

# Climate Change at City of Unley

Our path to Carbon Neutral 2023

Chad's Forum - 10 August 2022

*Climate Change is the defining issue  
of our time and we are at a defining  
moment*

- The United Nations declaration

# Overview

- Scale of Challenge
- Role of Council
- Developing the Plan
- Mitigation Actions – halting the cause of climate change
- Adaptation Actions – treating symptoms we can't reverse
- Working together

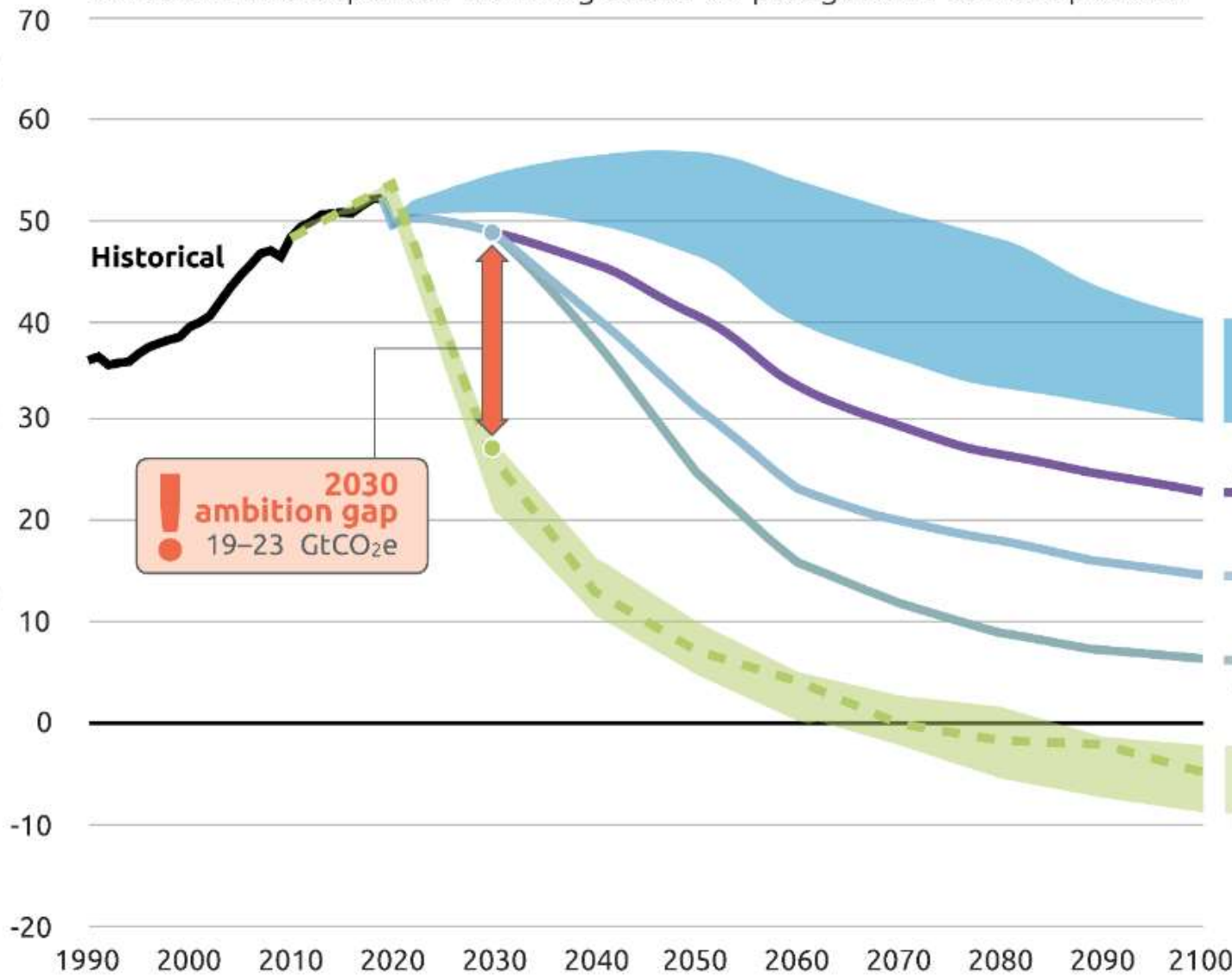




Nov 2021 update

Warming projected by 2100

Global greenhouse gas emissions GtCO<sub>2</sub>e / year



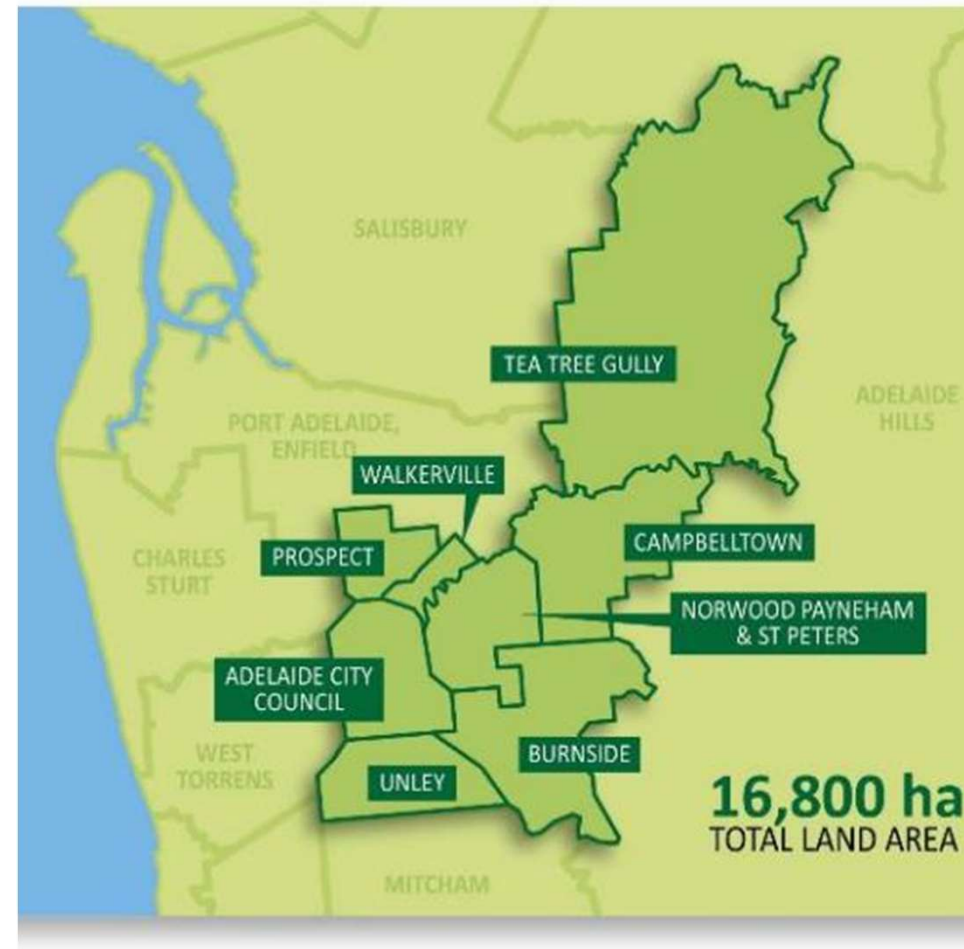
Source:  
Climate  
action  
tracker.org



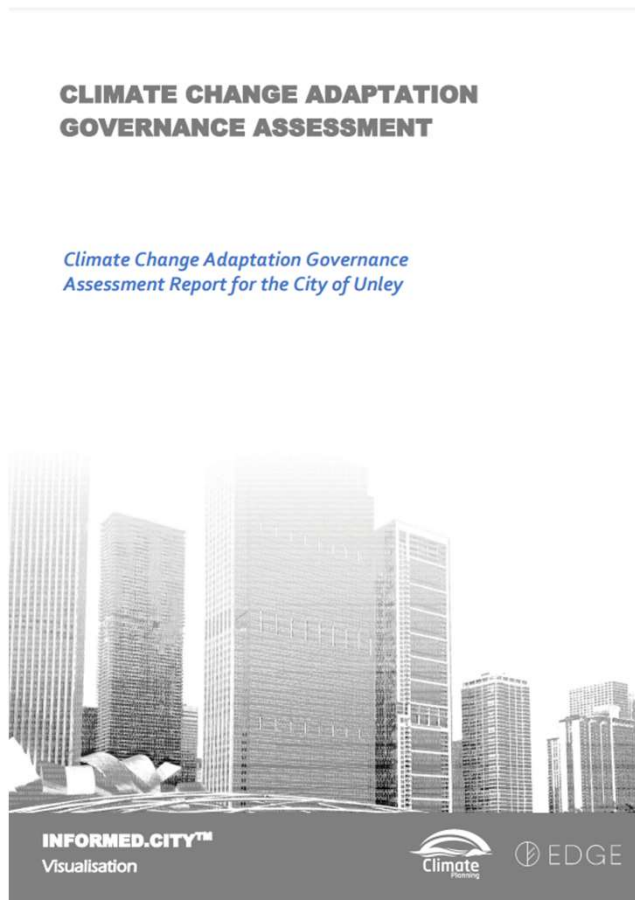
# Unley Council's Approach:

- Structural – long term
- Operational – short term
- Collaboration – ongoing
- Advocacy – Government
- Education – Community

= Whole of Council Approach



# Governance Risk Assessment



- 2021 Unley Council 1<sup>st</sup> out of 341 Councils assessed across Australia.
- Informed.City™ climate change governance assessment.
- Council achieved a top score in Strategic Planning, Public Risk Disclosure, Asset Management and Greenhouse Gas Emissions Reduction.

As of May 2021, the City of Unley recorded a higher assessment score than 341 Australian councils to have been assessed through the Informed.City™ climate change governance assessment.



# Reducing emissions

**Mitigation** is action to prevent greenhouse gas emissions releasing into the atmosphere to stop further changes to our climate.

**Its about halting the cause.**

# Global Covenant of Mayors for Climate & Energy – Dec 2020





# Developing Climate & Energy Plan

## Technical Report

- Review science, policy and what others doing
- Carbon footprint analysis and recommended actions

## Draft Plan

- 2030 Operational Carbon Neutral Target
- Emissions Reduction Pathway with 10 year action plan

## Consult & Final

- Online, hard copy and drop-in sessions
- Accelerated to **December 2023 Operational Carbon Neutral Target**

## Action

- Project delivery underway
- Purchase offsets from December 2023
- Active reduction of emissions continue to June 2030 and beyond.



City of Unley  
DE441 Technical Report  
Climate and Energy Plan 2020-2030  
18th July 2021



## Climate & Energy Plan

Our path to carbon neutral operations by 2023

2020-2023



# Carbon Footprint (corporate)

SCOPE	TOTAL TONNES CO2-E	SUBCATEGORY	TONNES CO2-E
<b>Scope 1</b>	<b>526</b>	Gas	183
		Petrol	73
		Diesel	270
<b>Scope 2</b>	<b>1,193</b>	Streetlights, paths & parks	445
		DIT Lighting	276
		Buildings	472
<b>Scope 3</b>	<b>1,897</b>	Travel	4
		Electricity embodied in water	85
		Diesel use in waste collection	128
		Council Waste	180
		Roads, paths & stormwater	1,500

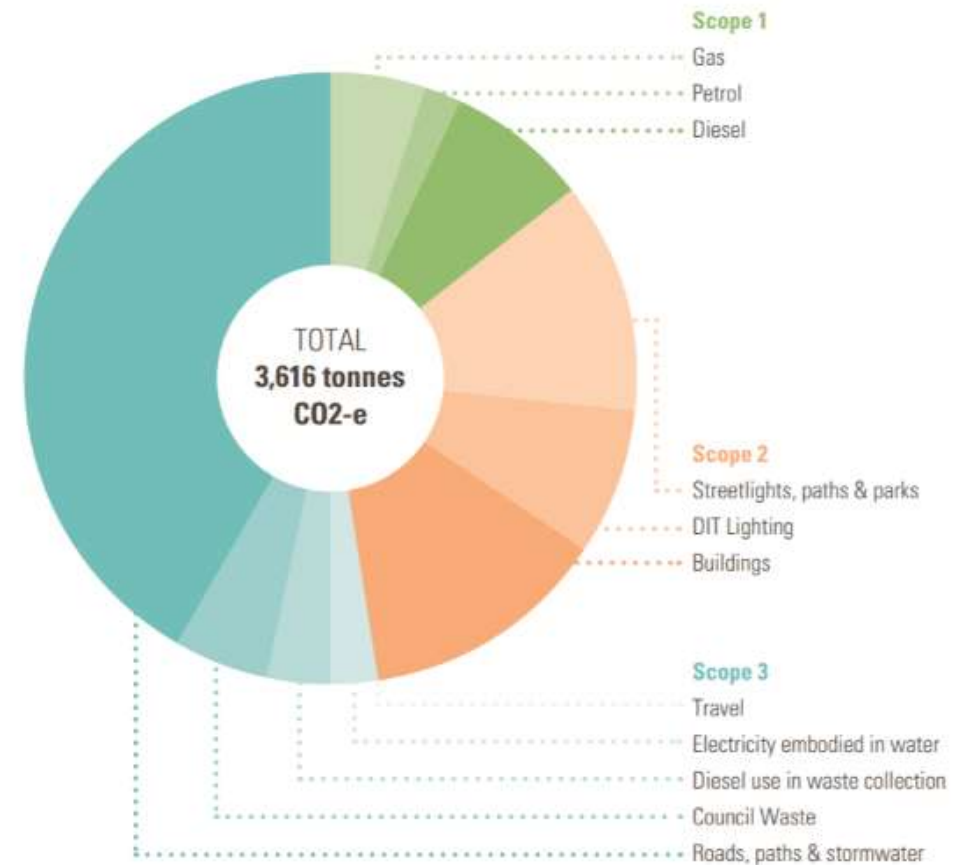


Figure 1: 2020 Estimate of Corporation of the City of Unley Emissions Scopes 1, 2 & 3



Electrification of the passenger and specialist vehicle fleet to electric vehicles (EV) as suitable models become available.



### Street Light Replacements

Continue rollout of LED efficient lighting.



### Solar PV

Continue install renewable energy on Council-owned buildings.



### Building Upgrades

Continue energy efficiency improvements as part of normal asset maintenance.



### Swimming Centre Upgrades

Replace gas heating boilers with low emission alternatives such as electric heat pumps.



### Remaining Emissions

Projected carbon footprint which Council has not reduced or made from renewable sources.

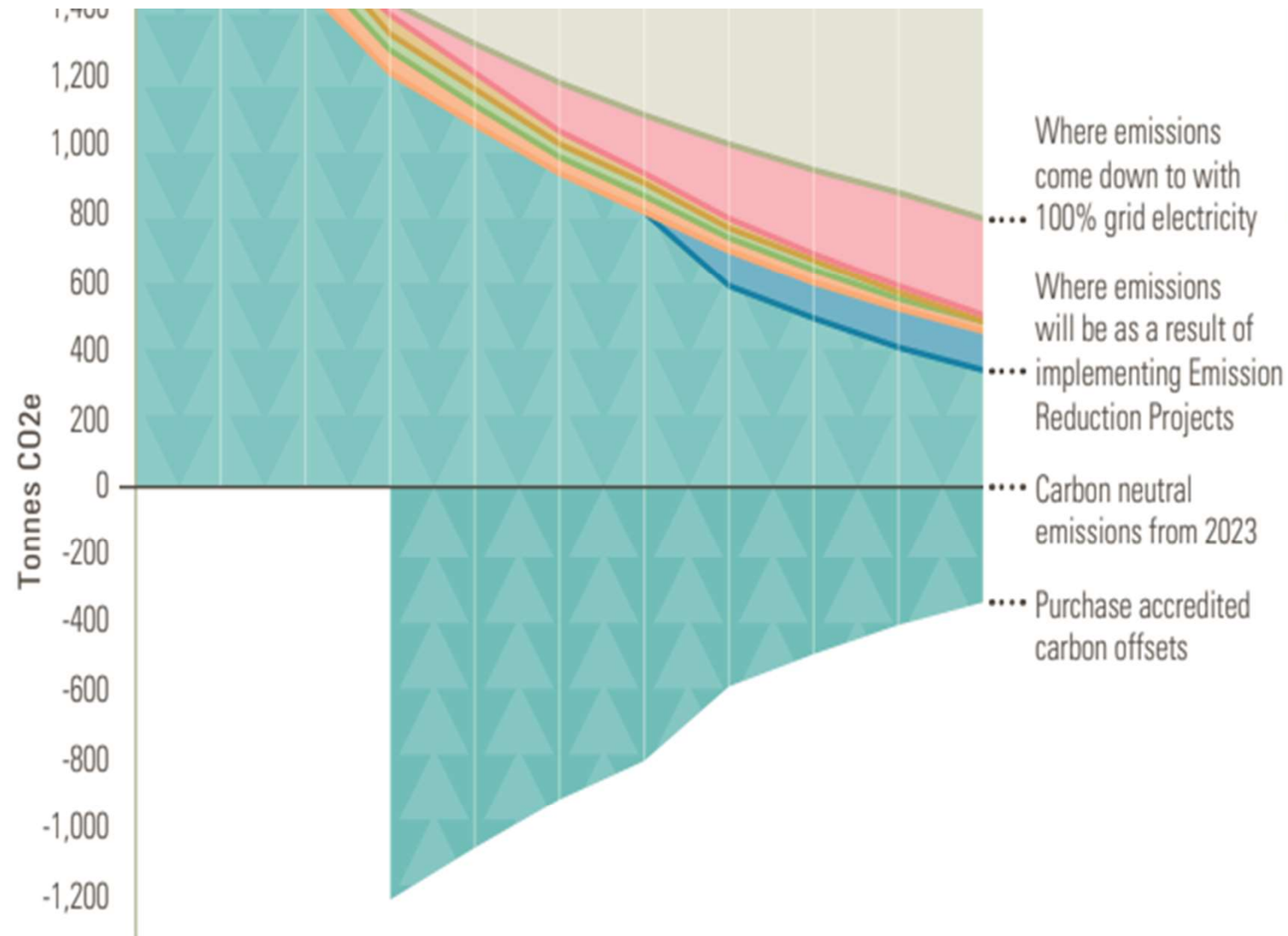


Figure 2: Effects of Emission Reduction Projects for Scope 1 & 2



### Electricity embodied in water use

Increased renewables at sites used to filter and pump potable water that Council uses.



### Council operational waste reductions

Reducing usage and increasing diversion to landfill waste from our buildings, depot and community centres.



### Implement lower carbon roads, paths and stormwater works

Forecast impact from increasing use of recycled content and low-carbon alternatives such as recycled crumb rubber in road reseals.



### Waste Collection Reduction Diesel Use

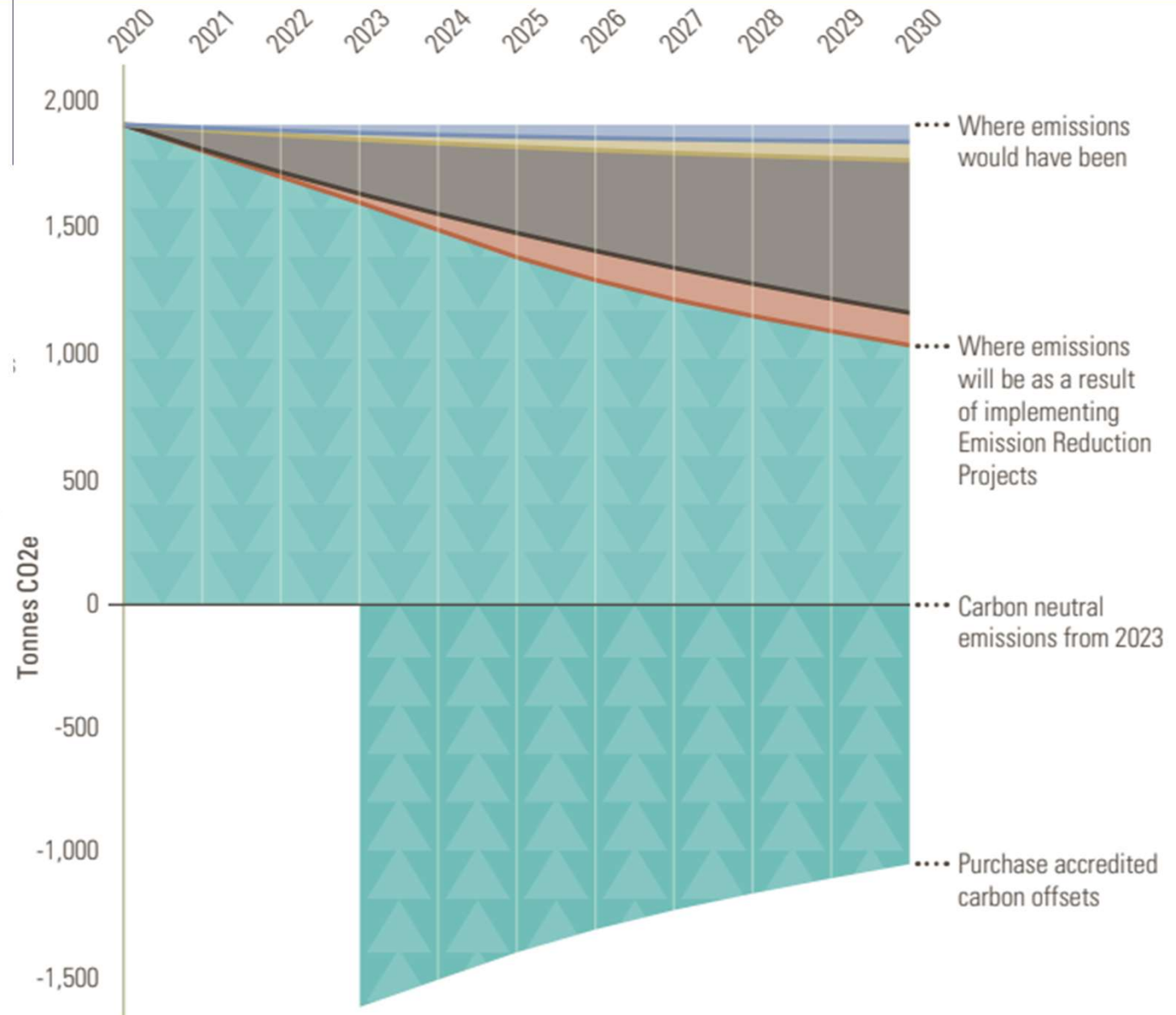
Anticipated impact as waste collection trucks are replaced.



### Remaining Emissions

Projected carbon footprint which Council has not reduced or made from renewable sources.

**Figure 3: Effects of Emission Reduction Projects for Scope 3**



# Offsets

From December 2023 purchase carbon offsets for the remaining emissions

Offsets could be investing in accredited and audited revegetation sites, renewable energy etc.

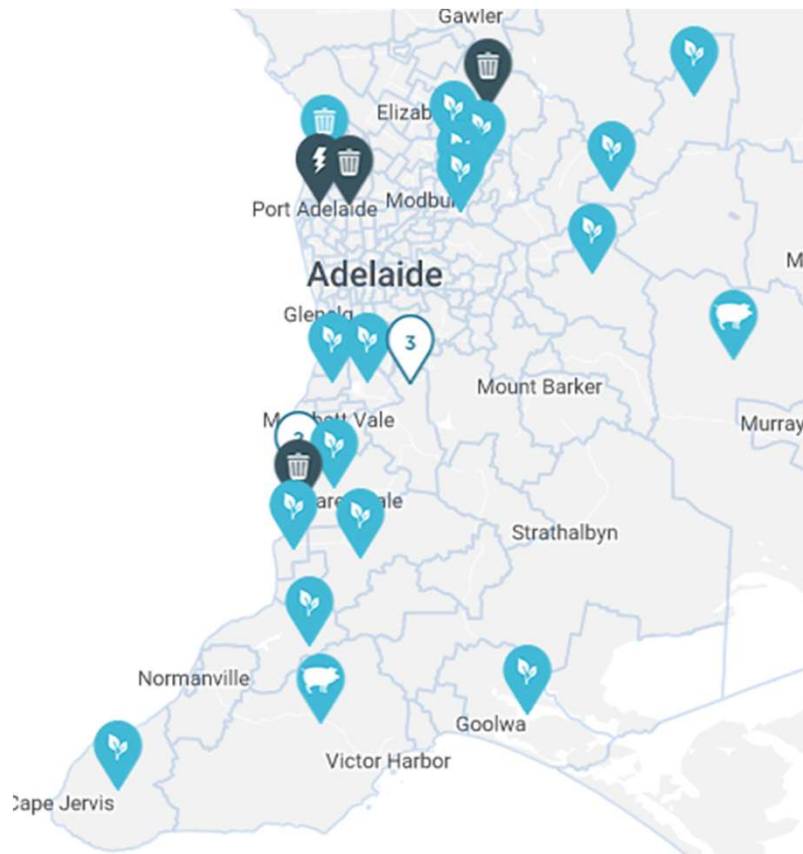
**Continue actions to reduce emissions past 2023.**

# What are offsets

- Purchase the rights or certificates of activities that lower carbon emissions.
- Buyer is able to compensate for the emission of greenhouse gases by providing a reduction elsewhere



# Local Carbon Offset Examples



- National searchable database
- Vegetation, landfill, agriculture, energy efficiency, facilities etc

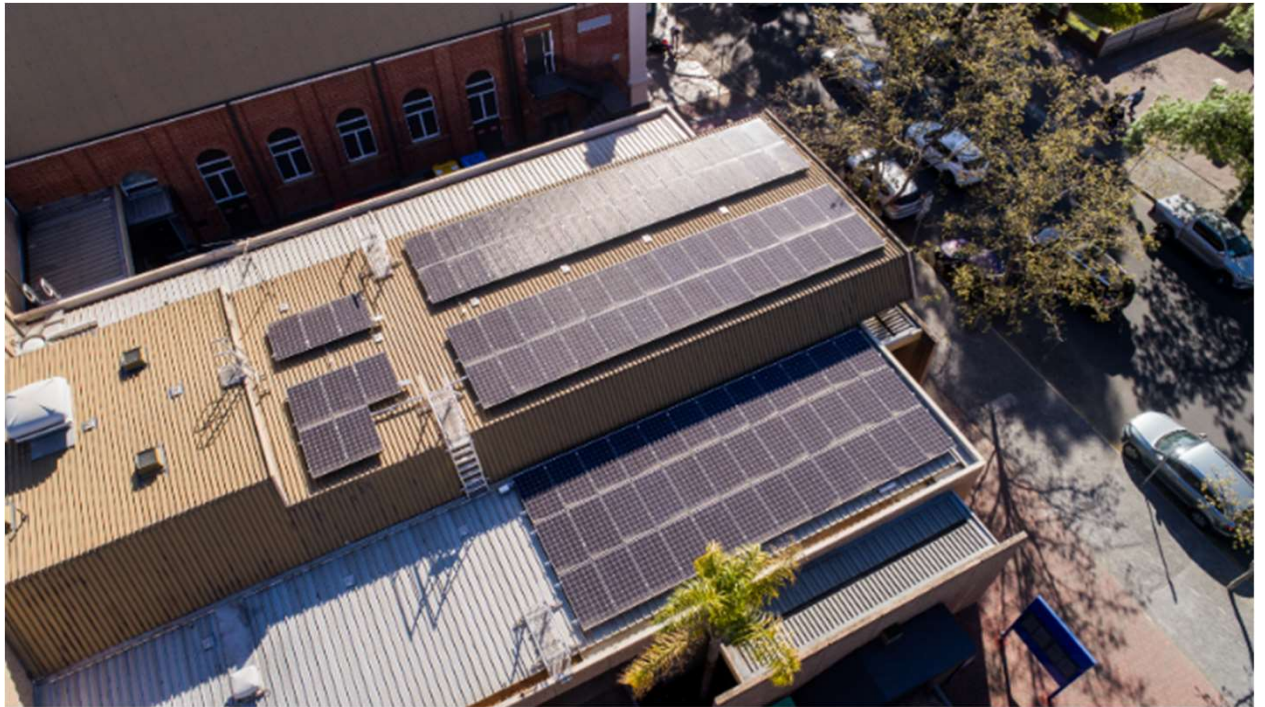
Source: Clean Energy Regulator, Australian Government

# Council's Emission Reduction Actions

- Energy
- Materials
- Waste
- Fleet
- Walking & Cycling

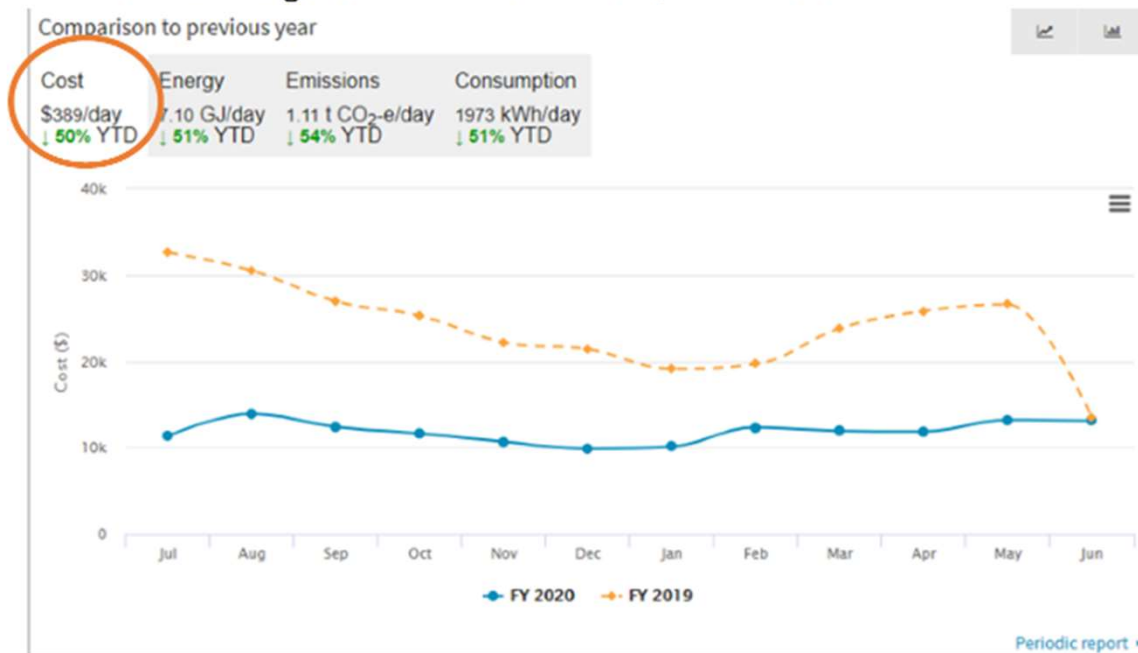
# Mitigation - Energy

- 105kW Solar installed 2016-2021
- 2022 Climate Partners Fund for Leased Buildings
- 2023 Goodwood Community Centre
- Accelerated tree planting reduce A/C



# Mitigation - Energy

## LED streetlights: lower emissions, lower costs



- 3000 Street Lights LED (60% more efficient)
- Building energy efficiencies with any replacements





# Mitigation - Materials & Services

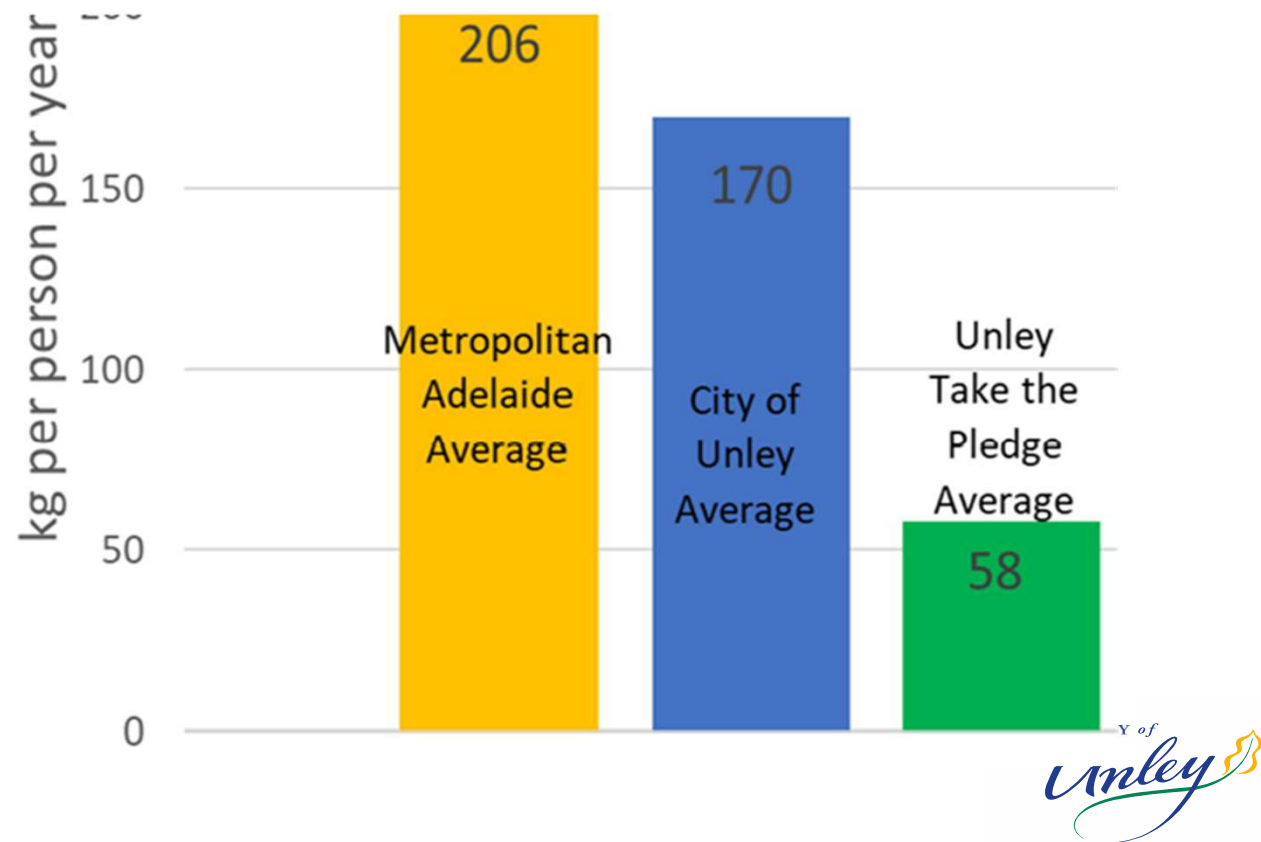
- Recycled content in roads
- Design standards and phasing out gas
- Purchasing power and decisions



# Mitigation – Waste

- Kitchen caddy roll out
- Zero Waste Events
- Weekly Organics trial
- Drinking Fountains
- Plastics Free SA
- East Waste

Waste generation comparison



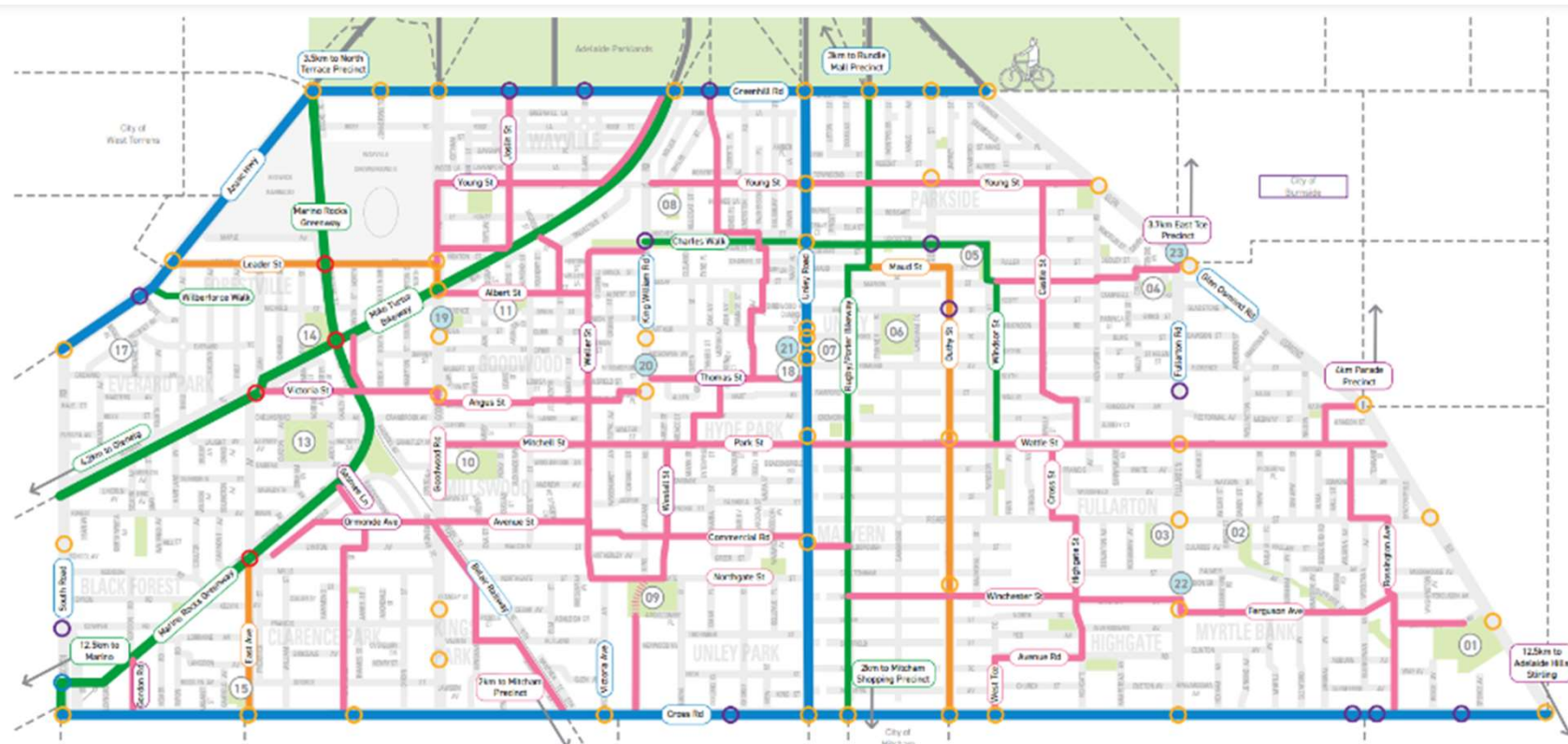


# Mitigation - Fleet

- 5 Hybrid passenger vehicles
- Staff E-bikes with over 1,000km to date
- First electric vehicle coming soon for parking inspectors



# Mitigation – Walking & Cycling



# Building Resilience

**Adaptation** is action to prepare and respond to the impacts of climate change already locked in.

**Its about treating the symptoms we can't reverse.**



# What is the Challenge



# Examples of Unley Adaptation Actions

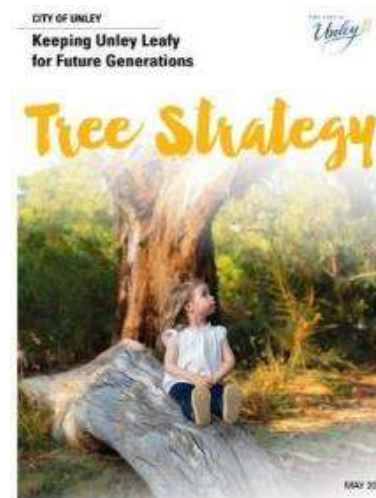
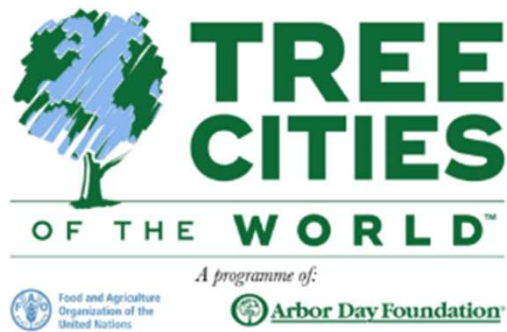
- Greening
- Biodiversity
- Water
- Preparedness
- Advocacy





# Adaption – Traditional Greening

- Tree Strategy
- 365+ Additional Trees for 2022-23
- Education & Engagement





# Adaptation – Maximise Greening

Maximise planting

Greening Infrastructure Projects

- King William Road
- Living Streets
- Pocket Parks
- Linear Trails
- On street plantings



# Adaptation - Greening

- Mapped canopy
- Detect change
- Planning, advocacy and track progress
- MyCanopy



# Adaptation – Water Recycling

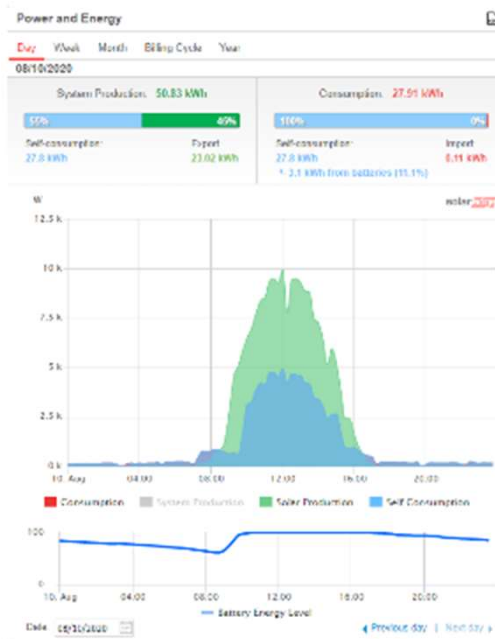
- >90ML/yr recycled across Ridge and Heywood Parks
- Glenelg Adelaide Pipeline
- Water wells
- Rain gardens
- Permeable paving
- Water Sensitive SA Members





# Adaptation - Preparedness

- Flood impact reduction
- Power reliability



# State Government Advocacy

- Beyond Council's jurisdiction we advocate for reforms around climate, waste management, active transport, urban greening etc.

# Corporate vs Community Emissions

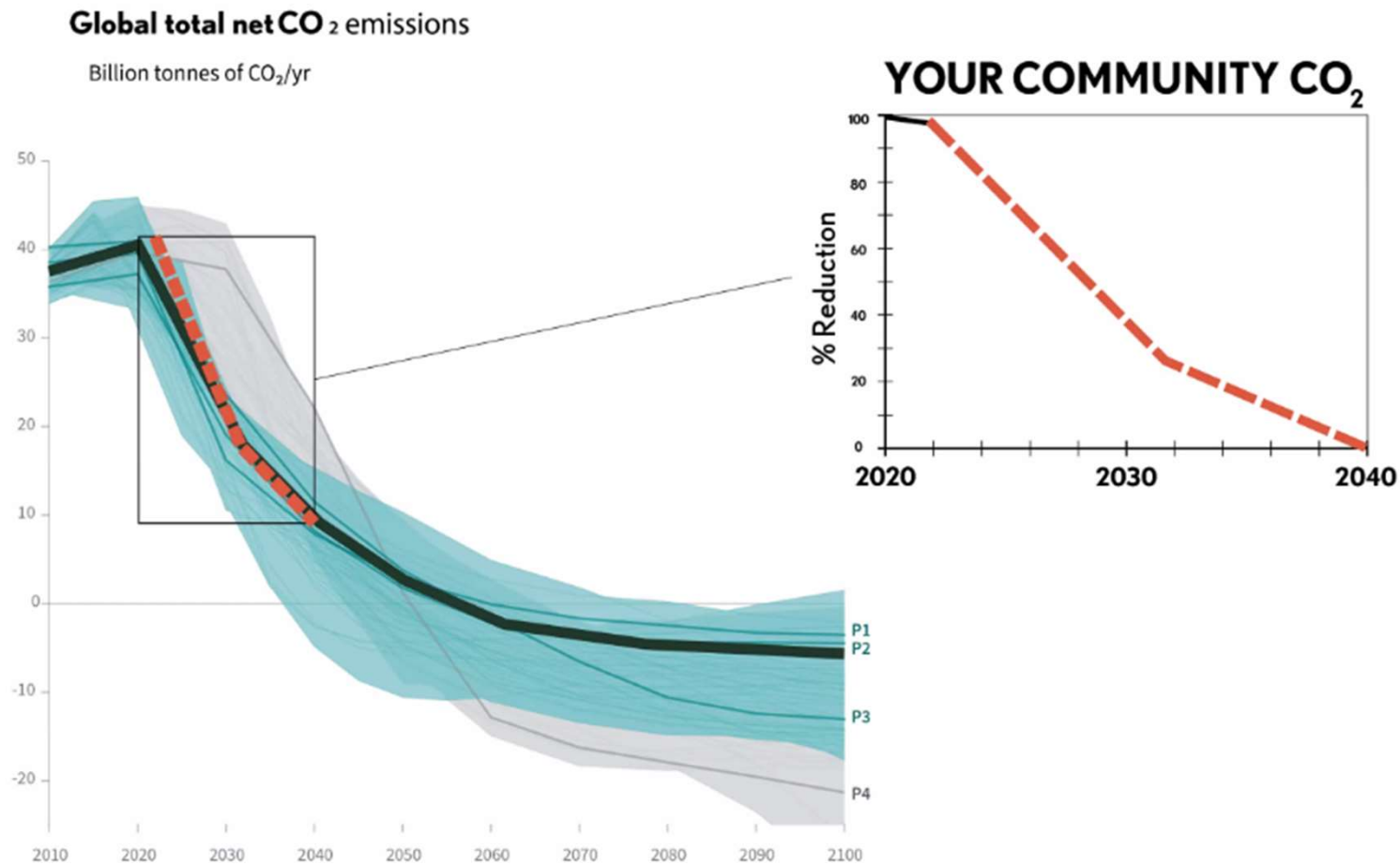
Climate & Energy Plan is for the things we can directly control (corporate emissions).

- Corporate 3,616 tonnes CO<sub>2</sub>e
- Community ~315,000 tonnes CO<sub>2</sub>e





# Our Part in Global Emissions



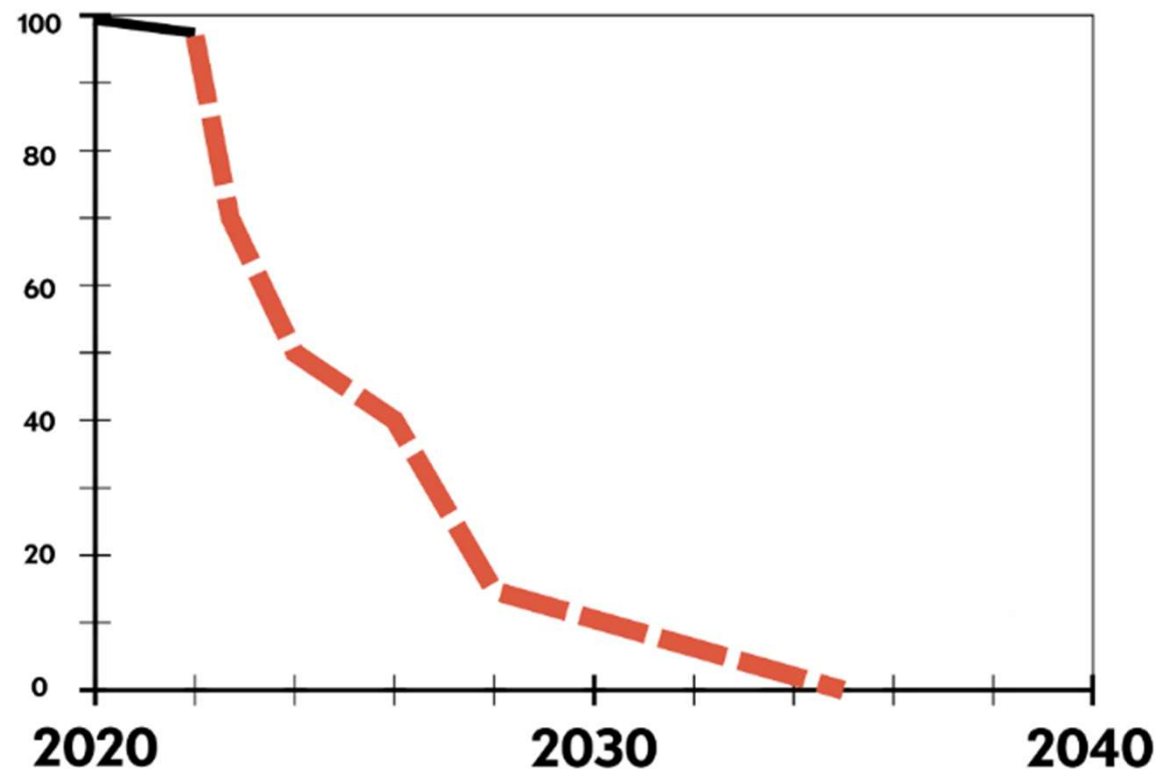
Source:  
Saul  
Griffith,  
Rewiring  
Australia

# Your Household CO2

**"A year ago, my family pledged net-zero 2025. We made a plan.**

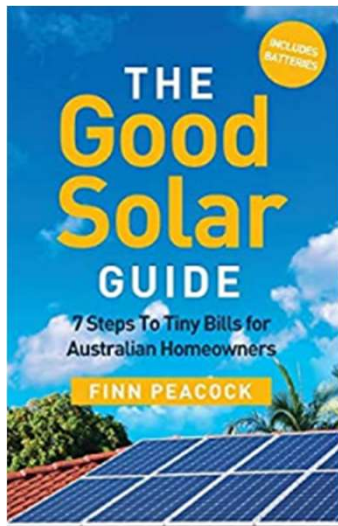
- Get solar now, financed to reduce up-front burden.**
- Electrify the stove, the water, the heating in the next two years.**
- Get a battery in 2024 when the prices have dropped.**
- Get a car in 2025 when the choices are higher and there is more supply and more second hand.**

**After that our banking and composting and eating well and consuming responsibly."**



Source: Saul Griffith, Rewiring Australia

# How to reduce energy & manage heat



Library Event on  
Electric Vehicles,  
solar and batteries



Home energy tool  
kits for loan



Heating/Cooling guides in  
community centres and libraries

# How to reduce waste

- Reduce in first place
- Take the pledge
- Kitchen caddy & food waste
- Tricky items options at depot

TAKE THE  
PLEDGE  
AND WIN!



# How you can reduce petrol use



- Discover walking & cycling trails
- Public transport
- E-scooters



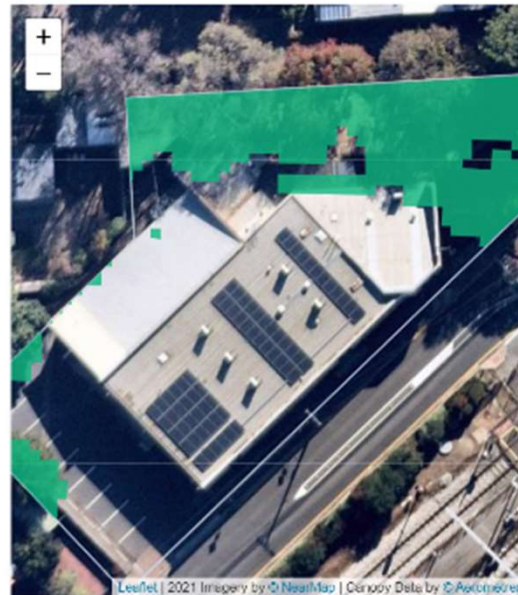
# How you can help green

- Street tree
- Private Gardens
- Win \$80 Tree voucher
- Greening Verges

2018



2021



2018 Canopy Coverage

**28.55%**  
494.00m<sup>2</sup>

2021 Canopy Coverage

**31.98%**  
553.19m<sup>2</sup>

Change

**3.42%↑**  
59.19m<sup>2</sup>

## Canopy cover at your property

For the first time we are providing the percentage of tree canopy cover for your listed property on your quarterly rates notice. This is part of our work to help keep Unley leafy for future generations.

The average private property coverage in April 2021 was **22.34%**

We understand that every property is unique and some have more room than others for trees.

We would like you to consider:

- Do you have space to plant any new trees?
- Is your tree canopy cover above or below the average?

# Working together

[unley.sa.gov.au/climate](https://unley.sa.gov.au/climate)

- Links to personal emissions calculators
- Regardless of if you track your carbon footprint, lots of simple and effective actions you can take.
- Purchase power of individuals makes a difference
- Stay informed - thankyou for coming tonight