



Roadmap to **Net-zero**

August 2023

We want to make a difference

At Wannon Water, we are bold in our work to care for and protect the environment. We are committed to addressing the global challenge of climate change and playing our part in achieving a more sustainable future.

As locals in South West Victoria, we're driven to shape our region for the better. We're striving to deliver sustainable water services that protect our environment and build stronger communities. We embrace our responsibility to reduce greenhouse gas emissions associated with our business and to influence others to do the same.

This roadmap sets out a clear path for us to achieve this.

Our commitment

To achieve net-zero emissions by 2030.

Our targets

- Reduce emissions by 40 per cent by mid-2025.
- Net-zero emissions from electricity use by the end of 2025 (Scope 2).
- Net-zero emissions by 2030 (Scope 1 and 2).



Our starting point

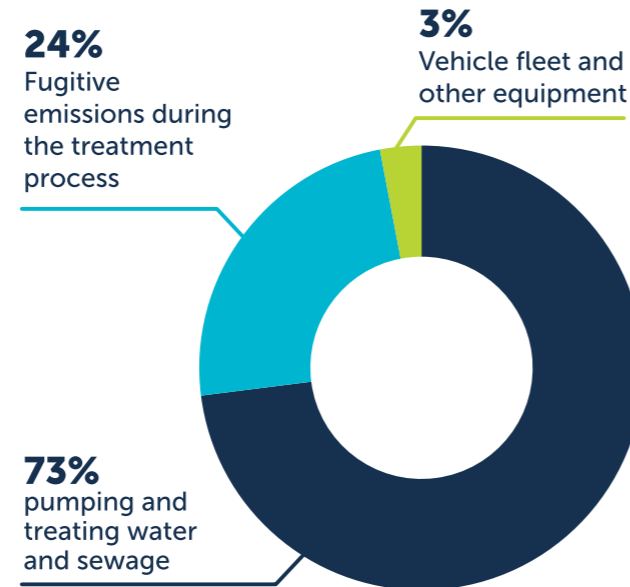
Our first reporting of emissions in 2006 was around 40,000 t CO₂-e. Since then we have been steadily reducing our emissions.

The reductions we have achieved include cost-effective efficiency projects, building local renewable energy facilities, planting carbon sequestration farms, buying fuel-efficient vehicles and collaborating with our peers to support new renewable energy generation that offsets our electricity emissions.

Our defined baseline for this plan is 31,626 t CO₂-e, based on our five-year average to 2016.

Our reportable emissions for 2022/23 are 21,063 t CO₂-e.

These emissions are made up of electricity consumption associated with pumps and treating water and sewage (73 per cent), operation of sewage treatment plants which produce fugitive emissions during the treatment process (24 per cent) and emissions from our vehicle fleet and other equipment (3 per cent).



Our guiding principles

1. Prioritise emission reduction

We prioritise actions that avoid or reduce our own emissions.

2. Make efficient investments

We make prudent and efficient investments to support affordability for customers while reducing our emissions. These investments will consider new sources of unregulated revenue where appropriate.

3. Use genuine and credible offsets

We use carbon offsets that are genuine, credible and consider customers' preferences and community concerns.

4. Partnership and local engagement

We partner with other organisations to deliver shared benefits and engage and lead locally to support our region.

5. Look for innovation

We support innovation to increase the available opportunities for reducing emissions and to deliver more value for our customers.

6. Communicate progress

We communicate our progress to customers, stakeholders, and communities.

7. Review and adapt

We keep abreast of emerging issues and customer preferences and adapt our plan accordingly.



Our focus for action

Electricity grid transition

The forecast reduction in emissions from Victorian electricity due to rapidly increasing renewable energy generation will strongly help us to reach our target of net-zero emissions by 2030.

Australia's electricity grid is undergoing rapid transition. The Australian Government has projected continued decarbonisation of electricity generation across the country. Renewables, particularly solar and wind, are projected to be a growing source of electricity generation.

Carbon emissions from Victorian electricity are forecast to reduce by more than 50 per cent by 2030, which will lead to a significant reduction in our reportable emissions from electricity use (Scope 2).

This is outside our control, and we understand we may need to adjust the scope, pace and extent of our actions to ensure we meet our commitment and targets.

Renewable energy and LGCs

We intend to establish more local renewable energy projects and participate in the Large-scale Generation Certificate (LGC) market where needed.

LGCs are created for electricity generated through renewable energy sources and validated by the Clean Energy Regulator. They can be surrendered to reduce reportable carbon emissions and purchased or sold through a national market.

Renewable energy projects reduce our emissions at the source. We continue to invest in local renewable energy projects such as our Portland Wind Turbine and the Brierly Basin floating solar installation.

These investments improve our efficiency, reduce our use of, and emissions from, grid electricity and generate LGCs each year which we will surrender as appropriate.

We are also a partner in Zero Emissions Water (ZEW) with 11 other Victorian water corporations.

ZEW has a Power Purchase Agreement with Victoria's largest solar farm near Ouyen that enables us to purchase around 4,000 LGCs each year under a cost-effective, collective buying agreement.

We will surrender LGCs as appropriate to reduce our reportable electricity emissions (Scope 2) and actively sell LGCs where our inventory from local projects or ZEW exceeds our forecast demand. This will help generate new revenue and increase business efficiencies.



Carbon farming

We are using accredited carbon farming methods to generate Australian Carbon Credit Units (ACCUs). These ACCUs will be used to effectively offset emissions (Scope 1).

We will pursue opportunities to establish more carbon farms and participate as a seller in the ACCU national market.

Carbon farming (sequestration) can remove carbon dioxide from the atmosphere, effectively offsetting carbon emissions from activities such as sewage treatment or vehicle use (Scope 1).

In 2009, we established an approved carbon farming project, partnering with CO2 Australia to plant around 450,000 blue mallee trees across 360 hectares on five properties in central Victoria. The project continues to generate ACCUs as the trees grow.

We are participating in a collaborative project with the Victorian water sector to establish more carbon farms in Victoria. This will increase our capacity to generate cost-effective ACCUs through a collective buying agreement. The farms are also expected to generate a range of other community and environmental benefits as we've observed from our existing project.

We are pursuing the opportunity to create new local carbon farming projects and generate significant co-benefits in our region through partnering with Catchment Management Authorities and other local businesses. This includes investigating alternative methods such as managed wetland projects that can generate accredited 'teal' carbon.

We recognise that changing our sewage treatment processes is not a timely or cost-effective option before 2030, however we will continue to investigate solutions to reduce emissions at the source.

We will surrender ACCUs from our projects to offset our Scope 1 emissions. We will also sell our ACCUs in the national market when it is sensible to do so, generating new revenue and increasing business efficiencies.

Electric vehicle transition

We will transition our passenger vehicle fleet by 2030 to reduce our emissions by eliminating them at the source.

Currently the availability and suitability of electric vehicles and the enabling infrastructure to support their effective business use is limiting the uptake of electric vehicles in both the passenger and commercial fleet. We will continue to investigate options to reduce vehicle emissions.

ACCUs will be used to offset remaining emissions in the interim.



The impact of acting

The table below shows how we will achieve net-zero by 2030. The forecast Scope 1 emissions show an increase in 2025 due to the Warrnambool Sewage Treatment expansion.

The emissions due to improving the water quality in Portland, Port Fairy and Heywood, along with service supply growth have been included in the forecast Scope 2 emissions.

While electricity use is increasing between 2022/23 and 2030, the reportable emission due to electricity grid use is decreasing as more renewable energy is provided through the grid.

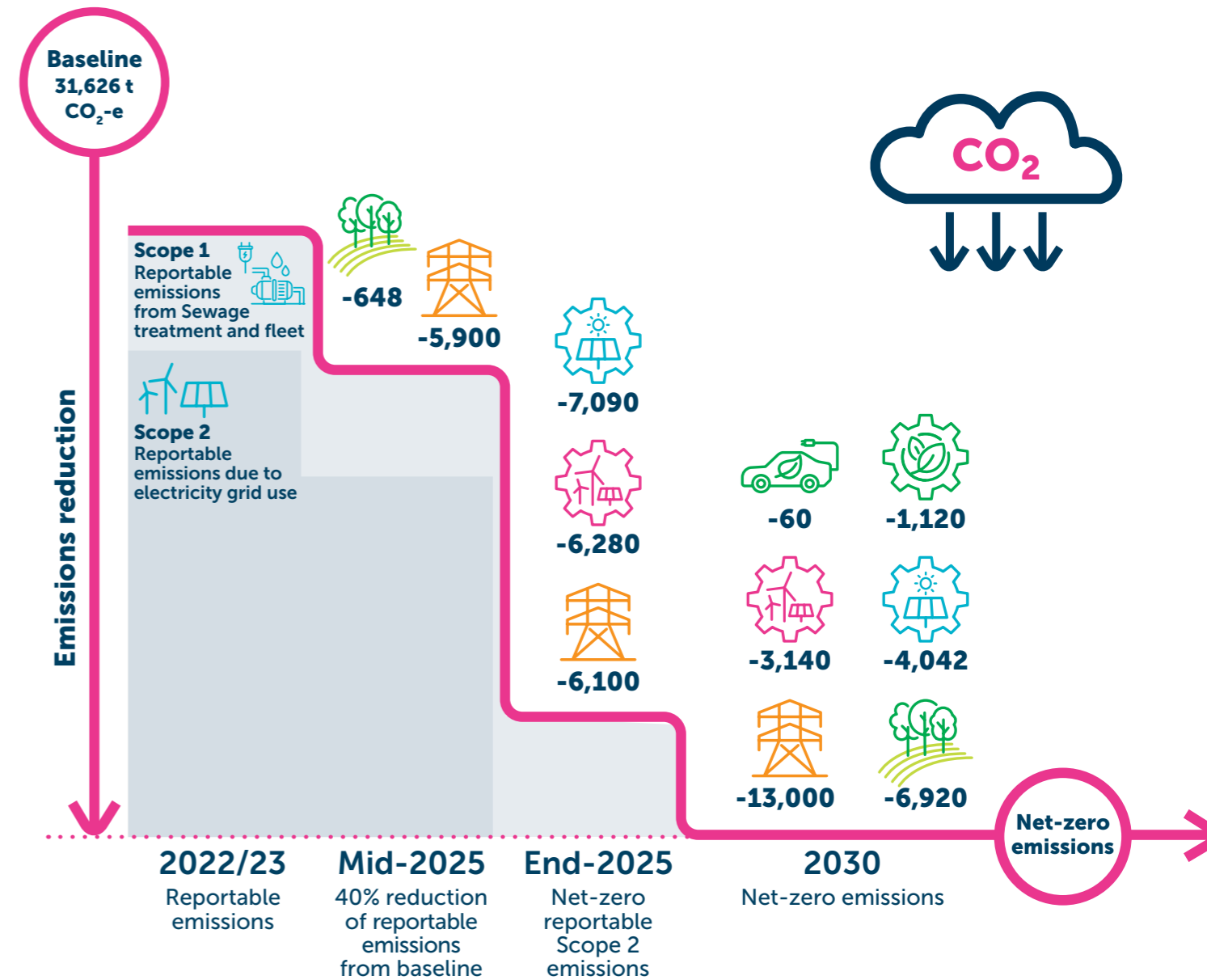
The reductions from the electricity grid transition have been calculated compared to the 2022/23 level of renewable energy supplied through the grid.

The targets of 18,976 t CO₂-e by mid-2025, zero Scope 2 reportable emissions by end of 2025 and net-zero reportable emissions (Scope 1 and 2) by 2030 are specified in the Statement of Obligations (Emissions Reduction) 2022.

Emissions source/reduction*	2022/23 actual	By mid-2025	By end 2025	By mid-2030
Scope 1: Emissions from sewage treatment and fleet				
Forecast	6,129	6,680	6,980	6,980
* Carbon farming offsets (ACCUs)	0	-648	0	-6,920
* Transition of passenger fleet (100% by 2030)	0	0	0	-60
Reportable Emissions (Scope 1)	6,129	6,032	6,980	0
Scope 2: Emissions from electricity grid use				
Forecast	16,821	18,844	19,470	21,302
* Electricity grid transition	0	-5,900	-6,100	-13,000
* Renewable energy offsets - locally generated (LGCs)	-1,887	0	-6,280	-3,140
* Renewable energy offsets - Zero Emissions Water (LGCs)	0	0	-7,090	-4,042
* Renewable energy offsets - market purchase (LGCs)	0	0	0	-1,120
Reportable Emissions (Scope 2)	14,934	12,944	0	0
Total Reportable Emissions (Scope 1 and Scope 2)	21,063	18,976	6,980	0
Target delivered		Yes	Yes	Yes

Our roadmap to net-zero

TO ACHIEVE NET-ZERO EMISSIONS BY 2030



Key

- Offsets - carbon farming ACCUs
- Electricity grid transition
- Electric vehicles - passenger fleet
- Offsets - Wannan Water LGCs
- Offsets - Zero Emissions Water LGCs
- Offsets - purchased LGCs

ACCUS: Australian Carbon Credit Units
 LGCs: Large-scale Generation Certificates
 All figures: In t CO₂-e

Maintaining affordability

Our focus is to continue to provide affordable services for our customers. Our Roadmap to Net-Zero is built on the principle of making prudent and efficient investments to support affordability for customers while reducing our emissions.

Many of our actions to date have lowered the cost of our business operations, and we aspire to find opportunities to generate new sources of revenue to help offset our investments in carbon neutrality.

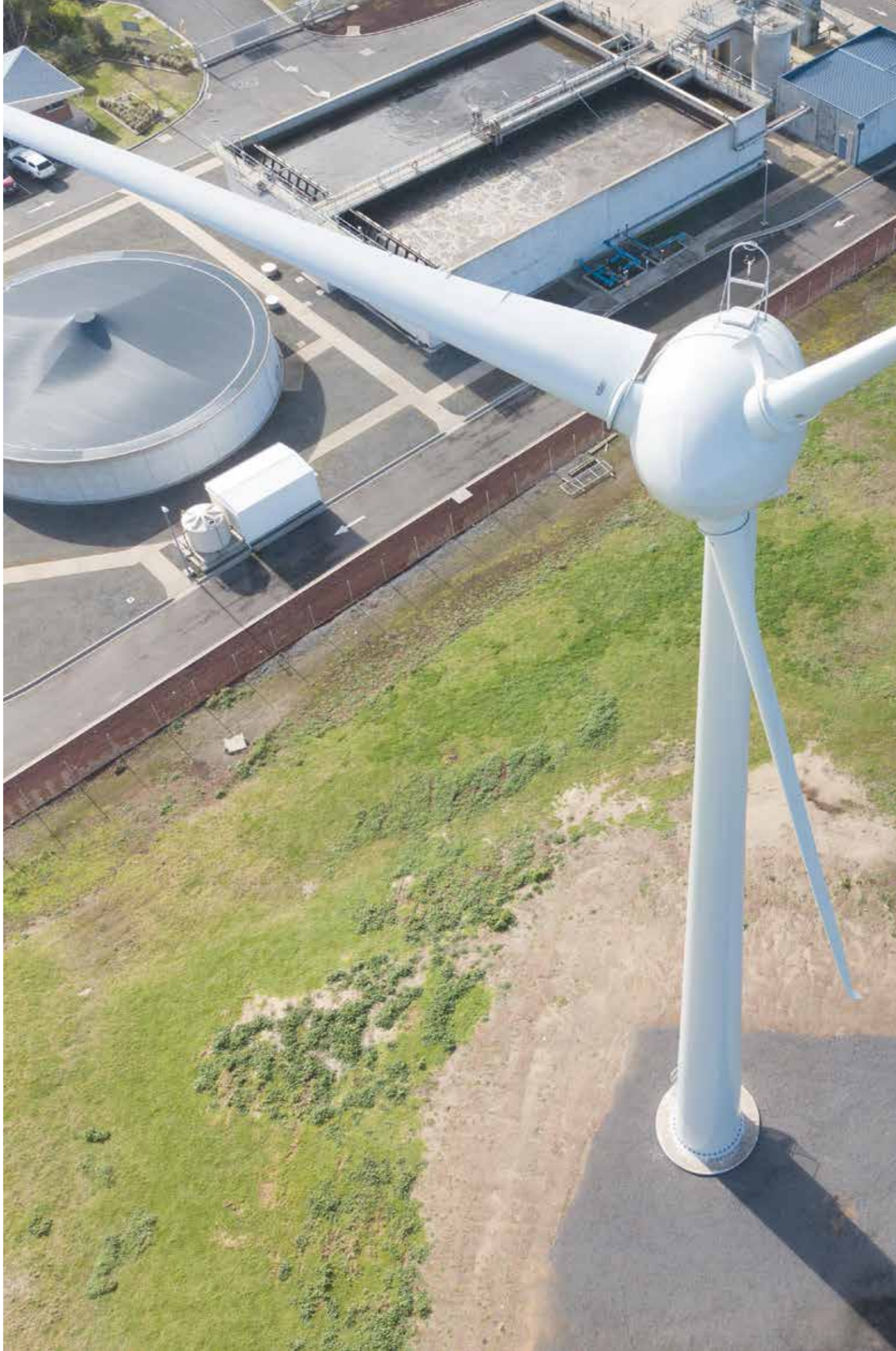
We have included a modest allowance in our forward budgets to enable us to implement this roadmap without putting upward pressure on pricing. This has been endorsed by our customers as part of our 2023-2028 price submission.

Looking to the future

As with any journey, there may be unexpected circumstances ahead. These might challenge our progress or create new opportunities to accelerate or improve our path to net-zero. We will remain innovative in responding to these challenges and opportunities to deliver emissions reductions as effectively as we can.

We have a role to play in enabling economic growth in our region by providing new water and services. We're aware that our region is experiencing strong interest for investment across sectors. It is possible that our growth forecast might be exceeded in the coming years driven by industries such as hydrogen production.

New industrial growth could increase emissions because treating recycled or raw water to a high standard is energy intensive. There can also be increases in fugitive emissions from sewage treatment. We will explore opportunities to partner with our existing major customers to reduce emissions associated with trade waste processing at the source, or through modifications to our existing treatment processes.



Where new infrastructure is built to support major developments, we expect proponents will support us to use renewable energy or secure offsets to deliver carbon neutral projects from the outset.

We are already considering how we might account for and respond to Scope 3 emissions and see this as an important part of our journey beyond 2030.

This roadmap does not lock us into specific projects or actions, to allow us to take unexpected circumstances into account. Instead, it provides guidance to help prioritise our decision making and reflects on how we plan to reach our destination.

This roadmap will be reviewed annually.

Reporting our progress

Our Corporate Plan sets out key performance indicators, including reportable carbon emissions in line with the targets in this roadmap. We'll publicly report progress against our targets in our Annual Report.

The State Government has established mandatory reporting obligations with all Victorian water corporations. We also report our progress internally every three months so we can monitor and adjust our actions.

Glossary

Terms	Meaning
Annual reportable emissions	Total Scope 1 and Scope 2 greenhouse gas emissions less any eligible offsets (LGCs, ACCUs) in accordance with the methodology prescribed in the Statement of Obligations (Emission Reduction).
Australian Carbon Credit Units (ACCUs)	An eligible carbon offset unit issued to a person by the Clean Energy Regulator (CER). In Wannon Water's case these are produced from carbon farming projects accredited by the CER.
Offset	A reduction or removal of emissions of carbon dioxide or other greenhouse gasses made in order to compensate for emissions made elsewhere. This includes ACCUs and LGCs.
Carbon farming	Carbon farming is the capture and storage (sequestration) of carbon from the atmosphere in the landscape through regeneration and planting of vegetation.
Emissions	Greenhouse gas emissions, including carbon dioxide and other gases that influence global warming processes.
Fugitive emissions	Emissions that occur from the collection and treatment of sewage.
Net-zero	For the purpose of this roadmap net-zero means an annual reportable emissions total of zero, calculated according to the Statement of Obligations (Emission Reduction).
Large-scale Generation Certificates (LGCs)	Registered tradable financial certificates validated by the Clean Energy Regulator (CER). LGCs are created for electricity generated from renewable energy sources by a facility accredited by the CER.
Scope 1 emissions	Emissions from sources that are within our control boundary such as fuel use and fugitive emissions.
Scope 2 emissions	Emissions from purchased electricity, heat and cooling, that is energy produced outside our control boundary but used by us. This includes electricity used to operate sewage and water systems.
Scope 3 emissions	All indirect emissions that occur as a result of the activities of Wannon Water, but occur from sources outside our control boundary.
Statement of Obligations (Emissions Reduction) 2022	A statement released by the Minister for Water that specifies the greenhouse gas emissions reduction and renewable electricity use obligations for all Victorian water corporations.
Surrender ACCUs	ACCUs can be surrendered to the Clean Energy Regulator to effectively offset Scope 1 reportable emissions. Surrendered ACCUs are removed from the national register by the Clean Energy Regulator.
Surrender LCGs	LCGs can be surrendered to the Clean Energy Regulator to effectively offset Scope 2 reportable emissions. Surrendered LCGs are removed from the national register by the Clean Energy Regulator.
t CO₂-e	Tonnes of carbon dioxide equivalent greenhouse gas emissions. This is a standardised unit of greenhouse gases to represent the amount of emissions which would have occurred if they were emitted as carbon dioxide.
'teal' carbon	Carbon trapped in freshwater vegetated areas, such as freshwater wetlands.





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