

Net Zero Emissions Policy

Purpose

This policy sets out the rationale, target and actions for Riverina Water to reach net zero greenhouse gas (GHG) emissions by 2030. It is intended to embed emission reductions into all relevant areas of Council decision-making.

Policy Statement

Riverina Water is committed to eliminating our contribution to climate change by cutting our GHG emissions.

This involves a three-step process:

1. Setting a 2030 net zero emissions target.
2. Developing a net zero roadmap to set out how we will meet our target.
3. Implementing the roadmap's actions throughout relevant strategies and plans to inform all relevant decision-making and procurement.

Scope

This policy applies to the greenhouse gas emissions from Riverina Water operations, which are broken into:

- **Scope 1** refer to direct emissions from sources located within RWCC designated boundary (e.g. diesel fuel used in RWCC vehicles)
- **Scope 2** emissions occur as a result of the use of grid-supplied electricity imported into the boundary area.
- **Scope 3** emissions occur outside the boundary as a result of activities taking place within the boundary (e.g. use of chemicals, some inputs to electricity)

Data and document control

Definitions

There are many technical terms used in the discussion of emission reductions. Please refer to the glossary at the end of this document for a comprehensive list of terms.

Principles

Our climate is changing. The CSIRO¹ tells us that Australia's climate has warmed on average by 1.44°C² since national records began in 1910. The primary cause of climate change is the release of GHG emissions from human activities, such as the burning of fossil fuels (coal, oil and natural gas), agriculture and land clearing. This is leading to a range of changes including an increase in the frequency of extreme heat events, changes to rainfall patterns, and an increase in extreme fire weather.

Context of NSW Government and other councils with net zero targets.

The New South Wales Government has released Net Zero Plan Stage 1: 2020-2030³ which is the foundation for NSW's action on climate change and goal to reach net zero emissions by 2050. Within this policy framework, the Department of Planning Industry and Environment's (DPIE) Sustainability Advantage program is engaging with councils throughout NSW to develop Net Zero 2030 Road Maps. Riverina Water's work with Sustainability Advantage underpins the Net Zero Road Map that will guide us to achieve the 2030 target.

Why we must we act

We have a responsibility to current and future generations to cut our greenhouse gas (GHG) emissions to do our part to prevent further climate change.

What we must do

Riverina Water must reduce our GHG emissions to reach net zero emissions by 2030. This will bring Council ahead of the requirements set out in the Paris Agreement of 2015.

¹ <https://www.csiro.au/en/research/environmental-impacts/climate-change/State-of-the-Climate/Report-at-a-Glance>

² ± 0.24°C

³ <https://www.environment.nsw.gov.au/topics/climate-change/net-zero-plan>

Data and document control

How we will do it

We have established a baseline of current annual operational emissions and have developed a roadmap that identifies our largest sources of emissions and how to cut them to net zero by 2030. The road map focuses on three key areas:

1. Electricity
2. Fleet
3. Remaining emissions.

Riverina Water's emissions baseline for FY2019/20 is 11.6ktCO₂e.

Of this, electricity Scope 2 and Scope 3 accounts for over 95% of the total.

Fuel use makes up most of the remainder.

Policy Implementation

The road map sets out a series of actions for Riverina Water to undertake during this decade. Some actions are relatively easy and can happen quickly. Other actions will require technology developments and reductions in implementation costs before they are viable.

Key actions in the road map include the following:

Electricity

Riverina Water

- Will transition to almost 100% locally supplied renewable electricity
- Investigate solar installation on adjacent land to power some sites
- Explore shifting load and use of battery storage to make use of solar

Fleet

- Procure the most efficient vehicles available
- Use E10 petrol and biodiesel blends for internal combustion engine vehicles
- Use renewable liquid fuels when available in the future
- Electrification of the vehicle fleet over time

Data and document control

Page 3 of 7

Author: Project Engineer – Strategic Planning

Version 1.0

Last revised date New

Next scheduled review February 2024

Remainder

- Explore procurement of lower-carbon water treatment chemicals
- Purchase carbon offsets: it is acknowledged that this is a last resort, but a small volume may be needed to achieve net zero

Policy number

1.30

Responsible area	Chief Executive Officer
Approved by	Riverina Water Board – R21
Approval date	24/2/2022
Legislation or related strategy	Net Zero Roadmap
Documents associated with this policy	Policy 1.13 Risk Management Policy 1.19 Purchasing Policy 3.1 Asset Management Asset Management Strategy Asset Management Plan Policy 3.2 Asset Purchase and Disposal Policy 5.0 Environmental Riverina Water Management Plan Riverina Water Strategic Business Plan and Resource Strategy Four-year capital works program Asset Register

Data and document control

Page 4 of 7

Author: Project Engineer – Strategic Planning

Version 1.0

Last revised date New

Next scheduled review February 2024

Policy 3.19 Lease for Private Use of Motor Vehicles

Integrated Water Cycle Management (IWCM)
Plan

Policy history	New
Review schedule	2 Years

Policy details may change prior to review date due to legislative or other changes, therefore this document is uncontrolled when printed.

Data and document control

Page 5 of 7

Author: Project Engineer – Strategic Planning**Version 1.0****Last revised date New****Next scheduled review February 2024**

GLOSSARY

Term	Definition
Carbon neutral	Where the net carbon emissions associated with an activity or entity are equal to zero because emissions have been reduced and offset units cancelled to fully account for all emissions. [See also net-zero emissions]
Carbon offsets	Activities that reduce greenhouse gas emissions or remove greenhouse gases from the atmosphere to compensate for emissions produced elsewhere. One tonne of offsets is equivalent to one tonne of CO ₂ equivalent. There are various types and qualities of offsets, depending on the methodologies used to create them. In Australia, credible offsets are accredited under the Climate Active Carbon Neutral Standard (formerly National Carbon Offset Standard (NCOS)). Some offsets have additional social or environmental benefits.
Climate	Average weather (or, more specifically, the mean and variability of variables such as temperature, precipitation and winds) over a time period ranging from months to thousands of years to millions of years.
CO ₂ e	Carbon dioxide equivalent – the standard unit for measuring carbon footprints, essentially converting all greenhouse gases into equivalent units of carbon for ease of communicating the scale of potential warming
Greenhouse gas (GHG)	Greenhouse gases are those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of terrestrial radiation emitted by the Earth's surface, the atmosphere itself, and by clouds. Water vapour (H ₂ O), carbon dioxide (CO ₂), nitrous oxide (N ₂ O), methane (CH ₄) and ozone (O ₃) are the primary greenhouse gases in the Earth's atmosphere.
Liability risk	Risks associated with contributing to, or not acting to address, climate change risks.
Low carbon	A state where carbon emissions are reduced compared to a previous baseline, through energy efficiency and renewable energy projects. Implementing low carbon initiatives is the first step towards achieving a net zero emissions target.
Mitigation	Climate change mitigation includes action we take globally, nationally and individually to limit changes caused in the global climate by human activities. Mitigation activities are designed to reduce greenhouse gas emissions and/or increase the amounts of greenhouse gases removed from the atmosphere by greenhouse sinks (AdaptNSW).
Net zero emissions	A state where any emissions of greenhouse gases generated are counterbalanced by the removal of greenhouse gases from the atmosphere. In practice this means reducing emissions as far as possible, then offsetting the remainder through activities such as tree planting, soil management and carbon capture and storage.

Data and document control

Term	Definition
Paris Agreement	<p>At the 21st session of the Conference of the Parties ('COP21') to the UNFCCC (see definition below) held in Paris in 2015, the world agreed to a global goal to limit average temperature increases to 'well below 2oC' and pursue efforts to keep warming below 1.5°C above pre-industrial levels.</p> <p>A total of 176 Parties have ratified the Paris Agreement, including Australia, which officially did so on 10 November 2016. All signatory countries are to set emissions reduction targets from 2020 and review their targets every five years to build ambition over time, informed by a global stocktake.</p>
PPA	<p>A Power Purchase Agreement (PPA) is a long-term agreement for an energy buyer to purchase a quantity of electricity generated by an off-site renewable energy project, such as a solar or wind farm.</p>
Science-Based Targets (SBT)	<p>Measurable and actionable environmental targets that allow cities, regions, companies to align their actions with societal sustainability goals and the biophysical limits that define the safety and stability of the earth's systems.</p>
Scopes 1, 2 and 3 emissions	<p>The concept of scopes categorises emissions sources for the purposes of carbon accounting and reporting to improve transparency and avoid the double-counting of emissions. Three scopes are defined in carbon accounting:</p>
Scope 1	<p>Emissions are direct emissions from sources located within a designated boundary (e.g. natural gas combusted in homes and factories within an LGA)</p>
Scope 2	<p>Emissions occur as a result of the use of grid-supplied electricity (or from heat, steam, and/or cooling) imported into the boundary area</p>
Scope 3	<p>Emissions occur outside the boundary as a result of activities taking place within the boundary (e.g. landfill gas emissions from tips outside the LGA caused by waste generated from households and businesses within the LGA).</p>

END OF POLICY STATEMENT

Data and document control