

Background Briefing #1

How we power our homes and businesses



What is happening in Unley?

Energy used in homes and businesses is a significant source of greenhouse gas emissions in the City of Unley. Electricity accounts for around 24% of Unley's community emissions, while gas contributes a further 17%. Together, energy use is responsible for more than 40% of emissions generated across our community.

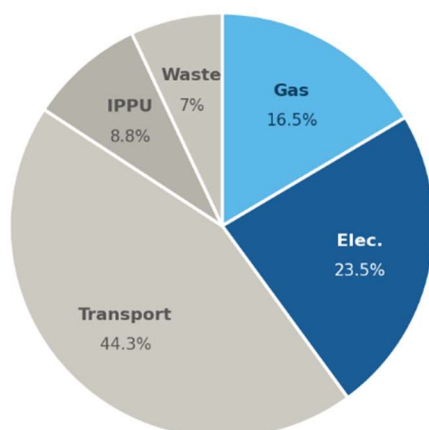
54.5% of households within Unley have rooftop solar¹ and here in SA over 11% of homes now have residential batteries².

Electricity will become an increasingly low-emissions energy source as South Australia continues its transition to renewable energy. The State Government has set a target of achieving 100% net renewable electricity generation by 2027.

Many homes and businesses in Unley were built before modern energy efficiency standards were introduced. As a result, some buildings can be expensive to heat or cool, particularly during periods of extreme weather.

As South Australia's energy system changes, there is growing interest in how homes and businesses can improve energy efficiency, generate and store renewable energy, and reduce reliance on fossil fuels such as natural gas.

City of Unley 2023/24 Community Emissions Profile: **Energy**



23.5% ELECTRICITY BREAKDOWN

Residential	10%
Commercial	12%
Industrial	2%

16.5% GAS BREAKDOWN

Residential	6%
Commercial	5%
Industrial	5%

Source: Ironbark Sustainability, City of Unley community emissions profile 2023/24. Methodology available at snapshotclimate.com.au

¹ Source: Australian PV Institute

² Source: SA Power Networks

Why does this matter?

Reducing energy emissions is an important element of working towards a low-emission, climate resilient future.

The way we power our homes and businesses affects more than greenhouse gas emissions. Energy-efficient homes and buildings are often more comfortable, healthier and cheaper to run. Lower energy use can help households and businesses manage rising energy costs while reducing emissions.

As temperatures increase and extreme heat events become more common, improving the performance of homes and buildings will become increasingly important. Extreme heat is Australia's deadliest natural disaster. Many of the actions that reduce emissions can also increase resilience to hotter conditions.

Opportunities for action

There are many ways communities can power homes and businesses to improve comfort, affordability and heat resilience, while reducing emissions.

Improve energy efficiency

Reduce energy demand through energy efficient appliances, insulation, draught proofing, shading, smart energy management and building upgrades.

Electrify homes and businesses

Replace gas-powered appliances and equipment with efficient electric alternatives powered by renewable energy for cooking, heating and hot water.

Generate renewable energy

Increase the use of rooftop solar and other renewable energy technologies.

Store and manage energy

Use batteries and other technologies to store renewable energy and reduce demand during peak periods.

Support informed choices

Access to independent information and support that helps households and businesses understand energy options and make informed decisions.

Advocate for a fast and fair transition

Advocate for State and Federal government action to accelerate the clean energy transition, lift energy efficiency standards for buildings and improve access to renewables so the benefits reach everyone.

Achieving a low-emissions and climate-resilient Unley will require action from households, businesses, community groups, Council and other levels of government. Everyone has a role to play, and progress is most effective when we work together.



Background Briefing #2

How we move around



**Reducing
Energy
Emissions**



**Reducing
Transport
Emissions**



**Reducing
Waste
Emissions**



**Preparing for
a Changing
Climate**

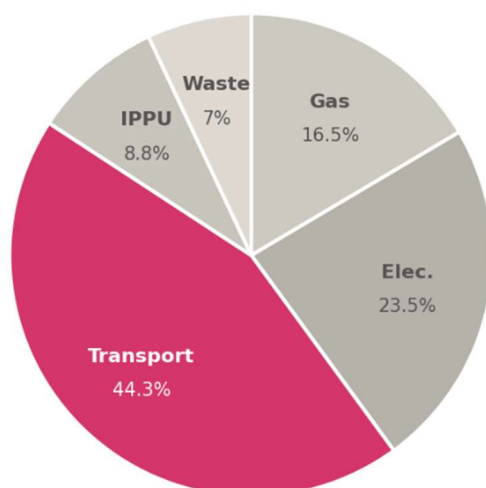
What is happening in Unley?

Transport is the largest source of community greenhouse gas emissions in Unley, accounting for approximately 44% of total emissions. Most transport emissions come from the use of private vehicles powered by petrol and diesel with residential transport responsible for 27% of community emissions.

Over 90% of households own at least one motor vehicle and more than half of us drive to work (compared to 7% public transport, 4.5% riding and 4% walking)³. Electric vehicles are growing in popularity and make up an increasing percentage of new car sales (10.4% of new car sales in SA in early 2026)⁴.

The way people travel is influenced by many factors, including where they live, work, study, shop and access services. Unley is located close to the Adelaide CBD, relatively flat, with many daily trips being short. Many destinations can be reached by walking, cycling or public transport, while others will continue to rely on private vehicles. This creates opportunities to explore different transport choices and how people move around the city.

City of Unley 2023/24 Community Emissions Profile: **Transport**



44.3% TRANSPORT BREAKDOWN

Residential	27%
Industrial	16%
Commercial	1%

Source: Ironbark Sustainability, City of Unley community emissions profile 2023/24. Transport emissions use Google data metrics and are attributed to Unley if the trip originates or terminates in Unley. Commuters who pass through are not counted. Full methodology available at snapshotclimate.com.au.

³ Source: 2021 census data

⁴ Source: www.aaa.asn.au/research-data/electric-vehicle

Why does this matter?

Reducing transport emissions is an important element of working towards a low-emission, climate resilient future.

The way we move around affects more than greenhouse gas emissions. Transport influences traffic congestion, air quality, public health, household costs and access to jobs, services and community activities. It also shapes how people experience their neighbourhoods and local centres.

People have different transport needs and circumstances. A successful approach will need to consider convenience, safety, affordability and accessibility.

Reducing transport emissions can support a healthier, more connected and more liveable community.

Opportunities for action

There are many ways communities can reduce transport emissions while maintaining mobility and choice.

Reduce the need for trips

Support local services, neighbourhood centres and ways of working that reduce travel demand.

Shift to active transport

Increase walking, cycling and other active travel options for suitable trips.

Increase public transport use

Find ways to make public transport a more attractive and convenient option.

Transition to low-emission vehicles

Accelerate the uptake of electric vehicles and other low-emission transport technologies.

Support behaviour change

Help people understand the benefits and options available for lower-emission travel.

Advocate for systems change

Advocate for State and Federal government changes that improve active transport and the transition to low emissions transport options for all people in our community.

Achieving a low-emissions and climate-resilient Unley will require action from households, businesses, community groups, Council and other levels of government. Everyone has a role to play, and progress is most effective when we work together.



Background Briefing #3

What we buy and how we dispose of things



**Reducing
Energy
Emissions**



**Reducing
Transport
Emissions**



**Reducing
Waste
Emissions**



**Preparing for
a Changing
Climate**

What is happening in Unley?

Waste accounts for approximately 7% of Unley's community greenhouse gas emissions.

When we think about waste emissions, it is easy to focus on what ends up in our bins. However, emissions are generated throughout the lifecycle of the products we buy, use and dispose of. This includes the extraction of raw materials, manufacturing, packaging, transportation, consumption and disposal.

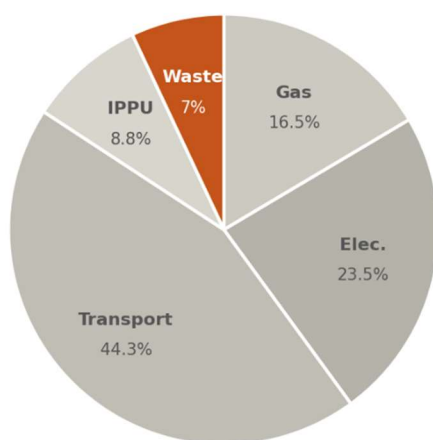
Many of the things we buy are discarded long before they reach the end of their useful life.

In Australia, the average household throws away 265kg of food waste (valued at over \$2,500) each year.⁵ Food waste and organic materials sent to landfill generates methane, a powerful greenhouse gas. Here in Unley, the average landfill bin contains 46% compostable materials and 15% recyclables, resulting in higher disposal costs and otherwise valuable materials being wasted.

Many of the things we buy are discarded long before they reach the end of their useful life.

While waste contributes a smaller share of Unley's emissions than energy or transport, the choices we make about what we buy, use and throw away have environmental impacts that extend well beyond council boundaries.

City of Unley 2023/24 Community Emissions Profile: **Waste**



7% WASTE BREAKDOWN

Residential	3%
Comm. & Industrial	3%
Industrial	0.9%
Const. & Demolition	0.2%

Source: Ironbark Sustainability, City of Unley community emissions profile 2023/24. Methodology available at snapshotclimate.com.au

⁵ Source - The Great Unwaste

Why does this matter?

Reducing waste emissions is about making better use of the resources we already have.

A circular economy aims to keep products and materials in use for as long as possible through reducing, reusing, repairing, sharing and recycling. This can help reduce emissions, lower costs and reduce pressure on natural resources.

Reducing waste is not only about what we throw away. It is also about making thoughtful choices about what we buy and how we use it.

Many people in Unley already take positive actions such as choosing durable products, buying second-hand, recycling, composting, avoiding single use plastics, and re-homing unwanted goods. Building on these behaviours can help reduce waste and create a more resource-efficient community.

Opportunities for action

There are many ways communities can reduce waste emissions and make better use of resources.

Avoid unnecessary consumption

Reduce waste by purchasing only what is needed, buying second hand or choosing products designed to last.

Reuse, repair and share

Extend the life of products through repair, reuse, borrowing and sharing.

Improve recycling

Support the correct sorting and recycling of materials to recover valuable resources.

Reduce food and organic waste

Prevent food waste and increase the recovery of organic materials.

Support a circular economy

Encourage systems and behaviours that keep materials in use for longer and minimise waste generation.

Advocate for bigger changes

Support advocacy for better product stewardship, packaging, ability to repair and other elements of sustainable consumption and disposal.

Achieving a low-emissions and climate-resilient Unley will require action from households, businesses, community groups, Council and other levels of government. Everyone has a role to play, and progress is most effective when we work together.



Background Briefing #4

Keeping our properties and neighbourhoods cool, green and resilient



**Reducing
Energy
Emissions**



**Reducing
Transport
Emissions**



**Reducing
Waste
Emissions**



**Preparing for
a Changing
Climate**

What is happening in Unley?

Heat, drought, flooding and storm events have always been part of life in Unley. Climate change is making many of these events more frequent and intense.

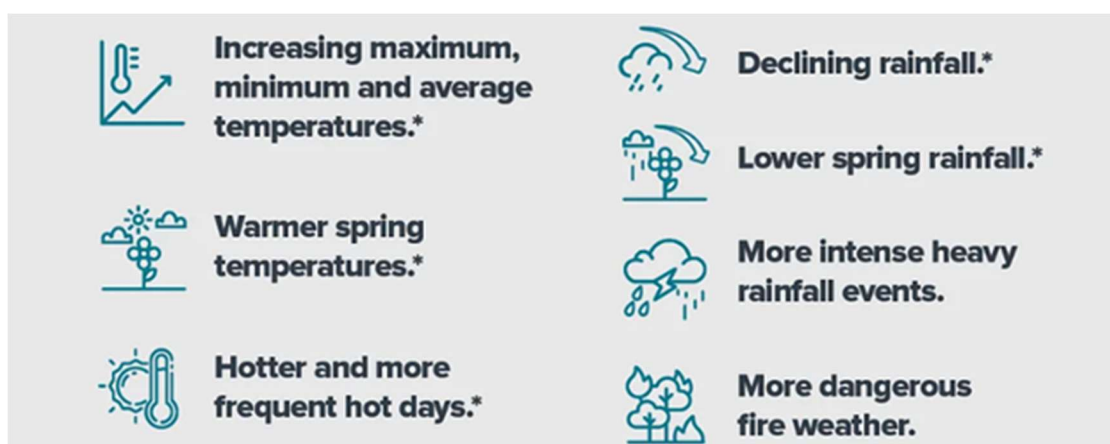
Climate projections indicate Adelaide is expected to experience hotter average temperatures, more very hot days, and more extreme weather events in the future. These changes are likely to increase pressure on people, homes, infrastructure and natural systems. Increased extreme weather events may impact business continuity (supply chain interruptions), insurance costs, worker availability and reduced economic activity as people avoid the weather extremes or Unley experiences flow-on impacts from other regions.

Unley is also expected to become drier on average, with lower annual rainfall and more frequent drought condition. At the same time, when rainfall does occur it is likely to be more intense, increasing risk of flooding and severe storms.

Climate change may also affect many of the things people value about Unley, including tree-lined streets, parks and open spaces, community facilities, local businesses and neighbourhood character. As a highly urbanised area, Unley can experience higher temperatures due to the concentration of buildings, roads and hard surfaces. Access to shade and green spaces will play an increasingly important role in maintaining community wellbeing.

Climate change will affect everyone differently. Some people, including older residents, young children and those with existing health challenges, may be more vulnerable to climate impacts.

City of Unley climate trends projected to 2050 and beyond indicate:



Source: Department for Environment and Water (2022). Guide to Climate Projections for Risk Assessment and Planning in South Australia 2022, Government of South Australia, through the Department for Environment and Water, Adelaide.

Why does this matter?

Preparing for climate change is about protecting what we value most about our community.

A changing climate can affect health, comfort, safety, biodiversity, infrastructure, local businesses and the places where people gather and connect.

Some members of the community may be more vulnerable to climate impacts than others, including older people, young children, people living with disability and those experiencing social or economic disadvantage.

Building resilience helps communities identify opportunities, respond to challenges, recover more quickly from extreme weather events and adapt to changing conditions over time.

Communities that are connected, informed and prepared are better able to cope with future challenges. Taking action now can help ensure Unley remains a liveable, healthy and attractive place for current and future generations.

Opportunities for action

There are several ways communities can prepare for a changing climate.

Keep neighbourhoods cool and green

Protect and enhance tree canopy, green spaces and shade across the city. Capture and reusing rain water as well as planning for drier periods.

Improve the resilience of homes and buildings

Support buildings that are better able to cope with heat and extreme weather.

Strengthen community connections

Build networks and support systems that help people prepare for and respond to climate impacts.

Prepare infrastructure and services

Ensure community infrastructure and essential services can continue to function during extreme events.

Build community preparedness

Support residents to understand climate risks and prepare for future challenges and emergencies.

Support informed and equitable adaptation

Help all members of the community understand climate risks and access the support needed to adapt to changing conditions.

Advocate for stronger protections

Advocate for changes to State Government planning, development and tree protection rules that help keep neighbourhoods cool, green and resilient for all.

Achieving a low-emissions and climate-resilient Unley will require action from households, businesses, community groups, Council and other levels of government. Everyone has a role to play, and progress is most effective when we work together.

