community or neighbourhood batteries, and community-owned renewable energy enterprises		\$	As opportunity arises	<b>Community</b> (MRSG – Renewable Energy Action Group)	<ul> <li>Environment</li> <li>Cool Changes groups</li> <li>Community Power Agency</li> <li>Centre for New Energy Technology (C4NET)</li> <li>MRCE</li> </ul>
PFF11	Continue implementation of Counting Down to Zero to help ensure Council operations and services transition to a fossil fuel free future.					





## Health and Wellbeing

#### TOPIC SUMMARY

- Sport and recreation in a changing climate
- Mental health support
- Community support networks
- Climate-conscious diets

The World Health Organisation has declared climate change to be the biggest health threat facing humanity (8). This sentiment is echoed in our Municipal Public Health and Wellbeing Plan with an overarching goal of creating a community that is committed to tackling the climate emergency and its impacts on health.

**CHALLENGES** Climate change poses both direct and indirect challenges to living healthy and thriving lives. Direct impacts come in the form of increased contact with natural disasters such as fire, floods and storm – which we know are forecasted to increase in our region. Recovery from the physical impacts of these events can be costly in time and money to individuals, businesses, and communities. Often forgotten are the threats and impacts of prolonged extreme heat to older residents and people living in sub-standard buildings. Here, in the Macedon Ranges, we've faced all these disasters over the past 5 years.

Indirect and ongoing impacts of extreme weather conditions include reduced safety for community sport and recreation, outdoor activities and social connections, further impacting our health and wellbeing. Equally important to consider is the mental health impacts that climate change presents, for example, "eco-anxiety", whereby the constant threat of climate change can create a state of anxiousness within the community.

**POSSIBILITIES** Almost all action on climate has a co-benefit to our health and wellbeing. Whether improving the heating and cooling efficiency in our homes or joining a local Landcare group to spend time in nature, small

steps for sustainability increase our health and wellbeing. By taking action on climate together, we also strength social cohesion and connection making us more resilient in the face of climate change.

Our opportunity lies in education and support. By strengthening our collective knowledge of climate change's health risks and support our most vulnerable to understand as well, we can make great impact on our ability to adapt to a changing climate.

#### COUNCIL'S ROLE

- Raise awareness about the links between climate change and health
- Promote the benefits of community connection and participation
- Support community-led initiatives that address the health impacts of climate change through grants

#### COMMUNITY OPPORTUNITIES

- Engage with your local clubs and help them to be more sustainable
- Develop initiatives to support our community to lead healthier, more active lives.

#### COLLABORATION

• Work together to create person-centred resources that meet the needs of distinct community groups (eg. farmers writing for farmers and youth engaging with youth).

#### WHAT WE WILL MEASURE

- Youth participation levels
- Community / environment group participation 'health' check
- Online resources reach



Key for resources, for action tables in each theme						
Internal Can be resourced with existing internal staff an operational funds						
\$	<\$50,000					
\$\$	\$50,000 - \$100,000					
\$\$\$ \$100,000 +						
All indicative co	osts and subject to staff resourcing and funding					

Key for status and priority rating					
Commenced Ongoing till 2030					
Very High	2024-25				
High	2025-26				
Medium	2027-30				
As opportunity arises	Actively responding to resource availability				

\*Collaborators yet to be formalised

# Theme: Health and Wellbeing

H+W 1 MRS Exte	ction					
Exte		Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
Grou food	RSG - Veg Action Group xtend the scope and build on partnerships of the acedon Ranges Sustainability Group's Veg Action roup, through establishing a coordinated "healthy local bod campaign" that promotes benefits, provides centives, and builds capacity in the community to grow		\$	Commenced (ongoing)	Community	<ul> <li>Community Wellbeing</li> <li>Environment</li> <li>Healthy Loddon Campaspe (HLC)</li> <li>SCCH</li> <li>DJAARA</li> <li>Loddon Mallee Public Health Unit (LMPHU)</li> </ul>



#	Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
H+W2	Amplify benefits of participation Increase levels of volunteerism and engagement with local community environment groups through promoting the associated health and wellbeing benefits (e.g. improved local connections and sense of purpose).	8	Internal	High	Environment	<ul> <li>Community Development</li> <li>Community Wellbeing</li> <li>Landcare</li> <li>Friends groups</li> <li>MRSG</li> <li>Community orgs</li> <li>MRCE</li> </ul>
H+W3	Youth Action Support Create a network of young people who "are fired up to do something". Invite, include and activate young people in the Shire to get involved in and advocate for more climate action		\$	As opportunity arises	<b>Community</b> (MRSG - Local Education Action Group)	<ul> <li>Environment</li> <li>Youth Services</li> <li>Schools</li> <li>Faith groups</li> </ul>
H+W4	Extreme Weather Support Provide customised materials and communications to assist at-risk residents to be prepared to act on days of extreme weather conditions and events. Ensure that materials and communications provide tangible household and social actions (e.g. 'phone trees', door knock checks, local 'cool spaces').		\$	High	Environment	<ul> <li>Community Development</li> <li>Emergency Response</li> <li>NHH / CHs</li> <li>Libraries</li> <li>Aged care Providers</li> <li>LMPHU</li> <li>SCCH</li> <li>MRCE</li> </ul>



#	Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
H+W5	Sustainable sports 1.1 Promote and support actions for sustainability amongst sports clubs in the shire (eg, plastic-free canteens, textile and equipment reuse and recycling, entrance to the renewable energy market, water literacy). 1.2 Consider undertaking an audit to identify what action is already underway, and how clubs can best be supported		\$	Medium	Environment	<ul> <li>Recreation</li> <li>Community Wellbeing</li> <li>Resource Recovery</li> <li>Green Planet Sports</li> <li>SCCH</li> <li>Local sports clubs and associations</li> </ul>
H+W6	Mental health support Provide dedicated information about, and pathways to, mental health support for residents considered to be acutely affected by climate impacts (e.g. farmers, youth, First Nations people, young parents and new families, CFA) and connect to local expert organisations	The second se	\$	As opportunity arises	Environment	<ul> <li>Community Wellbeing</li> <li>Youth Services</li> <li>SCCH</li> <li>Church groups</li> <li>NHHs / CHs</li> <li>Libraries</li> <li>Traditional Owners</li> <li>Community advocates</li> <li>LMPHU</li> </ul>





# Waste and Circular Economy

#### **TOPIC SUMMARY**

- Waste minimisation
- Resource recovery
- Towards a Circular Economy
- Community education

Currently, two-thirds of greenhouse gas emissions in Victoria are from the waste sector (9). The current take-make-dispose model of manufacturing is an unsustainable model that needs to be replaced with more efficient and sustainable alternatives. With such waste management innovations as soft plastic, bottle tops and bread tag recycling at all three of Resource Recovery Centres and the kerbside soft plastics collection trial, we've been leaders in our waste management and welcome the transition to a Circular Economy.

A Circular Economy sees the continual reuse and recycling of materials, reducing the need to use virgin material and decreasing items going to landfill.

**CHALLENGES** Currently the environmental impacts of collecting and transporting different waste streams, and disposing or re-purposing them in a responsible manner form a significant part of Council's total carbon footprint. Avoiding waste is still the best approach for addressing the environmental and financial challenges associated with waste management. Educating residents and visitors to optimise the use of resources, as opposed to manage them correctly at their end of life, remains an ongoing role for council.

**POSSIBILITIES** Being an early adopter of the four-bin kerbside collection system means that both Council and the community are well placed to take the next steps in tackling waste management challenges. Depending on trial results, there's the potential for kerbside soft plastic collection to

increase throughout the shire. Additionally, conducting targeted campaigns to assist businesses to reduce plastic and food waste whilst adopting more environmentally friendly practices could make great impact in our emissions. Also, establishing local initiatives like Repair Cafes and Tool Libraries will also help keep products and materials in use for longer periods of time and promote a sharing economy throughout the shire.

Additional staff resourcing from 2023-2024 to operate Council's three resource recovery facilities will increase the ability to monitor and divert materials from landfill and play a more significant role in a local "reuse economy".

#### COUNCIL'S ROLE

- Continue to provide innovative waste education and behaviour change programs
- Lead by example. Ensure all Council managed and council funded events minimise waste generation

### **COMMUNITY OPPORTUNITIES**

• Celebrate, promote and enable repairing, mending, composting, sharing, trading

### COLLABORATION

• Provide creative engagement events to upskill residents to be able to reduce waste.

### WHAT WE WILL MEASURE

- Kerbside collection weight by waste stream
- Total waste received at transfer stations
- Emissions of waste transportation by waste stream



Key for resources, for action tables in each theme					
Internal	Can be resourced with existing internal staff and				
operational funds					
\$	<\$50,000				
\$\$	\$50,000 - \$100,000				
\$\$\$ \$100,000 +					
All indicative costs and subject to staff resourcing and funding					

Key for status and priority rating					
Ongoing till 2030					
2024-25					
2025-26					
2027-30					
Actively responding to resource availability					

\*Collaborators yet to be formalised

### **Theme: Waste and Circular Economy**

Our lives feel more joyful and connected from changing the way we think about waste - nothing is wasted in 2030 and what used to be thrown away is now considered a resource. Our gardens are productive and flourishing and repair cafes thrive in each town.

COMMUNITY We are a plastic free community and all packaging is made from recycled materials and can be recycled. Businesses are on board and there are many employment opportunities where innovation is encouraged. We are satisfied that we are making a difference.

#	Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
W+CE1	Kerbside soft plastic collection Review results of Romsey Soft Plastics Trial and investigate feasibility of increasing the number of households able to participate in kerbside soft plastic collection.		\$\$\$	Commenced (ongoing)	Resource Recovery	Industry     partners
W+CE2	Business waste support Support businesses to investigate circular economy opportunities and promote innovative waste minimisation strategies and programs (e.g. connecting waste/resources to the local market/consumer)		\$	Very High	Economic Development	<ul> <li>Resource Recovery</li> <li>Environment</li> <li>Business and Tourism Associations</li> <li>Industry groups</li> <li>MRCE</li> </ul>



#	Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
W+CE3	Education, engagement and action Develop the Waste Minimisation and Resource Recovery Education and Engagement Plan, and partner with community groups to deliver timely and relevant engagement events and programs.		Internal	Very High	Resource Recovery	<ul> <li>Environment</li> <li>MRSG</li> <li>NHHs / CHs</li> <li>Business and Traders Assocations</li> </ul>
W+CE4	Repair Cafes and Tool Libraries Promote the 'sharing economy' and investigate possibility of a co-ordinated network of Repair Cafés and Tool Libraries throughout the shire	а Зыр	\$	As opportunity arises	Resource Recovery	<ul> <li>Environment</li> <li>MRSG</li> <li>NHH / CHs</li> <li>Men's sheds</li> <li>Social enterprises</li> <li>MRCE</li> </ul>
W+CE5	Incentives for kerbside waste minimisation: Investigate the possibility for altering waste charges, including bin size and 'pay by weight' options.	а Стан	\$\$\$	As opportunity arises	Resource Recovery	<ul> <li>SV</li> <li>Local government waste networks</li> <li>Waste collection contractors</li> </ul>
W+CE5	Continue implementation of the Waste and Resource Recovery Strategy 2021-2026.					





# Response and Recovery

#### **TOPIC SUMMARY**

- Co-ordinated and informed response
- Adaptation projects
- Community readiness and resilience
- Safe places

Even with global action to reduce emissions, the impacts of climate change will continue to increase over the coming decades due to past and current emissions (10). Recognising and adapting to climate change plays a key role in managing our experience of, and vulnerability to, its impacts.

Adaptation can come in the tangible form of upgraded buildings and greener infrastructure, and also intangibly within our everyday lives, through building our knowledge on community resilience and preparedness for natural disasters.

**CHALLENGES** We're already seeing forecast climatic conditions happening here in the shire. Several extreme weather events in recent years have resulted in physical damage to assets and disruptions to lifestyles and businesses, and demanded increased recovery efforts from across the community.

As new residents come to live in the shire, some residents have outlined concerns over our collective knowledge of the risk of "natural disasters" and our collective level of preparedness. Within Council, insecure funding and limited ongoing staffing resources present critical challenges to providing continuity to our recovery response and ability to build solid community relationships as the foundation for increasing resilience.

From this perspective, it must be noted that no actions listed in this theme can be achieved without the additional resources being established within Council.

**POSSIBILITIES** Within the community, there are strong lived experiences to natural disasters. This means that for long-lived residents the awareness of the associated risks is high, and peoples' collective experience and insights positions us well to improve programs and initiatives to build capacity for community-led recovery after extreme weather events and other major disruptions. Emergency Relief Centres and Neighbourhood Safer Places also present opportunity for physical adaption to support community resilience through modifications to be able to operate off-grid, to further support community resilience.

#### **COUNCIL'S ROLE**

- Increase organisational staff resources to recovery and resilience
- Continue to update our built environment and assets with climate adaptation in mind, prioritising renewable energy.
- Provide educational opportunities that build community capacity and resilience.

## **COMMUNITY OPPORTUNITIES**

- Volunteer with local CFA, SES, or other support networks
- Review your home for preparedness to the various natural disasters predicted for the region.

### COLLABORATION

 Work together to create respectful relationships that build resilience in difficult times

## WHAT WE WILL MEASURE

• Not applicable



Key for resources, for action tables in each theme						
Internal Can be resourced with existing internal staff and operational funds						
\$	<\$50,000					
\$\$	\$50,000 - \$100,000					
\$\$\$ \$100,000 +						
All indicative co	osts and subject to staff resourcing and funding					

Key for status and priority rating					
Commenced Ongoing till 2030					
2024-25					
2025-26					
2027-30					
Actively responding to resource availability					

\*Collaborators yet to be formalised

# Theme: Response and Recovery

COMMUNITY

Our community is well aware of the risks that may occur and have in place plans making us feel prepared and safe. Everyone has a part to play including children - "we're all in it together!"

Safe community hubs are established with reliable renewable energy and communications and we know how to look after ourselves for at least 72 hours, so that emergency services can help those most vulnerable. We value indigenous wisdom and knowledge which is applied to land management. We look after native wildlife understanding the important role they play.

# Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
A+ER1Assuring energy for Emergency Management sites:1.1 Continue to retrofit Emergency Relief Centres andNeighbourhood Safer Places to ensure they can withstandpower outages, prioritising off-grid solar power andcommunity batteries.1.2 Ensure the Municipal Emergency Operation CoordinationCentres (Gisborne and Kyneton shire offices) and theWoodend Depot can withstand power outages, prioritising offgrid solar power and community batteries.		\$\$\$	Commenced (ongoing)	Facilities Manage- ment	<ul> <li>Environment</li> <li>Emergency Management</li> </ul>



Page 42

	Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
A+ER2	Building capacity for community led recovery: Provide opportunities that build capacity and enable community-led planning and community-led recovery through co-designed workshops and programs.		\$\$	As resources allow or opportunity arises	Recovery	<ul> <li>Environment</li> <li>Community Development</li> <li>SES</li> <li>CFA</li> <li>NHHs / CHs</li> <li>Community groups across the shire</li> </ul>
A+ER3	Places to Respond and Recover: Provide resources to assist community organisations to prepare their facilities for providing disaster response services and to become local 'hubs' for community recovery programs		\$	As resources allow or opportunity arises	Recovery	<ul> <li>Community Dev.</li> <li>Environment</li> <li>SCCH</li> <li>NHH / CHs</li> </ul>
A+ER4	<ul> <li>Household Preparedness education:</li> <li>1.1 Identify additional resources to deliver information sessions, discussions and home preparedness workshops in partnership with VicSES and local CFAs to improve resilience in the community and Council.</li> <li>1.2 Further promote the Home Preparedness Tools developed by VicSES and CFA.</li> </ul>		\$	As resources allow or opportunity arises	Emergency Management	• SES • CFA



#	Action	Co-Benefits	Resources	Timeframe Status Priority	Lead	Collaborators*
A+ER5	Build Council capacity Further embed and enhance training for volunteer staff allocated to Emergency Recovery Centres by developing eLearning modules that shares research and methodology for community resilience, community-led recovery and building social capital in times of disaster		\$	As resources allow or opportunity arises	Emergency Management	<ul> <li>People and Learning</li> <li>Community support groups and volunteers</li> </ul>
A+ER6	Recovery and Resilience Coordination Secure additional resources within Council, to enable "preparedness" to be addressed alongside Council's emergency management roles and responsibilities, provide continuity in communications with the community and relationships with emergency relief and community support organisations, and enable actions listed for this theme to be enacted.		\$\$\$	Very High	Community Strengthen- ing	Environment



# **Monitoring and Evaluation**

Monitoring the progress and effective delivery of the actions in this plan is critical to the success of our approach to climate change.

Council has listened to its community and the idea of shift to trailing and piloting solutions as opposed to feasibility and opportunity studies – making evaluation all the more important. The following actions will be put in place to ensure this plan results in tangible success stories.

#	Action	Timeframe	Lead	Collaborator
M&E1	<b>Governance</b> Transition from the 'Cool-ER Changes' Engagement project steering group to a Climate Emergency Working Group, with key organisational representatives, comprising of Council staff, state agencies and community members, to monitor and guide the implementation of this plan.	2023-2024 (ongoing)	Environment	
M&E2	Organisational training and capacity building Develop climate change training modules to ensure all departments are equipped to evaluate programs and projects against the principles and priorities of the Climate Emergency Response Plan.	2024-2025	Environment	People and Learning
M&E3	<b>Reporting</b> Provide updates on implementation progress through the Annual Environment Report or other public annual reporting framework	Ongoing	Environment	Comms and Engagement



M&E4	<b>Communications</b> Establish an online interface to keep community members and partners up-to- date with the progress of actions of the Climate Emergency Plan.	2023- 2024	Environment	<ul> <li>Communi- cations</li> <li>Project partners</li> <li>Community groups</li> </ul>
M&E5	<b>Climate KPI's</b> Develop Key Performance Indicators for the organisation relating to the implementation of this plan.	2024-2025	Environment	People and     Learning
M&E6	<b>Community Connections and Support</b> Alongside the implementation of this plan, Council will continue to support residents to enact plans developed through Cool Changes and to assess and celebrate the effectiveness of local action. Council will also support and maintain communications to share learnings and experiences amongst the community, for example, through local forums.	On-going	Environment	• MRSG



# **Council's Advocacy Commitments**

In addition to Council and the community working together to take action to address climate change, there is also a role for Council to formally advocate for increased action by other levels of government, statutory authorities, and relevant organisations. Advocacy can be in the form of formal submissions or presentations to consultation processes, participation in discussions and projects to source support or drive change for climate action, or more proactively on areas of key concern for the shire.

Through the development of this plan, key areas for advocacy have been identified:

- **Diverse and climate ready housing**: Advocate for planning scheme policy and related regulations to deliver more diverse housing options, including increased environmental performance standards, smaller footprints, flexibility for use in different stages of life, and connection to and provision of shared transport infrastructure and public open space.
- Energy trading: Advocate for changes to legislation whilst strengthening relationship with PowerCor for improvements to power infrastructure to enable micro-grids and energy trading with neighbours and local areas to be established and supported.
- Getting off gas: Work with Central Victorian Greenhouse Alliance to advocate for an equitable transition off gas.
- **Communications:** Work with communication service providers and emergency management agencies to increase the portable telecommunications units throughout the shire, prioritising Emergency Relief Centres.
- Pedestrian access and public transport: Advocate for the installation of safe level crossings for pedestrians, and for improved services and connections in public transport. Advocate for review of train and bus suitability and adequate shelter for future climate scenario.
- Ethical Finance: Lead by example by continuing to increase the divestment of Council funds from financial institutions that fund fossil fuel projects, and promote the benefits of divestment to local businesses and community groups.



# References

- 1. http://www.bom.gov.au/state-of-the-climate/index.shtml
- 2. <u>https://www.climatechange.vic.gov.au/\_\_data/assets/pdf\_file/0029/442964/Victorias-Climate-Science-Report-2019.pdf</u>
- 3. https://climate.nasa.gov/faq/16/is-it-too-late-to-prevent-climate-change/
- 4. <u>https://www.climatechange.vic.gov.au/\_\_data/assets/pdf\_file/0029/442964/Victorias-Climate-Science-Report-2019.pdf</u>
- 5. https://ipcc.ch/report/ar6/wg1/chapter/summary-for-policymakers/
- 6. https://www.ipcc.ch/site/assets/uploads/2022/04/IPCC\_AR6\_WGIII\_PressRelease\_English.pdf
- 7. <u>https://profile.id.com.au/macedon-ranges/car-ownership?IWebID=10</u>
- 8. <u>https://profile.id.com.au/macedon-ranges/travel-to-work</u>
- 9. https://pv-map.apvi.org.au/historical#10/-37.3087/144.5728
- 10. https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health
- 11. <u>https://www.climatechange.vic.gov.au/\_\_\_data/assets/pdf\_file/0026/521297/Victorian-Climate-Change-Strategy.pdf</u>
- 12. <u>https://www.dcceew.gov.au/climate-change/policy/adaptation</u>

All links and references valid from September, 2023 and may change over time.

# **Abbreviations**

- IPCC: Intergovernmental Panel on Climate Change
- MRSG: Macedon Ranges Sustainability Group
- VECO: Victorian Energy Collaboration
- FOGO: Food Organics Garden Organics
- NCCMA: North Central Catchment Management Authority
- MW: Melbourne Water
- CW: Coliban Water
- GWW: Greater Western Water
- SRW: Southern Rural Water
- DEECA: Dept Environment, Energy and Climate Action
- PV: Parks Victoria
- SV: Sustainability Victoria
- SCCH: Sunbury and Cobaw Community Health
- NHH/CH: Neighbourhood and Community houses
- HLC: Healthy Loddon Campaspe
- CVGA: Central Vic. Greenhouse Alliance
- BUGs: Bicycle User Groups
- PTV: Public Transport Victoria
- C4NET: Centre for New Energy Technology
- MRCE: Macedon Ranges Community Enterprises
- LMPHU: Loddon Mallee Public Healthy Unit
- SES: State Emergency Services
- CFA: Country Fire Authority

