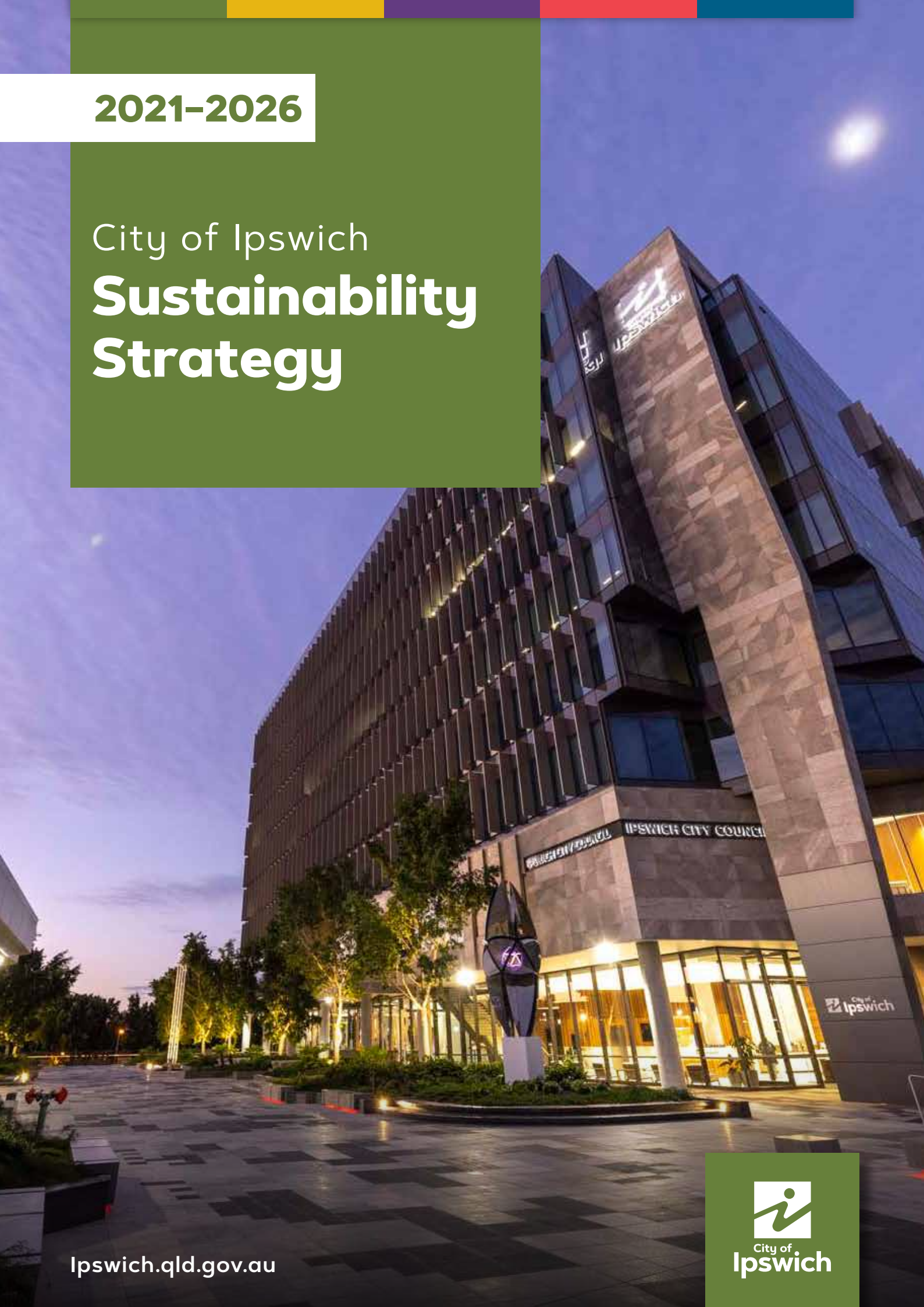
2021–2026

City of Ipswich

Sustainability Strategy



Ipswich.qld.gov.au

City of Ipswich

ACKNOWLEDGEMENT OF COUNTRY

Ipswich City Council respectfully acknowledges the Traditional Owners as custodians of the land. The Traditional Owners whose earth, winds and water we share, and have had a deep spiritual and cultural connection to country for thousands of years. We pay our respects to their elders, past, present and emerging, as the keepers of the traditions, cultures and stories of a proud people.

Cover image: 1 Nicholas Street
Constructed with a 5 green star rating, this building incorporates sustainable design elements and materials which include smart glass, a reflective colour scheme, a rooftop solar system and modern construction techniques.

CONTENTS

FOREWORD

In recognising the important role Ipswich City Council (council) has to play, this strategy is structured around key enablers and challenges related to sustainability. The strategy aims to embed the concept of sustainability into the culture and operation of council.

INTRODUCTION

Ipswich is the fastest growing Local Government Area (LGA) in Queensland and one of the fastest growing Local Government Areas in Australia. In recognition of the pace of growth in Ipswich, council's iFuture Corporate Plan has identified the Sustainability Strategy as a 2021–2026 catalyst project under the Natural and Sustainable theme. The purpose of the Sustainability Strategy is to detail how we will increase our existing efforts and implement new actions towards making Ipswich a more sustainable place to live as we continue to grow. Through this strategy, council defines sustainability for Ipswich by addressing key challenges identified through consultation with the community. The Sustainability Strategy provides the direction as to how we work to deliver, partner and advocate for effective sustainability outcomes in meeting the city's challenges.

The strategy presents five key sustainability Action Areas. Within these Action Areas are two Priority Action Areas whereby council is either creating a new strategic direction or strengthening existing efforts. The two Priority Action Areas are:

1. Sustainable Council
2. Climate Adaptation

The Priority Action Areas present an opportunity to build capacity as an organisation in corporate sustainability and as a community in climate adaptation.

The remaining Action Areas are called Progressed Action Areas and are:

3. Transport and Mobility
4. Natural Environment and Healthy Waterways
5. Circular Economy

These three Progressed Action Areas have existing council strategies and plans that are currently being delivered and have been identified, through consultation, as being important areas in defining sustainability for Ipswich. This strategy directly cross-references the work already being undertaken in these Progressed Action Areas to provide a well-rounded approach to sustainability for the city.

This strategy is also supported by a comprehensive implementation plan that will help us deliver on our goals. The implementation plan communicates how we aim to improve our sustainability performance within an organisational operational and community-wide context from 2021-2026. During this five-year period, the implementation plan will be reviewed and adjusted every two years as technology progresses, regulatory reforms occur, we continue to learn, and stakeholder feedback is continuously incorporated.

The Sustainability Strategy recognises the important role that Ipswich City Council, local business and the community play in achieving the city's sustainability goals.

WHAT IS SUSTAINABILITY?

The concept of sustainability is a broad one and means different things to different people. However, this strategy embraces the following definition:

'Sustainability means balancing economic, social and environmental factors to support a desired quality of life for current and future generations'.

SUSTAINABLE DEVELOPMENT

In 1987, the Bruntland Commission published its report, Our Common Future, in an effort to link the issues of economic development and long-term environmental stability. In doing so, this report provided the definition of sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations General Assembly, 1987, p. 43).

WHAT DOES SUSTAINABILITY MEAN TO YOU?

In early 2020, council engaged with the community to understand what sustainability meant to the community of Ipswich. This, coupled with subsequent engagement with council staff, informed the development of council's Sustainability Policy which was adopted in November 2020 and has also guided the development of this strategy.

Through this engagement, the community reaffirmed the importance of environmental sustainability by identifying a range of challenges that are most important for the City of Ipswich to act on and are summarised on the following page.

200+ participants

Shapeyouripswich.com.au, Rosewood Community Centre, Riverlink, Orion Springfield, Winston Glades and Queens Park Environmental Education Centre

How sustainable...

...is the city ★★

...are you ★★★

Your voice: What is sustainability?

- being mindful of future generations
- Everyone doing their bit
- managing our natural resources

Your views: Hot Topics

- Energy and water resources
- Trees and habitat
- Recycling and waste

Your views: City needs

- Public and active transport
- Economy and infrastructure
- Urban green spaces

Your ideas: Growing sustainability

- Backyard composting and worm farming
- Farmers markets with local produce
- Community gardens and public food trees

WHAT YOU SAID

'Development that responds to changing climates and infrastructure that enhances liveability'

'A planning approach that considers the long term and is holistic'

'Reduce our waste and utilise opportunities to reuse and recycle and build a circular economy'

'Reduce our pollution and waste of energy and water resources'

'Energy and water ratings for buildings (council and residential)'

'Greening the city'

'Everyone doing their bit for the city'

'Preserve the environment for future generations'

'Protect native fauna and flora'

WHY A SUSTAINABILITY STRATEGY FOR IPSWICH?

For Ipswich, we have recognised that to maintain, and improve the liveability of the city, a Sustainability Strategy is needed to address the modern challenges that we face not only locally, but globally. You (the community) have told us (council) that we need to be more sustainable as a city and that sustainability is important to you. You highlighted the need to have access to good transport options and green open spaces, as well as ensure that our economy is strong with job opportunities. You also acknowledged concerns around climate change and waste management in Ipswich. Having a clean and green environment is also important to you. Council has listened to the community feedback and as a result, the sustainability policy was adopted with the following six principles:

1. Governance and Leadership
2. Responsible Decision Making
3. Leave a Legacy
4. Sustainable Procurement
5. Efficient Use of Resources
6. Think Global, Act Local

The Sustainability Strategy is the action based delivery mechanism for the sustainability policy and directly reflects community feedback whilst addressing the sustainability challenges for the city.

Council seeks to be a leader as an organisation in sustainability and to facilitate and support economic prosperity whilst ensuring the wellbeing of our community by living in a considered way with the natural environment.

CITY CHALLENGES

The two key challenges that are the focus for this Sustainability Strategy for the city right now, are population growth at a local level and climate change at a global level.

POPULATION GROWTH

Our population is predicted to grow to 557,649 by 2041 from its current population of approximately 232,930 in 2021 (*source: iFuture Corporate Plan 2021–2026*). That means our current population will more than double over a 20-year period and that Ipswich will be the fastest growing LGA in Queensland and will be one of the fastest growing LGAs in Australia. As our community grows, we need careful planning as greater demand is placed on our resources, infrastructure and environment.

From a council perspective, the Planning Scheme is the statutory planning instrument to guide development in Ipswich. While the State Government principally sets the population targets and the urban footprint for development in Ipswich, council influences sustainable land use and growth management via the Planning Scheme.

The Sustainability Strategy sets out other avenues for growth management for Ipswich whereby as a community, we can make choices for living more sustainably as a shared responsibility.

CLIMATE CHANGE

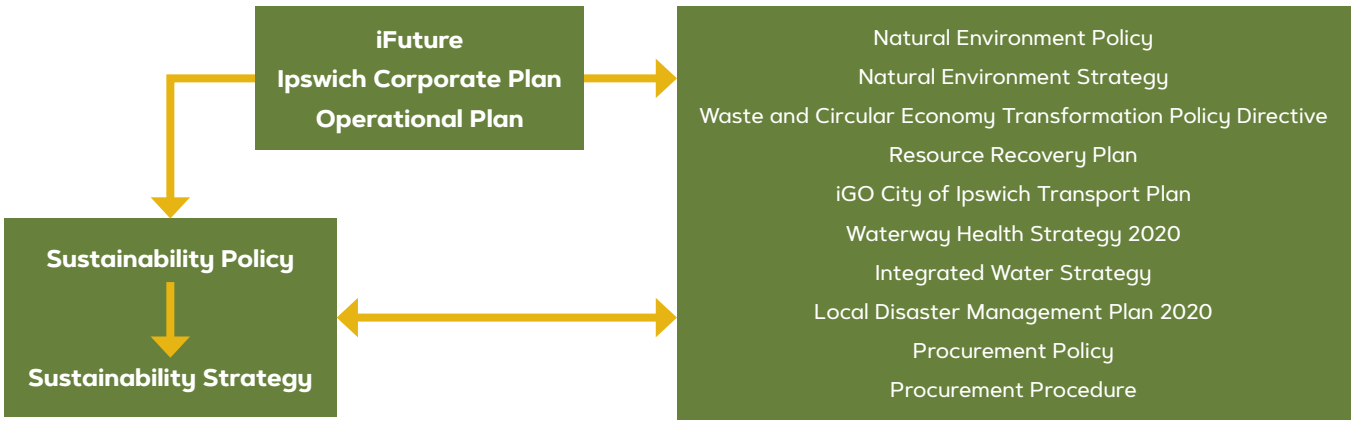
Climate change is a modern-day challenge that can impact our infrastructure, the way we live and our susceptibility to extreme weather events. Our ability as a city to plan, adapt and respond to a changing climate will ensure that we are prepared to meet this challenge.

Whilst climate change is recognised as a global concern, there is action we can take at a local level to mitigate impacts. National and state government policies acknowledge the climate science and are responding appropriately to meet Australia's international commitments to the legally binding Paris Agreement of 2015 that Australia is party to.

The Sustainability Strategy seeks to build capacity within the organisation and community through targeted actions to better equip ourselves to adapt to a changing climate and to contribute to the targets set in the Paris Agreement.

HOW THE SUSTAINABILITY STRATEGY 'FITS'

This strategy exists in the context of the city's greater vision, and the other strategies that seek to deliver on it.



ALIGNMENT TO THE SUSTAINABLE DEVELOPMENT GOALS

The United Nations Sustainable Development Goals (SDGs) were adopted in 2015, the same year as the Paris Agreement. They provide a blueprint to address global challenges related to poverty, inequality, climate, environmental degradation, prosperity, and peace and justice by 2030.

There is a close alignment between the SDGs and our responsibility as a local government to consider the long-term environmental, social and economic interests of our community.

As an example, by addressing climate change at a local level, we will contribute to this international effort. Increasing temperatures and changes to seasonal patterns and natural disasters will increase habitat loss should we not implement measures to mitigate and minimise these impacts at a local level.

In developing council's Sustainability Strategy, the targets and indicators of all 17 SDGs were reviewed. There were seven SDGs whereby council can deliver on related targets via this Sustainability Strategy and are as follows:

Source: United Nations Sustainable Development Goals. (2015). Retrieved from Un.org/sustainabledevelopment/sustainable-development-goals/

Source: Intergovernmental Panel on Climate Change (IPCC). (2018). Special Report on Global Warming of 1.5°C.

CITY BACKGROUND

ENVIRONMENT

46 rare and threatened species of fauna and flora

Over **11,000 kms** of waterways

400+ parks

219 nature reserves maintained

6,646ha of conservation estates

21% remnant vegetation cover across the Local Government Area

Over **12 days** per year over 35°C

SOCIAL

232,930 people live in the City of Ipswich.

By 2041, this is expected to increase to **557,649**

Source: iFuture Corporate Plan 2021-2026

ECONOMIC

77,728 local jobs

$10.56bn gross regional product

10,260 registered businesses

THE SUSTAINABILITY STRATEGY

OUR VISION

We are proud of and enjoy our waterways, our bushland our flora and fauna and our cultural landscapes. We are continuing our work towards a sustainable future that mitigates environmental impacts and to a changing climate. We are known nationally for being clean, green and a city with a circular economy.

OUR GOAL

To be a sustainable city.

What do we mean by a sustainable city?

A sustainable city is one that is **clean**, **green**, **healthy** and **resourceful**. It is a city that is **economically productive**, **culturally respectful** and **environmentally mindful**. It is one that designs for reduced emissions and safe, reliable movement in and around the city; it is one that consciously decides to minimise waste and maximise resource recovery; it is one that intrinsically honours and values the limits of nature to support our existence.

To be a sustainable city is to have a **connected and resilient community**. It is one that has the ability to adapt to local, regional and global influences and continue to thrive. It is a **capable and caring community** that can both celebrate in times of triumph and lean on each other in times of crises.

Simply put, a sustainable city is a liveable city.

SUSTAINABILITY STRATEGIC FRAMEWORK

In consultation with our community, there were five key Action Areas to achieve being a sustainable city that emerged and that address the two principal challenges that the city faces – population growth and climate change.

The five Action Areas for the Sustainability Strategy are:

PRIORITY ACTION AREAS:

1. **A Sustainable Council –** It is critical for council as an organisation to lead by example and facilitate projects and programs for the city to become more sustainable.
2. **Climate Adaptation –** Building our resilience to a changing climate will ensure we're able to continue to live comfortably and safely, and the impact to the environment is limited.

PROGRESSED ACTION AREAS:

3. **Transport and Mobility –** How we and our visitors move in, and around the city, influences the level of congestion on our roads and air pollution. Encouraging active transport and access to reliable public transport can reduce road congestion and subsequent air pollution.
4. **Natural Environment and Healthy Waterways –** Our natural environment and waterways are key to supporting diverse ecosystems and our well-being. How we preserve the environment and our waterways for generations to come will depend on how we value and plan for these natural assets now.
5. **Circular Economy –** Waste has been an ongoing challenge for the City of Ipswich owing to large volumes of waste being accepted from outside of the city. However, there are opportunities to change the way we manage waste by adopting a circular economy approach.

The strategic framework illustrates how the goal, policy principles and Action Areas 'fit together' to form the basis of the Sustainability Strategy.

STRATEGY OUTCOMES

By implementing the Sustainability Strategy, there are several outcomes that the strategy is setting out to achieve. The outcomes will provide the incentive for the implementation of the strategy to reach the sustainable city goal. The following are high-level outcomes identified for the strategy which will then be used as indicators to measure the success of the strategy implementation.

STRATEGY OUTCOMES

- Access to green space
- Access to sustainable transport
- Resilient and well-informed community
- Valuing our indigenous and cultural heritage
- Support healthy lifestyle
- Increased support of ethical practices

- Reduced carbon emissions
- Access to natural areas and biodiversity
- Improved city cooling
- Reduced energy consumption
- Reduced waste generation
- Reduced water consumption
- Increased support of renewable technology
- Improved waterway health

- Support new industry
- Support local jobs
- Increased resource efficiency
- Reduced operating costs

- Leading by example
- Increased collaboration

SUSTAINABILITY ACTION AREAS

PRIORITY ACTION AREA 1: SUSTAINABLE COUNCIL

We know the big issues that affect our city, from waste management to the health of our waterways. While we can influence and support businesses and the wider community, we can make direct change through how we conduct our own business.

By developing the right tools and capability, council can pursue more sustainable outcomes. It will take time and incremental change; however, through committed leadership and a well-equipped workforce – we can make a difference.

This means the decisions and the activities we undertake as an organisation every day – the energy and water we use, how we minimise our waste, and the purchasing decisions we make as a council – we can achieve best practice in sustainability. By taking a leadership role, we also aim to inspire best practice among local business and our residents and enable our community to move towards a sustainable city.

As one of Australia's fastest growing regions, we want to lead the way in sustainability performance by 'walking the talk'. Our community expects it, and we are committed to it. By doing this, we will reduce our running costs, minimise the use of valuable resources and play our part in mitigating against climate change risk and its impacts.

The way council plans to be a more sustainable council is by focussing on five key areas of our operations in the first instance. These five focus areas are:

- **ENERGY AND CARBON REDUCTION**
- **WATER EFFICIENCY**
- **RESOURCE RECOVERY AND WASTE MINIMISATION**
- **SUSTAINABLE PROCUREMENT**
- **GREEN WORKPLACE TRAVEL.**

SUSTAINABLE COUNCIL

FOCUS AREA 1:
ENERGY AND CARBON REDUCTION

Our Goal

Ipswich City Council will reduce organisational carbon emissions by 50% by 2026.

Our Actions

Our central action to reduce emissions will include a program of capital works for energy efficiency upgrades, including streetlight LED retrofits, and to implement renewable energy projects. In addition to these major work programs, emissions from transport will be addressed through the supply chain and council's vehicle fleet. Emissions from waste will be further reduced through the implementation of the Resource Recovery Strategy.

- Develop and adopt an emissions reduction plan (ERP) to achieve the goals described in this strategy. The ERP plan will include high impact mitigation actions which include:
  - strong leadership and carbon culture
  - power council with 100% renewable electricity
  - implement circular and sustainable waste management
  - reduce energy consumption through efficiency
  - sustainable travel and transport
- Investigate and determine the most cost-effective way for council to enter a Power Purchase Agreement for renewable energy
- Enhance measurement and monitoring of organisational energy and carbon emissions including Scope 3 emissions.

Why is this important?

Global efforts to tackle climate change include a collective agreement to reduce greenhouse gas emissions, as required under the Paris Agreement. The Paris Agreement, signed by 94 countries – including Australia – aims to:

'Strengthen the global response to the threat of climate change by keeping global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue other efforts to limit the temperature increase even further to 1.5 degrees Celsius.' (United Nations, 2017).

In 2020, Ipswich City Council generated approximately 25,543 tonnes of carbon dioxide equivalent (CO_2e) from our operations (Scope 1 and 2). The emissions from streetlights were 32.5% of council's emissions with buildings and facilities making up 45.2%. Emissions from our fleet made up 19.5% of our emissions. Council will seek to build on this emissions inventory through tracking Scope 3 emissions in future reporting.

Over time, the city has worked hard to reduce emissions through energy efficiency upgrades and implementing renewable energy projects (solar). There are, however, more opportunities for deeper energy savings and emissions reduction through continuing with these practical measures into the future.

What we're already doing?

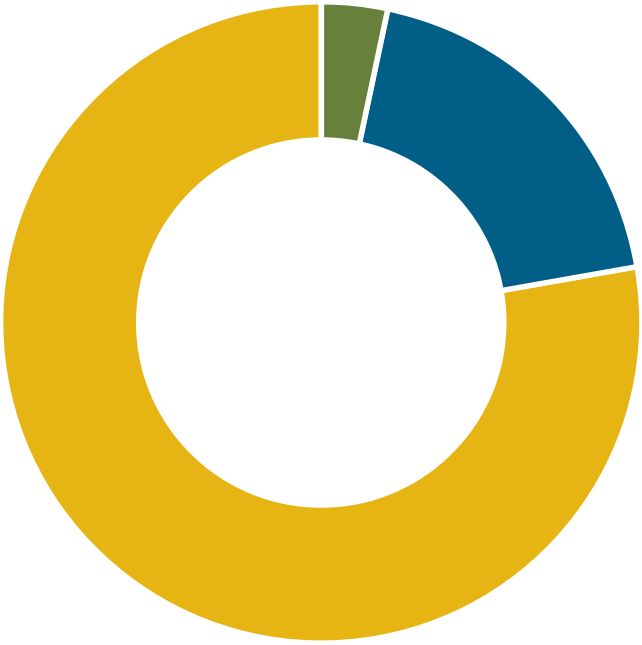
- Constructed a new administration building (1 Nicholas Street) with a 5 green star rating
- Continuing to deliver LED lighting replacement in our buildings, facilities and street lighting
- Monitor our electricity and emissions performance
- Inclusion of solar photovoltaic (PV) systems in the design of new buildings where it is viable such as the recent Rosewood Library and 1 Nicholas Street
- Actively investigating suitable smart node applications for park and street lighting.

Corporate Document Link

- Renewable Energy Plan

32.5%
of council's Scope 1 and Scope 2 emissions come from streetlights

Over
6,800
LED streetlights have been installed to date



Council's Scope 1 and 2 Emissions Sources

Scope 1 Emissions

- Natural Gas 0%
- Stationary Fuel 3.46%
- Transport Fuel 18.85%

Scope 2 Emissions

- Electricity 77.69%

Outcomes

Social

- Access to sustainable transport

Environmental

- Reduced energy consumption
- Reduced carbon emissions
- Increased support of renewable technology

Economic

- Increased resource efficiency
- Reduced operating costs

Governance

- Lead by example

Sustainable Development Goal Alignment

SUSTAINABLE COUNCIL

FOCUS AREA 2:
WATER EFFICIENCY

Our Goal

Ipswich City Council is innovative, progressive and efficient in the way we use water in our operations.

Our Actions

- Identify and prioritise the opportunities and measures to reduce demand for water consumption in council's buildings and facilities, and parks and open spaces, including reviewing service levels
- Develop detailed business cases for high priority projects to improve water efficiency and alternative water sources in our buildings and facilities, and parks and open spaces for solution implementation
- Develop design specifications for water efficiency and water quality outcomes for council-delivered projects
- Monitor water use and demand cycles using council's sustainability data platform and smart metering and apply adaptive management principles
- Work with Urban Utilities to utilise purified recycled water in council's operations wherever feasible.

Why is this important?

Water is crucial to the wellbeing of our city. Our operations consume over 440ML per annum. Predominantly this is for irrigation in our parks and green spaces as well as servicing high water usage community facilities such as swimming pools and council-owned buildings.

Parks, green spaces and community facilities are crucial to the physical and mental well-being of our communities. As our city continues to grow, this will increase the use of these assets putting pressure on our water supply to maintain these assets at required service levels.

Our approach aims to minimise the impact of climatic conditions such as drought and heat waves on our operations to ensure we have access to water when it is hot and dry. We acknowledge the impacts of climate change are expected to increase periods of drought, heat and flood cycles. As such, our approach includes utilising more efficient methods of water consumption and capturing and using alternative water sources in our operations.

Source: East Coast Cluster Report, Climate Change in Australia Projections for Australia's Natural Resource Management Regions

440ML
of water is used by the council per annum

What we're already doing?

- Completed irrigation upgrades at high-water using parks
- Implemented stormwater harvesting, treatment and reuse at several of our parks
- Utilising water efficient fixtures and fittings in council buildings
- Improving effectiveness of irrigation by using agronomic measures to maximise growth (i.e. soil texture and depth, physical intervention on soil compaction, weed and pest management, fertiliser frequency)
- Trialling water smart street trees in selected locations.

Outcomes

- **Reduced water consumption**
- **Healthy and clean waterways**

- **Increased resource efficiency**
- **Reduced operating costs**

- **Lead by example**

Sustainable Development Goal Alignment

SUSTAINABLE COUNCIL

FOCUS AREA 3:
SUSTAINABLE PROCUREMENT

Our Goal

To promote and embed sustainable procurement practices in all of council's procurement activities.

Our Actions

- Identify immediate opportunities to procure more sustainable goods and services and quantify the cost/ benefits using a category management approach
- Embed sustainable procurement procedures and requirements into purchasing category specifications and proposal evaluation criteria via the update of procurement templates
- Educate staff in sustainable procurement practices
- Engage with suppliers to communicate and build capacity around sustainable procurement to assist them in becoming preferred suppliers with council
- Establish a method to measure and monitor the 'triple bottom line' benefits of implementing sustainable procurement practices.

Why is this important?

Under the *Local Government Act 2009*, council has a responsibility to ensure that service delivery and the management of assets and infrastructure are done so in a sustainable way under sustainable development principles. This is to ensure that council's procurement activities consider financial, environmental and social aspects when procuring goods and services.

What we're already doing?

- Purchasing carbon neutral office paper
- Including environmental performance requirements in contracts
- Developed a Procurement Procedure that includes social and sustainable procurement.

Corporate Document Link

- Sustainability Policy
- Procurement Procedure

Outcomes

- **Increased support of ethical practices**

- **Reduced energy consumption**
- **Reduced Carbon emissions**
- **Reduced water consumption**

- **Increased resource efficiency**
- **Reduced operating costs**
- **Support local jobs**

- **Lead by example**
- **increased collaboration**

'Sustainable procurement integrates economic, environmental and social considerations into the specifications and evaluation criteria in procurement process, with the goal of reducing adverse impacts on human health, the natural environment, and minimising resource consumption and waste wherever possible.'

Sustainable Development Goal Alignment

SUSTAINABLE COUNCIL

FOCUS AREA 4:
RESOURCE RECOVERY AND WASTE MINIMISATION

Our Goal

To reduce the generation of waste in council's operations and to maximise opportunities for resource recovery.

Our Actions

- Source separate waste streams wherever possible and feasible for recycling and recovery
- Seek products that have minimal or no packaging or packaging that is recyclable
- Avoid single use plastics at council events
- Reuse and recycle materials such as asphalt and concrete in council's construction activities
- Implement a council wide internal food and organics recovery program.

Why is this important?

The Queensland Government's Waste Management and Resource Recovery Strategy has a vision to become a zero-waste society and to move towards a circular economy. Traditionally, waste management practices have followed a linear process; the take, make, dispose model prompting significant changes to Queensland's waste legislation to support a circular economy.

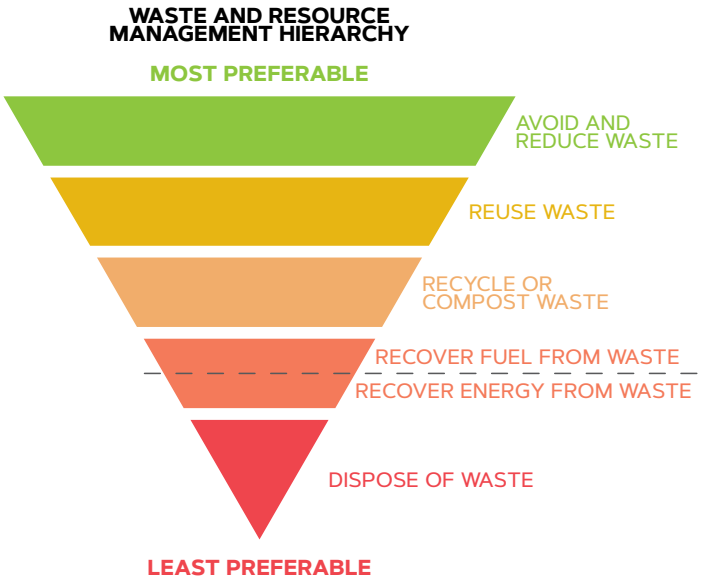
One of council's key functions is to deliver waste and recycling services for the community; therefore, council has a key role in supporting the State Government's waste strategy and in meeting the State targets of 55% diversion rate from landfill and 50% recycling target by 2025 for municipal solid waste. In addition, it is council's role to lead by example by implementing waste avoidance and minimisation actions for the organisation and to reuse and recycle materials in council delivered projects (*Source: ICC Resource Recovery Strategy*).

What we're already doing?

- Monitoring and reporting performance for our waste management activities
- Investigating opportunities into pilot projects aimed at increasing resource recovery within council
- Implementing source separation bins for different waste streams in 1 Nicholas Street
- Implemented a Food Organic and Garden Organics (FOGO) recycling program in council's administration building.

Corporate Document Link

- Resource Recovery Strategy
- Waste and Circular Economy Transformation Directive



Outcomes

Environmental

- **Reduced carbon emissions**
- **Reduced waste generation**

Economic

- **Increased resource efficiency**
- **Reduced operating costs**
- **Support new industry**
- **Support local jobs**

Governance

- **Lead by example**

Sustainable Development Goal Alignment

SUSTAINABLE COUNCIL

FOCUS AREA 5:
GREEN WORKPLACE TRAVEL

Our Goals

- Increase council staff participation in choosing sustainable and active transport modes
- Engage with major employment generators in Ipswich to develop and implement Sustainable (Green) Workplace Travel Plans.

Our Actions

- Engage with major city employers to facilitate institutional change, provide incentives and develop Sustainable Workplace Travel Plans
- Implement the Green Workplace Travel Plan for 1 Nicholas Street
- Investigate the concept of purchasing a small fleet of e-bikes for council staff to use when making small trips to test and showcase their capabilities and benefits.

Why is this important?

Council is a major employer in the Ipswich CBD area and therefore, has an influence on parking demand and traffic congestion in the CBD. Where council can encourage and facilitate employees to make sustainable transport choices, private vehicle use can be minimised alleviating some of the pressures caused by parking and congestion.

Council has an opportunity to take a leadership role in implementing the Green Workplace Travel Plan for 1 Nicholas Street which can then provide a pathway for other major employers across Ipswich to follow suit. Having a variety of sustainable transport options to get to and from work in the CBD and other major employment areas such as Springfield, supports this strategy's goal of being a sustainable city.

What we're already doing?

- Developed the Green Workplace Travel Plan for 1 Nicholas Street
- Investigate the ability for council staff to purchase e-bikes through salary-sacrificing schemes.

Corporate Document Link:

- iGO – City of Ipswich Transport Plan

Outcomes

- **Access to sustainable transport**
- **Support healthy lifestyle**

- **Reduced carbon emissions**

- **Lead by example**

Sustainable Development Goal Alignment

PRIORITY ACTION AREA 2:
CLIMATE ADAPTATION

Climate change is the change in the pattern of the weather over a long period of time, predominantly caused by greenhouse gas emissions. Climate change is already having far reaching impacts across Australia, and in Ipswich this has meant periods of drought, flooding and extreme heat. How we cope depends on how we mitigate and adapt to climate change now and plan for the future. Putting mitigative and adaptive climate change measures in place will help the City of Ipswich take quantitative and practical steps towards protecting and strengthening the Ipswich community against the impacts of climate change.

Many of the challenges for the City of Ipswich are likely to be exacerbated by changes in climate over time. Council is committed to using the best scientific information and local climate projections as a basis for climate change mitigation and adaptation decision making.

Modelling shows that over time, the Ipswich region will continue to be exposed to:

- higher average temperatures across all seasons
- more hot days and extreme heat waves
- increased intensity of extreme rainfall events
- longer periods of drought
- more frequent floods
- a harsher fire-weather climate.

Source: East Coast Cluster Report, Climate Change in Australia Projections for Australia's Natural Resource Management Regions.

This section explores the challenge of climate change and the impacts on our organisation, natural environment and community. It looks at the mitigation and adaptation actions we can take to address it. The four focus areas are:

- **CITY EMISSIONS**
- **URBAN HEAT AND URBAN GREENING**
- **DISASTER MANAGEMENT**
- **CLIMATE RISK MANAGEMENT.**

CLIMATE ADAPTATION

FOCUS AREA 1:
CITY EMISSIONS

Our Goal

Ipswich is recognised as a low carbon city.

Our Actions

- Investigate and understand the City of Ipswich's emissions including a baseline inventory
- Support community, business and industry to reduce energy and emissions via education programs
- Educate the community regarding the implications of climate change and ways to adapt to a changing climate
- Attract new business and industries to Ipswich with a focus on low emissions technology.

Why is this important?

Council recognises that shared responsibility is needed at all levels of government, by business, by investors, community organisations and residents to reduce greenhouse gas emissions. As an example Springfield City Group has committed to zero net energy by 2038 and is rolling out a number of actions in the Greater Springfield area to attract low carbon businesses to Ipswich.

Taking action to reduce emissions will enable a well-planned transition to a low carbon future that meets national and local needs while managing costs and risks. In many cases, investing in low carbon infrastructure such as roof top solar, electrification of vehicles and improving building efficiency provides valuable benefits, such as improved energy productivity, creation of new industries and jobs, and improved liveability within the community.

The decisions made today about energy, infrastructure, buildings, transport planning and waste will lock in the pathway to achieving rapid decarbonisation for Ipswich city.

Over 37,000 individual roof top solar power systems operating across the city representing over 192 megawatts of installed capacity.

Or to put it another way, 30% of all households and businesses are generating renewable energy, reducing their carbon footprint, and saving on electricity costs.

Source: AEMO Distributed Energy Resources (DER) Register

What we're already doing?

- Investigating ways to quantify the current 'base line' emissions of the City of Ipswich
- Collaborating with other councils and organisations to understand best practice in community emissions measurement
- Keeping up to date of energy industry developments which would support community emissions reduction opportunities.

Outcomes

- **Resilient and well-informed community**
- **Support healthy lifestyle**

- **Reduced carbon emissions**
- **Reduced energy consumption**
- **Increased support of renewable energy**

- **Support new industry**
- **Support local jobs**
- **Increased resource efficiency**

- **Increased collaboration**

Sustainable Development Goal Alignment

CLIMATE ADAPTATION

FOCUS AREA 2:
URBAN HEAT AND URBAN GREENING

Our Goal

Improve liveability by cooling the city and protecting people and communities from heat stress.

Our Actions

- Undertake a baseline analysis to map Ipswich's urban heat island (UHI)
- Develop an Urban Greening Plan
- Review and update Urban Greening Plan with urban heat data and recommendations from the UHI partner project
- Ensure land is zoned appropriately to allow for natural asset protection and green spaces.

Why is this important?

Urban heat 'islands' occur when the natural environment is replaced with man-made structures such as pavements and buildings which absorb and retain heat. This causes temperatures in these areas to be higher than vegetated areas. Heat in the City of Ipswich impacts our community, businesses and the natural environment in many ways including increased cost for cooling our homes and increase in heat-related stress. Our city on average is expected to be 0.9 degrees hotter by 2030 as well as experiencing an increasing number of days reaching temperatures above 35 degrees Celsius.

Source: East Coast Cluster Report, Climate Change in Australia Projections for Australia's Natural Resource Management Regions.

We can use the city's assets, such as our recreational areas and green spaces, to ensure people can cool down on hot days. We can also use direct measures, such as greening the urban environment, increasing canopy cover, increasing surface permeability, installing green roofs or rooftop solar installations, building with the future in mind and utilising community facilities in our public places to give communities relief from the heat. These actions ultimately aim to improve liveability and to prioritise protection for people and communities as we adapt to a changing environment.

What we're already doing?

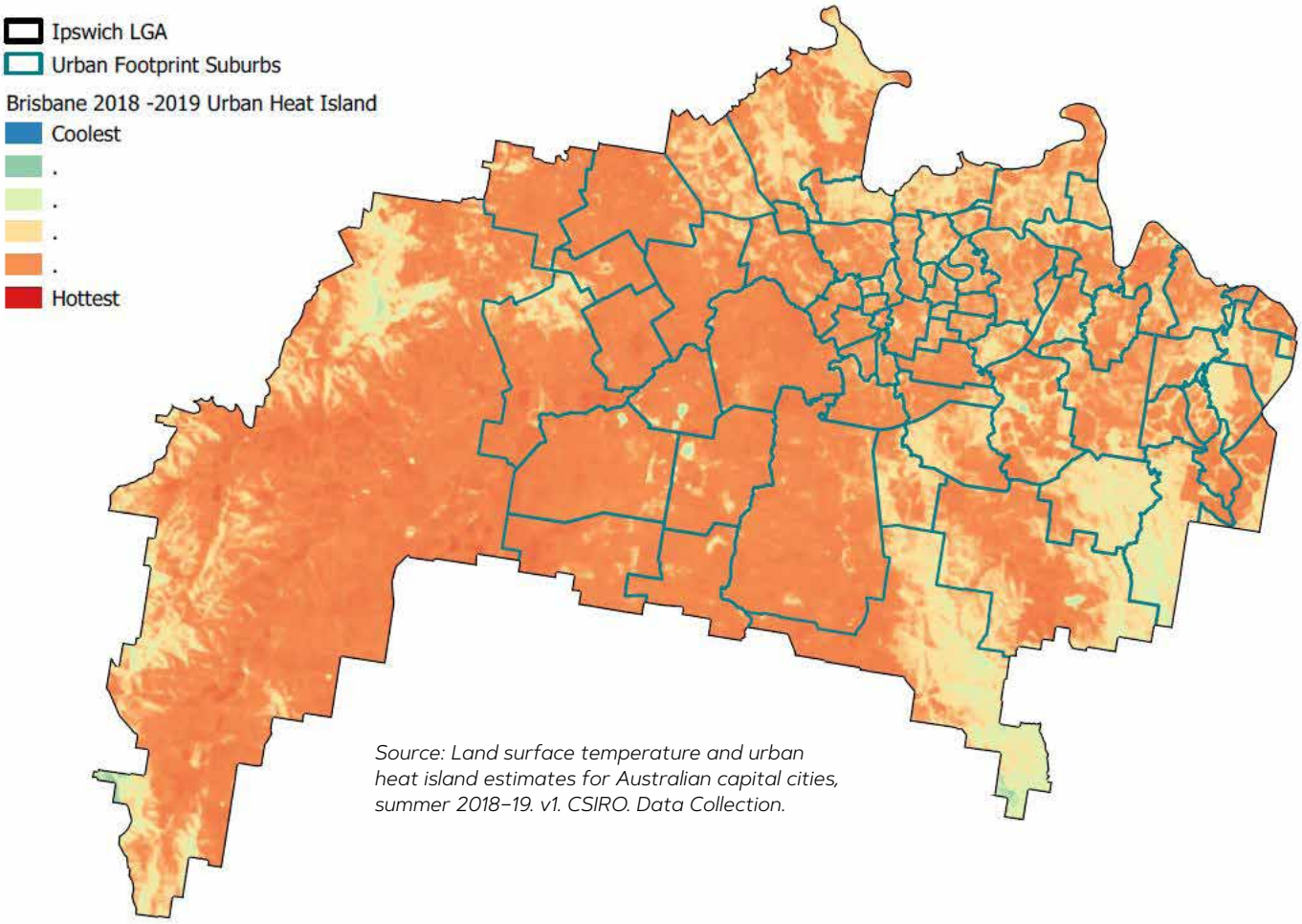
- Partnering with Griffith University (GU) and the University of Sunshine Coast (USC) to deliver a pilot urban heat island (UHI) project
- Considering sustainable urban design in buildings and facilities.

The city currently experiences over **12 days** each year above **35°C**

Data as of February 2019.

Source: East Coast Cluster Report, Climate Change in Australia. Projections for Australia's Natural Resource Management Regions

URBAN HEAT MAPPING OF THE IPSWICH LOCAL GOVERNMENT AREA



Source: Land surface temperature and urban heat island estimates for Australian capital cities, summer 2018–19. v1. CSIRO. Data Collection.

Outcomes

Social

- Access to green space
- Support healthy lifestyle

Environmental

- Improved city cooling
- Reduced energy consumption

Economic

- Increased resource efficiency
- Reduced operating costs

Sustainable Development Goal Alignment

CLIMATE ADAPTATION

FOCUS AREA 3:
DISASTER MANAGEMENT

Our Goal

To increase community awareness and resilience to climate-related disasters.

Our Actions

- Partner with local community leaders and groups to increase community resilience (Community Champions)
- Continue to develop community engagement and awareness about identifying and responding to risks, including but not limited to floods, fires, severe storms and heatwaves
- Establish the City of Ipswich Local Recovery Group to ensure a coordinated recovery from emergencies and disaster events
- Identify and support community-led disaster risk awareness, preparedness and recovery initiatives.

Why is this important?

Queensland is the most disaster-prone state in Australia, and as our climate changes, so too will the frequency, duration and intensity of disaster events. These events can cause significant environmental, economic and social impacts and consequences including damage to homes, injury and mortality, higher insurance costs, loss of livelihoods and more resources required for emergency response.

When coupled with population growth and urban development in hazard-prone areas, the risks associated with these events will increase, so it's important that we work to become a more resilient community with appropriate, effective and efficient adaptation and response mechanisms in place.

Disaster resilience is about working together to keep communities safe from disasters. Everybody has a role to play in reducing disaster risk and enabling community resilience at home, in our families and our local communities and networks.

What we're already doing?

- Providing the My Ipswich Alerts service free of charge to enable residents to receive alerts of potentially dangerous weather and bushfires and take action to stay safe
- Developing the Ipswich Integrated Catchment Plan as part of our ongoing commitment to understanding and preparing for flood
- Ongoing community education, awareness and engagement activities at local community and industry events and forums to promote disaster awareness and preparedness
- Providing ongoing support to the State Emergency Service (SES) through a support policy and funding of an SES Local Controller to enable the City of Ipswich to be more responsive to disaster events
- Developing Bushfire Hazard Response plans for the areas in Ipswich that face high bushfire risk
- Partnering with the Queenslanders with Disability Network, the Centre for Disability Research and Policy at The University of Sydney and the Queensland Government, to promote the Disability Inclusive Disaster Risk Reduction Framework and decrease disaster risk for people with disabilities and their carers
- Maintaining, reviewing and updating the Local Disaster Management Plan and Local Recovery Plans in consultation with the Local Disaster Management Group, to ensure a coordinated response to and recovery from disasters in our city
- Ongoing coordination of the Local Disaster Management Group and subsequent partnering with emergency services and support agencies on community awareness and education initiatives.

Outcomes

- **Resilient and well-informed community**

- **Lead by example**
- **Increased collaboration**

Sustainable Development Goal Alignment

CLIMATE ADAPTATION

FOCUS AREA 4:
CLIMATE RISK MANAGEMENT

Our Goal

Enhance council's risk assessment process in relation to climate change and quantify the extent of climate change risks into council's corporate risk register and risk management framework.

Our Actions

- Develop a climate change policy
- Develop a climate risk management strategy
- Investigate opportunities to design for climate resilience, including support for sustainable buildings and green infrastructure, sustainable built environment elements in the planning scheme and advocating for more sustainable elements in building codes
- Incorporate and embed consideration of climate change within council's corporate governance documents
- Communicate the risks and opportunities associated with climate change to stakeholders regularly and as new information becomes available
- Develop and increase staff awareness, understanding, direction and leadership of climate-related risks and potential impacts and opportunities across the organisation.

Why is this important?

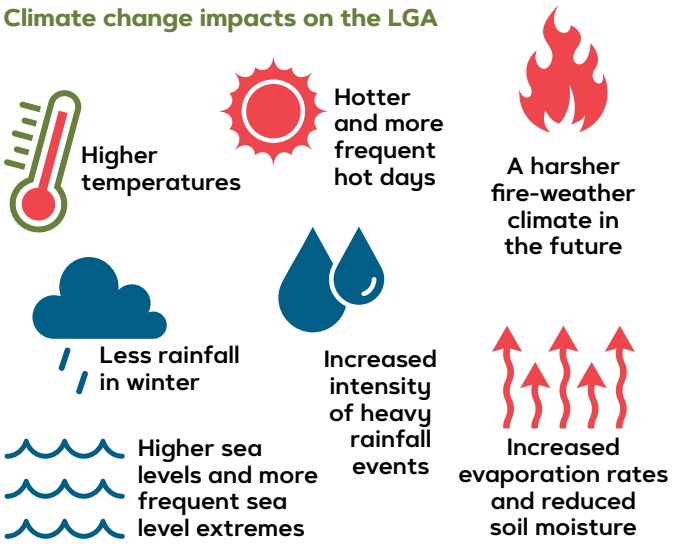
Climate change is a pressing issue for local government that is already manifesting as a legal, social, economic and environmental risk. Local governments make decisions that span generations (e.g. roll-out of infrastructure, planning for future settlements) and as such, need to be actively assessing and responding to the direct and indirect risks that climate change presents.

Ipswich City Council needs to be positioned to respond to changes in Australian Government and Queensland policy frameworks and regulatory regimes in this rapidly changing space.

What we're already doing?

- Member of the Queensland Climate Resilient Councils (Q CRC) program and have held face-to-face briefing climate risk sessions with senior management and staff
- Conducted a climate risk governance assessment through the Q CRC program
- Developed a climate adaptation plan for 1 Nicholas Street.

Climate change impacts on the LGA



Source: Climate Change in Australia

Outcomes

- Resilient and well-informed community

- Reduced carbon emissions
- Improved city cooling
- Reduced energy consumption

- Support local jobs
- Increase resource efficiency
- Reduced operating costs

- Lead by example

Sustainable Development Goal Alignment

PROGRESSED ACTION AREA 3:
TRANSPORT AND MOBILITY

One of the challenges that the City of Ipswich faces is how we move in, and around the city. The majority of trips within Ipswich are undertaken by private motor vehicles. This is largely due to Ipswich's low-density urban form, uncompetitive public transportation and disaggregated network of active transport infrastructure. Additionally, Ipswich battles with a car dominated culture and an expectation that cars will always be provided for through the continuation of space for the movement (i.e. new and upgraded roads) and parking.

The City of Ipswich Transport Plan 'branded as iGO' is council's masterplan for the city's transport future. iGO is a high-level aspirational document that provides overarching direction to respond to a number of transport issues and challenges that are faced within Ipswich. Released in June 2016, iGO is the city's first integrated transport plan that takes into account all modes of land transport.

To address transport and mobility issues in relation to the Sustainability Strategy, the following focus areas have been highlighted from iGO as opportunities for more sustainable modes of transport and less reliance on private vehicles:

- **SUSTAINABLE TRANSPORT**
- **ACTIVE TRANSPORT.**

TRANSPORT AND MOBILITY

FOCUS AREA 1:
SUSTAINABLE TRANSPORT

Options for Sustainable Transport include transport modes such as public transport, ride-sharing, electric vehicles or low emission vehicles, and e-mobility (e.g. e-scooters and e-bikes).

Our Goals

- Increase community awareness to support the use of sustainable transport options
- Enable the ability for the community to uptake sustainable transport options.

Our Actions

- Support and/or undertake public education and information campaigns and events that promote the benefits of sustainable transport modes
- Encourage the deployment and uptake of car and ride sharing schemes.

Why is this important?

iGO – City of Ipswich Transport Plan outlines council's aspirations to advance Ipswich's transport system and guide future investment decision making.

Some of the issues affecting a sustainable transport future for Ipswich and the key drivers for change include:

- high car use
- population growth
- low density suburban form
- uncompetitive public transport system
- fuel and climate change.

What we're already doing?

- In addition to developing the iGO – City of Ipswich Transport Plan, council have also developed a number of sub-strategies and action plans:
  - iGO Active Transport Action Plan
  - iGO Public Transport Advocacy and Action Plan
  - iGO Intelligent Transport Systems Strategy
  - iGO Road Safety Action Plan
  - iGO Freight Action Plan
- Actively supporting the Queensland Government's Connected Vehicles – Intelligent Transport System (C-ITS) trial in Ipswich
- Advocated for electric vehicle (EV) charging stations to be included at key locations in Ipswich as part of Phase 2 of the Queensland Government's Electric Super Highway initiative
- Advocating to the Queensland Government for public transport improvements and investment in projects such as the Ipswich to Springfield rail corridor
- Investigating the alternative use of parking revenue for the purposes of sustainable transport initiatives
- Investigation into e-Scooter and e-bike hire providers for principal activity centres.

Corporate Document Link:

- iGO – City of Ipswich Transport Plan

Outcomes

- **Access to sustainable transport**
- **Support healthy lifestyle**

- **Reduced carbon emissions**

Sustainable Development Goal Alignment

TRANSPORT AND MOBILITY

FOCUS AREA 2:
ACTIVE TRANSPORT

Active transport includes walking, cycling and human-powered movement (e.g. skateboards, scooters).

Our Goals

- Make active transport choices easy and achievable within the city to reduce the reliance on private vehicle use for short trips
- Engender the health and wellbeing benefits of active transport choices within the community.

Our Actions

- Plan, prioritise, advocate and deliver strategic bikeway projects in Ipswich that form part of the Principal Cycle Network Plan
- Plan, advocate and deliver end of trip facilities at all train stations, key bus stops and public transport hubs. Ensure that an appropriate number of different facility types are provided (i.e. secure bicycle cages for all day commuter parking, bicycle racks for shorter term parking)
- Expand on existing community education in relation to active transport through deliverables in the iGO Active Transport Action Plan.

Why is this important?

Walking, cycling and human-powered active transport modes provides many benefits for the health of both our community and the city. By choosing an active transport option when making short trips allows people the opportunity to enjoy 'incidental exercise' and to be potentially more engaged with their neighbourhood and urban environments.

Opting for active transport modes can also help alleviate traffic congestion, demand on parking and reduce carbon and air pollutant emissions in the business centres in Ipswich making for a cleaner and greener city.

What we're already doing?

- Continue to develop and grow the Ipswich Active School Travel Program and other school-based programs (i.e. walking/cycling bus) which promote children travelling to and from school via safe active transport modes
- Council is working in partnership with the Queensland Government in delivering the Principal Cycle Network (e.g. Brassall Bikeway).

Corporate Document Link:

- iGO – City of Ipswich Transport Plan

Outcomes

- **Access to sustainable transport**
- **Support healthy lifestyle**

- **Reduced carbon emissions**

Sustainable Development Goal Alignment

PROGRESSED ACTION AREA 4:
NATURAL ENVIRONMENT AND HEALTHY WATERWAYS

Our natural environment and waterways provide habitat for the diverse range of flora and fauna of our region. In fact, Ipswich contains one of the most highly diverse natural environments in South East Queensland, from vine forest along the Brisbane River to the heath-covered top of Flinders Peak.

Besides its biological values, the natural environment contributes to the economic prosperity, amenity, liveability and lifestyle of the city and its residents. In addition, the natural environment and the waterways of our region provide a strong and lasting connection to country for Aboriginal people. The persistence of intact and accessible natural environments is critical for the ongoing connection to country and Aboriginal culture.

The natural environment provides extensive 'ecosystem services' such as clean air and water, noise and light management, local amenity, temperature regulation and recreation opportunities which do wonders for our mental health. These factors combine to help make the city a much better and more sustainable place to live.

The need to protect and conserve our natural environment and waterways is significant both in terms of the uniqueness of the Australian landscape as well as its value to people. It is imperative for council to strike a balance between human need and conservation in order to preserve many of the city's natural resources for generations to come. In 2017, the percentage of the city mapped as naturally vegetated was 21.4%. That said, council has protected extensive areas from clearing through tools such as land-use planning, land acquisitions and landholder partnerships.

Source: Queensland Government – Bioregion and Subregion Analysis of Remnant Regional Ecosystem Vegetation 1997–2017).

Without sufficient natural environment and all of the ecosystem services and socially beneficial functions it provides, the sustainability and liveability of the city will decrease overtime.

This section focuses on:

- **NATURAL ENVIRONMENT AND CULTURAL LANDSCAPES**
- **WATERWAYS AND WETLANDS.**

NATURAL ENVIRONMENT AND HEALTHY WATERWAYS

FOCUS AREA 1:
NATURAL ENVIRONMENT AND CULTURAL LANDSCAPES

Our Goal

Important areas of native bushland habitat and vegetation are conserved and restored, and the city responds appropriately to climate change.

Our Actions

- Climate change and climate refugia is considered in the review of the Nature Conservation Strategy
- Adapt planning, management and maintenance activities for the Natural Area Estate covering pest plant and animals, fire hazard management, restoration of habitat, protection of threatened species, preservation of significant local species, intrinsic cultural value and visitor management to changing climatic conditions
- Adapt and modernise strategic delivery of environmental offsets across the city to ensure we are planting the appropriate species in the long term and that we're planting in the right areas
- Increase understanding and model the changes to threatened species distribution within Ipswich LGA, including identification of species under threat of local extinction due to climate change as well as identification of species that could survive in Ipswich in the future that don't currently occur here.

Why is this important?

Ipswich supports a highly diverse natural environment with rainforests, dry vine forests, eucalypt forests and woodlands, swamps, and wetlands making up the city's habitat network. These natural areas provide habitat for a range of native flora and fauna, including the nationally significant brush-tailed rock wallaby and koala and a number of threatened flora.

Our city's population growth and growing urbanisation continues to place pressure on the natural environment and the diversity of native flora and fauna that rely on it. By protecting our natural environment, we can support the quality of life and liveability of residents, workers and visitors. Protecting, bushland, biodiversity and habitat can support native flora and fauna to thrive into the future.

As the climate changes, some threatened flora and fauna may have to rapidly adapt to changing environments and ecosystem types. Some areas that were once habitable may not be in the long term and some species may need conservation intervention to ensure their survival long term. For species and ecosystems at the extremes of their environments already e.g. mountain tops and deep sea, there may be nowhere left to go.

Ensuring that changing climatic conditions are considered in conservation planning and management is therefore critical. Recognition and systematic assessment of climate change refuge for wildlife is critically important, as is assessment of existing conservation land holdings to understand what the future is likely to hold for them.

What we're already doing?

- Continually delivering on Enviroplan conservation initiatives across our city
- Voluntarily acquiring strategically important conservation areas and including these in the Natural Area Estate
- Protecting significant areas through appropriate conservation zoning in the Ipswich Planning Scheme
- Maintain, enhance and rehabilitate council's 6,500 hectares of Natural Area Estate through delivery of conservation works, bushland maintenance programs, pest management control and investing in capital works
- Identifying and mapping the distribution threatened and locally significant species and planning for their conservation
- Developed a Platypus Recovery Plan and Threatened Species Plan to identify and manage threats.

Corporate Document Link:

- Natural Environment Policy
- Natural Environment Strategy
- State of the Natural Environment Report

Outcomes

- **Access to green space**
- **Valuing our indigenous and cultural heritage**
- **Support healthy lifestyle**

- **Access to natural areas and biodiversity**

Sustainable Development Goal Alignment

NATURAL ENVIRONMENT AND HEALTHY WATERWAYS

FOCUS AREA 2:
WATERWAYS AND WETLANDS

Our Goal

Waterways and wetlands are rehabilitated and protected to provide ecological sustainability through good water quality, habitat and fauna connectivity, recreational outcomes and mitigation of major storm and flood events.

Our Actions

- Promote waterways and wetlands as engaging and accessible public spaces
- Support landholders in undertaking works on private properties.

Why is this important?

Waterways and wetlands provide important values to the community regardless of where they sit within the landscape, from mountain peaks, rural landscapes, to urban backyards and the heart of the city. Our waterways contribute to sustaining our way of life and play a pivotal role in maintaining both a liveable city and indigenous cultural relevance to Traditional Owners. Waterways also provide vital habitat for native flora and fauna, support urban cooling, provide water supply for agriculture and business consumption and play an important role in managing stormwater and mediating flooding.

What we're already doing?

- Developed and implemented waterway improvement plans for Black Snake, Bundamba, Deebing and Iron Pot Creeks
- Investing in on-ground programs and partnerships in catchment improvement projects, including the Franklin Vale initiative
- Carrying out riparian revegetation projects throughout the city's catchment to remove weeds and return degraded areas to their natural condition
- Delivering streambank stabilisation projects to mitigate erosion and sediment load on our rivers and waterways
- Rehabilitating aquatic connectivity at priority in-stream barriers identified in the region
- Implementing water sensitive urban design programs e.g. water smart street trees and stream naturalisation
- Ensuring the development of Ipswich is undertaken in a way which embraces the natural environment through appropriate land use planning and development assessment approvals
- Acquiring key areas for protection, such as flood plains to enhance natural areas
- Reviewed the stormwater quality offsets program.

Corporate Document Link:

- Waterway Health Strategy 2020

Outcomes

- **Support healthy lifestyle**
- **Valuing our indigenous and cultural heritage**

- **Access to natural areas and biodiversity**
- **Improved waterway health**

Sustainable Development Goal Alignment

PROGRESSED ACTION AREA 5:
CIRCULAR ECONOMY

Waste has presented an issue for Ipswich, particularly in recent years with the spotlight on the interstate transport of waste being disposed in privately owned landfills in Ipswich. The introduction of China's National Sword Policy in 2018 has also created a challenge in managing recyclable waste both locally in Australia and globally. China's policy, in effect, placed a ban on the import of recyclable waste materials such as paper and plastics which meant that Australia could no longer export these products to China for recycling.

The State Government, in response to some of these issues, has introduced a Waste Management and Resource Recovery Strategy which also included a waste levy to deter the disposal of interstate waste to Queensland landfills. The state strategy also promotes the diversion of waste from landfill and supports effort being made to recover and recycle waste streams wherever possible to establish a circular economy and facilitate local recycling and manufacturing industries.

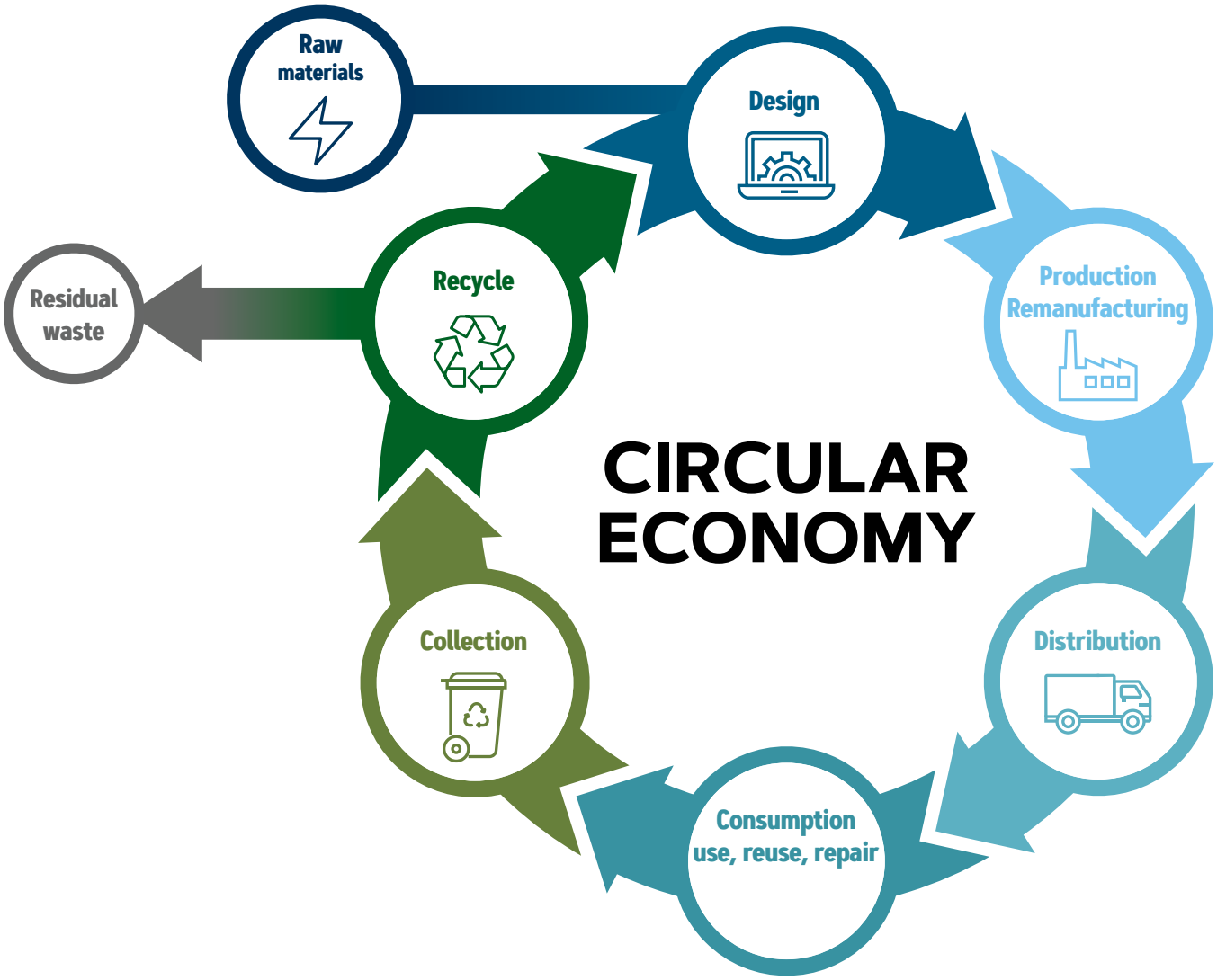
WHAT IS THE CIRCULAR ECONOMY?

The essence of a circular economy is to retain the value of materials within the economy for as long as possible, continually seeking ways to recycle, redesign and reuse materials in order to minimise the unsustainable depletion of our natural environment. (*Source: ICC Resource Recovery Strategy*).

Local government has a responsibility under the Waste Reduction and Recycling Act 2011 to manage waste for their communities. Council delivers waste services directly to the community via Ipswich Waste Services (IWS) operations and supports both Ipswich's business and residential community in implementing a circular economy to work towards a zero-waste society.

Focus areas:

- **IPSWICH WASTE SERVICES OPERATIONS**
- **CIRCULAR ECONOMY BUSINESS AND INDUSTRY COLLABORATION**
- **CIRCULAR ECONOMY FOR THE COMMUNITY.**



CIRCULAR ECONOMY

FOCUS AREA 1:
IPSWICH WASTE SERVICES OPERATIONS

Our Goal

Deliver effective and efficient waste management services for Ipswich through our people, processes and technology.

Our Actions

- Implement the actions from council's Resource Recovery Plan.

Why is this important?

Ipswich Waste Services (IWS) is council's operational arm for delivering waste services to the residents and businesses of Ipswich. IWS sets the strategic direction for how these waste services will be delivered in consultation with the community, industry and government agencies. Council has a responsibility to deliver waste services that are reliable, efficient and environmentally sound to meet the needs of Ipswich's growing community.

What we're already doing?

- Delivering efficient waste and recycling services to Ipswich's residential and business community
- Improving and upgrading waste infrastructure at the Riverview Recycling and Refuse Centre.

Corporate Document Link:

- Resource Recovery Strategy
- Waste and Circular Economy Transformation Directive

Outcomes

- **Support healthy lifestyle**

- **Reduced carbon emissions**
- **Reduced waste generation**

- **Increased resource efficiency**
- **Reduced operating costs**

Sustainable Development Goal Alignment

CIRCULAR ECONOMY

FOCUS AREA 2:
CIRCULAR ECONOMY BUSINESS AND INDUSTRY COLLABORATION

Our Goal

Effective collaboration with local resource recovery sectors to improve market development, economic growth and to assist emerging bio-markets.

Our Actions

- Proactively share data and information across the Queensland waste sector to support transparency, innovation and informed waste management planning and decision making
- Facilitate the uptake of the state sponsored ecoBiz sustainability program with small-to-medium businesses in Ipswich
- Deliver the 10 action items from Ipswich's Waste and Circular Economy Transformation Policy Directive.

Why is this important?

Working towards creating a circular economy enables the wise use of materials and resources to minimise otherwise useful waste going to landfill. In doing so, new industry and manufacturing processes can be established that support the use of recycled materials and innovations in product development. There is also the opportunity to localise circular economy activities and industries so that there are local employment opportunities and less transport carbon miles generated in moving materials for processing.

What we're already doing?

- Promoting a coordinated, consistent approach with regional partners and regulators to develop cost effective, innovative solutions and clear waste policy positions
- Encouraging tyre recyclers to beneficiate their products through improved contract management practices
- Participate in waste industry forums.

Corporate Document Link:

- Resource Recovery Strategy
- Waste and Circular Economy Transformation Directive

Outcomes

- **Support healthy lifestyle**

- **Reduced carbon emissions**
- **Reduced waste generation**

- **Support new industry**
- **Support local jobs**
- **Increased resource efficiency**

- **Increased collaboration**

Sustainable Development Goal Alignment

CIRCULAR ECONOMY

FOCUS AREA 3:
CIRCULAR ECONOMY FOR THE COMMUNITY

Our Goal

For the Ipswich community to be actively engaged in circular economy activities including improved recycling and choosing to buy products with recycled content.

Our Actions

- Deliver targeted community engagement and awareness programs to improve waste avoidance, recovery and reuse behaviours
- Trial a Food Organic and Garden Organics (FOGO) program in the city.

Why is this important?

Traditionally, as a society we have relied on landfill disposal as the primary solution to disposing of our waste. There is a limit to the amount of suitable landfill sites within the city and given our forecasted population growth the amount of waste we generate will continue to grow. Additionally, disposal costs and environmental impacts associated with landfill disposal will increase exponentially should current waste management practices continue.

To drive change, targeted education and awareness programs aimed at adopting sustainable waste management practices to promote a low-waste society will support resource recovery and thus support a circular economy approach towards sustainable waste management.

What we're already doing?

- Promoting national waste reduction and reuse events through council media channels
- Deliver a school's waste education program.

Corporate Document Link:

- Resource Recovery Strategy
- Waste and Circular Economy Transformation Directive

Outcomes

- **Support healthy lifestyle**

- **Reduced carbon emissions**
- **Reduced waste generation**

- **Support local jobs**
- **Increased resource efficiency**

Sustainable Development Goal Alignment

Council's Sustainability Strategy has set a strategic plan to be implemented over the next five years.

Each of the five priority areas of this strategy will help Ipswich to focus effort and resources to achieve the strategy goal of becoming a sustainable city.

By taking part in the city's sustainability journey, everyone can contribute to the current and future liveability of our city.

GLOSSARY

Adaptation – Taking action to avoid, withstand or benefit from current and projected climate changes and impacts.

Climate change – A change in global or regional climate patterns, in particular, a change apparent from the mid to late 20th century onwards and attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels.

Carbon offsets – Carbon offsets are tradeable units that represent abatement of greenhouse gas emissions. Offsets represent the rights to a greenhouse gas reduction. The carbon offsets purchased are retired through a registered third party so they cannot be counted twice.

Carbon neutral – Being carbon neutral means that the net greenhouse gas emissions associated with an organisation's or city's activities are equal to zero. It is achieved through a combination of measuring and reducing greenhouse gas emissions and purchasing carbon offsets. The terms zero net emissions, zero emissions and carbon neutral can be used interchangeably.

Circular economy – Retain the value of materials within the economy for as long as possible, continually seeking ways to recycle, redesign and reuse materials in order to minimise the unsustainable depletion of our natural environment.

Emissions – This term is used interchangeably with greenhouse gas emissions, unless specifically stated that it relates to air quality pollutants.

Energy efficiency – Using less energy to achieve the same output.

Greenhouse gas emissions – The greenhouse gas emissions from human activities that cause climate change: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), ozone (O3), and synthetic gases such as chlorofluorocarbons (CFCs) and hydrofluorocarbons (HFCs).

Mitigation – Actions and efforts undertaken to reduce the potential impacts of climate change.

Paris Climate Agreement – The Paris Climate Agreement entered into force on 4 November 2016. The Paris Agreement is made under the United Nations Framework Convention on Climate Change (Climate Change Convention, also referred to as the UNFCCC). Australia announced its ratification of the Paris Agreement on 10 November 2016. Its stated goal is to limit the increase in the global average temperature to 'well below 2°C' above pre-industrial levels, that we should 'pursue efforts' to limit the temperature increase to 1.5°C (Article 2). In addition, parties are aiming to peak global greenhouse gas emissions 'as soon as possible' (Article 4). According to the Intergovernmental Panel on Climate Change (IPCC), global warming of more than 2°C would have serious consequences, such as an increase in the number of extreme weather events.

QCRC – Queensland Climate Resilient Councils

RCP – Representative Concentration Pathway.

Resilience – The capability of preparing for, responding to, and recovering from challenging conditions. The ability to bounce back after change or difficulty.

Recycled water – Former wastewater (sewage) is treated to remove solids and impurities and used for non-potable water needs, rather than discharged into waterways.

Renewable energy – Energy from resources which are naturally replenished on a human timescale, such as sunlight, wind, rain, tides, waves, and geothermal heat.

Sustainable Development Goals – Are an urgent call for action by all countries – developed and developing – in a global partnership to address 17 varying goals.

Water efficiency – Using less water to achieve the same output.

Zero emissions or net zero emissions – The net greenhouse gas emissions associated with an organisation's or city's activities are equal to zero.

Scope 1 Emissions – Direct GHG emissions that occur from sources that are owned or controlled by the organisation e.g. transport fuels from council's fleet and natural gas usage in council operated facilities.

Scope 2 Emissions – GHG emissions that occur from the generation of purchased electricity consumed by council.

Scope 3 Emissions – GHG emissions that are a consequence of the activities of the organisation, but occur from sources not owned or controlled by the company e.g. fuel usage by major contractors who provide key services to council, business travel (air travel, hire care travel), organisational waste and paper use.

Urban Greening – The network of natural and semi-natural areas that deliver a range of environmental, economic and social values and benefits to urban places, including protection from flooding or excessive heat, or improving air and water quality, whilst also protecting biodiversity. Examples of urban greening include urban tree canopies, parks and sports fields, nature reserves and wildlife corridors, waterways and wetlands, stormwater harvesting systems, green roofs and walls, and tree-lined streets and pathways.

Urban heat – An urban heat island is an urban area or metropolitan area that is significantly warmer than its surrounding rural areas due to human urbanisation.

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