

# Sustainable Wollongong 2030

## A Climate Healthy City Strategy



*'What the earth has to provide must be saved so we can hand down to the future generations, so they can learn how to care for what we have and generate all species.'* Lorraine Brown and Narelle Thomas

## Sustaining life

Painted by Lorraine Brown and Narelle Thomas

Years ago, in many parts of the world there were no shops to supply food, only hunters and gatherers.

For thousands of years our people, like many Indigenous people of the nations had to live by the seasons.

Their skills were remarkable and their knowledge of the land impeccable. If they didn't know the seasons, their foods and how to prepare the food they would have starved.

The most important part of keeping and maintaining life was to never take more than you needed.

To sustain life you have to care for your land – your country – never waste.

What the earth has to provide must be saved so we can hand down to the future generations, so they can learn how to care for what we have and generate all species.

Council commissioned this painting to represent the traditional Aboriginal perspective of sustainability and our Community Strategic Plan vision.

'From the mountains to the sea, we value and protect our environment'



## *Vision:*

*Together, we're creating a healthy and sustainable future for all. Wollongong is a thriving low waste, low emissions city, in harmony with its environment.*



## Acknowledgement of Country

We acknowledge and pay respect to the Traditional Custodians of the Illawarra region, the Dharawal People. We acknowledge that the lands we live and work upon are Aboriginal lands. We recognise the important connection that the local Aboriginal people have with the land and the environment in which they live, it is a connection that goes beyond the features and physical attributes of a place. We acknowledge how Aboriginal people lived off the land and how important it was to keep the environment preserved, so it could continue to provide food, medicine and a connected relationship that is intrinsic to the culture and identity of our local Aboriginal peoples and culture.

We also pay respect to Elders past, present and those emerging. We would also like to extend our acknowledgement and pay respect to other Aboriginal people that are off country and have decided to call our beautiful region home.

In celebration of unity, culture, both traditional and contemporary, we acknowledge the rich history of our local Aboriginal heritage.



## Glossary of terms and acronyms

CO<sub>2</sub> Carbon Dioxide

CO<sub>2</sub>e Equivalent tonnes of carbon dioxide. The universal unit of measurement to indicate the global warming potential (GWP) of each greenhouse gas (GHG), expressed in terms of the GWP of one unit of carbon dioxide. It is used to evaluate the climate impact of releasing (or avoiding releasing) different GHGs on a common basis.

CPP Cities Power Partnership

CSP Community Strategic Plan

DCP Development Control Plan

ESD Ecologically Sustainable Development

EV Electric vehicle

FOGO Food Organics Garden Organics

GCoM Global Covenant of Mayors for Climate and Energy

GDP Gross Domestic Product

GHG Greenhouse Gas

GRP Gross Regional Product

IPCC Intergovernmental Panel on Climate Change

ISJO Illawarra Shoalhaven Joint Regional Organisation of Councils

kWh Kilowatt hours is a unit of energy equal to 1000 watt hours or 3.6 megajoules.

LED Light Emitting Diode

LEP Local Environmental Plan

LGA Local Government Area

LSPS Local Strategy Planning Statement

PPA Power Purchase Agreement

PV Photovoltaic

SEPP State Environmental Planning Policy

Supporting Documents Council's strategies and plans that support the delivery of the CSP, Delivery Program and Operational Plan

SDGs United Nations Sustainable Development Goals to create a sustainable global future.

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All key statistics in this Strategy are current as at May 2020 unless otherwise stated.



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*"We can't do this alone -  
as a community we all have  
a role to play in creating  
a sustainable future for  
generations to come."*

**Lord Mayor Councillor  
Gordon Bradbery AM**

**It is my pleasure to present Sustainable  
Wollongong 2030: A Climate Healthy City  
Strategy.**

The strategy outlines how we can work together to create a sustainable future for our city. There are many pathways that we can take to create a sustainable, greener, healthier, cooler and more liveable city for everyone.

The strategy provides the overarching framework and goals to create a sustainable Wollongong, with detailed actions, resourcing and timeframes included in supporting plans.

It re-affirms our long-term commitment to creating a sustainable Wollongong and ensuring that we are resilient as a community and able to adapt to a changing climate.

We will increase tree and vegetation cover across our city, improve biodiversity outcomes, reduce waste to landfill, protect our coasts and estuaries, improve stormwater management and reduce emissions.

As part of this work, Council has set emission reduction targets of net zero by 2030 for our own operations and net zero by 2050 for the community.

We can't do this alone - as a community we all have a role to play in creating a sustainable future for generations to come.

We look forward to working with you to create a Sustainable Wollongong.

**Lord Mayor Councillor Gordon Bradbery AM**



# Executive Summary

From our beautiful beaches and wetlands through to the striking escarpment, Wollongong is a city with unique and diverse natural environments, an attractive destination to residents and visitors alike. Wollongong is home to many unique natural ecosystems, endangered species and communities, as well as over 200,000 residents. As our population grows, we will need to balance the social, economic and environmental needs of our city in order to create a Sustainable Wollongong.

Both Council and our community are committed to creating a sustainable and climate resilient city and this is reflected by community sentiment and in the many and varied supporting documents and programs that we prepare and implement. We recognise that, as a local government leader, we have a moral responsibility to current and future generations to preserve natural resources and minimise our impact on the environment.

This sentiment is also reflected in our Community Strategic Plan (CSP) vision

***From the mountains to the sea, we value and protect our natural environment and we will be leaders in building an educated, creative and connected community.***

and its first goal:

***‘We value and protect our environment’.***

Our community have told us that they are concerned about climate change and supportive of Council being a leader, advocating for and working with all areas of our community to reduce emissions and waste, improve climate resilience and create a sustainable Wollongong. Our Aboriginal community told us that they have traditionally lived in harmony with their environment and these principles of protecting the environment to sustain life are inherent throughout this strategy.

We, as Council, are also participants in a number of global and national initiatives, such as the Global Covenant of Mayors for Climate and Energy (GCoM), Climate Emergency Declaration and Cities Power Partnership (CPP), which help us to drive and guide emission reductions from Council operations, adapt to a changing climate and support the city to do the same.

The Sustainable Wollongong 2030: A Climate Healthy City Strategy (Strategy) outlines our commitment to environmental sustainability for both Council operations and our community. This Strategy identifies pathways to create a sustainable, greener, healthier, cooler and more liveable city.



This Strategy centres around six priority areas and associated goals over the next ten years.

PRIORITY AREA	GOAL
<b>A city whose council shows leadership</b>	Environmental and climate leadership underpins Council decision-making and service delivery which inspires the same in others
<b>A city that works together</b>	Together we protect our environment, reduce emissions and increase our resilience to climate change
<b>A low emissions city</b>	We will achieve net zero emissions by 2030 for Council operations, and together we will achieve net zero emissions by 2050 for the city
<b>A city in harmony with our environment</b>	Our ecosystems and waterways are enhanced, our urban areas are cooler and greener and our community is connected to our natural environment
<b>A low waste city</b>	Our community only take what they need, reuse and recycle what they can and are aware of the resources that they consume
<b>A climate and water resilient city</b>	Our infrastructure and community can adapt to a changing climate and water is valued as a vital natural resource

In order to achieve these goals a suite of high-level actions have been developed that when delivered through our service and operational programs will create a Sustainable Wollongong. To ensure that we achieve our goals in this Strategy, monitoring of the implementation of these actions and progress towards the sustainability outcomes will be undertaken and reported through the

Integrated Planning and Reporting Framework. We are also developing a 'Sustainability Dashboard' to show our progress towards achieving these sustainability outcomes and ultimately achieving our goals. This dashboard will be made available on our website, Administration Building foyer, community facilities and the Sustainable Wollongong and community newsletters.





Wollongong Botanic Garden

# Our City

From our beautiful beaches and wetlands through to the striking escarpment, Wollongong is a city with unique and diverse natural environments, an attractive destination to residents and visitors alike. Wollongong is home to many unique natural ecosystems, endangered species and communities, as well as over 200,000 residents.

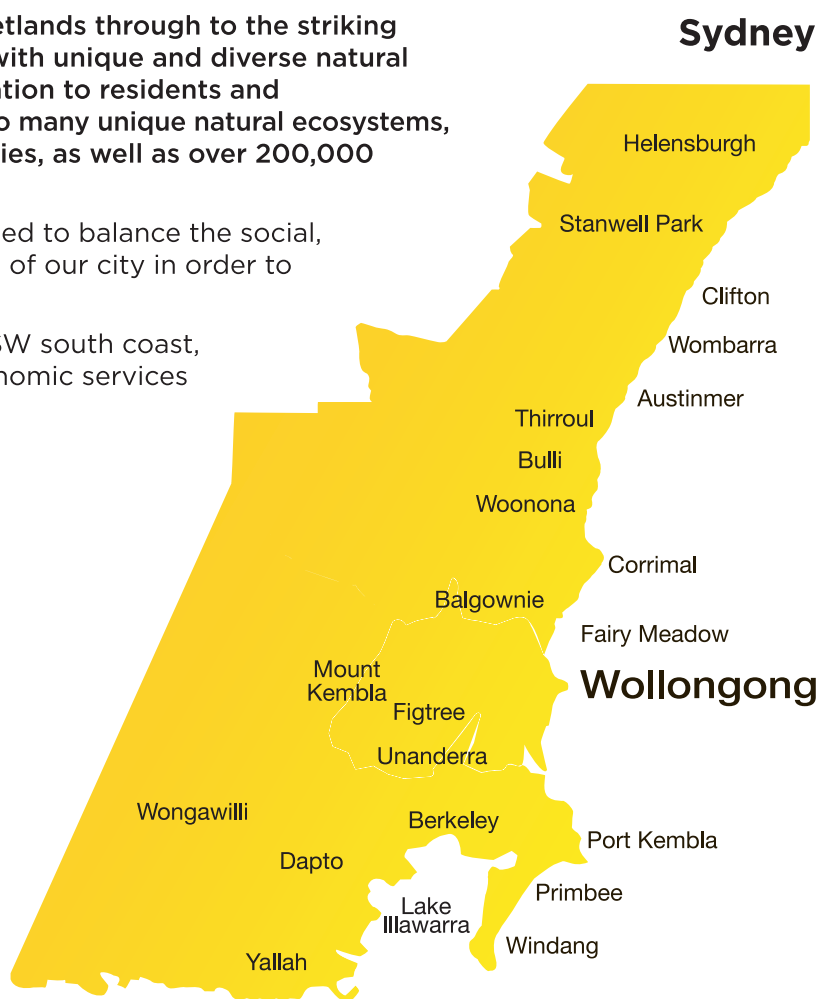
As our population grows, we will need to balance the social, economic and environmental needs of our city in order to create a Sustainable Wollongong.

We are the largest centre on the NSW south coast, providing important social and economic services to the region.

## Where are We?

Located 80 km south of Sydney we are the 3rd largest city in New South Wales and the 10th largest city in Australia in terms of population

714 sq km in area bounded by the Royal National Park in the north, Lake Illawarra in the south, the coastline in the east and escarpment in the west



## Who are We?

In 2016, there were 5,346 people in the LGA who identified as Aboriginal or Torres Strait Islander, representing 2.6% of the total population

21.5% of Wollongong's population was born overseas. The five main countries of birth are UK, China, Former Yugoslav Republic of Macedonia, Italy and New Zealand.

63.7% of the Wollongong LGA population occupied single homes; 20.7% occupied a medium density dwelling; while 10.3% occupied high-density dwellings

In 2016, 72.5% of people who live in Wollongong said they travel to work in a motor vehicle, 5.5% by train, 2% by bus and 3.7% used active transport.

218,114 people live in the City of Wollongong, by 2036, 254,805 will call the city home

There are approximately 103,797 employed residents with 95,936 local jobs. Wollongong's diverse economy provides employment for 20,000 residents of surrounding LGAs

Almost 23,000 Illawarra residents commute to Greater Sydney for work

Wollongong is the regional capital of the Illawarra-Shoalhaven, producing \$12.2B (60%) of the region's \$20.4B Gross Regional Product (GRP).

29% of households are vulnerable (with an income of less than \$750 per week)

16.6% of households do not have an internet connection

# Aboriginal Heritage

The area we know today as Wollongong was originally inhabited by the Dharawal people (Tarawal or Thuruwal), who remain the Traditional Custodians of this land. The name Wollongong is said to originate from the Aboriginal word woolyungah, meaning 'five islands'. Wollongong has a proud Aboriginal community that encourages everyone to learn about and celebrate local cultural traditions.

*'Connection to Country can be fostered today by keeping our culture documented – by keeping our kids connected and by learning the wider community of what's around them – stopping development in areas where there are significant plants carving art grooves – the more we ourselves and the wider community knows the better connection to culture and fostering our knowledge can surely preserve 'connection to Country' belongs/belonging.'*

Aboriginal Engagement Participant

Our natural environment sustained our local Aboriginal people for tens of thousands of years before the arrival of European settlers. They lived in harmony with the local environment and they lived seasonally, within the climatic conditions and food availability. Nature was their supermarket and so looking after it was of top priority. Aboriginal people sporadically burnt parts of the environment to prevent wildfire and regenerate the landscape. This ensured the sustainability of the local environment and of their people through taking only what they needed to survive, not wasting and protecting the environment for future generations.

*Leave only footprints,  
leave no rubbish behind.*

Aboriginal Reference Group

This connection to country, way of living and leaving only footprints is something inherent in traditional Aboriginal culture and something that we have integrated into the development of this strategy.

Artwork by Lorraine Brown and Narelle Thomas,  
Coomaditchie Artists



# Sustainability

Sustainability is commonly defined as meeting the needs of present generations without compromising the ability of future generations to meet their own needs.

To us, environmental sustainability is about improving the sustainability of and enhancing our way of life whilst minimising our impact on our natural systems. Our environment defines us; it's the spaces we play in, the places we work and build, it's our home. Protecting and maintaining our environment is essential if we want it to create a sustainable city and to support the liveability and prosperity of our region. Healthy ecosystems and waterways support all life in our city and provide spaces for us to work, rest and play in.

## Creating a Sustainable Wollongong means:

- protecting our ecosystems,
- reducing greenhouse gas emissions,
- reducing natural resource consumption,
- becoming resilient to the impacts of climate change,
- increasing active transport and walkability of our city,
- designing and constructing buildings to minimise their environmental impact,
- connecting with and appreciating our natural environment.



This requires us to balance protecting our environment, economy and social fabric of our city. We are aiming to preserve our identity as

a city, what makes us unique and wonderful, as we continue to grow and evolve and pursue opportunities to be a leader as a climate healthy city.

## Climate change

Climatic changes are naturally occurring phenomena that have been rapidly increased due to human activities, including burning fossil fuels, land clearing and agriculture.

Climate change is arguably the most significant issue of our time, with the potential to impact on the environmental, economic and social sustainability of our city and beyond. These impacts are already being felt around the world.

Globally, the top 5 hottest years on record were recorded between 2015-2019 and the severity and frequency of other natural disasters such as bushfires, floods and droughts continue to increase. If we continue with our current practices, global temperatures are predicted to increase by 2-5.5 °C by the end of the century, which will further exacerbate these impacts.

Climate change is affecting many of the basic elements of life, such as access to water, food production, health and well-being, use of the land and biodiversity values. In addition, these impacts will not be evenly distributed, with the poorest and most vulnerable people anticipated to be impacted the most. Economists have advised that without action the impacts of climate change are estimated to annually cost at least 5% of global domestic product GDP.

The Intergovernmental Panel on Climate Change (IPCC) has stated that the need to address climate change is extremely urgent and we need to keep global temperatures to less than 1.5°C above pre-industrial levels to mitigate catastrophic impacts of climate change.

<sup>1</sup> Our Common Future, World Commission on Environment and Development, 1987.






<sup>2</sup> <https://www.climatecentral.org/gallery/graphics/top-10-warmest-years-on-record>

<sup>3</sup> STERN REVIEW: The Economics of Climate Change, Executive summary, Nicholas Stern, Cambridge University Press 2008. Garnaut Climate Change Review: Final Report Commonwealth of Australia, 2008

<sup>4</sup> Climate Council and IPCC, 2018

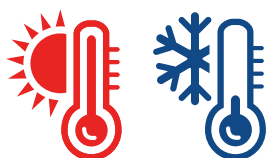
## Global changes, local impacts

The NSW Department of Planning, Industry and Environment (DPIE) has published the Illawarra Climate Change Snapshot 2014, which summarises the key climatic projections for the Illawarra as a result of climate change (Figure 1).

  	Projected temperature changes	
	Maximum temperatures are projected to <b>increase</b> in the near future by 0.4 – 0.9°C	Maximum temperatures are projected to <b>increase</b> in the far future by 1.6 – 2.3°C
	Minimum temperatures are projected to <b>increase</b> in the near future by 0.4 – 0.7°C	Minimum temperatures are projected to <b>increase</b> in the far future by 1.5 – 2.4°C
 	Projected rainfall changes	
	Rainfall is projected to <b>decrease</b> in winter	Rainfall is projected to <b>increase</b> in summer and autumn
	Projected Forest Fire Danger Index (FFDI) changes	
	Average fire weather is projected to <b>increase</b> in spring	Severe fire weather is projected to <b>increase</b> in summer and spring in the far future

**Figure 1:** Projected climatic changes for the Illawarra. Source: Illawarra Snapshot 2014

The impacts anticipated as a result of these projections include:



### Extreme temperatures

Discomfort, ill health and even premature death due to temperature extremes

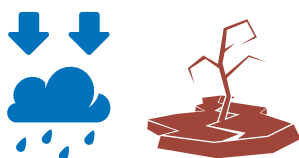
Increased risk and discomfort to the most vulnerable in our community

Increased heating and cooling costs

Increased strain on electricity grid due to increased demand

Increased strain on community and emergency services

Increased stress to our natural vegetation



### Decreased rainfall and drought

Increased dust

Lower rainfall predictability

Botanic garden, sports fields and parks become harder to maintain

Increased occurrences of plant and tree mortality in our parks

Frequent sports field closures due to unsafe playing surfaces

More frequent water restrictions

Estuary water quality issues



### Other Impacts

Increased storm surge, flooding, and bushfire risk

Damage to infrastructure and property

Increased strain on emergency services

Increased health impacts

Damage to natural environments

Increasing clean-up costs

Increasing insurance premiums

Increased pollution entering our waterways, estuaries and beaches

*'environmental sustainability matters,  
without it a place becomes unliveable'*

Online engagement HQ participant



Wollongong Botanic Garden ex-situ conservation

# What is the role of Council?

As a Local Government authority, we have a responsibility to our community to promote a healthy, resilient and productive environment. Under the Local Government Act one of the guiding principles for councils is that councils should consider the principles of ecologically sustainable development (ESD) in their decision-making.

The highest level of influence we have is directly implementing actions to reduce the environmental impact of our operations and this will be a priority for Council (Figure 2).

We, as Council, have a role in urban planning, transport, economic and community development; waste and water management, community education, public land management and the delivery of specific climate, environment and sustainability programs. We will act as a steward, facilitator, advocate, service provider, regulator and partner in helping the community achieve these outcomes.

We can make a valuable contribution towards improving environmental sustainability through our own operations and service delivery through sustainable infrastructure, waste, water, energy and resource use and procurement. We will lead by example and implement actions to reduce our environmental impact and emissions from Council operations.

Council cannot achieve the goals in this strategy on its own. Residents, businesses and schools have an important role to play in creating a better Wollongong for all. Council has limited direct influence on the uptake of environmental behaviours within our community.

However, we are committed to providing education, support and advice to our community, business and industry to reduce their emissions and environmental impact.

We also collaborate and partner with government agencies in delivering important programs within our community to secure funding to implement local and regional programs. We will work collaboratively with Shellharbour, Kiama and Shoalhaven Councils and the Illawarra-Shoalhaven Joint Organisation (ISJO) to advocate for and implement programs within our community.

As Council, we represent the voices of our community and will advocate for what is best for our community at the state and national levels.

Together we can work to make our urban and natural environment, and social and economic systems more resilient to climate change and other environmental challenges.



**Figure 2:** Spheres of influence for the different roles of Council.

# Why do we need this strategy?

The inaugural Environmental Sustainability Strategy was adopted by Council in 2014 and to date has guided Council's works and programs to reduce environmental impact. Over 82% of scheduled actions from the 2014 Strategy were implemented, such as the Urban Greening Strategy, sustainability review of the DCP and joining the Global Covenant of Mayors for Climate and Energy (GCoM), to name a few.

It is evident that the 2014 Strategy has been effective in facilitating programs and activities that have led to improvements in our environment. However, it is important to review our strategic direction and update it in a current context; in response to environmental issues, community concern and government policy, legislation and commitments.

We are seeing the impacts of climate change and environmental harm around our city and it is important that we recognise that we have a collective role to play in improving the sustainability of our community, our environment and our land. We have big challenges ahead of us, but this also provides us with exciting opportunities to improve the way that we do things to enhance quality of life for all.

To create a Strategy that is practical and focused, we are concentrating on activities that lead to measurable improvements in Wollongong's environment, whilst considering social and economic factors. This Strategy provides a high-level strategic direction for Council's operations by identifying actions to be delivered through the supporting documents and programs.

By consolidating all our environmental priorities, goals and sustainability outcomes into one document, we will improve the integration of environmental considerations into all decision-making and operations.

Adoption of this Strategy will also enable Council to build on its commitment to a sustainable future, embed environmental sustainability into the core business of Council and influence the continuing quality of life, prosperity and liveability of our city.

In preparing this updated Strategy, we have worked hard to understand the community's thoughts and concerns as well as identify the most important and effective opportunities for us to pursue. This Strategy has been developed

*'we moved based on the seasons, food availability and environmental changes'*

## Aboriginal Reference Group

with rigorous community engagement, attracting a high level of community participation reflecting the importance that our community has in protecting our environment and creating a sustainable city. This Strategy also pays homage to the traditional Aboriginal culture, connection to country and way of living, and integrates these principles into the goals and direction of this Strategy.

This Strategy supports our 2018 Climate Emergency Declaration, adoption of emissions reduction targets for Council and the city, and other works under the Global Covenant of Mayors and Cities Power Partnership program.

Delivering this Strategy will create a legacy for change now to create a brighter, healthier, and more resilient future for our city.



**This Strategy is about more than doing the right things. It is about working with our community to do things better and to do things differently. This is the only way to embrace the challenges we face and seize the opportunity to create a sustainable future for all.**



Wollongong Botanic Garden Rainforest Collection

## KEY STATISTICS 2018/19



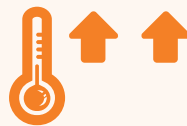
**20% >**

Increase in population by 2036



**20% <**

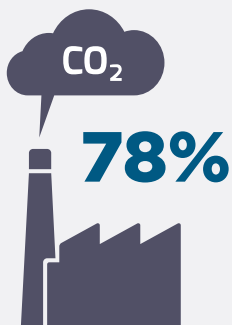
Rainfall recorded in 2019



Average daily temperatures 1.85°C warmer in 2019 than previous years

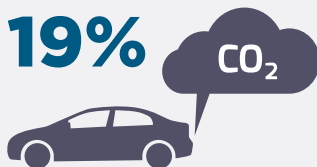


Hottest day 39.6°C recorded 23 Jan 2020



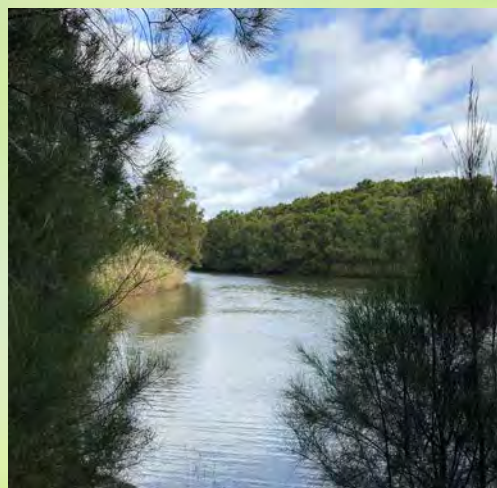
**78%**

Emissions from energy consumption in 2018/19



**19%**

Emissions from transport in 2018/19



Puckey's Reserve Wollongong

# Strategic Context

## Global

### Ecologically Sustainable Development

**(ESD)** was first introduced by the Brundtland Commission Report in 1987. The report described the principles of ESD and how it could be globally achieved. The principles of ESD are:

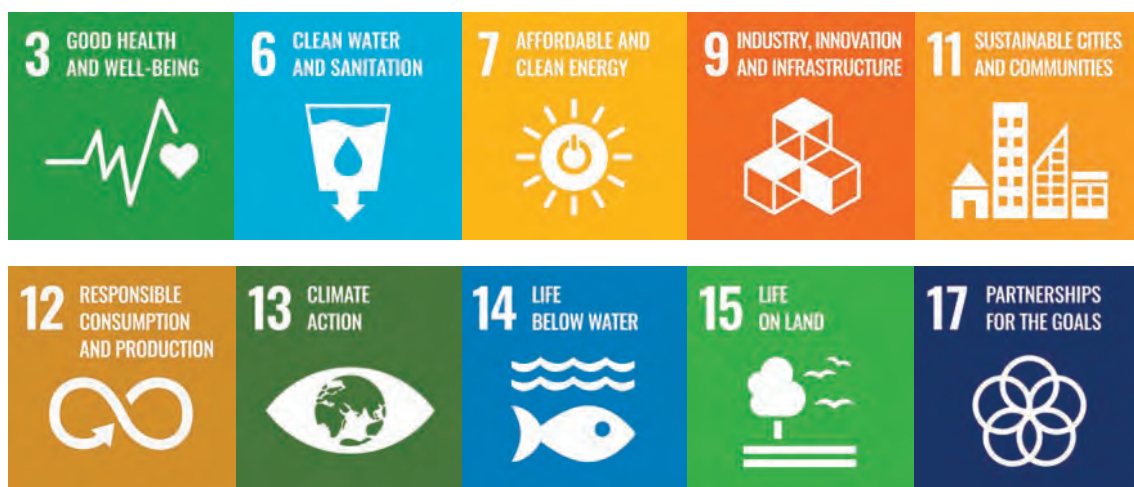
- i. The Precautionary Principle – we will not undertake any actions that have a potential risk to cause serious harm to the community or the environment; even in the absence of scientific certainty;
- ii. Inter and intra-generational equity – we recognise the importance of equity within and between generations;
- iii. Biological diversity – we value our natural biodiversity and will work to protect and enhance local native habitat;
- iv. Improved valuation, pricing and incentive mechanisms – we will integrate long and short-term economic, environmental and social considerations into all Council decision-making processes and operations.

The four main pillars of ESD are environmental, social, economic and governance considerations, and are commonly known as quadruple bottom line (QBL) thinking and this should underpin all Council decision-making.

The United Nations have held numerous Conferences on Environment and Development since the Brundtland Report, including

- Rio de Janeiro (1992) - Climate Change was formally recognised
- Kyoto (1997) - the first global agreement to limit emissions
- Paris (2015) - a global commitment to limit global temperature increases to less than 2°C above pre-industrial levels and pursue efforts to limit the rise to 1.5°C and a commitment to achieve net-zero emissions, globally, by the second half of the century. In 2019, it was recognised by the IPCC that there is an urgent need to keep global temperatures to within 1.5°C of warming because of the impacts already being seen globally.

The Sustainable Development Goals (SDGs) are a global strategy agreed by the United Nations General Assembly and form a blueprint to create a sustainable future for everyone. There are 17 interconnected goals for 2015-2030, including 10 directly relevant to sustainability and climate change as shown in Figure 3. Each of the priority areas also reference the SDGs that they will help achieve.



**Figure 3:** Sustainable Development Goals directly relevant to sustainability (*United Nations 2020*)

## National and NSW

In response to the Paris Agreement, the Australian Government has set an emissions reduction target of 26-28% of 2005 emissions by 2030.

To complement this commitment, the Australian Government has a range of responses to sustainability and climate change issues integrated into their service delivery, including biodiversity and biosecurity, environmental protection (pollution licences and air quality), waste avoidance, agriculture, forestry and water. More information on the

policies, programs and legislation that can be found at <https://www.environment.gov.au/topics>

The NSW Government has also endorsed the Paris Agreement and has set a corresponding emissions reduction target of net zero emissions by 2050. The NSW Government also has a number of programs and plans to improve sustainability outcomes in the state of NSW (Table 1).

**Table 1:** NSW Government plans and programs with links to sustainability outcomes

PLAN/POLICY	AIMS/OBJECTIVES	KEY DIRECTIONS
<b>14 Premier's Priorities</b>	Aims to enhance the quality of life for the people of NSW	<ul style="list-style-type: none"> <li>Increasing green cover in urban spaces across the state</li> <li>Increasing canopy cover across Sydney</li> </ul>
<b>Illawarra-Shoalhaven Regional Plan</b>	Five (5) goals for the region, one of which is protecting and enhancing the natural environment	<ul style="list-style-type: none"> <li>Protect the region's environmental value by focusing development in locations with the capacity to absorb development</li> <li>Build the Illawarra - Shoalhaven's resilience to natural hazards and climate change</li> <li>Improve environmental outcomes for waste management and air quality</li> <li>Secure the health of coastal landscapes by managing land uses and water quality</li> </ul>
<b>Shoalhaven Illawarra Enabling Regional Adaptation (SIERA) Project</b>	To understand the climate vulnerabilities in the region and to identify opportunities to respond to them. Several vulnerable systems were identified	<ul style="list-style-type: none"> <li>Satellite settlements – isolation and limited road access</li> <li>Transport – growing regional population and geographical constraints</li> <li>Emergency management – increased demand and declining volunteer base</li> <li>Energy – centralised system vulnerable to network failure from extreme climate events</li> <li>Food – changing rainfall and temperature patterns and increased development</li> <li>Industrial transformation – rising energy costs, international markets and the need to reduce environmental impacts</li> <li>Water – climatic changes, population growth, increased development and seasonal demand variability</li> </ul>

## Wollongong City Council Response

Our Wollongong 2028: Our Community Strategic Plan sets our community's vision and the importance of our environment:

*From the mountains to the sea, we value and protect our natural environment and we will be leaders in building an educated, creative and connected community.*

The first goal of Our Wollongong 2028: Community Strategic Plan is: 'We value and protect our environment'. This further reflects the importance of our environment to both our community and Council.

The Sustainable Wollongong Strategy will be a supporting document, which will inform the Resourcing Strategy, Delivery Program and Operational (Annual) Plan (Figure 4).

This Strategy will play an important part in addressing our commitments to the GCoM, CPP, Climate Emergency Declaration and United Nations SDGs.

We have many plans and programs which aim to improve the environmental and sustainability outcomes for the city and deliver on the goals of the Community Strategic Plan. This Strategy provides direction and pathways for action for our supporting documents and programs. The actions delivered through the supporting documents and programs will be reported through the Integrated Planning and Reporting process.



### COMMUNITY STRATEGIC PLAN

A 10 year plan that identifies our community's priorities and vision for the future



### SUPPORTING DOCUMENTS

A level of interconnected documents that provide further detail about how we are going to achieve positive outcomes for the community



### DELIVERY PROGRAM

Sets out the key activities and projects that will be delivered to the community during the Council term



### ANNUAL PLAN

Provides more detail of the Delivery Program including projects, activities and budgets



### IMPLEMENTATION

Figure 4: Council's Integrated Planning Framework



**Joined in 2017**

## Global Covenant of Mayors for Climate and Energy (GCoM)

In 2017 we became a signatory to the GCoM, which commits us to a series of activities to achieve a resilient and low-emission society. These actions include adopting an emissions reduction target and developing a Climate Change Mitigation Plan and a Climate Change Adaptation Plan (to be revised in 2020/21).



**Climate Emergency Declaration**

## Climate Emergency Declaration

In August 2019, in support of the global climate crisis, Council recognised that we are in a state of climate emergency that requires urgent action by all levels of government, and at the time of writing, we are one of close to 100 Australian councils to do so. Through this declaration we acknowledge that climate changes pose a serious risk to life as we know it and that current measures being implemented are not enough to limit human caused climatic changes<sup>5</sup>. This declaration means that we need to ensure that the climate emergency response is considered as a high level of importance in all our decision-making. This includes taking all actions possible to reduce emissions through advocacy, partnerships with other councils, supporting local community action and reducing our own emissions.



**Online headquarters  
Forum for Public  
Submissions**

## Cities Power Partnership Program (CPP)

In January 2020 we also became members of the CPP program to help reduce our emissions and to promote opportunities to our community and businesses. This program will support the city's transition to a clean energy future by providing access to a range of resources to help evaluate and monitor actions and opportunities to collaborate and share knowledge with other councils.



**Adopted net zero  
emissions by 2030 for  
Council operations**



**Adopted net zero  
emissions by 2050  
for Community**



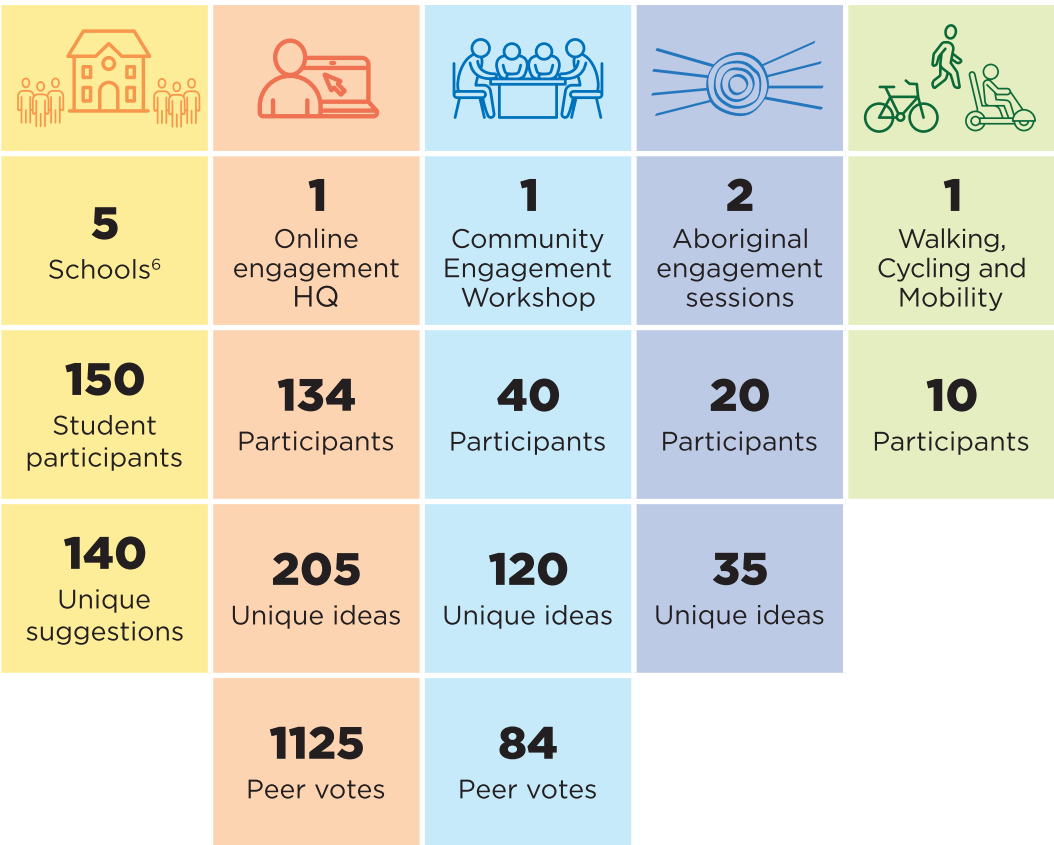
**Joined in 2020**

<sup>5</sup> <https://climateemergencydeclaration.org/>

# Listening to our community

## How did we engage?

In developing this Strategy, we held a series of engagement activities to gain community input (see Figure 5). We asked our community what was important to them in terms of sustainability, why it was important and what we as a community could do. There was a high level of participation, with over 500 responses and over 1200 peer votes received. This information has been used to identify the key issues of concern to the community and their aspirations in creating a Sustainable Wollongong.



**Figure 5:** Community engagement participation

We have also included three artworks from local Aboriginal artists as visual inspiration throughout this Strategy. These artworks are reflective of Aboriginal connection to country, the importance of our environment and of living sustainably, and serve to encourage commitment and action to achieve the goals of this Strategy.



<sup>6</sup> Smith's Hill High, Woonona High, Dapto High, Woonona Public and Northern Illawarra Academically Gifted Program

Through engagement on this Strategy, our community have expressed their love and appreciation for the environment. They have told us that they are very concerned about climate change and supportive of both the Climate Emergency Declaration and setting an emissions reduction target.

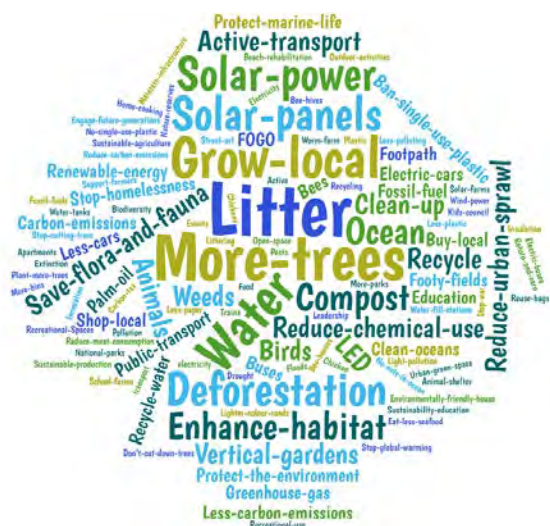
- Council demonstrating environmental leadership
- Council working in partnership with the community
- Reducing our City's emissions
- Increasing renewable energy
- Improving resilience to climate change
- Moving towards zero waste
- More green space, green corridors and trees
- Improved water quality and water resilience
- Increased sustainability requirements for all new developments
- Improved active transport opportunities in the city
- Improved public transport systems and car/ride share schemes

Our community identified that Council should be a leader and advocate for bold environmental and climate change initiatives. Reducing emissions and waste, preserving biodiversity, reducing urban heat stress and creating a climate resilient city is of high importance for the liveability of our city.



## Community Responses

The feedback, comments, concerns and priorities are important to us and we will continue to use them when reviewing or updating future supporting documents and programs.



## School Responses

## Structure

Each of the following chapters addresses a key priority area to achieving a 'Sustainable Wollongong'. Based on stakeholder engagement we have identified six priority areas as depicted in Figure 6. The priority areas are interdependent and impact or influence each other.



**Figure 6:** Key priority areas that are key to a Sustainable Wollongong.



Each of the priority areas and goals in this Strategy align with, and the delivery of the high-level actions in the priority areas will assist in, achieving the goals in Wollongong 2030 Community Strategic Plan (Table 2).

**Table 2:** Links between the priority areas and goals in the Sustainable Wollongong Strategy and the goals in the Community Strategic Plan (CSP).

SUSTAINABLE WOLLONGONG PRIORITY AREA	SUSTAINABLE WOLLONGONG GOAL	COMMUNITY STRATEGIC PLAN GOAL
<b>A city whose council shows leadership</b>	Environmental and climate leadership underpins Council decision-making and service delivery which inspires the same in others	Goal 1 – We value and protect the environment Goal 2 – We have an innovative and sustainable economy Goal 3 – Wollongong is a creative, vibrant city Goal 4 – We are a connected and engaged community Goal 5 – We are a healthy community in a liveable city Goal 6 – We have sustainable, affordable and accessible transport
<b>A city that works together</b>	Together, protect our environment, reduce emissions and increase our resilience to climate change	Goal 1 – We value and protect the environment
<b>A low emissions city</b>	We will achieve net zero emissions by 2030 for Council operations, and together we will achieve net zero emissions by 2050 for the city.	Goal 1 – We value and protect the environment Goal 2 – We have an innovative and sustainable economy Goal 6 – We have sustainable, affordable and accessible transport
<b>A city in harmony with our environment</b>	Our ecosystems and waterways are enhanced, our urban areas are cooler and greener, and our community is connected to our environment	Goal 1 – We value and protect the environment Goal 2 – We have an innovative and sustainable economy Goal 4 – We are a connected and engaged community Goal 5 – We are a healthy community in a liveable city
<b>A low waste city</b>	Our people only take what they need, reuse and recycle what they can, and are aware of the resources that they consume	Goal 1 – We value and protect the environment Goal 2 – We have an innovative and sustainable economy Goal 3 – Wollongong is a creative, vibrant city
<b>A climate and water resilient city</b>	Our infrastructure and community can adapt to a changing climate and water is valued as a vital natural resource	Goal 1 – We value and protect the environment Goal 2 – We have an innovative and sustainable economy Goal 5 – We are a healthy community in a liveable city

Each priority area has a goal that depicts what ‘Sustainable Wollongong’ would be and a series of sustainability outcomes for us to strive towards to achieve the goal. It is envisaged that these goals and sustainability outcomes will be accomplished through the delivery of a series of strategic actions identified for delivery under each priority area (Figure 7).



**Figure 7:** Sustainability Strategy framework

*Exploring Stanwell Park*



*Exercising at Lake Illawarra*

These strategic actions have been developed at a high level to provide flexibility to program managers in achieving and delivering on their intent, particularly as technology, practice, understanding and the organisation evolves. They are primarily being delivered through supporting documents and programs. Where gaps in our existing programs have been identified, actions have been developed and will be incorporated into future programs as they are created or revised (Figure 8).

Reporting on the progress towards the sustainability outcomes and achievement of actions through our Integrated Planning and Reporting Framework will provide accountability to the community and other key Council stakeholders. Refer to the sections on Implementation and Monitoring & Reporting.



**Figure 8:** The link between the CSP, Sustainable Wollongong Strategy, action delivery and reporting



*'Council as a leader taking action  
and inspiring our community to act'*

Community workshop participant



*Residents cycling in our northern suburbs*

# Priority Area 1:

## A city whose council shows leadership

### **Goal: Environmental and climate leadership underpins Council decision-making and service delivery which inspires the same in others.**

As a local government entity, Council is in an important strategic position to demonstrate leadership to the community, business and industry. We can set an example by making direct change through how we conduct our own business. We have a unique and close connection to the community and are therefore well placed to promote environmental sustainability.

Environmental sustainability is considered in the decisions we make every day, from the energy and water we use, the waste we generate and manage, our purchasing choices, staff fleet and travel, planning and development assessments, infrastructure design and delivery, land management, and policies and processes.

In 2017 we joined the GCoM and as part of this program we have set emissions reduction targets to help drive emissions reduction, being:



These targets are ambitious, but we believe that they are important to achieve in order to limit impacts and improve the health and wellbeing of our community and our environment.

## **Our commitments**

### **Governance**

Whilst only 5% of the city's emissions are generated from Council's operations, Council is committed to minimise the use of valuable natural resources and play its part in mitigating against and adapting to climate change and its impacts. Environmental sustainability is a whole of organisation issue and as such requires a whole of organisation commitment. Effective governance will help to ensure that environmental sustainability is considered in our services and operations; that staff are made accountable for their decisions and actions and are equipped with the knowledge, capacity and confidence to deliver appropriate environmental outcomes in undertaking their roles.

### **Our Services and Operations**

Local governments are diverse in their business; they have significant procurement needs and have the ability to influence suppliers and markets to adopt environmentally sustainable practices and standards through their procurement decisions. We will increasingly seek and require our prospective suppliers to demonstrate their

environmental practices and considerations in their operations, products and services and promote local economic capacity.

One of the key challenges faced by Council is planning for and supporting our thriving community, their housing and recreation needs and our evolving city whilst balancing environmental factors. The way that a city, its suburbs, its buildings and transport are designed, built and managed can have a large impact on the long-term sustainability of our city and the livelihood of our community. We will work to strengthen and implement planning mechanisms to protect and enhance our environmental assets and reduce the impact of development. This includes encouraging the inclusion of green technologies, renewable energy production and sustainable design features through planning controls, policies and guidelines for developments in all sectors of our community, as well as striving to reduce environmental impacts associated with construction and performance of Council's infrastructure and assets.

## Guidance and support for the city

We recognise that we are civic leaders and will need to work to encourage and support Wollongong's community, business and industry in their transition to a 'Sustainable Wollongong' and adapting to climate change. We will advocate for stronger environmental leadership, funding and support from the state and federal governments.

As a city it is crucial that we continue to support local business and industry to reduce their environmental impact. They are an essential part of the social and economic function of Wollongong. Often the goods produced by local industry are far more sustainable, and are subject to stricter environmental rules and requirements, than those produced elsewhere. The importance of meaningful employment for the people of Wollongong cannot be understated in maintaining the stable social fabric that underpins our community. The Economic Development Strategy 2019-29 promotes Smart Cities, innovation, local jobs and technological advances and will provide a vehicle for the development of a green jobs industry and sustainable technology innovation in the LGA.

There are a number of economic benefits of Sustainability for Wollongong and these include: creating a green industry, research and innovation, eco tourism, smart infrastructure and cities. It is important for Council to support and work with business and industry so that they can transition to more sustainable ways of operating, whilst continuing to do business, sustain and foster employment and contribute to the financial sustainability of our city.

### RECENT HIGHLIGHTS

- Joining the Global Covenant of Mayors for Climate and Energy
- Declaring a State of Climate Emergency
- Setting emissions reduction targets for Council operations and our community
- Joining the Cities Power Partnership program

### WHAT CAN YOU AND YOUR BUSINESS DO TO SHOW LEADERSHIP?

- Talk about climate change and the positive actions you are taking
- Install solar panels
- Improve the energy and water efficiency of your home and business
- Drive less and use public transport, cycle or walk
- Buy a hybrid or electric vehicle
- Compost food scraps and garden waste
- Buy 2nd hand items and rehome good quality items
- Join a community group or organisation promoting environmentally friendly behaviour
- Be an environmental champion in your workplace
- Businesses can buddy with smaller businesses to help them improve their environmental impact
- Invest ethically



## SUSTAINABILITY OUTCOMES

- Council projects and operations incorporate sustainable design, procurement, construction and delivery practices
- Council projects and operations showcase environmental technologies and support local businesses
- Actions within this Strategy are being implemented effectively
- Reduced emissions from Council operations, including increased energy from renewable sources
- Our community is supported to reduce emissions
- Council's planning instruments actively encourage sustainable development
- Council staff have the knowledge, skills and capacity to make decisions to reduce the environmental impact of Council's operations

### OUR SUSTAINABILITY OUTCOMES WILL BE ACHIEVED THROUGH:

#### Delivery of the following key supporting documents:

- Climate Change Mitigation Plan 2020
- Climate Change Adaptation Plan 2009
- Community Strategic Plan: Our Wollongong 2028
- Delivery Program and Operational Plan
- Economic Development Strategy 2019-29
- City Libraries Strategy 2017-22



*Wollongong City Council tree management*

### AND THROUGH NEW AND EXISTING ACTIONS AND PROGRAMS:

- **L1** Advocate for policy changes at state and federal government levels to reduce plastics and packaging
- **L2** Review and pursue opportunities for resource recovery associated with Council operations
- **L3** Incorporate sustainability principles, requirements and standards into all decision-making, including strategic planning projects and documents, asset management planning, procurement processes, licence and lease agreements for Council-owned facilities
- **L4** Review and update development controls and associated policy to encourage environmentally sustainable development, including water efficiency, energy efficiency, use of renewable energy, and integrated transport management
- **L5** Advocate for stronger sustainability requirements in Federal and State Government planning controls
- **L6** Advocate for increased investment in an improved and integrated public and sustainable transport system within the region
- **L7** Celebrate and promote Council's efforts and achievements in improving the sustainable outcomes of its services and operations



*Wollongong Botanic Garden Rainforest Collection*



*'Encouraging community action to  
reduce resources, energy and water use  
and waste'*

**Community workshop participant**



*Friends of the Botanic Garden volunteer*

## Priority Area 2: A city that works together

### **Goal: Together we protect our environment, reduce emissions and increase our resilience to climate change.**

Creating a Sustainable Wollongong will require Council to work in partnership with the community, private sector and other levels of government to ensure that we continue to protect and enhance our environment for current and future generations and to support and learn from each other. We will also collaborate with key local, state and federal agencies and businesses to develop and trial new and innovative projects.

Across Wollongong there are many individuals, community groups, businesses and organisations showing leadership, encouraging others, implementing solutions to problems and making sustainability part of their lives. There are also many in our community who are advocating for stronger leadership at the state and federal levels and their efforts will assist us in achieving the outcomes in this Strategy.

### **Our commitments**

#### **Collaboration and partnerships**

We will work with our key partners in our city to deliver actions to achieve the goals in this Strategy; this will require significant collaboration with individuals, community groups, schools, businesses and business, industry and community organisations and other government agencies to work towards the vision of a healthy and sustainable future for all (Figure 9).



**Figure 9:** Key priority areas that are key to a Sustainable Wollongong.

Our relationships with our partners will change over time, with different projects we are working on and as we progress along our sustainability journey.

We will work with our Aboriginal community to learn from their traditional culture, living in harmony with the land and connection to Country, and incorporate learnings into future projects, plans and programs.

We will work with our community to ensure that they are supported in reducing the environmental impact of their lives, homes and businesses, and ensuring that they have access to the important services to become resilient to the impacts of climate change.

## Recognition

We will explore opportunities to promote positive environmental actions being implemented by our community and other stakeholders, which will support and encourage others to do the same.

## Education

We are active in providing environmental education programs; reconnecting people with the natural environment, encouraging environmental protection and empowering people with the skills, capacity and motivation to live more sustainably. We will continue to

explore opportunities to enhance our existing programs and explore new and innovative initiatives to support our community and other stakeholders to implement actions to reduce their environmental impact and associated emissions.

## Business and Industry

A sustainable community means a healthier environment and a happier, healthier and productive community. As Council works towards delivery of its Economic Development Strategy and creating 10,500 new jobs for the city by 2028, we have the opportunity to attract innovative sustainable new industry to our city. The plan recognises Wollongong's fast changing and diversifying advanced manufacturing sector, with significant operations in industrial, chemicals, mining, defence, construction, textiles and food and beverage as well as exploring opportunities in emerging fields such as renewable energy.

Council through its participation in the Invest Wollongong partnership (along with the NSW Government and University of Wollongong), has identified clean energy as a target investment sector. Wollongong is envisaged to play a key role in Australia's decarbonised energy future, with Port Kembla identified as a superior location for Australia's first large scale hydrogen facility.

### RECENT HIGHLIGHTS

- Rise and Shine program
- Clean Up Australia Day
- Bushcare, Landcare & Dunecare programs
- South eastern bioregion ex-situ conservation program
- Friends of the Botanic Garden
- Schools Enviro' Day



### HOW CAN YOU AND YOUR BUSINESS WORK TOGETHER?

- Improve the sustainability of your home and business and support others to do the same
- Connect with your local Aboriginal community and explore their culture, learn about their connection to country and their ways of living sustainably
- Join a Bushcare, Landcare or Dunecare group or other environmental or community-based programs
- Help vulnerable people to adapt to climate change
- Work with local schools to help them improve their local environment
- Start your own group with like-minded individuals
- Businesses can work with
  - larger businesses to deliver environmental programs in the community
  - smaller businesses to reduce their environmental impact

## SUSTAINABILITY OUTCOMES

- Continued and increased access to, and a high level of engagement in, community sustainability engagement, education and volunteer programs
- Aboriginal culture and connection to country forms part of the process for developing new programs, policies and plans
- Businesses and industry within Wollongong are exploring and adopting environmentally sustainable technologies and opportunities
- All communities are resilient to the impacts of climate change, including those most vulnerable

### OUR SUSTAINABILITY OUTCOMES WILL BE ACHIEVED THROUGH:

#### Delivery of the following key supporting documents:

- Climate Change Mitigation Plan 2020
- Climate Change Adaptation Plan 2009
- Disability Inclusion Action Plan 2016
- Ageing Plan 2018-22



*Waterdragon in Wollongong Botanic Garden*



*Puckey's planting day volunteers (Yours & Owls 2018)*

### AND THROUGH NEW AND EXISTING ACTIONS AND PROGRAMS:

- **T1** Continue to coordinate and expand Council's community environmental programs - events and sustainability initiatives, such as: Bushcare, Dunecare, FIREdy, Greenplan, Greenhouse Park, National Tree Day, Rise and Shine, Community Service Order Program, Schools Enviro Day, Green Team waste education programs and Discovery Centre activities
- **T2** Investigate opportunities to increase the sustainability of local businesses through programs that increase energy efficiency and increase uptake of renewable energy sources
- **T3** Prepare and deliver environmental and waste education plans to guide Council's program delivery and promote positive sustainable behaviour within our community
- **T4** Develop and strengthen relationships with UOW, TAFEs, innovation and research organisations to enhance the development of green technologies and best practice sustainability outcomes
- **T5** Pursue opportunities to encourage businesses, industry and the community to adopt environmentally sustainable practices and technology and promote associated employment
- **T6** Work with our Aboriginal community, organisations, Elders and groups, to learn and understand their traditions and cultural connection they have with the land, water and environment and incorporate these learnings when developing new Council supporting documents and programs
- **T7** Recognise and celebrate sustainability improvements achieved by local individuals, schools, businesses, and community organisations



*'Finding a better way to use and create energy in the future'*

High school workshop participant



Beaton Park Leisure Centre solar panels

## Priority Area 3: A low emissions city

### **Goal: We will achieve net zero emissions by 2030 for Council operations, and together we will achieve net zero emissions by 2050 for the city.**

A low emissions city is one where the built environment and natural environment complement one another. It's a place where infrastructure and systems aim to reduce their impact on the natural environment from design, to construction and use.

The highest emissions source for the city is from stationary energy consumption, followed by transport (Figure 10). In Wollongong, stationary energy emissions comprise 16% from residential buildings, 7% from commercial buildings and 55% from industry. Council's operational emissions equate to 5% of community emissions, with our largest emissions source being Whytes Gully landfill (Figure 11).

### **Our commitments**

#### **Strategic Planning**

In order to play our part in meeting Australia's commitments under the Paris Accord we must take immediate action to reduce our emissions as a city.

In response to this, Council has declared a state of climate emergency and we have set emissions reduction targets for both Council operations and city-wide emissions as part of our GCoM commitments:



To guide us on our path to achieving our emissions reduction targets we have developed the first of many Climate Change Mitigation Plans. This inaugural plan outlines actions to reduce emissions from Council operations, establish partnerships with government agencies, business, industry, schools and community groups, and pilot innovative solutions to reduce emissions.

#### **Development controls**

Our built environment is what helps make our lives comfortable and can impact on the health of both our people and our ecosystems. What we build and how we build it affects our natural environment. Many buildings constructed today have an energy legacy for many years to come. Therefore, our built environment plays a key role in reducing our emissions. To create a low emissions city, we need to improve the energy efficiency of existing and new buildings by using low emissions materials and energy efficient technologies. This means we will review our practices, policies and systems to identify opportunities for improvement and alternatives such as renewable energy.

Buildings that are sustainably designed, constructed and operated often achieve

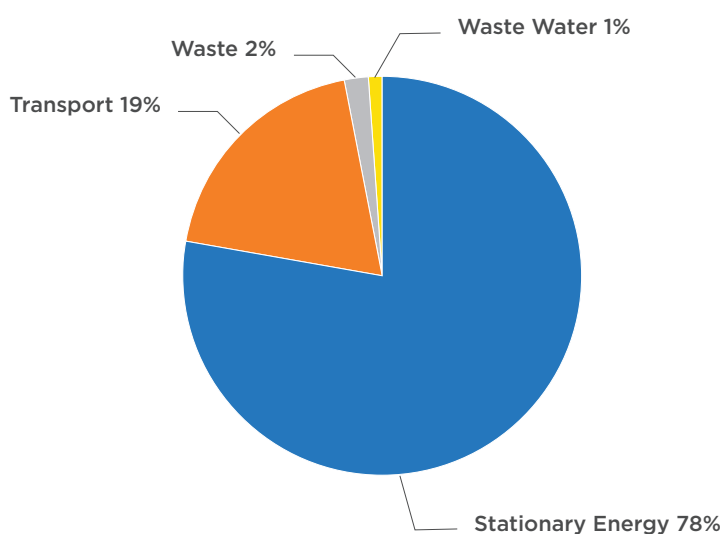
substantial financial savings and have significant social and environmental benefits, when compared to conventional buildings. The NSW Government has the highest level of jurisdiction in relation to planning controls and frameworks, such as complying development codes and BASIX. Council cannot require higher standards than NSW Government requirements, however we can advocate for more stringent environmental outcomes. We are well positioned to provide leadership in reducing the environmental impacts from the built environment; encouraging energy efficiencies, good design and use of less or low impact materials.

## Renewable energy and energy efficiency

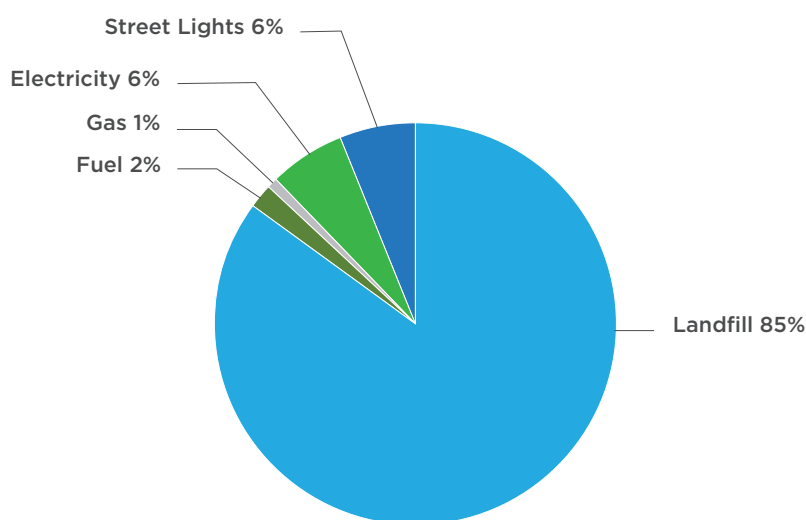
Reducing reliance on fossil fuels and using energy from renewable sources, such as solar PV systems, batteries, green power purchasing and investigating opportunities for solar farms and power purchase agreements (bulk purchasing etc) will increase energy security for Council operations, businesses and residents. Partnerships with UOW, TAFE and other research organisations to trial new technologies and best practice outcomes will further improve energy security for our city.

## Transport

One of the greatest challenges for Council as the city grows is to provide sufficient and effective sustainable transport options; this is made more complicated by the spatial context of our city. Opportunities for sustainable transport such as walking or cycling, working from home opportunities and electric vehicle infrastructure will help to reduce our emissions as well as providing health, social and other environmental benefits. Active transport outcomes, including access and walkability, can be achieved through planning and design.

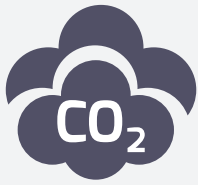


**Figure 10:** Emissions profile for the Wollongong Local Government Area (2016-17)



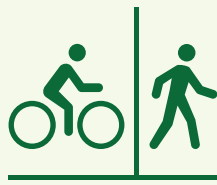
**Figure 11:** Emissions profile for the Wollongong City Council operations (2017-18)

## KEY STATISTICS 2018/19



**Total emissions city-wide**  
3,091,346 tonnes CO2e- in 2018/19

**Total emissions council operations**  
130,971 tonnes CO2e- in 2018/19



**Shared paths**  
137 km



**Footpaths**  
430km



**Roads**  
1,039km



**Streetlights**  
19,191 street lights

7,089 LED street lights, with 2,500 to be replaced within 18 months

### RECENT HIGHLIGHTS

- Joining the Global Covenant of Mayors for Climate and Energy
- Declaring a State of Climate Emergency
- Setting emissions reduction targets for Council operations and our community
- Joining the Cities Power Partnership program
- New landfill gas capture contract at Whytes Gully Landfill for enhanced capture of landfill gas and potential for power generation.

### WHAT CAN YOU AND YOUR BUSINESS DO TO REDUCE EMISSIONS?

- Create energy efficient homes and businesses – solar PV, insulation, energy efficient appliances and lighting, green power, turn off standby power
- Insulate walls and ceilings in your home or business
- Adjust your thermostat to reduce heating costs in winter and cooling costs in summer
- Drive less, buy an alternate fuel vehicle, car/ride share, cycle or walk, catch public transport
- Reduce waste to landfill, recycle more, say no to single use plastic, buy less stuff
- Eat more locally produced food
- Plant more trees
- Buy 2nd hand and repair broken items
- Borrow online library materials



## SUSTAINABILITY OUTCOMES

- Increased investment in renewable energy
- Increased proportion of energy obtained from renewable sources
- Reduced energy consumption and emissions for Council and the city
- Improved access to and utilisation of sustainable transport
- Reduced emissions from Whytes Gully Landfill

### OUR SUSTAINABILITY OUTCOMES WILL BE ACHIEVED THROUGH:

#### Delivery of the following key supporting documents:

- Climate Change Mitigation Plan 2020
- Wollongong City Cycling Strategy 2030
- City of Wollongong Pedestrian Plan 2017-21
- Wollongong City Centre Access and Movement Strategy 2013
- Illawarra Regional Transport Plan 2014



*EV charging station Wollongong*

### AND THROUGH NEW AND EXISTING ACTIONS AND PROGRAMS:

- **E1** Review, adopt and incorporate sustainable building design and performance standards for all new and refurbished Council buildings and facilities
- **E2** Continue to work towards the emissions reduction targets through ongoing climate change mitigation planning, informed by regular inventories of Council and community emissions, success stories, learnings and technological advances
- **E3** Continue to pursue commitments and actions under the Global Covenant of Mayors for Climate and Energy, including equitable access to energy
- **E4** Progressively install additional landfill gas capture infrastructure at Whytes Gully Landfill
- **E5** Work towards the achievement of pledges under Council's Cities Power Partnership membership



*Residential solar panels*



Wollongong Botanic Garden GreenPlan Nursery



*'We really need more trees and flora -  
this will give us more shade and homes  
for our animals'*

Primary school workshop participant



Keira Corridor - Puckey's Reserve

## Priority Area 4: A city in harmony with our environment

**Goal: Our ecosystems and waterways are enhanced, our urban areas are cooler and greener, and our community is connected to our natural environment.**

From our beautiful beaches and wetlands through to the striking escarpment, Wollongong is a city with unique and diverse natural environments. However, the projected population growth for Wollongong will place increasing pressure on our natural resources.

### Our commitments

#### Biodiversity programs

Healthy ecosystems are vital for the health of our community and for the future sustainability of our city. Protecting and enhancing our ecosystems is important to ensure that local plants and animals, including endangered species, are protected and can adapt to a changing climate. We have many beautiful parks, coastal and bushland areas and a world class Botanic Garden which act as biodiversity hot spots and green corridors which provide habitat and allow animals to move through our suburbs. We will continue to maintain and enhance these assets through our natural areas program, promoting their values and encouraging connection with the community.

Implementing programs in partnership with other agencies and our community are crucial to ensuring the resilience of endangered species. We will continue to deliver programs such as the natural area restoration program, Bushcare volunteer program and participate in the South-East NSW Bioregion Working Group, which all aim to conserve, protect and restore the most threatened flora in our region. Green corridors and remnant vegetation provide valuable habitat for a variety of threatened flora and fauna in our region. Council continues to work with other land managers and Local Land Services to implement a coordinated pest management program aimed at reducing the impacts of the priority pests affecting our city, including deer, rabbits and Common Myna birds.

#### Urban design and planning

Through careful planning, action and investment we can all play a part in improving the quality of life for all. Liveability, amenity and adapting to climate change impacts are key drivers to protecting and enhancing our natural environment. Increasing tree canopy and preserving biodiversity values of our city is of high importance, and investing in programs that preserve these values is something we take seriously and will ensure they are protected for future generations.

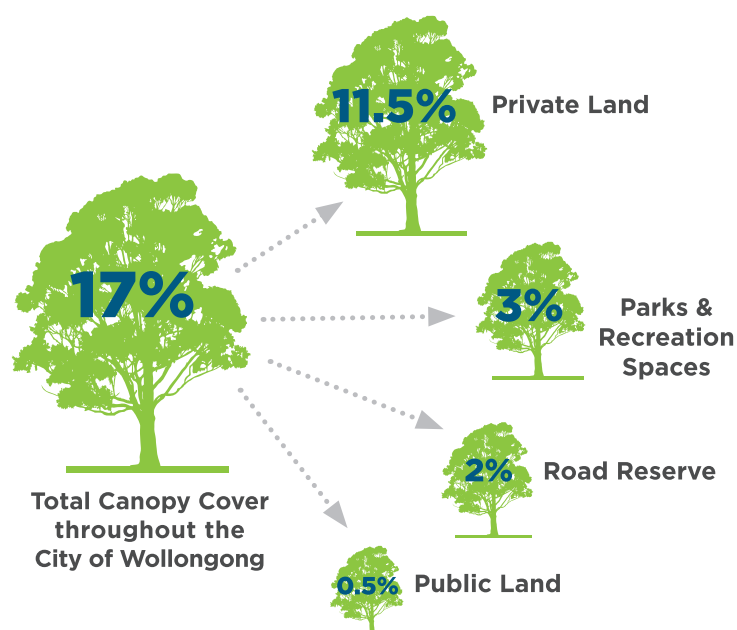
Implementation of the Urban Greening Strategy and the natural area restoration program will help communities adapt to a changing climate. These habitats provide a range of 'ecosystem services'; offering shade, reducing ambient air

temperatures, filtering air and water and assisting in pollination, all of which makes the city much more comfortable and inviting to live, work and play in. The value of trees and vegetation in providing habitats for native animals and birds is becoming increasingly important.

As population and housing densities increase, the provision of quality open space is becoming more important for the community. Open space contributes significantly to the liveability and sustainability of the urban environment, providing a range of environmental, social and economic benefits. We need to continue to provide natural places to play, relax and connect with nature. Inviting outdoor spaces promote social interaction and helps to build a sense of community, promoting positive mental health for all ages.

#### Food system resilience

We also need to ensure that public spaces are available for food production, such as community gardens, and that our community is aware of where they can access low cost and free meals. Local food system resilience needs to be increased and Council can assist through supporting local agencies in their response to food security and equitable access to fresh food.



## Stormwater management

Stormwater management is another key responsibility for Council, and it will become increasingly important as storm surges, inundation and flooding frequencies increase. Stormwater flows and quality impact on our local waterways and beaches. Our beaches are arguably our social epicentre, a core of our city's identity, as well as a drawcard for visitors to the area. Their usability and health is vital for a range of recreational activities as well as amenity and city pride.

In this regard, we need to continue to manage our stormwater systems; reducing and removing litter and other pollutants before they enter our waterways and eventually the ocean. Water Sensitive Urban Design systems offer opportunities to naturalise stormwater treatments, generally improving water treatment and increasing amenity. We will need to continue to work with our key stakeholders to identify, install and manage these systems.

## KEY STATISTICS 2018/19



### Our Environmental Programs

994 environmental programs and workshops  
44Ha restoration works at 132 natural area sites  
Total of 6860Ha across 499 natural areas  
1,200 trees planted, replacing removals with a ratio of 2:1  
20,595 plants sold at the GreenPlan Nursery  
70 Bushcare, Dunecare and FIReady groups, approximately 16,000 volunteer hours  
Successful implementation of pest animal management programs including deer, rabbit and Common Myna bird



*Puckey's Reserve Wollongong*



### Beaches, Sports Facilities, Parks and Open Spaces

17 patrolled beaches  
600km stormwater pipes  
154 playgrounds  
18 pools  
220 sportsfields  
5 skate parks  
500 park sites  
6 outdoor exercise facilities



*Wollongong Botanic Garden bird hotel*

## Conservation program statistics

Wollongong Botanic Garden (WBG) participates in the South-East NSW Bioregion Working Group to deliver conservation outcomes. We collect and propagate endangered species to support scientific research and conservation and hold ex-situ collections to help safeguard wild populations including:

### **Pomaderris walshii (Critically Endangered)**

- 200+ plants replanted into wild sites (more than tripling existing wild numbers). Approx. 100 plants held in ex-situ collections at WBG, constantly under propagation.

### **Pomaderris adnata (Endangered)**

- 20 plants held in ex-situ collections at WBG constantly under propagation. Seed collections by WBG staff from wild plants have also been deposited into National Seed Banks.

### **Zieria baeuerlenii (Endangered)**

- 300+ plants replanted into a wild site for research. Approx. 100 plants held in ex-situ collections at WBG, constantly under propagation.

### **Banksia vincentia (Critically Endangered)**

- Approx. 70 plants held in ex-situ collections at WBG for ongoing research and future replanting.

### **Melaleuca biconvexa (Vulnerable)**

- Germination trials carried out on behalf of OEH/DPIE to research this species.



*Pomaderris walshii*



*Pomaderris adnata*



*Zieria baeuerlenii*



*Banksia vincentia*



*Melaleuca biconvexa* germination

## KEY SPECIES STATISTICS



### Overall species sighted in LGA

Flora  
2,472

Fauna  
629

Communities  
30



### Threatened under Biodiversity Conservation Act 2016

Flora  
95

Fauna  
121

Endangered  
Communities  
29

## RECENT HIGHLIGHTS

- Urban Greening Strategy
- Rise and Shine Program
- South-East NSW Bioregion ex-situ conservation program
- Biodiversity certification and Bio banking projects – Puckey's Estate and Redgum Ridge
- Natural area restoration works at priority sites
- Botanic Garden Greenplan

## WHAT CAN BUSINESSES DO TO BE IN HARMONY WITH OUR ENVIRONMENT?

- Increase vegetation cover around your business if you can
- Increase shade around your business if you can
- Provide low cost or free meals from your business or support an organisation that does
- Donate excess food from your business to food rescue organisations
- Support a community garden initiative



## WHAT CAN YOU DO TO LIVE IN HARMONY WITH OUR ENVIRONMENT?

- Plant a tree at home, or take part in an organised volunteer tree planting activity
- Increase vegetation cover around your home and business if you can
- Increase shade around your home and business if you can
- Reduce hard surfaces around your home
- Join a Bushcare, Landcare or Dunecare group
- Join a community garden or an organisation that provides low cost or free meals
- Create a habitat and vegetable garden in your back yard
- Make your own compost for your garden to improve plant growth & help soil to retain moisture
- Plant native plants in your garden to provide habitat and food for native wildlife.
- Create an insect hotel in your backyard to provide homes for essential pollinators. Did you know that most native bees are stingless?
- Remove environmental weeds from your garden
- Keep cats indoors at night
- Place a bird bath in your yard to provide water for native wildlife
- Keep the stormwater drains free of leaf litter and rubbish
- Never put chemicals, paints or detergents down the stormwater drains
- Put rubbish in the bin or take it with you when you are out
- Pick up dog poo when you walk your dog
- Wash your car on the lawn or in a car wash
- Replace your lawn with a native meadow garden
- Don't ride mountain bikes or motorbikes in environmentally sensitive areas

## SUSTAINABILITY OUTCOMES

- Increased tree canopy and vegetation cover to provide shade and reduce heat intensity, 35% canopy cover in urban areas
- Increased opportunities for active and passive recreation in public open space to improve the health and wellbeing of our community
- Increase in the populations / extent and condition of ecosystems within our city
- Reduced pest and weed species / populations in our city
- Increased opportunities for active transport, such as walking and cycling within our city
- Increased access to sustainable locally produced fresh food
- Improved flood and stormwater management through water sensitive design and infrastructure

## OUR SUSTAINABILITY OUTCOMES WILL BE ACHIEVED THROUGH:

### Delivery of the following key supporting documents:

- Botanic Garden Master Plan 2020
- Urban Greening Strategy 2017-37
- Illawarra Biodiversity Strategy 2011
- Floodplain Risk and Stormwater Management Plans
- Sportsgrounds and Sporting Facilities Strategy 2017-21
- Lake Illawarra Coastal Management Program
- Play Wollongong Strategy 2014-24
- Illawarra Escarpment Strategic Management Plan 2015
- Wollongong Access and Movement Strategy 2013
- Wollongong City Cycling Strategy 2030
- Town and Village Plans
- West Dapto Vision Strategy 2018 and West Dapto Integrated Transport Plan
- Urban Design Framework
- Places for People Wollongong Social Infrastructure Planning Framework 2018-2028

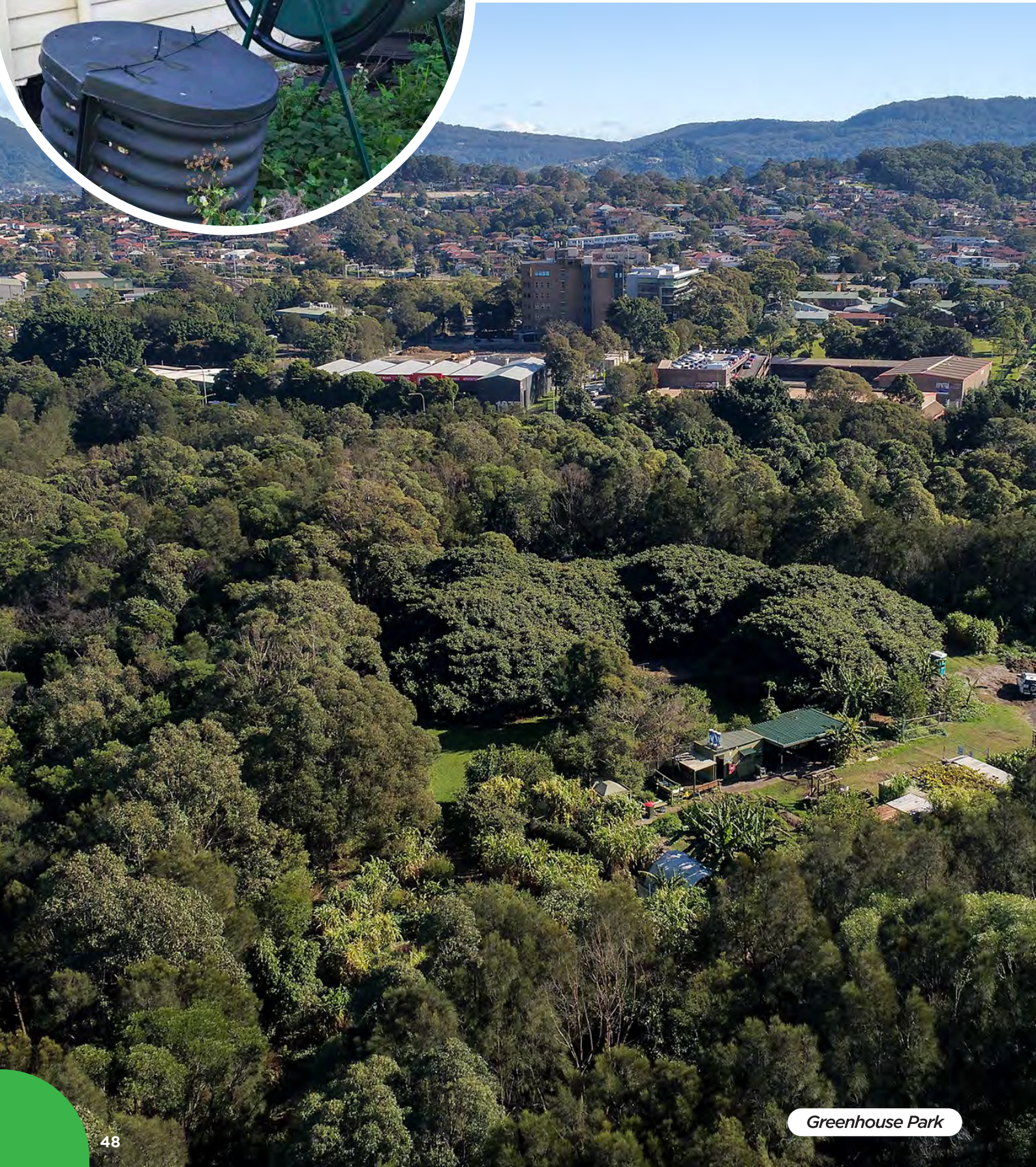
## AND THROUGH NEW AND EXISTING ACTIONS AND PROGRAMS:

- **H1** Delivery of Environmental Education Programs and key strategic events with focus on biodiversity
- **H2** Aim to increase seed banking vulnerable local species with partner agencies
- **H3** Continue support for the Botanic Garden GreenPlan Nursery to enhance community access to local native plant species
- **H4** Continue to participate in the South-East NSW Bioregion Group threatened species conservation programs
- **H5** Continue to implement the Illawarra District Weeds program
- **H6** Continue to implement the Illawarra Wild Deer Management, Wollongong Myna Pest Action and Rabbit Control Programs
- **H7** Continue to implement, and plan to expand, the Natural Areas Management Program to ensure conservation of remnant bushland, wetlands and riparian areas
- **H8** Increase the community's knowledge of locations and availability of low cost and free meals
- **H9** Increase local food system resilience through supporting local agencies in their response to food security
- **H10** Continue to support the establishment of community gardens on appropriate public spaces through the Community Gardens Policy
- **H11** Ensure that sufficient and high-quality open space are planned for and delivered throughout the city including the upgrade of existing and the construction of new open spaces in urban release areas
- **H12** Beaches and Lake Illawarra are monitored under the NSW Beachwatch and estuary health monitoring programs
- **H13** Develop a landscape succession guideline to ensure new vegetation in urban areas is climate resilient, reduces weed potential and biosecurity pest risk



*'our land is our supermarket, we need to look after it or we won't survive'*

Aboriginal engagement participant





## Priority Area 5: A low waste city

### **Goal: Our community only take what they need, reuse and recycle what they can, and are aware of the resources that they consume.**

The creation and management of waste is a significant environmental issue; Australians are reported to be one of the highest generators of waste in the world per capita. Our society has become increasingly consumer-driven, dismissive of the resources required to manufacture materials and products, and accustomed with disposal of outdated or unwanted things. Litter and waste have been identified as issues of concern to our community.

### **Our commitments**

#### **Waste Management**

We play an important role in waste management; providing garbage collection, fortnightly recycling, fortnightly green waste and two on-call annual clean up collections, which include separate collections for scrap metal, tyres, mattresses and electrical items, in addition to managing the Wollongong Waste and Resource Recovery Park (Whytes Gully).

Currently we collect over 83,000 tonnes of waste annually from households; this is made up of waste to landfill, recycling and green waste. Wollongong's population is projected to increase by 15% by 2036 and more people means more waste and more pressure on Whytes Gully, where there is limited space available. Furthermore, the emissions generated by waste decomposition at Whytes Gully represent the biggest source of emissions for Council – being over 100,000 tonnes CO<sub>2</sub>e- per year.

In partnership with other service providers we offer recycling collections for businesses that help to reduce recyclable waste going to landfill. Community members can also take excess recyclables and difficult to recycle items, such as paints, oils, batteries, gas bottles and electrical items to the Community Recycling Centre and Wollongong Waste and Resource Recovery Park.

In 2019 we commenced a trial of a Food Organics Garden Organics (FOGO) program to explore ways of keeping organic matter out of landfill and reusing it for compost. The trial is currently ongoing, involving 1,600 homes throughout Austinmer, Cordeaux Heights and Warrawong. It is seeing high levels of participation and low levels of contamination. Results are being used to inform potential expansion of the program.

#### **Litter**

Litter is of high concern to our community, causing harm to our terrestrial and aquatic environments and is a hazard to many animal species, in addition to impacting on the amenity of our city. Council collects an estimated 4,000 tonnes of litter per year through its public place waste collection, street sweeping, litter collection and water quality improvement devices.

In 2016 the NSW Government set a target to reduce litter by 40% by 2020. This target has driven a number of state-funded programs. Council runs a number of education and litter collection programs including Picitup, Rise and Shine and Clean up Australia Day activities. These programs contribute to the collection of 50 tonnes per year and are important for Council to continue to implement to reduce litter around our city.

#### **Single-use plastics**

Single-use plastics are extremely environmentally damaging as they contribute significantly to our litter and waste streams and are difficult to recycle; this is compounded by plastics being unable to be transported to China for recycling. Our community is very concerned about single-use plastics with many calling for them to be banned. While Council cannot ban single-use plastics, we can discourage their use. We have a Single-Use Plastics Management Policy, which aims for single-use plastic free Council events within 5 years. We are also supporting our community and businesses to choose reusable products through our programs such as Plastic Free Wollongong and Operation Nappy. Many businesses are already reducing single-use plastics by not giving out plastic bags and changing to sustainable alternatives. We are keen to see the continued reduction of single-use plastics throughout our city.

## Education and engagement

We also coordinate numerous education, awareness and volunteer programs in our community to encourage waste reduction and avoidance.

Events typically generate significant amounts of waste from food and other activities. Council is responsible for managing, delivering and approving a variety of community events. This role provides an avenue to engage with participants, organisers and stall holders, encouraging sustainable practices. For this reason, Council has developed a Waste Wise Events program and is collecting recycling and organics from Council-run events. This has resulted in an 80% reduction in the waste being sent to landfill from these events.

Despite this, further opportunities exist to reduce the environmental impact associated with events, particularly in the case of events at Council facilities or on Council-owned or managed land, and leases and licences of Council-owned facilities.

## Our operations

Council itself is also a producer of waste, through its operations and delivery of products and services to the community. We are aiming to continue to reduce our own waste generation, improve the sustainability of our supply chains and increase recycling to demonstrate leadership in this area.

### RECENT HIGHLIGHTS

- FOGO trials
- Community Recycling Centre at Whytes Gully
- Single-Use Plastics Management Policy - moving toward single-use plastic free Council-run events
- Waste Wise events program
- Rise and Shine program



**FOGO Trial  
organics bin**

### WHAT CAN YOU DO?

- Avoid creating waste in the first place
- Place the correct items in your bins
- Use public litter bins when you are out
- Compost your food scraps and garden organics
- Create a veggie garden
- Avoid single-use plastics by taking your own water bottle, coffee cup, cutlery and straws
- Take reusable bags and produce bags when you go shopping
- Buy second hand and rehome good quality items
- Use reusable nappies and feminine hygiene products

### WHAT CAN BUSINESSES DO?

There are many programs offered by the Department of Planning, Industry and Environment to reduce waste and improve the environmental impact of businesses. For more information on business programs go to <https://www.environment.nsw.gov.au/topics/sustainable-business-and-government>



## SUSTAINABILITY OUTCOMES

- Reduced amount of waste, including food waste and garden organics, sent to landfill both from the community and from Council operation
- Reduced use of single-use plastics in the city
- Decreased litter and illegal dumping around the city
- Increased amount of material recovered for re-use and recycling
- Reduced waste produced from events across the city

### OUR SUSTAINABILITY OUTCOMES WILL BE ACHIEVED THROUGH:

#### Delivery of the following key supporting documents:

- Wollongong Waste and Resource Recovery Strategy 2022
- Climate Change Mitigation Plan 2020
- Stormwater Management Plans



Household garden compost

### AND THROUGH NEW AND EXISTING ACTIONS AND PROGRAMS:

- **W1** Deliver the Waste Wise Events program for Council events, in alignment with the Single-Use Plastics Management Policy
- **W2** Develop a Sustainable Events Guideline for event managers and stallholders to avoid and reduce waste, and reduce water and energy consumption of events
- **W3** Continue to roll out the Food Organics and Garden Organics (FOGO) program across the city
- **W4** Coordinate community environmental programs, such as Rise and Shine, Community Service Order Scheme, Clean Up Australia Day, World Environment Day, Schools Enviro Day, National Recycling Week, International Composting Week and other sustainability/waste education activities

## KEY STATISTICS



**Domestic Waste tonnages**

Garden organics  
28,968 tonnes

Landfill  
34,311 tonnes

Recycling  
16,607 tonnes



**FOGO Trial**

Up to 65% increase in diversion rate


Collected 310 tonnes of organics in 12 weeks

0.3% contamination rate



**Litter Waste Collection**

4,000 tonnes of litter collected from around the city



**Water Quality**

96 water quality improvement devices throughout the city



**Waste Wise Events & Education**

Waste wise events 85% diversion from 20 events

91 waste education events and workshops with 9303 participants



*'Enhance the quality of our waterways and their function as wildlife corridors'*

Community workshop participant



Wollongong Water Recycling Facility irrigates JJ Kelly Park



## *Priority Area 6:* **A climate and water resilient city**

### **Goal: Our infrastructure and community can adapt to a changing climate and water is valued as a vital natural resource**

Changes to our climate will affect our health, economy and function, and inevitably these impacts will be inequitable; our most vulnerable community members are likely to be hit the hardest. Extreme temperatures and more hot days impact on the liveability of our city and the health and safety of our community. They also place significant stress on our electricity, water infrastructure and public facilities as people seek respite and try to cool down.

We need to act to ensure that all of our community are best equipped to cope and respond, through education, support and networks as well as provision of infrastructure and programs where appropriate.

We are already seeing the impacts of climate change around our city, with droughts, bushfires, changing rainfall patterns, extreme heat, and flooding occurring more often and at greater intensities. How we adapt and become more resilient to these changes will be made easier through good planning, action and foresight. This will require a high level of commitment from Council to understand the anticipated impacts and implement innovative solutions through individual actions and collaboration with partners.

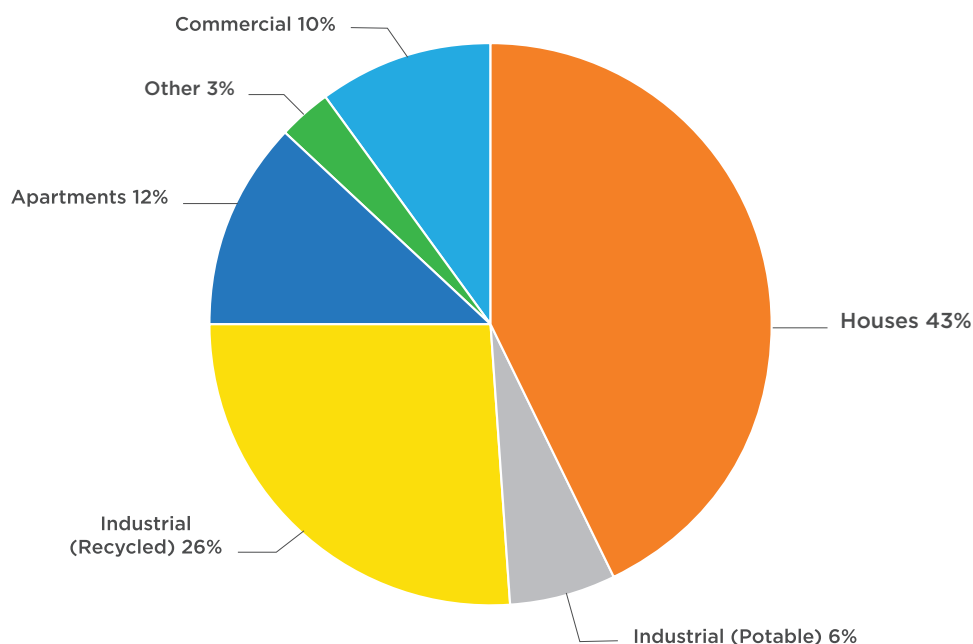
### **Our commitments**

#### **Infrastructure**

Council owns and manages a variety of infrastructure and natural areas that will be impacted by climatic changes, including stormwater infrastructure, buildings, parks, pathways and sportsfields. As rainfall regimes change, we experience greater storm intensity and hotter temperatures; the materials used for this infrastructure will be subject to destructive forces, impacting on their life expectancy and useability. We need to ensure that these assets are resilient to the impacts of climate change, through careful planning and design and modifications and replacement where appropriate. We also need to ensure that we are providing appropriate infrastructure to help our community cope with climatic changes such as shelter and refuge. The incorporation of green and blue infrastructure solutions (water and vegetation) are so important to enhancing local resilience, responding to increased heat effects and water scarcity, and reducing the amount of hard impermeable surfaces.

#### **Water security**

Water is essential to life on Earth. Reductions in water availability due to drought, changes in rainfall patterns and increasing consumption mean that we need to think about our management of this vital natural resource. We are all affected by drought and limited water availability; residential water use accounts for 43% of city-wide water consumption (Figure 12). Increased density will place increased pressure on our open spaces for both active and passive recreation, which will require significant water use to maintain quality. Therefore, water reuse in our buildings and sportsfields will become increasingly important to maintain the high quality of our parks, open spaces and sportsfields and present an opportunity for Council to show leadership in this space. There are also opportunities to increase water recycling and reuse throughout the city through business and industry operations.



**Figure 12:** City-wide water consumption 2017-18

## Flood management

An increase in floods and storm events is anticipated, likely to cause disruption to services and activities, and the damage and destruction of property. Wollongong has had devastating experience with the flooding of its city, which serves to highlight the need to plan and prepare for these events through construction of effective stormwater infrastructure, implementation of development controls and development of emergency response plans.

Our city was fortunate not to be directly impacted by these bushfires. In order to continue to reduce our risk to the impacts of bushfire we must continue to manage our natural assets, in particular their interface with infrastructure and residents and undertake emergency preparedness. Continuing to work in partnership with the Rural Fire Service and Illawarra Bushfire Management Committee (IBMC) to implement the FIReady and Asset Protection Zone program is essential to protecting life and property in our city.

## Bushfire management

Reducing the risk to infrastructure and people is extremely important, with increased extreme weather events and bushfire risk in a changing climate. The NSW 2019/2020 bushfire season was the most destructive season on record, resulting in the burning of 12.6 million hectares of land, over 5,900 buildings (including 2,779 homes), and the death of at least 34 people. Moreover, an estimated one billion animals have been lost, some endangered species may be driven to extinction, and 434 million tonnes of CO<sub>2</sub>-e were emitted<sup>7</sup>.



*Hazard reduction Timberi Park, Dapto in May 2020*

<sup>7</sup> <https://www.abc.net.au/news/science/2020-03-05/bushfire-crisis-five-big-numbers/12007716>



**Artwork by Allison Day, Coomaditchie Artist**

## Coastal and environmental management

Our coastal zone is highly valued by our community and visitors to the area. It includes beaches, dunes, headlands, cliffs, rock platforms, coastal lakes, lagoons and estuaries. The coastline is dynamic in nature and can be subject to coastal hazards such as erosion, storm surge and inundation. Climate change is predicted to increase the risk of these hazards due to sea level rise and increases in storm intensities. The historical development of our coastal suburbs means that land use planning decisions within the coastal zone must consider these current and future hazards to manage risk to human life, infrastructure and public and private property.

Our natural systems are also vulnerable to these changes requiring biodiversity and ecosystems to adapt. Council and its partners will be required to monitor and respond to protect, particularly sensitive, habitats, through this process.

Reviewing and implementing our Climate Change Adaptation Plan will help to reduce and manage the impact on our assets, promote and plan for our ability to deliver services and support our community to adjust to a changing climate.



*Catchments in our city*

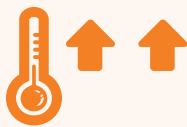
## KEY STATISTICS



Total of 1429L rainfall on average (however this is declining)



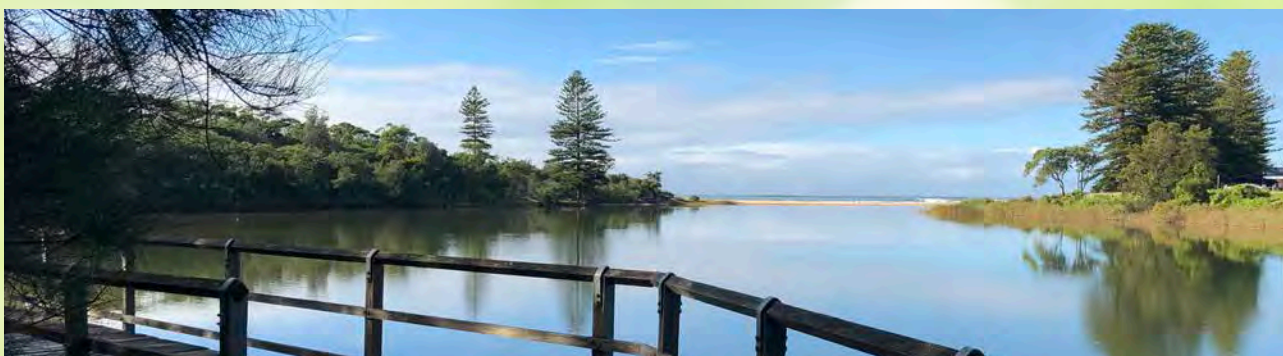
4 Days over 35° in 2019



Average daily temperatures 1.85°C warmer in 2019 than previous years



Rainfall in 2019 was down by 22% on the previous year<sup>8</sup>



*Puckey's Reserve boardwalk Wollongong*

### RECENT HIGHLIGHTS

- Declaring a State of Climate Emergency
- Lake Illawarra Coastal Management Program
- Urban Greening Strategy
- Wollongong Coastal Zone Management Plan



### WHAT YOU CAN DO TO BE CLIMATE RESILIENT?

- Insulate your home and shade windows from hot afternoon sun
- Improve the energy and water efficiency of your home
- Install a grey water system
- Set up a wicking bed (drip irrigates from underneath)
- Reduce the amount of hard surfaces around your home by creating gardens and planting appropriate trees
- Assess how vulnerable your home is to the impacts of climate change
- During extreme weather, check on vulnerable neighbours
- Use a trigger nozzle on your hose
- Mulch your gardens and only water in the cooler parts of the day
- Protect your home or business against bushfires by clearing gutters and flammable materials from around your home

## SUSTAINABILITY OUTCOMES

- Improved capacity of our community to adapt to climate change
- Improved capacity of our natural ecosystems and waterways to adapt to climate change
- Reduced heat intensity of our urban areas
- Reduced potable water consumption for Council facilities and the city
- Increased life expectancy of Council assets
- Decreased risk to the community and natural environment from natural disasters such as bush fires, floods and storms

### OUR SUSTAINABILITY OUTCOMES WILL BE ACHIEVED THROUGH:

#### Delivery of the following key supporting documents:

- Urban Greening Strategy 2017-37
- Climate Change Adaptation Plan 2009
- Illawarra Biodiversity Strategy 2011
- Floodplain Risk and Stormwater Management Plans
- Sportsgrounds and Sporting Facilities Strategy 2017-21
- Wollongong Coastal Zone Management Plan 2017
- Lake Illawarra Coastal Management Program

### AND THROUGH NEW AND EXISTING ACTIONS AND PROGRAMS:

- **C1** Continue to implement the Asset Protection Zone (Bushfire) Management Program
- **C2** Continue to implement the Natural Areas Management Program
- **C3** Update the Water Sensitive Urban Design chapter in the DCP
- **C4** Investigate opportunities to improve the climate resilience of all new and refurbished Council buildings and facilities
- **C5** Review asset management plans to include climate change provisions
- **C6** Plan for the provision of effective blue and green infrastructure through strategic urban planning processes



*Thomas Dalton Park Irrigation Project*



*Thomas Dalton Park Irrigation Site*

<sup>8</sup> <http://www.bom.gov.au/climate/current/statements/scs71.pdf>

# Implementation

A suite of high-level actions have been developed for each of the priority areas in this Strategy. The implementation of these actions will contribute to achieving the goals and sustainability outcomes prescribed, ultimately resulting in measurable improvements for our environment and the resilience of our city.

The majority of these actions will be implemented through existing strategies, plans and programs. Where there are gaps in our current programs, high-level actions have been identified for consideration through relevant planning and approval processes.

Supported actions will be included in our Delivery Program and Operational Plan for resourcing and implementation.

Funding for the implementation of actions within this Strategy will be subject to approval through our annual budgetary and planning processes. Additional feasibility assessments, external funding applications or partnerships may be necessary for large scale projects.

Effective and collaborative implementation of the actions identified in this Strategy will ensure that we, as a community, can create a thriving low waste, low emissions City which is resilient, liveable and has high biodiversity values.



**Figure 13:** The link between the CSP, Sustainable Wollongong Strategy, action delivery and reporting

## Monitoring and Reporting

### - how will we know that we have met our goals?

To ensure that we achieve our goals in this Strategy, monitoring of the implementation of high-level actions and progress towards the sustainability outcomes needs to be both measurable and meaningful. Our responses to climate and environmental issues are changing rapidly, with technological advancements, policy changes and community sentiment directly influencing what we do and how we do it.

Our Integrated Planning and Reporting Framework will provide accountability to the community and other key Council stakeholders, through the quarterly and annual reports which documents our progress in implementing the Delivery Program and Operational Plan. These reports are made publicly available.

We are also developing a 'Sustainability Dashboard' to measure the outcomes of the programs that we implement, not just the outputs. For example, through our natural area restoration and Bushcare programs, we clear weeds and plant new trees, but this information does not tell us the improvements that we are making in the condition of our natural areas. By using an outcomes framework, we can regularly monitor and report on the impact that we are having. The Sustainability Dashboard will be specifically tailored to measure our progress towards our sustainability outcomes and ultimately achieving our goals.

The results of our 'Sustainability Dashboard' will be made available on our website, Administration Building foyer, community facilities and we will keep the community updated through our regular sustainability and community newsletters.

## Strategy review

To ensure that this Strategy remains current and reflective of political and community sentiment, it will be reviewed on a four-year cycle, coinciding with Council terms and review of the CSP. The Strategy will also undergo a major review in 2030.





*'Leave only footprints,  
leave no rubbish behind.'*

Aboriginal Reference Group