

Camden: Towards Net Zero

2023



Artist: Melissa Barton
Bulawiri Nura - Three Country's

An artwork that depicts and celebrates the strength and unity, community and team work shared between the Dharawal, Dharug and Gundungurra peoples to care for Country in and around Camden. Camden being an area where these three nations met, held ceremony, corroboree, traded and looked after our sacred Mother earth and Father sky. Showing that traditional ways of caring for Country are significant and valuable to our way of living today.

Council acknowledge that the Camden LGA is situated on the sacred Traditional Lands and Waterways of the Dharawal peoples. We also recognise surrounding Dharug and Gundungurra people that may have connections to these lands. We pay our respects to Elders from the past, present, and emerging, and to all Aboriginal and Torres Strait Islander peoples on these lands.

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Mayors Message



The impacts of climate change are already being felt around the world. Here in Camden of late, we've unfortunately experienced the increased frequency and intensity of extreme weather events including storms, droughts, bushfires and flooding. These events have led to costly disruptions and recovery, reduced liveability for our local communities, and impacts on natural systems including flora and fauna. But as we look to the future, we have hope for change.

We know that in order to combat the effects of climate change, immediate and urgent action is required. Camden: Towards Net Zero 2023 outlines our pathway to achieve net zero emissions from Council operations by 2050, with an interim target to reduce emissions by 50 per cent by 2030, based on 2018-19 levels.

The Plan is based on a comprehensive review of our operations, which identifies the key sources of emissions, as well as areas of opportunity to drive them down. The actions in the Plan allow Camden Council to lead by example, demonstrating our commitment to delivering the vision and actions set out in the Community Strategic Plan 2022-

36 and Sustainability Strategy 2020-24.

Throughout Camden: Towards Net Zero 2023, you'll see planned targeted and coordinated action across six key focus areas to reduce emissions from Council operations, including energy, waste, goods and services, the built environment, transport and plant, and emissions management.

In 2021 Council was recognised as a Silver Partner of Sustainability Advantage, a program of the NSW Department of Planning and Environment (DPE), and is committed to further strengthening our environmental performance. Camden: Towards Net Zero 2023 is one of the steps we are taking to become a Gold partner. I'm proud that Camden Council is an organisation which strives to operate sustainably.

**Mayor of Camden
Ashleigh Cagney**





This plan has been developed to provide a pathway for Council operations to achieve net zero emissions by 2050.

Extensive research, data collection and analysis, and consultations with stakeholders have assisted with development of an integrated and organisational wide approach to develop carbon abatement strategies to help us work towards becoming net zero.

The objectives of this plan are to:



Improve organisational knowledge, capacity and understanding of emissions



Contribute to sustainable and resilient communities



Demonstrate leadership and commitment towards combatting climate change



Provide an appropriate and achievable framework to achieve 50% emissions reduction by 2030* and net zero emissions by 2050

Purpose

Camden Council has a vital role to play in reducing emissions from its own operations and essential services to help mitigate the long-term impacts of climate change and increase resilience for our communities.

Council uses natural resources and creates waste as part of providing essential services to the community. Energy is used for a range of activities, including to power vehicles and equipment, for heating and cooling community buildings, powering facilities and lighting sports fields.

This plan is the next step in Camden Council's sustainability journey and reflects its dedication to community leadership on climate change action, and achieving net zero emissions by 2050. This Plan is consistent with overarching goals and actions within Council's strategic documents including Connecting Camden - Community Strategic Plan (CSP) 2022-2036 and Sustainability Strategy 2020-24.

Relevant themes include:

Connecting Camden - Community Strategic Plan 2022-36



Balanced

Our community is resourced, efficient and able to meet our vision and objectives.

B4.1 - Develop a pathway to net zero carbon.

Sustainability Strategy 2020-24



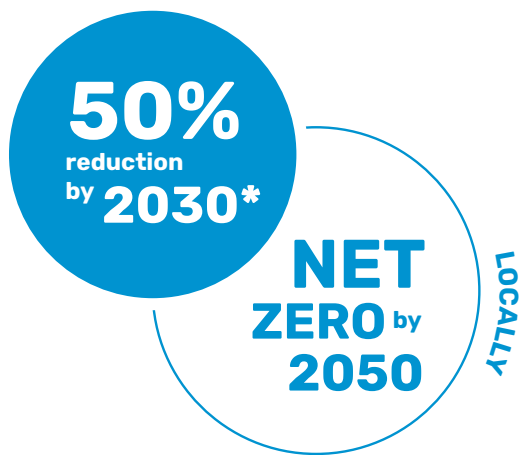
Improving Resilience to Climate Change

We will strive to understand climate risks for the Camden LGA; minimise the impacts of urban heat; deliver climate mitigation and adaption initiatives; and build resilience to climate and natural disasters.



Leading by Example

We aim to reduce energy, water, waste and emissions from Council operations; increase use of renewable energy and alternate water supplies; support sustainable procurement; improve the sustainability of Council events; and apply best practice sustainability standards for Council projects.

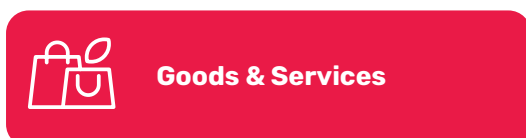


We realise we have an opportunity to support the vision of the community for sustainable, resilient and healthy communities.

A fundamental shift is required in the way we operate to reach our goal of net zero emissions. This Net Zero plan provides a pathway towards net zero emissions by 2050 and demonstrates Council's commitment to our growing community to help slow the long-term effects of climate change.

Council has identified six focus areas to assist with planning and help achieve the biggest carbon emission reductions. Carbon offsets have not been included as a focus area as these will only be considered as a last resort to meet targets when all other opportunities have been exhausted.

Our commitments





Why are we working towards net zero emissions?

net zero

Climate Change

Climate change is a crisis that is threatening nature and people across the globe through long-term alterations to climate patterns. Climate change impacts are increasing in scale and severity, causing risk to human and natural systems.

Climate change is caused by an increase in greenhouse gases such as carbon dioxide in the atmosphere. We know that carbon dioxide concentrations are higher now than at any other time in the last two million years, and this recent increase is driven primarily by human activity.

Everyday actions that rely on the use of fossil fuels, such as turning on the lights or driving the car release carbon dioxide into the earth's atmosphere. While around half of the carbon dioxide released will be absorbed by trees and the ocean the other half remains in the atmosphere. These increased emissions act to create a greenhouse effect where light can pass through, but heat cannot escape causing temperatures to rise.

Average global temperatures have already increased by around 1° Celsius from pre-industrial levels and in Australia it is higher at 1.4° Celsius.

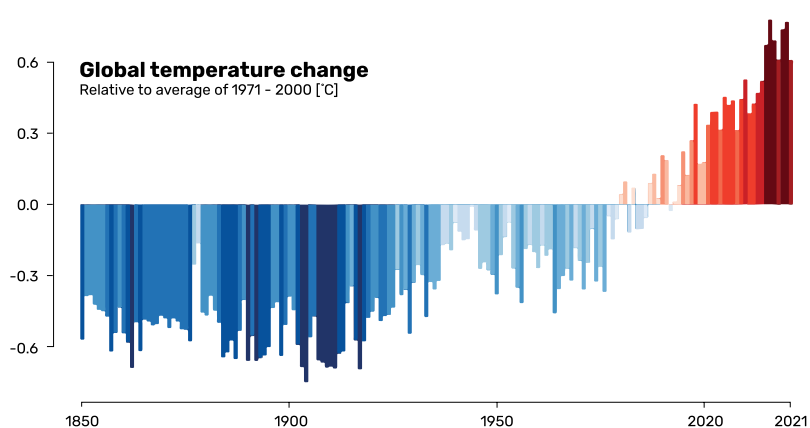


Figure 1:
Global temperature change from 1850 to 2021, University of Reading

Camden impacts

In Camden we are already seeing the impacts of climate change through increased frequency and intensity of storms, floods, droughts, heat waves and other extreme weather events. Unfortunately, these impacts are becoming more frequent and intense resulting in costly disruptions and recovery, reduced liveability for our local communities, and the natural systems that support us are threatened.

Drivers for climate action

Globally

Action on climate change and achieving net zero emissions are being addressed on a global scale. Significant global drivers for action on climate change include:

1. Sustainable Development Goals (SDGs)

In 2015, UN member countries adopted the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals. The SDGs came into force on 1 January 2016 and call on action from all countries to end poverty and promote prosperity while protecting the planet.

2. Paris Agreement

To address climate change, 196 countries including Australia have signed the Paris Agreement which was developed at the COP21 in Paris on 12 December 2015. In the agreement,

signatory countries agreed to work to limit global temperature rise to well below 2° Celsius, and given the grave risks, to strive for 1.5° Celsius.

3. Special IPCC report on 1.5°C warming (SR15)

In October 2018 in Korea, governments approved the wording of a special report on limiting global warming to 1.5° Celsius. The report indicates that achieving this would require rapid, far-reaching, and unprecedented changes in all aspects of society.

4. IPCC Sixth Assessment Reporting cycle (AR6)

The AR6 cycle builds on prior scientific evidence and provides the international community with further data with which to build consensus to act to reduce emissions. The Working Group I, II and III reports referred to above form part of the IPCC's sixth assessment report cycle (AR6), and their synthesis report was released in March 2023, bringing together the latest science, evidence, and projections for global warming. Key findings from this report show that global warming will continue to rise in the near term (2021-2040) with temperatures likely to reach 1.5°C. With every increment of global warming the risk of adverse impacts, losses and damages will be intensified for both people and nature. Significant and accelerated action is required as the window of opportunity for a viable and healthy future for people and the planet is rapidly narrowing.

PROJECTED CHANGES

SYDNEY



Figure 2: Projected changes for Sydney, Adapt NSW



43%
reduction
by **2030[^]**

**NET
ZERO** by
2050

NATIONALLY

Nationally

Australia committed to reducing the threat of climate change by supporting the Paris Agreement at COP21 in Paris on 12 December 2015. This agreement is binding and brings nations from all around the world together to address climate change and adaption.

Since signing this agreement, the Australian Government continues to set new targets to reduce the nations emissions.

In 2021, the Australian Government set a target of net zero emissions by 2050 and has since added to this commitment with an interim emissions target of 43 per cent reduction by 2030 (compared to 2005 levels).

70%
reduction
by **2035[^]**

**NET
ZERO** by
2050

NEW SOUTH WALES

New South Wales

The NSW Government has committed to net zero emissions by 2050 and has recently set an updated interim target of 70% reduction by 2035 (compared to 2005 levels).

To reach these objectives, a *Net Zero Plan Stage 1: 2020-2030* has been released, the first of three plans to guide the NSW Government's framework to achieve the targets.

50%
reduction
by **2030^{*}**

**NET
ZERO** by
2050

LOCALLY

Locally

Many local governments across Australia are already taking significant steps to reduce their carbon emissions by either meeting or exceeding the state and national targets.

We acknowledge that we have a duty to respond to the needs of our community by accelerating carbon abatement and removal. We are responding by aligning with the Australian and NSW state targets of achieving net zero by 2050.



Camden Council's emissions profile

two

Understanding our emissions profile is important so that we can make informed decisions and prioritise actions to help us reach net zero by 2050. This profile helps us do our part to limit temperature rises to 1.5 degrees Celsius or below.

How our emissions are measured

The Greenhouse Gas Protocol (GHG) sets a standardised global framework to measure and manage greenhouse gas emissions. These emissions are differentiated into:

- **Direct emissions** - a result of emissions from sources owned or controlled by the reporting entity; and
- **Indirect emissions** - a result of emissions from the reporting entity but occur at sources controlled by another entity.

The GHG Protocol further differentiates direct and indirect emission sources into three broad scopes:

- **Scope 1 emissions** are emissions directly generated at Council facilities, or due to the direct provision of services and equipment. This could include the use of onsite natural gas or LPG, driving company cars, or emissions associated with refrigerant gases in air conditioning equipment.
- **Scope 2 emissions** are caused indirectly by consuming electricity. These emissions are generated outside the organisation by the power generator but are a direct result of the activities of the organisation.
- **Scope 3 emissions** are also indirect emissions and are a result of activities that are outside of the ownership of the organisation. Typical examples are emissions from waste management, work related air travel, the consumption of goods and services, contractor emissions, or leased assets.

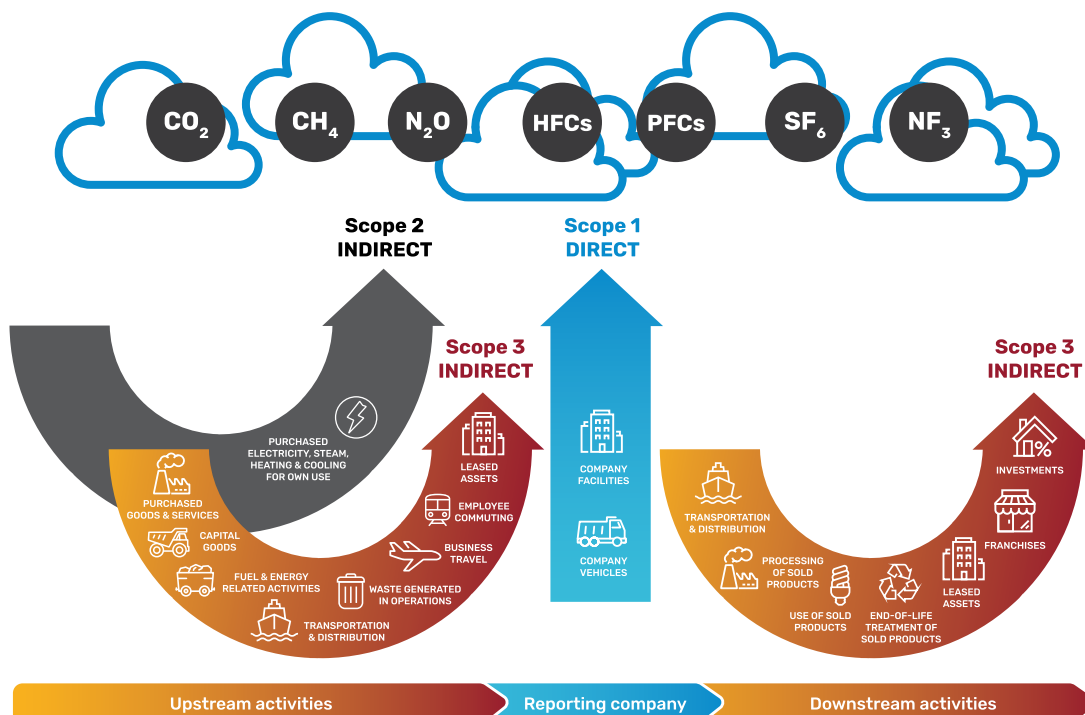


Figure 3: Scope 1, 2 and 3 emissions, GHG Protocol



Growth in the Camden LGA

Camden Council is currently one of the fastest-growing local government areas (LGA's) in Australia. The population is expected to increase from 126,017 in 2023 to more than 240,000 by 2041, an increase of 93%.

This sustained growth will inevitably bring about increases in the number and type of services and facilities Council provides, and without careful management this has the potential to lead to associated increases in our greenhouse gas emissions.



POPULATION FORECAST Camden Council

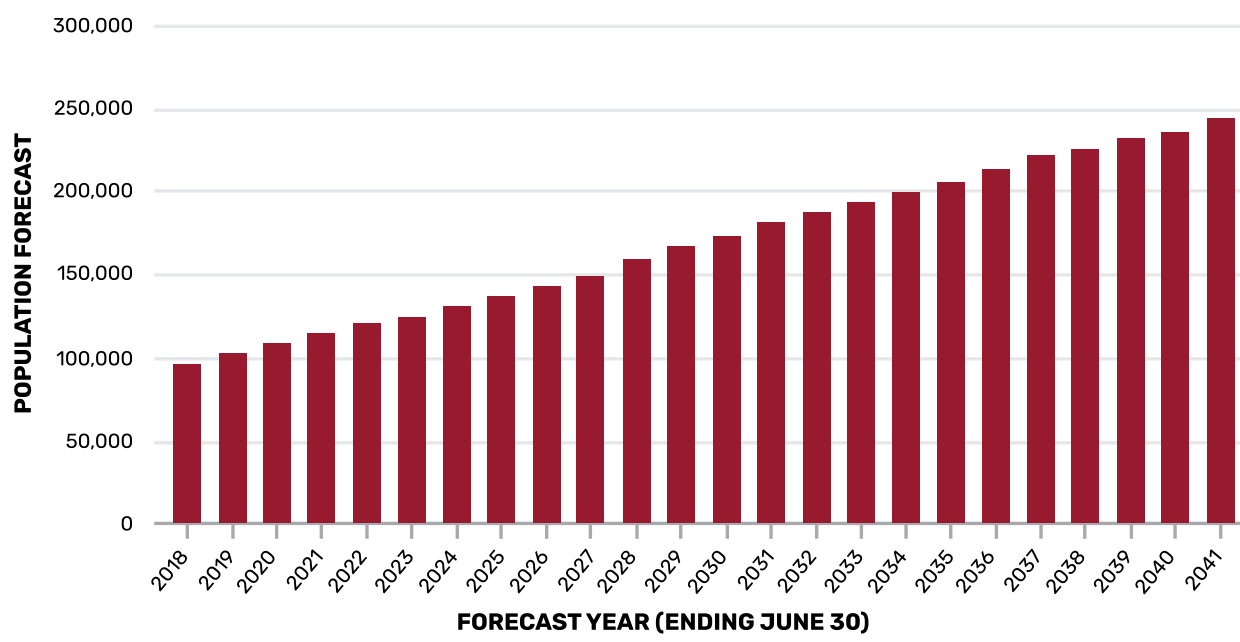


Figure 4: Camden LGA population forecast, 2018-2041, Forecast.id

Camden's emissions footprint

Due to the impacts of Covid-19 on the delivery of services and operation of facilities, the 2018-19 financial year has been identified as the most representative financial year for Council operations and has been used as the baseline year for this net zero plan.

In 2018-19 our emissions footprint was 20,745 tonnes (t) of carbon dioxide equivalent (CO₂-e) and included all GHG Protocol scope 1 and 2 emissions as well as limited scope 3 emissions.

The majority of emissions (41%) came from electricity use at Council facilities (21%) and street lighting (20%). Purchased goods and services are the second largest emissions source, accounting for 32%. Other contributors to Council's corporate carbon emissions include fuel (diesel, petrol and ethanol), natural gas and emissions related to employee travel to and from work.

The following figure provides further insight into our emissions profile for 2018-19.

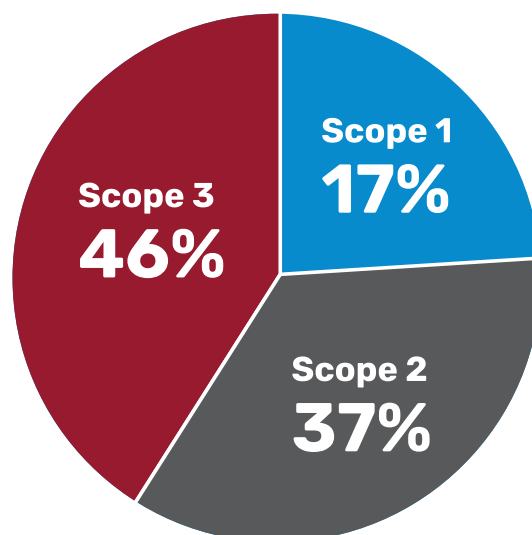


Figure 5: 2018-19 Emissions footprint by scope

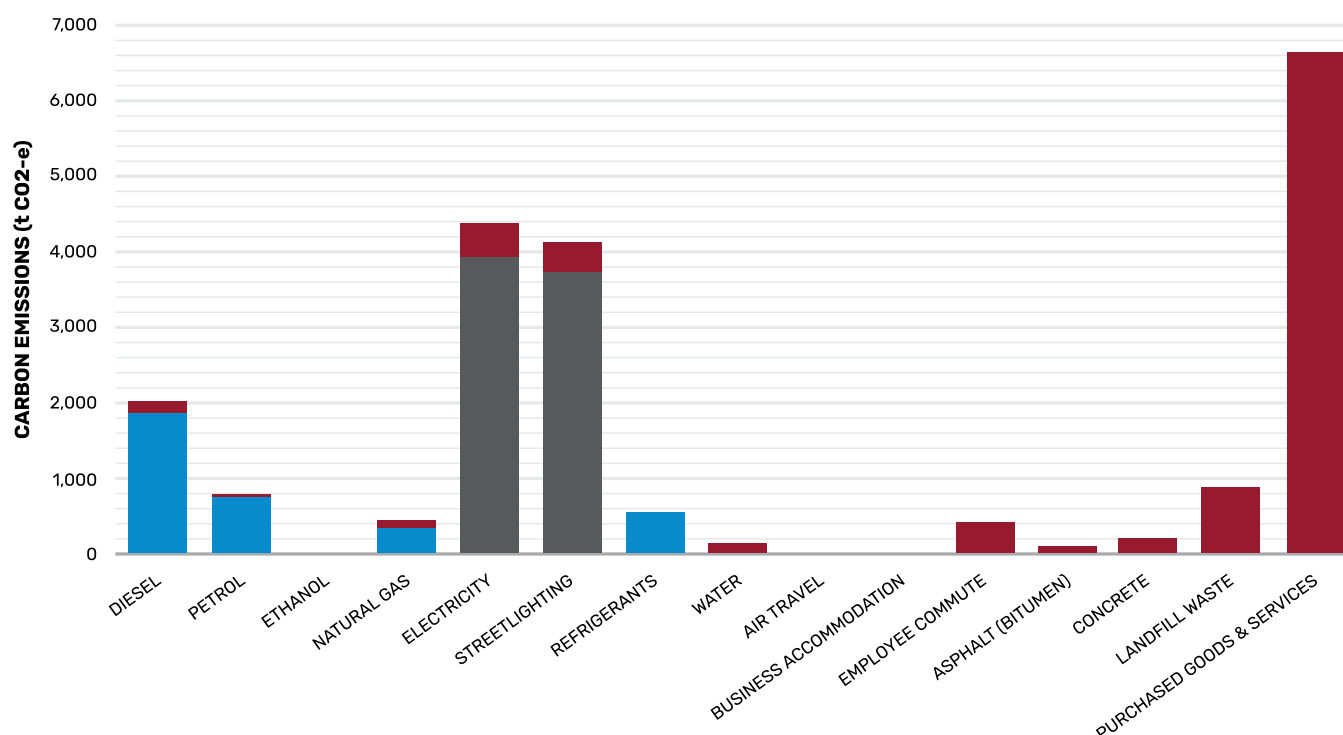


Figure 6: Camden's emissions from sources and scopes (2018-19)

**Looking forward it
is also important to
understand our future
carbon footprint.**



Future emission trends

Looking forward it is also important to understand our future carbon footprint. Long-term emission projections have been prepared up until 2050. These are based on the current emissions profile as well as consideration of the following impacts:

- Energy efficiency and emission reduction projects that are already planned or underway;
- New facilities planned or expected to be built;
- Facilities expected to be closed or divested;
- Emissions reduction that is likely to occur because of external factors, such as grid decarbonisation; and
- Population growth and the resultant increase in demand for Council services.

Monitoring shows that our emissions are continuing to increase with 21,538 t CO₂-e in the 2019-20 financial year and 24,390 t CO₂-e in the 2020-21 financial year, an increase of 17.5% compared to the baseline year.

It is projected that Council's emissions will be **25,618 t CO₂-e by 2049-50** if no carbon abatement actions are taken by Council. Figure 7 details Camden's emissions if we continue without any carbon abatement actions beyond 2020-21.

It should also be noted that while all scope 1 and 2 emissions were included in the inventory, only select scope 3 emission sources were included due to the availability of data. If a full scope 3 emissions inventory was conducted as part of future reviews, then the emissions would be expected to be even higher.

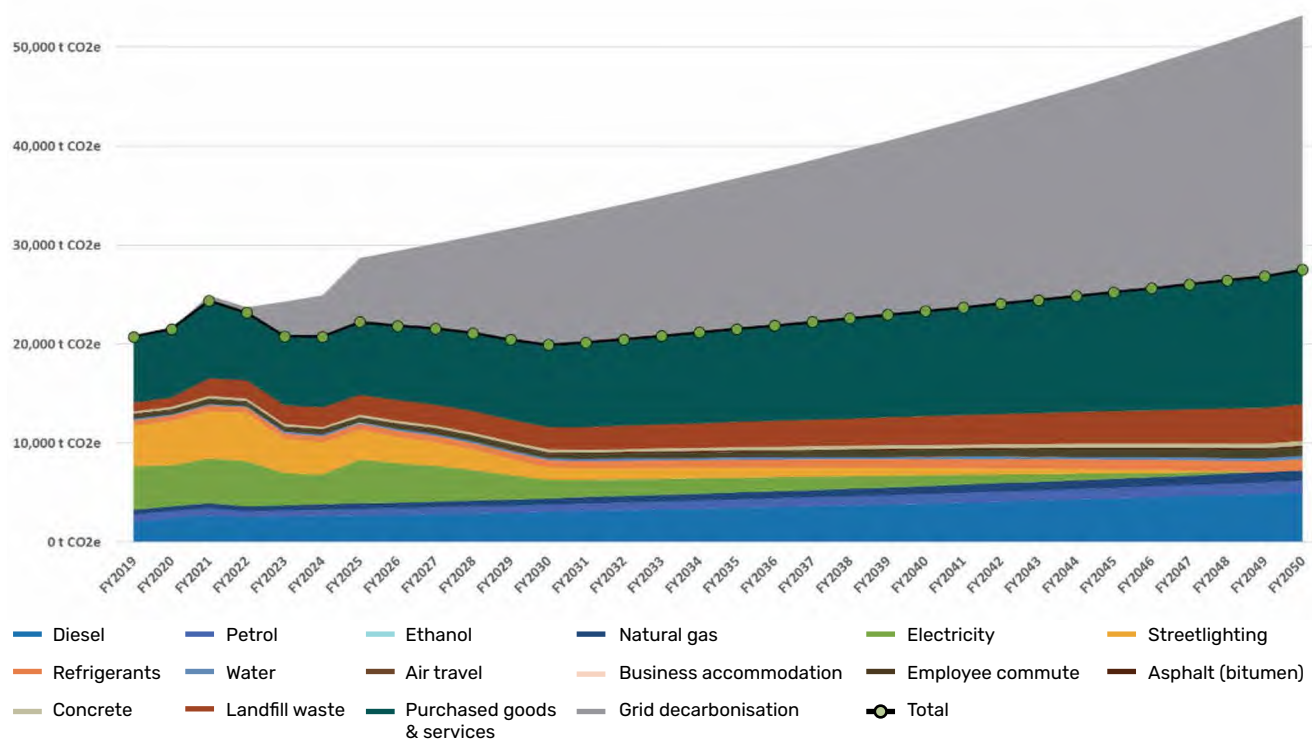


Figure 7: Predicted future emissions for Camden Council

What we have already achieved

This plan builds on many great initiatives implemented over the years. Without these initiatives, our emissions would be much higher. The timeline below provides a snapshot for some of the significant work already undertaken by Council staff.

three

2016

Construction of the Oran Park Administration Building including 99 kW solar photovoltaic system and a range of other energy efficiency design features

LED lighting upgrade for Council buildings commences

Installed 36 kW of solar photovoltaic systems across four community centres

LED sports field lighting upgrade commences

2021



2013

212 kW of solar photovoltaic systems installed at Camden Library, Narellan Library, Mount Annan Leisure Centre



2020

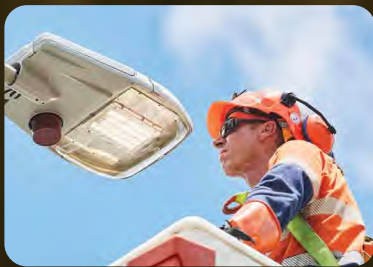
Street sweeping waste collected and sorted, diverting 90% waste from landfill

2022

Upgraded more than 7,100 non-LED streetlights with LED lights reducing Council's emissions by 2,100 t CO2-e annually

One of the first Council's in NSW to purchase an electric mower

Installed 99 kW solar photovoltaic system at the Millwood Avenue Depot



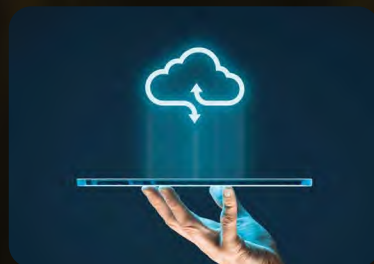
Installation of two 22 kW DC electric vehicle charging stations for staff fleet vehicles

Transitioned to 100% cloud-based storage systems to reduce the annual electricity usage for all server storage and computer resources



2023

Power Purchase Agreement securing 100% renewable energy for street lighting, and 46 sites from 1 January 2023



A photograph of a suburban street scene. In the foreground, a paved road curves to the right. On the left side of the road, there are several houses with dark tiled roofs and light-colored walls. A street lamp stands on the left. On the right side, there are green trees and a red car parked on the street. In the background, a forested hill is visible under a clear blue sky.

Planning for Net Zero emissions

four

We are faced with many challenges here at Camden and to assist us on our journey towards net zero emissions we will follow a series of key steps to help reach our goals. To help with all decisions, the framework outlined in Figure 8 will be used.



Figure 8: Hierarchy for emissions reduction at Camden Council

Unfortunately, sometimes carbon emissions cannot be eliminated and are left after abatement measures have been implemented. To reach our net zero emissions reduction target, we may need to purchase carbon offsets to balance our residual operational emissions. These carbon offsets come from projects that reduce, remove or sequester emissions from the atmosphere.

Carbon offsets will be used as a strategy of last resort with a focus on local emission abatement as the preferred approach.

- Avoid the generation of emissions by better designed and operated buildings and facilities, and by sourcing renewable energy for all Council facilities
- Reduce the amount of energy used by implementing energy efficient measures and materials
- Reduce the generation of waste and improve waste diversion from landfill; and improve circularity opportunities
- Invest in clean energy solutions such as solar photovoltaics on buildings and faculties or through large scale renewable energy solutions
- Purchase products and services with reduced or zero emissions
- Consider the entire life cycle of a product
- Influence emissions in the supply chain through stakeholder engagement



- Nature based solutions such as revegetation or planting trees to remove carbon
- Investing in alternative solutions that avoid or reduce emissions

An aerial photograph of a park. In the center is a large, irregularly shaped green lawn. To the left of the lawn is a paved path that leads to a playground area with a red and blue structure. To the right of the lawn is a parking lot with several spaces, including a designated accessible space with a blue wheelchair icon. The park is surrounded by trees and landscaping. The word 'five' is written vertically in a large, white, outlined font on the right side of the image.

Opportunities for Net Zero

five

Modelling has shown that, without intervention our emissions are projected to steadily increase in line with the delivery of new services and assets required to meet the needs of our growing population.

To meet our goal of emitting no more than 10,373 t CO₂-e by 2029-30, accelerated and early action is required across the six key carbon abatement areas. Carbon offsets have also been identified as a final action to meet our targets as part of this strategy.

Figure 9 shows the modelled emissions reduction pathway with abatement measures implemented, including the purchase of carbon offsets in 2049-50. Even if we can implement all our identified actions, it will still be a challenge to eliminate all of our corporate greenhouse gas emissions by 2050.

Depending on which abatement measures are pursued and the success of those measures, the gap to net zero emissions could be as much as 9,086 t CO₂-e in 2050.

This gap can potentially be bridged by embracing and implementing new innovations and technologies as they are developed, or through carbon offset purchases as a last resort.



Given the long timeframes involved with our net zero targets, it is not possible to define all the actions and activities that will be undertaken to meet these targets. Priorities for actions in each of the six focus areas over the next twenty plus years are outlined in the following section. Actions have been identified for delivery as either short, medium or long term actions.

Short term actions are those that we will aim to complete by 2028. These actions include more detail due to the shorter timeframes involved.

Medium term actions are those that we will aim to complete by 2030, while long term actions are those that will be completed beyond 2030.

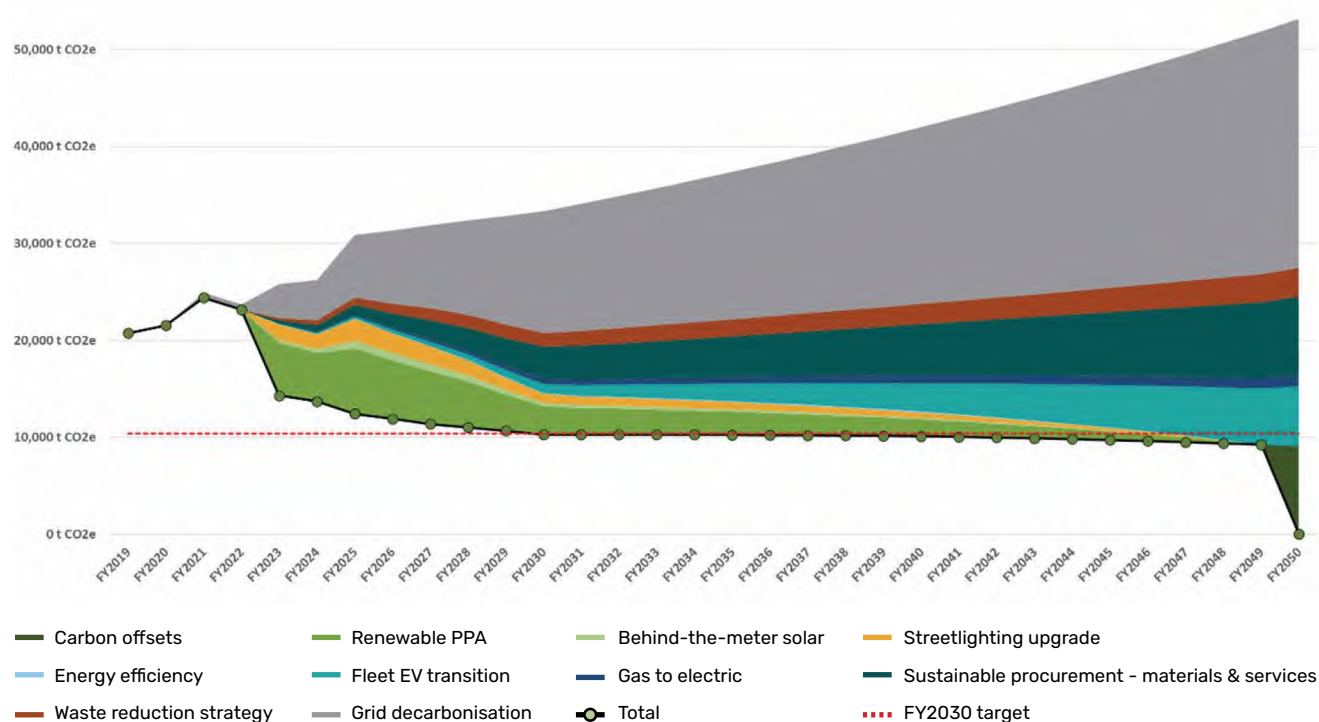


Figure 9: Indicative emissions reduction pathway for Camden Council with carbon offsets

Our buildings, facilities and assets are energy efficient and powered by renewable energy

Our buildings and facilities are powered by a range of sources and include electricity sourced from the grid, renewable energy and natural gas with grid electricity and gas contributing to the majority of all our emissions. Moving away from fossil fuels like coal and gas is an important step in reducing our carbon emissions.

Electricity consumption represents a large portion of our carbon footprint with an upward trend of 9% over the last three years. Our aquatic centres and major facilities such as the Oran Park Administration Building and Oran Park Library are some of our highest contributors. Gas is used across a total of ten sites and accounts for approximately 2% of our total emissions and like electricity, the Mount Annan Leisure Centre and Oran Park Administration Building and Oran Park library are our highest gas consumers.

There are many opportunities to drive down emissions and broadly we will seek to increase energy sourced from renewable energy, implement energy efficient technologies in our buildings and facilities and incorporate best practice management across all sites.

How will we measure our success?

20% increase in renewable energy generated by 2028

20% reduction in Council energy use per capita by 2028

All Council assets are powered by 100% renewable electricity by 2028

All Council assets are 100% electric by 2030



Case study

LED street light upgrade

In 2022 Council partnered with Endeavour Energy to install energy efficient lighting throughout the Camden area as part of a LED Streetlight Replacement Program. Inefficient streetlights were replaced with LED lights resulting in financial savings of over \$8 million over 20 years as well as saving approximately 2,100 tonnes of carbon dioxide equivalent each year.

Energy Actions



Energy

Ref	Action	Timeframe
E1	Purchase 100% accredited renewable energy for all Council sites	Short Term
E2	Upgrade building and facility lighting to energy efficient LED and install motion sensors at relevant sites including Narellan Library, Mount Annan Leisure Centre, Camden War Memorial Pool, Camden Library, Camden Civic Centre and Oxley Street Car Park	Short Term
E3	Replace gas fired equipment including boilers, heaters, and hot water systems with energy efficient heat pumps at buildings including Oran Park Administration Centre, Narellan Library, Mount Annan Leisure Centre and community centres	Short Term
E4	Upgrade Heating Ventilation Air Conditioning (HVAC) systems and heat pumps with units using natural refrigerants and high energy efficiency at buildings including Camden Civic Centre, Narellan Library and Mount Annan Leisure Centre	Short Term
E5	Install variable speed drives on circulation pumps at Mount Annan Leisure Centre and pumps at waterbodies throughout the LGA	Short Term
E6	Increase existing solar photovoltaic system size where possible and enhance with monitoring and batteries where suitable at Council sites including Mount Annan Leisure Centre, Oran Park Library and Administration Building, Narellan Library, Narellan Child, Family and Community Centre, Camden War Memorial Pool, Camden Civic Centre, community centres and sportsgrounds	Short Term
E7	Investigate a sustainable funding source for energy efficiency projects	Short Term
E8	Ensure the renewal of assets includes consideration of energy efficiency and emissions as a primary selection criteria	Short Term
E9	Develop a list of standard energy efficient appliances, fixtures and fittings to ensure urgent replacements incorporate emissions reduction considerations	Short Term
E10	Actively pursue opportunities to implement additional energy efficiency opportunities and seek partnership opportunities	Medium Term
E11	Investigate the implementation of smart controls for street lighting	Medium Term
E12	Replace gas fired kitchen appliances with high efficiency electric appliances at Council buildings including Mount Annan Leisure Centre, Oran Park Administration Centre and Camden Civic Centre	Medium Term
E13	Monitor and replace existing solar systems as required to ensure optimal production	Medium Term
E14	Complete electrification by phasing out all gas fired equipment at all Council facilities and replacing with efficient electric equipment	Medium Term
E15	Investigate opportunities for large scale batteries and solar systems to generate supply for Council facilities	Long Term



Waste

Our waste diversion rates will be increased through continual improvement

Our waste contributed to 4.2% of our total emissions and was a combination of landfill waste (construction and industrial waste) and emissions associated with recycling (construction and demolition).

Waste reduction is key to reducing carbon emissions however the construction of new facilities and assets to accommodate the needs of a growing population has resulted in a steady increase in waste emissions since our baseline year of 2018-19, rising to 7.4% of our emissions in 2020-21.

Lowering emissions from waste can be achieved by increasing waste recovered from waste streams and through awareness campaigns to promote the value of 'waste' as a resource and influence behaviour.

How will we measure our success?

Council's waste is measured and reported annually

60% waste recovery from Council's waste streams by 2028

80% waste recovery from Council's waste streams by 2050



Case study

Street sweeping contract

Street sweeping and drain cleaning is regularly undertaken to keep our streets healthy and clean. In 2020 a new contract was sought with increased environmental and financial benefits. As a result, at least 90% of the waste is now diverted from landfill with plastics sent to a plastic recycler and organic waste reused in the landscape industry reducing our emissions and saving approximately \$56,300 each year.

Waste Actions



Waste

Ref	Action	Timeframe
W1	Work with internal stakeholders to establish and implement a waste monitoring framework to accurately capture and report on Council's waste generation	Short Term
W2	Develop staff engagement programs and materials to improve waste diversion and recycling across Council facilities	Short Term
W3	Investigate waste reduction and diversion technologies to drive reductions in waste generation and resource recovery	Short Term
W4	Waste management to be included in all construction and demolition project contracts to include reporting on waste separation, recycling and waste to landfill	Short Term
W5	Implement waste diversion measures to achieve 60% recovery from Council's waste stream	Medium Term
W6	Explore innovative approaches to increase resource recovery and reduce waste generation, including opportunities to support the circular economy	Medium Term





Goods and Services

Commitment to progressively lower emissions through our purchased products and services

Purchased goods and services are our second largest contributor to greenhouse gas emissions accounting for 32% of our total carbon emissions.

As the population continues to grow in the Camden area, so does the number of facilities, assets and maintenance requirements. Construction projects have been identified as an area with the highest spend and related emissions, for example asphalt and concrete, providing the greatest opportunity to reduce emissions.

How will we measure our success?

Net zero and energy efficiency criteria included in tenders

20% decrease in emissions associated with the supply of goods and services by 2027

20% increase in purchase of goods with recycled content by 2027



Case study

Recycled roads

Revised tendering criteria allowed for an increase in the amount of recycled material incorporated into a road renewal project. This project successfully incorporated 15% recycled asphalt and 5% recycled glass in the wearing course of the road, achieving a reduction in virgin materials and significantly lower emissions. Due to the success of the recycled content it has now been applied to other suitable road projects.



Goods and Services Actions



Ref	Action	Timeframe
G1	Develop and provide procurement training to all staff that incorporates consideration of net zero emissions and energy efficiency	Short Term
G2	Work with staff undertaking tenders to develop and incorporate net zero and energy efficiency requirements including standard tender criteria where relevant	Short Term
G3	Implement and review the Quadruple Bottom Line assessment tool for all Council projects through a staged approach, starting with high value capital projects as a priority	Short Term
G4	Review Council's Engineering Specifications to include consideration of emissions reduction opportunities and allow for innovation	Short Term
G5	Identify and develop initiatives to implement circular economy and low emissions opportunities focussing on areas with the greatest spend	Medium Term
G6	Partner with other organisations to trial new and emerging technologies and achieve economies of scale on the purchase of low emission goods and services	Medium Term

Goods and Services



Built Environment

Our buildings and facilities will have low or zero emissions

Our buildings and facilities provide the basic needs for our growing community and include parks, recreational facilities, community buildings and Council buildings. Through our planning mechanisms and sustainable design, there are many emission reduction opportunities to be gained in the way our buildings and facilities are built, leading to increased resilience to the impacts and shocks of climate change.

How will we measure our success?

At least 5 Council buildings have National Australian Built Environment Rating System (NABERS) ratings

At least 3 Council buildings have NABERS rating of 5 stars or more

Sustainability standards included in the Camden Public Building Design Manual and Camden Open Space Design Manual



Case study

Oran Park Leisure Centre

Council's new Oran Park Leisure Centre has been designed as a sustainable facility, with initiatives to reduce emissions over its life. Key emissions saving features include a 335kW rooftop solar system, no connection to natural gas, the purchase of 100% renewable energy and thermal separation of the structure and façade. The facility also has increased insulation, natural ventilation and lighting, insulated pool shells and an energy recovery and heat reclamation system to reduce energy use.



Built Environment Actions



Built Environment

Ref	Action	Timeframe
B1	Implement best practice asset design and building for new facilities and upgrades incorporating energy efficiency, electric vehicle charging infrastructure, renewable energy, natural refrigerants and low carbon materials	Short Term
B2	Develop minimum standards in the Camden Public Building Design Manual and Camden Open Space Design Manual for new Council buildings and the upgrade of existing facilities to maximise zero carbon and energy efficiency outcomes including minimum 5 star NABERS ratings for new facilities	Short Term
B3	Ensure new and existing facilities include provision for electric charging infrastructure	Short Term
B4	Investigate and improve Council processes to maximise energy efficiency outcomes in Voluntary Planning Approvals and Works In-Kind Agreements	Short Term
B5	Undertake NABERS assessment for Council's most energy intensive facilities and identify actions to achieve a minimum standard of 5 stars	Medium Term
B6	Investigate the use of smart technology solutions for improved management of buildings and resource efficiency	Medium Term
B7	Ensure all HVAC system replacements or upgrades use refrigerants that have low or zero ozone depleting potential (ODP)	Medium Term



Transport & Plant

Our staff fleet vehicles, operational vehicles and plant fleet will include low greenhouse emission options

Our plant and fleet includes our trucks, plant equipment, operational and staff fleet. Transport emissions are primarily from diesel used in truck and plant fleet and to a lesser extent our passenger and utility vehicle fleet. Transport emissions account for 13% of our operational emissions (scope 1 & 3) however given truck and plant items account for most of the emissions, opportunities to transition truck and plant should be a priority.

The lack of public transport within the Camden area provides limited opportunities for staff to travel to work via non-car based transport with employee commute accounting for approximately 2% of the total emissions.

Despite this, operational and staff fleet provides the easiest opportunity to reduce emissions by transitioning to electric vehicles within the next ten years.

How will we measure our success?

30% of Council's passenger fleet are electric vehicles by 2030

20% reduction in fleet emissions by 2030



Case study

Electric lawnmower

In 2022 Council became one of the first local governments in Greater Sydney to purchase a fully electric ride-on mower. This lawn mower is quieter to run, requires less maintenance and produces no emissions, providing a better alternative to traditional fossil fuelled versions.



Transport & Plant Actions



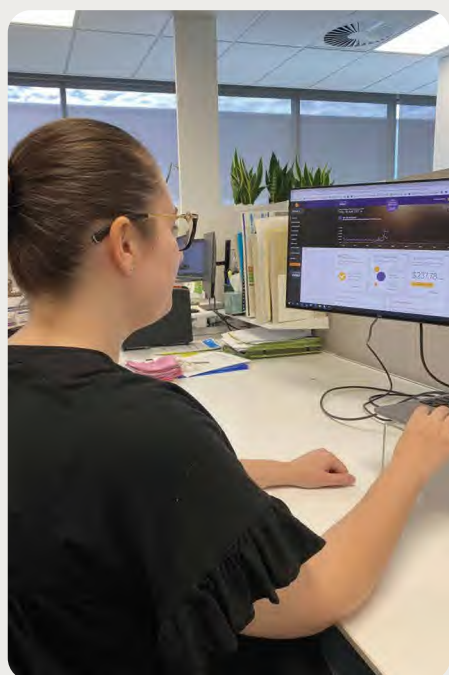
Ref	Action	Timeframe
T1	Develop a fleet action plan to identify and prioritise actions to reduce emissions from passenger and commercial vehicles including provision of charging infrastructure	Short Term
T2	Ensure all new facilities incorporate appropriate end of trip facilities to encourage active transport	Short Term
T3	Advocate for alternative transport options for the Camden local government area	Short Term
T4	Investigate opportunities to reduce work related travel in private vehicles	Medium Term
T5	Investigate opportunities to offset travel related emissions where other options are not available	Long Term

Transport & Plant





Emissions Management



We have the skills, knowledge and systems to allow us to understand and track our emissions

Emissions management is a new area for Council and will involve delivery of a range of engagement and training opportunities to ensure that our staff can make the most of opportunities and new technologies as they arise. It will also be important to share our progress towards net zero with staff and the community. A number of actions have also been identified that will assist Council in streamlining the monitoring and reporting required under this plan, as well as improving accuracy and confidence in our emissions profile.

Emissions Management Actions

Ref	Action	Timeframe
M1	Establish processes and pathways to capture accurate data for future emissions profiles and to ensure consistent information is collected	Short Term
M2	Implement best practice data management systems to assist with preparing emissions profiles	Short Term
M3	Share Council's progress towards net zero with staff and the community including key learnings and outcomes	Short Term
M4	Increase knowledge of staff on emissions management and energy efficiency through training	Short Term
M5	Develop a reporting dashboard to capture and share emissions data to staff and the community	Short Term
M6	Investigate options to certify Council's emission reporting through programs like Climate Active	Medium Term
M7	Investigate and identify suitable carbon offset opportunities and develop guidelines for their use	Long Term

A brown and white cow stands in a field of tall, golden-brown grass. In the background, a suburban neighborhood with houses and trees is visible under a clear sky. The word "six" is written in a large, white, outlined font over the cow's body.

six

Resourcing

Significant resourcing will be needed to achieve these commitments and demonstrate Council's commitment to achieving net zero emissions. Cost efficiencies can be made by programming for the replacement of some assets and appliances at the end of their useful life with more efficient and less emissions intensive equipment. Some actions will

require significant up-front investment to ensure Council is able to achieve the goals it has set for itself.

Where possible Council will also seek funding support through partnerships, grants and other incentives to support and enhance our actions.



seven

Monitoring and Review

Council will report annually on the key achievements, highlights and challenges associated with implementing this plan and our progress against the success measures. This will also include reporting on our corporate water and energy use, and scope 1 and 2 emissions annually, with more comprehensive reporting across emissions from all scopes (1,2 and 3) calculated and reported every four years.

This strategy and action plan will be reviewed in 2027 to ensure we are on track with our net zero ambitions and to make changes as needed to include relevant policy and legislation changes, new technologies and innovations, update trends and ensure that all opportunities to reduce our emissions are considered and included.

