

Our Climate Emergency Response  
From 2020 to 2030  
*A place where people and nature thrive*

ensuring  
**our**  
future | **2020**



# Climate change - A Mornington Peninsula Perspective

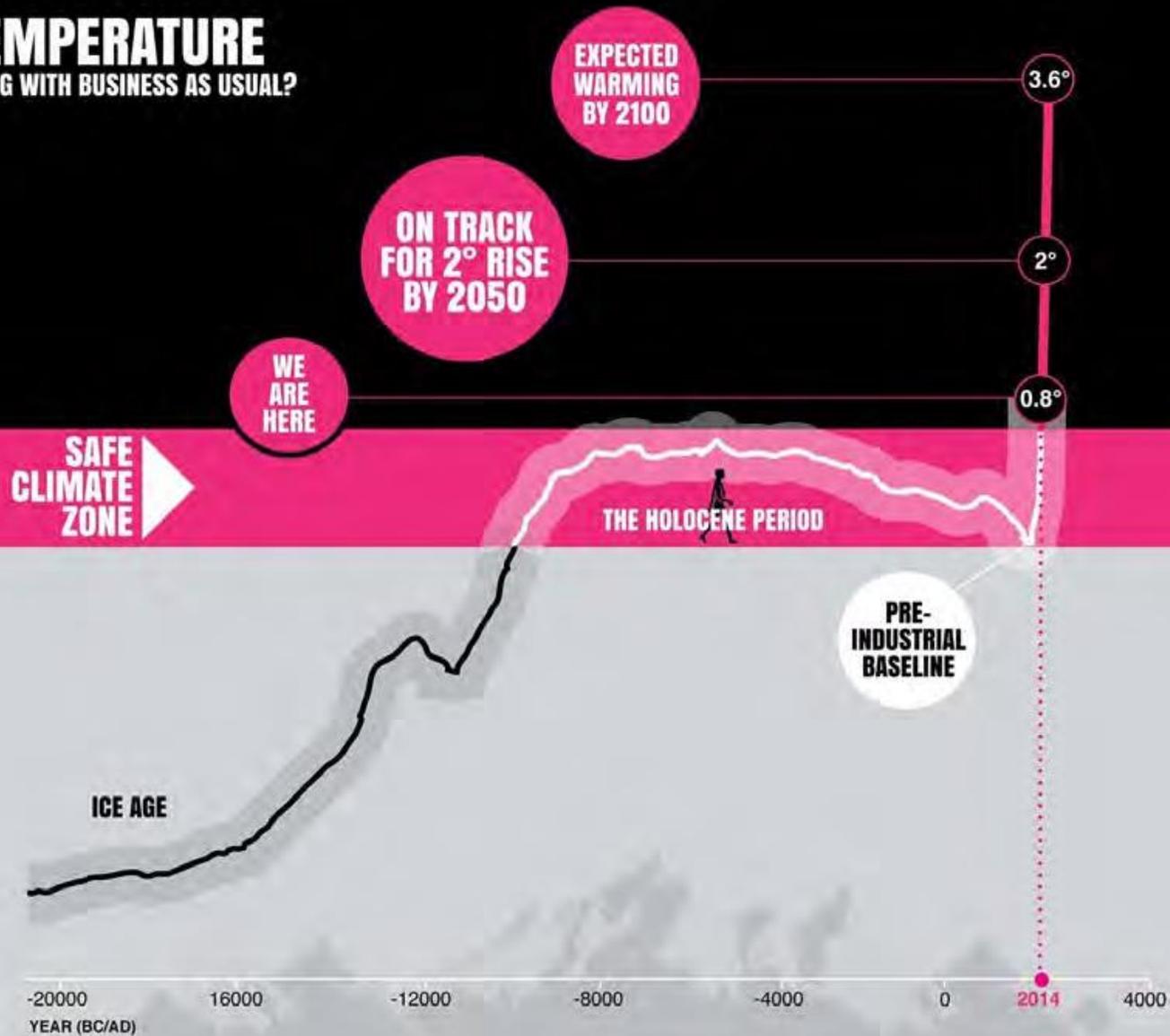
Jacqui Salter

Community Environmental  
Education Coordinator



# GLOBAL TEMPERATURE

HOW ARE WE TRACKING WITH BUSINESS AS USUAL?



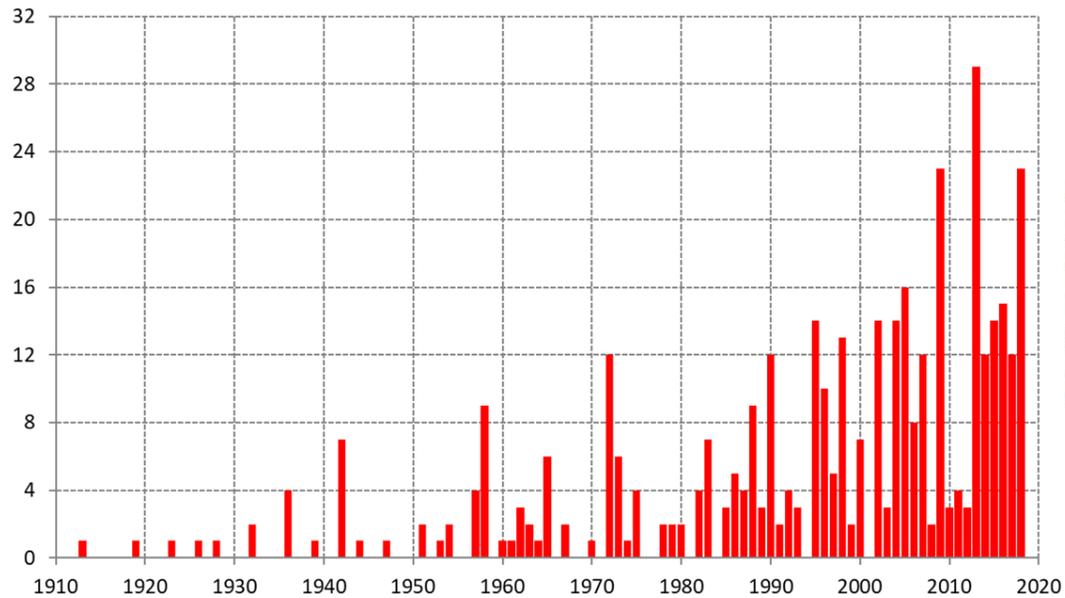
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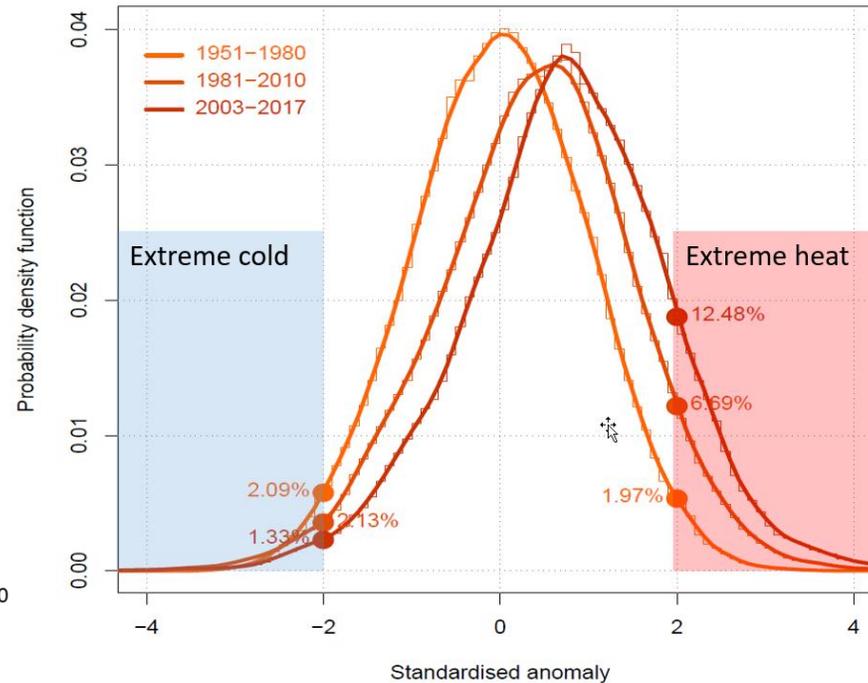
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# Climate Change

Number of extreme days in Australia per year



The range of typical temperatures is shifting



Source: BoM

# GREATER MELBOURNE HAS BEEN GETTING WARMER AND DRIER. IN THE FUTURE THE REGION CAN EXPECT:



temperatures to continue to increase year round



more hot days and warm spells



fewer frosts



less rainfall in winter and spring



more frequent and more intense downpours



harsher fire weather and longer fire seasons



rising sea level



Increased frequency and height of extreme sea level events



warmer and more acidic seas

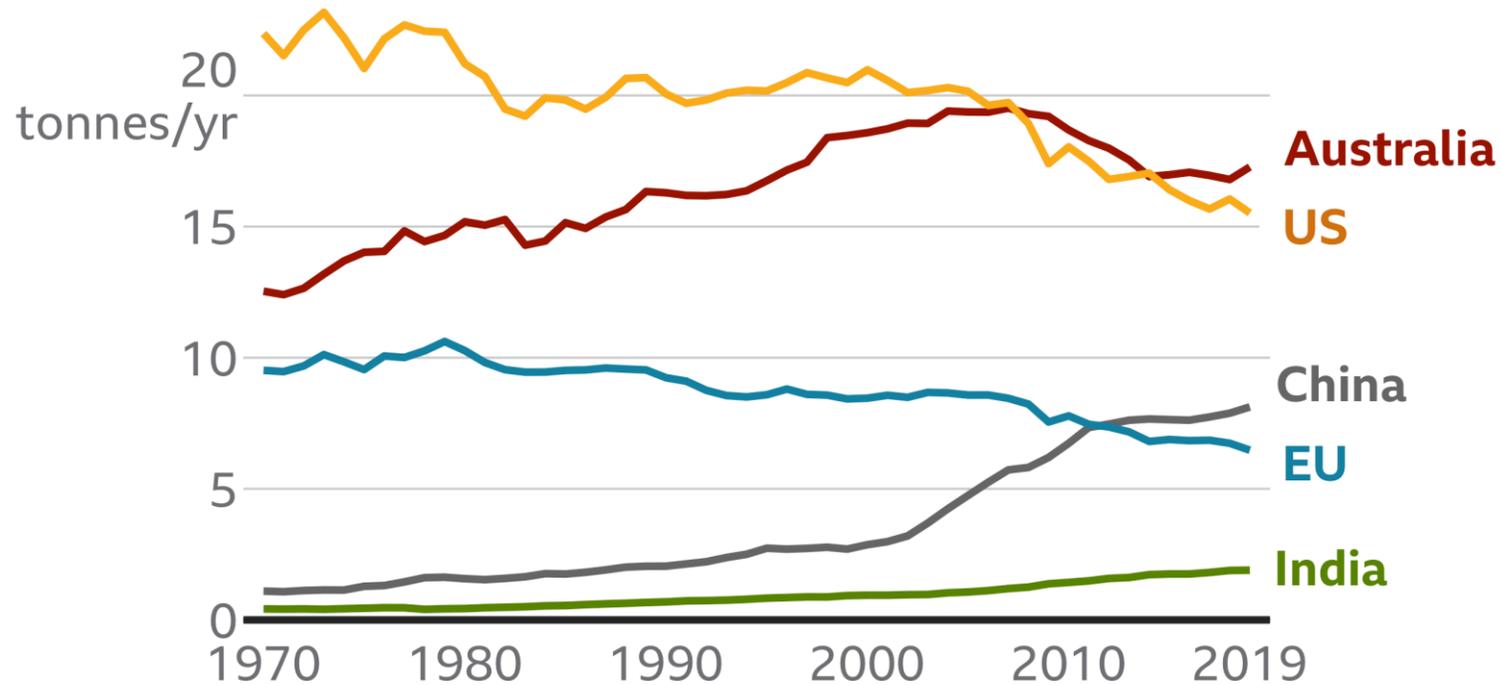


# Impacts of climate change on the Peninsula



# Australia has higher emissions per person than many countries

Per capita CO2 emissions in selected countries



EU includes UK

Source: EC, Emissions Database for Global Atmospheric Research



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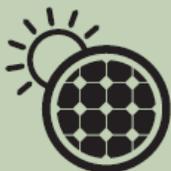
Leadership and governance



Increased climate advocacy



Zero carbon energy



Resilient and adaptive community



Sustainable transport and travel



Sustainable land use and environmental restoration



Circular economy and zero waste



## Our Community Emissions

In 2018, community emissions were calculated as 2.07 million tonnes of CO<sub>2</sub>-e.



Electricity consumption  
(52.5%)



Transport  
(31%)



Natural gas consumption  
(8.4%)



Industrial processes  
(4.9%)



Waste  
(2.6%)



Agriculture, forestry and other land use  
(0.5%)

*Emissions by sector for the Mornington Peninsula (2018 BASIC+ Inventory).*



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# Climate Change & the Emergency



One peak goal:  
By 2040 we want net  
zero-emissions right  
across the Peninsula



# Mornington Peninsula Shire's Climate Emergency Plan

**By 2040**

we want net zero-emissions, right across the Peninsula.

**One peak goal**

**7 summit targets**

**21 action steps**

to restore a safe climate pathway (with 35 sub-targets to keep us on track)

Leadership and governance



Increased climate advocacy



Zero carbon energy



Resilient and adaptive community



Sustainable transport and travel



Sustainable land use and natural environment



Circular economy and zero waste



## Baseline

**2018**

Use past level to track our reductions

## 2030 Plan Targets

**2025**

Reduce community emissions by 30%

**2030**

Reduce community emissions by 65%

## Long Term Targets

**2035**

Reduce community emissions by 80%

**2040 Peak Goal**

Reach net zero-emissions Shire-wide



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## Summit target

200 MW  
local renewable  
electricity  
(2030)

2030

50% of all Peninsula  
buildings have  
solar installed  
Residential and  
business carbon  
emissions down 70%

2025

2023

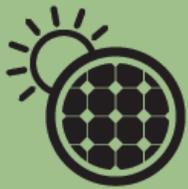
Shire to source  
all electricity from  
renewable generation

2021

Shire to achieve carbon  
neutral accreditation

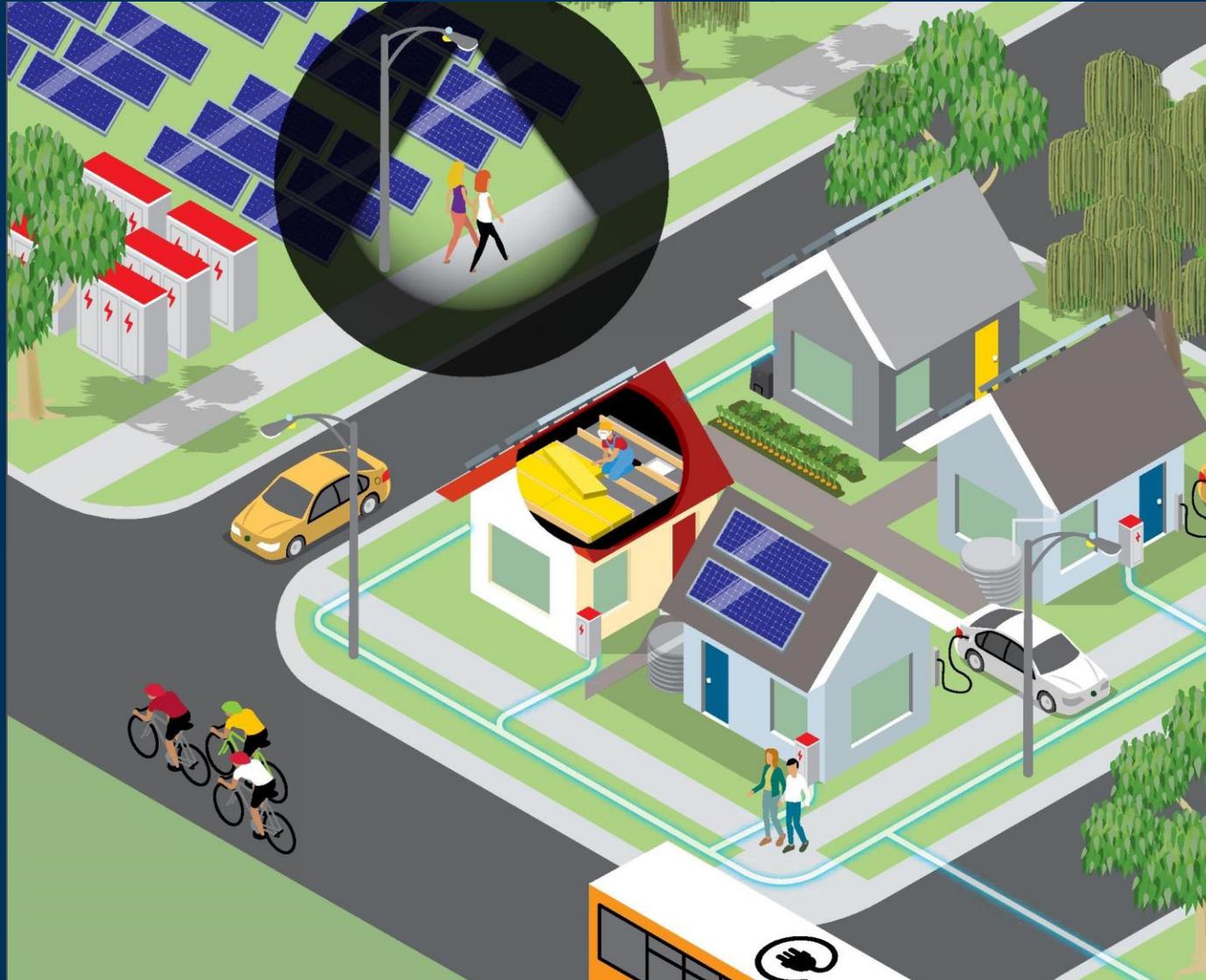
Each year

The Seven  
Summits



Zero carbon  
energy

# Zero Carbon Energy



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# Zero Carbon Energy – Shire emissions



We have just achieved carbon neutral certification!

Achieved through:

- Energy efficiency works in Shire facilities such as lighting and appliance upgrades
- Replacing over 10,000 inefficient street lights with LED alternatives
- Installing solar panels on over 40 buildings



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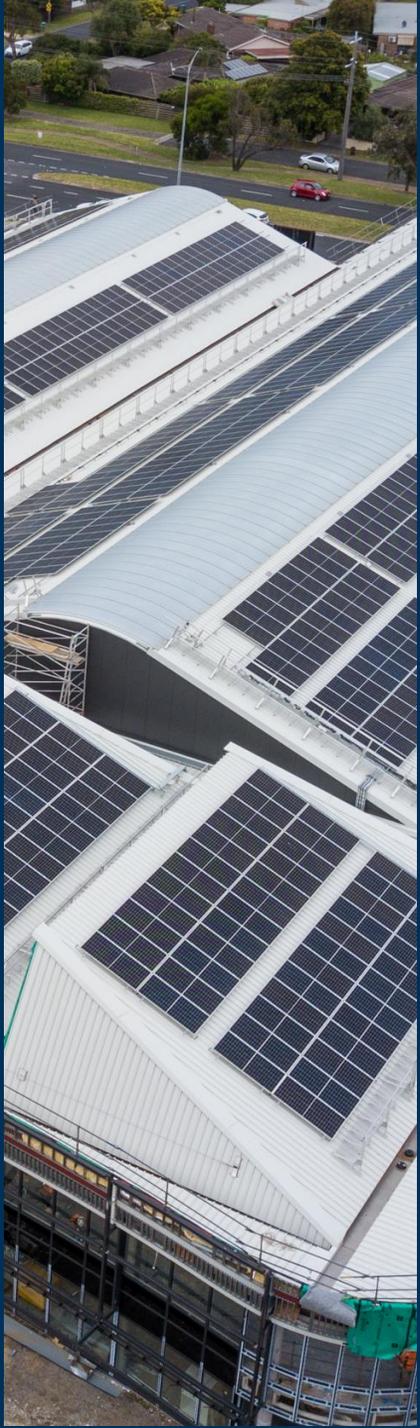


# Zero Carbon Energy - Community

- Bulk Buy – residential energy efficiency, good prices and vetted suppliers
- Small Business Energy Saver Program
- Energy Advice Service
- Energy Savvy Upgrades
- Monitoring power use – Home energy kits
- Community Energy Initiative



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# Bulk Buy

- Residential energy efficiency, good prices and vetted suppliers

## **Includes:**

- Solar panels (rooftop or free standing)
- LED lighting and motion sensors
- Heating, cooling and ventilation
- Refrigeration
- Water and building efficiency upgrades
- Waste management
- Bushfire resilience measures e.g, metal gutters, upgrading roofs, installing mesh guard on windows and doors, sprinkler system, hoses or emergency water supply.
- Drought and water efficiency e.g, irrigation



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# Small Business Energy Saver Program

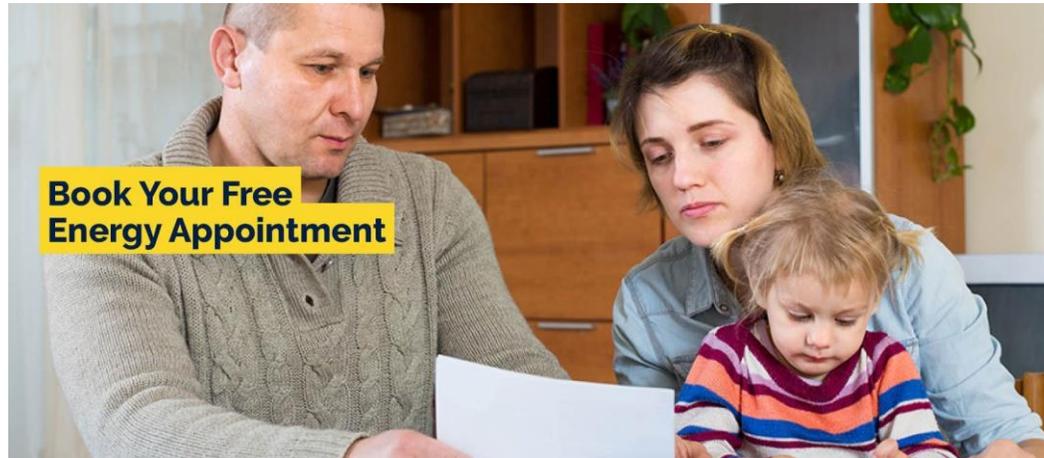
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# Energy Advice Service

- The Shire has partnered with the Australian Energy Foundation to provide residents with FREE energy advice to help reduce energy usage.
- Contact AEF for a free 20-min phone consultations to avoid bill shock. Call **1300 23 68 55** or email [advice@aef.com.au](mailto:advice@aef.com.au)



# Energy Advice Service – Topics:

Solar Panels & Battery Storage

Draught-Proofing

Insulation

Heating & Cooling

Hot Water

Windows

Lighting

Electricity Bills

Referrals to fully vetted suppliers



# Energy-savvy upgrades

- Offers subsidized energy efficiency and renewable energy upgrades to households struggling to pay energy bills
- Will deliver 700 energy assessments and complete 62 upgrades to most needy
- Householders will pay \$100 for assessment and a co-contribution of 50% for upgrades
- Upgrades include sealing draughts, improving insulation and upgrading appliances to more energy efficient models



# Environmental Upgrades Finance Program (EUF)

- EUF is a long term, low interest loan for businesses to upgrade the energy, water or waste efficiency of their building.
- Finance can also be used to make businesses more resilient to the impacts of climate change.



# Home energy kits

Available for libraries after 1 Dec  
Contains:

- Energy Saving Thermometer
- Mini non-contact thermometer
- Water Flow Measuring cup
- PowerMate Lite energy meter
- Thermal Imaging Camera



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## Summit target

Transport emissions down 50% from 2018 levels (2030)

2030

Shire fleet zero emissions

Major economic hubs more accessible by active transport

Smart tech public transport solutions introduced

2025

EV charging available at major hubs

Increase bike and pedestrian traffic by 10%

2023

Daily public transport usage doubled

2021

Each year

The Seven Summits

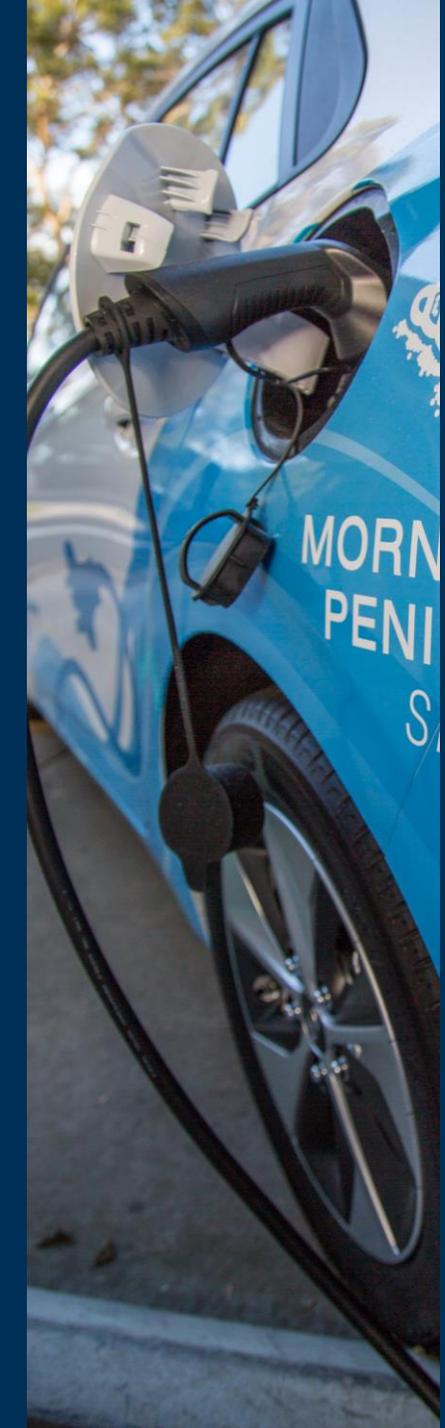


Sustainable travel and transport

# Sustainable Travel and Transport



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# Sustainable Travel and Transport

- Electric Vehicles into our fleet
- EV charging infrastructure
- Integrated Transport Strategy
- Better buses campaign
- Active transport infrastructure
- Open space planning
- Smart Technology Trials – Rye, Mornington
- Work from home – activating work space hubs



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# Reducing water use

The Shire has reduced the use of drinking water by 60% since 2002 by:

- using recycled water for sports grounds and for road maintenance;
- Planting drought tolerant grasses on sports fields; and
- Incorporating water efficient design features to buildings and gardens.

# Summit target

Zero waste  
to landfill;  
100% reuse  
(2030)

2030

Cut household waste down 20%

Cut business waste down 20%

22,829 tonnes recycled waste used in civil or construction works

2025

2023

2021

FOGO service for residents

Each year

The Seven Summits



Circular economy and zero waste

# Circular Economy and zero waste

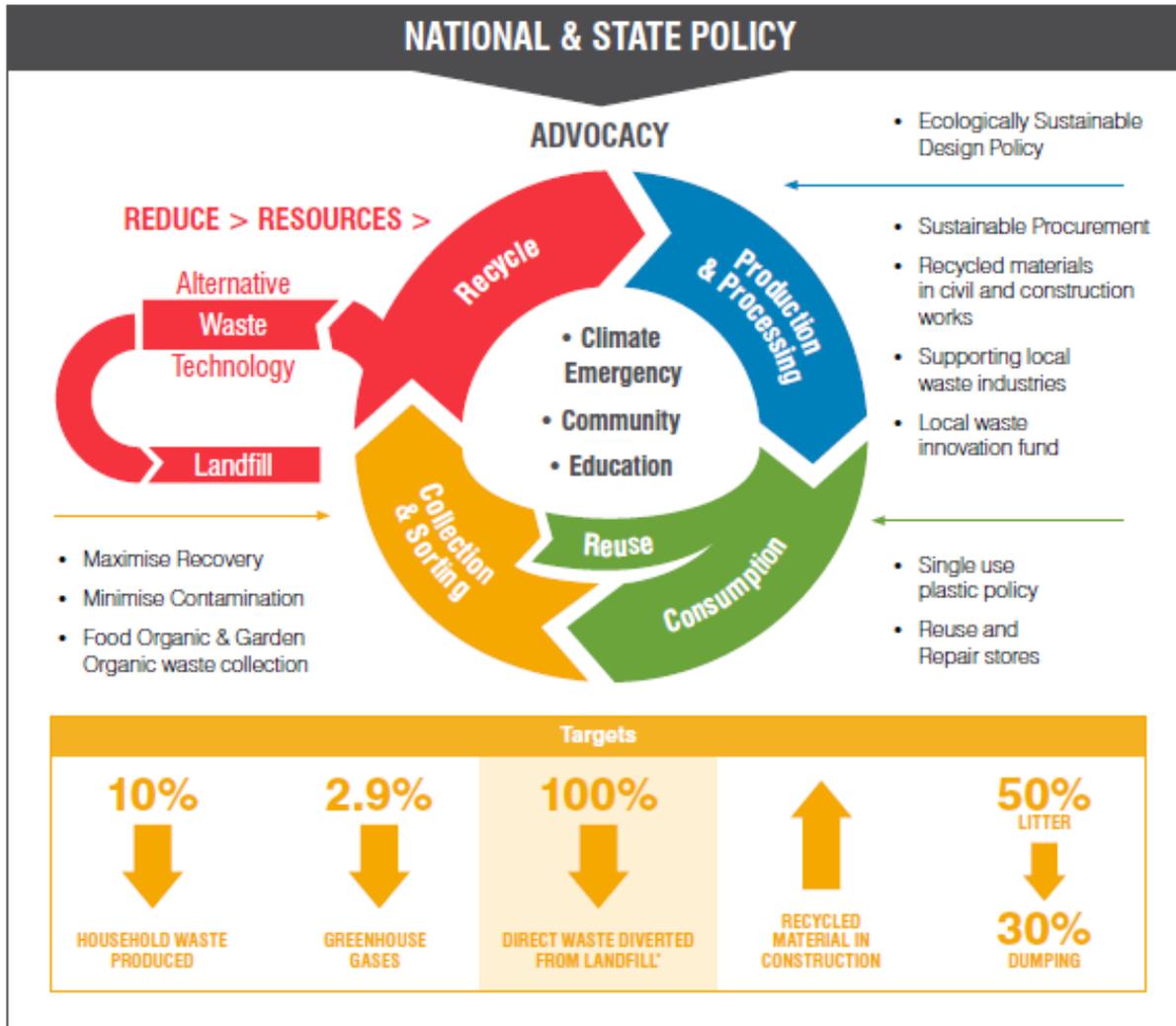


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# 6. Beyond Zero Waste Strategy

## Our Waste Future

To reach Zero Waste by 2030, Council will shift to a circular economy.





# Circular Economy and zero waste

- FOGO – Food Organics, Garden Organics
- Glass recycling – 4-bin system
- Container deposit scheme
- Single-use plastic free policy
- Greening the supply chain
- Materials flow analysis – encouraging reuse, local recycling, reduce waste
- Education programs, beach patrols
- Recycled content in roads and footpaths



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# ESD policy

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- Council recently adopted the ESD Policy for council buildings and civil works
- Sets strong objectives for all Shire construction projects, including buildings, roads, open spaces and all furniture and fit-outs.
- Considers energy, water, well-being, transport, waste, materials, biodiversity, resilience and education.
- Entire lifecycle of projects
- Will reduce operating costs and greenhouse gas emissions.



# Climate Action Grant

- Develop partnerships between the Shire and community groups to deliver emission reductions to achieve the overarching goal of our Climate Emergency Plan of achieving net zero emissions by 2040
- Next round February 2022

Small grants: \$1000 to \$5000

Large grants: \$5,000 to \$10,000



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# Climate change – How you can help



# Hierarchy of Control

1. Avoid Emissions
2. Minimise Emissions
3. Switch fuel sources
4. Offset remaining emissions



# 1. Avoid emissions

- Only turn on lights when necessary
- Only heat and cool when necessary
- Heat to a lower temperature in winter and cool to a warmer temperature in summer
- Insulate your buildings



## 2. Minimise emissions

Become more energy efficient

- Changing your lighting to energy efficient LED fitting
- Use less hot water
- Upgrading hot water systems to heat pumps, or using instant electric hot water if suitable instead of heating and storing water.
- Upgrading old air conditioning equipment to new efficient split systems.
- Using energy efficient appliances.



### 3. Switching fuel sources

- Install solar panels to generate clean power on site.
- You can also purchase GreenPower from most electricity retailers.
- You may also switch from gas to electricity, for example replacing gas heating and gas hot water with electric alternatives that can then be offset by renewable energy.



## 4. Offsetting residual emissions

The last step is offsetting the residual or remaining emissions.  
e.g, planting trees



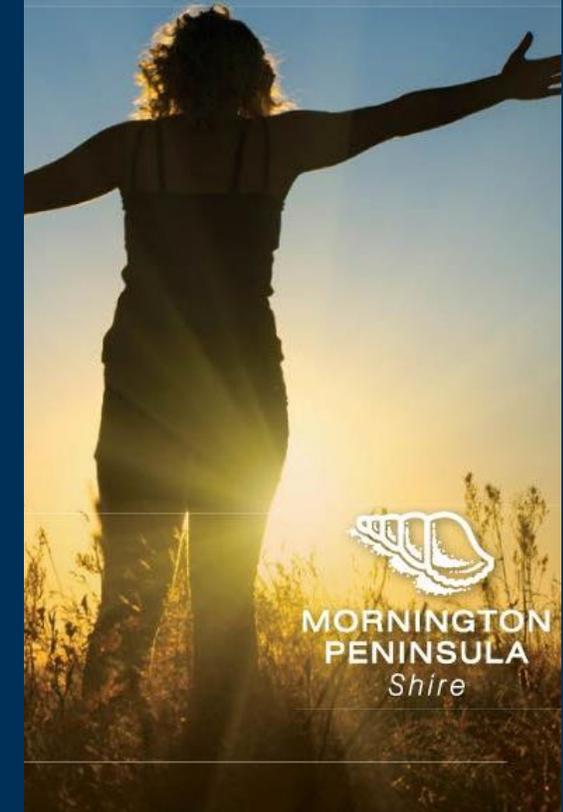
## More info?

- Free energy advice from AEF - <https://www.aef.com.au/>
- Get a home assessment and suggestions on how to improve with the Victorian Residential Energy Scorecard (VRES):  
<https://www.victorianenergysaver.vic.gov.au/save-energy-and-money/get-a-home-energy-assessment>
- Interested in solar or batteries? Check out Solar Vic for information on rebates and zero interest loans:  
<https://www.solar.vic.gov.au/>
- If you would like further advice on reducing your energy and water use, contact the [Eco Living Display Centre](#), for a personal Energy Efficiency consultation  
[ecolivingdisplaycentre@mornpen.vic.gov.au](mailto:ecolivingdisplaycentre@mornpen.vic.gov.au)

Contact: Jacqui Salter, Community Education Officer  
Jacqueline.salter@mornpen.vic.gov.au

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QUESTIONS and THANK YOU

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