



## City of Unley Corporate Greenhouse Gas Inventory FY24-25

24 April 2026

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**Kaurna Acknowledgement**

We acknowledge that the City of Unley is part of the traditional lands of the Kaurna people and we respect their spiritual connection with their country.

We also acknowledge the Kaurna people as the traditional custodians of the Adelaide region and that their cultural and heritage beliefs are still as important to the living Kaurna people today.

# 1 Executive summary

## 1.1 Background

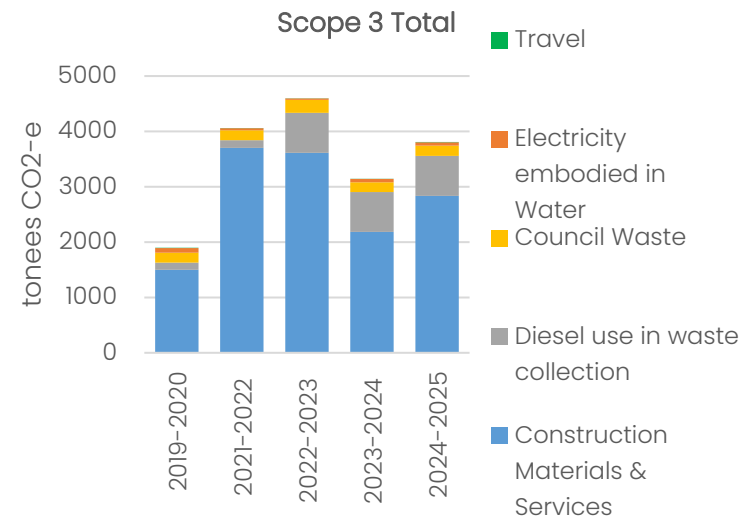
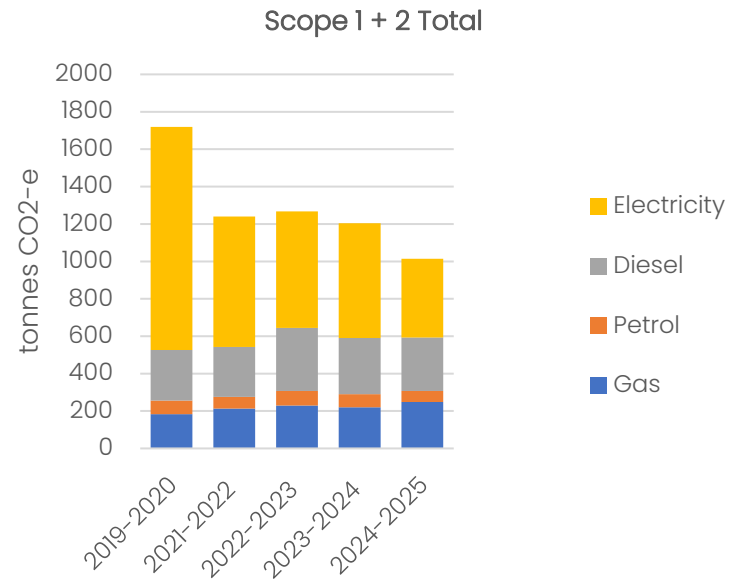
The City of Unley has a commitment to achieving carbon neutrality for operations by December 2030 (Climate & Energy Plan, February 2023). This report describes the greenhouse gas emission inventory for the 2024-2025 financial year.

Inventories categorise emissions sources into three scopes:

- **Scope 1** or “direct emissions” are those released directly by Council Operations such as the combustion of petrol, diesel and gas.
- **Scope 2** refers to the emissions embodied in the electricity consumed by Council Operations.
- **Scope 3** refers to other “indirect” greenhouse gas emissions that are generated in the wider economy as a consequence of Council’s operations.

The Scope 1 and 2 emissions from Council Operations are based on the quantities of fuels and electricity used. These are well documented and accurately measured. Scope 3 on the other hand is largely based on applying general “emissions factors” to categories of expenditure.

The FY2024-2025 inventory total represents a 33% increase in estimated overall emissions compared to the base year FY2019-2020 and an 11% increase compared to FY2023-2024. This is largely attributed to an increase in scope 3 emissions due to increased expenditure for delivery of Council’s infrastructure program and with a small increase in Scope 1 gas emissions due to the extended opening hours of the Unley Swimming Pool. Further detail is provided in **Table 1** and an explanation for all major changes is provided at Section 3.1.



## 2 Emissions Reduction Actions during FY2024–2025

City of Unley completed the following emissions reduction actions in FY 2024–2025 (Climate & Energy Plan – Year 4):

- Expanded Council’s electric vehicle fleet, with the purchase of a second EV for the Regulatory Services team.
- Increased onsite renewable energy and storage capacity, including:
  - Installation of additional solar and battery systems at Goodwood Library & Community Centre and the Depot.
  - Upgrade of the Unley Swimming Centre solar system from 10 kW to 30 kW.
- Council now operates 235 kW of solar capacity across seven sites and 82 kW of battery storage across four sites.
- Implemented solar monitoring hardware and software across facilities to improve energy performance oversight and efficiency.
- Delivered energy efficient lighting upgrades, including LED and motion sensor installations at the Civic Centre and Unley Library, resulting in reduced after hours and unnecessary energy use.
- Continued asset electrification and efficiency upgrades as part of routine asset replacement, including removal of gas hot water systems and installation of high efficiency appliances.
- Completed public realm lighting upgrades, including:
  - Ridge Park LED lighting designed to minimise blue light impacts on nocturnal wildlife.
  - Shared Path Lighting Renewal in partnership with the Adelaide Showgrounds, converting existing lighting to energy efficient LEDs along the Marino Rocks Greenway Trail.
- Implemented fleet tracking software across 42 operational and volunteer vehicles to support route optimisation, fuel efficiency, and improved environmental reporting.
- Conducted waste audits at the Civic Centre and Depot, followed by staff education initiatives to improve waste diversion and recycling outcomes.
- Negotiated a Renewable Power Purchasing Agreement (PPA) as part of a seven council East Adelaide buying group, enabling the purchase of South Australian renewable electricity and delivering significant cost savings. The PPA commenced on 1 July 2025 and is the first of its kind in South Australia.
- Secured \$1.055 million in Federal Government funding through the Community Energy Upgrade Fund to accelerate electrification of heating at the Unley Swimming Centre.
- Delivered the first two rounds of the City of Unley Community Renewables Program, facilitating solar and battery bulk buys with 144 participants and enrolling 137 households in the Unley Virtual Power Plant.

- Met external climate disclosure commitments through annual reporting to CDP (formerly Climate Disclosure Project) and the Global Covenant of Mayors for Climate & Energy.

### **3 Data Sources**

City of Unley staff provided data from several sources for this report including:

- Billing data entered into Trellis for electricity, gas and water use,
- Financial data and Audit committee reports,
- Bespoke reporting prepared by staff
- Data from East Waste for waste collection (fuel, kilometres travelled and truck hours).

#### 4 Greenhouse Gas Emissions Inventory FY2024-2025

Scope	Sub Category	2019-2020 (t/CO2e)	2021-2022 (t/CO2e)	2022-2023 (t/CO2e)	2023-2024 (t/CO2e)	2024-2025 (t-CO2e)	% Change to base year	% Change to FY23-24
Scope 1	Gas	183	213	230	220	248	36%	13%
	Petrol	73	63	78	70	60	-18%	-15%
	Diesel	270	267	337	301	286	6%	-5%
Scope 2	Electricity	1193	697	623	613	421	-65%	-31%
<b>Scope 1 + 2 Total</b>		<b>1719</b>	<b>1240</b>	<b>1267</b>	<b>1204</b>	<b>1014</b>	<b>-41%</b>	<b>-16%</b>
Scope 3	Travel	4	1	0.3	1.7	5.6	40%	229%
	Electricity embodied in Water	85	38	26	61	60	-29%	-1%
	Diesel use in waste collection	128	139	721	721	721	464%	0%
	Council Waste	180	178	235	176	186	4%	6%
	Construction Materials & Services	1500	3703	3614	2184	2835	89%	30%
	<b>Scope 3 Total</b>		<b>1897</b>	<b>4059</b>	<b>4596</b>	<b>3144</b>	<b>3809</b>	<b>101%</b>
<b>Total Emissions, Scope 1, 2 &amp; 3</b>		<b>3616</b>	<b>5299</b>	<b>5863</b>	<b>4348</b>	<b>4823</b>	<b>33%</b>	<b>11%</b>

**Table 1:** Total inventory for the City of Unley for FY 2024-2025 compared to the base year (FY2019-2021), FY2021-2022, FY2022-2023, and FY2023-2024

#### 4.1 Explanation of Significant Changes

Category	FY 23-24 tCO <sub>2-e</sub>	FY 24-25 tCO <sub>2-e</sub>	Change	Comments
Gas	220	248	13%	In FY 2024-25, the Unley Swimming Centre opened beyond its usual swimming season through an arrangement with the Office of Recreation, Sport and Racing. Opening in August 2024, the pool remained open beyond its usual 36-week swim season, and throughout winter 2025, supporting swimmers to stay active through the redevelopment of the Adelaide Aquatic Centre. The extended swim season resulted in record participation, with 122,661 visitors recorded in 2024-25, including 52,218 memberships and 42,183 casual entries the highest numbers in the Centre's history.
Petrol	70	60	-15%	The 15% decrease is due to a decrease in fuel use. There has been no change to the emissions factors.
Electricity	613	421	-31%	The location-based emissions factor for electricity in SA decreased from 0.33 kgCO <sub>2-e</sub> per kWh (FY24) to 0.28 kg kgCO <sub>2-e</sub> per kWh (FY25). The reduction in emissions is a result of the EF change and a reduction in electricity purchased from the grid. Note the use of the location-based approach to the calculation of electricity emissions in consistent with Council's previous inventories.  Estimated electricity emissions for FY 24-25 using the market-based method are 1,132 tCO <sub>2-e</sub> .
Travel	1.7	5.6	+229%	This increase is due to an international flight being taken in FY 24-25.
Construction Materials & Services	2,184	2,835	+30%	Emissions estimates for this category are based on expenditure in generalised categories. The increase from FY24 to FY25 reflect increased expenditure.

**Note:** The scope 3 inventory reports on the focus areas for Scope 3 reduction identified in Council's Climate and Energy Plan. It does not currently include all categories required to comply with the Australian Government's Climate Active approach to Carbon Neutral Certification for Organisations.

## 4.2 Next Steps

The following activities are scheduled to be delivered in Year 5 (FY2025-2026) of the Climate & Energy Plan (2023):

- Progress the Unley Swimming Centre heat pump electrification project (\$2.14m total), supported by \$1.055m in Federal funding, with completion targeted for 2027.
- Continue fleet and plant electrification as assets reach end of life, particularly small plant and equipment at the Depot (including mowers and a forklift).
- Commence the Eastern Adelaide Renewable Power Purchasing Agreement from 1 July 2025.
- Deliver the third Community Renewables solar and battery bulk buy with ShineHub.
- Assess the Unley Civic Centre and Library to identify further energy efficiency and emissions reduction opportunities.
- Develop a Community Climate & Energy Plan to support emissions reductions across the city.