



# **Water and Energy Use Guidelines for Buildings and Facilities**

**2022**



**Mildura Rural City Council**

## Introduction

In February 2020, Mildura Rural City Council declared a state of climate change emergency requiring urgent action by all levels of government. This resulted in the development of the Towards Zero Emissions Strategy 2021-2050 which was adopted by Council in June 2021. Council is committed to achieving zero net emissions by 2040 (excluding landfill) and 2050 (including landfill).

The Strategy includes a commitment to transition all existing buildings and facilities off fossil gas to be entirely powered by 100 percent renewable energy sources by 2030. **In line with the Strategy, no new gas connections and gas appliances/equipment are to be installed at council owned buildings and facilities. Existing gas appliances/equipment are to be upgraded to electric by 2030.**

## Purpose

This document specifies behavioural and purchasing guidelines to ensure the responsible use of water and electricity in buildings and facilities.

These guidelines apply to Council staff, contractors users of Council buildings and facilities and any organisation purchasing goods with council funding (recipients of Council Grants).

All users of a building will strive to reduce their water and energy consumption, regardless of where responsibility lies for the payment of bills.

## Behavioural Guidelines

Minimise the number of appliances including televisions and refrigerators. Remove old appliances when new ones are purchased.
Only use lighting/cooling/heating necessary for the area being used and the activity undertaken.
Comply with State Permanent Water Saving Rules and Lower Murray Water (LMW) and Grampians Wimmera Mallee (GWM) Water water saving restrictions.
Ensure any leaks or irrigation issues are addressed immediately or reported to Council where applicable.
Include water and energy efficiency considerations when requesting Council Land Manager Consent for works where applicable.
Encourage all users of the facility to save water and energy. For example, turning appliances off at the wall and switching off lights when leaving a room.

## Purchasing Guidelines

Item	Minimum Water Requirement	Minimum Energy Requirement
Refrigerators	N/A	5+ stars
Freezers only	N/A	4.5+ stars
Dishwashers	5+ stars	4+ stars
Washing machines	4.5+ stars	5+ stars
Ovens	N/A	Electric only

Stoves / cooktops	N/A	Electric induction only
Deep Fryers	N/A	Electric only
Taps	6 litres/min, 5+ stars, push/sensor taps	N/A
Toilets	Dual flush, 4+ stars	N/A
Urinal Equipment	1.8 litres/flush, 3+ stars	N/A
Shower	7 litres/min, 3+ stars	N/A
Hose fittings	Trigger nozzle	N/A
Microwaves	N/A	Electric
Televisions	N/A	5+ stars
Hot water systems	N/A	Electric heat pump (CO2 refrigerant preferred)
Cooling / heating		Appropriately sized reverse cycle air-conditioning system or Heating, Ventilation, Air-Conditioning (HVAC) system with fresh air intake (connect to Building Management System). Payback evaluation on price difference to determine best option. Energy efficient option for price difference payback of less than the material warranty period.
Internal lighting	N/A	Assessment of lux lighting levels required for specific spaces. Maximum use of natural light e.g. skylights, LED with motion sensors.
External lighting	N/A	LED or solar with motion sensors.
Windows	N/A	Double glazed. Tinting if required.
Window furnishing	N/A	Thermal curtains or blinds and with pelmets where applicable.
Insulation	N/A	Highest rating available.
Pumps	N/A	Central control variable speed drive. Electrical specialist to provide most efficient option for purpose.

## New Builds – Additional Requirements

Item	Requirement
Project design phase	Project manager must consult with Council's Energy and Water Innovation Officer.
Building orientation	North facing unless not practical for location.
Energy source	Buildings and facilities must be all-electric. No natural or LPG gas connections and appliances/equipment.
Solar photovoltaic (PV) system	All new buildings must have solar PV installed at the time of construction unless there is significant shading. System size suited to buildings predicted use. Battery storage where economically feasible.

Automated building control	All new buildings must have a Building Management System (BMS) installed which integrates HVAC, lighting, security, fire etc.
Water collection and re-use	All new buildings must have rainwater tank/s installed at the time of construction. Uses for rainwater to be assessed on a site by site basis. Grey water re-use systems if appropriate for location/application.

## More Information

For more information, please contact Council's Energy & Water Innovation Officer on (03) 5018 8100.