Theme 4:

Climate resilience and reducing emissions

Background

The global climate is changing, with the severity of impacts projected to increase significantly due to past, current, and future greenhouse gas emissions driven by industrial human activity. Globally and locally, climate change is expected to have widespread adverse impacts on the environment, human health, economic stability, and social wellbeing. Community demands and compliance measures are continuing to grow in this space.

Climate change will have far-reaching impacts on our planet, communities, and future generations. We recognise that urgent climate action is needed this decade and are committed to taking decisive action. The impacts of climate change on the City of Marion are projected to be significant, requiring urgent and proactive measures to build resilience and reduce risk.

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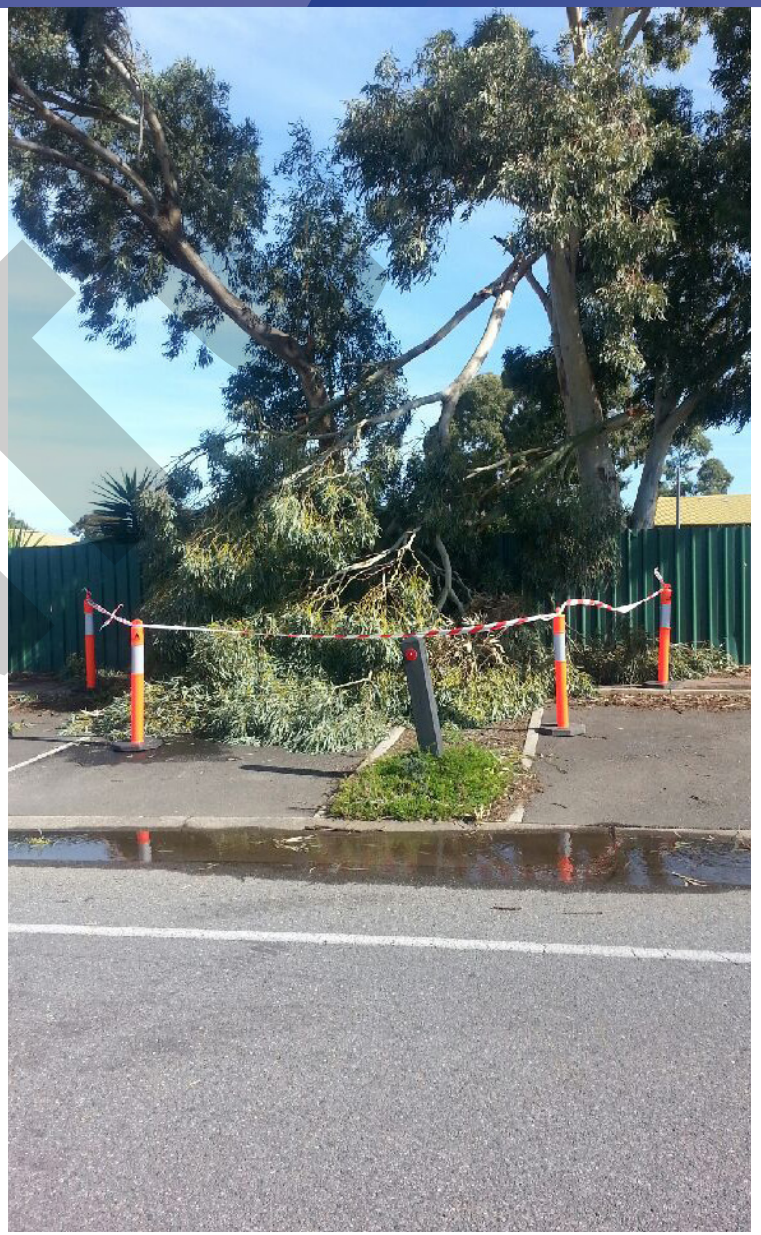
Climate resilience and reducing emissions

Climate impacts

Our region has already become hotter and drier with more variable and extreme weather and these trends are projected to continue. Key climate variables and associated hazards that will impact our city now and increasingly into the future are:

- **Increased heat:** Higher average temperatures and more frequent and intense heatwaves will impact the health of our natural environment, community, assets, services and workforce. It will also result in more dangerous fire conditions.
- **Reduced annual rainfall:** Average annual rainfall will decline and more time will be spent in drought. This places stress on our trees, parklands biodiversity and agriculture.
- **Increased rainfall intensity and storms:** Despite an overall decrease in rainfall, the number and intensity of heavy rainfall events and storms will increase. This places stress on our stormwater systems and can increase risks of flooding.
- **Sea level rise and oceanic change:** Sea levels will continue to rise along with increases in storm surges, increases in ocean temperatures and changed ocean conditions. This will increase coastal erosion and will impact coastal ecology.

Significantly reducing our greenhouse gas emissions, understanding climate risks and proactive climate adaptation planning are crucial for limiting the climate impacts on our organisation and the wider community.



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Climate resilience and reducing emissions


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Climate reporting

Under carbon accounting standards like the Greenhouse Gas (GHG) Protocol Corporate Accounting and Reporting Standard, greenhouse gas emissions are classified into three categories or scopes.

These categories help us understand the full impact of our operations and identify opportunities to reduce emissions across all areas of influence.

Scope 1: Emissions released directly from council-owned or controlled sources, such as council vehicles, buildings, and facilities e.g. natural gas, fleet fuel, refrigerants.

Scope 2: Emissions from the generation of electricity that the council purchases and uses in its operations e.g. electricity for facilities and streetlights.

Scope 3: Emissions resulting from activities outside of council's direct ownership or control, but which we influence indirectly through our supply chain.

To track our progress in reducing corporate greenhouse gas emissions, we will use data from the 2022/23 financial year as our baseline. Our approach will align with the LGA industry guidelines and the GHG Protocol Corporate Accounting and Reporting Standard.

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Climate resilience and reducing emissions

Appendix 1 summarises our baseline emissions profile. An annual inventory will review our emissions boundary to maintain alignment with GHG accounting standards, with findings published in a public climate report.

Mandatory climate-related financial disclosure requirements are being phased in by the Federal Government from 2025 under the *Corporations Act 2001*. These align with international standards, including those set by the International Sustainability Standards Board, and include requirements for emissions accounting and disclosure.

While these reporting obligations do not yet apply to councils, similar requirements are likely to emerge in the near future. In the interim, there is growing pressure for councils to support climate-related reporting by suppliers, partners, and other tiers of government. Climate reporting is already considered best practice and is being adopted by most South Australian metropolitan councils. It also supports access to external funding through Federal Government energy efficiency funding programs.



Our role

We are committed to leading by example in addressing climate change and supporting a just transition to a sustainable, low-carbon future. Our role involves both reducing emissions from our operations and helping our community and environment adapt to the impacts of a changing climate.

We will embed climate change considerations across all areas of governance, service delivery and operations. This includes reducing corporate greenhouse gas emissions, prioritising actions within our direct control, and working to improve the resilience of council services and infrastructure. For emissions outside our direct control—such as those in our supply chain—we will use our purchasing power to encourage low-carbon practices and seek opportunities to support innovation in sustainable materials and technologies.

We will proactively identify, manage and disclose climate-related risks to our operations in line with international best practice. At the same time, we will continue to support our community to reduce their emissions and adapt to climate impacts through targeted programs, information, and services.

Collaboration is central to our climate response. This includes continuing to work with our regional partners, through the Resilient South Regional Climate Partnership, and with State and Federal Government agencies, to strengthen community resilience and advocate for policy and investment that enables a low-carbon, climate resilient economy.

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Strategic alignment and targets

This theme aligns with the following priorities in our Strategic Plan:

O4.1 L1.1 L2.1 L4.1 L4.2 S1.6 S3.1 S3.2

Alignment with state and national targets

We are committed to supporting global, national and international efforts to combat climate change by reducing greenhouse gas emissions.

We recognise the importance of coordinated action at all levels and align our efforts with the South Australian Government and the Federal Government, which have set targets to achieve net zero emissions by 2050.

We support these targets in the South Australian Government's Net Zero Strategy 2024–2030.

- Reduce net greenhouse gas emissions by at least 60% by 2030 (from 2005 levels)
- Achieve net zero emissions by 2050.
- Achieve 100% net renewable electricity generation by 2027



Climate resilience and reducing emissions

Targets for council operations

These targets will measure our progress towards reducing emissions and increasing climate resilience.

1. Reduce corporate greenhouse gas emissions by **50%** by 2035 (from 2022/23 baseline)

2. Replace our light fleet vehicles with EVs by **2028**

3. Purchase **100%** renewable energy

4. Phase out use of gas at all council buildings and facilities by **2035** - replacing each unit with an electric alternative when it reaches the end of its useful life

Stretch target for council operations

1. Achieve net zero corporate emissions by 2050 (from 2022/23 baseline.)

2. Rooftop solar on all City of Marion owned buildings - including leased facilities - by 2030

3. All residual risks in the City of Marion climate risk register are 'medium' or lower by 2030[37]

Community and environmental indicators and goals

These indicators, industry trends and community aspirations are outside of council control, however they will be monitored to help inform our future programs and funding priorities. Each indicator is accompanied by a preferred trend direction and data sources. The trend direction is based on past community feedback or existing government directions.

- Decrease greenhouse gases in the atmosphere.[31]
- Decrease community greenhouse gas emissions in the City of Marion.[32]
- Increase the uptake of rooftop solar and batteries by households and businesses.[33]
- Increase replacement of fossil-fuel appliances with electrical appliances for households and businesses.[34]
- Avoid public health incidents associated with extreme heat e.g. mortality rate.
- Avoid impacts to community infrastructure during flood, storms or bushfires.[35]
- Avoid negative impacts to local economy due to climate change.[36]

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Current activities

✓ Emissions inventory and reporting
We maintain a greenhouse gas inventory and report annually on our progress toward reducing emissions.

✓ Solar on council buildings
We have installed solar panels on over 12 council buildings to help power our operations with renewable energy.

✓ Environmentally Sustainable Design (ESD)
Our ESD guidelines aim to incorporate ESD principles into new council buildings and major projects to help improve environmental outcomes and reduced embodied emissions.

✓ Renewable electricity
Since 2023, we have sourced 100% renewable electricity, either through Green Power or a Power Purchase Agreement, to power our operations.

✓ Energy-efficient LED streetlighting
We have upgraded over three-quarters of the streetlights across the city to energy-efficient LED lighting, which has significantly reduced energy consumption.

✓ Optimising the transition of light passenger fleet to electric vehicles (EVs)
Continuing to optimise and future-proof vehicle replacements ensuring all fleet vehicles are fit for purpose, develop electric vehicle (EV) charging infrastructure.

✓ Public EV charging infrastructure
Encouraging electric vehicle charging infrastructure for our community to support increased uptake of electric vehicles, including provision of public EV chargers at various council facilities.



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Climate resilience and reducing emissions



✓ Resilient South Regional Climate Partnership
Collaborating with neighbouring councils and State Government to deliver the Resilient South Regional Climate Action Plan 2024–2029.

✓ Resilient assets
Ensuring that our assets are resilient to future climate impacts by working with partners on initiatives like the Resilient Asset Management Program.

✓ Promoting home energy efficiency
Supporting residents to improve home energy efficiency by promoting resources and guidance and toolkits on creating all-electric, energy-efficient homes.

✓ Support for community uptake of renewable energy and storage
Providing support for community efforts to adopt renewable energy and storage solutions.

✓ Sustainable transport options
Supporting active transport through developing safe walking and cycling routes and advocating for zero-emissions public transport.

✓ Foster a sustainable and resilient community
Encourage community initiatives that reduce emissions and create a more climate-resilient local community.

✓ Support local businesses in sustainability efforts
We help businesses secure funding for sustainability and emissions reduction initiatives and prepare for climate change by providing training and capacity-building events e.g. Future Energy Week.

✓ Coastal planning
Monitoring and planning for coastal climate hazards, ensuring that our coastline is resilient to the impacts of climate change.

✓ Storm preparation and response
Preventing and managing impacts to the community before and after storms.

✓ Advocate for development policies that support local climate resilience
Advocating for State Government planning policy and improved building standards that support low-emission, energy-efficient, and climate-resilient developments.

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Priority C1

Reduce greenhouse gas emissions from our operations

Objectives

- **C1a** Track our emissions in line with best practice approaches for emissions inventories.
- **C1b** Maximise renewable energy generation and storage and purchase renewable energy.
- **C1c** Transition to a low-emission fleet.
- **C1d** Transition to low-emission buildings and assets.
- **C1e** Seek innovative solutions to improve efficiency of public lighting including consideration of reduced lighting times.
- **C1f:** Assess council owned facilities for battery storage and integrate where practical and feasible.

New activities

The following new activities will be undertaken over the course of this plan in addition to our current activities:

C1.1 Produce an annual climate report: Prepare a climate report each year, detailing the greenhouse gas emissions associated with our operations, and make it publicly available on our website.

C1.2 Review ESD Guidelines: Review the City of Marion ESD guidelines for buildings and embed these principles into our enterprise project management system.

C1.3 Improve energy efficiency of Marion Water: Monitor opportunities to improve the energy efficiency of Marion Water and power Marion Water pumping operations with renewable energy.

C1.4 Management systems for rooftop solar: Review the management and maintenance of solar PV systems to ensure efficiency and maximum output in line with council's asset management framework.

C1.5 Refrigerants in air conditioning systems: Transition to low Global Warming Potential (GWP) refrigerants used on new builds and as part of asset replacement programs aiming for refrigerants with GWP <10.

C1.6 Electric vehicle fleet: Monitor emerging low-emission technologies for medium and heavy vehicles and seek opportunities to trial these innovations.

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Priority C2

Reduce emissions in our supply chain



Objectives

- **C2a** Strengthen data collection and reporting processes for emissions across the supply chain.
- **C2b** Integrate environmental sustainability and low-emissions criteria into procurement practices in alignment with emerging LGA standards and advocate for additional LGA support where required.
- **C2d** Encourage suppliers to lower the emissions associated with the goods and services they provide.

New activities

The following new activities will be undertaken over the course of this plan in addition to our current activities:

C2.1 Sustainable procurement policies and procedures: Review policies and procedures to embed sustainability, ensuring selection processes give weighting to suppliers with sustainable commitments or credentials.

C2.2 Increase staff awareness of sustainability across the supply chain: Increase engagement with employees across the organisation to promote understanding and adoption of sustainable procurement practices.

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Priority C3

Support our community to reduce their emissions



Objectives

- **C3a** Support our community to transition to all-electric homes powered by renewable energy.
- **C3b** Provide infrastructure and programs to increase sustainable and active transport modes.
- **C3c** Support local businesses to reduce their emissions.

New activities

The following new activities will be undertaken over the course of this plan in addition to our current activities:

C3.1 Promote sustainable transport options: Support active transport through developing safe walking and cycling routes and advocating for zero-emissions public transport.

C3.2 All electric homes: Look for further new opportunities to promote the Electrify Everything community campaign encouraging households to transition away from fuel combustion – including wood, gas and oil - to all-electric homes.

C3.3. Solar and energy efficiency for renters: Advocate to the State Government to incentivise landlords and tenants to install solar and improve the energy efficiency of rental properties.

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Priority C4

Build our organisation's resilience to climate change

Objectives

- **C4a** Build and manage our assets to ensure resilience to climate change including heat, storms, flooding and bushfires.
- **C4b** Deliver services that are resilient to climate impacts.
- **C4c** Build staff capacity to understand and respond to climate change.
- **C4d** Strengthen climate governance and embed climate resilience across the organisation.
- **C4e** Identify and publicly disclose our climate risks and manage how they impact on our organisation.

New activities

The following new activities will be undertaken over the course of this plan in addition to our current activities:

C4.1 Climate modelling: Work with Resilient South partners to increase the use and understanding of locally relevant climate modelling to understand climate impacts to our organisation and community (with a preference for NarClim models[38] and data provided by state government).

C4.2. Climate hazard mapping: Advocate for and increase accessibility of climate hazard mapping to assist with informed decision-making to mitigate climate risk.

C4.3 Climate risk: Maintain and develop our climate risk register to ensure we proactively respond to climate change hazards and impacts.

C4.4 Climate training and awareness: Deliver new training to build climate literacy and awareness among staff and Council members, supporting a knowledgeable workforce and organisation that can contribute to climate action in all aspects of our business.

C4.5 Support staff in extreme heat and other climate events: Increase our focus on how heatwaves, extreme weather events and bushfires might impact the health and wellbeing of our workforce.

C4.6 Integrate climate considerations in project management: Find new ways to embed climate considerations into all phases of council projects through our enterprise project management system.

C4.7 Climate scenario planning: Increase the use of scenario planning with staff and other stakeholders – such as the Southern Region Zone Emergency Management Committee - to conduct incident planning exercises for extreme events and other climate-related risks.

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Priority C5

Foster community resilience to climate change



Objectives

- **C5a** Raise community awareness about local climate impacts, risks and opportunities.
- **C5b** Encourage climate-resilient resilient low-emissions development.
- **C5c** Assist the community to avoid or prepare for climate change risks.
- **C5d** Assist the community - including those outside our region - in responding and recovering from climate change related emergencies.

New activities

The following new activities will be undertaken over the course of this plan in addition to our current activities:

C5.1 Increase urban heat awareness and safety: Raise awareness of urban heat risks and provide information on safety measures, cool spaces, and support services available to the community.

C5.2 Support vulnerable communities during extreme heat: Implement educational initiatives and proactive strategies, such as checking on vulnerable residents during extreme heat, to support community wellbeing during heatwaves through the Positive Ageing and Inclusion Program.

C5.3 Promote climate-resilient housing: Share new education materials on climate-resilient housing solutions.

C5.4 Climate hazard mapping: through Resilient South, share new local information on climate hazards that are relevant to our community.

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