Organisational Zero-net Emissions Plan 2022

A part of Sunshine Coast Council's Climate Change Response

Sunshine Coast™ COUNCIL

Acknowledgement to country

Sunshine Coast Council acknowledges the Sunshine Coast Country, home of the Kabi Kabi peoples and the Jinibara peoples, the Traditional Custodians, whose lands and waters we all now share.

We recognise that these have always been places of cultural, spiritual, social and economic significance. The Traditional Custodians' unique values, and ancient and enduring cultures, deepen and enrich the life of our community.

We commit to working in partnership with the Traditional Custodians and the broader First Nations (Aboriginal and Torres Strait Islander) communities to support self-determination through economic and community development.

Truth telling is a significant part of our journey. We are committed to better understanding the collective histories of the Sunshine Coast and the experiences of First Nations peoples. Legacy issues resulting from colonisation are still experienced by Traditional Custodians and First Nations people.

We recognise our shared history and will continue to work in partnership to provide a foundation for building a shared future with the Kabi Kabi and the Jinibara peoples.

We wish to pay respect to their Elders – past, present and emerging, and acknowledge the important role First Nations people continue to play within the Sunshine Coast community.

Together, we are all stronger.

Edition September 2022

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Contents

Council's climate change response

This Zero-net Emissions (ZNE) Plan is one of three components of Sunshine Coast Council's response to the need for urgent action on climate change, along with climate risk management and providing leadership and support for our community to reduce their own emissions reduction.

Climate change is identified as a key driver of change in Council's *Environment and Liveability Strategy* (2017), and the Intergovernmental Panel on Climate Change (IPCC) has identified the next 10 years as the critical decade for climate change action, globally, nationally, and locally if we are to have any chance to reduce the worst of the impacts of a warming climate.

We are already experiencing the impacts of a changing climate in our work and personal lives as evidenced by the changes in the intensity, frequency and/or severity of many climate hazards such as bushfires, storms, and flooding as well as the gradual shift to a changed environmental state due to sea level rise, reduced rainfall, changing ecosystems and increasing heat. These impacts are largely being driven by increases in greenhouse gas (GHG) emissions from human activities.

Reducing our own emissions is critical to contribute to global mitigation efforts to slow down the impacts that are already locked into the climate system to ensure we do not go above 1.5 - 2°C degrees of warming.

This plan provides strategic directions to embed emission reduction into everyday decisions for planning and service delivery to achieve our target to be a zero-net emissions organisation by 2041.

Structure of this plan

This plan is structured in two parts:

Part A – Strategic Directions

Part A outlines what is meant by zero-net emissions, why we have committed to such a target, and how we are going to achieve becoming a zero-net emissions organisation as guided by an established six-step process.

Part B – Implementation Plan

Identifies a suite of priority actions and tasks, under six focus areas to deliver a comprehensive and integrated approach to emissions reduction across the organisation.

The implementation plan outlines how the actions will be measured, monitored, and reviewed and expands on how we intend to track progress and report on the plan's implementation and performance.

Actions will be captured in organisational corporate reporting with responsibility assigned to relevant business areas of the organisation. It is intended that the plan will be reviewed and updated annually to maintain relevance and currency with a five-year implementation timeframe.

Implementation of this Plan will demonstrate Council's commitment and action as we partner in the delivery of a Climate Positive Brisbane 2032 Olympic and Paralympic Games.

Sustainable Development Goals

To demonstrate our commitment to being Australia's most sustainable region, this plan has been aligned to the United Nations' Sustainable Development Goals (SDGs).

These goals provide a global roadmap for all countries to work towards a better world for current and future generations.

In September 2015, Australia was one of 193 countries, to commit to the SDGs.

PART A: Strategic Directions

What is zero-net emissions?

Zero-net emissions refers to achieving an overall balance between the quantity of greenhouse gas emissions (GHG) produced, and the amount of GHG emissions removed from the atmosphere.

Council is committed to reducing its emissions as much as possible. However, it is acknowledged that there are some activities where avoiding emissions may not be possible or further reductions are not technically or financially feasible. In these instances, Council would therefore need to invest in additional initiatives to 'offset' the remaining greenhouse gas emissions.

Why are we committed to zero-net emissions?

It is everyone's responsibility to think about our actions and activities to contribute to reducing our greenhouse gas emissions.

Council is working towards its organisational 2041 zero-net emissions target in playing our part to achieve the Paris Agreement goal of limiting global warming to well below 2°C, preferably to 1.5°C, compared to pre-industrial levels.

Council's target, timing and emissions reduction pathway have been verified as being consistent with a Science Based Target approach, aligning to the Paris Agreement to avoid the worst impacts of climate change.

Figure 1 summarises the international, national, state and local policy context and alignment for reducing greenhouse gas emissions.

Aligning with strategic policy

Global

Paris Agreement adopted in 2015 is the international agreement that commits countries to work to limit global temperature rise to well below 2°C, and strive for 1.5°C (above pre-industrial levels).

Intergovernmental Panel on Climate Change (IPCC, 2018) report on 1.5°C warming indicates that achieving this would require rapid, far-reaching and unprecedented changes in all aspects of society.

United Nations Sustainable Development Goals (SDGs). The actions outlined in this Plan contribute to the following SDGs:

- 3 Good Health and Wellbeing
- 7 Affordable and Clean Energy
- 8 Decent Work and Economic Growth
- 9 Industry, Innovation and Infrastructure
- 11 Sustainable Cities and Communities
- 12 Responsible Consumption and Production
- 13 Climate Action.

Australian Government

Australia's target under the Paris Agreement is to reduce emissions by 43% (below 2005 levels) by 2030 and to be net zero by 2050.

Queensland Government

Target to reach zero net emissions by 2050. Interim target for at least a 30% reduction in emissions on 2005 levels by 2030. Target to decarbonise the electricity grid with 50% renewable energy by 2030.

Sunshine Coast Council

Vision: *Australia's most sustainable region. Healthy. Smart. Creative.*

Sunshine Coast Council Corporate Plan 2022-2026
Our Goals: Our Strong Community, Our Environment and Liveability, Our Resilient Economy, Our Service Excellence, Our Outstanding Organisation

Environment and Liveability Strategy 2017
Relevant themes: Sustainable Design, Energy and Resources, Sustainable Living, Adaptation and Resilience
Target: Sunshine Coast Council is a zero-net emissions organisation and the community is low carbon by 2041.

Zero-net Emissions Plan **(this plan)**
Sunshine Coast Council is a zero-net emissions organisation by 2041.

Figure 1: International, national, state and local policy context and alignment for reducing greenhouse gas emissions.

How can we get there? Setting the scene – achieving zero-net emissions

Reducing our emissions and achieving zero-net emissions takes a focused and collaborative effort and is guided by an established six-step and iterative process (Figure 2).

1 Setting a zero-net emissions target

Sunshine Coast Council's Environment and Liveability Strategy 2017 has specified a 2041 outcome and target under the 'Energy and Resources' theme.

2041 outcome:
A low carbon, energy and resource efficient community making sustainable choices.

Target:
Sunshine Coast Council is a zero-net emissions organisation and the community is low carbon by 2041.

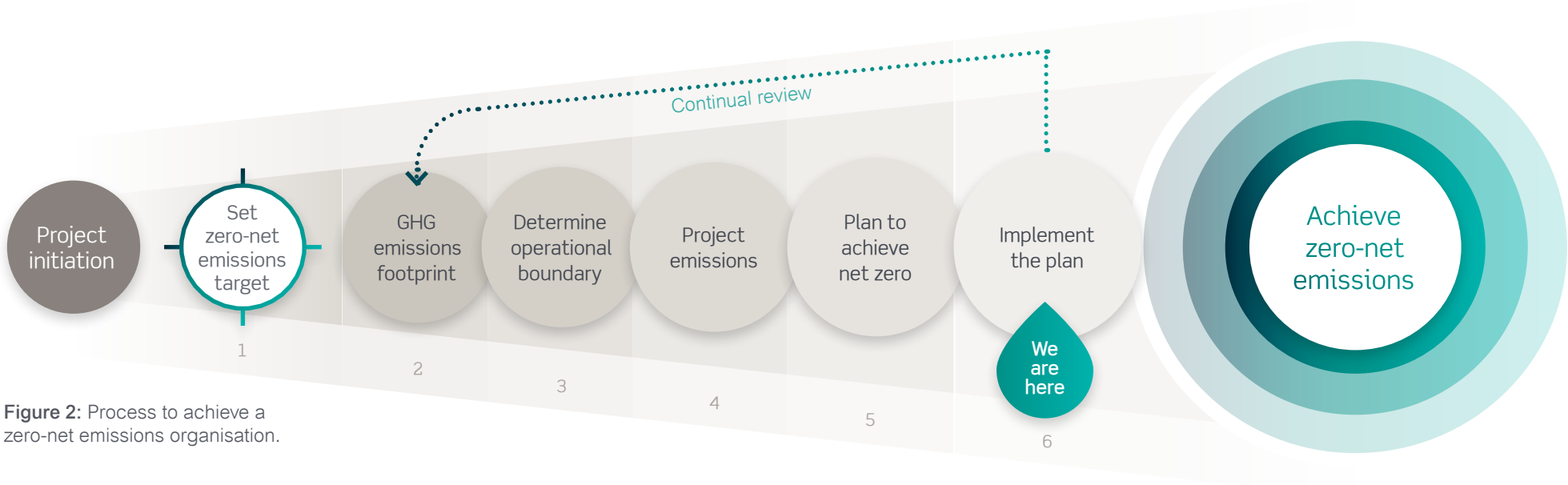

Figure 2: Process to achieve a zero-net emissions organisation.

2 What is our organisational greenhouse gas emissions (carbon) footprint?

To determine our organisational greenhouse gas (GHG) emissions footprint, all relevant emission sources within our organisational/operational boundary must be considered.

Council has been measuring and reporting its greenhouse gas emissions since 2015 via the annual Organisational Environmental Sustainability Benchmark Report[1].

In 2020/21, Council's GHG emissions footprint was developed in accordance with the National Climate Active Standard. By aligning to Climate Active, it allows Council to be well positioned when we are ready to be certified as a zero-net emissions organisation.

[1] www.sunshinecoast.qld.gov.au/Council/Budget-Financial-and-Annual-Reports/Organisational-Environmental- Sustainability-Reporting.

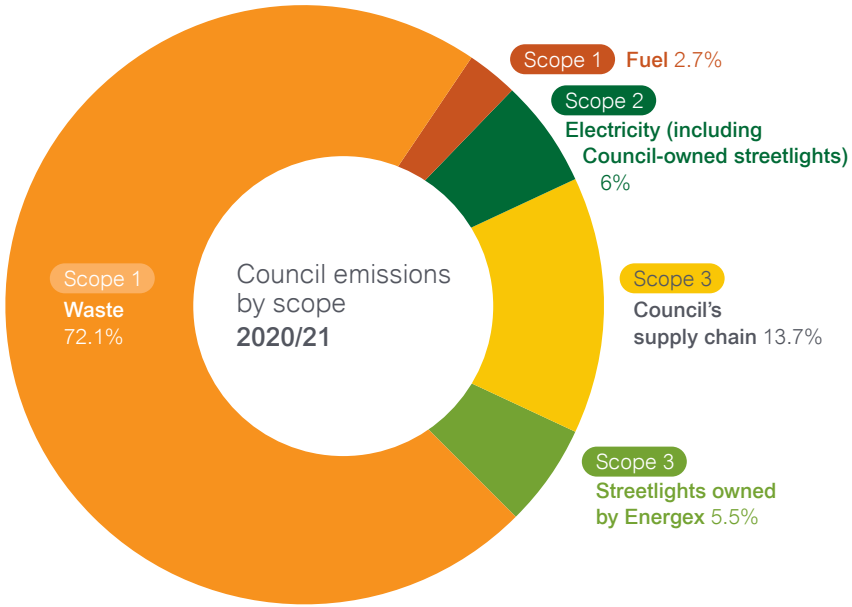

Figure 3: Breakdown of Council's emissions by scope (2020/21).

When determining our organisational emissions footprint, we need to determine our 'emissions scopes', that are:

Scope 1 emissions

Includes all direct GHG emissions from sources that Council has operational control over e.g. waste in landfill, fuel use, refrigerants.

Waste contributions are the most significant source of our total organisational GHG emissions footprint and is included in our organisational boundary because Council owns and operates two active landfills, Nambour and Caloundra (taking both community and council waste).

Fuel is a smaller component of our organisational emissions and is included because Council has control over its fleet and the associated fuel purchased.

Scope 2 emissions

Includes 'indirect emissions' that come from the generation of electricity purchased and consumed by Council e.g. electricity that Council uses.

Electricity emissions relates to the amount of electricity we use at all council assets and the type of energy we purchase, if it comes from coal fired power stations or renewable energy.

Scope 3 emissions

Includes all other indirect GHG emissions from goods and services produced by a third party but consumed by Council associated with Council's supply chain e.g. purchase of products and services, (including streetlights owned by Energex).

A large portion of our supply chain emissions are attributed to two main service categories - 'professional services' and 'streetlights owned by Energex' where we have responsibility for paying for the electricity used.

Other smaller Scope 3 contributions are from construction materials and services, and vehicle and equipment hire.

3 What is our greenhouse gas emissions boundary?

The organisational boundary is determined by identifying those asset types or business operations that are under the full control and/or influence of Council.

Establishing our organisational greenhouse gas emission boundary identifies what emissions are either 'quantified', 'non quantified' or 'excluded' in the carbon accounting process.

Data for scope 1 and 2 emissions are more easily quantified with reliable, validated, quantity, consumption or use data available.

Scope 3 emissions are more complex to calculate and are based on Council's supply chain which requires further refinement of our existing emissions data sources to improve data accuracy and identify further emissions reduction opportunities.

While Council doesn't need to measure everything, it needs to account for all material emissions. Sometimes emissions sources can be 'non-quantified' where data is unable to be obtained and a best guess can be generated using an uplift factor to calculate the carbon emissions. These are areas we can work on to improve our data collection.

'Excluded emissions' are emission sources that lie outside the emissions boundary as they were deemed irrelevant.

Table 1 presents our emission boundary that we report on as part of the Climate Active footprint and outlines the Groups/Branches responsible for the delivery of services that align with the emission sources.

Table 1: Organisational emissions boundary aligning with key responsibility areas across Council.

Carbon accounting	Emission scope	Emissions source	Responsibility	
			Group	Branch
Quantified	1	Fuel	Built Infrastructure	Asset Management
		Waste to Landfill	Liveability and Natural Assets	Waste and Resource Management
		Green Waste	Liveability and Natural Assets Built Infrastructure	Waste and Resource Management Parks and Gardens Environmental Operations
		Liquid Petroleum Gas (LPG)	Business Performance	Finance
		Refrigerants	Business Performance	Property Management
	2	Electricity	Business Performance	Business and Innovation
		Streetlights (Council)	Business Performance	Business and Innovation
	3	Streetlights (Energex)	Business Performance	Business and Innovation
		Potable Water	Business Performance	Finance – Unitywater
		Printing and stationery	Business Performance Business Performance	Business and Innovation Digital and Information Services

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Table 1: Organisational emissions boundary aligning with key responsibility areas across Council *continued...*

Carbon accounting	Emission scope	Emissions source	Responsibility	
			Group	Branch
Quantified *continued...*	**3** *continued...*	ICT services and equipment	Business Performance	Digital and Information Services
		Food and catering	Office of the CEO and the Mayor Built Infrastructure Business Performance Customer Engagement and Planning Services Economic and Community Development Liveability and Natural Assets	Across all Branches
		Air travel	Office of the CEO and the Mayor	Corporate Governance
		Telecommunications	Business Performance	Finance
		Asphalt	Built Infrastructure	Civil Asset Management
		Construction, maintenance, and service	Built Infrastructure	Civil Asset Management
		Professional Services	Office of the CEO and the Mayor Built Infrastructure Business Performance Customer Engagement and Planning Services Economic and Community Development Liveability and Natural Assets	Across all Branches
		Office equipment lease	Business Performance	Property Management
		Postage, couriers, and freight	Business Performance	Business and Innovation
		Business accommodation	Office of the CEO and the Mayor	Corporate Governance
		Cleaning services	Business Performance	Property Management
		Building and facility maintenance services	Business Performance	Property Management
		Hired vehicles and equipment	Built Infrastructure	Asset Management
		Working from home	Business Performance	People and Culture
Non-quantified	**3**	Taxi and ride share	–	–
		Employee commute	–	–
		Hire cars	–	–
		Upstream leased assets	–	–
Excluded emissions sources	**3**	Investments	-	-
		Closed landfills	-	-
		Third party landfill gas management*	-	-

* Landfill gas capture is managed by a third party and is therefore excluded from council's organisational emissions boundary. However, council does account for the fugitive emissions from landfills (minus landfill gas captured by third party).

4 What are our projected emissions?

A clear pathway for Council to reduce its greenhouse gas emissions (GHG) has been developed based on a 'science-based target' approach aligned with the goals of the Paris Agreement to limit global warming to well-below 2°C and preferably to 1.5°C above pre-industrial levels.

Business as Usual (BAU)

A 'Business-as-Usual Emissions Reduction Scenario' has been developed to better understand our projected emissions for our current policy settings.

Assuming no additional intervention/ emissions reduction measures are made, a business-as-usual scenario is expected to see a steady increase in our emissions over time (Figure 4).

Emissions Reduction Scenario

Further modelling was undertaken to indicate how Council could reach its target by 2041, under population growth assumptions and planned key emission reduction initiatives in the areas of waste, electricity, and fleet, to be delivered in the next 5 to 10 years.

The key measures modelled were:

- Introduction of food organics garden organics (FOGO)
- Increased gas flaring/capture at the landfills (which reduces our fugitive landfill gas emissions)
- Installing more rooftop solar
- Upgrading streetlights to efficient LEDs
- Converting fleet to electric vehicles/ hybrids

The emissions abatement associated with each initiative was modelled to show its contribution to reducing Council's GHG emissions and what it would look like out to 2041 (Figure 5).

Even with all modelled initiatives implemented, there will still be a shortfall (the white space between net emissions and science-based target lines [see Figure 5]) requiring additional abatement opportunities to be identified and/or the purchase of offsets to realise the target. This highlights the critical importance of early and ongoing action to implement the identified initiatives, as well as identifying new emissions abatement opportunities to ensure we stay within our carbon budget, consistent with the Paris Agreement target as our population increases.

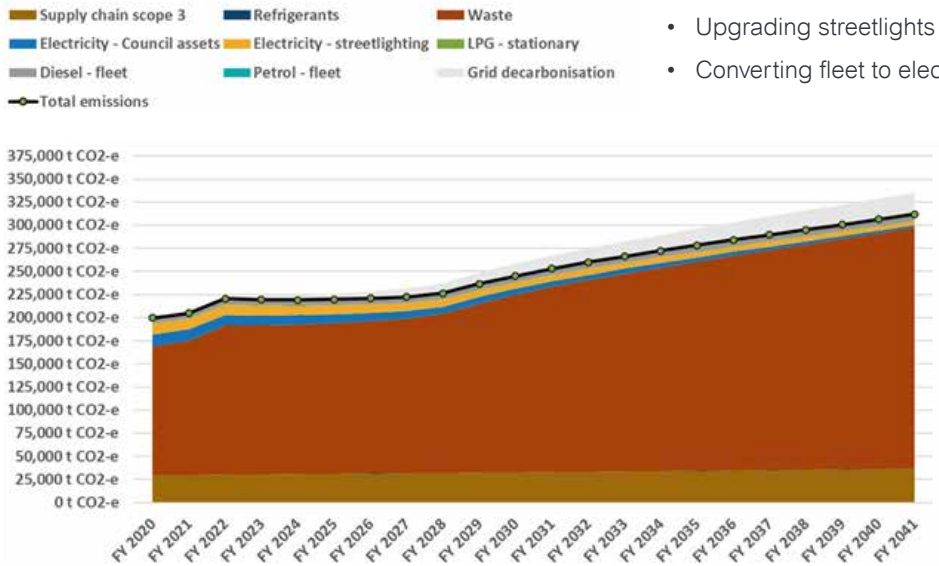


Figure 4: Business as usual emissions for Council to 2041.

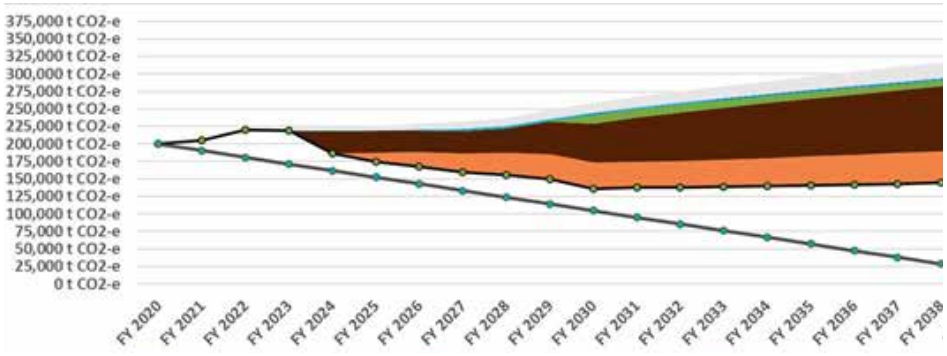


Figure 5: Modelled emissions reduction scenario to 2041.

5 Planning to achieve a zero-net emissions organisation

In Part B of this plan a suite of priority actions are outlined to assist in reducing organisational emissions as we work towards our target of becoming a zero-net emissions organisation.

The actions are presented under six focus areas:

- Governance and culture change
- Waste
- Electricity
- Transport
- Supply chain
- Buildings and infrastructure

Council's zero-net emissions target, action planning and associated success is fundamentally a change management approach, whereby our response is embedded into governance systems and processes and is supported by a strong culture for change. The key focus areas of waste, electricity, transport, supply chain and buildings and infrastructure are based on the major emission sources that contribute to Council's organisational greenhouse gas footprint.

In responding to these focus areas, Table 2 summarises the relevant Council strategies, policies, plans and processes in place and/or required to support implementation. Noting that some of these documents are in the process of being updated or finalised.

Table 2: Summary of key strategies, policies and processes related to focus areas.

FOCUS AREA	KEY RELATED STRATEGIES, POLICIES AND PROCESSES	
Governance and culture change	Sunshine Coast Council Corporate Plan 2022-2026 Regional Economic Development Strategy 2013-2033 Sunshine Coast Community Strategy 2019-2041 Asset Management Policy	Carbon Policy Employee Code of Conduct Flexible Work Policy Offsets Policy
Waste	Queensland Government Waste Management and Resource Recovery Strategy Sunshine Coast Waste Strategy 2015-2025 Civil Assets Management road reseal and road rehabilitation program	
Electricity	Retail Electricity Strategy Energy Demand Management Plan	Draft SCC Urban Lighting Master Plan
Transport	Integrated Transport Strategy Motor Vehicle Policy and Procedure Major Fleet and Plant Capital Replacement Program Parking Management Plan	Active Transport Plan Travel Behaviour Change Program Draft Electric Vehicle Transition Policy City Hall Travel Management Plan
Supply chain	Procurement Policy and associated guidelines	
Buildings and infrastructure	Capital Works Program Strategic Asset Management Plans Sunshine Coast Design (Yellow Book)	Open Space Landscape Infrastructure Manual (LIM) SCC Workplace Strategy ProjectHub

6 Implementing the plan

It is the responsibility of everyone within Council to be accountable for delivering this Plan and to make a positive impact on our organisational greenhouse gas emissions.

It is important to recognise that these actions are only the beginning, and more emissions abatement measures are required to meet our target as part of our contribution to global action to reduce significant impacts associated with our changing climate.

As we continue to work together, there is a need to be thinking about innovative approaches and trialling and testing new concepts.

Measuring, monitoring and reviewing

This Plan sets out actions to be delivered over the next five years, with an intention for the plan to be updated annually to retain its relevance and maintain a current five-year implementation horizon.

Actions will be measured, monitored, analysed, and reported on annually, as we track our organisational greenhouse gas emissions performance through Council's annual environmental sustainability reporting. It is envisaged this reporting will in turn be used to set emissions reduction targets for the coming financial year to ensure our investments are focused on achieving our target.

Offsetting our emissions

While the focus is on reducing our GHG emissions as much as possible, there will still be unavoidable emissions that we need to manage. In these instances, Council would be required to purchase carbon credits to offset our unavoidable emissions to reach our zero-net emissions target.

The cost of carbon credits that would be required presents a significant future financial liability that needs to be recognised and considered within long-term emissions planning.

Carbon credits need to be purchased through a recognised voluntary and/or compliance carbon offset market and validated. Conversely, Council participating in the carbon market and creating its own carbon credits could provide a new financial opportunity.

PART B: Implementation Plan

How are we going to reduce our organisational emissions?

To reduce Council's emissions over the next five to ten years, a suite of priority actions and tasks, under six focus areas have been identified.

These focus areas provide Council with specific and practical tasks to reduce its emissions:

Governance and culture change	Transport
Waste	Supply chain
Electricity	Buildings and infrastructure

Each focus area contains:

- **Interim targets:** to monitor how we are progressing at two timeframes 2025 and 2030. Identified interim targets are modelled against the business as usual (BAU) scenario (Part A: Figure 4).
- **Actions and tasks:** key actions have been identified with a description of the tasks required.
- **Timeframes:** the implementation plan sets out a five-year timeframe for delivering tasks. This indicates the commencement year and the estimates duration of the task, with some being ongoing.
- **Cost estimates:** cost associated with delivery of tasks is indicative only. Funding of actions and tasks are subject to Council's capital works and operational annual budgetary considerations. The breakdown has been categorised into Low, Medium and High over a five-year period:

Low = $0-100,000	Medium = $101,000 - $500,000	High = $500,001+

- **Lead:** nominates responsible Branch or multiple Branches, who would take the lead or have a shared responsibility on the different tasks.

The success of achieving Council's zero-net emissions target and actions needs to be incorporated into Council's systems and processes, including a strong emphasis on governance and culture change. The focus areas of electricity, transport, waste, procurement and buildings and infrastructure are based on the major emission sources that contribute to Council's organisational greenhouse gas footprint.

It is a shared responsibility to be accountable for the delivery of this plan to achieve the desired impact on our organisational greenhouse gas emissions target.

Funding and financial benefits

There are a range of financial strategies available to Council that support most emission reduction initiatives, such as:

- Implementing life cycle analysis to ensure the existing budgets/prioritisation is aligned to emissions abatement and positive return on investment (ROI)
- Grants and incentives (e.g. Federal Government's Emissions Reduction Fund, Queensland Government Waste Levy)
- Applying an internal shadow carbon price (based on carbon offset market) to drive investment in priority technologies and projects with a lower emissions footprint
- Establishing a revolving renewable energy/sustainability fund to 'kickstart' and support low emissions technologies, energy efficiencies and projects
- Participating in the 'carbon market' by establishing carbon sequestration/ emissions reduction projects to create and sell excess carbon credits.

Council projects should be designed and prioritised based on those that generate a positive return on investment within the asset life (including for their carbon abatement potential). For example, each project should be assessed based on the life-cycle cost analysis taking into consideration all costs of acquiring, maintaining, and disposing of a building or product. This needs to be considered early in the scoping stage and budgeted and not as an addition which can be 'value engineered' out. A longer payback within the asset life should also be considered acceptable where a technology investment delivers multiple benefits such as GHG emissions reduction, sustainability, and community benefits.

Governance framework

The governance framework within which this Plan will be delivered uses Council's existing organisational structure, systems and processes and adopts an integrated approach.

The following actions are intended to inform council's organisational planning and resourcing procedures, are subject to annual plan and budget processes and business case preparation and consideration.

Principles of implementation

The following Environment and Liveability Strategy principles are to be applied by using the checklist when implementing actions and making significant decisions relating to the delivery of this Plan.

How to apply the principles to support the ZNE Plan

Lead	*My team has developed a plan on how we will implement the ZNE Plan.*
	My team was involved in developing the plan on how we will implement the ZNE Plan.
	I have communicated to my team what we are doing regarding the ZNE Plan, why we are doing it and how we will do it.
	My individual and team performance expectations regarding ZNE Plan are clear.
	I have identified what support is needed to enable my team to participate and deliver what is expected.
	My team is familiar with the risks of not taking responsibility for the ZNE Plan.
	I communicate to my team our progress against our ZNE Plan and recognise people's contribution and achievements.
	I role model my commitment to reducing our GHG emissions by considering how I act, what I prioritise, what I recognise, what I measure and what I say.
	I reinforce the need to think about GHG emissions when planning our business activities.
Connect	*Relevant stakeholders have been engaged across the organisation where there is an opportunity to collaborate and contribute.*
	External stakeholders who can contribute to the ZNE Plan have been contacted and invited to collaborate.
	We are committed to sharing our learnings, what worked and what didn't, as well as learning from others.
	Gaps in my team's capability and capacity for emissions reduction has been identified and a plan in place to fill this gap.
Adapt	*Relevant data about our current performance, expected benefits to be achieved from my team's ZNE Plan, and impact is measured and reported.*
	Education and information are provided to my team to ensure that they have the required knowledge to develop and implement ZNE Plan actions.
	My team sources information from across and outside council to ensure that we are knowledgeable about trends and ideas.
	Operational risks and relevant adaptive mitigation strategies have been identified that support GHG emissions reduction.
Balance	*My team's ZNE Plan considers the triple bottom line in our approach.*
	My team's ZNE Plan is aspirational and future focused so that it considers the needs of future generations.
	I consider how I make decisions and rely on a balanced decision-making framework to ensure balance and risk mitigation.
	I communicate the decision-making approach to my team so that they can understand the logic and I role model my commitment to delivering the ZNE Plan.
Embrace	*I have assessed the impact of the ZNE Plan on my team and have a plan in place to manage this change.*
	I have assessed my team's level of awareness and motivation and readiness to contribute to the achievement of the ZNE Plan.
	I encourage my team to challenge how we have traditionally delivered services and raise opportunities to reduce our GHG emissions.
	I have a plan in place to increase the readiness of my team to contribute to the achievement of the aspirations of the ZNE Plan (capability, capacity, motivation).
	I identify and respond to risks that may inhibit the ZNE Plan's goals.
Create	*New ideas and approaches are encouraged and supported to be raised, discussed, and trialled.*
	The necessary capability in our team and through partnerships to achieve the ZNE Plan has been assessed and a plan is in place to ensure adequate capability.

Governance and culture change

Embed the reduction of organisational greenhouse gas emissions across decision-making processes.

Meeting our zero-net emissions target is the responsibility of everyone in the organisation to consider the way we do our everyday tasks. It is about developing a low carbon culture where climate action and sustainability become the new 'business as usual'.

Create a culture of sustainability and commitment to reducing our GHG emissions

Develop clear reporting processes to reduce GHG emissions

Incorporate net GHG emissions reduction in Council policies

Governance and culture change interim targets

FY 2025

Reduction of 31% of BAU organisation emissions, representing 67,000 tons CO_2e

FY 2030

Reduction of 57% of BAU organisation emissions, representing 140,000 tons CO_2e

Alignment with Sustainable Development Goals

TASK	2022/23	2023/24	2024/25	2025/26	2026/27	Five-year cost estimates	Lead (SCC branch)
OUTCOME: Embed the reduction of organisational greenhouse gas emissions across decision-making processes							
ACTION 1.1: Embed zero-net emissions planning into policies, processes, reporting, and decision making to support emissions reduction activities							
1.1.1 Incorporate ZNE targets into relevant Branch/service delivery planning and performance management processes	●	●	●	●	●	Low	Corporate Planning and Performance/ People and Culture/ All Branches
1.1.2 Develop improved data capture processes for measuring and reporting Council's emissions	●	●				Low	Environment and Sustainability Policy/ Digital Information Services
1.1.3 Incorporate GHG emissions targets and performance into the annual planning and reporting cycle to inform prioritisation and decision-making processes	●	●	●	●	●	Low	Corporate Planning and Performance
1.1.4 Streamline financial account codes in line with the Climate Active methodology including Capital Works program to improve emissions reporting	●	●				Low	Finance/Environment and Sustainability Policy
1.1.5 Incorporate zero-net emissions planning into relevant existing and new Council strategies, policies and plans	●	●	●	●	●	Low	Corporate Governance/ Corporate Planning and Performance / All Branches
1.1.6 Incorporate consideration of climate risk reduction (including emissions reduction) as a new reporting requirement in Ordinary Meeting and Council workshop agenda reports	●					Low	Environment and Sustainability Policy/ Meeting Management
1.1.7 Continue to investigate the feasibility and opportunities to earn carbon credits associated with council activities as part of ongoing emissions reduction efforts	●	●	●	●	●	Low	Environment and Sustainability Policy/ Business and Innovation
1.1.8 Investigate, trial and implement emerging carbon sequestration opportunities (e.g. blue carbon) and incorporate into emissions reduction planning	●	●	●	●	●	Medium/High	Environment and Sustainability Policy/ Environmental Operations
ACTION 1.2: Create a corporate culture that supports emission reduction activities							
1.2.1 Establish an organisational behaviour change program to increase awareness and understanding of emissions reduction planning and encourage action	●	●	●	●	●	Low	People and Culture/Environment and Sustainability Policy
1.2.2 Support emissions reduction and innovation through partnerships with business	●	●	●	●	●	Low	Economic Development
1.2.3 Support a culture of research and development (R&D) by facilitating funding for small scale pilots and trials that provide both cost savings and emissions reduction for future up- scaling	●	●	●	●	●	Low/Medium	All Branches

Waste

Transition to a zero-waste organisation.

All staff have a responsibility to reduce waste as we seek to deliver systems and practices that efficiently minimise and manage our waste.

Greenhouse gas emissions generated from waste going to landfill make up a large proportion of our total organisational emissions. This is because Council owns and operates two active landfills and must account for the emissions generated by both Council and our community in its organisational footprint.

With over 60% of waste generated within the region disposed at our landfills, reducing the amount and type of this waste will have a large impact on reducing our total greenhouse gas emissions footprint. Managing the different waste streams, particularly the diversion of food and garden organics from landfill, is expected to result in significant emissions reduction over time.

Other initiatives at a Federal and State level could also significantly contribute as a driver to reducing our landfill gas emissions and provide strong guidance to a range of emission reduction initiatives to deliver on these targets.

Support
a circular economy to increase resource recovery and reduce emissions

Drive
innovation supporting new processes for waste and emissions reduction

Develop
positive and integrated waste behaviours

* The state target specifies a higher waste diversion rate based on a range of assumptions including there will be a regional approach with alternative waste technologies such as gasification.

\# Target to be reviewed pending development of new waste strategy and the consideration of other emission reducing measures.

Waste interim targets

FY 2025

- 25% reduction from BAU in GHG emissions from landfill
- 10% waste reduction for households (per capita)
- 45%* waste diversion from landfills (recovery rate as a percentage of total waste generated)

FY 2030

- 45%# reduction from BAU in GHG emissions from landfills
- 15% waste reduction for households (per capita)
- 60%* waste diversion from landfills (recovery rate as a percentage of total waste generated)

Alignment with Sustainable Development Goals

TASK	2022/23	2023/24	2024/25	2025/26	2026/27	Five-year cost estimates	Lead (SCC branch)
OUTCOME: To transition to a zero-waste organisation							
ACTION 2.1: Support a circular economy to increase resource recovery and reduce emissions							
2.1.1 Analyse and quantify different carbon abatement opportunities for different waste streams to inform ongoing emissions reduction planning and activities		●	●			Low	Waste and Resource Management
2.1.2 Commence region-wide garden organics (GO) service as part of the full FOGO (Food organics, garden organics) to collect and process food and garden waste commencing from 2025	●	●	●	●	●	High	Waste and Resource Management
2.1.3 Prepare Council's new Waste Strategy to support emission reduction initiatives	●					Low	Waste and Resource Management
2.1.4 Identify circular economy opportunities by analysing and mapping waste streams		●	●			Low/Medium	Waste and Resource Management/ Economic Development
2.1.5 Develop, promote and increase the uptake of circular economy, partnerships and opportunities with industry and community	●	●	●	●	●	Medium	Economic Development
2.1.6 Minimise (or even eliminate) waste in construction and other projects by improving efficiency and keeping products and materials in use	●	●	●	●	●	Medium/High	Civil Asset Management
2.1.7 Investigate opportunities to improve gas capture at Council landfill sites	●	●	●	●	●	Low	Waste and Resource Management
ACTION 2.2: Drive innovation							
2.2.1 Investigate and determine the facilities and services to support an expansion of the collection and processing of waste resources	●	●	●	●	●	High	Waste and Resource Management/ Economic Development
2.2.2 Investigate emerging technologies for powering waste collection vehicles					●	High	Waste and Resource Management
2.2.3 Investigate opportunities to support/attract new businesses to invest in new waste processing technologies		●	●	●		Low/Medium	Economic Development
2.2.4 Collaborate with Council of Mayors of SE Qld (COMSEQ) to establish joint waste resource partnerships	●	●	●	●	●	High	Waste and Resource Management
ACTION 2.3: Develop positive and integrated waste behaviours							
2.3.1 Support product stewardship schemes to enable circular economy outcomes for identified problem waste items and where feasible, introduce facilities to receive nominated items at Council sites	●	●	●	●	●	Low/Medium	Waste and Resource Management
2.3.2 Develop and implement a community waste reduction/minimisation education and behaviour change program	●	●	●	●	●	Medium	Waste and Resource Management/ Environment and Sustainability Policy
2.3.3 Investigate further alternative composting methods to complement FOGO such as compost rebate program, community composting hubs e.g. Food Waste loop	●	●	●			Low	Environment and Sustainability Policy

Electricity

Utilise 100% renewable energy supply for Sunshine Coast Council's operations.

Electricity use from Council owned and operated buildings, facilities and streetlights contribute to our energy emissions. Energy efficiencies have been included in the Building and Infrastructure section.

Half the emissions from electricity use are attributed to streetlights which Council is responsible for paying the electricity costs. Partnering with Energex to upgrade streetlights to more efficient LED that use less electricity will reduce greenhouse gas emissions and provide significant operational cost savings.

In addition to the 15 MW Sunshine Coast Solar Farm (which financially offsets all of Council's electricity usage), Council has approximately 479KW of solar photovoltaics (PV) installed on its facilities (2020/21). There is a significant opportunity to increase these 'behind the meter' (direct onsite generation) solutions including rooftop solar PV capacity and battery storage. Energy demand management and energy efficiency projects will also be undertaken to decrease Council's electricity demand.

These measures will go a long way in meeting our target to source our electricity from a 100% renewable energy supply, further enhancing the financial performance of the Sunshine Coast Solar Farm.

Improve
energy management and efficiency for Council operations

Source
100% renewable energy for electricity, including streetlights

Maximise
renewable energy generation technologies on Council owned assets

Electricity interim targets

FY 2025

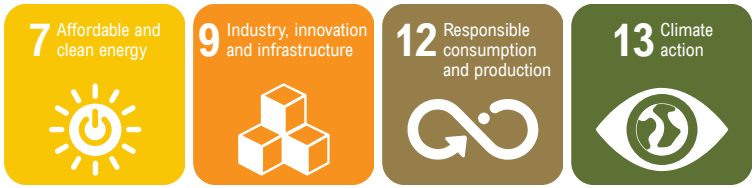
- 12% GHG reduction from electricity usage*
- 150% increase of installed solar roof capacity on council assets*
- 5 batteries installed at council assets

FY 2030

- Sourcing electricity from 100% renewable energy supply
- 100% of streetlights upgraded to efficient LED
- 300% increase of installed solar roof capacity on council assets*

* From 2020/21 Financial Year baseline.

Alignment with Sustainable Development Goals



TASK	2022/23	2023/24	2024/25	2025/26	2026/27	Five-year cost estimates	Lead (SCC branch)
OUTCOME: To utilise 100% renewable energy supply for Sunshine Coast Council's operations							
ACTION 3.1: Improve energy management and efficiency outcomes							
3.1.1 Conduct energy audits at priority Council buildings and facilities in accordance with Australian Standard 3598:2000 and develop a business case including marginal abatement cost (MAC) curves		●				Low	Property Management/ Business and Innovation
3.1.2 Implement emission reduction opportunities (e.g. lighting upgrades, building envelope sealing, HVAC controls) at priority council buildings and facilities as a key component of the Workplace Strategy	●	●	●	●	●	Medium	Property Management
3.1.3 Investigate and implement demand side electricity management, including peak energy reduction strategies	●	●	●	●	●	Medium	Business and Innovation/ Property Management
3.1.4 Partner with Energex to upgrade their streetlights to the appropriate energy efficient lighting (including environmental/ dark sky and social considerations)	●	●	●	●	●	High	Business and Innovation/ Project Delivery/ Transport Infrastructure Management
3.1.5 Upgrade Council owned streetlights to the most appropriate energy efficient lighting (per location)		●	●	●	●	High	Transport Infrastructure Management
ACTION 3.2: Source 100% renewable energy							
3.2.1 Purchase streetlight electricity from a 100% renewable energy source					●	High	Business and Innovation
3.2.2 Demonstrate viability and implementation of new and integrated renewable energy solutions at planning/scoping phase			●	●	●	Low/Medium	Project sponsor (via Capital request process)
3.2.3 Introduce an internal shadow carbon price[2] for capital works to prioritise and support emissions reduction technologies/projects			●	●		Low	Finance
3.2.4 Examine purchasing electricity from landfill gas generation[3]	●	●				High	Business and Innovation/ Waste and Resources Management
3.2.5 Reinvest operational cost savings associated with emissions reduction activities to support additional energy saving projects	●					Low	Environment and Sustainability Policy/ Project Delivery/Finance
ACTION 3.3: Maximise renewable energy generation technologies on Council owned asset							
3.3.1 Establish a Renewable Energy Working Group	●					Low	Environment and Sustainability Policy/ Business and Innovation
3.3.2 Refresh the Energy Demand Management Strategy to develop a renewable energy plan to drive investment in solar PVs, battery storage, demand side management and energy efficiencies across new and existing Council buildings and facilities	●					Low	Business and Innovation/ Environment and Sustainability Policy/ Property Management
3.3.3 Implement a revised Energy Demand Management/ Renewable Energy Plan	●	●	●	●	●	High	Business and Innovation/ Environment and Sustainability Policy/ Property Management

[2] Introducing an internal shadow carbon price would mean that low emissions measures such as solar etc would not be designed out as there would be a financial cost to doing so.
[3] While Council owns its landfill, there is a focus on purchasing electriciity generated from landfill gas as Council does not have the internal expertise to deliver and maintain electricity generation at these sites

Transport

Optimise fuel efficiency and transition to renewable fuel source for fleet and plant equipment.

Analysis of Council's performance in fuel efficiency represents a clear opportunity for improvement in this sector, in operational logistics, reduction in overall fuel usage and choice of fleet vehicles.

For Council, a transition from internal combustion engines to alternative hybrid/electric options would require the installation of supporting infrastructure (e.g. fast charging EV stations).

Support
the uptake of fleet vehicles to electric

Pursue
alternative renewable fuel sources for fleet and equipment

Encourage
behavioural change towards zero or low emissions transport modes

* From 2020/21 Financial Year baseline.

Alignment with Sustainable Development Goals

Transport interim targets

FY 2025

- 30% of passenger vehicles will be electric, hybrid or low emissions*
- 40% reduction in the number of cars in the fleet*
- 10% of ride-on plant and equipment are low emission/electric*
- 10% of Council employees to commute to and from work using an alternative travel mode/arrangement to private vehicle use on a regular basis*
- 10% reduction in council employee vehicle kilometre (km) car travelled

FY 2030

- 50% reduction in GHG emissions from Council's fleet*
- 60% of passenger vehicles will be electric, hybrid or low emissions
- 30% Council employees to commute to and from work using an alternative travel mode/arrangement to private vehicle use on a regular basis*
- 20% reduction in Council employee vehicle kilometre (kms) car travelled

TASK	2022/23	2023/24	2024/25	2025/26	2026/27	Five-year cost estimates	Lead (SCC branch)
OUTCOME: To optimise fuel efficiency and transition to renewable fuel source for fleet and plant equipment							
ACTION 4.1: Pursue alternative low/zero emissions fuel sources for equipment and fleet							
4.1.1 Transition passenger vehicles, electric, hybrid or other low emissions options based on the targets in the revised Motor Vehicle Management Policy	●	●	●	●	●	Medium	Fleet Services
4.1.2 Transition small and large equipment and heavy machinery to low emissions or clean, efficient, emissions-free technology	●	●	●	●	●	Medium	Fleet Services
ACTION 4.2: Ensure appropriate transport infrastructure in place to support EV/ low emissions fuel uptake							
4.2.1 Develop an Electric Vehicle Transition Policy	●					Low	Transport and Infrastructure Planning
4.2.2 Install suitable EV charging infrastructure at priority Council and community facilities to support fleet transition and as a key component of the Workplace Strategy		●	●	●	●	Low/Medium*	Property Management/ Fleet Services
ACTION 4.3: Change transport behaviour and corporate culture							
4.3.1 Workplaces travel plan to promote and support the uptake of sustainable transport options for staff	●	●	●	●	●	Medium	Transport Infrastructure Management

* Cost for the EV charging infrastructure could be cost positive depending on the arrangement Council chooses to adopt.

Supply chain (procurement related)

Incorporate sustainable procurement and circular economy principles in our supply chain.

Goods and services that council purchases and consumes, contribute significantly to our total emissions. Over half of these emissions produced are generated by outsourced services such as professional services (rather than the supply of products) and Energex owned streetlights.

To make a difference we need to integrate sustainability, emissions reduction and support circular economy criteria and principles into procurement. This means, developing tenders in ways that ensure the lowest footprint with the highest positive social and environmental benefit.

Achieving a circular economy goes beyond end of pipe recycling and requires a fundamental change to the way materials are sourced and products are designed at the outset, produced, sold, used and disposed of. Our ability to achieve circular economy outcomes is highly dependent on the suppliers we source from.

This means we have an opportunity to influence contractors/suppliers who provide products and services to Council to take steps towards reducing their (and the Region's) greenhouse gas emissions.

Implement sustainability through our procurement throughout the organisation

Support a circular supply chain

Identify opportunities for innovation

Supply chain (procurment related) interim targets

FY 2025

- A minimum standard of 10% recycled content in purchased products
- Increase in numbers considered 'sustainable' suppliers (set up a preferred supplier list)
- Increase the amount (specified in tonnes and type per contract) of recycled content procured in infrastructure and building, packaging and services (e.g. information technology, cleaning contractors, catering, construction services)
- Report on goods/services/contracts that have procured recycled content to calculate percentage of goods with recycled content purchased by the organisation

FY 2030

- 20% of high value contracts are providing low emissions products and services

Alignment with Sustainable Development Goals

TASK	2022/23	2023/24	2024/25	2025/26	2026/27	Five-year cost estimates	Lead (SCC branch)
OUTCOME: To incorporate sustainable procurement and circular economy principles in our supply chain							
ACTION 5.1: Implement sustainability into procurement							
5.1.1 Establish a procurement working group to develop systems and processes to incorporate low emissions/ sustainability into the capital works and procurement processes from inception to end of life	●					Low	Business and Innovation/ Project Delivery
5.1.2 Develop an Environment and Sustainability Procurement Guideline – to drive greater sustainability and emissions reduction outcomes	●					Low	Business and Innovation
5.1.3 Review contracts to streamline the purchasing process to reduce wastage and/or preference sustainable choices – applicable for all purchasing decisions	●	●	●	●	●	Low	Business and Innovation
ACTION 5.2: Support a circular supply chain							
5.2.1 Set targets for the use of sustainable and recycled materials in procurement/inputs across operational areas and capital projects	●	●				Low	Business and Innovation
5.2.2 Develop and implement procurement tools to support sustainability and circular economy principles in tender process e.g. life cycle analysis	●	●				Low	Business and Innovation/ Finance
ACTION 5.3: Support innovation							
5.3.1 Investigate opportunities to support/attract/establish new businesses and markets for low emissions goods and services, products, materials and new technologies	●	●	●	●	●	Medium	Economic Development
5.3.2 Investigate opportunities for outcome-based procurement to facilitate innovative solutions to achieve, emissions reduction, increase efficiencies, cost savings and other sustainability outcomes	●	●	●	●	●	Low/Medium	Business and Innovation/ Project Delivery
ACTION 5.4: Engage across our suppliers and train contract managers							
5.4.1 Support our local business and contractors to reduce carbon e.g. Supply Chain workshops, Doing Business with Council workshops	●	●	●	●	●	Low	Economic Development/ Business and Innovation
5.4.2 Ensure procurement processes and templates include a requirement for sustainability considerations as part of the information required from respondents and considered by Council as part of the evaluation process	●	●	●	●	●	Low/Medium	Business and Innovation

Buildings and infrastructure

Design and construct Council's buildings to be net-zero emissions and maintain optimal operating efficiency.

Construction, operation, and maintenance of buildings in Australia account for ~25% of greenhouse gas emissions and use more than 50% of Australia's electricity.

Emissions from buildings come from various stages in their life cycle, including extraction of raw materials, processing, transportation, construction, waste disposal, building operations and ultimately demolition. Decision making in the early stages of the project is crucial when determining the type of raw materials used and where they can be sourced, supporting local industry, designing and constructing to a sub-tropical climate, maximising energy efficiency and waste disposal throughout the project and the life of the asset.

It is important that each stage of the asset decision cycle is 'joined up' and contributes towards meeting our emissions reduction objectives.

What is a zero-net emissions building?

A zero-net emissions building has no net annual greenhouse gas emissions and is achieved through an energy efficient building design and fixed appliances combined with either an onsite or offsite renewable energy system.

Design
for embodied carbon reduction and building resilience

Improve
performance and maintenance on Council's assets

Plan
for adaptability of Council assets and changing technologies

Buildings and infrastructure interim targets

FY 2025

Implement a Sustainability Management System into the Capital Works program that embeds and integrates design, project construction and property management/maintenance processes through the decision-making process

FY 2030

All new Council owned commercial and community buildings are classified as net-zero emissions buildings

Alignment with Sustainable Development Goals

TASK	2022/23	2023/24	2024/25	2025/26	2026/27	Five-year cost estimates	Lead (SCC branch)
OUTCOME: To design and construct Council's buildings to be net-zero emissions and maintain optimal operating efficiency							
ACTION 6.1: Design for embodied carbon reduction and resilience							
6.1.1 Plan and design Council buildings and infrastructure to deliver low emissions outcomes	●	●	●	●	●	Low	Project Sponsor/Strategic Planning (Principal Architect)
6.1.2 Develop and implement a Sustainability Management System and tools for capital works projects to support delivery of low emissions outcomes	●	●	●			Low/Medium	Project Delivery
6.1.3 Advocate for development outcomes that deliver low/zero-emissions assets	●	●	●	●	●	Medium	Strategic Planning/ Urban Growth Projects
6.1.4 Deliver new Council owned or managed buildings and major refurbishments inline with the 6-star green building performance outcomes by investigating where the principles of the sustainability rating can be implemented for each project	●	●	●	●	●	Low/Medium	Project Sponsor/ Strategic Planning (Principal Architect)
ACTION 6.2: Enhance performance and maintenance							
6.2.1 Continue to support investment in Building Management Systems (BMS) across Council's facilities to optimise building performance and ongoing maintenance	●	●	●	●	●	Medium	Property Management
ACTION 6.3: Plan for adaptability of council assets							
6.3.1 Identify, trial and implement new technologies, uses and innovations for buildings and infrastructure that deliver emissions reduction and financial savings	●	●	●	●	●	Low/Medium	Project Sponsor

Glossary

Carbon offset

An activity (such as land restoration or tree planting) that compensates for the emissions of carbon dioxide or other greenhouse gases released into the atmosphere resulting from industrial or human activity.

Carbon neutral

Balancing between emitting carbon and absorbing carbon from the atmosphere in carbon sinks.

Climate Active

The national standard that certifies organisations and businesses who wish to declare they have credibly reached a state of achieving net zero emissions.

Climate change

Long term change to the average weather patterns due to the impact of increased global emissions from industrial and human activity.

Emissions abatement

The act of reducing or curbing emissions to reduce the concentration of emissions in our environment. The term abatement is often interchangeable with emissions reduction.

Fugitive emissions

Are losses, leaks and other releases of gases such as methane and carbon dioxide to the atmosphere associated with activities within a landfill or other industrial activities.

Greenhouse gas (GHG) emissions

Made up of gases including water vapour, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O) and ozone (O_3) that trap the heat and contribute to climate change.

Internal shadow carbon price

Places a monetary value on greenhouse gas emissions, which are then factored into investment decisions and business operations. This supports initiatives that are more emissions efficient.

Low emissions vehicle

A low-emission vehicle is classified as one emitting relatively low levels of greenhouse gas emissions, also corresponds to lower fuel consumption.

Paris Climate Agreement

Is a legally binding international treaty that was adopted by 196 countries of which Australia was one in 2015 to limit global warming to below 2°C, preferably to 1.5°C to pre-industrial levels.

Science-based targets

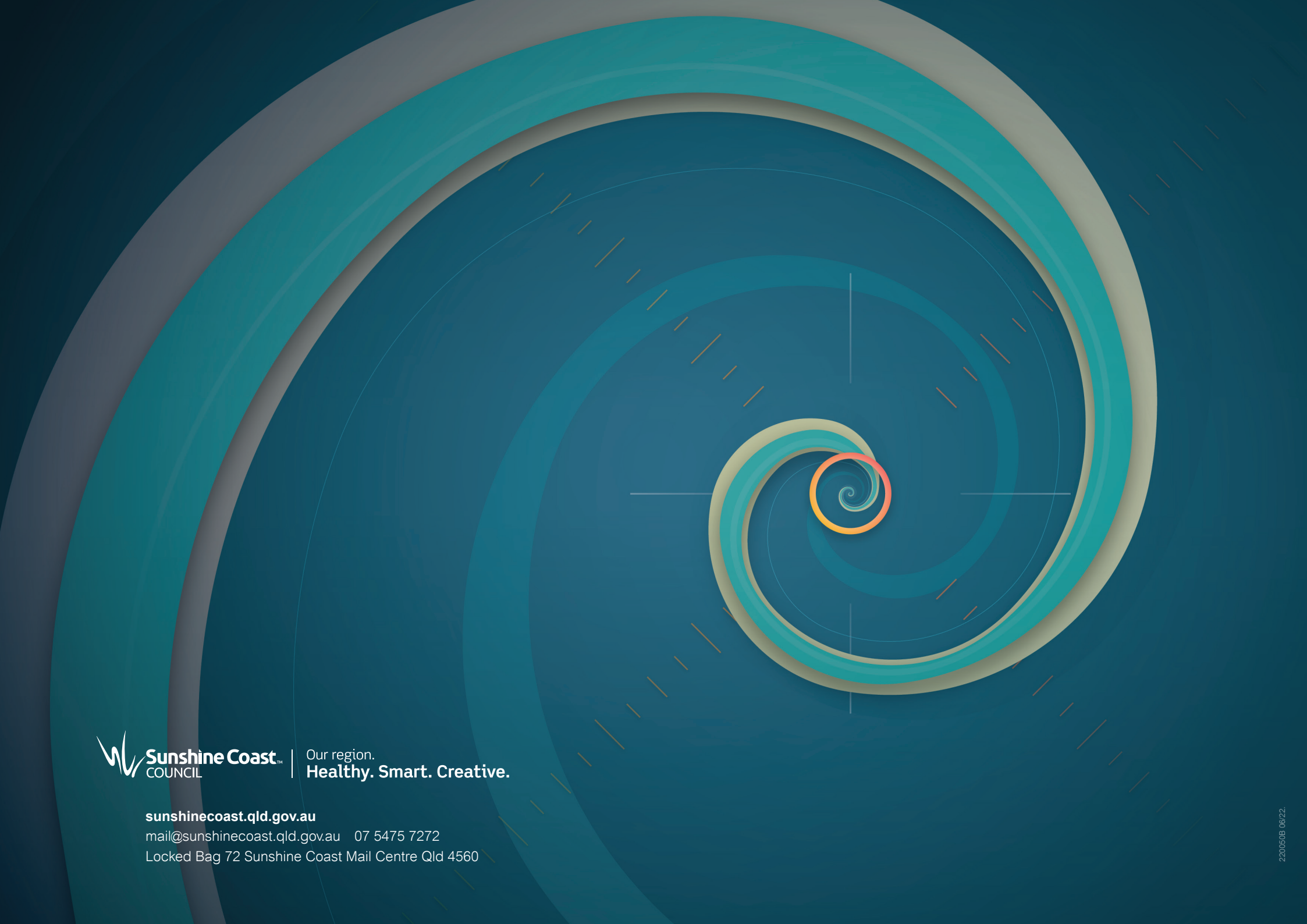
Targets are considered 'science-based' if achieving net-zero emissions reduction is in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement, to keep the global mean temperature increase well below 2°C above pre-industrial levels.

SMEs

Small to medium enterprise, is a term used to describe a range of businesses based on the number of employees or annual turnover.

Zero net emissions or net zero emissions

Net zero is a similar concept to Carbon Neutral, but it takes into consideration all the greenhouse gases emissions and not just carbon dioxide.



Sunshine Coast COUNCIL | Our region. **Healthy. Smart. Creative.**

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