His Worship the Mayor
Councillors
City of Marion

# Notice of Infrastructure and Environment Committee

Council Chamber, Council Administration Centre
245 Sturt Road, Sturt

## Tuesday, 10 June 2025 at 6.30 pm

The CEO hereby gives Notice pursuant to the provisions under Section 83 of the *Local Government Act 1999* that an Infrastructure and Environment Committee will be held.

A copy of the Agenda for this meeting is attached in accordance with Section 83 of the Act.

Meetings of the Council are open to the public and interested members of this community are welcome to attend. Access to the Council Chamber is via the main entrance to the Administration Centre on Sturt Road, Sturt.

Tony Harrison

Chief Executive Officer

## 1 Open Meeting

## 2 Kaurna Acknowledgement

We acknowledge the Kaurna people, the traditional custodians of this land and pay our respects to their elders past and present.

## 3 Elected Member Declaration of Interest (if any)

## 4 Confirmation of Minutes

| 4.1 Confirmation of Minutes of the Infrastructure and Environment Committee Meeting held on 8 April 2025 | |
|---|---|
| **Report Reference** | IEC250610R4.1 |
| **Originating Officer** | Business Support Officer – Governance and Council Support – Cassidy Mitchell |
| **Corporate Manager** | Manager Office of the Chief Executive – Sarah Vinall |
| **General Manager** | Chief Executive Officer – Tony Harrison |

### RECOMMENDATION

That the minutes of the Infrastructure and Environment Committee Meeting held on 8 April 2025 be taken as read and confirmed.

### ATTACHMENTS

1. IE C 250408 - Final Public Minutes [**4.1.1** - 8 pages]

# Minutes of the Infrastructure and Environment Committee held on Tuesday, 8 April 2025 at 6.30 pm
# Council Chamber, Council Administration Centre
# 245 Sturt Road, Sturt

**PRESENT**

His Worship the Mayor Kris Hanna

| | |
|---|---|
| Councillor Joseph Masika | Councillor Jayne Hoffmann |
| Councillor Nathan Prior (from 6.32 pm) | Councillor Matt Taylor |
| Councillor Raelene Telfer | Councillor Renuka Lama (from 6.34 pm) |
| Councillor Luke Naismith | Councillor Jana Mates (Chair) |
| Councillor Jason Veliskou | Councillor Amar Singh |
| Councillor Sarah Luscombe | Councillor Ian Crossland (from 6.33 pm) |

**In Attendance**

Chief Executive Officer - Tony Harrison
General Manager City Services - Angela Allison
Acting General Manager City Development – Charmaine Hughes
Acting Manager City Activation - Alex Cortes
Manager Engineering, Assets & Environment – Mat Allen
Chief Financial Officer - Ray Barnwell
Manager Office of the CEO - Sarah Vinall
Senior Strategic & Policy Planner - David Barone
Manager Development and Regulatory Services - Gary Brinkworth
Executive Officer to the General Manager - Tracey Stringer

## 1 Open Meeting

The Chair opened the meeting at 6.31 pm.

## 2 Kaurna Acknowledgement

We acknowledge the Kaurna people, the traditional custodians of this land and pay our respects to their elders past and present.

## 3 Elected Member Declaration of Interest

The following interests were disclosed:

- Nil

## 4 Confirmation of Minutes

**4.1 Confirmation of Minutes of the Environment Committee Meeting held on 11 February 2025**

**Report Reference** IEC250408R4.1

**Moved Councillor Hoffman** **Seconded Councillor Singh**

1. That the minutes of the Environment Committee Meeting held on 11 February 2025 be taken as read and confirmed.

**Carried Unanimously**

## 5 Business Arising

**5.1 Business Arising Statement - Action Items**

**Report Reference** IEC250408R5.1

**Moved Councillor Telfer** **Seconded Councillor Taylor**

That the Infrastructure and Environment Committee:

1. Notes the business arising statement, meeting schedule and upcoming items.

**Carried Unanimously**

6.32 pm Councillor Prior entered the meeting

## 6 Confidential Items

**6.1 Cover Report - Lot 707 Marion Road, Bedford Park Code Amendment and Shared Use Pathway**

Report Reference IEC250408F6.1

**Moved Councillor Naismith** **Seconded Councillor Veliskou**

1. Pursuant to Section 90(2) and (3)(m) of the Local Government Act 1999, the Council orders that the public be excluded from attendance at that part of this meeting relating to Agenda Item IEC250408F6.1 - Lot 707 Marion Road, Bedford Park Code Amendment and Shared Use Pathway except the following persons: Chief Executive Officer, General Manager, City Services, Chief Financial Officer, Acting General Manager City Development, Acting Manager City Activation, Manager Engineering, Assets and Environment, Manager Office of the Chief Executive, Manager Development and Regulatory Services, Senior Strategic Policy Planner and Executive Officer to the General Manager, to enable the Council to consider the Item in confidence on the basis the Council considers it necessary and appropriate to act in a meeting closed to the public (excepting those persons listed above) in order to receive, discuss or consider in confidence the following information or matter relating to the Item:- information the disclosure of which could reasonably be expected that information relating to the proposal to prepare or amend a designated instrument under part 5 division 2 of the Planning, Development and Infrastructure Act 2016 before the draft instrument or amendment is released for public consultation under the Act.

2. Determines, on this basis, the principle that meetings of the Council should be conducted in a place open to the public has been outweighed by the need to keep consideration of the information or matter confidential.

**Carried Unanimously**

6.33 pm the meeting went into confidence

6.33 pm Councillor Crossland entered the meeting
6.34 pm Councillor Lama entered the meeting

**Moved Mayor Hanna** **Seconded Councillor Taylor**

That the Infrastructure and Environment Committee:

1. Pursuant to section 91(7) of the Local Government Act 1999, orders that the following document(s) relating to Agenda Item IEC250408F6.1 - Lot 707 Marion Road, Bedford Park Code Amendment and Shared Use Pathway shall be kept confidential, except when required to effect or comply with Council's resolution(s) regarding this matter, being document(s) relating to a matter dealt with by the Council on a confidential basis under sections 90(2) and 90(3)(m) of the Act,:
   - Report – IEC250408F6.1 - Lot 707 Marion Road, Bedford Park Code Amendment and Shared Use Pathway
   - Attachment 11.1.1 - Potential Stormwater Pipe Route Options
   - Attachment 11.1.2 - Potential Shared Use Path Route Options
   - Minutes – IEC250408F6.1 - Lot 707 Marion Road, Bedford Park Code Amendment and Shared Use Pathway

   on the grounds that the document(s) relates to information the disclosure of which could reasonably be expected to comprise information relating to a proposal to prepare or amend a designated instrument under Part 5 Division 2 of the Planning, Development and Infrastructure Act 2016 before the draft instrument or amendment is released for public consultation under that Act being, information relating to a proposal to amend the Planning and Design Code in relation to the suburb of Port Adelaide which has not yet been released for public consultation.

2. Determines this order shall operate until it is revoked and will be reviewed every 12 months.

3. Pursuant to section 91(9)(c) of the Local Government Act 1999, delegates to the Chief Executive Officer the power to revoke this order in whole or part.

**Carried Unanimously**

7.00 pm the meeting came out of confidence

## 7 Reports for Discussion

**7.1 Public EV Charging Stations**
**Report Reference** IEC250408R7.1

Anita Saunders, Program Manager, Electric Vehicle Charging at RAA presented 'RAA Charge South Australia Electric Vehicle Charging Network'.

Background

The City of Port Adelaide Enfield and the City of Marion undertook a collaborative RFP process for public EV Charging Stations on council land. Conditions of the RFP included no cost to the councils for the supply and installation and maintenance, adopting a consumer-charge model. The presentation included proposed site locations and an overview of RAA's public EV charging network across South Australia, partially funded by the State Government; RAA identified EV charging gaps in the Marion area.

Next steps include finalising site host agreements, permits, capacity of each site and parking controls.

Discussion

- RAA's business model was discussed; members sought further detail regarding the type/kw of EV charging stations, their cost and efficiency for users.
- Suggested alternative/additional sites for EV charging stations.
- Members agreed the current suggested locations is a good starting point, cautioning against reducing the number of car parking bays near community facilities.

**Moved Mayor Hanna** **Seconded Councillor Luscombe**

That the Infrastructure and Environment Committee:

1. Notes the public EV charging station update and presentation from RAA.

2. Notes that approval to enter into Section 221 and Section 222 permits for the proposed public EV charging station locations will be presented for endorsement at the General Council meeting to be held on 27 May 2025.

**Carried**

## 7.2 Greening Open Space

**Report Reference** IEC250408R7.2

Background

The Open Space Plan 2024 – 2034 endorsed May 2024 allows for irrigation upgrades. The next review of the Open Space Plan is a mid-life review scheduled for 2028/29.

At the Council Members Planning Day in January 2025 the opportunity to irrigate additional reserves was discussed; Members requested analysis of the unirrigated reserves to be provided for review. Irrigating additional reserves contributes to environmental cooling, climate resilience and recreation.

Staff provided an update on the work that has been done since the Planning Day, including Irrigation analysis, design constraints, construction and cost considerations.

Discussion

Members discussed irrigating the 53 additional reserves, noting:

- The program is currently unfunded, both capital cost and ongoing maintenance
- A more detailed analysis/ranking of the 53 reserves is required to assist Council with their assessment of the reserves
- Deferring the program until the Open Space Plan is due for review was also discussed
- Limitations of the current decision Tool were discussed, requiring further discussion and investigation

**Moved Councillor Telfer** **Seconded Mayor Hanna**

That the Infrastructure and Environment Committee adjourn the item until the March 2027 General Council meeting.

**The vote was tied**
**The Chair made a casting vote and voted against the motion**
**The motion was lost**

**Moved Councillor Masika** **Seconded Councillor Crossland**

That the Infrastructure and Environment Committee:

1. Note the information on the delivery process and cost implications of expanding the number of open spaces that are irrigated.

2. Recommend that Council request that Administration to provide a revised irrigation support tool matrix considering the inclusion of factors such as: demonstrated community demand, availability of purple pipe supply, capital costs, operating costs, current Open Space planning relating to the 53 proposed sites, to be presented at the General Council meeting in June 2025.

**Carried**

8.31pm Councillor Masika left the meeting and did not return
8.31pm Councillor Naismith left the meeting
8.32pm Councillor Crossland left the meeting and did not return
8.32pm Councillor Hoffman left the meeting and did not return

8.34pm Councillor Naismith re-entered the meeting

**7.3 Glenthorne Master Plan Opportunities**
**Report Reference** IEC250408R7.3

Background

Staff spoke about the Glenthorne National Park Master Plan (2020) and possible development opportunities subject to rezoning of some of the land, noting:

- The current zoning is (Conservation Zone (National Park) and Hills Face Zone (private land areas) - limits land use
- A rezoning of selected land would allow for new opportunities
- Staff sought feedback and support for progressing a Code Amendment and the suggested policy direction.

Discussion

Council have invested in the Glenthorne National Park; support small parcels be rezoned for additional use; risk with rezoning potentially is competition for the site

**Moved Mayor Hanna** **Seconded Councillor Prior**

That the Infrastructure and Environment Committee:

1. Notes the Briefing Paper and supports the proposal to prepare a Code Amendment to rezone the parcels fronting Majors Road at O'Halloran Hill to:

    a. better support a broader range of community, recreation, tourism land uses along with associated small-scale commercial and retail land uses; and
    b. maintain the values of the natural and landscape character of this location

2. Seeks that staff prepare a Proposal to Initiate a Code Amendment for Council endorsement in May.

3. Seeks that the CEO writes to the CEO of the Department for Environment and Water advising of Council's intent to prepare a Code Amendment and seeking the Department's support and ongoing collaboration for this process.

**carried Unanimously**

**8 Reports for Noting - Nil**

**9 Workshop / Presentation Items - Nil**

**10 Other Business - Nil**

**11 Meeting Closure**

The meeting was declared closed at 8.53 pm

CONFIRMED THIS 10 DAY OF JUNE 2025

_____

CHAIRPERSON

## 5 Business Arising

| 5.1 Business Arising Statement - Action Items | |
|---|---|
| **Report Reference** | IEC250610R5.1 |
| **Originating Officer** | Executive Officer to the General Manager City Services – Tracey Stringer |
| **Corporate Manager** | N/A |
| **General Manager** | General Manager City Services – Angela Allison |

### REPORT OBJECTIVE

The purpose of this report is to review the business arising from previous meetings of the Infrastructure and Environment Committee meetings.

There are currently no outstanding items in the business arising.

### RECOMMENDATION

**That the Infrastructure and Environment Committee:**

1. **Notes that there are currently no outstanding action items.**

### ATTACHMENTS

Nil

## 6 Confidential Items - Nil

## 7 Reports for Discussion

| 7.1 Environmental Sustainability Plan - emission reduction review | |
|---|---|
| **Report Reference** | IEC250610R7.1 |
| **Originating Officer** | Unit Manager Environmental Sustainability – Rebecca Neumann |
| **Corporate Manager** | Manager Engineering, Assets and Environment - Mathew Allen |
| **General Manager** | General Manager City Services - Angela Allison |

### REPORT HISTORY

| Report Reference | Report Title |
|---|---|
| IEC240611R7.2 | Carbon Inventory and Reporting |
| GC210209R04 | Final Carbon Neutral Plan |
| CG230822R12.1 | EV Fleet Transition |
| IEC241112R7.1 | Environmental Sustainability Plan - draft scope and timeframe |

### REPORT OBJECTIVE

For the IEC to select a preferred emissions reduction pathway for inclusion into the *City of Marion Environmental Sustainability Plan 2026-2030*.

### EXECUTIVE SUMMARY

The City of Marion's Carbon Neutral Plan 2020–2030[1] set a target to achieve carbon neutrality for Council operations by 2030. At the Infrastructure and Environment Committee Meeting on 11 June 2024, it was identified that several elements of the Carbon Neutral Plan required further review. In response, a review has been undertaken in conjunction with the development of the City of Marion's Environmental Sustainability Plan 2026–2030 (ES Plan). As part of this process, Dsquared Consulting was engaged to review our approach to emissions reduction (Attachment 1), to inform decisions on council's emissions boundary, revised targets, and future reduction pathways based on current best practices and emerging trends.

Two updated emissions reduction target options are presented for Council's consideration. The preferred target will be integrated into the Environmental Sustainability Plan 2026–2030, guiding the City's continued leadership in climate action and emissions reduction.

Jacob Potter from Dsquared Consulting will deliver a presentation outlining the findings and recommendations of the emissions reduction review for the City of Marion.

### RECOMMENDATION

**That the Infrastructure and Environment Committee:**

1. **Notes the attached emissions reduction report (Attachment 1).**

[1] www.marion.sa.gov.au City of Marion Carbon Neutral Plan 2020–2030

2. **Recommends to Council that the following emissions reduction target be incorporated into the Environmental Sustainably Plan 2026-2030:**
   **Option 1: Carbon neutral by 2030 requiring the ongoing purchasing of carbon offsets on an annual basis.**
   **or**
   **Option 2: Rescinding the target of "City of Marion being carbon neutral for its operations by 2030" and replacing it with an emissions reduction target of 50% by 2035 and net zero by 2050.**

## DISCUSSION

### Background

The endorsed City of Marion Carbon Neutral Plan 2020-2030 included a pathway for reducing the greenhouse gas emissions from council operations and a target of becoming carbon neutral for our operations by 2030. The City of Marion Carbon Neutral Plan can be viewed on the City of Marion website: City of Marion Carbon Neutral Plan 2020–2030

At the 11 June 2024 Infrastructure and Environment Committee Meeting, an update was provided on the carbon inventory for Council's corporate emissions (IEC240611R7.2). In the presentation and discussion with the Committee, several aspects of the Carbon Neutral Plan were identified as needing further consideration and a 12-month review was requested by the Committee. The review has focused on:

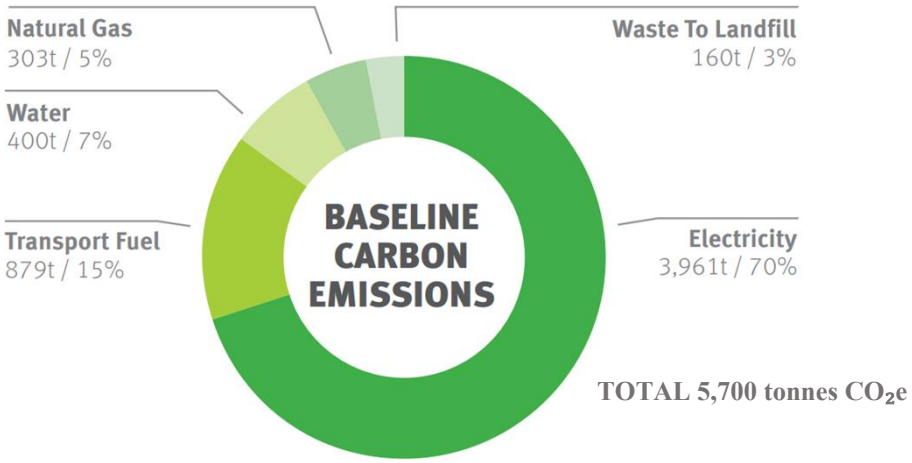
- **Carbon reporting boundary:** Clarity on the boundaries for emissions measurement (i.e. what emissions sources are recorded).
- **Offsets:** The expected costs and implications for purchasing offsets to reach the 2030 carbon neutral target.
- **Target and baselines:** Whether a 2030 target was still feasible and what other options could be considered that ensure City of Marion remains active in delivering emissions reduction objectives.

The review of the Carbon Neutral Plan has been undertaken as part of the process of developing the *Environmental Sustainability Strategy 2026-2030* (ES Strategy) and the *Environmental Sustainability Plan 2026-2030* (ES Plan) for the City of Marion. The updated content is included within the 'Climate resilience and emissions reduction' theme within the Draft ES Strategy and ES Plan and is intended to replace the stand-alone Carbon Neutral Plan.

The City of Marion engaged Dsquared Consulting to undertake a review of our current emissions reduction approach and to develop a strategy that will guide the definition of our future emissions boundary, establish emissions reduction targets, and identify key emissions reduction initiatives. The final report prepared by dsquared consulting is included as Attachment 1.

### Council's emissions boundary

Council committed to significantly reducing our emissions in the Carbon Neutral Plan 2020-2030. An emission inventory was reported in the Carbon Neutral Plan 2020-2030, for the baseline year of 2015/16, totaling 5,700 tonnes $CO_2e$ (figure below).




**Source:** Emissions Boundary included in Carbon Neutral Plan

Under the Carbon Neutral Plan emissions boundary, emissions have reduced from 5,700 $TCO_2e$ in 2015/16 to 1,709 tonnes $CO_2e$ in 2023/24. This represents a 70% reduction in the baseline emissions sources. This reduction can be attributed to:

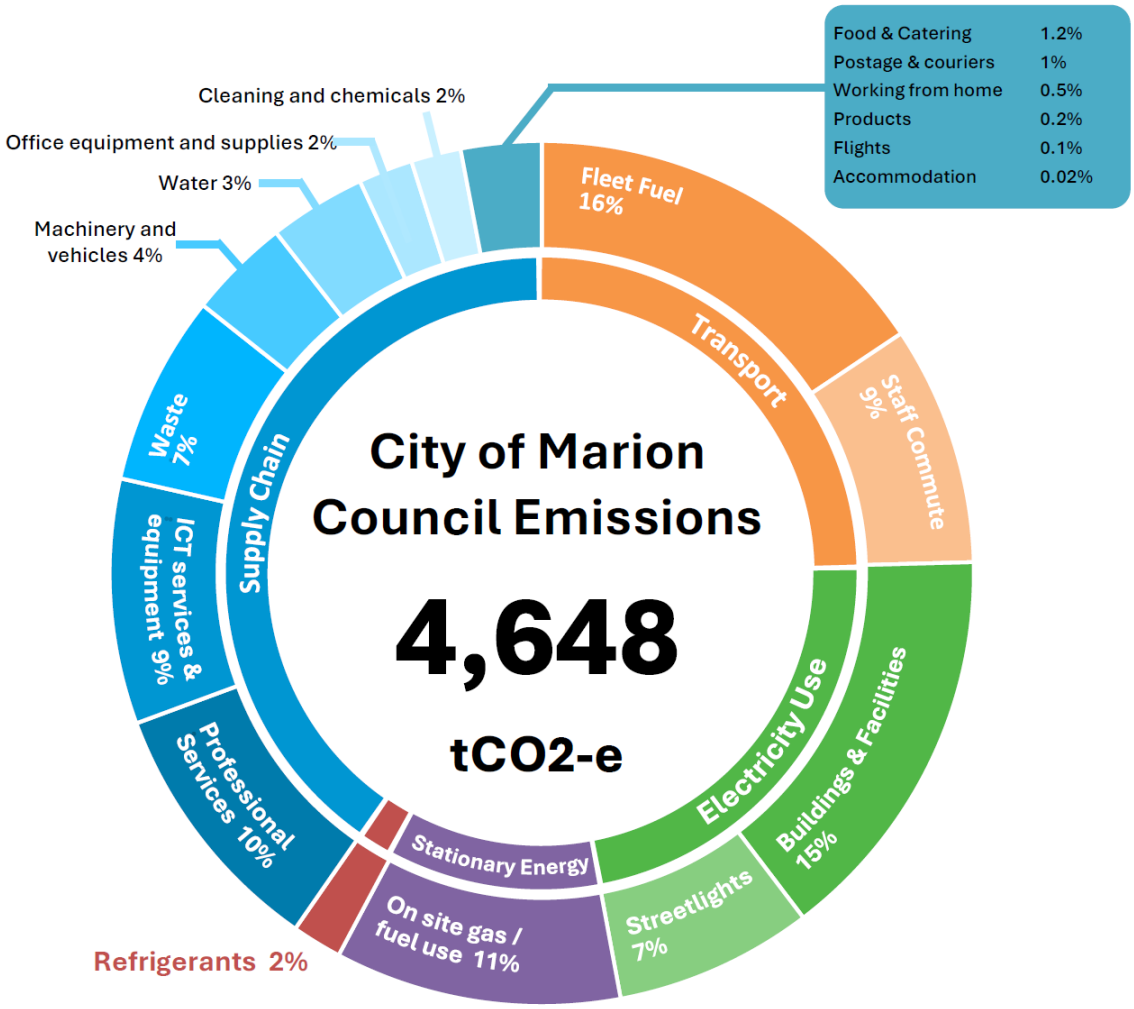
- Transition to energy efficient LED street lighting.
- Installation of rooftop solar across council buildings.
- Transition to 100% GreenPower electricity.
- Emissions reductions from the light vehicle fleet with the transition to EVs.

This 2015/16 baseline emissions inventory reported on limited emissions sources and did not include emissions from our supply chain. Industry development in emissions accounting in recent years enables organisations to now calculate and include key emissions from the supply chain.

**Revised emissions boundary**

The Carbon Neutral Plan acknowledged that council would need to expand its emissions boundary over time to include additional emissions sources to align with evolving standards. Given significant advancements in carbon accounting practices and evolving industry trends since the development of the Carbon Neutral Plan, it is an appropriate time to revise our emissions boundary.

An updated emissions inventory has been developed using data from the 2022/23 financial year. This year was selected as it represents the first year following the COVID-19 pandemic, thereby reducing pandemic-related bias. It is worth noting that this year only includes purchasing of renewable electricity for half of the year.




**Scope 1**

Direct GHG emissions emitted by Council (fossil fuels burnt / gasses released)

**1,093 $tCO_2$-e**

**Scope 2**

Indirect GHG emissions from electricity consumption

**625 $tCO_2$-e**

**Scope 3**

Indirect GHG emissions from Council's supply / value chain

**2,980 $tCO_2$-e**

**Sector guidance on emissions reporting**

This revised emissions inventory boundary aligns with international standards and recently developed emissions management guidelines for the local government sector. The new SA Local Government Association's *Best practice guide to Emissions Management for Local Government in SA* has been used as a framework to determine which emissions categories to include within the revised boundary. These standards align with the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard, Climate Active and the new international and national climate-related financial reporting standards which are being phased in across the private sector from this year.

The LGA guidelines prioritise emission as outlined in the three categories below, with councils encouraged to provide at least the 'Minimum' and 'Good Practice' categories:

- **Minimum Practice:** Included Scope 1 and 2 emissions which are mandatory to report on, as well as a selection of Scope 3 emissions which are typically collated by local councils.
- **Good Practice:** Included an expanded selection of Scope 3 emissions categories that

would need to be included if reporting against standards such as Climate Active.

- **Best Practice:** Scope 3 emissions associated with capital works and infrastructure are harder to collate. The guide recommends councils work with suppliers to build maturity in collating data on these emissions over time.

The table below from the LGA guidelines outlines the emissions sources included in these three categories.

| Emission categories | Minimum | Good Practice | Best Practice |
|---|---|---|---|
| Accommodation (hotel nights) | | ✓ | |
| Cleaning and Chemicals (cleaning services) | | ✓ | |
| Construction Materials and Services | | | ✓ |
| Electricity | ✓ | | |
| Food & catering | | ✓ | |
| Horticulture and Agriculture (construction related) | | | ✓ |
| ICT services and equipment | | ✓ | |
| Machinery and vehicles (fleet vehicles & repairs) | | ✓ | |
| Office equipment & supplies | ✓ | | |
| Postage, courier and freight | ✓ | | |
| Products (paper / clothing) | Paper | Clothing /workwear | |
| Professional Services (consultants) | | ✓ | |
| Refrigerants (air-conditioning gases) | ✓ | | |
| Roads and landscape | | | ✓ |
| Stationary Energy (natural gas, diesel / petrol generators) | ✓ | | |
| Transport (fleet fuel, flights, staff commute) | ✓ | Staff commute | |
| Waste (landfill) | ✓ | | |
| Water | ✓ | | |
| Working from home | | ✓ | |

The revised 2022/23 emissions boundary incorporates all 'Minimum Practice' and 'Good Practice' emissions categories as outlined above. Scope 3 emissions classified as 'Best Practice' (including embodied emissions from construction, road infrastructure, and capital works) have been excluded from the current inventory, as they are not readily quantifiable under existing data management practices. While these emissions fall outside the revised boundary, the Environmental Sustainability Plan includes an initiative to investigate methods for capturing and reporting them in future inventories.

### Carbon neutrality and purchasing offsets

Because emission cannot be eliminated entirely, purchasing offsets is required to meet carbon neutral targets. Offsets can be purchased from Australian or international offset projects that reduce or remove emissions from the atmosphere, such as through reforestation, renewable energy or

energy efficiency. Offset prices currently range between $10-15 for international offsets and $35-50 for Australian offsets (Australian Carbon Credit Units) and $70-80 for Australian offsets with additional social/community co-benefits or supporting Aboriginal communities.

There is a growing shift toward local, direct climate action over reliance on carbon offsetting. Many councils are adopting more integrated climate strategies that focus on direct emissions reduction and building climate resilience of their operations and communities.

**Future Emissions Reduction Targets**

Outlined below are potential targets for Council's continued action on emissions reduction. Council's preferred target will be incorporated into the Environmental Sustainability Plan.

***Option 1: Target of Carbon Neutrality by 2030***
This option involves maintaining Council's target of achieving carbon neutrality by 2030, which will require obtaining carbon neutral certification and purchasing carbon offsets on an annual basis. Based on the revised emission inventory and emissions reduction pathway outlined above, Council's corporate emissions are projected to be approximately 2,600 tonnes of $CO_2e$ in 2030. While offset prices vary, the annual cost of offsetting corporate emissions is estimated to range from $40,000 to $130,000 per year at current market rates, depending on whether Australian or international offsets are selected. Additional costs may include third-party validation and Climate Active certification fees.

Considerations:
- This is an ambitious target that aligns with the existing commitment in the Strategic Plan 2024–2034.
- Purchasing carbon offsets allows Council to take short-term action on unavoidable emissions.
- The estimated annual cost of carbon offsets for this option is at least $40,000, based on current market prices. It is worth noting that the cost of offsets is expected to increase in the coming years due to increased demand.
- There remains uncertainty regarding the future requirements of the Climate Active framework for certifying carbon neutral claims, which began a review in 2023, with outcomes yet to be released.

***Option 2: Emissions reduction target of 50% by 2035 and net zero by 2050***

This option includes revising Council's emissions target to a 50% reduction by 2035, with a long-term goal of achieving net zero emissions by 2050. This approach continues to demonstrate environmental leadership, aligns with state and national net zero goals, and does not rely on the purchase of carbon offsets in the short to medium term.

According to the analysis provided by Dsquared Consulting, this target is considered achievable for Council, contingent upon the following key actions:
- Continued procurement of 100% renewable electricity
- Transition to fully electric buildings and facilities by 2035 (replacing gas units over this period when they reach end of life)
- Reduction in fuel emissions from the medium and heavy vehicle fleet through the adoption of low-emissions technologies
- A 5–10% reduction in supply chain emissions.

The target can be reviewed regularly as part of the Environmental Sustainability Plan review process, enabling ongoing progress monitoring and adjustments as required.

Considerations:

- This would maintain a commitment to achieving net zero emissions albeit with a longer timeframe of 2050.
- This target would reflect a balanced approach to climate action, maintaining Council's commitment to sustainability.
- The target is consistent with State and Federal government goals of reaching net zero emissions by 2050.
- This option would defer the need to purchase offsets until 2050.

## PRESENTATION

Jacob Potter from Dsquared Consulting will deliver a presentation outlining the findings and recommendations of the emissions reduction review, included in Attachment 1.

**PRESENTER:** Mr Jacob Potter, Associate, Dsquared Consulting
**PRESENTATION TIME:** 15 minutes.

## ATTACHMENTS

1. Attachment 1 Consultant Report [**7.1.1** - 23 pages]

dsquared

# Emissions Reduction Strategy

## for the City of Marion

CITY OF MARION

# Document Control

| Issue | Date | Change | Checked | Approved |
|---|---|---|---|---|
| 01 | 07/04/25 | Work in progress draft | AD | JP |
| 02 | 16/04/25 | First issue | AD | JP |
| 03 | 27/05/25 | Second issue | AD | JP |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

This plan has been prepared by dsquared Consulting on behalf of the City of Marion.

## About dsquared

**Our Vision is to think beyond the square.**

Our Mission is to create spaces, places, and communities that are positive for both the environment and for people. We will do this by providing our clients with sustainable and bespoke solutions that are innovative, challenge perceived ideas, and push the boundaries of achievement and excellence.

We confirm that all work has been undertaken in accordance with our ISO 9001 accredited quality management system.

### Acknowledgement of country

The dsquared team wish to acknowledge the Traditional Custodians of all country throughout Australia, and their cultural, spiritual, physical, and emotional connection with their land, waters, and community. We pay our respects to all Elders past, present, and emerging.

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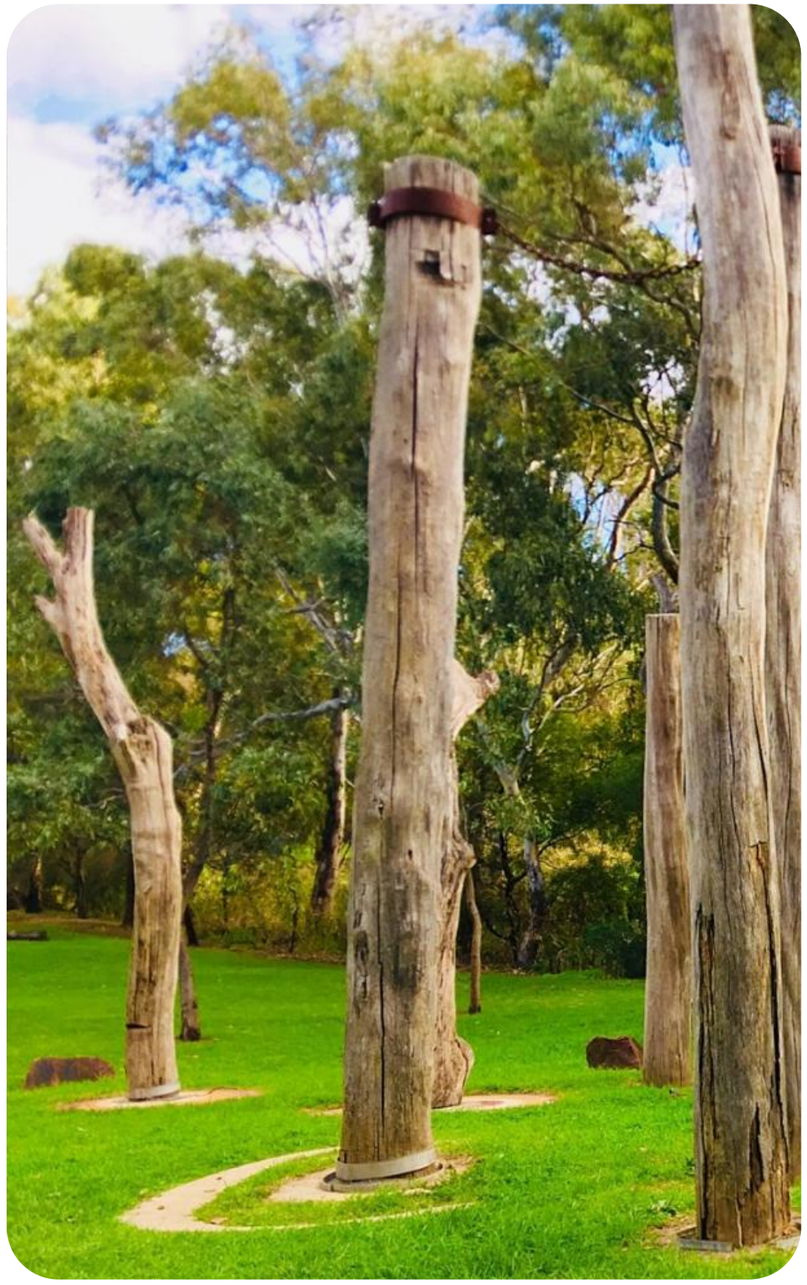
Project Number: 3235

# Contents





# Introduction

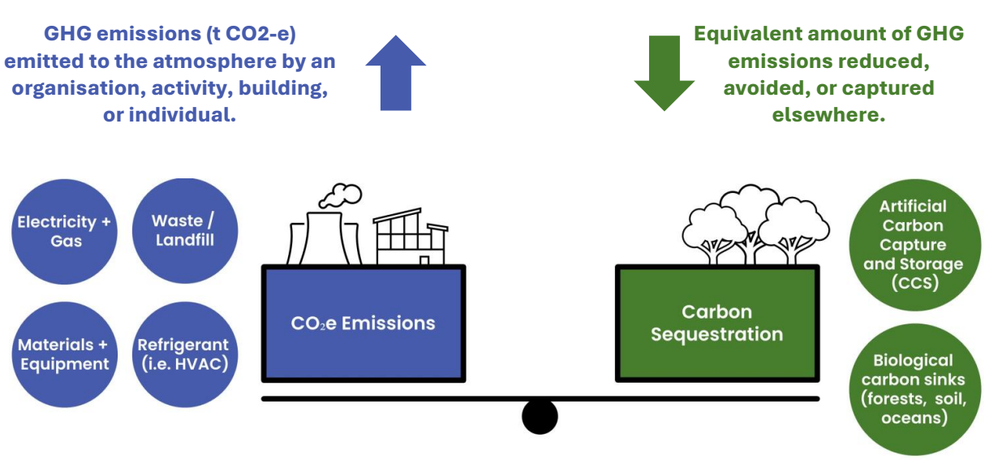
The City of Marion (Council) is committed to taking action to reduce the impacts of climate change, targeting carbon neutral operations by 2030. This Emissions Reduction Strategy Report (the Strategy) provides Council with an approach to reducing greenhouse gas (GHG) emissions across both corporate and community emissions. The Report builds upon Council's Carbon Neutral Plan developed in 2020 and provides an updated pathway for Council's ongoing emissions reduction efforts.

The City of Marion has been demonstrating leadership in sustainability and managing emissions for many years including developing an emissions inventory, implementing emissions reduction initiatives, and supporting the community to reduce environmental impacts as part of education and grant programs. This Report has been developed to continue this journey and support Council in continuing to demonstrate leadership in the local government sector.

The scope of this Strategy is The City of Marion's emissions which are in direct control of the Council and emissions from its value chain which it can minimise and influence. Where Council can implement initiatives and programs that support the community to reduce emissions, these opportunities have been identified to ensure Council is considering a holistic approach to transitioning to net zero emissions.

This Strategy has been developed to set a pathway to reduce emissions in line with the following United Nations net zero definition which acknowledges that reducing emissions is required across society. The aim of the Strategy is to reduce emissions as far as possible which will also reduce the amount of additional carbon sequestration required to balance GHG emissions.

*"net zero means cutting greenhouse gas emissions to as close to zero as possible, with any remaining emissions re-absorbed from the atmosphere"*




# Why take action

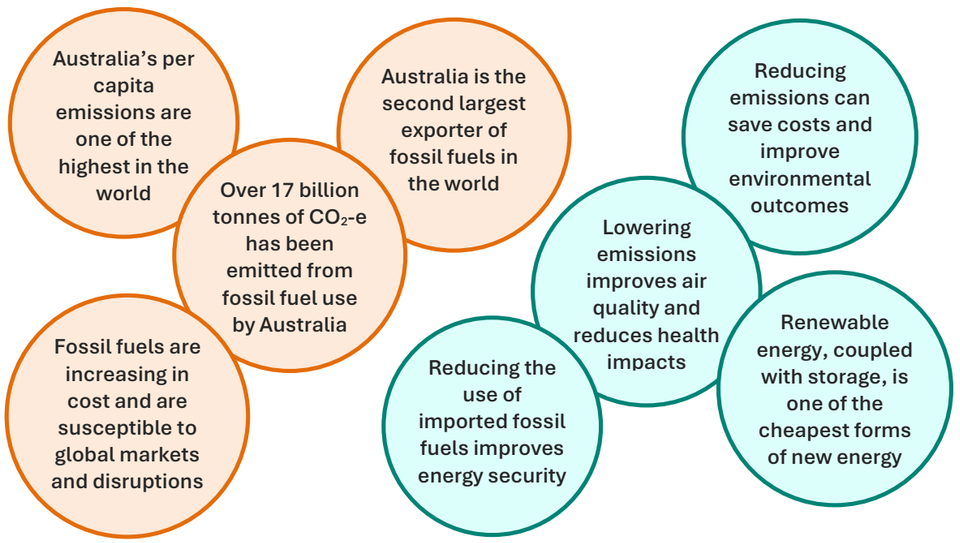
GHG emissions have increased exponentially worldwide since the Industrial Revolution and are a major concern due to their ability to trap more heat in earth's atmosphere, resulting in changes to the climate which can have a negative impact on life. Some of the impacts include the following:

Greenhouse gas (GHG) emissions have increased exponentially and have been scientifically proven to trap more heat in the atmosphere, impacting the climate and resulting in increasing average temperatures, more variable and extreme weather, and rising sea levels.

Extracting and burning fossils fuels negatively impacts natural environments, air quality, water quality, and flora and fauna. For example, there are over 6,500 coal mines worldwide covering approx. 100,000 square kilometres with 8.9 billion tonnes of coal mined each year.

Air quality impacts of burning fossils fuels have been shown to impact health including increasing the likelihood of asthma in children, respiratory complications, and increased likelihood of cancer and diabetes, which increases pressure on healthcare systems.

Fossil fuels are non-renewable, finite, becoming increasingly harder to mine and extract, and are susceptible to global supply interruptions and prices. The price of coal in Australia has doubled since 2020 largely due international markets and the war in Ukraine.



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# Council achievements

Council previously developed a baseline corporate emissions inventory for FY 2015/2016 which totalled 5,700 $tCO_2$-e and included electricity and gas use in buildings and facilities, streetlighting electricity, fleet fuel, water and waste. Since the initial inventory, Council continues to track and report on emissions annually and developed a Carbon Neutral Plan for 2020-2030, implementing the following projects to reduce consumption, costs and emissions as part of Council operations and services:

**Carbon Neutral Plan 2020-2030**


**Ongoing LED street lighting upgrades per the Public Lighting Action Plan**

**Purchase 100% GreenPower (From January 2023)**

**Fleet Transition**

Commitment to replace light passenger fleet with electric vehicles as part of fleet replacement program


**Installation of 2x heat pumps at the Marion Outdoor Pool, electrifying water heating for the lap and learners' pools and waterslides**


**540kW of Solar PV installed on Council buildings since 2017, including sporting clubs**

**Marion Water**

Expansion to provide recycled water to Seacliff Park, Flinders University and nearby playing fields, saving 250ML per year

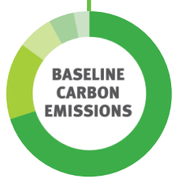

**Installation of EV Chargers at Council sites, including the Administration building and City Services**


**ESD Guidelines: New Buildings, Structures and Refurbishments**

Supported by staff training

**Southern Materials Recovery Facility** (SMRF) and kitchen caddy rollout, supporting waste diversion from landfill

**Electric vehicles in Council fleet, including MG4, MG ZS, BYD Atto 3**




**Carbon Inventory Validation and interim review of emissions against Carbon Neutral Plan and investigate expanded scope 3 sources**

**Streetlighting Audit**

Identify further opportunities for LED lighting upgrades

# Standards used

This Strategy has been developed in line with the GHG Protocol Corporate Standard, Climate Active Carbon Neutral Organisation Standard and reference documents. The GHG Protocol and Climate Active standards are summarised below.

The **GHG Protocol** is an internationally accepted set of standards and resources for GHG emissions accounting and reporting and is used by both public and private entities. The GHG Protocol is referenced by many GHG emissions tools and certifications including Climate Active and the Science Based Targets initiative (SBTi).

**Climate Active Carbon Neutral** Organisation Standards and Technical Guidance Manuals have been used throughout the development of this Plan and associated emission calculations, including setting an emissions boundary and baseline year, to ensure that in the event Council pursues Carbon Neutral certification, the emissions inventory and initiatives will meet the minimum requirements. Climate Active is an Australian Government program that is commonly adopted by industry and demonstrates a best practice approach to emissions accounting.

# Greenhouse gas emissions

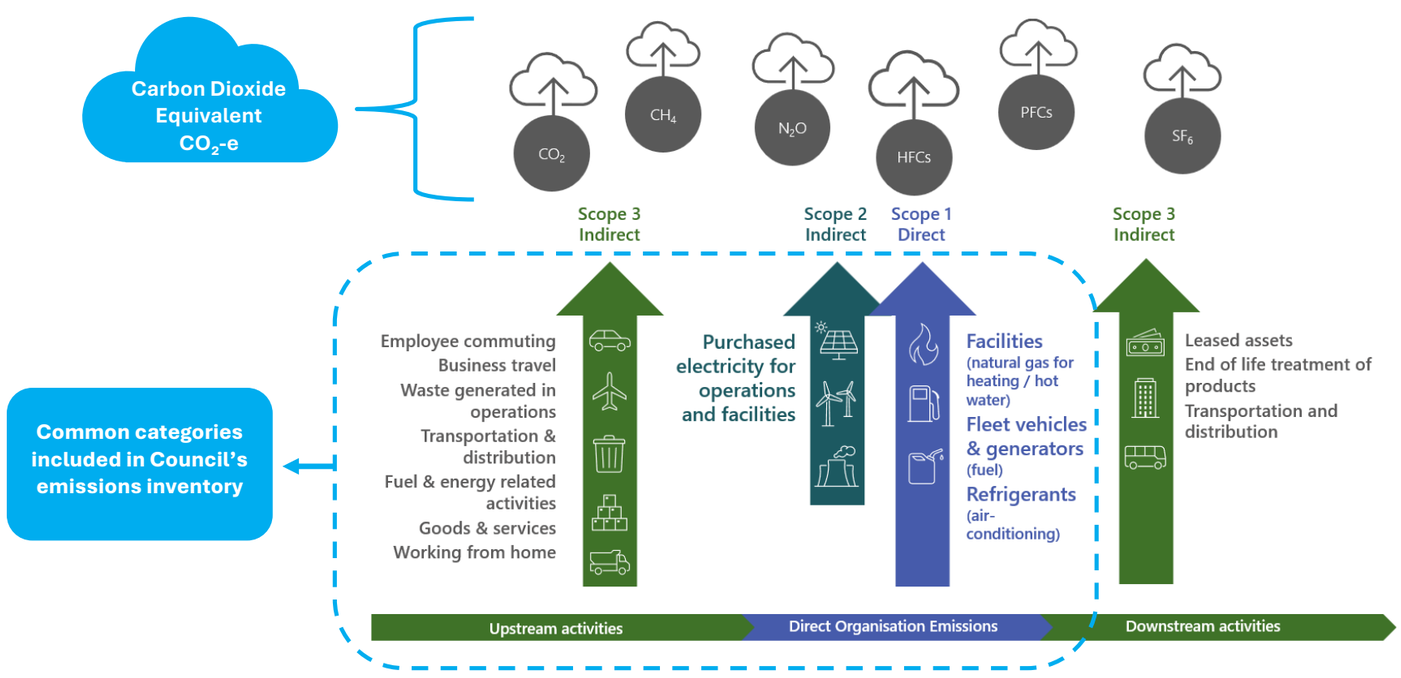
The emissions inventory is an account of Greenhouses gases (GHGs) which trap heat in the atmosphere and include gases such as carbon dioxide ($CO_2$), methane ($CH_4$) and nitrous oxide ($N_2O$). In alignment with reporting standards, the emissions inventory must account for the six greenhouse gases covered by the Kyoto Protocol, which are shown in the image below.

Greenhouse gases have varying global warming potential (GWP), for example $CH_4$ is 28 times more potent that $CO_2$ (based on the impact over 100 years). As such GHG emissions are represented in a standardised measure known as **carbon dioxide equivalent ($CO_2$-e)**, in order to compare the relative impact of different emission sources.

# Scope 1, 2 & 3 emissions

The emissions inventory includes Scope 1, 2 & 3 emissions for emissions sources associated with Council's operations and community emissions. Emissions scopes are categorised as follows:

- **Scope 1:** Direct emissions from sources that are owned or controlled by the reporting organisation.
- **Scope 2:** Indirect emissions associated with the purchase of energy (e.g., electricity).
- **Scope 3:** Scope 3 emissions are the result of activities from assets not owned or controlled by the reporting organisation, but that the organisation indirectly impacts in its value chain.




### Scope 3: Supply chain and embodied emissions

Emissions associated with the procurement of goods and services are upstream Scope 3 indirect emissions referred to as supply chain emissions. Supply chain emissions include the procurement of office supplies and vehicles through to materials and construction activities associated with roads, footpaths and other capital works projects.

Upstream activities that cause Scope 3 emissions, including extraction and refining of raw materials, manufacturing, transportation, distribution and onsite construction, are known as the embodied emissions associated with those goods or services.

Construction-related goods and services, such as concrete and asphalt, are difficult to track and quantify. As such, supply chain emissions from operational activities only have been included in this Strategy.

## Reporting

The purpose of this report is to provide voluntary emissions reporting for the City of Marion's corporate operations. Public reporting showcases Council's commitment to emissions reduction, supporting the environment and taking action on climate change.

Mandatory reporting for climate risk and emissions is not currently required for local government, although voluntary reporting on these topics is considered best practice and aligns with the initiatives of many other South Australian metropolitan councils. However, information on emissions and reduction initiatives are increasingly requested as part of grant and funding applications, including the LGA Grants Commission and Community Energy Upgrade Finance (CEUF) grant applications. The voluntary reporting already undertaken by Council, including this report, positions the City of Marion to be prepared to take advantage of these opportunities.

In addition, the Federal Government implemented mandatory climate-related financial disclosure (CRFD) requirements for corporate entities, which began on 1 January 2025. This regime aligns with the International Sustainability Standards Board (ISSB) standards and includes emissions accounting and disclosure. This scheme is applicable to large corporations with high consolidated revenue, assets, and employees that are required to prepare financial reporting under the *Corporations Act 2001*. Whilst this scheme will assist Council to obtain more accurate emissions data from their supply chain over time, there are no current plans to expand applicability of the scheme to local government.

## Carbon Neutral vs Net Zero?

The City of Marion has previously endorsed a commitment to achieving Carbon Neutral status for its operations by 2030. This requires a formal process of third-party verification of emissions accounting, and purchase of accredited Carbon Offset units to balance or neutralise Council emissions.

**Carbon Neutral** status focuses on setting an emissions reduction plan and targets, and offsetting emissions generated by an organisation on an annual basis.

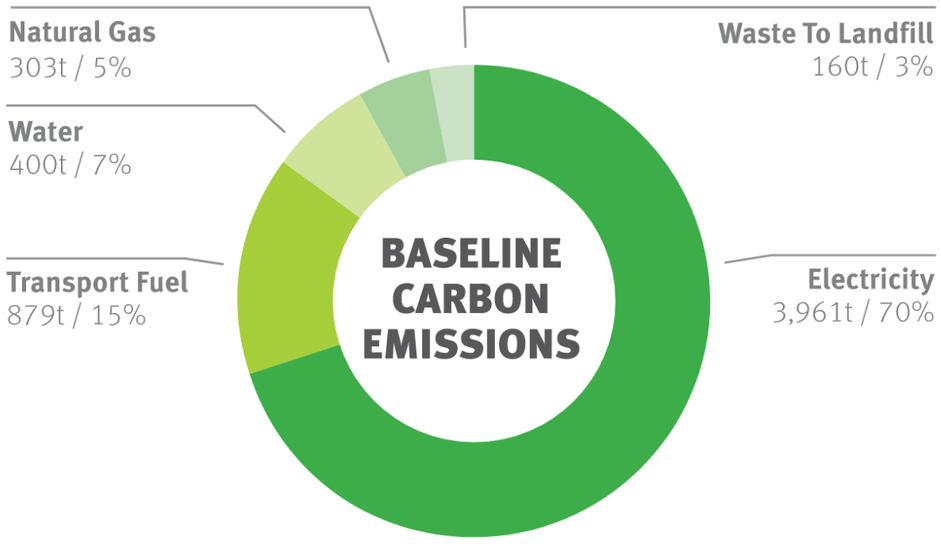
In contrast, achieving **Net Zero** focuses primarily on implementing large emission reduction activities to reduce emissions as close as possible to zero, with the remainder of emissions offset by carbon sequestration. Net Zero is a global concept that will not be achievable until thew worldwide economy decarbonises.

Information on carbon offsets is provided at the end of this report, however in alignment with industry trends that are shifting away from Carbin Neutral claims, it is recommended that Council focus on investing in tangible emissions reduction activities, rather than purchasing carbon offsets.

# Council emissions inventory

## Background

A previous emission inventory was reported by Council in the Carbon Neutral Plan 2020-2030, for the baseline year of FY2015/16, totally approximately 5,700 tCO2-e (refer below).




## Emissions Boundary

This FY2015/16 baseline emissions inventory reported on limited emissions sources and does not include Scope 3 emissions from the value chain. Industry development in emissions accounting over the past decade enables organisations to now include and calculate emissions from the supply chain.

An updated emissions inventory has been developed based on 2022/23 (FY23) data. The FY23 emissions inventory has been expanded to include additional emissions sources to align with the GHG Protocol and Climate Active Carbon Neutral standards, as well as the Best Practice Guide developed as part of the Local Government Association of SA Net Zero Accelerate Program.

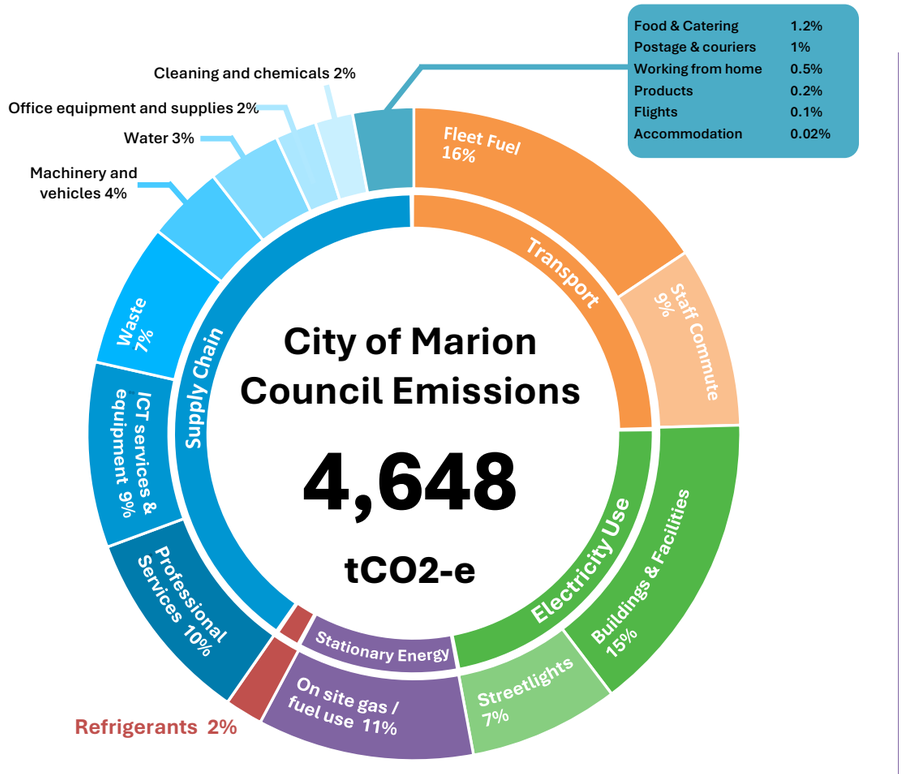
Overtime the availability of value chain data and emissions is expected to improve and as such Council's emissions boundary should be reevaluated.

It is recommended that this expanded emission inventory is used to set a new baseline for ongoing reporting.

## 2022/23 emissions inventory

Financial reporting (money spent), energy retailer reports, vehicle fuel reports and water supply reports are the primary sources of data used in developing the updated FY22/23 emission inventory.

The emissions inventory includes Scope 1, 2, and 3 emissions categories in Council's direct corporate control or where Council can influence emissions and totals 4,648 tCO2-e (refer below).




### Scope 1

Direct GHG emissions emitted by Council (fossil fuels burnt / gasses released)

**1,093 $tCO_2$-e**

### Scope 2

Indirect GHG emissions from electricity consumption

**625 $tCO_2$-e**

### Scope 3

Indirect GHG emissions from Council's supply / value chain

**2,980 $tCO_2$-e**

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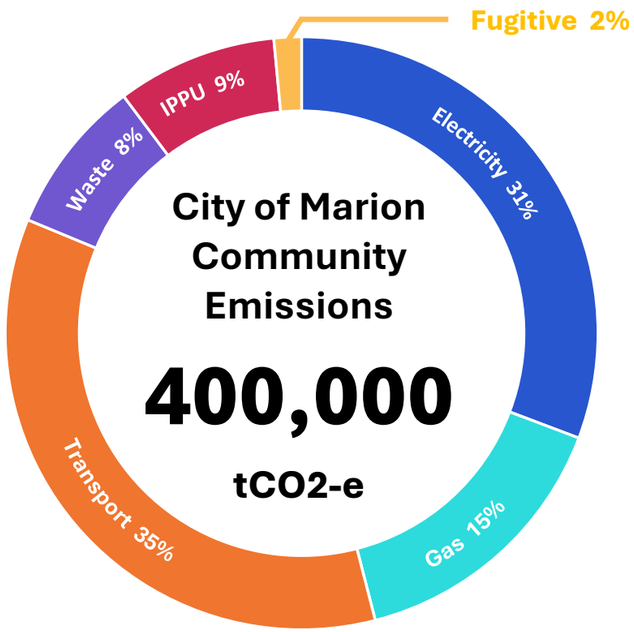
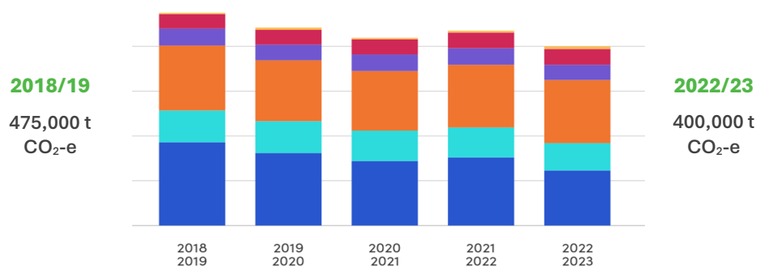
## Community emissions inventory

The following community emissions inventory demonstrates the broader emissions landscape, identifying significant opportunity for Council to facilitate and support emissions reduction within the community. The emissions inventory is based on the Snapshot Climate tool for FY23 to align with Council's corporate emissions. Based on the Snapshot tool Council's corporate emissions equate to approximately 1-2% of the total City of Marion community emissions.




Community emissions have been reducing due to increasing renewable energy generation in the South Australian electricity grid as shown below.

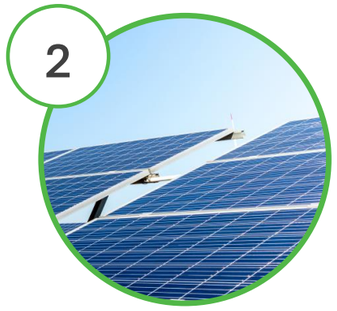



# Key priorities & opportunities

Based on the FY23 emissions inventory for corporate Council operations, the following emissions reduction priorities for this Report have been identified:


## Fleet fuel & transport

Continue to support the replacement of petrol/diesel fleet vehicles for electric options, while supporting increased accessibility and availability of electric vehicle charging. Optimise fleet assets, considering opportunities for downsizing to higher efficiency alternatives. Support staff in using sustainable and active forms of transport.




## Smart energy

Continue to procure 100% Green Power, whilst improving the energy efficiency of Council facilities though combination of optimised rooftop solar and battery storage, energy and systems management, equipment and building upgrades and transition to all-electric assets over time.


## Waste, resources & supply chain

Implement sustainable procurement processes and facilitate a transition to lower emissions and environmentally sustainable suppliers and services, targeting the largest suppliers and supply chain emissions sources. Support the local economy and businesses, whilst reducing transport emissions in the supply chain.


## Data Management

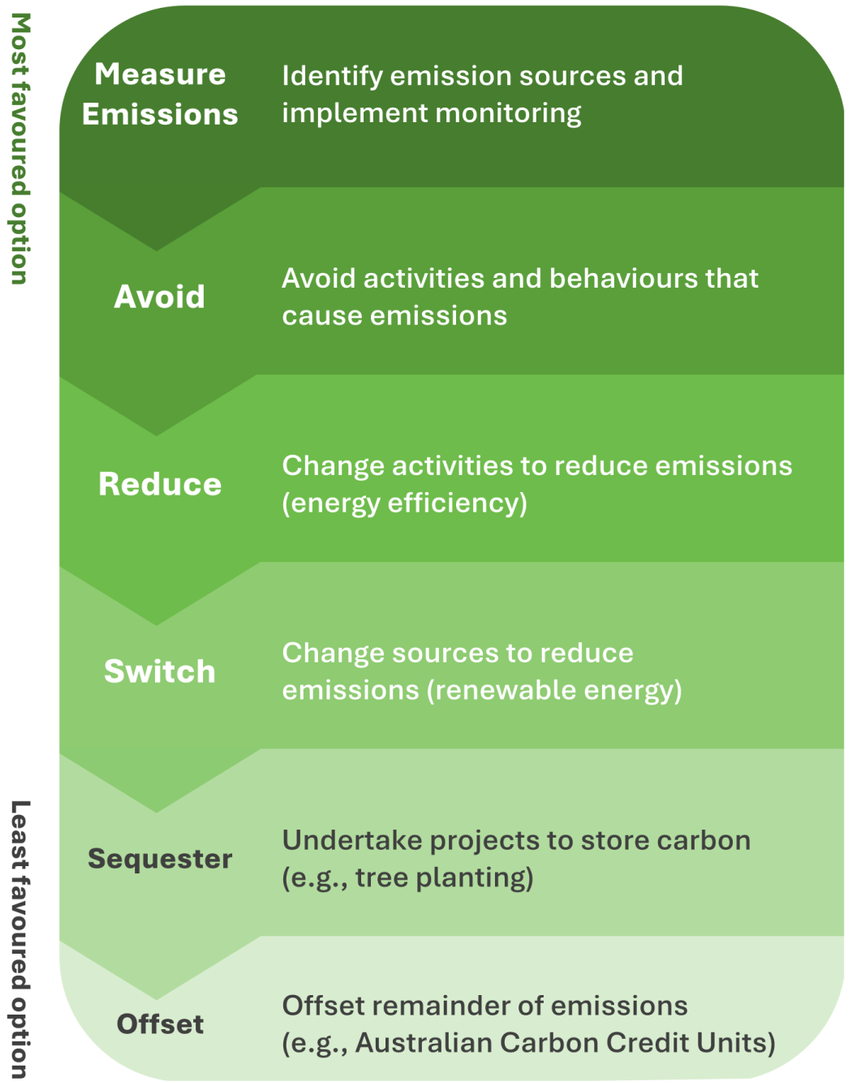
Develop and implement policies that improve data capture for supply chain, particularly for construction related emissions, such as road/ footpath and capital works projects, that could inform future emissions reduction strategies. Implement asset and energy management strategies for regular review and monitoring of energy consumption and solar generation data to enables the optimisation of facility operations.


## Collaborate & advocate

Advocate on behalf of community in support of emissions reduction actions and collaborate with other councils to reduce duplication and share resources. Share learnings with staff and collaborate across government to drive outcomes.

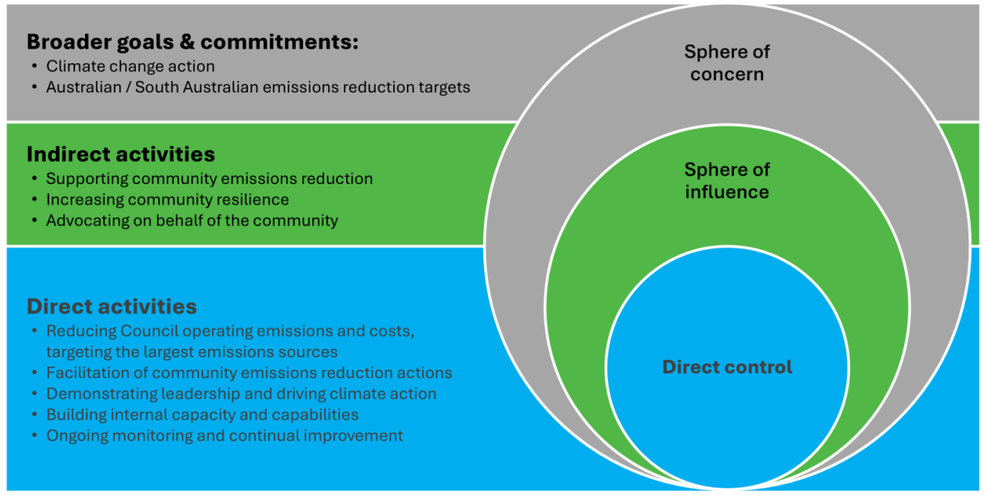
## Carbon management hierarchy

The below carbon management hierarchy has been used to develop this Strategy with a focus on initiatives that will avoid and reduce emissions as the highest priority, while also reducing costs for Council.




## Emissions reduction approach

The following has been used to guide the recommendations with a focus on direct emissions reduction activities, whilst also considering where Council can use its influence to support the community on reducing emissions. The recommendations have also been aligned with broader goals and commitments on climate action.




The highest priority should be placed on reviewing existing operation, practices, and behaviours to avoid activities that result in emissions, and demonstrating leadership for the community.

Carbon offsets are the final stage and used to achieve Carbon Neutral certification to reduce emissions to zero.

## Sequestration

Capturing and removing emissions permanently from the atmosphere is an approach to offsetting organisational emissions and is commonly achieved via biological process, such as planting trees, or artificial carbon capture and storage (CCS) technologies.

A 2023 research collaboration between 33 South Australian council's, including City of Marion, determined that metropolitan councils did not have sufficient land area across verges, reserves and parks to generate carbon offsets from tree planting activities and that partnership with regional councils would be required.

Council's commitment in the Tree Management Plan to plant approximately 4,300 street and reserve trees over 4 years will result in carbon sequestration, assisting to offset some of Council's GHG emissions. The majority of these trees will be planted by 2027/28.

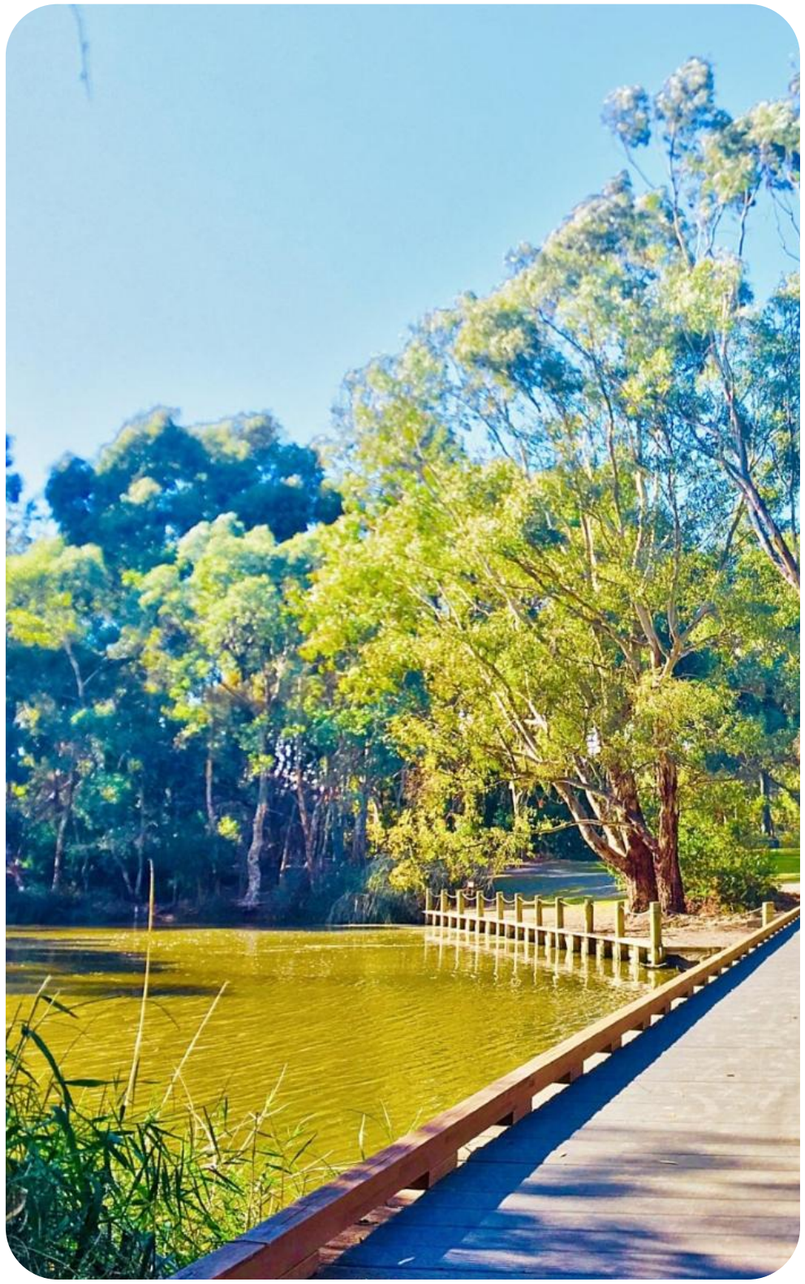
It is estimated that urban street trees and plantings can sequester approximately 8-10kg $CO_2$-e per year per tree, however this is dependent on the tree species, location, and surrounding environment. Based on planting 4,300 trees per year, it is estimated that the tree planting programs could sequester approximately 35-45 t $CO_2$-e per year. This is an accumulative impact as each year the trees will sequester additional carbon each year, and as more trees are planted.

However, tree planting and greening activities across council land are not expected to contribute to a significant reduction in Council's emissions inventory (approximately 1% per year), and is not formally recognised under certification schemes such as Climate Active.

It should be noted that the estimated total carbon storage captured in street and reserve trees across the City of Marion is approximately 16,500 t $CO_2$-e which is expected to continue to increase as more trees are planted and mature. Planting additional trees and vegetation also provides a number of other benefits including:

- Increasing tree canopy cover and biodiversity.
- Reducing the impact of the urban heat island effect (cooler local environments).
- Developing climate resilience and adaptation to increased temperatures.
- Improving resident wellbeing and amenities.

It is recommended that Council continue to monitor and increase the number of street and verge trees and vegetation as it continues to reduce operational emissions. Addition information and data could also be sourced to more accurately calculate the additional carbon sequestered by new street and verge trees planted by Council with the estimate used to demonstrate the emissions offset compared to Council's emissions inventory.



# Energy management

## Introduction

Energy is a large emissions source for both Council's corporate operations and the community. A key focus of this Strategy is also to identify opportunities to reduce energy consumption, costs, and emissions. To support this, energy site visits were undertaken to 5 of Council's larger energy consuming sites to investigate opportunities for energy efficiency and renewable energy integration.

## Energy consumption

Energy consumption includes electricity kilowatt hours (kWh) and natural gas megajoules (MJ) and Council's top energy consuming sites and trends have been summarised below. Electricity (kWh) has been converted to MJ to enable a comparison of total energy consumption. Overall, energy consumption has been reducing however this is largely due to the outdoor pool heat pump upgrades. Most facilities have been increasing energy consumption which may be linked to increased services post-COVID.

| Site | 21/22 | 22/23 | 23/24 | Change | % |
|---|---|---|---|---|---|
| **Marion Outdoor Pool** | 5,962,449 | 5,653,534 | 3,344,078 | -2,618,371 | -44% |
| **Administration Building** | 1,171,336 | 1,144,822 | 1,394,554 | 223,219 | 19% |
| **Marion Cultural Centre** | 1,329,037 | 1,695,367 | 1,375,442 | 46,406 | 3% |
| **Mitchell Park Sports and Community Centre** | 387,858 | 1,564,067 | 1,697,708 | 133,641 | 34% |
| **City Services** | 1,116,553 | 1,282,044 | 1,037,464 | -79,088 | -7% |
| **Edwardstown Soldiers' Memorial Recreation Ground** | 489,257 | 480,076 | 499,679 | 10,422 | 2% |
| **Total (MJ)** | **10,456,489** | **11,819,910** | **9,348,927** | **-1,107,563** | **-11%** |

## Energy site visits

Based on the above top energy consuming sites, site visits were undertaken to the following facilities:

- **Marion Outdoor Pool**
- **Marion Cultural Centre**
- **Mitchell Park Sports and Community Centre**
- **City Services**
- **Edwardstown Soldiers' Memorial Recreation Ground**

The Administration Building was excluded as it is currently undergoing a staged refurbishment program which will include energy efficiency improvements.

## Energy priorities

The following energy reduction priorities were identified during the site visits. A detailed summary of the energy upgrade opportunities has been provided separately to inform forward planning and budgets.

### All-electric transition

>90% of gas consumption was related to heating and hot water for the facilities where a site visit was undertaken. It is recommended that Council implement a staged all-electric transition approach as follows:


#### Marion Cultural Centre

Transition gas storage to electric heat pumps for hot water services in the next 1-2 years.


#### Marion Outdoor Pool

Transition remaining gas boilers to electric at end of life or as part of major refurbishments and upgrades e.g., in the event of upgrading the showers and kiosk, older instant gas units should be replaced with all-electric.

#### Sports clubs & remaining gas

Transition sports clubs and remaining gas sites to all-electric at end of life (10-12 years for sports clubs).

Based on the above sites transitioning to all-electric, it is estimated that Council could reduce natural gas emissions use by approximately 85%. However, this will increase electricity consumption and demand which should be factored into planning and budgets.

## Energy efficiency

The majority of sites had LED lighting installed with times and controls. It is recommended that Council review the remaining sites and replace older fluorescent and halogen lights with LEDs. Remaining opportunities relate to appliances (fridges and freezers) and equipment (kitchens) which should be replaced with the most efficient option at end of life. This should be planned for as part of asset management plans and equipment replacements, with minimum energy efficiency standards and requirements set.

## Renewable energy

The majority of Council facilities have solar photovoltaic (PV) systems installed which are reducing electricity consumption, costs, and emissions. However, a number of the solar PV systems were not functioning including inverter errors and faults. It is recommended that Council:

- Implement improved solar monitoring systems including generation, self-consumption, export to the grid, and alerts.
- Review solar PV expansion opportunities however it is recommended existing faults are addressed first before proceeding with additional solar PV systems or expansions. This will provide a more accurate generation and consumption figure to assess larger systems against.
- Consider energy storage in 1-2 years as battery prices continue to reduce, however this will have a minor impact on emissions as most of Council's sites are not generating sufficient energy to charge batteries. It should be noted that councils are also expected to be eligible for the Cheaper Home Batteries Program which will reduce batter prices by approximately 30%. Depend on the site and consumption profile, this can reduce the payback on batteries to provide a favourable return.

### Solar PV systems over 100kW

Council's current solar PV systems are limited to less than 100kW which is typical for councils that have previously installed solar PV. The is due to a number of reasons including:

- **Network connection rules and agreements:** Systems larger than 100kW were considered large embedded generation systems under SA Power Networks (SAPN) connection rules. This has now been increased to 200kW (or kVA) which has relaxed some of the engineering and network connection requirements.
- **Renewable energy certificates:** Renewable energy systems, such as solar PV, generate renewable energy certificates based on the size of installed system. For systems less than 100kW, Small-scale Technology Certificates (STCs) are generated which are typically provided as an upfront rebate to reduce the install costs of solar PV. Systems over 100kW generate Large-scale Generation Certificates (LGCs) based on the actual energy generated (MWh) and are typically traded / sold on an annual basis. This resulted in systems less than 100kW typically being cheaper to install per kW.
- **Cost:** Solar PV prices were previously higher however have reduced significantly and now provide a financial return / payback regardless of the STCs and LGCs.

### Renewable energy contract

It is understood Council is progressing a Power Purchase Agreement (PPA) arrangement with the option of purchasing 100% renewables and it is recommended that Council review the costs for purchasing renewables versus implementing direct emissions reduction initiatives.

As Council is purchasing 100% renewable energy, the above energy opportunities will be impacted by future electricity procurement. For example, transitioning for gas to electric will result in a 100% emission reduction however in the event 100% renewables are no longer procured, the additional electricity consumption will result in a small increase in electricity emissions. In additional, implementing energy efficiency improvements and solar PV will have no emissions impact.

## Streetlighting

Council has previously implemented an LED streetlighting replacement program which has resulted in a reduction in electricity consumption, costs, and emissions. The LED streetlighting program was implemented after the initial 2015/16 baseline was set and has contributed to reductions in Council's operational electricity emissions. However, the program was undertaken in collaboration with other councils with a third-party delivery partner and included the generation of Australian Carbon Credit Units (ACCUs) based on the energy and emissions savings achieved.

The revised 2022/23 baseline has calculated streetlighting emissions based on a combined Scope 2 and 3 emissions factor and allocated the electricity emissions to Council's Scope 3 emissions. The purchase of Green Power as part of Council's electricity contract has then been used to demonstrate the emissions reduction from purchasing renewable energy for streetlighting electricity consumption. The emissions have not included the generation and surrender of ACCUs.

# Supply chain

It is recommended that Council investigate and implement procurement procedures to reduce Scope 3 emissions from the supply chain, which accounts for almost 50% of total Council emissions.


As energy and fleet continue to decarbonise over time (scope 1 and 2), the share of emissions from the supply chain will continue to grow.

In addition, scope 3 embodied emissions from capital works projects are significant, however have not been included in this emissions inventory as specific quantity and cost data was not available. This is a common challenge for many Councils and requires a strong focus on improving data capture and financial reporting procedures, whilst engaging with stakeholders and suppliers to obtain relevant information. Improving embodied emissions data is a key reccommended action for Council (refer to the following section for more information).

Therefore, this Strategy focuses on expanding the scope 3 supply chain emissions categories reported in the previous inventory, in line with the LGA's Best Practice Guide to Emissions Management.

## Sustainable Procurement

The top 5 supply chain emissions sources for the FY22/23 emissions inventory for the City of Marion Council are:

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| **Professional Services** | **ICT services and equipment** | **Waste generated** | **Machinery and Vehicles** | **Water supply** |
| Including legal services, consultants, advertising, staff training and taxis. | Over 90% of emissions in this category relate to technical ICT services. | Waste from Council facilities that goes to landfill. | Including the purchase of vehicles and maintenance / repair. | Potable and recycled water supply to council buildings and irrigation. |

For the largest impact on emission reduction, it is recommended that the top supply chain emissions shown above are targeted for review and implementation of initiatives based on the following sustainable procurement principles:

It is recommended that Council investigate criteria and KPIs for their supply chain, including implementation of procedures that align with ISO 20400:2017 – Sustainable Procurement.

Key stages of ISO 20400 are outlined below:

## Plan

**Increase understanding by:**

- analysing Council needs and suppliers,
- consult internally and externally, analysing supply market,
- define procurement strategy, including drafting specifications/contracts and develop evaluation criteria, and
- Implement plan with largest suppliers first.

## Source

**Go to market to:**

- engage with suppliers and clarify/query,
- evaluate offers and negotiate, and
- award contract in support of policies and KPIs.

## Manage

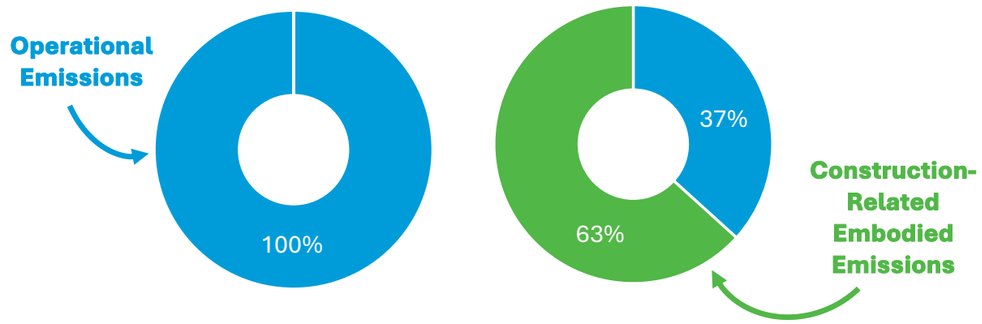
**Continually manage procurement from contract award through delivery by:**

- implementing contracts,
- manage transition,
- review and manage of supplier performance,
- drive continuous improvement, evaluating policies and KPIs, and
- celebrate success.

# Embodied emissions

Construction materials such as concrete, steel and asphalt used in infrastructure and capital works projects have high embodied emissions across the supply chain. Based on previous assessments of council projects and inventories, the largest emissions sources are expected to be:

- Asphalt associated with road replacement programs.
- Concrete for curbs and pedestrian pathways and pavements.
- Concrete and steel in capital works and maintenance projects.




In addition, construction related emissions are estimated to be >60% of Local Government emissions, however, are not easily quantified within current data management practices and therefore have not been included in this emissions inventory.

The first step in managing embodied emissions is to implement robust data collection for quantities and costs of these materials, so that the impact can be quantified, and improvements or opportunities can be measured and evaluated for decisions making. In addition, robust data practices will enable construction materials to be easily captured in future emissions reporting.

From here, priorities can be identified and strategies evaluated to reduce construction-related emissions, such as:

- Optimising designs to reduce the use of high embodied emissions materials.
- Mandating a minimum embodied emissions reduction as part of major capital works projects.
- Incorporating an embodied emissions / recycled content assessment for all infrastructure projects as a tender requirement for suppliers, encouraging suppliers to increase product and emissions transparency and data availability.
- Expanding the use of recycled and low emission materials as part of infrastructure works and tracking progression over time to demonstrate leadership to the community.
- Reducing construction and demolition waste to landfill as part of road and capital works projects.
- Implementing a staged approach, targeting the largest embodied emissions sources and key projects that incorporate large amounts of asphalt and concrete.

## Opportunities

The following embodied emissions opportunities can be considered with a focus on local South Australian suppliers and manufacturers, and products that support circular economy practices, such as recycled content, buy-back or reuse materials collected as part of kerbside recycling services.

However not all options will be available locally and typically have a higher upfront cost. Therefore, opportunities and costs to reduce embodied emissions should be considered against other emissions reduction intitiatives and potential co-benefits, such supporting the local economy or demonstrating leadership.

| Opportunity | Summary |
|---|---|
|   **Low emission / carbon neutral concrete** | **Low emission concrete**: Target a 30% emissions reduction through improved process efficiencies and design optimisation + increased recycled content such as fly ash. **Carbon neutral concrete**: Low emissions concrete + carbon neutral certified. |
|  **Green / recycled steel** | Investigating steel supplies with a higher percentage of recycled content or green steel which uses lower emission production processes such as electric arc furnaces powered by renewable energy. |
| Reconophalt™ **Recycled asphalt content** | Continue to use recycled content for asphalt such as Reconophalt which reduces embodied emissions by 20-30%. |
| RESOURCECO **Recycled Crushed Rock** | Consider options for recycled crush and rock for use as part of infrastructure works. |
| EPD® **Environmental certifications** | Preferencing products and materials that have Environmental Product Declarations (EPDs) and environmental certifications (GECA, Green Tag, etc.) to prioritise lower impact materials and improve data capture. |

# Transport

Transport emissions relating to fleet fuel consumption, the purchase of new vehicles, and staff commute are a significant source of emissions. Due to fuel consumption being a Scope 1 direct emissions source (fossil fuel combustion and direct emissions to the atmosphere), it is a priority that the Council implement emissions reduction initiatives to support a low and zero emissions fleet transition, as well as more sustainable commutes for the community.

The following provides a summary of the emissions reduction outcomes of transitioning to low and zero emission forms of transport per kilometre travelled. For public transport the figure is based on per person per kilometre travelled based on average trip data and fuel use for Adelaide Metro.

Average hybrid

= 10-30% emission reduction

Electric vehicle

= 50-70% emission reduction

Bus

= 40-50% emission reduction

Train

= 70% emission reduction

Walk / cycle

= 100% emission reduction

## Staff Commute

It is recommended that Council continues to advocate for improved public and active transport networks to support staff and residents in low emissions commuting.

The inclusion of staff commuting in Council's emissions inventory is the result of meeting several criteria of the Relevance Test from the GHG Protocol. Staff commuting emissions are significant in size and Council have influence over emissions reduction, through supporting the development of local active transport networks, installing end-of trip facilities at Council buildings and supplying low emission or electric fleet vehicles for staff that commute in Council vehicles.

In addition, this approach aligns with the Best Practice Guide developed as part of the Local Government Association of SA Net Zero Accelerate Program (sector guidance) and emission reporting from undertaken by other SA Councils.

For the FY22/23 emissions inventory, staff commute was calculated based approximate distances from staff postcodes, average WFH days and average SA travel mode split (car, bus, bike etc) published by the Australian Bureau of Statistics. Staff commute emissions for City of Marion are slightly higher than other SA Councils, potentially due to longer commuting distances.

To improve the accuracy of staff commuting emissions, it is reccommended that Council undertake an annual staff survey collating actual commuting distances, predominant transport mode and average days working from home (i.e. no commute). This can then assist Council to make informed decisions on initiatives, such as end-of-trip facilities, EV charging infrastructure and WFH policies.

## Fleet fuel

Council already has a strategy in place to transition all light passenger fleet vehicles to all-electric alternatives and anticipate a full transition by 2028.

It is reccommended that medium and commercial vehicles such as utes could be transitioned to hybrid and electric options over the next 3-5 years as vehicle availability increases and costs reduce. It is projected that EVs may reach price parity with internal combustion vehicles between 2027 to 2030 as EV production and material costs reduce with greater uptake and more efficient technologies. Limited options are currently available on the market, however further ute options that may be suitable for Council are expected from 2025.

**BYD Shark 6 PHEV**
$58k (before on roads)
Currently available

**Ford Ranger PHEV**
$75k (before on roads)
Expected mid- 2025

The following is recommended for consideration as part of the ongoing low emission fleet transition:

- Review vehicle use for fleet optimisation, considering where medium fleet vehicles (i.e. utes) may be suitable to be substituted for electric passenger vehicles, allowing for an earlier transition of these vehicles as market availability for electric and hybrid options are limited.
- Continually review the performance of current EV fleet from an operation, costs an emissions prospective.
- Monitor upfront costs, insurance, repair costs and resale value of low emissions vehicles as it is expected prices will reduce over the next 2-3 years as more options enter the market.
- Increasing budgets to account for the higher upfront cost (30-40% over the next 2-3 years) as well as considering increased repair and insurance costs, until price parity is realised.
- Review EV charging infrastructure requirements based on the initial EV rollout. It is expected EV ranges will reach >700km by 2027 which will reduce the need for large numbers of charges.
- Develop a procedure / approach for EV charging at home for staff that use fleet vehicles for daily commute, as well as implementing processes for public charging.
- Review Work Health and Safety (WHS) risks associated with electric vehicles, including cable management to avoid trip hazards, back-up power provision for charging during a power outage, electric capacity and distances between charging locations.

  EV fires are topical, however based on worldwide statistics EVs have a 0.0012 per cent chance of catching fire, compared to 0.1 per cent for internal combustion vehicles. However, EV fires can be significantly more difficult to contain due to thermal runaway. Charging locations should preference locations in open car parks with clear access for firefighters and include automatic shutdown isolation buttons in safe locations away from the charging stations to isolate the electrical supply.

# Implementation

The following emissions reduction initiatives are recommended for consideration and will be assessed against Council's strategic priorities, operational plans and budgets.

| Initiative | | Summary | Indicative resources | Indicative budget | Timing | Indicative target | Emissions reduction |
|---|---|---|---|---|---|---|---|
| **Transport** | | | | | | | |
| **1a** | **Low emissions fleet transition** | Continue to transition to electric vehicles aiming for the procurement of all light/passenger vehicles to be fully electric by 2028. Continually monitor opportunities for the transition of medium and heavy commercial vehicles to hybrid or electric options with the aim to have this transition implemented and underway by 2030.<br>Review current EV transition costs and savings, EV prices, and future trends as part of fleet transition planning, and plan for the installation of further EV charging infrastructure to support the electric transition. | Budget will be dependent on vehicle type, availability and replacement timeframe.<br>Initial focus on medium fleet transition to anticipated hybrid options. Delayed transition of small trucks from 2028, anticipating all-electric options will be available. | Increase fleet replacement budgets until price parity with combustion vehicles is reached over time. | By 2030 | Medium fleet (utes, buses and vans) transition to hybrid options.<br>Small trucks (i.e. tippers) to transition to electric from 2028.<br>25% fuel reduction in major plant. | 10-130tCO2-e reduction per annum for fleet fuel emissions. |
| **1b** | **Fleet optimisation** | Continue to review fleet assets and consider opportunities for optimisation and downsizing. For example, consider vehicle usage and switch larger utility vehicles for smaller passenger electric vehicle were appropriate/practical. | Existing internal resources to undertake review and planning | N/A | ongoing | N/A | Dependant on optimisations and downsizing. |
| **1c** | **Staff Commute** | Undertake annual staff survey to capture more accurate commuting data, including commuting distances, transport mode (private vehicle, bus, bike etc), and average days working from home (i.e. no commute). | Existing internal resources to administer survey and collate responses annually. | N/A | By 2030 | Aim for 20% emissions reduction over 5 years | 5-10 tCO2-e reduction per annum for staff commute |
| **Smart Energy** | | | | | | | |
| **2a** | **Renewable energy contract** | Negotiate a 100% renewable electricity power purchase agreement to continue 100% renewable energy for Council facilities and services.<br>Reviewing peak demand profiles to assess whether there are opportunities to reduce peak demand charges. | Existing internal resources to undertake review and planning for ongoing procurement | TBC – Pending PPA negotiations | Ongoing | 100% renewable energy | Approximately 2,000 $tCO_2$-e based on 22/23 electricity consumption |
| **2b** | **Energy efficiency / electrification** | Implement an annual energy efficiency and electrification program for Council facilities based on the sustainability audits, ESD Guidelines, and priorities identified in this Report.<br>Program to be based on initiatives that achieve a <7-year payback while supporting improved facilities and services, aiming for a 3-5 year payback. | Refer separate energy summary. | To be costed separately based on energy efficiency assessments | Ongoing | Refer separate energy summary. | 100-200 t $CO_2$-e depending on all-electric transition staging / timing |
| **2c** | **Detailed energy site inspections** | Undertake detailed site investigations and design development for facilities identified for energy efficiency upgrades. | Refer separate energy summary. | To be costed separately based on energy efficiency assessments | TBC | Refer separate energy summary. | N/A |

| Initiative | | Summary | Indicative resources | Indicative budget | Timing | Indicative target | Emissions reduction |
|---|---|---|---|---|---|---|---|
| **Waste, resources and supply chain** | | | | | | | |
| **3a** | **Supply chain** | Undertake a review of the largest supply chain emissions (top 5) and collaborate with suppliers to identify and implement emissions and cost reduction initiatives.<br>Update procurement processes for large supply contracts to include sustainability and emissions criteria. Review broader procurement practice and supply chain emissions (outside of top 5) and identify opportunities to reduce non-essential procurement. | Existing internal resources to undertake supply chain review and negotiate new contracts. | Expert consultant advice and staff training optional $30,000 - $40,000 | From 2026 | Aim for the following % emissions reduction:<br>- 10% in ICT services and equipment over 5 years.<br>-5% in professional services by 2030.<br>- 15% across all other procurement over 5-7 years. | Estimated 200tCO2-e reduction by 2035 |
| **3b** | **Sustainable procurement Strategy** | Develop and implement a sustainable procurement strategy or policy to guide staff decision making. Strategy to include prioritising local products/businesses and suppliers with sustainable commitments or credentials, including carbon neutral certification, whilst also incorporating a review and reporting mechanism (e.g. supplier review checklist). | Existing internal resources to develop strategy and coordinate implementation in Council, including staff training. | N/A | | | |
| **3c** | **Bin audits** | Request waste contractor provides regular waste reporting of waste streams and volumes and implement initiatives to reduce landfill waste. | Renegotiate waste contracts to include reporting. | TBC | From 2026 | Aim for 3% emissions reduction annually | Approx10 tCO2-e reduction per annum. |
| **Data management** | | | | | | | |
| **4a** | **Smart energy management** | Implement strategy with property and facilities management team to undertake regular review of energy consumption and solar generation data in Trellis for individual facilities. Data review to identify potential anomalies that may indicate faults or opportunities for efficiency and optimisation.<br>The strategy should outline procedures to follow to enact further investigation or rectification works when potential issues are identified. Consider smart energy metering systems to track renewable energy system performance, enable energy storage integration, and send alerts for errors or performance issues. | Existing internal resources to develop strategy and coordinate implementation in Council, including staff training. | Consider whether this needs to be a dedicated resource/role and inf external training is required. | ongoing | N/A – data improvement and management. | Optimised system and equipment functionality will reduce emissions by reducing unnecessary energy consumption and optimising on site Renewable Energy use. |
| **4b** | **Infrastructure and capital works embodied emissions** | Coordinate procedures that improve the capture of construction related emissions, such as road / footpath and capital works projects, with the aim to collate these emissions and set targets/strategies in the future.<br>Request material quantity and emissions related information from suppliers, including for alternative low emissions product options for consideration. | Consider allocating additional budget for large capital works and road projects to specific low emissions materials. Continually review against whole of life costs, e.g. longevity, maintenance costs. | Approximately 2-3% of project budgets. | From 2025 | N/A – targets to be set in future strategy. | TBC - based on project type and assessment. |
| **Advocacy** | | | | | | | |
| **5** | **Advocate** | Advocate on behalf of the community for improved standards and services that will reduce consumption, costs and emissions for residents and business. This includes advocating on improved energy efficiency standards, EV charging, and sustainable transport. | Existing internal resources | N/A | From 2025 | N/A – Recommend advocacy actions undertaken annually. | N/A |

# Emissions reduction pathway

The below net zero pathway has been developed to provide guidance on setting an emissions reduction target for Council's corporate emissions only.

Based on the projections, it is estimated that Council could achieve a 50% reduction in emission by 2035 compared to 2022/23. This will require Council to continue to investigate and implement emissions reduction programs in line with this Report, including purchasing 100% renewable energy, as well as monitoring emerging technologies and solutions to fast track the pathway as the broader economy decarbonises.

The recommendations in this Report will be assessed against Council's broader strategic priorities, budgets and operational planning.

The following emissions reduction assumptions have been included in the below pathway:

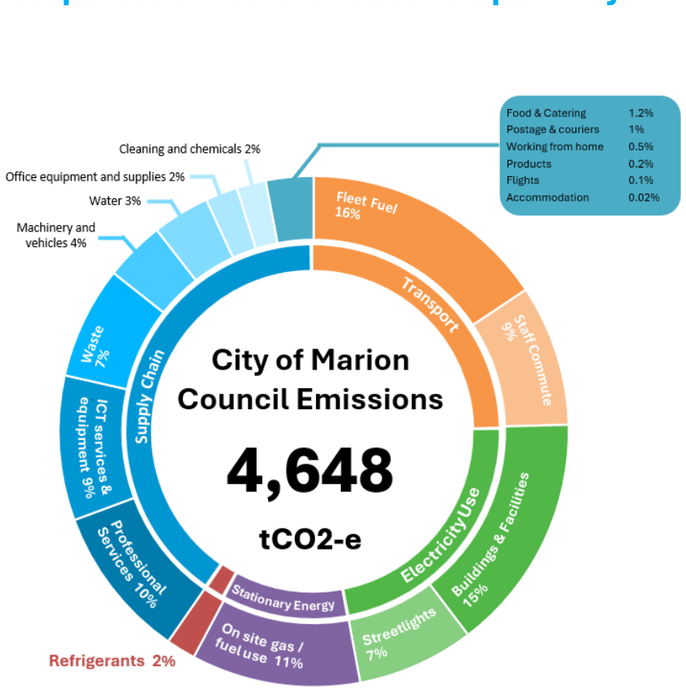
**Ongoing 100% renewable energy contract**

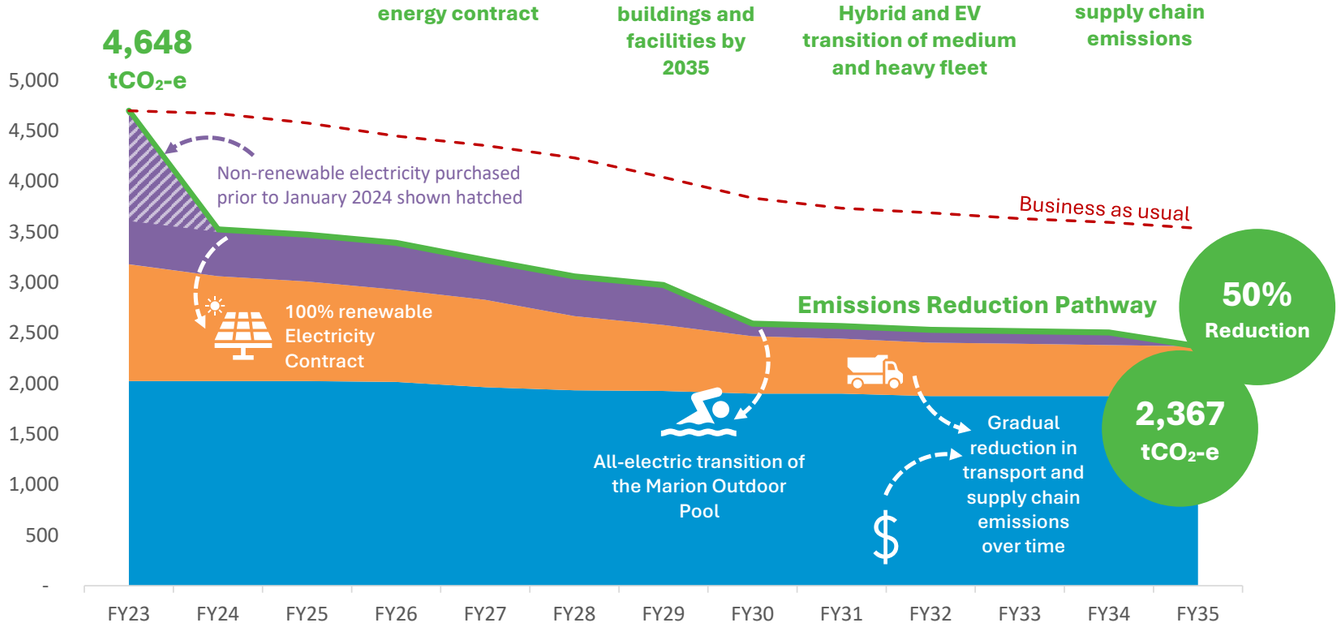
**Transition to all-electric buildings and facilities by 2035**

**57% reduction in fuel emissions due to Hybrid and EV transition of medium and heavy fleet**

**5-10% reduction in supply chain emissions**

## Corporate emissions reduction pathway




Pathway for total combined emissions sources based on anticipated decarbonisation of the electricity grid and transport over time. Whilst this pathway includes the transition of Council's light passenger fleet to electric vehicles, as this is already well underway, no other specific emissions reduction initiatives form part of this pathway, including procurement of renewable energy, which is included on the Emissions Reduction Pathway to show the emissions reduction impact.

# Carbon Offsets

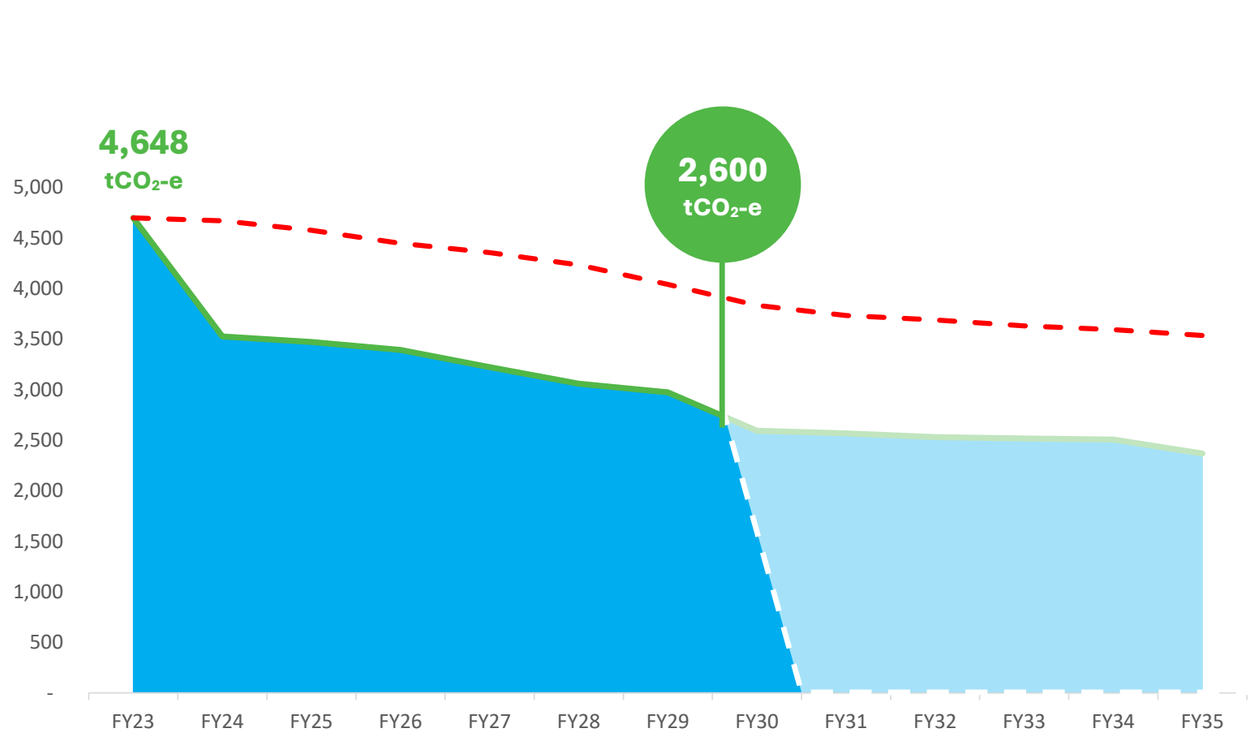
To achieve carbon neutrality prior to the rest of the economy decarbonising and by 2030 in line with the previous Carbon Neutral Plan, carbon offsets can be purchased based on the equivalent amount of GHG emissions Council emit to the atmosphere.

This Report does not recommend purchasing carbon offsets at this time and focusses on direct emissions reduction actions that Council can implement for corporate emissions. If Council were to purchase carbon offsets to reduce emissions to zero from 2030, this will be required annually and ongoing to maintain carbon neutral status.

Carbon offset prices currently range between $10-$15 for international offsets, $35-$50 for Australian Carbon Credit Units (ACCUs), and $70-$80 for ACCUs with additional co-benefits such as social improvements or supporting Aboriginal custodians.

## Carbon offset costs

Based on the above projections, in 2030 Council's corporate emissions are estimated to total approximately 2,600t CO2-e. As a result, carbon offsets would cost approximately $40,000 to $130,000 for international offsets or ACCUs (respectively), or up to $210,000 for ACCUs with additional co-benefits, annually. Although carbon offsets are supporting initiatives and projects to sequester and reduce emissions in the atmosphere, it is recommended that Council focus on direct and local emissions reduction initiatives as a higher priority.




**Australian Carbon Credit Units (ACCU)**
**$35 - $50 / t**

Approx.
$91,000 - $130,000

**International Offsets**
**$10 - $15 / t**

Approx.
$26,000 - $40,000

# Next steps

Council is committed to continuing to demonstrate leadership in emissions management and implementing programs to support reducing emissions in line with the priorities identified in this Report. The below provides a summary of the key actions and next steps to continue to work towards reducing emissions. A more detailed summary of the facility energy audits and recommendations is provided in a separate Energy Upgrade Options Report.

| | |
|---|---|
| **FY23 Baseline** | **The FY23 inventory developed for this Report should be used as a new baseline to monitor emissions reduction initiatives and set targets. This aligns with best practice approaches for emissions inventories and will enable Council to track its emissions and reduction measures moving forward.** |
| **Emissions reduction initiatives** | **Implementing immediate emissions reduction initiatives targeting the top 5 emissions sources is recommended.**<br>**This includes (1) transport including staff commute, (2) energy and, (3-5) supply chain emissions, specifically professional services, ICT services and equipment and operational waste. These emissions sources are the largest opportunities to reduce consumption, costs and emissions.** |
| **50% emissions reduction target** | **A 50% corporate emissions reduction target by 2035 is achievable to work towards net zero emissions while Council's supply chain and the economy decarbonises. The emissions inventory and target should be reviewed and updated every 3-5 years to track progression and revise the target if required, in particular if Council services grow, with the aim of reaching net zero emissions prior to 2050.** |
| **Community emissions** | **There are a number of ways Council can support the community on reducing emissions including advocacy, education, grants and collaborating across local, state and federal government to implement emissions reduction programs.** |
| **Embodied Emissions** | **Although embodied emissions related to the construction of roads/pathways and other capital works projects within Council has not been included in this Report, it is estimated that this would contribute a significant source of emissions (estimated >60% share). Implementing strategies to capture and record material and cost data will enable this to be tracked against targets and emissions reduction initiatives in the future.** |
| **Planning** | **This Report has identified that achieving net zero emissions is dependent on Council's supply chain and the broader economy in decarbonising. However, there are actions Council can take to reduce emissions within its control. It is recommended Council review the opportunities identified in this Report and incorporate into Council operations and planning.** |
| **Publicly commit** | **It is recommended Council publicly commit to emissions reduction initiatives and targets to work towards, demonstrate leadership, and enable Council to celebrate achievements. Learnings from the Council initiatives should also be shared to support community emissions reduction action.** |

dsquared

# Net Zero Pathway

The net zero emissions transition is a journey which is continually evolving as new approaches, technologies and data becomes available. A flexible approach based on a continual improvement model should be adopted to improve over time and work towards net zero emissions.

In particular, emissions from Council's value chain are expected to mature and be refined over time. This may increase emission totals through the inclusion of additional emissions sources not previously collated or more accurate data and revised emissions factors. As such, the path to net zero may not be linear and the baseline emissions inventory used as a benchmark for reporting my need to be updated and reset from time to time, as recommended as part of this strategy with respect to the 2015/16 baseline inventory.

## Reporting

Considering a flexible and continual improvement model, the following approach to emissions reporting is recommended:

- Reestablish a new emissions inventory reporting baseline (per FY22/23) that incorporates expanded emissions sources in line with other SA Councils, Climate Active Carbon Neutral standard and the Best Practice Guide developed as part of the Local Government Association of SA Net Zero Accelerate Program.
- Undertake annual or bi-annual emissions reporting against the FY22/23 baseline, covering a detailed scope of emissions sources. Notable emissions reduction is not expected to be achieved at shorter intervals, as fleet replacement programs, building and infrastructure upgrades and sustainable procurement initiatives are implemented over longer periods of time.
- Implement 6-monthly energy (electricity and gas) and fleet fuel (petrol and diesel) efficiency monitoring and reporting, demonstrating ongoing reductions in energy (kWh/MJ) and fuel (kL) consumption and costs, based on programs and initiatives that will have an associated impact on reducing emissions. Consumption reporting will enable greater understanding of improvements in electricity efficiency compared to emission reporting, as the purchase of GreenPower/ renewable energy neutralises these emissions to zero. In addition, unusual trends and inefficiencies can be identified earlier, reducing costs and emissions.

| 7.2 Environmental Sustainability Plan - strategy and implementation | |
|---|---|
| **Report Reference** | IEC250610R7.2 |
| **Originating Officer** | Unit Manager Environmental Sustainability – Rebecca Neumann |
| **Corporate Manager** | Manager Engineering, Assets and Environment - Mathew Allen |
| **General Manager** | General Manager City Services - Angela Allison |

## REPORT HISTORY

| Report Reference | Report Title |
|---|---|
| IEC241112R7.1 | Environmental Sustainability Plan - draft scope and timeframe |
| IEC240611R7.1 | City of Marion Environmental Sustainability Plan |

## REPORT OBJECTIVE

To present the draft Environmental Sustainability Strategy 2026-2030 (Attachment 1) and the more detailed Environmental Sustainability Plan 2026–2030 (Attachment 2) to the Infrastructure and Environment Committee (IEC) for consideration, prior to presentation to General Council for endorsement for community consultation.

## EXECUTIVE SUMMARY

The Draft City of Marion Environmental Sustainability Strategy 2026–2030 (ES Strategy) and Environmental Sustainability Plan 2026-30 (ES Plan) have been developed to align Council's operational activities with the strategic directions of the City of Marion Strategic Plan 2024–2034. The ES Strategy and ES Plan responds to growing community interest in environmental action by providing a transparent, structured framework to guide Council's sustainability initiatives over the next four years. It is also intended to showcase the breadth of work that council delivers across the "Sustainability" pillar of the council's Strategic Plan.

The ES Strategy and ES Plan are structured around five key themes. Each theme includes targets and stretch targets, current services and initiatives, and a set of priorities and objectives, all designed for delivery within existing resources. To support the achievement of stretch targets and stronger delivery of environmental priorities, draft initiatives requiring further investment are detailed in the accompanying Sustainability Stretch Plan (Attachment 3).

The ES Strategy and ES Plan integrates with a range of Council plans and strategies, including the Biodiversity Plan, Tree Asset Management Plan, Open Space Framework, and the Resilient South Regional Climate Action Plan.

If these ES documents are approved by council the current Carbon Neutral Plan 2020–2030 will be rescinded.

## RECOMMENDATION

**That the Infrastructure and Environment Committee**

1. Recommend to Council for Public Consultation the Draft Environmental Sustainability Strategy 2026-2030 (Attachment 1) with the following changes:
   a. xxx
   b. xxx

c. xxx

2. Recommend to Council for Public Consultation the Draft Environmental Sustainability Plan 2026–2030 (Attachment 2) incorporating all changes referred to in recommendation 1.

3. Note that graphic design of the Environmental Sustainability Strategy 2026-30 and the Environnmental Sustainability plan 2026-30 will be completed prior to presentation to Council.

4. Note the Sustainability Stretch Plan will be presented to a future forum as part of the 2026-27 ABP process.

**DISCUSSION**

**Background**

The ES Strategy and ES Plan are designed to ensure strategic alignment between the overarching directions of the City of Marion Strategic Plan 2024–2034 and the Council's operational activities. The ES Strategy and the ES Plan responds to the community's strong interest in environmental sustainability by outlining how the strategic priorities will be translated into tangible outcomes. It aims to enhance transparency around current sustainability initiatives and provide a clear framework for the initiatives to be delivered over the next four years.

The Infrastructure and Environment Committee provided initial input on the themes and directions at the IEC meeting in June 2024 (IEC240611R7.1), and a further update on the progress of the plan was provided in November 2024 (IEC241112R7.1).

**Attachment Structure**

The ES Strategy (Attachment 1) is a summary of the ES Plan directions and includes for each of the five themes:

- the Strategic plan alignment
- targets for council operations
- stretch targets for council operations
- priorities and objectives within each priority.

This document is the key focus of the discussion as it sets out the framework for the ES Plan.

The ES Plan (Attachment 2) is a more operationally focused document that includes the same detail as the ES strategy but expands with further detail on:

- Alignment with state and national targets

- Community and environmental indicators and goals drawn from government reports and City of Marion survey feedback
- Current council services and initiatives
- New focus areas that can be delivered within existing resources.

Any changes requested by the IEC for the ES Strategy will be applied to the ES Plan prior to presentation to Council.

It is proposed that the ES Strategy and the ES Plan are public documents. the ES strategy could be considered the snapshot document that is easily consumable by the public. The ES Plan provides members of the public who want more information with the depth and breadth of the currently funded activities that Council undertakes. It serves as an action plan for staff but also an educational document for the public.

With the exception of the stretch targets in these two documents targets for council operations, priorities, objectives, current services, activities and new focus areas are within existing resources.

The Sustainability Stretch Plan (Attachment 3), is included for noting only. This document represents draft unfunded initiatives that will assist in delivery of the stretch targets. To achieve the stretch targets additional funding such as outlined in the Stretch Plan would be required. No new initiatives requiring funding are proposed for the 2025-26 financial year. It is not proposed to discuss the Sustainability Stretch Plan in detail at the IEC but rather have a more fulsome discussion on these initiatives at a future forum in preparation for the 2026-27 budget cycle. It is not proposed that this Sustainability Stretch Plan would be issued for public consultation, but rather any initiatives agreed to by council would be incorporated into the ABP public consultation document.

**Scope of the *Environmental Sustainability Plan 2026-2030***

The ES Strategy and ES Plan includes the following themes:

1. Greening, trees and biodiversity
2. Water and coastal management
3. Waste reduction and circular economy
4. Emissions reduction and climate resilience
5. Sustainable living and environmental engagement

Both the ES Strategy and ES Plan will undergo further work to ensure readability, accessibility and graphic design, all consistent with the City of Marion style guide.

**Strategic Planning Framework**

The ES Strategy and ES Plan are guided by the four strategic directions of the *Strategic Plan 2024–2034*, with a strong focus on the ‘Sustainable’ theme. It is also informed by Council’s Environment, Climate, and Waste Management Policies, and aligns with a range of related strategic and operational documents, including:

- *Biodiversity Plan 2024–2029*
- *Tree Asset Management Plan 2024–2034*
- *Open Space Framework 2024–2034*
- *Walking and Cycling Guidelines and Four-Year Plan*
- *Regional Public Health Plan 2025*
- *Resilient South Regional Climate Action Plan 2024–2029*

If approved by Council, the ES Strategy and ES Plan will supersede the current *Carbon Neutral Plan 2020-2030*, providing a broader and more integrated climate response. A detailed explanation of emissions reduction and consideration on the appropriate emissions target is covered in a

separate report in this meeting (IEC250610R7.1). The City of Marion Climate Change Policy is also due for review in 2025, feedback from this IEC meeting for the ES Plan will also be used to ensure consistency in the policy that council members will be considering at the 1 July Forum.

**Implementation, monitoring and reporting**

Delivery of the ES plan will be shared across the organisation. An internal Environmental Sustainability Committee will oversee progress and drive integration across council teams. Progress on the implementation of this plan will be reported to the IEC on an annual basis.

Further discussion on the Sustainability Stretch Plan (Attachment 3) will be held with Council Members in the coming months at a forum to determine those initiatives that will be incorporated into the 2026-27 draft ABP. It is anticipated that this Sustainability Stretch Plan will be reviewed annually to ensure the identified unfunded initiatives for the ABP are aligned with business needs.

A mid-term review of the full ES Plan would be scheduled for early 2028 to assess progress and alignment with objectives. A comprehensive review would then be conducted in 2030 to ensure the Plan remains relevant and responsive to evolving needs.

**Next steps**

Following review by the IEC the next steps are:

- Edits as requested by the IEC and final graphic design
- The ES Strategy and ES Plan will be presented to the General Council for endorsement to proceed to community consultation.
- A four-week community consultation period is anticipated, providing an opportunity for community feedback.
- The revised ES Strategy and ES Plan will be updated to reflect community feedback, will be submitted to the General Council for final endorsement.
- Sustainability Stretch Plan to be considered by a future forum in preparation for the 2026-27 budget cycle.

**ATTACHMENTS**

1. Attachment 1 - DRAFT Environmental Sustainability Strategy (Summary) [**7.2.1** - 11 pages]
2. Attachment 2 - DRAFT Environmental Sustainability Plan [**7.2.2** - 66 pages]
3. Attachment 3 - DRAFT Sustainability Stretch Plan [**7.2.3** - 11 pages]
4. Presentation 1 [**7.2.4** - 10 pages]

# ATTACHMENT 1
# Environmental Sustainability Strategy

## THEME 1 GREENING, TREES AND BIODIVERSITY

### Strategic Plan alignment

- **TARGET: 4300 street and reserve trees planted annually until all suburbs are at capacity**
- L2.2 - Maintain and deliver community spaces, streetscapes and facilities that are intergenerational, vibrant, multiuse, and welcoming.
- S1.1 Mitigate urban heat by enhancing cooling and greening efforts throughout the city, and by seeking new opportunities to create additional open spaces
- S1.2 Manage tree planting and canopy development with an emphasis on enhancing character, ensuring diversity promoting safety and boosting climate resilience.
- S1.3 Expand biodiversity and natural landscaping across the city, with a focus on the protection and restoration of remnant and threatened species and ecosystems
- S2.1 Create attractive, vibrant, useable open spaces
- S2.3 Explore partnerships with Aboriginal and Torres Strait Islander People to learn and share traditional land management practices.

### Targets for council operations

- Ensure 90% of plantable spaces along council-managed roads are filled with trees by 2030
- Deliver an annual tree planting program that aims to achieve a minimum of 30% mature canopy cover over council-managed road
- Plant 60,000 native plants by 2030 (baseline 2024/2025)[1]
- Biodiversity condition at priority biodiversity sites is maintained[2]

### Stretch targets for council operations

- No loss of remnant vegetation on council managed land.

[1] Based on planting target in the City of Marion Biodiversity Plan 2024-2029
[2] "Priority sites" are defined in the City of Marion Biodiversity Plan 2024-2029

## THEME 1 GREENING, TREES AND BIODIVERSITY

| Priority G1: Expand and improve council's natural assets | Priority G2: Advocate for trees, greening and biodiversity in the community | Priority G3: Enhance regional biodiversity and greening |
|---|---|---|
| **Objectives:**<br>• **G1a** Protect, enhance and restore biodiversity with a focus on the critical protection of remnant vegetation<br>• **G1b** Develop open spaces and streetscapes that enhance tree canopy, promote natural landscaping and enable climate resilience<br>• **G1c** Increase nature in council developments through biodiversity sensitive urban design<br>• **G1d** Develop organisational maturity in natural asset management through improved data, planning and monitoring. | **Objectives:**<br>• **G2a** Encourage residents to protect, enhance and restore tree canopy and biodiversity on private land<br>• **G2b** Advocate for State Government policies that promote increased tree canopy and protection trees<br>• **G2c** Encourage greening and biodiversity sensitive design in residential and commercial developments<br>• **G2d** Advocate for improved biodiversity protection laws. | **Objectives:**<br>• **G3a** Collaborate with partners to protect, enhance and restore regional biodiversity corridors along Sturt River, Field River, coastline and the southern hills face<br>• **G3b** Collaborate with partners to enhance greening of regional active transport connections and other transit routes<br>• **G3c** Collaborate with partners to support regional monitoring of tree canopy, green cover and urban heat<br>• **G3d** Collaborate with partners to develop regionally consistent biodiversity monitoring and reporting protocols<br>• **G3e** Collaborate with Kaurna to improve cultural connections through nature<br>• **G3f** Support research and development to enhance and future-proof our natural environment |

## THEME 2 WATER AND COASTAL MANAGEMENT

### Strategic Plan alignment

- L2.1 - Use sustainable and Universal Design Principles, smart technology, and codesign to enhance accessibility.
- L4.1 - Advocate to the community on the benefits of environmentally sustainable design in buildings
- L4.2 - Council infrastructure is assessed for climate risks and actions are taken to embed and improve resilience
- S1.4 - Pioneer new methods in sustainable management of water through water-sensitive urban design, water recycling, and provision of water for the environment

### Targets for council operations

- Continually increase the use of recycled water for our operations by 2030
- Ensure potable mains supply water does not exceed 30% of the total water used for irrigation of council land and aim to keep total consumption of potable water below 200Ml per annum
- Expand Marion Water to enable supply of up to 300Ml per year by 2030
- Maintain groundwater extraction within sustainable limits of up to 200Ml per year.
- Install 200 new street tree inlets by 2030
- Complete and implement updated Stormwater Management Plans for all catchments by 2030

### Stretch targets for council operations

- Install 1000 new street tree inlets by 2030 (subject to grant funding)

## THEME 2 WATER AND COASTAL MANAGEMENT

| Priority H1: Protect and enhance our water catchments and coast | Priority H2: Conserve water, diversify our water sources and create water-sensitive council facilities | Priority H3: Promote the establishment of a water sensitive city |
|---|---|---|
| **Objectives:**<br>• **H1a** Advocate for the rivers, creeks, wetlands and groundwater across the City to meet or exceed acceptable standards in health and quality<br>• **H1b** Maintain and improve council's stormwater network to reduce runoff, improve water quality, mitigate against flooding and support climate resilience<br>• **H1c** Integrate WSUD into council-managed landscapes to increase green infrastructure and mitigate extreme urban heat<br>• **H1d** Increase organisational capacity to design, build and maintain WSUD treatments<br>• **H1e** Monitor our coastline and develop and implement planned responses to coastal climate change hazards. | **Objectives:**<br>• **H2a** Create water-sensitive council buildings and facilities<br>• **H2b** Maximise stormwater capture and reuse initiatives including onsite retention and managed aquifer recharge (MAR) schemes<br>• **H2c** Prioritise use of rainwater and irrigation with recycled water for climate resilient landscapes<br>• **H2d** Use native groundwater within sustainable limits<br>• **H2e** Maximise irrigation efficiency in council reserves through innovation and smart technology. | **Objectives:**<br>• **H3a** Collaborate with stakeholders (other councils, government agencies, SA Water, businesses and community) for coordinated approaches and improved governance of catchment-scale, integrated water management<br>• **H3b** Promote water sensitive urban design practices for existing homes, businesses and small-scale developments<br>• **H3c** Demonstrate leadership and innovation in the application of smart and adaptive water infrastructure. |

## THEME 3 WASTE REDUCTION AND CIRCULAR ECONOMY

### Strategic Plan alignment

- **TARGET 70% resource recovery from household kerbside collection services.**
- L4.1 - Advocate to the community on the benefits of environmentally sustainable design in buildings.
- S1.5 Minimise waste, maximise resource recovery and build circular economy, through our services and support to organisations and the community.
-

### Targets for council operations

- Divert at least 60% of waste generated by council-run facilities from landfill by 2029/30
- Achieve average resource recovery over 80% at Council-run events

### Stretch targets for council operations

- Divert at least 65% of waste generated by council-owned facilities (including leased sites) from landfill by 2029/30
- Achieve average resource recovery over 90% at Council-run events (per event)

## THEME 3 WASTE REDUCTION AND CIRCULAR ECONOMY

| Priority W1: Develop circular council operations | Priority W2: Encourage our community to reduce waste | Priority W3: Support circular businesses and product stewardship | Priority W4: Prevention of litter and pollution |
|---|---|---|---|
| **Objectives:**<br>• **W1a** Establish procurement practices that support sustainable markets for material circularity<br>• **W2b** Reduce waste and resource consumption from corporate operations<br>• **W3c** Lead by example through sustainable procurement practices<br>• **W3d** Measure progress toward circular economy goals and report on effectiveness of policies and programs | **Objectives:**<br>• **W2a** Build community capacity to repair, reuse and share resources<br>• **W2b** Increase recovery of food waste and recyclable resources from landfill to the circular economy<br>• **W2c** Develop community education campaigns and behaviour change initiatives to reduce waste and increase recycling in households.<br>• **W2d** Educate the community about appropriate recycling practices to reduce contamination | **Objectives:**<br>• **W3a** Partner with waste service providers to improve materials recovery and appropriate disposal<br>• **W3b** Advocate for improved recycling facilities and local processing of soft plastic products and materials<br>• **W3c** Support local businesses with waste reduction and circular economy practices<br>• **W3d** Advocate for Federal and State leadership on mandatory product stewardship schemes for handling problematic waste streams | **Objectives:**<br>• **W4a** Promote pollution prevention and cleanup in the community<br>• **W4b** Minimise and manage illegal dumping and public place littering. |

## THEME 4 CLIMATE RESILIENCE AND REDUCING EMISSIONS

### Strategic Plan alignment

- **TARGET: City of Marion (administration) will be carbon neutral by 2030 for its operations.**
- O4.1 - Manage our resources in a financially sustainable way and make provision in council's Long-Term Financial Plan to continually support and ensure uninterrupted council services.
- L1.1 Develop innovative active transport pathways and safe crossing points to key amenities that connect roads, footpaths and public transport
- L2.1 - Use sustainable and Universal Design Principles, smart technology, and codesign to enhance accessibility.
- L4.1 Advocate to the community on the benefits of environmentally sustainable design in buildings
- L4.2 Council infrastructure is assessed for climate risks and actions are taken to embed and improve resilience
- S1.2 Manage tree planting and canopy development with an emphasis on enhancing character, ensuring diversity, promoting safety, and boosting climate resilience
- S1.6 Manage our coastal environment and respond to the impacts of sea-level rise, climate and storm surge
- S3.1 Build resilience to climate change by managing the impacts and risks
- S3.2 Support the community's carbon emission reduction through investing and/or partnering in infrastructure, such as electric vehicle recharge stations.

### Targets for council operations

- Reduce corporate greenhouse gas emissions by 50% by 2035 (from 2022/23 baseline)
- Replace our light fleet vehicles with EVs by 2028
- Purchase 100% renewable energy
- Phase out use of gas at all council buildings by 2035 (replacing each unit with an electric alternative when it reaches the end of its useful life)

### Stretch targets for council operations

- Achieve net zero corporate emissions by 2050 (from 2022/23 baseline)
- Rooftop solar on all City of Marion owned buildings including leased facilities by 2030
- All residual risks in council's climate risk register are "medium" or lower[3]

[3] Refer to City of Marion Risk Management Framework and City of Marion Climate Change Policy

| Priority C1: Reduce greenhouse gas emissions from our operations | Priority C2: Reduce emissions in our supply chain | Priority C3: Support our community to reduce their emissions | Priority C4: Build our organisation's resilience to climate change | Priority C5: Foster community resilience to climate change |
|---|---|---|---|---|
| **Objectives:**<br>• **C1a** Track our emissions in line with best practice approaches for emissions inventories<br>• **C1b** Maximise renewable energy generation and purchase renewable energy<br>• **C1c** Transition to a low-emission fleet<br>• **C1d** Transition to low emission buildings and assets<br>• **C1e** Seek innovative solutions to improve efficiency of public lighting | **Objectives:**<br>• **C2a** Strengthen data collection and reporting processes for emissions across the supply chain.<br>• **C2b** Integrate environmental sustainability and low-emissions criteria into Council procurement practices in alignment with emerging Local Government Association (LGA) standards.<br>• **C2c** Encourage suppliers to lower the emissions associated with the goods and services they provide. | **Objectives:**<br>• **C3a** Support our community to transition to all-electric homes powered by renewable energy<br>• **C3b** Provide infrastructure and programs to increase sustainable and active transport modes<br>• **C3c** Support local businesses to reduce their emissions | **Objectives:**<br>• **C4a** Build and manage our assets to ensure resilience to climate change including heat, storms, flooding and bushfires<br>• **C4b** Deliver services that are resilient to climate impacts<br>• **C4c** Build staff capacity to understand and respond to climate change<br>• **C4d** Strengthen climate governance and embed climate resilience across the organisation<br>• **C4e** Identify and publicly disclose our climate risks and manage how they impact on our organisation | **Objectives:**<br>• **C5a** Raise community awareness about local climate impacts, risks and opportunities<br>• **C5b** Encourage climate-resilient resilient low-emissions development<br>• **C5c** Assist the community to avoid or prepare for climate change risks<br>• **C5d** Assist the community (including those outside our region) in responding and recovering from climate change related emergencies |

## THEME 5 SUSTAINABLE LIVING AND ENVIRONMENTAL ENGAGEMENT

- S2.2 Provide opportunities for the community to connect with nature, learn about our natural environments and promote innovative and sustainable living
- S2.3 Explore partnerships with Aboriginal and Torres Strait Islander People to learn and share traditional land management practices
- S2.4 Promote a sustainable urban environment by supporting community gardens
- S3.2 Support the community's carbon emission reduction through investing and/or partnering in infrastructure, such as electric vehicle recharge stations
- L4.1 Advocate to the community on the benefits of environmentally sustainable design in buildings

### Targets for council operations

- Maintain a Green Thymes click-rate average of 10%
- Reach at least 1000 households each year through direct mailouts with opportunities to get involved in environmental programs
- Increase community awareness of council environmental programs in the community satisfaction survey

| Priority E1: Foster sustainable communities | Priority E2: Connect our community with nature | Priority E3: Support community gardening and sustainable food systems | Priority E4: Support and promote community leadership in sustainability |
|---|---|---|---|
| **Objectives:**<br>• **E1a** Deliver education and engagement programs that increase awareness of sustainable living in our community<br>• **E1b** Remove barriers and provide incentives to encourage positive behaviour change towards sustainable living practices<br>• **E1c** Enhance partnerships and networks with community to support collective action | **Objectives:**<br>• **E2a** Enhance community engagement with nature<br>• **E2b** Promote community understanding of our unique natural environment, local biodiversity and its cultural significance<br>• **E2c** Provide children and young people with meaningful opportunities for nature connection, fostering lifelong environmental stewardship. | **Objectives:**<br>• **E3a** Support existing community garden groups and foster the development of new community gardens<br>• **E3b** Support local food gardening and sharing of local produce to build a sustainable local food system<br>• **E3c** Share knowledge and stories about food, land, and cultural connection to deepen understanding of how food systems are interwoven with environmental and human health. | **Objectives:**<br>• **E4a** Support the development of diverse and inclusive environmental groups and local champions<br>• **E4b** Build community capacity to deliver and innovate on local environmental projects and initiatives<br>• **E4c** Amplify community impact through sharing and showcasing achievements and local stories<br>• **E4d** Create pathways for youth leadership through |

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|---|---|---|---|
| | | | collaboration with schools and youth-led initiatives. |

# ATTACHMENT 2
# Environmental Sustainability Plan 2026-2030

## Contents

# Acknowledgment of Country

# Mayor's Forward

# Executive Summary

# INTRODUCTION

This Environmental Sustainability Plan (ES Plan) will guide how the City of Marion will work with the community and partners to improve environmental sustainability outcomes in our city. This plan is a key document that guides how we will manage the natural and built environment in an ecologically sustainable manner. It outlines how we will deliver on our Strategic Plan 2024-2034 objective of a sustainable city where we protect, restore and connect to the natural environment, building resilience to climate change.

## Environmental Sustainability

Sustainability is about ensuring our past and current actions do not negatively impact our future. Our community has a vision for a sustainable future where we protect, restore and connect to the natural environment, building resilience to climate change.

Our opportunities include:

- Protecting and restoring our remnant plant and animal species.
- Sustainable and innovative water management.
- Planting trees and other vegetation to cool our streets.
- Adopting innovative initiatives for waste reduction and building a circular economy.
- Providing opportunities for the community to connect to nature.
- Reducing our carbon emissions for council-owned buildings.
- Mitigating the impacts of climate change on council infrastructure.

Our challenges include:

- Irreversible declines in biodiversity
- Tree canopy loss across the city due to tree loss on private land.
- Management of natural resources through climate change and infrastructure requirements of an increasing population.
- Urban heat pockets across the city.
- Increase in waste generation of products with limited or no recycling pathways.
- Digitally connected society, with disconnection to nature.
- Impacts of climate change on council infrastructure.

## Council's role

The City of Marion plays a proactive role in environmental sustainability by integrating sustainable practices into its operations, decision-making, and community engagement. The council is committed to reducing its environmental footprint through resource conservation, waste reduction, and promoting energy efficiency. It supports the protection and enhancement of natural ecosystems, fosters sustainable development, and works collaboratively with residents, businesses, and other stakeholders to promote environmental awareness and positive behavioural change. Through these efforts, we aim to create a resilient, sustainable community that thrives within a healthy environment. While we consider broader regional, state, and national priorities in our decisions, our focus remains on working closely with the local community to address local environmental challenges and support sustainable living practices. Our role in delivering the actions in this plan ranges from a service provider to delivery partner, facilitator and advocate.

## Community priorities

Environmental sustainability stands at the heart of our community's values. This is evident in the City of Marion Strategic Plan, where "Sustainable" is a core aspect of the community vision, shaped by extensive community consultation. Through this process, it was clear that trees, greening, and nature were key areas of concern for our residents.

In addition to the Strategic Plan, recent community engagement initiatives, such as those for the Biodiversity Plan and Tree Asset Management Plan, have further emphasised the community's desire for a stronger commitment to sustainability. There is a growing interest in enhanced environmental services and greater action on sustainability across the city. This plan is designed to meet that demand. It outlines how the strategic priorities of our community will be transformed into meaningful outcomes, ensuring that environmental sustainability remains a key focus for the City of Marion.

## Our Strategic Planning Framework

The City of Marion Strategic Plan 2024–2034 sets out four key strategic directions: Liveable, Sustainable, Community, and Our Organisation. These directions reflect the community's vision for the future and guide Council's work over the next decade. They are interconnected and emphasise a whole-of-council approach to achieving long-term, positive outcomes for our city and its people.

The Environmental Sustainability Plan is shaped by these strategic directions and is guided by our Environment Policy, Climate Policy, and Waste Management Policy. It also aligns with a number of Council's strategic and operational documents that support our environmental work, including but not limited to:

- Biodiversity Plan 2024–2029
- Tree Asset Management Plan 2024–2034
- Open Space Framework 2024–2034
- Walking and Cycling Guidelines and 4 Year Plan
- Regional Public Health Plan 2025
- Resilient South Regional Climate Action Plan 2024–2029

The Environmental Sustainability Plan replaces the former Carbon Neutral Plan with a broader and more integrated climate response. It reflects our commitment to reducing emissions, protecting natural assets, and building a more climate-resilient City of Marion.

## Guiding principles

We will implement the ES Plan using the following principles from the *City of Marion Environment Policy*:

- **Environmental leadership:** Demonstrating leadership by striving for environmental sustainability in all our services.
- **Collaboration and partnerships:** Developing positive relationships with our community, partners and customers to enhance environmental sustainability.
- **Advocacy:** Advocating at regional, state and federal levels on environmental matters that may impact council operations, activities or services.
- **Working regionally:** Progressing environmental priorities across our region to ensure efficient planning and allocation of resources, particularly across the southern Adelaide region and water catchments that cut across council boundaries.
- **Building community capacity and resilience**: Support our community and build their capacity to drive environmental sustainability in their local area.
- **Managing our natural assets:** Ensuring council asset management is sustainable throughout the asset management lifecycle

- **Monitoring and measurement:** Improving our environmental performance through setting and reviewing targets or measures.

## Our partners and stakeholders

This Plan will be delivered in collaboration with a wide range of stakeholders and partners including:

- Community of the City of Marion (including residents, ratepayers, businesses, visitors etc)
- Kaurna as the traditional custodians this land
- Local environmental groups and volunteers
- Environmental and non-government organisations
- Community service organisations and housing providers
- Southern Region Waste Authority (SWRA)
- Resilient South Regional Climate Partnership
- Neighbouring councils of Holdfast Bay, Mitcham, Onkaparinga and West Torrens
- Local Government Association of SA
- Green Adelaide
- Department for Environment and Water
- SA Water
- Water Sensitive SA
- Stormwater Management Authority
- Infrastructure SA
- Green Industries SA
- Department for Infrastructure and Transport
- PlanSA
- Adelaide Coastal Councils Network
- South Australian Coastal Protection Board
- South Australian Coastal Councils Alliance
- SA Power Networks
- Professional networks and relevant industry associations

## Implementation, monitoring and reporting

Accountability for implementing this plan is shared across the organisation. Delivery will be coordinated by the **Internal Environmental Sustainability Committee**, which will oversee progress, drive integration across council teams, and ensure actions align with the City of Marion's sustainability goals.

To achieve broader impact, collaborative projects will be actively pursued between council departments, partner organisations, and community groups. These partnerships will drive innovation and amplify efforts towards our sustainability objectives.

While this document spans a four-year period, it is designed to be part of a continuous framework, maintaining a consistent approach to sustainability and reinforcing our long-term commitment to environmental leadership.

Progress on the implementation of this plan will be reported annually to Council, with a midway review scheduled for early 2028. A full review of the plan will take place in 2030 to ensure its ongoing relevance.

# THEME 1 GREENING, TREES AND BIODIVERSITY

## Background

Trees and biodiversity provide unique character to place and are highly valued features in the Marion council area. In addition to having value in its own right, there are many strong and well-documented links between high biodiversity and high community wellbeing. Despite Marion being a highly urbanised metropolitan area, we still have remnant native vegetation and significant biodiversity. Healthy ecosystems and green spaces provide a range of services including reduced urban heat island effects, groundwater recharge, air purification, and amenity.

Key challenges include:

- Tree canopy loss across in the city due to tree loss on private land associated with infill development.
- Urban heat islands forming due to infill development and climate change.
- Lack of protection for native vegetation in Metropolitan Adelaide.
- Integrating valuation, funding and management of natural assets (e.g. trees, wetlands, biodiversity etc.) into traditional asset management systems.
- Restriction on the planting potential of council land due to roadway and utility clearances
- Tree and other vegetation loss due to warming and drying events

## Our role

To protect, enhance and restore biodiversity and create cool, healthy and diverse natural environments for the benefit of our community and wildlife. The City of Marion is committed to protecting and enhancing the natural environment through delivering and facilitating urban greening, tree management, and biodiversity conservation. By promoting the planting and maintenance of trees, preserving natural habitats, and encouraging community involvement in environmental stewardship, we aim to build a greener, more resilient urban landscape that supports both ecological health and community wellbeing.

## Strategic Plan alignment

- L2.2 - Maintain and deliver community spaces, streetscapes and facilities that are intergenerational, vibrant, multiuse, and welcoming.
- S1.1 Mitigate urban heat by enhancing cooling and greening efforts throughout the city, and by seeking new opportunities to create additional open spaces
- S1.2 Manage tree planting and canopy development with an emphasis on enhancing character, ensuring diversity promoting safety and boosting climate resilience
- S1.3 Expand biodiversity and natural landscaping across the city, with a focus on the protection and restoration of remnant and threatened species and ecosystems
- S2.1 Create attractive, vibrant, useable open spaces
- S2.3 Explore partnerships with Aboriginal and Torres Strait Islander People to learn and share traditional land management practices

## Alignment with state and national targets

We aim to support the following greening and biodiversity targets that have been set by the South Australian and the Australian Government, noting that we have only limited control over the outcomes:

- 30% tree canopy cover across metropolitan Adelaide by 2055.[1]
- No new extinctions[2]

## Community and environmental indicators and goals

The following 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.

[1] State Government target, Adelaide Urban Greening Strategy and Greater Adelaide Regional Plan 2025
[2] Australian Government target, Strategy for Nature 2024-2030

- Increase protection laws for remnant vegetation, revegetation greater than 20 years and revegetation in priority areas[3]
- Developments in the council area have a net positive biodiversity impact
- Improve the condition and extent of remnant native vegetation and biodiversity in the council area
- Increase tree canopy cover on private land within the City of Marion[4]

## Targets for council operations

The following targets will measure our progress towards achieving improved greening, trees and biodiversity outcomes for our operations:

1. Ensure 90% of plantable spaces along council-managed roads are filled with trees by 2030
2. Deliver an annual tree planting program that aims to achieve a minimum of 30% mature canopy cover over council-managed road
3. Plant 60,000 native plants by 2030 (baseline 2024/2025)[5]
4. Biodiversity condition at priority biodiversity sites is maintained[6]

## Stretch targets for council operations

1. No loss of remnant vegetation on council managed land.

## Current services and initiatives

We offer a range of services focused on trees, greening, and biodiversity:

- **Tree planting and maintenance**: Annually, we plant approximately 3,900 street trees and 400 reserve trees, aiming to enhance urban greenery and environmental health. This work is guided by an industry-leading Trees Asset Management Plan. We are progressively increasing tree canopy on council-managed land.

[3] Proposed increased protections in the state Biodiversity Bill
[4] This indicator is measured by LiDAR canopy and urban heat data
[5] This target is based on the annual planting target in the City of Marion Biodiversity Plan 2024-2029
[6] "Priority sites" are defined in the City of Marion Biodiversity Plan 2024-2029

- **Interactive Tree Map**: Residents can access an online map to view tree locations, species information, and future planting sites within the city.
- **Biodiversity Plan 2024-2029**: This plan guides the management, enhancement, and protection of natural areas and biodiversity over the next five years. We aim to improve connectivity of biodiversity through our major corridors.
    - Coastline and gullies
    - Field River
    - Southern Hills Face.
    - Sturt River
- **Supporting wildlife-friendly gardens and weed removal**: We provide resources to help residents create gardens that support native wildlife, including butterflies, birds, frogs, and lizards. We run programs to eradicate pest plants such as gazanias and fountain grass.
- **Urban Tree Warriors and Adopt-a-tree**: We support residents to get involved with caring for newly planted street trees.
- **Support local conservation groups:** Council staff support four Friends groups who volunteer thousands of hours each year to plant and maintain biodiversity in our reserves.
- **Verge and Significant Tree Incentives:** We provide funding to support residents to plant and maintain their verges and funding to support private landowners to retain and maintain significant and regulated trees.
- **Coastal biodiversity protection:** We work to protect significant coastal heathland and grassland sites, educating our community and advocating for the protection of intertidal and subtidal biodiversity, rocky reefs and marine areas.
- **Advocating for biodiversity and greening outcomes:** We advocate for improved biodiversity protection laws and biodiversity outcomes in State Government infrastructure and transport projects.
- **Collaborating on regional conservation efforts**: We work with the State Government and regional partners on conservation projects, including coastal conservation, Glenthorne National Park Ityamaiitpinna Yarta and Field River catchment.
- **Promoting and celebrating local biodiversity and trees:** We provide opportunities for the community to celebrate and appreciate local biodiversity and trees including educational 'tree tags' and 'Tree of the Month.'
- **Promote greening in commercial precincts**: Encourage the integration of greening and biodiversity in commercial business precincts including through the Greening of Edwardstown project.

- **Biosecurity, nuisance and declared species:** We work with regional partners on ecologically sensitive approaches to problem-causing species in the council area.

# Priority G1: Expand and improve council's natural assets

## Objectives

- **G1a** Protect, enhance and restore biodiversity with a focus on the critical protection of remnant vegetation
- **G1b** Develop open spaces and streetscapes that enhance tree canopy, promote natural landscaping and enable climate resilience
- **G1c** Increase nature in council developments through biodiversity sensitive urban design
- **G1d** Develop organisational maturity in natural asset management through improved data, planning and monitoring

## Focus areas

In addition to our current services and initiatives, the following funded initiatives will be new areas of focus:

- **Sustainable streetscapes:** During the revision of streetscape guidelines, include detail that supports developers to prioritise climate resilience and greening in public realm– particularly in verge spaces.
- **Verge gardening demonstration sites:** Promotion of verge gardening projects to showcase appropriate native species and designs.
- **Alignment of footpath upgrades with verge gardening promotion:** Look for opportunities to align the footpath capital works with promotion of the verge incentive program to support residents with dolomite removal required in preparation for verge gardens.
- **Biodiversity mapping:** Increase mapping and reporting on the condition and extent of biodiversity on council managed land.
- **Strengthening tree management practices**: Ensure all council managed trees are mapped in the Forestree management system and engage with national and international networks to monitor leading practices in tree management.
- **Support habitat creation in our open spaces**: Review and where appropriate expand the program for constructed tree hollows.
- **Biodiversity sensitive urban design**: Investigate opportunities for Biodiversity Sensitive Urban Design (BSUD) demonstration projects to enhance urban biodiversity.
- **Natural asset management**: Work with Resilient South council and the Institute of Public Works and Engineering Australia (IPWEA) to investigate approaches to incorporate natural assets into convention asset management planning systems.

# Priority G2: Advocate for trees, greening and biodiversity in the community

## Objectives

- **G2a** Encourage residents to protect, enhance and restore tree canopy and biodiversity on private land
- **G2b** Advocate for State Government policies that promote increased tree canopy and protection trees
- **G2c** Encourage greening and biodiversity sensitive design in residential and commercial developments
- **G2d** Advocate for improved biodiversity protection laws

## Focus areas

In addition to our current services and initiatives, the following funded initiatives will be new areas of focus:

- **Greening in vulnerable communities**: Explore new partnerships and engagement opportunities to enhance greening in low socio-economic areas.
- **Increased promotion of greening in developments**: Further promotion of resources and educational materials that assist in greening in residential developments.
- **Education about tree selection and care:** Develop new resources to help educate residents about tree species selection, planting and caring for trees on their land.
- **Biodiversity Act:** Advocate for improved protection of urban biodiversity through the proposed development of the state government Biodiversity Act.
- **Big trees**: Advocate for the improved protection and management of large trees now and into the future – particularly river red gum communities.

# Priority G3: Enhance regional biodiversity and greening

## Objectives

- **G3a** Collaborate with partners to protect, enhance and restore regional biodiversity corridors along Sturt River, Field River, coastline and the southern hills face
- **G3b** Collaborate with partners to enhance greening of regional active transport connections and other transit routes
- **G3c** Collaborate with partners to support regional monitoring of tree canopy, green cover and urban heat
- **G3d** Collaborate with partners to develop regionally consistent biodiversity monitoring and reporting protocols
- **G3e** Collaborate with Kaurna to improve cultural connections through nature
- **G3f** Support research and development to enhance and future-proof our natural environment

## Focus areas

In addition to our current services and initiatives, the following funded initiatives will be new areas of focus:

- **Urban heat and tree canopy mapping:** work with State and local government partners to update mapping of tree canopy cover and urban heat in 2026 and 2030.
- **Climate-resilient trees:** collaborate with in-kind support for research programs such as Future Trees (University of Adelaide) to understand threats to our trees and encourage diversity and climate resilience.
- **Tree data standards:** work with Resilient South councils to scope the development of consistent tree data standards that promote consistent monitoring and reporting.
- **Biodiversity metrics:** work with Resilient South councils to scope the development of consistent biodiversity monitoring and reporting.
- **Sturt River – Warriparri:** Look for new opportunities to increase ecological and cultural outcomes along Sturt River – Warriparri
- **Torrens to Darlington (T2D) South Road Upgrade:** Collaborate with partners to advocate for improve greening outcomes through the State Government T2D initiative.

# THEME 2 WATER AND COASTAL MANAGEMENT

## Background

Water is a precious natural resource that is essential for the vitality and wellbeing of our community and environment. South Australia faces climate change challenges—including declining average rainfall, prolonged droughts, and more frequent and intense storm events—we must proactively manage water to enhance resilience and safeguard our future.

Urban infill and reduced landscape permeability are increasing stormwater runoff and contributing to higher pollutant loads entering the Gulf St Vincent. Without intervention, this will place further pressure on natural waterways and marine ecosystems. Water-Sensitive Urban Design (WSUD) is essential to reversing this trend—ensuring new developments incorporate permeable surfaces, green infrastructure, and stormwater treatment to improve water quality and reduce urban flooding.

The City of Marion's natural waterways, particularly in the southern reserves, are important assets that require ongoing protection. Erosion control, pollutant management and invasive species removal are critical priorities for maintaining the health of these ecosystems. Meanwhile, aging stormwater infrastructure, coupled with increasing demands from urban development and climate variability, underscores the need for strategic investment in stormwater management, upgrades, and maintenance.

The transition to a water-sensitive city is part of South Australia's broader Resilient Water Futures framework, which outlines a holistic approach to integrated water management, drinking water security, stormwater resilience, and environmental sustainability. This transition requires collaboration across multiple agencies, including:

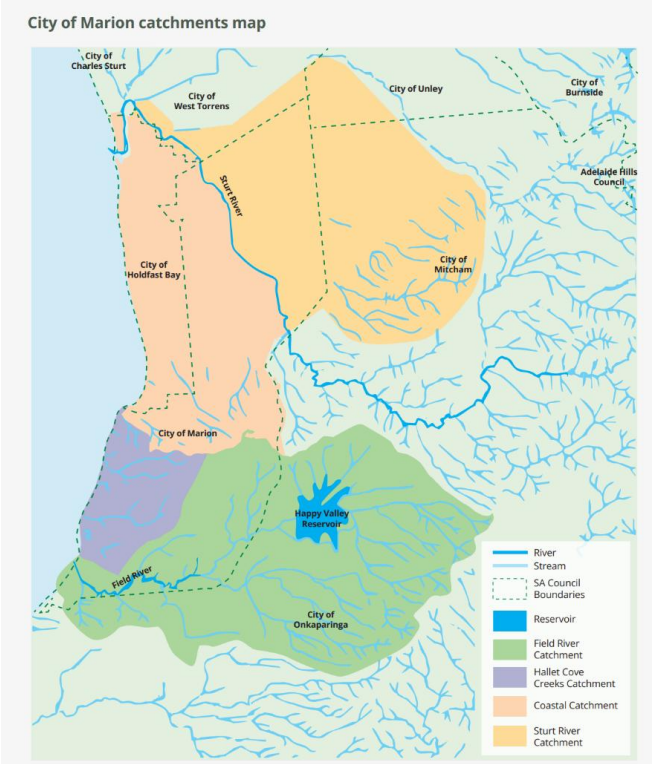
- **EPA** – oversees water quality policies and monitoring and reporting on the State of the Environment.
- **Green Adelaide & the Department for Environment and Water** – manage water access and catchment planning.
- **Adjoining Councils and Stormwater Management Authority**– stormwater management and planning.
- **SA Water –** provision of potable water, mains water reticulation and sewerage system

The City of Marion has four key stormwater catchments, each at different stages of management planning:

- Holdfast-Marion Coastal Catchments Glenelg to Marino – Stormwater Management Plan endorsed 2015 (to be reviewed in 2026).

- Mitcham – Marion Lower Sturt River Catchment – Stormwater Management Plan (draft in progress).
- Hallett Cove Creeks Catchment – Stormwater Management Plan (endorsed 2014).
- Onkaparinga - Marion Field River Catchment – Stormwater Management Plan (in progress ).

By embedding water-sensitive principles into urban planning, investing in resilient infrastructure, and collaborating across agencies, the City of Marion is actively working towards a water-secure, climate-adaptive, and liveable future for all.



Source: City of Marion Asset Management Plan Stormwater 2024 – 2034 (page 22).

## Our role

The **City of Marion** is committed to being a leader in delivery of **water sensitive urban design (WSUD)**, supporting Adelaide's vision as a **water-sensitive city**. We recognise that water is fundamental to a thriving, climate-resilient, and liveable city, and we are dedicated to **integrated, sustainable water management** that protects resources for both the **environment and future generations**.

We will **lead by example**, embedding **water-sensitive principles** into all aspects of our operations while **empowering the community, businesses, and developers** to adopt innovative and sustainable water practices. Through collaboration with stakeholders, we will drive:

- **Clean, Healthy Waterways** – Protecting and restoring natural ecosystems to support healthy waterways that exceed water quality standards.
- **Water-Sensitive Urban Design (WSUD)** - Creating greener, cooler, and flood-resilient suburbs.
- **Water Recycling & Efficiency** – Maximising the use of stormwater, recycled water, and alternative sources and minimise the use of potable water.
- **Smart & Resilient Water Infrastructure** – Future-proofing Marion's water systems to adapt to climate change and urban growth
- **Community Leadership & Partnerships** – Educating, engaging, and enabling the community to be water wise.

## Strategic Plan alignment

- L2.1 - Use sustainable and Universal Design Principles, smart technology, and codesign to enhance accessibility.
- L4.1 - Advocate to the community on the benefits of environmentally sustainable design in buildings
- L4.2 - Council infrastructure is assessed for climate risks and actions are taken to embed and improve resilience
- S1.4 - Pioneer new methods in sustainable management of water through water-sensitive urban design, water recycling, and provision of water for the environment

## Alignment with State and National Targets

We support the following directions around water management that have been set by the South Australian and the Australian Government:

- Managing groundwater supplies within sustainable limits as per the Central Adelaide Prescribed Wells Area Water Allocation Plan
- Responding to the priorities of the Water Resilient Futures program of SA Water

## Community and environmental indicators and goals

The following 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 reliance on the River Murray for metropolitan water supply (SA Water reports)
- Increase stormwater harvesting and reuse over the use of potable mains supply water (council and state government reports)
- Increase uptake of WSUD features (such as rainwater tanks, permeable paving, greywater systems or raingardens) (industry reports)
- Minimise stormwater runoff (council and state government stormwater monitoring)
- Stormwater quality within acceptable limits (state government water quality monitoring stations)
- Groundwater levels and quality to be within acceptable limits (reports from EPA and DEW)
- Marine condition monitoring reports to be within acceptable limits (state government marine condition monitoring reports)
- Reduce marine debris (state government and community marine debris reports and council gross pollutant traps cleaning reports)
- Reduce microplastics wetlands, watercourses and coastal environments (community monitoring reports e.g. AusMap[7])
- Reduce community per capita mains water consumption from SA Water

## Targets for council operations

The following targets will help us measure our progress in improving water management for our operations:

1. Continually increase the use of recycled water for our operations by 2030

[7] www.ausmap.org

2. Ensure potable mains supply water does not exceed 30% of the total water used for irrigation of council land and aim to keep total consumption of potable water below 200Ml per annum
3. Expand Marion Water to enable supply of up to 300Ml per year by 2030
4. Maintain groundwater extraction within sustainable limits of up to 200Ml per year.
5. Install 200 new street tree inlets by 2030
6. Complete and implement updated Stormwater Management Plans for all catchments by 2030

## Stretch targets for council operations

1. Install 1000 new street tree inlets by 2030 (subject to grant funding)

**Table/Box: Water Use Hierarchy**
Where council needs to use water to maintain existing services, we will strive to access the following water sources in accordance with the following hierarchy:

1. On-site retention – retain rainwater onsite (using tanks, wetlands or landscape permeability)
2. Recycled water – treated stormwater from the Oaklands Aquifer Storage and Recovery (if supply is feasible).
3. Groundwater – sustainable use of groundwater resources in line with water allocation plans for the region
4. Potable Water – drinking quality mains water supplied by SA Water through the mains reticulation.
5. Other sources – this may be supplied in emergencies only if the other sources are unavailable

Future water sources that might be considered, however are not a short-term priority for council operations may include sewer mining, connection to the Glenelg Adelaide Pipeline (GAP) for recycled sewage water, connections to other aquifer storage and reuse schemes, greywater reuse onsite, temporary carting of water from external sources for emergencies.

## Current services and initiatives

We deliver a wide range of initiatives to manage water resources sustainably:

- **Stormwater management:** We construct and maintain a stormwater infrastructure network informed by catchment-based Stormwater Management Plans and a Stormwater Asset Management Plan to reduce risks of flooding and protect water quality.

- **Water-sensitive streetscapes and reserves:** We continue to expand, monitor and maintain Water Sensitive Urban Design features and activities that reduce stormwater runoff and improve water quality (such as street-sweeping, gross pollutant traps, street tree water inlets, raingardens and permeable paving).
- **Improving waterways:** We work with Green Adelaide and the Environment Protection Authority to define and establish water quality and environmental flow requirements for waterways within our control
- **Responsible use of groundwater:** We work with Green Adelaide and the Environment Protection Authority to ensure our operations protect groundwater quality and our water extraction is within our agreed allocation and sustainable limits and help reduce reliance on potable water.
- **Monitor coastal climate change:** We monitor, assess and respond to coastal climate change risks.
- **Marion Water:** The Marion Water Business delivers recycled water for council reserves and our customers to reduce reliance on potable water in our region.
- **Promote awareness of water quality:** We support the work of lead State Government agencies by raising awareness with the community on water quality issues, particularly where public health is a consideration.
- **Collaboration and Partnerships:** We work with Water Sensitive SA, neighbouring councils, water authorities and industry experts to improve integrated water management and collaboration on the transition to a water sensitive region.
- **Advocacy:** We advocate to the State Government for holistic catchment-scale planning that integrates water quality, hydrology, biodiversity to improve outcomes for the marine environment.

**Councils Water Supply Mix**
Insert chart of councils current water consumption mix

# Priority H1: Protect and enhance our water catchments and coast

## Objectives

- **H1a** Advocate for the rivers, creeks, wetlands and groundwater across the City to meet or exceed acceptable standards[8] in health and quality
- **H1b** Maintain and improve council's stormwater network to reduce runoff, improve water quality, mitigate against flooding and support climate resilience
- **H1c** Integrate WSUD into council-managed landscapes to increase green infrastructure and mitigate extreme urban heat
- **H1d** Increase organisational capacity to design, build and maintain WSUD treatments
- **H1e** Monitor our coastline and develop and implement planned responses to coastal climate change hazards

## Focus areas

In addition to our current services and initiatives, the following funded initiatives will be new areas of focus:

- **Stormwater Management Plans (SMPs)**: Pending funding from the Stormwater Management Authority, collaborate with the City of Onkaparinga on the development of a SMP for the Field River catchment and review of the Holdfast-Marion Coastal Catchments SMP to ensure stormwater infrastructure is climate resilient
- **Integrate WSUD in major council projects:** Ensure the review of the ESD Guidelines and Streetscape Guidelines include guidance on WSUD features for council projects.
- **Improve WSUD maintenance programs:** Review maintenance levels for WSUD assets with a focus on data collection and defining levels of service through the asset management framework.
- **Build staff knowledge and skills:** Strengthen WSUD skills and knowledge through workforce training and development.
- **Coastal Hazard Adaptation Plan:** Develop a Coastal Hazard Adaptation Plan for the City of Marion[9].

[8] Standards accepted by lead agency responsible, e.g. EPA or Department for Environment and Water.
[9] In line with the new LGA – State Government Climate Ready Coasts Coastal Hazard Adaptation Guidelines

# Priority H2: Conserve water, diversify our water sources and create water-sensitive council facilities

## Objectives

- **H2a** Create water-sensitive council buildings and facilities
- **H2b** Maximise stormwater capture and reuse initiatives including onsite retention and managed aquifer recharge (MAR) schemes
- **H2c** Prioritise use of rainwater and irrigation with recycled water for climate resilient landscapes
- **H2d** Use native groundwater within sustainable limits
- **H2e** Maximise irrigation efficiency in council reserves through innovation and smart technology

## Focus areas

In addition to our current services and initiatives, the following funded initiatives will be new areas of focus:

- **Marion Water Business:** Review the Marion Water Plan to expand how it supports climate resilience and identify future new areas of water supply and demand.
- **Water sensitive buildings:** Review the ESD Guidelines to identify minimum mandatory standards for water resilience in new buildings and upgrades.
- **Irrigation planning:** In the review of council's irrigation plans, ensure use of recycled water and groundwater is prioritised over mains potable water where feasible and utilise digital/smart water infrastructure where appropriate.

# Priority H3: Promote the establishment of a water sensitive city

## Objectives

- **H3a** Collaborate with stakeholders (other councils, government agencies, SA Water, businesses and community) for coordinated approaches and improved governance of catchment-scale, integrated water management
- **H3b** Promote water sensitive urban design practices for existing homes, businesses and small-scale developments
- **H3c** Demonstrate leadership and innovation in the application of smart and adaptive water infrastructure

## Focus Areas

In addition to our current services and initiatives, the following funded initiatives will be new areas of focus:

- **Water Resilient Futures:** Increase the integration of water resilience measures throughout existing council services and reviews of council plans.
- **Expand stormwater monitoring:** Expand monitoring of catchment drains to assess stormwater volume, water quality, and WSUD effectiveness.
- **Water-sensitive developments:** Work with partners such as Water Sensitive SA and PlanSA to expand educational campaigns and advocate for new planning policy around water-sensitive homes, businesses and developments with an increased focus on onsite water retention.

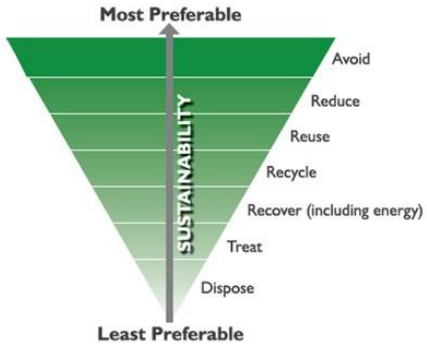
# THEME 3 WASTE REDUCTION AND CIRCULAR ECONOMY

## Background

Waste is a critical environmental sustainability issue, with waste volumes exponentially increasing as resource consumption continues to grow, fuelled by short-lived products. Council has a key role to play in waste management and increasingly in waste reduction, both in the community and in council operations. With a municipal waste diversion rate of 54%, surpassing the state average of 51%, the City of Marion is making progress in reducing waste to landfill. However, only 15% of food waste is currently being diverted to the green organics bin and this remains a strategic priority for council.

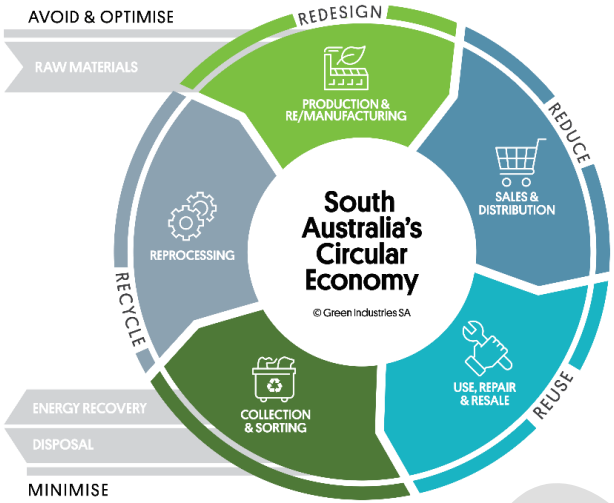
Our operations and services are guided by two principle frameworks, the waste hierarchy and the circular economy.

The waste management hierarchy underpins waste management policy and practice across Australia and is illustrated below.




Waste hierarchy image source: EPA SA website

The circular economy is a model for rethinking the approach to products and services and shifting the way that materials in products are extracted, made, consumed and repurposed to ensure emissions are reduced, less natural and raw materials are needed, products are kept in use longer and product design eliminates waste and pollution.




Circular economy image source: Green Industries SA website

Problematic waste streams which will present ever-growing challenges and need to be considered during the next 5 – 10 years include:

- Food waste
- E-waste (any item with a power cord or battery)
- Batteries (including e-cigarettes and embedded batteries)
- Solar panels
- Mattresses
- Hard-to-recycle plastic packaging (including soft plastics and single-use)
- Clothing and textiles

## Our role

The City of Marion plays a vital role in waste management by providing kerbside bin collections, hard waste collection and recycling drop-off services to the community. We have a strong history of collaborating with stakeholders to minimise waste and promote resource recovery, supporting the broader shift towards a circular economy.

We govern the Southern Region Waste Resource Authority (SRWRA) along with the Cities of Holdfast Bay, and Onkaparinga. We work with these partners to drive innovation in waste and recycling, including the industry-leading Southern Materials Recovery Facility (SMRF).

Additionally, the council provides waste and recycling education to the community to encourage the adoption of sustainable behaviours at home to increase recycling and minimise waste.

The City of Marion supports a circular economy through:

- Purchasing recycled materials and products.
- Supporting sustainable business practices that contribute to a circular economy.
- Supporting resource sharing in our community.
- Advocating to State and Federal Government for waste-related regulatory and policy reforms.

Our vision is to have a City of Marion free of waste where there is no pollution impacting local ecosystems or public health.

## Strategic Plan alignment

L4.1 - Advocate to the community on the benefits of environmentally sustainable design in buildings.

S1.5 Minimise waste, maximise resource recovery and build circular economy, through our services and support to organisations and the community.

## Alignment with State and National Targets

We support the following waste targets that have been set by the South Australian and the Australian Government:

- 70% of kerbside waste diverted from landfill by 2025[10]
- Zero avoidable waste to landfill by 2030[11]
- Halve food waste going to red general waste bins by 2030 (from 2024 baseline)[12]
- Double circularity by 2035[13]
- Reduce the average waste generation per person by 10% by 2030[14]

## Community and environmental indicators and goals

The following 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.

The following indicators are measured through audits of kerbside collection bins and other data from waste service providers:

- Reduce % contamination in the yellow co-mingled recycling bin by weight
- Reduce % hazardous waste in the kerbside collection bins (including electronic waste) by weight
- Reduce % soft plastics in the kerbside collection bins by weight
- Reduce % textiles in the kerbside collection bins by weight
- Reduce % food waste in the green organics and red general waste bins by weight
- Reduce % nappies and sanitary products in red general waste bins

## Targets for council operations

The following targets will help us track our progress in reducing waste and supporting a circular economy by 2030:

1. Divert at least 60% of waste generated by council-run facilities from landfill by 2029/30

[10] South Australian Government Target in *Supporting the Circular Economy: South Australia's Waste Strategy 2020-2025*
[11] South Australian Government Target in *Supporting the Circular Economy: South Australia's Waste Strategy 2020-2025*
[12] Australian Government Target in *National Food Waste Strategy – Halving Australia's Food Waste by 2030*
[13] Australian Government Target in *Australia's Circular Economy Framework: Doubling our circularity rate*
[14] Australian Government Target in *National Waste Policy Action Plan 2024*

2. Achieve average resource recovery over 80% at Council-run events

## Stretch targets for council operations

The following targets are ambitious stretch targets that require additional resources to deliver:

1. Divert at least 65% of waste generated by council-owned facilities (including leased sites) from landfill by 2029/30
2. Achieve average resource recovery over 90% at Council-run events (per event)

## Current services and initiatives

We currently provide a wide range of waste services to our community:

- **Southern Regional Waste Resource Authority (SRWRA):** We drive innovation in waste management services incorporating the landfill and Southern Materials Recovery Facility.
- **Partnering with waste service providers:** We collaborate with SRWRA, waste service providers and Government stakeholders to maximise resource recovery and circular economy inputs, and minimise contamination of recyclable materials.
- **Managing waste through a comprehensive kerbside collection system:** Our kerbside 3-bin system separates general waste, co-mingled recycling, and organics, with each waste type collected for disposal, recycling, or composting at dedicated facilities.
- **Waste education and behaviour change**: We deliver strategic programs and projects which encourage residents and visitors to reduce and recycle waste in the City of Marion, including food waste recycling incentives (e.g. kitchen caddies), waste minimisation at major council events, and provision of community education resources.
- **Reduce waste across council operations**: We encourage waste avoidance at council events, offices, and community facilities by improving waste separation, reduce packaging, prioritising purchasing of recycled content materials, and engaging contractors, tenants and suppliers in Council's waste reduction efforts.
- **Hard waste collection and responding to illegal dumping**: We provide a hard waste collection service that aims to recycle at least 50% of hard waste and respond to illegal dumping with education and enforcement.
- **Supporting pollution prevention:** We provide bins and infrastructure in key reserves to reduce litter and dog faeces; we respond to spills or notifications of contamination on council land and promote public hazardous waste drop-off services.

- **Promote litter reduction activities:** We support community-led activities such as Clean Up Australia Day and other clean-up activities at litter hotspots such as Lower Field River outlet
- **Advocacy for improved waste-related legislation**: We advocate for waste-related legislative changes at State and Federal levels including legislation impacting waste collection service delivery, soft plastic recycling and mandatory product stewardship arrangements.
- **Supporting circular economy in council operations**: We are standardising three-bin systems as a minimum to optimise recycling at our facilities, prioritising the use of recycled materials in civil infrastructure and construction (including footpaths and roads), supporting circular economy in local businesses and converting green waste from council operations into mulch.
- **Collaborate for greater impact**: Explore joint procurement partnerships with other councils to strengthen buying power for sustainable, circular procurement.
- **Strengthening partnerships for a circular economy**: Partnering with local businesses and community champions to drive circular economy solutions.
- **Support businesses in adopting circular economy principles:** Assist local businesses to identify opportunities for circular economy practices, improved waste management, and connection with Green Industries SA for tailored advice and resources.
- **Promote specialised recycling services**: We encourage the use of drop-off locations for specialized recycling, including batteries, e-waste, chemicals, paint, and inform the community about fire risks from batteries in bins and encourage safe disposal alternatives.
- **Support for waste reduction campaigns**: We promote national and international waste reduction initiatives, such as Plastic Free July and National Recycling Week, to raise awareness and inspire action.

# Priority W1: Develop circular council operations

## Objectives

- **W1a** Establish procurement practices that support sustainable markets for material circularity
- **W2b** Reduce waste and resource consumption from corporate operations
- **W3c** Lead by example through sustainable procurement practices
- **W3d** Measure progress toward circular economy goals and report on effectiveness of policies and programs

## Focus areas

In addition to our current services and initiatives, the following funded initiatives will be new areas of focus:

- **Embed circular economy into council procurement**: Integrate circular economy principles into scheduled review of procurement policies to increase recycled material use and set targets for recycled content in purchases.
- **Purchase recycled content in infrastructure:** Identify new priority materials to advance circular economy goals and integrate requirements into tenders and specifications.
- **Support reuse and resource recovery**: Review asset disposal and resource recovery practices at council depots and stores to identify opportunities to better align with circular economy principles.

# Priority W2: Encourage our community to reduce waste

## Objectives

- **W2a** Build community capacity to repair, reuse and share resources
- **W2b** Increase recovery of food waste and recyclable resources from landfill to the circular economy[15]
- **W2c** Develop community education campaigns and behaviour change initiatives to reduce waste and increase recycling in households
- **W2d** Educate the community about appropriate recycling practices to reduce contamination

## Focus areas

In addition to our current services and initiatives, the following funded initiatives will be new areas of focus:

- **Promoting sharing, repair and reuse in the community:** Find new ways to encouraging the sharing economy by supporting repair cafes, swap events, maker spaces, and a 'library of things' for the community to access items that reduce waste.
- **Foster a reduction of textiles to landfill:** Raising community awareness about the impacts of excessive clothing and textile consumption and disposal while promoting sustainable alternatives, supporting textile recycling drop-off days and promoting the implementation of the 'Seamless' product stewardship program for clothing.
- **Advocating for a sustainable weekly green bin collection service:** Continuing to advocate for and investigate options for a sustainable weekly green bin collection service.
- **E-waste recycling education and promotion:** Providing additional community education about e-waste types and disposal options, and promote drop-off days.
- **Raising awareness and improving recycling**: Expand online campaigns and partner with SRWRA, GISA and our waste service providers to educate residents and businesses on correct recycling practices, reduce contamination, and promote waste reduction.
- **Enabling community action and collaboration**: Provide new resources and support for community groups and event organisers to facilitate community education and engagement approaches (e.g. performance or visual art) to reduce waste at local events and foster sustainable waste management practices across the city.

[15] Our largest unrecovered resources with a recycling rate below 50% include food organics, recyclable plastics and metals.

# Priority W3: Support circular businesses and product stewardship

## Objectives

- **W3a** Partner with waste service providers to improve materials recovery and appropriate disposal
- **W3b** Advocate for improved recycling facilities and local processing of soft plastic products and materials
- **W3c** Support local businesses with waste reduction and circular economy practices
- **W3d** Advocate for Federal and State leadership on mandatory product stewardship schemes for handling problematic waste streams

## Focus areas

In addition to our current services and initiatives, the following funded initiatives will be new areas of focus:

- **Repurposing hard waste:** Investigate options and partnerships for recycling and repurposing good quality products and materials from hard waste e.g. tip shop, collection service.
- **Supporting solutions to hazardous waste, batteries and e-waste:** New focus on advocating for all e-waste and solar panels to be included in the mandatory product stewardship scheme for televisions and computers and further develop partnerships with the State Government and private providers to support improved access to recycling and disposal options for hazardous wastes and e-waste.

# Priority W4: Prevention of litter and pollution

## Objectives

- **W4a** Promote pollution prevention and cleanup in the community
- **W4b** Minimise and manage illegal dumping and public place littering

## Focus areas

In addition to our current services and initiatives, the following funded initiatives will be new areas of focus:

- **Trial waste separation in public places:** Explore and implement trials for separating waste and recyclables in public spaces
- **Support phasing out single-use plastics**: Focus on advocacy to support state and federal government policies and bans to reduce unnecessary single-use plastic packaging from entering the environment as litter and microplastics and to remove non-recyclable waste items from circulation.
- **Support regulation to phase out PFAS:** Support the national regulatory approach to phase out Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) from packaging (particularly compostable packaging) due to the potential contamination in council green waste streams and potential impacts on human health and the environment.

# THEME 4 CLIMATE RESILIENCE AND REDUCING EMISSIONS

## Background

The atmospheric levels of carbon dioxide and other greenhouse gases have risen significantly since the pre-industrial period due to the burning of fossil fuels, deforestation and industrial processes. This has driven significant climate change within the City of Marion and globally.

Climate change will have far-reaching impacts on our planet, communities, and future generations. The City of Marion recognises that urgent climate action is needed this decade and is 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.

Our region has already become hotter and drier with more variable and extreme weather and these trends are projected to continue. Key climate trends that will impact the City of Marion now and increasingly over the next 100 years are:

- **Increased heat:** Higher average temperatures and more frequent and intense heatwaves.
- **Drought and reduced rainfall:** Average annual rainfall will decline, and more time will be spent in drought.
- **Increased rainfall intensity and storms:** Despite an overall decrease in rainfall, the number and intensity of heavy rainfall events and storms will increase.
- **Sea level rise and coastal impacts:** Sea levels will continue to rise along with increased risk of coastal erosion and higher storm surges.
- **More dangerous fire weather:** There will be more days of high and extreme fire danger.

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.

Mandatory reporting for climate risk and emissions is not currently required for local government, although voluntary reporting on these topics is considered best practice and aligns with the initiatives of many other South Australian metropolitan councils. Information on emissions and reduction initiatives are increasingly requested as part of grant and funding applications, including the LGA Grants Commission and Community Energy Upgrade Finance (CEUF) grant applications. The voluntary reporting already undertaken by Council positions the City of Marion to be prepared to take advantage of these opportunities.

The Federal Government implemented mandatory climate-related financial disclosure (CRFD) requirements for corporate entities, which began on 1 January 2025. This regime aligns with the International Sustainability Standards Board (ISSB) standards and includes emissions accounting and disclosure. This scheme is applicable to large corporations with high consolidated revenue, assets, and employees that are required to prepare financial reporting under the *Corporations Act 2001*. Whilst this scheme will assist Council to obtain more accurate emissions data from their supply chain over time, there are no current plans to expand applicability of the scheme to local government.

## Our emissions

Under carbon accounting standards like the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard, greenhouse gas emissions are classified into three scopes. The table below outlines the typical emission sources within each scope for a council in South Australia. The figure below this illustrates what

| Scope | Emission Sources |
|---|---|
| **Scope 1:** Direct emissions from sources that are owned or controlled by the reporting organisation. | • Combustion of natural gas/LPG (heating, hot water, cooking etc)<br>• Combustion of petrol and diesel for fleet vehicles and generators<br>• Leakage of refrigerants (gases in air conditioning and refrigeration systems) |
| **Scope 2:** Indirect emissions associated with the purchase of energy (e.g., electricity). | • Electricity purchased for operations, streetlights and facilities including leased facilities |
| **Scope 3:** Scope 3 emissions are the result of activities from assets not owned or controlled by the reporting organisation, but that the organisation indirectly impacts in its value chain. | • Waste to landfill (from council facilities)<br>• Water<br>• Professional services<br>• ICT services and equipment<br>• Machinery and vehicles (fleet vehicles and repairs)<br>• Office equipment and supplies<br>• Cleaning services and chemicals<br>• Paper<br>• Clothing/workwear |

| | |
|---|---|
| | • Postage, couriers, freight<br>• Food and catering<br>• Accommodation (hotel nights)<br>• Staff commute<br>• Staff working from home<br>• Construction materials and services*<br>• Horticulture and agriculture (construction related)*<br>• Roads and landscape* |

***Construction related embodied emissions**

**Source:** Net Zero Accelerate - A best practice guide to emissions management for local government in SA

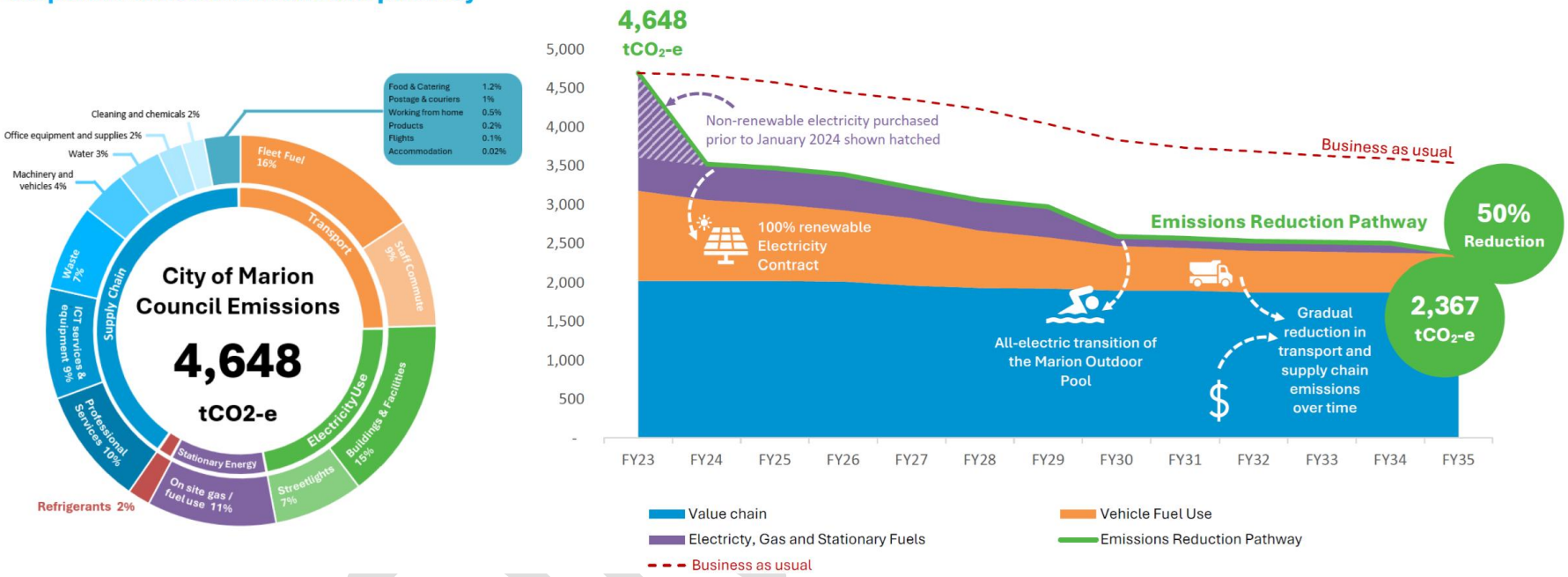
To track our progress in reducing corporate emissions, we will use data from the 2022/23 financial year as our baseline. During this period, our operations generated 4,648 tonnes of $CO_2$ equivalent greenhouse gas emissions as shown in the diagram below. This emissions profile was developed in accordance with the GHG Protocol Corporate Accounting and Reporting Standard, aligning with industry best practices and local government guidelines[16].

With continued efforts - such as purchasing renewable energy, transitioning to all-electric facilities by 2035, reducing fuel use in our medium and heavy vehicle fleet, and lowering emissions in our supply chain - we aim to cut emissions by 50%, reaching approximately 2,367 tonnes of $CO_2$ equivalent by 2035.



[16] Net Zero Accelerate - A best practice guide to emissions management for local government in SA, LGA South Australia

## Corporate emissions reduction pathway




## Our role

Our role in responding to climate change involves leading by example and supporting our community. This includes reducing our own corporate greenhouse gas emissions and adapting to the inevitable climate impacts while providing resources and support for our community to do the same. We will build our organisation's resilience to climate change while fostering climate resilience in our community. We will identify, manage and disclose climate risks to council operations in line with international standards.

Our priority for corporate emission reduction is reducing the emissions within our direct control. For emissions in our supply chain where council has less control, we will use purchasing power to influence suppliers to adopt low-carbon practices. Council will also look for opportunities to advocate for change at the federal and state levels to promote the use of low-carbon materials and technologies.

Another key aspect of our climate response is working with our regional partners through the Resilient South Regional Climate Partnership and with partners at a state and federal level to increase community climate resilience and support appropriate policies and strategies for a low carbon economy.

## Strategic Plan alignment

- O4.1 - Manage our resources in a financially sustainable way and make provision in council's Long-Term Financial Plan to continually support and ensure uninterrupted council services.
- L1.1 Develop innovative active transport pathways and safe crossing points to key amenities that connect roads, footpaths and public transport
- L2.1 - Use sustainable and Universal Design Principles, smart technology, and codesign to enhance accessibility.
- L4.1 Advocate to the community on the benefits of environmentally sustainable design in buildings
- L4.2 Council infrastructure is assessed for climate risks and actions are taken to embed and improve resilience
- S1.2 Manage tree planting and canopy development with an emphasis on enhancing character, ensuring diversity, promoting safety, and boosting climate resilience
- S1.6 Manage our coastal environment and respond to the impacts of sea-level rise, climate and storm surge
- S3.1 Build resilience to climate change by managing the impacts and risks
- S3.2 Support the community's carbon emission reduction through investing and/or partnering in infrastructure, such as electric vehicle recharge stations.

## 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 Australian Government, which have set targets to achieve net zero emissions by 2050.

- South Australia'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

## Community and environmental indicators and goals

The following 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
- Decrease greenhouse gas emissions in the City of Marion (community)[17]
- Increase rooftop solar and batteries by households and businesses[18]
- Increase replacement of fossil-fuel appliances with electrical appliances for households and businesses[19]
- Avoiding public health incidents associated with extreme heat (e.g. mortality rate)
- Avoiding impacts to community infrastructure during flood, storms or bushfires
- Avoiding negative impacts to local economy due to climate change

## Targets for council operations

The following targets will measure our progress towards reducing emissions and increasing climate resilience:

- Reduce corporate greenhouse gas emissions by 50% by 2035 (from 2022/23 baseline)
- Replace our light fleet vehicles with EVs by 2028
- Purchase 100% renewable energy
- Phase out use of gas at all council buildings by 2035 (replacing each unit with an electric alternative when it reaches the end of its useful life)

[17] The Snapshot Community Climate Tool is available at snapshotclimate.com.au
[18] Measured by household rooftop solar energy generation through Clean Energy Regulator
[19] Measured by household rooftop solar energy generation through Clean Energy Regulator

## Stretch targets for council operations

- Achieve net zero corporate emissions by 2050 (from 2022/23 baseline)
- Rooftop solar on all City of Marion owned buildings including leased facilities by 2030
- All residual risks in council's climate risk register are "medium" or lower[20]

## Current services and initiatives

We are currently progressing a range of initiatives to reduce emissions and improve climate resilience:

- **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 PV on over 12 council buildings to help power our operations with renewable energy.
- **Environmentally Sustainable Design (ESD)**: We have guidelines that 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:** We are continuing to optimise and future-proof vehicle replacements ensuring all fleet vehicles are fit for purpose, develop electric vehicle (EV) charging infrastructure.
- **Resilient South Regional Climate Partnership:** Collaborating with neighbouring councils in the Resilient South partnership and delivering the Regional Climate Action Plan.
- **Resilient assets:** We are working with partners on projects like the Resilient Asset Management Program (RAMP) to ensure that our assets are resilient to future climate impacts.
- **Promoting home energy efficiency:** We encourage residents to improve their home's energy efficiency and comfort by promoting resources and guidance and toolkits on creating all-electric, energy-efficient homes.

[20] Refer to City of Marion Risk Management Framework and City of Marion Climate Change Policy

- **Support for community uptake of renewable energy and storage:** We support community efforts to adopt renewable energy and storage solutions.
- **Sustainable transport options**: We support 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:** We are monitoring and planning for coastal climate hazards, ensuring that our coastline is resilient to the impacts of climate change
- **Storm preparation and response**: We run programs to prevent and manage impacts to the community before and after storms.
- **Public electric vehicle charging infrastructure:** We encourage electric vehicle charging infrastructure for our community to support increased uptake of electric vehicles, including provision of public EV chargers at various council facilities.
- **Advocate for development policies that support local climate resilience**: Advocate for State Planning policy and improved building standards that support low-emission, energy-efficient, and climate-resilient developments.

# 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 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

## Focus areas

In addition to our current services and initiatives, the following funded initiatives will be new areas of focus:

- **Produce an Annual Climate Report:** Prepare a comprehensive climate report each year, detailing the greenhouse gas emissions associated with our operations, and make it publicly available on our website.
- **Review ESD Guidelines:** Review the City of Marion ESD guidelines for buildings and embed these principles into councils enterprise project management system
- **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
- **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
- **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.
- **EV fleet:** Monitor emerging low-emission technologies for medium and heavy vehicles,\ and seek opportunities to trial these innovations.

# 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 Council procurement practices in alignment with emerging Local Government Association (LGA) standards.
- **C2c:** Encourage suppliers to lower the emissions associated with the goods and services they provide.

## Focus areas

In addition to our current services and initiatives, the following funded initiatives will be new areas of focus:

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

# 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

## Focus areas

In addition to our current services and initiatives, the following funded initiatives will be new areas of focus:

- **Promote sustainable transport options**: Support active transport through developing safe walking and cycling routes and advocating for zero-emissions public transport.
- **All electric homes:** Look for further new opportunities to promote the Electrify Everything community campaign encouraging households to transition away from fuel combustion (wood, gas, oil etc) to all-electric homes.
- **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.

# 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

## Focus areas

In addition to our current services and initiatives, the following funded initiatives will be new areas of focus:

- **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 and data provided by state government)
- **Climate hazard mapping:** Advocate and for and increase accessibility of climate hazard mapping to assist with informed decision-making to mitigate climate risk
- **Climate risk**: Increase our focus on how we recognise and respond to climate risks through council's climate risk register, including seeking consistency in climate change risk assessments across the Resilient South region and local government more broadly.
- **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.
- **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.
- **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.
- **Climate scenario planning:** Increase the use of scenario planning with staff and other stakeholders (e.g. Southern Region Zone Emergency Management Committee) to conduct incident planning exercises for extreme events and other climate-related risks.

# 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

## Focus areas

In addition to our current services and initiatives, the following funded initiatives will be new areas of focus:

- **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.
- **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 Aging and Inclusion program (PAI).
- **Promote climate-resilient housing**: Share new education materials on climate-resilient housing solutions.
- **Climate Hazard Mapping**: through Resilient South, share new local information on climate hazards that are relevant to our community.

# THEME 5 SUSTAINABLE LIVING AND ENVIRONMENTAL ENGAGEMENT

## Background

The City of Marion is dedicated to creating a future where sustainable living is embedded in the everyday lives of our community. Sustainable living means making choices that have a minimal impact on the environment —using water wisely, minimising waste, reducing emissions, and choosing sustainable, locally produced food.

We will work to empower residents, businesses, and visitors to adopt environmentally responsible practices, fostering a deep connection between people and nature. By encouraging sustainable choices, we aim to reduce our collective impact on the natural world while enhancing the liveability of our city.

Through targeted programs, educational initiatives, and collaborative partnerships, we aim to build a community that actively participates in the protection and enhancement of our local environment. Together, we will create a city that leads by example, where environmental engagement is at the core of our actions.

In the 2025 community satisfaction survey, only 45% of respondents were satisfied with opportunities to learn about the natural environment. The high proportion of neutral (35%) and "don’t know" (11%) responses suggests limited awareness of existing opportunities, highlighting a chance for Council to improve communication and promote local environmental engagement initiatives.

## Our role

We have built strong ongoing relationships with diverse partners to engage our community on environmental matters and encourage sustainable living practices. We aim to empower individuals in our community to make informed choices that reduce their environmental impact while fostering a deep connection to nature within the local area. We will raise awareness of key environmental issues, build local knowledge, and enhance community capacity to contribute to sustainability efforts.

We aim to provide accessible information about sustainable living and create opportunities for individuals and groups to get involved in a range of environmental initiatives. We will keep the community updated on the progress of our environmental actions as an organisation, ensuring transparency and collaboration.

## Strategic Plan alignment

- S2.2 Provide opportunities for the community to connect with nature, learn about our natural environments and promote innovative and sustainable living
- S2.3 Explore partnerships with Aboriginal and Torres Strait Islander People to learn and share traditional land management practices
- S2.4 Promote a sustainable urban environment by supporting community gardens
- S3.2 Support the community's carbon emission reduction through investing and/or partnering in infrastructure, such as electric vehicle recharge stations
- L4.1 Advocate to the community on the benefits of environmentally sustainable design in buildings

## Community and environmental indicators and goals

The following 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.

This theme includes Community and environmental indicators and goals for all the other themes in this plan, plus the following:

- Attitudes towards the environment and nature[21]
- Increasing participation in citizen science platforms[22]
- Increasing use of public transport
- Number, distribution, accessibility of community gardens
- Attendance at sustainability themed council events
- Engagement with sustainability theme digital media content
- Number of community-led environmental projects per year[23]

[21] Attitudes towards the environment are measured through independent surveys commissioned by Green Adelaide every 5 years
[22] Including iNaturalist and Aussie Bird Count
[23] Measured through community grants applications and known projects

## Targets for council operations

The following targets will measure our progress with engaging our community on environmental matters:

- Maintain a Green Thymes click-rate average of 10%
- Reach at least 1000 households each year through direct mailouts with opportunities to get involved in environmental programs
- Increase community awareness of council environmental programs in the community satisfaction survey

## Current services and initiatives

We offer a variety of services to enhance environmental awareness and encourage active participation in local sustainability efforts:

- **Environmental events and workshops:** We host events focused on sustainability actions at home and in the local area, with a focus on topics like saving energy, food gardening, reducing waste, sustainable food and wildlife-friendly gardening.
- **Green Thymes newsletter:** We provide a regular e-newsletter that keeps the community informed about local environmental initiatives and opportunities to engage with nature.
- **Community garden support:** We provide ongoing support, promotion, and capacity building for both established and new community gardens on council-owned land.
- **Common Thread sustainability workshops:** We run series of sustainability workshops designed to inspire action, encourage community connection and educate about key sustainable living topics
- **Digital environmental communications:** We use social media, our website, and enewsletters such at Green Thymes to keep the community informed and connected to local environmental efforts
- **Citizen science initiatives:** We promote and facilitate local involvement in citizen science programs such as CoastSnap, Aussie Backyard Bird Count, FrogWatch, and Reef Watch.
- **Environment Report Card:** We provide an annual overview highlighting the City of Marion's environmental achievements, progress, and partnerships.

- **Promoting council environmental initiatives**: Through various publications and digital channels, we actively promote council-led environmental programs focusing on climate, waste management, water conservation, and greening efforts.
- **Create engaging nature experiences:** We develop events and activities that offer opportunities for the community to connect with nature and learn about the local environment.
- **Green Adelaide Education Program**: We support nature stewardship and environmental leadership in schools through collaboration with Green Adelaide.
- **Nature play in open spaces:** We integrate nature-based play principles into the design of playgrounds, reserves, and open spaces to encourage young people to connect with nature.
- **Encourage community gardening participation**: We promote existing community gardens and inspire residents to get involved in local gardening initiatives for a stronger, more sustainable community.
- **Foster food gardening skills**: We deliver educational workshops and resources to empower residents with the knowledge and skills to grow their own food sustainably.
- **Encourage community engagement with environmental groups**: We promote local environmental organisations to inspire wider community participation in sustainability efforts.
- **Celebrate environmental leadership**: We share stories of local environmental champions through case studies and events to highlight and inspire sustainable practices within the community.

# Priority E1: Foster sustainable communities

## Objectives

- **E1a** Deliver education and engagement programs that increase awareness of sustainable living in our community
- **E1b** Remove barriers and provide incentives to encourage positive behaviour change towards sustainable living practices
- **E1c** Enhance partnerships and networks with community to support collective action.

## Focus areas

In addition to our current services and initiatives, the following funded initiatives will be new areas of focus:

- **Foster inclusive sustainable living education**: Find new opportunities to partner with community service organisations to deliver sustainable living education and programs that support people on low incomes.
- **Engage in regional sustainability initiatives**: Participate in regional behaviour change programs in partnership with organisations across the Adelaide region to promote sustainable living practices on a broader scale.
- **Promote sustainable home design**: Work with local partners to raise awareness and encourage environmentally sustainable practices in home and renovation design, contributing to greener communities.
- **Partner with conservation leaders to encourage native gardening**: Work with leaders from local Friends groups to support native home gardening through tailored advice.
- **Collaborate with libraries and community centres to deliver sustainable living education:** Find new opportunities to work together to provide accessible community projects and programs that foster sustainable living, raise awareness of key environmental issues, build local knowledge, and promote environmental services.

# Priority E2: Connect our community with nature

## Objectives

- **E2a** Enhance community engagement with nature
- **E2b** Promote community understanding of our unique natural environment, local biodiversity and its cultural significance
- **E2c** Provide children and young people with meaningful opportunities for nature connection, fostering lifelong environmental stewardship

## Focus areas

In addition to our current services and initiatives, the following funded initiatives will be new areas of focus:

- **Foster a deeper connection with nature:** Promote plant and animal identification resources like iNaturalist to enhance community engagement and understanding of local plants and animals.
- **Incorporate nature into public art:** Use public art initiatives to inspire connection with the natural environment and raise awareness about local biodiversity.
- **Encourage creative nature initiatives:** Introduce innovative programs that go beyond traditional nature activities, bringing people together and fostering a shared appreciation for the environment.

# Priority E3: Support community gardening and sustainable food systems

## Objectives

- **E3a** Support existing community garden groups and foster the development of new community gardens
- **E3b** Support local food gardening and sharing of local produce to build a sustainable local food system
- **E3c** Share knowledge and stories about food, land, and cultural connection to deepen understanding of how food systems are interwoven with environmental and human health.

## Focus areas

In addition to our current services and initiatives, the following funded initiatives will be new areas of focus:

- **Support local food-sharing initiatives**: Find new ways to foster and facilitate community-based produce swaps and seed libraries to encourage the exchange of homegrown food.
- **Develop a healthy food policy to ensure healthy food options at council events, venues and services**: Prioritise locally sourced food in the healthy food policy to support sustainable food systems.

# Priority E4: Support and promote community leadership in sustainability

## Objectives

- **E4a** Support the development of diverse and inclusive environmental groups and local champions
- **E4b** Build community capacity to deliver and innovate on local environmental projects and initiatives
- **E4c** Amplify community impact through sharing and showcasing achievements and local stories
- **E4d** Create pathways for youth leadership through collaboration with schools and youth-led initiatives

## Focus areas

In addition to our current services and initiatives, the following funded initiatives will be new areas of focus:

- **Foster local sustainability initiatives**: Support the formation of new neighbourhood groups to collaborate on local sustainability projects, such as the "In Our Street" initiative, to drive positive environmental change.
- **Empower environmental leaders** Find new opportunities to build the capacity of environmental champions through leadership programs like Living Smart and the City of Marion Community Leadership Program to nurture local sustainability advocates.
- **Support community-driven environmental projects**: Proactively engage with the community to encourage innovative environmental project proposals to be put forward for funding through our Community Grants opportunities.

# Terms and Acronyms

| Term | Definition |
|---|---|
| Citizen science | Citizen science is the practice of engaging the public in scientific research, where volunteers contribute data collection, analysis, or other activities, often in collaboration with professional scientists, to advance knowledge in various fields |
| Community garden | Community Gardens are community led and managed, not-for profit initiatives, where members of the local community come together to grow food in individual or shared plots. Community gardens are open to the public on a regular basis |
| Resilient South | A Regional Climate Partnership for the Southern Adelaide Region including the Cities of Holdfast Bay, Marion, Mitcham and Onkaparinga and the Government of South Australia. |
| Biodiversity | The diversity of living organisms in a particular location. The term is particularly used for species that are endemic ('native') to a location and have evolved over time to exist in that area as part of an ecosystem. |
| Biodiversity-Sensitive Urban Design | An approach to the planning and design of urban environments focussed on improving biodiversity and ecosystem health. |
| Water Sensitive Urban Design | An approach to the planning and design of urban environments focused on integrating the urban water cycle (including potable water, wastewater, and stormwater) with the built and natural urban landscape. |
| Green infrastructure / natural assets | "Green infrastructure" and "natural assets" are similar terms that refer to living systems or items that are engineered and managed to achieve defined environmental, social and economic outcomes. Examples could be trees, forests or wetlands in an urban setting. |
| Natural Asset Management | Natural Asset Management (NAM) is a particular field of asset management that deals with the systemic management of natural assets. It follows similar approaches to traditional asset management (roads, bridges etc) based on the delivery of defined service levels in the most cost-effective way. |

| | |
|---|---|
| Carbon neutrality | According to the Climate Active Carbon Neutral Standard for Organisations, carbon neutrality means reducing emissions where possible and compensating for the remainder by investing in carbon offset projects to achieve net zero overall emissions. |
| Greenhouse gas | Greenhouse gases include carbon dioxide, methane, nitrous oxide, ozone and some artificial chemicals such as chlorofluorocarbons (CFCs) |
| Climate resilience | The ability of a feature or system to prepare for, recover from and adapt to the impacts of climate change while retaining the same basic structure and ways of functioning. Climate resilience requires an integrated approach that considers climate risk reduction, emissions reduction and adaptation. It requires partners working together using their knowledge and experience. |
| Environmental Sustainability | Planning and providing for the needs of current and future generations, creating resilient and prosperous communities and protecting the environment and ecosystem services. |
| Environmentally Sustainable Design | |
| Greening | Conservation, restoration, or creation of green infrastructure including trees and vegetation, that benefits people, nature and our economy, and the soils and water to support it. |
| Circular economy | An alternative to the wasteful traditional 'linear' economy based on 'take, make, use and dispose' based on the principles of designing out waste and pollution, keeping products and materials in use at their highest utility for as long as possible and regenerating natural systems. |
| Emissions | Emissions refers to greenhouse gas emissions, released into the atmosphere primarily due to human activities such as the burning of fossil fuels (coal, oil, and natural gas), agriculture, and land clearing. |
| Emissions inventory | An account of the amount of greenhouse gas (GHG) emissions emitted to the atmosphere. The emissions inventory must account for the six greenhouse gases (GHG) covered by the Kyoto Protocol. |

| | |
|---|---|
| Hazardous waste | Selected solid waste items, as specified by Council, which arise from residential premises that cannot be collected by the general waste, co-mingled, organics recycling or hard waste collection services. |
| Supply chain | Supply chain refers to the series of activities involved in the production, distribution, and consumption of goods or services, focusing on minimising environmental impacts at each stage. |
| MUDs (Multi Unit Developments) | |
| Future Trees | Future Trees is a Resilient South and University of Adelaide project focused on increasing urban tree diversity through data sharing, trialling new species and developing new cultivars resilient to more challenging climates. www.resilientsouth.com/futuretrees |
| Regional Climate Partnerships | The Regional Climate Partnerships, including Resilient South, are a network of regional, cross-sectoral groups delivering practical action aimed at strengthening the climate resilience of their communities, economies, and natural and built environments. The City of Marion participates in the Resilient South Regional Climate Partnership. |

Draft Sustainability Stretch Plan – unfunded initiatives

# Attachment 3
# DRAFT Sustainability Stretch Plan (unfunded)

## Draft Sustainability Stretch Plan – unfunded initiatives

### THEME 1 GREENING, TREES AND BIODIVERSITY

Priority G1: Expand and improve council's natural assets

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| G1.1 | Natural asset inventory | Develop a natural asset inventory with a baseline condition assessment of our natural assets | This will improve organisational maturity in asset management, including the ability to monitor, manage, and protect our natural assets, ensuring informed decision-making. This approach helps identify key areas for improvement, track changes over time, and prioritise actions to maintain or enhance the health of natural assets. Priority natural assets will include natural WSUD features, wetlands, watercourse, remnant and priority biodiversity sites. | G1b Develop organisational maturity in natural asset management | | | | |
| G1.2 | Tree condition auditing | Ongoing improvements to data collection to ensure comprehensive understanding of tree condition over time | This would enable us to improve data quality for better expenditure planning through the Tree Asset Management Plan. It will create a more comprehensive view of the urban forest and tree condition and how to optimise spending. | G1b Develop organisational maturity in natural asset management | | | | |
| G1.3 | Biodiversity sensitive urban design for major projects | This funding would be tied to planned major projects and would not be a standalone budget. It would include before and after surveys, use of appropriate native plants in design and ensuring project design does not negatively impact. | Ensuring major projects do not result in loss of remnant vegetation, do not negatively impact priority biodiversity sites and aim to have a biodiversity net positive impact. | **Stretch Target: No loss of remnant vegetation on council managed land.** | | | | |
| G1.4 | Urban greening prioritisation tool | Develop a tool for prioritisation of new urban greening initiatives. This would include local translation of Adelaide's Urban Greening Strategy and align with other regional work on an urban greening prioritisation tool. | To provide clarity on which greening types (irrigated turf, natural landscaping, tree planting etc) should be prioritised across the council area to meet community needs and support sustainability and climate resilience - in particular urban heat vulnerability. This work would feed into planning for open spaces, streetscape, walking and cycling, and transport. | G1b Develop open spaces and streetscapes that enhance tree canopy, promote natural landscaping and enable climate resilience | | | | |

Priority G2: Advocate for trees, greening and biodiversity in the community

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| G3.1 | Biodiversity incentive program for residents | Develop a biodiversity protection incentive program for residents to protect remnant native vegetation on their land | Support for monitoring, assessment and management (e.g. weed control and revegetation) of remnant vegetation sites | **Stretch Target: No loss of remnant vegetation on council managed land.**<br>G2a Support residents to protect and maintain trees and biodiversity on private land | | | | |
| G3.2 | Wildlife friendly gardens | Expand support and incentives for residents to create wildlife friendly gardens, targeting priority landscapes and using behaviour change approaches | More native vegetation on private land in suburbs with high biodiversity values. This will benefit local biodiversity and reduce invasive weeds. | G2a Encourage residents to protect, enhance and restore tree canopy and biodiversity on private land | | | | |

## Draft Sustainability Stretch Plan – unfunded initiatives

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| G3.3 | Tree incentive program for private greening | Develop a tree incentive program for residents to support further tree planting on private land | More trees and greening on private land to provide cooling, shading and amenity benefits for the wider community and improve liveability. | G2a Encourage residents to protect, enhance and restore tree canopy and biodiversity on private land | | | | |

Priority G3: Enhance regional biodiversity and greening

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| G3.1 | Coastal corridors | Identify projects and seek grant funding to enhance local biodiversity corridors along the coast | This would address the lack of funding for maintaining and enhancing coastal biodiversity | **Stretch Target: No loss of remnant vegetation on council managed land.**<br>G3a Collaborate with partners to protect, enhance and restore regional biodiversity corridors along Sturt River, Field River, coastline and the southern hills face<br>G3e Collaborate with Kaurna to improve cultural connections through nature | | | | |
| G3.2 | Sturt River - Warriparri restoration | Identify projects and seek grant funding opportunities to continue to enhance restoration of ecological and cultural values of Sturt River - Warriparri. | Additional infill planting and opportunities to further consider collaboration with SA Water exist - particularly in consideration of channel upgrades. Opportunities for better cultural outcomes with Kaurna-led initiatives on Warriparri (links with RAP). | G3a Collaborate with partners to protect, enhance and restore regional biodiversity corridors along Sturt River, Field River, coastline and the southern hills face<br>G3e Collaborate with Kaurna to improve cultural connections through nature | | | | |
| G3.3 | Woodland and grassland wildlife linkages study | Identify projects and seek grant funding for improving strategic urban biodiversity linkages for wildlife focusing on woodland birds and grassland species as icons | Improving urban biodiversity linkages for wildlife including birds, butterflies and other icon species | **Stretch Target: No loss of remnant vegetation on council managed land.**<br>G3a Collaborate with partners to protect, enhance and restore regional biodiversity corridors along Sturt River, Field River, coastline and the southern hills face<br>G3e Collaborate with Kaurna to improve cultural connections through nature | | | | |

## Draft Sustainability Stretch Plan – unfunded initiatives

### THEME 2 WATER AND COASTAL MANAGEMENT

Priority H1: Protect and enhance our water catchments and coast

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| H1.1 | Scale up WSUD across our city | Install more WSUD treatments across the council area- as guided by the reviewed stormwater management plans. | WSUD treatments such as tree inlets and raingardens, allow sufficient water to tree to promote healthy street trees and reduce the presuure on watering. This is an effective way to improve street tree greening outcomes. | **Stretch Target: Secure grant funding to install 1000 new street tree inlets by 2030** | | | | |
| H1.2 | Coastal clifftop erosion response | Following the existing planned audit of uncontrolled stormwater along the coast, deliver works that require changes on council land | Reducecs cliff erosion and imrpoces stabiility and coastal climate achange resilience. | H1e Monitor our coastline and develop and implement planned responses to coastal climate change hazards | | | | |

Priority H2: Conserve water, diversify our water sources and create water-sensitive council facilities

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| H2.1 | Water efficiency audits | Undertake water efficiency audits for council buildings and facilities to identify opportunities for improvement | Improve water efficiency in council buildings and reduce water costs. Demonstrate WSUD leadership to the community. | H2a Create water-sensitive council buildings and facilities | | | | |
| H2.2 | Rainwater tanks | Install rainwater tanks in council-owned buildings and connect them to indoor water appliances | Rainwater tanks would be a visible way to demonstrate leadership in WSUD to the community. | H2a Create water-sensitive council buildings and facilities | | | | |
| H2.3 | Water allocation for greening | Investigate purchasing additional licenses or water allocation to enable irrigation of open space for greening | The benefits will depend on the outcome of the investigation. Potential high benefit to greening outcomes. | H2d Use native groundwater within sustainable limits | | | | |

Priority H3: Promote the establishment of a water sensitive city

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| H3.1 | Water Sensitive City Scorecard | Publish a Water Sensitive City Scorecard for the City of Marion | Benchmark our progress in becoming a water sensitive city, coordinate actions with other stakeholders and identify areas for improvement in urban water management. The scores can be used to advocate for improved outcomes and seek grant funding for key areas. | H3a Collaborate with stakeholders (other councils, government agencies, SA Water, businesses and community) for coordinated approaches and improved governance of catchment-scale, integrated water management | | | | |
| H3.2 | Water sensitive home workshops and resources | Develop a series of 'water sensitive design at home' workshops and associated resources and promotions e.g. how to create a raingarden, installing a rainwater tank | Support residents to reuse water which in turn reduces outflows to stormwater systems. This would support residents to overcome some of the barriers of installing rainwater tanks and understand the practicalities and options. | H3b Promote water sensitive urban design practices for existing homes, businesses and small-scale developments | | | | |
| H3.3 | Water Sensitive Southern Region Forum | Work with the Resilient South Councils to run a Water Sensitive Southern Region Forum by 2030 | Bringing together diverse stakeholders in the southern region to build collaboration and collective planning around transitioning to a water sensitive region. | H3a Collaborate with stakeholders (other councils, government agencies, SA Water, businesses and community) for coordinated approaches and improved governance of catchment-scale, integrated water management | | | | |

## Draft Sustainability Stretch Plan – unfunded initiatives

### THEME 3 WASTE REDUCTION AND CIRCULAR ECONOMY

Priority W1: Develop circular council operations

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| W1.1 | Sustainable procurement inventory (recycling) | Identify priority areas of our procurement and supply chains where mapping of recycled content and life cycle assessment (including disposal) would be relevant and develop a data management system (note links to embodied carbon inventory C2.1). | With little to no readily available data on recycled content purchases across the council, establishing a data management system would enable the development of a baseline to inform policy development in this area, set targets, identify priorities and drive commitment to improve. | W1a Establish procurement practices that support sustainable markets for material circularity | | | | |
| W1.2 | Waste audit of council facilities | Weight-based waste audit of council run facilities every 3 years | Provides transparency and tracking of waste diversion from council operations over time. Support informed decision-making on actions to reduce waste from council operations. Demonstrates leadership on best practice to the community. | **Stretch Target: Divert at least 65% of waste generated by council-owned facilities (including leased sites) from landfill by 2029/30**<br>W2b Reduce waste and resource consumption from corporate operations | | | | |
| W1.3 | Evaluate waste at leased facilities | Evaluate waste generation and bin systems at leased facilities which utilise council waste management services | Improve understanding of waste management and waste reduction at council's leased sites. Facilitate diversion of recyclables and food waste from council's buildings and tenants. | **Stretch Target: Divert at least 65% of waste generated by council-owned facilities (including leased sites) from landfill by 2029/30** | | | | |
| W1.4 | Rollout of improved waste separation facilities and supporting education at leased facilities | Engage with tenants, design and rollout a 3-bin system at leased facilities and support tenants with education and signage | Support tenants to optimise waste separation systems for effective resource recovery at leased sites and increase waste diversion at these sites | **Stretch Target: Divert at least 65% of waste generated by council-owned facilities (including leased sites) from landfill by 2029/30** | | | | |
| W1.5 | Zero waste council events | Post-event waste auditing and sorting at select council-run events (e.g. Concert at the Cove) and support prior to event for appropriate infrastructure and vendor packaging choices | Improve resource recovery from council-run community events. The current event waste management is reliant on face to face education by volunteers, which is not feasible to deliver at medium-sized events. Other councils and event organisers organise this to reduce event related waste. | **Stretch Target: Achieve average resource recovery over 80% at Council-run events** | | | | |

Priority W2: Encourage our community to reduce waste

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| W2.1 | Reuse and repair workshops | Repair skills workshops for residents to prolong the useful life of clothing, electronic and other household items which are difficult to recycle. | Encourages waste avoidance in the community, reduces problematic wastes such as textiles and electronics, promotes resource-sharing in the community. | W2a Build community capacity to repair, reuse and share resources<br>W2d Educate the community about appropriate recycling practices to reduce contamination | | | | |
| W2.2 | School food waste avoidance education program | Awareness-raising and skills development for food waste prevention to children aged 9-12 years old in COM via school networks. | Most food waste is edible and there are growing resources to help shift this community trend to food waste avoidance. Children take learning home from school and educate and influence their parents. Focuses on prevention rather than management of edible food waste. | W2b Increase recovery of food waste and recyclable resources from landfill to the circular economy | | | | |

## Draft Sustainability Stretch Plan – unfunded initiatives

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| W2.3 | Yellow bin tagging education campaign | Bin tagging is a method of providing direct feedback at the individual household level and is a commonly employed tool to address recycling contamination using temporary cardboard information tags attached to bin handles. | Highly effective with sustained and positive recycling behaviour change using this approach in Marion's previous campaigns (2017-2019).<br>Acknowledges households' recycling efforts and fosters civic pride in recycling right. Provides individualised household feedback that residents can easily act on to reduce contamination. | W2c Develop community education campaigns and behaviour change initiatives to reduce waste and increase recycling in households<br>W2d Educate the community about appropriate recycling practices to reduce contamination | | | | |
| W2.4 | Food waste recycling program | Continuation of the food waste recycling program requiring renewed funding. This includes provision of kitchen caddies, compostable bags and education materials to prevent a decline in food waste recycling rates. | Program maintenance cost for food waste recycling in COM. Has positive return on investment and saves waste management costs to the community. Proven success with households adopting food waste recycling habits. Benefits the environment by creating more compost for farms and gardens.<br>Demonstrates council's continued commitment to minimising food waste to landfill. | W2b Increase recovery of food waste and recyclable resources from landfill to the circular economy | | | | |
| W2.5 | Waste audits at community events | Funding for community groups to deliver sustainable waste management at sizeable, local community events. Includes waste audits, provision of waste separation systems, bin buddies providing education, vendor engagement in event lead-up. | Equip community groups to sustainably manage event waste. There is interest from community groups to manage waste better but they need support/ resources to do this.<br>There is scope to improve resource recovery from non-council-run community events where currently almost all waste ends up going to landfill. | **Stretch Target: Achieve average resource recovery over 80% at Council-run events** | | | | |
| W2.6 | Waste audits at community events | Pending legislation change, delivery a weekly green organics collection service and fortnightly general waste collection service to the community. | Increased diversion of food waste from landfill | W2b Increase recovery of food waste and recyclable resources from landfill to the circular economy | | | | |

Priority W3: Support circular businesses and product stewardship

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| W3.1 | Community recycling hubs for tricky waste items | Install recycling drop-off hubs at council facilities such as libraries for household items that are tricky to recycle such as batteries, x-rays, light globes and blister packs. | Requested by the community, as these drop-off services are commonly offered by our neighbouring councils to make recycling easier for hard-to-recycle items. Reduced availability of services for small e-waste and x-ray recycling means more funded drop-off options are needed for sustainable hazardous waste management. Batteries are a real safety risk in bins and more drop-off options reduces risk and demonstrates council commitment to this. | W3a Partner with waste service providers to improve materials recovery and appropriate disposal | | | | |

Priority W4: Prevention of litter and pollution

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| W4.1 | City-wide shelves for 10c deposit containers on public bins | City-wide roll-out of recycling shelves for 10c containers on all metal public bin enclosures to facilitate recycling in public places | Public place recycling services are regularly requested by the community. This is a simple solution which overcomes the contamination issues associated with permanent recycling bins in public places. No need for collection service as containers will be collected by residents for cashing in. Removes the need for can and bottle collectors in the community to rummage in bins to recover the deposit containers. | W4b Minimise and manage illegal dumping and public place littering | | | | |

## Draft Sustainability Stretch Plan – unfunded initiatives

### THEME 4 CLIMATE RESILIENCE AND REDUCING EMISSIONS

Priority C1: Reduce greenhouse gas emissions from our operations

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| C1.1 | Energy efficiency assessments at council sites | Undertake energy efficiency assessments across council sites including a review of leased facilities | Idenitfy opportunities to avoid emissions, improve energy efficiency and reduce emissions across council sites, including increasing solar PV, batteries, LED lighting, air-conditioning upgrades, insulation/ glazing upgrades, shading, new appliances. | **Stretch Target: Achieve net zero corporate emissions by 2050 (from 2022/23 baseline)Stretch target: All residual risks in council's climate risk register are "medium" or lower** | | | | |
| C1.2 | Energy efficiency improvements at council owned sites | Following energy assessments (C1.1) implement emissions reduction measures at council sites | This will further improve emissions reduction from council activities | **Stretch Target: Achieve net zero corporate emissions by 2050 (from 2022/23 baseline)**<br>**Stretch target: All residual risks in council's climate risk register are "medium" or lower** | | | | |
| C1.3 | Innovative public lighting | Following council's planned public lighting audit (25/26), investigate the feasibility for innovative solutions to further reduce electricy used in public lighting such as smart lighting. | Reduce energy consumption and associated costs and emissions resulting from streetlighting . Also opportunity to reduce ecological impacts of lighting and support dark skys. | **Stretch Target: Achieve net zero corporate emissions by 2050 (from 2022/23 baseline)**<br>**Stretch target: All residual risks in council's climate risk register are "medium" or lower**<br>C1e Seek innovative solutions to improve efficiency of public lighting | | | | |

Priority C2: Reduce emissions in our supply chain

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| C2.1 | Sustainable procurement inventory (embodied carbon) | Identify priority areas of our procurement and supply chains where mapping of carbon would be relevant and develop a data management system (note links to recycled content inventory W1.1). | Council is likely to need need to identify key sources of embodied carbon and report on these in the future. If suppliers can demonstrate use of low carbon materials, then this information can be captured alongside asset information. Without an inventory like this, council would need to use financial data to make assumptions on carbon in supply chains, this method results in much higher emissions reporting. | **Stretch Target: Achieve net zero corporate emissions by 2050 (from 2022/23 baseline)**<br>**Stretch target: All residual risks in council's climate risk register are "medium" or lower**<br>C2a: Strengthen data collection and reporting processes for emissions across the supply chain. | | | | |

Priority C3: Support our community to reduce their emissions

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| C3.1 | Home energy efficiency and solar workshop series | Home energy workshop series to be delivered in person annually. Topics covered could include low energy design, basics of building materials, all electric homes, electric vehicles, solar and batteries. Investigate running in partnership with Resilient South councils. | Support household emission reduction, building on the recent Renew online webinars. | C3a Support our community to transition to all-electric homes powered by renewable energy | | | | |

## Draft Sustainability Stretch Plan – unfunded initiatives

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| C3.2 | Support local businesses with emissions reduction | Provide grants or rebates to support local small to medium businesses with emissions reduction strategies, energy audits and carbon inventories (where not other funding support is easily available e.g. state government) | Support businesses to prioritise emissions reduction investment and incentivise climate action. Make sustainable practices and technology more affordable and accessible. | C3b Provide infrastructure and programs to increase sustainable and active transport modes | | | | |
| C3.3 | Sustainable transport behaviour change program | Develop a behaviour change program using evidence based behaviour change techniques to encourage increased use of sustainable transport modes in City of Marion, including walking, cycling, public transport and car sharing | Support a reduction in community emissions from transport through targeted behvaiour change initiatives that support use of sustainable transport infrastructure. | C3c Support local businesses to reduce their emissions | | | | |

Priority C4: Build our organisation's resilience to climate change

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| C4.1 | Cooling at Marion Outdoor Pool | Investigate cooling measures and design features that can be implemented at Marion Outdoor Pool to support staff and community wellbeing during hot conditions (measures could include shading, cool paving, misting) | Improve staff safety and wellbeing. Improve community safety and user experience of the pool and enable the potential for the pool to be open longer hours in hot conditions. | **Stretch target: All residual risks in council's climate risk register are "medium" or lower** | | | | |
| C4.2 | Sustainability and climate resilience reserve audit | Conduct a sustainability and climate resilience audit of key reserves and playgrounds. (note links with G2.1 and C5.1) | This would enable us to improve our designs and project management processes to improve sustainability outcomes in our open spaces, playgrounds and reserves. This would provide decision support tools for staff to enable improved sustainability outcomes in open spaces. | **Stretch target: All residual risks in council's climate risk register are "medium" or lower** | | | | |

Priority C5: Foster community resilience to climate change

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| C5.1 | Assessment of cooling measures across the open space pedestrian network | Survey the pedestrian network to identify opportunities and priority areas for additional shade and cooling measures (e.g. cool paving, green walls, water for evaporative cooling) (note links with G2.1 and C4.2) | Increase liveability and support conditions that enable walking for transport and recreation. Support the objectives of the walking and cycling guidelines. | **Stretch target: All residual risks in council's climate risk register are "medium" or lower** | | | | |
| C5.2 | Coordinated heatwave response | Investigate the development of a coordinated organisational heatwave response to support vulnerable communities | There are ad-hoc initiatives across the organisation to provide community support but there is limited understanding of the community vulnerabilities | **Stretch target: All residual risks in council's climate risk register are "medium" or lower** | | | | |

## Draft Sustainability Stretch Plan – unfunded initiatives

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| C5.3 | Cooling industrial areas | Deliver initiatives to support the greening and cooling of key industrial areas including Edwardstown | This would build on the success of the Greening Edwardstown Project to cool hotter industrial areas that experience the heat island effect. There are still opportunities to increase greening in Edwardtown and the Green Adelaide Cooler Greener, Wilder Grant program that could be leveraged for this. | **Stretch target: All residual risks in council's climate risk register are "medium" or lower** | | | | |

## Draft Sustainability Stretch Plan – unfunded initiatives

### THEME 5 SUSTAINABLE LIVING AND ENVIRONMENTAL ENGAGEMENT

Priority E1: Foster sustainable communities

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| E1.1 | Sustainable living incentive program | Deliver an incentive program to support residents to adopt sustainable behaviours relating to energy, water and waste. This would be delivered in conjunction with a comprehensive sustainability education and engagement campaign to support uptake and sustainable behaviour change. | This would expand on the current package of sustainability rebates for verge gardens, tree maintenance and home composting to assist residents to overcome the upfront costs of sustainable actions in the home. City of Marion would be catching up to service offerings of neighbouring councils (and thereby improving council reputation). Rebates incentivise targeted behaviours and would not be offered if other levels of government are offering another comparable rebate. The development of an incentive program, combined with a comprehensive sustainability education and engagement program, will be a powerful driver of residents adopting sustainable living habits which reduce waste, increase energy efficiency and conserve water. | E1b Remove barriers and provide incentives to encourage positive behaviour change towards sustainable living practices | | | | |
| E1.2 | Sustainable home advice for residents | Offering one-on-one consultations providing environmentally sustainable home advice for households including home renovators and residents building a new home | Provides targeted advice to people at a critical point where they can integrate sustainable design and behaviour elements in their home.<br>Promotional opportunity for the sustainability incentive program. | E1a Deliver education and engagement programs that increase awareness of sustainable living in our community | | | | |

Priority E2: Connect our community with nature

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| E2.1 | Environmental places interactive map | Develop an interactive map on our website that highlights places of natural or environmental significance in our city and ways to get involved in local environmental activities | This initiative will increase nature connection as people will have greater awareness of natural places to visit locally and environmental volunteering opportunities. Increase knowledge of our natural environment.<br>Increased number of biodiversity volunteers, as they are promoted via this map. | E2a Enhance community engagement with nature<br>E2b Promote community understanding of our unique natural environment, local biodiversity and its cultural significance | | | | |
| E2.2 | Social media nature campaign for young people | Support schools and young people to be nature stewards through a campaign of short social media videos that reach young people through online platforms they engage with | Engage with young people and provide them opportunities for nature connection via platforms that they use and are comfortable with. | E2c Provide children and young people with meaningful opportunities for nature connection, fostering lifelong environmental stewardship.<br>E4d Create pathways for youth leadership through collaboration with schools and youth-led initiatives. | | | | |
| E2.3 | Nature interpretative signage | Install interpretive nature signage at key locations, including significant coastal areas | To share information about local nature and biodiversity and deepen our communities connection to nature | E2a Enhance community engagement with nature<br>E2b Promote community understanding of our unique natural environment, local biodiversity and its cultural significance | | | | |

Priority E3: Support community gardening and sustainable food systems

## Draft Sustainability Stretch Plan – unfunded initiatives

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| E3.1 | Small scale community gardens | Develop a program to support the establishment of more small-scale community gardens | Increase the number of community gardens across the city. Make starting a community garden more appealing and accessible by creating a streamlined process and allowing community groups to start small. | E3a Support existing community garden groups and foster the development of new community gardens<br>E3b Support local food gardening and sharing of local produce to build a sustainable local food system<br>E3c Share knowledge and stories about food, land, and cultural connection to deepen understanding of how food systems are interwoven with environmental and human health. | | | | |
| E3.2 | Accessibility audits of community gardens | Conduct accessibility audits of all community gardens and prioritise areas for improvements | Improve community garden inclusion and access and increase participation in community gardening. Provide support for existing community groups who have identified a need for increased access. This action is alignment with focus area 5.2 public health plan. | E4a Support the development of diverse and inclusive environmental groups and local champions | | | | |
| E3.3 | Community orchards on council reserves | Develop community orchards on key council reserves as demonstration gardens for growing fruit | Community orchards would allow for community education and engagement on growing fruit. Community can access the produce. Council can ensure the orchard is well maintained. | E1a Deliver education and engagement programs that increase awareness of sustainable living in our community<br>E3b Support local food gardening and sharing of local produce to build a sustainable local food system | | | | |
| E3.4 | Magic Harvest Program | Deliver the Magic Harvest program at neighbourhood centres to teach food growing skills | This would empower community members with practical food-growing skills, promoting local food resilience, healthy eating, and reduced food waste. It strengthens community connections, encourages sustainable living, and supports climate action by reducing the environmental footprint associated with food transport and production. | E1a Deliver education and engagement programs that increase awareness of sustainable living in our community<br>E3b Support local food gardening and sharing of local produce to build a sustainable local food system | | | | |

Priority E4: Support and promote community leadership in sustainability

| Ref | TITLE of Unfunded initiative | DESCRIPTION of Unfunded initiative | Benefits/rationale | Stretch target / priority | Yr1 2026/27 | Yr2 2027/28 | Yr3 2028/29 | Yr4 2029/30 |
|---|---|---|---|---|---|---|---|---|
| E4.1 | Support environmental leadership and capacity | Investigate the feasibility of offering an environmental leadership program for City of Marion residents | Develop community capacity to deliver environmental initiatives and advocate for local environmental outcomes. Increase the number of environmentally focused projects in the local area and environmental community grant applications. | E4b Build community capacity to deliver and innovate on local environmental projects and initiatives<br>E4c Amplify community impact through sharing and showcasing achievements and local stories<br>E4d Create pathways for youth leadership through collaboration with schools and youth-led initiatives. | | | | |

# THEME 1 GREENING, TREES AND BIODIVERSITY

## Targets for council operations

- Ensure 90% of plantable spaces along council-managed roads are filled with trees by 2030
- Deliver an annual tree planting program that aims to achieve a minimum of 30% mature canopy cover over council-managed road
- Plant 60,000 native plants by 2030 (baseline 2024/2025)
- Biodiversity condition at priority biodiversity sites is maintained

## Stretch targets for council operations

- No loss of remnant vegetation on council managed land.

CITY OF MARION

# THEME 1 GREENING, TREES AND BIODIVERSITY

| Priority G1: Expand and improve council's natural assets | Priority G2: Advocate for trees, greening and biodiversity in the community | Priority G3: Enhance regional biodiversity and greening |
|---|---|---|
| **Objectives:**<br>• **G1a** Protect, enhance and restore biodiversity with a focus on the critical protection of remnant vegetation<br>• **G1b** Develop open spaces and streetscapes that enhance tree canopy, promote natural landscaping and enable climate resilience<br>• **G1c** Increase nature in council developments through biodiversity sensitive urban design<br>• **G1d** Develop organisational maturity in natural asset management through improved data, planning and monitoring. | **Objectives:**<br>• **G2a** Encourage residents to protect, enhance and restore tree canopy and biodiversity on private land<br>• **G2b** Advocate for State Government policies that promote increased tree canopy and protection trees<br>• **G2c** Encourage greening and biodiversity sensitive design in residential and commercial developments<br>• **G2d** Advocate for improved biodiversity protection laws. | **Objectives:**<br>• **G3a** Collaborate with partners to protect, enhance and restore regional biodiversity corridors along Sturt River, Field River, coastline and the southern hills face<br>• **G3b** Collaborate with partners to enhance greening of regional active transport connections and other transit routes<br>• **G3c** Collaborate with partners to support regional monitoring of tree canopy, green cover and urban heat<br>• **G3d** Collaborate with partners to develop regionally consistent biodiversity monitoring and reporting protocols<br>• **G3e** Collaborate with Kaurna to improve cultural connections through nature<br>• **G3f** Support research and development to enhance and future-proof our natural environment. |

# THEME 2 WATER AND COASTAL MANAGEMENT

## Targets for council operations

- Continually increase the use of recycled water for our operations by 2030
- Ensure potable mains supply water does not exceed 30% of the total water used for irrigation of council land and aim to keep total consumption of potable water below 200Ml per annum
- Expand Marion Water to enable supply of up to 300Ml per year by 2030
- Maintain groundwater extraction within sustainable limits of up to 200Ml per year
- Install 200 new street tree inlets by 2030
- Complete and implement updated Stormwater Management Plans for all catchments by 2030

## Stretch targets for council operations

- Install 1000 new street tree inlets by 2030 (subject to grant funding).

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# THEME 2 WATER AND COASTAL MANAGEMENT

| Priority H1: Protect and enhance our water catchments and coast | Priority H2: Conserve water, diversify our water sources and create water-sensitive council facilities | Priority H3: Promote the establishment of a water sensitive city |
|---|---|---|
| **Objectives:**<br>• **H1a** Advocate for the rivers, creeks, wetlands and groundwater across the City to meet or exceed acceptable standards in health and quality<br>• **H1b** Maintain and improve council's stormwater network to reduce runoff, improve water quality, mitigate against flooding and support climate resilience<br>• **H1c** Integrate WSUD into council-managed landscapes to increase green infrastructure and mitigate extreme urban heat<br>• **H1d** Increase organisational capacity to design, build and maintain WSUD treatments<br>• **H1e** Monitor our coastline and develop and implement planned responses to coastal climate change hazards. | **Objectives:**<br>• **H2a** Create water-sensitive council buildings and facilities<br>• **H2b** Maximise stormwater capture and reuse initiatives including onsite retention and managed aquifer recharge (MAR) schemes<br>• **H2c** Prioritise use of rainwater and irrigation with recycled water for climate resilient landscapes<br>• **H2d** Use native groundwater within sustainable limits<br>• **H2e** Maximise irrigation efficiency in council reserves through innovation and smart technology. | **Objectives:**<br>• **H3a** Collaborate with stakeholders (other councils, government agencies, SA Water, businesses and community) for coordinated approaches and improved governance of catchment-scale, integrated water management<br>• **H3b** Promote water sensitive urban design practices for existing homes, businesses and small-scale developments<br>• **H3c** Demonstrate leadership and innovation in the application of smart and adaptive water infrastructure. |

# THEME 3 WASTE REDUCTION AND CIRCULAR ECONOMY

## Targets for council operations

- Divert at least 60% of waste generated by council-run facilities from landfill by 2029/30
- Achieve average resource recovery over 80% at Council-run events

## Stretch targets for council operations

- Divert at least 65% of waste generated by council-owned facilities (including leased sites) from landfill by 2029/30
- Achieve average resource recovery over 90% at Council-run events (per event).

CITY OF MARION

# THEME 3 WASTE REDUCTION AND CIRCULAR ECONOMY

| Priority W1: Develop circular council operations | Priority W2: Encourage our community to reduce waste | Priority W3: Support circular businesses and product stewardship | Priority W4: Prevention of litter and pollution |
|---|---|---|---|
| **Objectives:**<br>• **W1a** Establish procurement practices that support sustainable markets for material circularity<br>• **W2b** Reduce waste and resource consumption from corporate operations<br>• **W3c** Lead by example through sustainable procurement practices<br>• **W3d** Measure progress toward circular economy goals and report on effectiveness of policies and programs. | **Objectives:**<br>• **W2a** Build community capacity to repair, reuse and share resources<br>• **W2b** Increase recovery of food waste and recyclable resources from landfill to the circular economy<br>• **W2c** Develop community education campaigns and behaviour change initiatives to reduce waste and increase recycling in households.<br>• **W2d** Educate the community about appropriate recycling practices to reduce contamination. | **Objectives:**<br>• **W3a** Partner with waste service providers to improve materials recovery and appropriate disposal<br>• **W3b** Advocate for improved recycling facilities and local processing of soft plastic products and materials<br>• **W3c** Support local businesses with waste reduction and circular economy practices<br>• **W3d** Advocate for Federal and State leadership on mandatory product stewardship schemes for handling problematic waste streams. | **Objectives:**<br>• **W4a** Support pollution prevention in the community<br>• **W4b** Minimise and manage illegal dumping and public place littering. |

# THEME 4 CLIMATE RESILIENCE AND REDUCING EMISSIONS

## Targets for council operations

- Reduce corporate greenhouse gas emissions by 50% by 2035 (from 2022/23 baseline)
- Replace our light fleet vehicles with EVs by 2028
- Purchase 100% renewable energy
- Phase out use of gas at all council buildings by 2035 (replacing each unit with an electric alternative when it reaches the end of its useful life)

## Stretch targets for council operations

- Achieve net zero corporate emissions by 2050 (from 2022/23 baseline)
- Rooftop solar on all City of Marion owned buildings including leased facilities by 2030
- All residual risks in council's climate risk register are "medium" or lower.

CITY OF MARION

# THEME 4 CLIMATE RESILIENCE AND REDUCING EMISSIONS

| Priority C1: Reduce greenhouse gas emissions from our operations | Priority C2: Reduce emissions in our supply chain | Priority C3: Support our community to reduce their emissions | Priority C4: Build our organisation's resilience to climate change | Priority C5: Foster community resilience to climate change |
|---|---|---|---|---|
| **Objectives:**<br>• **C1a** Track our emissions in line with best practice approaches for emissions inventories<br>• **C1b** Maximise renewable energy generation and purchase renewable energy<br>• **C1c** Transition to a low-emission fleet<br>• **C1d** Transition to low emission buildings and assets<br>• **C1e** Seek innovative solutions to improve efficiency of public lighting. | **Objectives:**<br>• **C2a** Strengthen data collection and reporting processes for emissions across the supply chain.<br>• **C2b** Integrate environmental sustainability and low-emissions criteria into Council procurement practices in alignment with emerging Local Government Association (LGA) standards.<br>• **C2c** Encourage suppliers to lower the emissions associated with the goods and services they provide. | **Objectives:**<br>• **C3a** Support our community to transition to all-electric homes powered by renewable energy<br>• **C3b** Provide infrastructure and programs to increase sustainable and active transport modes<br>• **C3c** Support local businesses to reduce their emissions. | **Objectives:**<br>• **C4a** Build and manage our assets to ensure resilience to climate change including heat, storms, flooding and bushfires<br>• **C4b** Deliver services that are resilient to climate impacts<br>• **C4c** Build staff capacity to understand and respond to climate change<br>• **C4d** Strengthen climate governance and embed climate resilience across the organisation<br>• **C4e** Identify and publicly disclose our climate risks and manage how they impact on our organisation. | **Objectives:**<br>• **C5a** Raise community awareness about local climate impacts, risks and opportunities<br>• **C5b** Encourage climate-resilient resilient low-emissions development<br>• **C5c** Assist the community to avoid or prepare for climate change risks<br>• **C5d** Assist the community (including those outside our region) in responding and recovering from climate change related emergencies. |

# THEME 5 SUSTAINABLE LIVING AND ENVIRONMENTAL ENGAGEMENT

## Targets for council operations

- Maintain a Green Thymes click-rate average of 10%
- Reach at least 1000 households each year through direct mailouts with opportunities to get involved in environmental programs
- Increase community awareness of council environmental programs in the community satisfaction survey.

CITY OF MARION

# THEME 5 SUSTAINABLE LIVING AND ENVIRONMENTAL ENGAGEMENT

| Priority E1: Foster sustainable communities | Priority E2: Connect our community with nature | Priority E3: Support community gardening and sustainable food systems | Priority E4: Support and promote community leadership in sustainability |
|---|---|---|---|
| **Objectives:**<br>• **E1a** Deliver education and engagement programs that increase awareness of sustainable living in our community<br>• **E1b** Remove barriers and provide incentives to encourage positive behaviour change towards sustainable living practices<br>• **E1c** Enhance partnerships and networks with community to support collective action. | **Objectives:**<br>• **E2a** Enhance community engagement with nature<br>• **E2b** Promote community understanding of our unique natural environment, local biodiversity and its cultural significance<br>• **E2c** Provide children and young people with meaningful opportunities for nature connection, fostering lifelong environmental stewardship. | **Objectives:**<br>• **E3a** Support existing community garden groups and foster the development of new community gardens<br>• **E3b** Support local food gardening and sharing of local produce to build a sustainable local food system<br>• **E3c** Share knowledge and stories about food, land, and cultural connection to deepen understanding of how food systems are interwoven with environmental and human health. | **Objectives:**<br>• **E4a** Support the development of diverse and inclusive environmental groups and local champions<br>• **E4b** Build community capacity to deliver and innovate on local environmental projects and initiatives<br>• **E4c** Amplify community impact through sharing and showcasing achievements and local stories<br>• **E4d** Create pathways for youth leadership through collaboration with schools and youth-led initiatives. |

## 8 Reports for Noting - Nil

## 9 Workshop / Presentation Items - Nil

## 10 Other Business

## 11 Meeting Closure

The meeting shall conclude on or before 9.30pm unless there is a specific motion adopted at the meeting to continue beyond that time.