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ACKNOWLEDGEMENT OF COUNTRY

We acknowledge the Barngarla People, the Traditional Owners of the land on which the City of Port Lincoln rests and their continuing connection to land, sea, culture and community. We pay our respects to Elders past, present and emerging, and we extend that respect to other Aboriginal and Torres Strait Islander people in our community.

EXECUTIVE SUMMARY

These are the actions City of Port Lincoln has planned over the next 10 years to progress our five environmental sustainability goal areas:



1. Towards Net Zero

Carbon emission management framework Carbon emission reduction projects Corporate sustainability governance update Additional resourcing for environmental sustainability program

Support community emission reduction initiatives



2. Climate Resilience

Climate change risk management Coastal hazard adaptation planning Street tree planting & tree canopy mapping

Bushfire Management & Treatment Plan Stormwater sea-level rise adaptation planning



3. Waste & Resources

ACTIONS

Finalise Waste Management Strategy Sustainable Kerbside Collection Services: Recycling and FOGO

Waste & Resources Coordinator CBD & Foreshore street recycling bins Further initiatives identified in Waste & Resources Management Strategy



4. Water Sensitive

Recycled Water Scheme review Recycled Water Scheme operational maintenance and asset management

Council water efficiency initiatives

WSUD development & stormwater quality improvement initiatives

Strategic Planning Code Review of stormwater overlay

Stormwater projects with WSUD focus



5. Biodiversity

ACTIONS

Seek representation on EP Landscape Board

Biodiversity conservation actions Cat management program

Murray Point Masterplanning WSUD Stormwater Initiatives

COMMUNITY **PROFILE**



TOTAL AREA

3,037 Hectares



ESTIMATED POPULATION 14,947

as at June 2022*



COASTLINE









AQUATIC ECOSYSTEM CONDITION IN 2022

Source: EPA South Australia



CARBON EMISSIONS

from the Port Lincoln community

kiloton Source: SnapshotClimate 2021



MEAN CLIMATE PROJECTIONS FOR PORT LINCOLN BY 2030:

Reference period: 1986-2005 Medium emissions scenario (RCP 4.5)



ANNUAL RAINFALL decline



INCREASE IN AVERAGE DAILY **MAXIMUM TEMPERATURE**



Increased intensity OF EXTREME RAINFALL

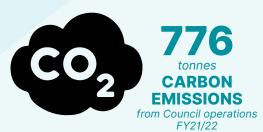


increase in number of days of **SEVERE FIRE DANGER**

Source: SA Department for Environment and Water

COUNCIL PROFILE

Years vary due to incomplete data sets



CARBON EMISSIONS

from food and garden organics in the red bin in FY23/24



RECEIVE KERBSIDE WASTE SERVICE

PARTICIPATING IN KERBSIDE RECYCLING



950,000

ELECTRICITY CONSUMED

by Council assets

12,281 tonnes

RUBBISH TO LANDFILL in FY23/24





ORGANIC WASTE SENT TO LANDFILL in FY23/24

MULCH PRODUCED in FY23/24



POTABLE WATER CONSUMED BY COUNCIL OPERATIONS FY21/22

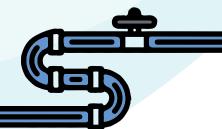


RECYCLED WATER FOR IRRIGATION of Council reserves FY22/23

163,963 m²

OPEN SPACE IRRIGATED with recycled water

RECYCLED WATER SUPPLY



WHY IS THIS STRATEGY NEEDED?

The City of Port Lincoln is committed to protecting and enhancing our natural environment for future generations. This strategy has been developed to ensure we take an integrated approach to our environmental sustainability goals across Council operations including action on climate change, projects that benefit our local ecosystems and natural resources, improving our internal practices, as well as community support and advocacy for initiatives that contribute to a more sustainable region.

> The environmental sustainability goal areas are derived from Goal 4 of our Strategic Directions Plan 2021-2030 fall into the following 5 broad categories.



1. Towards Net Zero

We will reduce our carbon emissions, commencing our journey towards achieving Net Zero by 2050



We will be clean, green,

renewable and resilient: The City of Port Lincoln will be a leader in Local Government Environmental Sustainability.



2. Climate Resilience

We will plan our city to be resilient and adapt to the changing climate



3. Waste & Resources

We will work to minimise our waste to landfill and promote the principles of a local circular economy



4. Water Sensitive

We will manage our impact on water resources and maintain efficient operations to deliver our city services



5. Biodiversity

We will work to maintain a healthy natural environment including our waterways, land, and coast

ENVIRONMENTAL SUSTAINABILITY FRAMEWORK

Environmental sustainability is relevant to all the things we do at City of Port Lincoln. This framework illustrates how Council's sustainability goal areas from our Strategic Directions Plan link to our core service delivery areas.

STRATEGIC DIRECTIONS PLAN



ENVIRONMENTAL SUSTAINABILITY FRAMEWORK



- 1. Towards Net Zero
- 2. Climate Resilience
- 3. Waste & Resources
- 4. Water Sensitive
- 5. Biodiversity

COUNCIL SERVICES (POLICIES | ACTION PLANS)



Community & Civil
Infrastructure
Development Services
Environment & Community
Community & Wellbeing
Corporate Services
Governance Services

SUPPORTING PLANS & STRATEGIES

The following plans and strategies are aligned with this framework:

- Council Climate Emergency Declaration (CO 19/148, August 2019)
- Goal 4, Strategic Directions Plan 2021-2030
- Goal 4, Annual Business Plan 2024/25
- Stormwater Management Plan
- Waste & Resources Management Strategy 2025-29
- CBD, Foreshore & Marina Masterplan
- Open Space Strategy 2021-26

- LGA SA Climate Support Program
- LGA SA Climate Ready Coasts Program
- LGA SA Net Zero Accelerate Program
- EP Regional Waste & Resources Strategy
- State & Federal emission reduction legislation targets
- State & Federal targets for food and organic waste management
- State Planning and Design Code

OUR GOALS

The City of Port Lincoln will be a leader in regional Local Government Environmental Sustainability. We will manage our carbon emissions, plan our city to adapt to a changing climate, and manage our impact on the local environment. We will do this through the following goal areas over the next 10 years, reporting on performance in Council's Annual Report.



Both the Australian Government and South Australian Government have adopted policies for action on Climate Change in line with the Paris Agreement and science-based targets approach, with reporting practices emerging across the economy to monitor progress.

Council's target for carbon emissions reduction will be developed in line with this legislation to achieve net zero emissions by 2050. This target will be underpinned by Council through development of an emissions reduction plan incorporating reporting, interim reduction targets and a prioritised action plan to support ongoing investment.

Council will also continue to advocate for and support appropriate initiatives that achieve community wide carbon emissions reduction.



Adverse impacts due to effects of climate change such as frequency and severity of drought, extreme heat, fire danger ratings, and sea level rise pose a risk to our environment, infrastructure, businesses, and the community.

Council will manage this risk through climate change adaptation planning to improve the city's physical assets and services' resilience to climate change. We will also ensure that our planning and development policy decisions are aligned to the current and future needs of our city in the context of a changing climate.

We will also continue to advocate for and support community projects and initiatives that improve our climate change resilience.



Managing our waste in line with the waste hierarchy of Prevention, Reuse, Recycle, Recovery and Disposal is crucial to minimising adverse impacts to our natural environment.

To achieve this Council has drafted a Waste and Resources Strategy and Action Plan supported by State and Regional plans based on the following objectives:

- 1. Reduce waste generation and increase landfill diversion
- 2. Increase the recovery of resources
- 3. Deliver reliable, flexible and cost-effective services that meet the needs of the community
- 4. Protect and conserve the natural environment
- 5. Implement governance structures that support collaboration and partnerships

Key to achieving these objectives will be a process of reporting on and continual improvement of Council's waste management services, development of additional streams of resource recovery such as the introduction of a kerbside Food Organics and Garden Organics service (FOGO), and supporting community awareness and education around minimising waste.



Water is one of our most precious resources. Degradation of our water resources and our coastal and marine environment impacts the economic, social and environmental health of the region.

Council will work with local and state government agencies, businesses, and community stakeholders to incorporate Water Sensitive Urban Design (WSUD) principles in our stormwater network and planning tools to minimise impact of stormwater outfall on our coastal and marine environment. In particular, we will progressively work towards the objectives of the City of Port Lincoln Stormwater Management Plan and industry best practice.

Council will also manage our use of scarce water resources for Council operations. Initiatives that reduce our reliance on potable water use such as management of the recycled water scheme for irrigating Council reserves, improvements to irrigation and monitoring systems, as well as considering the use of rainwater tanks and using water efficient fixtures and fittings will continue to be a priority.



Maintaining healthy ecosystems is important for our community. Maintaining a positive relationship between our people and our natural environment will ensure the long-term integrity of these systems.

Public open spaces, parks, reserves and trails will be responsibly designed, developed and managed to minimise the use of chemicals, control environmental pests and weeds, and enhance the urban tree canopy to enhance biodiversity in our natural environment.

Conservation of biodiversity will be considered in Council's strategic decisions regarding development of Council Land.

Council will implement and continually improve its bushfire prevention planning and practice for Council reserves based on the key principle of managing fuel loads whilst preserving biodiversity in accordance with the Lower Eyre Peninsula Bushfire Management Area Plan.

We will also work collaboratively with partners and the community to build knowledge and opportunities to connect and care for the natural environment.

10 YEAR ACTION PLAN

Note: Estimated Budget Allowances Only

1. Towards Net Zero

STF	RATEGY ITEM	Team	Role	24/25	25/26	26/27	27/28	28/29
1.1	Carbon emission reporting and management framework	GMEI, MFB, MPP	Implement	\$25,000	\$10,000	\$10,300	\$10,609	\$10,927
1.2	Carbon emission reduction projects	MPP	Implement	\$20,000	\$150,000	-	\$150,000	-
1.3	Corporate sustainability governance update	GMCC, MFB	Implement	Internal		\$5,000	Internal	\$5,305
1.4	Additional resourcing for environmental sustainability program	GMEI	Implement	-	\$50,000	\$75,000	\$100,000	\$103,000
1.5	Support community education and emission reduction initiatives	EM, CEO, GMCC, GMEI	Advocate	Internal, ongoing				
			Sub-TOTAL	\$45,000	\$210,000	\$90,300	\$260,609	\$119,232

2. Climate Resilience

STRA	TEGY ITEM	Team	Role	24/25	25/26	26/27	27/28	28/29
2.1 (Climate change risk management	CEO, GMEI, GMCC	Implement	Internal	\$10,000	\$10,300	Internal, c	ngoing
2.2 (Coastal hazard adaptation planning	GMEI, MCAO, MDR	Implement	\$10,000	\$25,000	\$25,750	Internal, c	ngoing
	Street tree planting & tree canopy napping	GMEI, MPP	Implement	Internal	\$30,000	\$50,900	\$31,827	\$32,782
2.4 E	Bushfire Management & Treatment Plan	MDR	Implement	\$100,000	\$100,000	\$100,000	\$50,000	\$51,500
	Stormwater sea level rise adaptation planning	MCAO	Implement	-	\$50,000	(TBC per	nding complet planning)	tion of
			Sub-TOTAL	\$110,000	\$215,000	\$186,950	\$81,827	\$84,282

29/30	30/31	31/32	32/33	33/34	NOTES
\$11,255	\$11,593	\$11,941	\$12,299	\$12,668	Year 1 - GHG inventory, establish targets, reporting and action plan Year 2 - Energy efficiency upgrade strategy for council assets Year 3 - Sustainable corporate fleet strategy (eg. EV, hybrid) Year 4 - GHG inventory & reporting Review membership with appropriate industry groups and peak bodies to provide technical and strategic support.
\$200,000	\$200,000	-	-	-	Progress major facilities for energy efficiency upgrades (eg. Leisure Centre, Ravendale, NAC, Civic Centre, Recycle Water Network, LED street lights, etc.) In line with Commonwealth Community Energy Upgrade Funding objectives, Round 2 to open January 2025.
Internal		Internal,	ongoing		Corporate systems and policy review eg. procurement, ESD guidelines, Council waste systems, sustainable events guidelines, facilities operation, position descriptions, etc.
\$106,090	\$109,273	\$112,551	\$115,927	\$119,405	Increase staff resources in Environmental Sustainability to deliver program of work in line with adopted strategy.
	In	ternal, ongoir	ng		Lobby and provide support for community projects and initiatives such as EV infrastructure, community scale renewable energy projects, etc.
\$317,345	\$326,493	\$124,491	\$128,226	\$132,073	

29/30	30/31	31/32	32/33	33/34	NOTES
	In	ternal, ongoin	g		Review and implement recommendations from 2024 LGA Climate Support Program including Climate Risk Management Training, Governance Review, and Risk Assessment. Addresses Emergency Management Plan Action 1.3: Assess impact of climate change on Council's future emergency risk profile.
	In	ternal, ongoin	g		Review recommendations from 2022 Coastal Scoping Study & Cell 2 Town Beach Adaptation Study in line with LGA Coastal Hazard Adaptation Planning Guidelines. First round LGA funding anticipated from early 2025 under Climate Ready Coasts program. Additional funding to be sought from Federal Disaster Resilience fund available for main body of work required for Urban Planning project.
\$33,765	\$34,778	\$35,822	\$36,896	\$38,003	Year 2: commence \$30,000 p.a. towards street tree planting program Year 3: Urban tree canopy mapping project to identify key objectives. Consider opportunities for community participation. Consider extension of Streetscaping and Tree Management Policy to acknowledge value of maintaining specific large trees on land under Council's care and control.
\$53,045	\$54,636	\$56,275	\$57,964	\$59,703	Strategy to reassess our defensive posture with respect to bushfires and increasing risk due to climate change. SAFECOM Risk & Resilience Funding Application: \$300k over three years on a 50:50 matched funding basis.
	(TBC pending completion of planning) Strategy 4: Planning for Sea Level Rise. Project to look at adaptation measures for stormwater infrastructure due to risk of future sea level rise, as per recommendation Strategy 4 in 2019 Stormwater Management Plan.				level rise, as per recommendation Strategy 4 in 2019 Stormwater
\$86,810	\$89,415	\$92,097	\$94,860	\$97,706	

3. Waste & Resources

STR	ATEGY ITEM	Team	Role	24/25	25/26	26/27	27/28	28/29
3.1	Finalise Waste Management Strategy	MCAO	Implement	Internal resources				
3.2	Sustainable Kerbside Collection Services: Recycling & FOGO	MCAO	Implement	\$50,000	\$275,000	\$485,000	Internal,	ongoing
3.3	Waste and Resources Coordinator	MCAO	Implement	-	\$40,000	\$41,200	\$42,436	\$43,709
3.4	CBD & Foreshore street recycling bins	MCAO	Implement	-	\$29,680	\$90,740	\$16,213	\$16,699
3.5	Further Initiatives as per Draft Waste Management Plan	MCAO	Implement / Advocate	-	\$56,500	\$6,545	\$6,741	\$65,476
			Sub-TOTAL	\$50,000	\$401,180	\$623,485	\$65,390	\$125,884

4. Water Sensitive

STR	ATEGY ITEM	Team	Role	24/25	25/26	26/27	27/28	28/29
4.1	Recycled Water Scheme review	GMEI	Implement	\$20,000	\$20,000	(TBC pend	ding completic	on of review)
4.2	Recycled Water Scheme Asset Management	MCAO	Implement	\$6,000	\$779,000	\$62,000	\$323,000	-
4.3	Council water efficiency initiatives	MPP	Implement	Internal	Internal	\$20,000	\$20,000	Internal, ongoing
4.4	Strategic Planning Code Review: stormwater overlay	MDR	Implement	\$120,000	-	-	-	-
4.5	WSUD Development & Stormwater Quality Initiatives	MCAO	Implement	Internal	\$10,000	\$10,300	\$10,609	\$10,927
4.6	Stormwater Projects with Water Sensitive Urban Design focus: - Gross pollutant traps - Mallee Park Wetlands - Racecourse Wetlands	MCAO	Implement	\$160,000	\$110,000	\$750,000	\$535,000	\$420,000
			Sub-TOTAL	\$306,000	\$919,000	\$842,300	\$888,609	\$430,927

29/30	30/31	31/32	32/33	33/34	NOTES
					Finalise and adopt Waste Management Strategy
	In	ternal, ongoin	g		Year 1: Completion of FOGO Pilot Year 2: upgrade of recycle bins & development of organics processing facility Year 3: rollout of FOGO bins and collection service
\$45,020	\$46,371	\$47,762	\$49,195	\$50,671	Allocation of funds to support additional staff resource for waste and resources strategy programs and initiatives.
\$42,200	\$22,396	\$23,068	\$23,760	\$24,473	Year 2: install 5 x foreshore recycling (trial) and Year 3: install 5 x foreshore and 10 x CBD recycling Year 6: install 5 x foreshore FOGO (trial) Ongoing: recycling bin collection charges
\$7,152	\$7,366	\$71,547	\$7,815	\$8,050	Three yearly kerbside waste audits Streamline data management & reporting Community education program Fishing industry product stewardship Lobby for improved access to hazardous liquid waste collection Maintain watching brief on soft plastics recycling Construction and demolition waste recovery
\$94,373	\$76,133	\$142,377	\$80,770	\$83,193	

29/30	30/31	31/32	32/33	33/34	NOTES
					Review process optimisation, future asset renewal requirements, scheme viability and expansion opportunities.
-	\$58,000	\$25,000	-	-	Continue to maitain and renew assets associated with the Recycled Water Scheme. Priority and expenditure to be reviewed as part of system review.
					Continue irrigation controller upgrades, flow rate sensors, etc. Monitoring via smart meters or flow rate sensors to all facilities & irrigated reserves. Review Council facilities for viable rainwater tank installation.
-	-	-	-	-	Review of stormwater overlay as part of Strategic Planning Code review project as a means of reducing stormwater impacts and increasing rainwater harvesting.
\$11,25	5 \$11,593	\$11,941	\$12,299	\$12,668	Year 1: training & development, plus ongoing installation of additional rain gardens. Review water quality monitoring program with EPA & EP Landscape Board. Improved management of stormwater flows and quality has a positive outcome on aquatic and marine ecosystem.
\$400,000	\$210,000	\$1,000,000	\$1,500,000	-	 Stormwater projects with Water Sensitive Urban Design focus: gross pollutant traps across selected Council stormwater outfall locations commencing with Laguna Beach in 25/26 Mallee Park Wetlands project to improve stormwater quality and reduce discharge volumes into marine environment. Stormwater detention basin on Western Approach road as first stage of Racecourse Wetlands project. Port Lincoln Racecourse Wetlands project to reduce peak stormwater and pollutant discharge to marine environment. Includes significant portions of Stormwater Management Authority funding.
\$411,25	\$279,593	\$1,036,941	\$1,512,299	\$12,668	

5. Biodiversity

STR	ATEGY ITEM	Team	Role	24/25	25/26	26/27	27/28	28/29
5.1	Biodiversity Conservation Actions	CEO, GMEI, MPP	Advocate Implement	Internal	\$10,000	11	nternal, ongoi	ng
5.2	Cat Management Program	MDR	Implement	\$5,000	\$5,150	\$5,305	\$5,464	\$5,628
5.3	Murray Point Masterplanning	MPP	Implement	\$15,000	15,000 (TBC pending completion of masterplan)			
5.4	WSUD Stormwater Initiatives	MCAO	Implement	(as listed in 4, Water Sensitive)				
			Sub-TOTAL	\$20,000	\$15,150	\$5,305	\$5,464	\$5,628

Sub-TOTAL Other Strategy	\$336,000	\$1,445,330	\$1,540,790	\$978,854	\$603,012	\$553,214
Sub-TOTAL New	\$195,000	\$315,000	\$207,550	\$323,045	\$162,941	\$362,365
TOTAL Expenditure	\$531,000	\$1,760,330	\$1,748,340	\$1,301,899	\$765,953	\$915,579

POSITION TITLES:

ΕM **Elected Members** CEO Chief Executive Officer

General Manager Environment & Infrastructure **GMEI** GMCC General Manager Corporate & Community

MCAO Manager Civil Assets & Operations MPP Manager Places & Presentation MDR Manager Development & Regulatory

MFB Manager Finance & Business

29/30	30/31	31/32	32/33	33/34	NOTES
					Seek Representation on EP Landscape Board Lobby for responsible use of Jussieu BioUnit Strategy to extend and improve Parnkalla Trail Consider biodiversity conservation in Council's strategic decisions relating to development of Council land. Review recommendations and develop action plan based on Open Space Strategy 2021-6 & EBS Ecology Study 2010.
\$5,796	\$5,970	\$6,149	\$6,334	\$6,524	Ongoing cat management program as per 2016 Animal Management Plan to minimise unowned cat population.
					Project to enhance access and wayfinding for recreation, ecotourism and preservation of native vegetation.
					WSUD initiatives reducing environmental impacts on marine environment from stormwater discharge, and delivering biodiversity gains through construction of wetlands.
\$5,796	\$5,970	\$6,149	\$6,334	\$6,524	

Legend: New strategy/action plan budget item Covered by existing/draft strategy budget item

10 YEAR TOTAL

\$771,976	\$1,402,056	\$1,822,489	\$332,163	\$11,351,785
\$367,236	\$172,253	\$177,421	\$182,744	\$2,465,556
\$404,740	\$1,229,802	\$1,645,067	\$149,420	\$8,886,229

REFERENCES

Climate Change projections

https://www.environment.sa.gov.au/topics/climate-change/climate-science-knowledgeresources/latest-climate-projections-for-sa

Shapshot Emissions Profile

https://snapshotclimate.com.au/locality/municipality/australia/south-australia/port-lincoln/2021

EPA Aquatic Ecosystem Report

https://www.epa.sa.gov.au/reports_water/jussieu-ecosystem-2022

City of Port Lincoln Greenhouse Gas Emissions Inventory 2022, Pangolin Associates

City of Port Lincoln Coastal Scoping Project Report 2022, Integrated Coasts

Port Lincoln City Council Vegetation & Biodiversity Study 2010, EBS Ecology

GLOSSARY OF TERMS

Circular economy	An approach that reduces material use, redesigns materials and products to be less resource intensive, and recaptures waste as a resource to manufacture new materials and products (Reference: US Environment Protection Agency)				
Climate resilience	Capacity to anticipate climate risks and hazards, absorb shocks and stresses, and reshape and transform development pathways in the long term (Reference: United Nations Framework Convention on Climate Change)				
Environmental sustainability	Maintaining a balanced state of environmental health through application of the principles of ecologically sustainable development, including; triple bottom line, intergenerational equity, the precautionary principle, conservation of biological diversity and integrity, and promotion of improved valuation, pricing and incentive mechanisms in decision making (Reference: <i>Environmental Protection and Biodiversity Conservation Act 1999</i>)				
EPLGA	Eyre Peninsula Local Government Association				
FOGO	Food organics and garden organics, typically a term used with reference to a municipal kerbside collection service				
GHG Inventory	Greenhouse gas emissions inventory				
LGASA	Local Government Association of South Australia				
Net Zero	Reducing anthropogenic greenhouse gas emissions to as close to zero as possible, balanced by actions to remove any remaining emissions (Reference: South Australian Department of Environment and Water)				
Product stewardship	An approach to managing the impacts of different products and materials, acknowledging those involved in producing, selling, using and disposing of product have a shared responsibility to ensure that those products or materials are managin a way that reduces their impact, throughout their lifecycle, on the environment, and on human health and safety. Under the Product Stewardship Act 2011 (Commonwealth) this can be voluntary, co-regulatory or mandatory				
WSUD	Water sensitive urban design, an approach to urban planning and design that integrates the management of the total water cycle into the land use and development process (Reference: South Australian Department of Environment and Water)				

For further interpretation and definitions refer to the Environment Protection Act 1993, Environment Protection and Biodiversity Conservation Act 1999, and other relevant legislation.

