



Climate Change Adaptation Strategy

July 2024

(Adopted CM 17 / 7 / 2024 Item Number 2024/63)

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We acknowledge and respect the Wakka Wakka and Auburn Hawkwood people, the traditional owners of this land that we live, work and play and respect their cultures, their ancestors and their elders past, present and future generations.

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Abbreviations

CSIRO	Commonwealth Scientific and Industrial Research Organisation
DPF	Diesel Particulate Filter
EGR	Exhaust Gas Recirculation
EOL	End of Life
ICT	Information Computer Technology
IPCC	Intergovernmental Panel on Climate Change
LED	Light-Emitting Diode
SBRC	South Burnett Regional Council
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
VIC	Visitor Information Centre

1 Introduction

This Climate Change Adaptation Strategy has been produced by South Burnett Regional Council (SBRC) in response to the changing climate in our local region. The concept of climate change has been extensively referenced throughout this document. However, Council understands that not all SBRC residents embrace the idea of climate change.

The core premise of the Climate Change Adaptation Strategy is that, as a region, we have faced and will continue to face extreme weather events, from floods to drought, and everything in between, including heatwaves, severe storms, and bushfires.

While it's not the only stakeholder or agency responsible for preparing for climate change, Council has a responsibility to help its community prepare for and mitigate against the widespread impacts the changing climate has on our region. This responsibility extends to infrastructure, assets and services and ensuring that they are designed, constructed, and maintained, and are robust enough, to respond to these climate changes.

The core purpose of this plan is to help protect the South Burnett region and build climate resilience, no matter what the cause of these events.

In 2023, South Burnett Regional Council Councillors joined a growing number of Councils recognising the serious risk that a changing climate poses to the safety of our community, and that immediate action is required to build community resilience in response to the local impacts of a changing climate.

The decision to develop a Climate Change Adaptation Strategy (2024 to 2034) came following the adoption of Council's Environmental Sustainability Policy in 2023. It provides a strategic context and roadmap to building resilience in response to the effects of a changing and variable climate.

South Burnett Region, like the rest of Australia and many parts of the world, expects the changing climate to exacerbate the frequency and severity of events such as floods, droughts, heatwaves, severe storms, and bushfires.

This Adaptation Strategy and Action Plan will ensure Council embeds consideration of a changing climate into all corporate decision-making. It will guide our planning and response to both slow moving and fast changes in our climate and provide a clear pathway forward. It also aligns with our goal of developing an understanding of Council's current greenhouse gas emissions as a baseline for future action.

This Strategy has been created to ensure the South Burnett Regional Council is in the best position possible to mitigate against, prepare for, and work through all kinds of climate related challenges and emergencies that effects its business.

To best mitigate, adapt to, and build resilience in response to a changing climate in our region, four pillars of positive action are identified:

- 1) Environmental action
- 2) Governance and operations
- 3) Community action
- 4) Commerce and industry action

Under these four pillars, nine high level goals have been identified:

1. Environmental Action

- a. To develop an understanding of Council's current greenhouse gas emissions as a baseline for future action.
- b. To ensure a climate responsive built environment.
- c. To protect and enhance our natural environment.
- d. To transition to a circular economy.
- e. To reduce our emissions by embracing affordable, efficient, and renewable energy solutions.

2. Governance and Operations

- a. Council will lead in climate change preparedness and management, with an educated, mindful, responsive culture within its own operations, and encourage other sectors in the South Burnett region to do the same.
- b. To strengthen resilience as an organisation, ensuring Council is prepared, ready and adaptive to climate change related events.

3. Community Action

- a. To build an educated, engaged, resilient and responsive community through conversations, workshops, and information sharing.

4. Commerce and Industry Action

- a. To work proactively and collaboratively with local business, industry and other agencies to build a more resilient and supportive business network within the region that has strong connections both within and external to the region.

By taking steps to understand and improve our capacity to respond to a changing climate, resilience of our organisation and our community will be enhanced.

2 The Story So Far

2.1 About the South Burnett Region

Located on the edge of the Great Dividing Range and set against a backdrop of the Bunya Mountains, the South Burnett comprises a unique blend of vibrant country towns, and associated rural and supporting industries, set amongst a scenic rural landscape, enjoying a relaxed and laid-back living.

It is part of the Wide Bay–Burnett region, which extends from the northern edge of the Sunshine Coast to the coastal town of Winfield, and inland to the orchards and grazing areas of the Burnett. The region occupies 3% of the state’s total area and includes around 7% of the state’s population.

Situated inland from the Sunshine Coast and an easy two-hour drive from Brisbane, the South Burnett is a great place to make a home. In the past our region was best known for its peanuts – the “Peanut Capital of Australia”.

The South Burnett however, offers much more. Residents enjoy a relaxed country lifestyle, contrasted with abundant opportunities and possibilities afforded by well-established and innovative industries. From agriculture, manufacturing, mining and renewable energy, to art, culture, tourism, health and quality education, the South Burnett really does have it all.

The region is blessed with rich agricultural land that produces high-quality agricultural products for both domestic and international markets including peanuts, navy beans, maize, wheat, grain, dubosia and sorghum.

The region also boasts Swickers - Queensland’s only export accredited pork abattoir. The local wine industry is gaining momentum, producing award-winning wines, that can be paired with produce direct from paddock to plate. Kingaroy is the hub of the South Burnett and has an airport, bus services to Brisbane, a shopping centre, education, health, various Government agencies and many facilities generally expected in much larger centres.

All townships within the region support a vigorous sporting and social lifestyle with facilities such as museums, art galleries, shopping centres, indoor/outdoor sporting facilities, parks and green spaces, local theatre groups, annual festivals and music venues. The timber-town of Blackbutt is home to Australia’s only annual avocado festival. Historical Nanango is considered Queensland’s fourth oldest town and has a number of heritage-listed sites including Ringsfield House, the Nanango Court House and the Butter Factory. Further to the north, 12km from Murgon, is the spectacular Bjelke-Petersen Dam.

Another dam in the region popular for fishing is Boondooma Dam. Rock wallabies can be seen on local cliffs, particularly around twilight hours. The Garnet gem fields are located just west of Proston.

2.2 The Statistics

- Our population 34,290 (2023), expecting growth to 37,107 by 2041.
- Population density 4.02 persons per square kilometre.
- Land area 8,397 square kilometres.
- There are 13,528 local jobs and 13,202 employed people.
- Gross Regional Product – \$2.11 billion.
- Largest industry by employment is health care and social assistance.
- The region consists of a diverse economy largely based on the sustainable utilisation of natural resources, including farming, mining, non-renewable and renewable power generation, timber harvesting, cropping and ecotourism.
- The South Burnett Regional Council area is predominantly rural, with the existing centre of Kingaroy and smaller townships at Murgon, Nanango and Wondai, and villages at Benarkin, Blackbutt, Durong, Hivesville, Kumbia, Maidenwell, Memerambi, Proston, Tingoora, and Wooroolin. Rural land is used largely for agriculture, particularly cattle grazing, and crop and cereal growing (including peanuts, navy beans, wheat, grain and sorghum). Timber production, viticulture, coal mining and electricity generation are also important industries.
- There are 3,345 registered businesses in the region. The Agriculture, Forestry and Fishing industry had the largest number of total registered businesses in South Burnett Region, comprising 43.5% of all total registered businesses, compared to 8.4% in Queensland.
- In 2020/21, the total value of agricultural output in South Burnett Regional Council was \$169m. The largest commodity produced was Livestock processing, which accounted for 67.4% of South Burnett Region’s total agricultural output in value terms.

Sourced From: Informed Decisions (2023a, 2023b).

2.3 Council’s Corporate Plan and Responsibilities

SBRC has a range of existing plans and policies in place that describe its approach to delivering sustainable outcomes, including its Corporate Plan 2021-2026. The theme of this plan is “The South Burnett ... unique communities working together in a strong and vibrant region”.

There are five key pillars to the Corporate Plan:

- 1) Enhancing liveability and lifestyle.
- 2) Providing key infrastructure for our towns and villages
- 3) Growing our region’s economy and prosperity.
- 4) Safeguarding our environment, and
- 5) Organisational excellence.

While Council's ability to prepare for and manage a changing climate is relevant to all five pillars, pillar four holds the most significance. The highlighted outcomes below relate directly to this Action Plan:

EN1 Investigate, develop and implement a Environmental Sustainability Policy.

EN2 *Develop and implement energy efficient initiatives to reduce Council's energy / carbon footprint.*

EN3 *Continue to provide and investigate options to improve waste reduction, landfill management and recycling.*

EN4 Ongoing commitment to biosecurity and pest management, including declared and non-declared species.

EN5 *Encourage responsible investment in renewable energy.*

EN6 *Encourage investment in transport innovation, for example electric vehicles and charging stations.*

EN7 *Support initiatives that promote and protects biodiversity, natural resource management and caring and retaining our unique landscapes.*

EN8 Develop and implement a systematic programme to identify and take action to address overgrown allotments across all regional residential areas.

EN9 Develop and implement a systematic programme to identify and take action to address stray / feral / pests and wild animals.

EN10 Community education and assistance to support food and other local businesses to meet relevant Local Laws compliance standards.

Regarding the Environmental Sustainability Policy adopted in June 2023, Council has committed to focusing on:

Priority Area / Goal	Corporate Plan 2021-2026 Pillar Reference
Renewable energy production and purchasing.	4. Safeguarding our environment
Establishing a social licence for action.	
Developing an understanding of Council's current greenhouse gas emissions as a baseline for future action.	4. Safeguarding our environment
The continue adoption of hybrid vehicles into the Council fleet.	4. Safeguarding our environment 5. Organisational excellence.
The consideration of battery-operated small plant as a replacement for petrol operated equipment.	4. Safeguarding our environment 5. Organisational excellence.
The utilisation of the procurement framework to drive local reuse and recycling.	3. Growing our region's economy and prosperity 4. Safeguarding our environment 5. Organisational excellence
The expansion of wastewater reuse.	4. Safeguarding our environment 5. Organisational excellence
The ongoing focus on the reduction of waste to landfill.	1. Enhancing liveability and lifestyle 4. Safeguarding our environment 5. Organisational excellence
Repurposing and reusing infrastructure.	1. Enhancing liveability and lifestyle 2. Providing key infrastructure for our towns and villages 3. Growing our region's economy and prosperity 4. Safeguarding our environment
The treatment of invasive species.	4. Safeguarding our environment
Increasing tree canopy cover on public land.	1. Enhancing liveability and lifestyle 2. Providing key infrastructure for our towns and villages 4. Safeguarding our environment

Priority Area / Goal	Corporate Plan 2021-2026 Pillar Reference
Protecting and enhancing waterways and natural areas.	1. Enhancing liveability and lifestyle 2. Providing key infrastructure for our towns and villages 4. Safeguarding our environment
The improvement of ecological value of the urban forest by utilising species endemic to the South Burnett region.	4. Safeguarding our environment
Making its best endeavours to achieving State and Commonwealth environmental targets.	4. Safeguarding our environment 5. Organisational excellence.

Much of the above is directly impacted by our changing climate – hence the policy’s relevance to this Action Plan.

2.4 Building on Strong Foundations

In addition to the creation of the Environmental and Sustainability Policy, much work has already been completed by SBRC that will help the region best prepare for a constantly changing climate. The table below provides a summary of some of the projects / actions already delivered, as well as a work in progress list of current activities.

Department	Action
Works	<ul style="list-style-type: none"> Works installed a water bore in the Kingaroy depot to support our road works water use, because of limited access to natural streams during drought.
ICT	<ul style="list-style-type: none"> ICT dispose of EOL ICT e-waste through ACT logistics who are accredited with the below. https://actlogistics.com.au/accreditations/
Fleet	<ul style="list-style-type: none"> Vehicles: All passenger vehicles (Sedans, Hatch, Wagons) purchased are Hybrid (fuel/electric) models. Currently have one hybrid in the vehicle pool fleet with more to come when replacements are due and appropriate for operational needs. Currently for utilities the hybrid market is only at beginning stages and these vehicles are not available as yet, when the market expands these utilities may be considered. Trucks sold in Australia currently meet Euro 5/6 Emission standards and require emission devices and systems to be fitted such as EGR (Exhaust Gas Recirculation), Ad-

Department	Action
	<p>blue (Additive injected into exhaust system to counteract emissions) and DPF (Diesel Particulate Filter which traps particles that are burnt off during set driving conditions)</p> <ul style="list-style-type: none"> • Engines in Yellow plant and mobile machinery meet Tier standards for emissions. Currently in Australia a Tier 3 engine (Very limited emission controls) can still be purchased, however due to meet regulations overseas most machines are now supplied with a Tier 4/Tier 4 final engine (can include EGR, Ad-blue & DPF devices and systems). Council currently have numerous machines with Tier 4 /Tier 4 final engines. • Fuel usage is calculated into whole of life costs evaluations for replacement vehicles.
Waste	<ul style="list-style-type: none"> • Waste fluids such as oils and coolants are captured and collected for recycling. • Old batteries are collected for recycling. • Certain filters are collected for recycling. • Old Cutting edges removed from Graders, loader Etc. are used for wear plates on other items such as sacrificial skid wear plates on slashers instead of scrapping.
Built	<ul style="list-style-type: none"> • Solar Panels on Council buildings. • Solar Air Conditioning. • Solar Hot Water systems. • Solar Heat blankets on pools. • Blankets on all outdoor swimming pools. • Smart energy efficiency building design in new building projects i.e. Nanango Administration Building, Murgon Swimming Pool Kiosk and Change Room. • LED light upgrades in offices, depots, libraries, art galleries, VIC's etc. • Air ventilation system – upgrades at the Nanango Pool. • Air Conditioning – controlled levels in air conditioning units in Council offices between 22 to 28 degrees.

Department	Action
Parks	<ul style="list-style-type: none"> • Recycled plastic products used in bollard upgrades and fencing materials, board walks. • Solar lighting in park shelters. • Solar lighting along park footpaths and rail trails. • Increased tree planting to improve the tree canopy in urban streets and reduce temperatures. • Increased tree planting in parks to improve tree canopy and reduce temperatures in parks. • Use of recycled water within Community sporting and recreation facilities i.e., Golf courses, football fields, cricket fields, showgrounds.
Future Projects	<ul style="list-style-type: none"> • Solar panels on Council owned buildings where this is a business case for their installation • Batteries for storing solar energy and using the energy in peak times. • Review plant energy efficiencies within swimming pools, Council offices and depots. • Review white good energy efficiencies across Council buildings and depots. • Increase tree plantings in urban areas, streets and parks to reduce ambient street level and urban temperatures. • Encourage all new buildings to have energy efficiency build targets. • New equipment in parks – recycled plastic options. • Solar lighting for streets/park footpath v's electricity street and park lighting. • Food waste recycling in Council offices. • Recycled bottle collection in Council facilities. • Irrigation for parks and gardens. • Recycled water in KTP, Memorial Park.

2.5 Action Plan Context

This Action Plan has been informed and guided by applicable international, federal, state and regional frameworks, legislation, strategies and plans, as well as the SBRC Corporate Plan, including:

- 2016 Paris Climate Change Agreement – Australian Ratification - International Climate Change Agreement
- Sendai Framework for Disaster Risk Reduction 2015-2030
- World Health Organisation Sustainable Development Goal
- National Climate Resilience and Adaptation Strategy
- Queensland Climate Adaptation Strategy (Q-CAS)
- Queensland Strategy for Disaster Resilience
- Queensland State Planning Policy (SPP)
- Queensland Planning Act 2016
- The Burnett Regional Resilience Strategy
- Queensland Disaster Management Act 2003
- Queensland Prevention, Preparedness, Response and Recovery Disaster Management Guideline
- Queensland and Emergency Risk Management Framework (QERMF) Risk Assessment Process Handbook
- SBRC Corporate Plan 2021-2026
- SBRC Environment and Sustainability Policy 2023
- SBRC Local Disaster Management Plan (LDMP)
- SBRC Waste Strategy 2023-2029

2.6 Use of this Action Plan

- Council will progressively implement this plan over the next 10 years with regular review.
- Council will use this Plan to guide internal decision making about operational priorities, investment, budgets, and resource allocations.
- The Council actions listed in this Plan are specific, timebound and require committed resources, as required.
- They ensure that Council is maximising its sphere of influence, delivering results on the ground locally, advocating for strong action at a state and federal level, and supporting the community to do their part.
- We will also use the plan to monitor and report on progress towards our shared goals.

3 Our Changing Climate – South Burnett

3.1 Climate Change Defined

As noted earlier in this document, whether the concept of human induced climate change is embraced or not, the region is facing a changing climate and continued major weather events.

Climate change is defined by the Intergovernmental Panel on Climate Changes (IPCC, 2018) as “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere”.

3.2 Impacts of a Changing Climate

The impacts of climate change are being experienced across the community now and are forecast to increase. Climate change related extreme weather events, have widespread impacts such as:

- Increased damage to buildings and infrastructure, leading to higher maintenance costs.
- Increased pressure and demands on emergency services.
- Reduced access to water.
- More heat-related deaths, particularly among the elderly and vulnerable.
- Damage to local vegetation and waterways.
- Negative impact to industries such as agriculture and tourism through increased intensity of drought and damaging rainfall events
- Interruptions to supply chains and food production.

3.3 A Shared Responsibility

Council recognises that stewardship of our environment is a shared responsibility. Council's role is to work collaboratively with all stakeholders such as traditional custodians, government agencies, education and research organisations, industry and business sectors, residents, and landholders to share knowledge, ideas and opportunities to seek to influence change through advocacy and partnerships, to ensure sustainable actions for the future benefit of our communities.

Global, National and State Context Responding to climate change is a global responsibility. As noted, in 2015, Parties to the United Nations Framework Convention on Climate Change (UNFCCC) came together to accelerate climate action, formalised in what we know as the Paris Agreement (United Nations, 2015). The central aim of the Paris Agreement is 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 efforts to limit temperature increase even further to 1.5 degrees Celsius.

The Queensland Government has committed to lifting Queensland's ambition on climate action by setting an emissions reduction target of 75% by 2035 (Queensland Department of Energy and Climate, 2024). The government is set to introduce legislation to lock in its emissions reduction targets, including the

existing targets of 30% reduction below 2005 levels by 2030, and zero net emissions by 2050.

The responsibility of delivering immediate climate action is often assumed by local governments, who can localise their community's ambitions for transformational change.

Council adopts several roles to achieve this strategy's outcomes and priorities.

Council will provide leadership to deliver services and programs, as well as regulate, advocate, educate, facilitate, or partner with our communities and other stakeholders, together all these roles play a part in protecting the environment and promoting sustainability.

Council will undertake each of these roles, to varying degrees, as part of its ongoing journey to create and maintain healthy and natural built environments.

Our community places high value on the diverse habitats and our region's natural beauty and unique lifestyle. Council also plays an important role as a leader in planning for its future growth and as a steward of our region's environment by actively working to raise awareness and build greater community understanding and participation in preserving and enhancing our biodiversity and natural spaces.

Where Council does not have a direct role, it may advocate to other levels of government for improved outcomes. It is important to recognise that Council is not solely responsible for funding, achieving outcomes or policy change for many matters, with some issues the responsibility of state and federal governments, and the private sector.

This Climate Change Adaptation Strategy aims to deliver tangible actions to mitigate and adapt to the challenges faced by climate change.

3.4 Our Region's Weather

The Regional Action Climate Roadmap state in their Creating Our Climate Ready Future report:

"Our changing climate means more frequent and extreme climate hazards are impacting our region - rain, storms, flooding, droughts, heatwaves and bushfires. Some of these happen fast, while others unfold slowly. While our community has experienced many of these hazards before, it is the increasing severity and frequency of these hazards, in close succession, that will result in rising impacts on our region.

The places we live, work and play were not planned with this severity or frequency of climate hazards in mind. Our region also attracts many new residents each year, who are not familiar with local climatic hazards, especially water security and drought, as the region has experienced an abundance of rain in recent times. Now is the time to assess what assets, activities and people will be exposed to these hazards, and to consider whether there are changes we can make to our residences, workplaces, recreation areas and community spaces, and the way we run our activities, organisations, and businesses, to prevent or at least minimise the impacts.

Many of the changes we need to make to prepare for climate change impacts can bring other benefits too. They can bring opportunities to build the economic vibrancy of our region, strengthen our community capital, and support healthy environments and landscapes.

These changes can also lead to improved human health and wellbeing, making our places more liveable, attractive and valuable. New business and employment opportunities can arise from developing innovative solutions to climate challenges, emissions reductions initiatives and resource efficiencies.”

Our region has experienced considerable change over the past few years. An increasing number of “tree changers” have moved to the area to purchase lifestyle properties and hobby farms etc. This trend became apparent during Covid, as people escaped more highly populated towns with the goal of enjoying a more laidback, “green” existence, away from the hustle and bustle of city life.

Unfortunately, most of these people moved to the region in greener times. While the South Burnett has experienced a considerable amount of rain over the past few years, these “green times” will not continue – dry weather, and drought, is a certainty at some stage in the future.

These “new locals” have not yet experienced the region in dry times, and all it brings with it, from extreme heat to threatened water security, the strain on our local power supplies, and its impact on local industry and business, especially agriculture.

Education and resilience are key, when it comes to preparing our new locals for dryer, more challenging times.

3.5 Recent Events

The Queensland Reconstruction Authority (2022) detail the following events:

“Between 2010 and 2022, the Burnett region endured 17 significant disaster events including flooding, severe weather and storms, cyclones, and bushfires. The region experienced four significant disaster events in the 2021-2022 disaster season including the Southern Queensland Flooding, Southeast Queensland Rainfall and Flooding, Ex-Tropical Cyclone Seth, and the Central, Southern and Western Rainfall and Flooding events.

These disaster events have caused significant damage to property, infrastructure, businesses and homes, compounding localised stresses in the region. From these lived experiences our community has an appreciation of the factors that can enhance resilience and strengthen our region our local networks, sense of community, connection to the landscape, and a desire for a happy and healthy lifestyle.

The Burnett Regional Resilience Strategy provides the blueprint for a more resilient future where the community works together to create shared solutions to common problems.

Developing this strategy provided an opportunity to work collaboratively across local governments and in partnership with the Queensland Government and other local stakeholders with an approach that is locally led, regionally coordinated and

state supported. This Strategy was developed in partnership with the Bundaberg Regional Council, Cherbourg Aboriginal Shire Council, North Burnett Regional Council, South Burnett Regional Council and the Queensland Government via the Queensland Reconstruction Authority.

The Strategy builds upon the Burnett Catchment Flood Resilience Strategy released in 2018, by taking an all-hazards approach to the challenges of bushfire, earthquake, drought and heatwave. By strengthening disaster resilience our communities are better equipped to deal with the increasing prevalence of disasters. It was a useful tool when creating this plan.”

3.6 Our Weather Changes

The State of the Climate Report 2022, released by the CSIRO (2022a) and the Bureau of Meteorology, says changes to weather and climate extremes are happening at an increased pace across Australia. The report, released every two years, shows an increase in extreme heat events, intense heavy rainfall, longer fire seasons and a rise in sea levels (CSIRO, 2022b).

Weather events will continue to impact our region in several ways. The Climate Change in the South East Queensland Region report, published by the Queensland Government (2019b) outlined the following projections:

Higher Temperatures

Maximum, minimum and average temperatures are projected to continue to rise. For the near future (2030), the annually averaged warming is projected to be between 0.6 and 1.3°C above the climate of 1986–2005. By 2070, the projected range of warming is 1.1 to 3.3°C, depending on future emissions. The region’s summer average temperature is 24°C. This could rise to over 25°C by 2030 and to over 27°C by 2070.

Hotter and More Frequent Hot Days

There is likely to be a substantial increase in the temperature reached on the hottest days, and an increase in the frequency of hot days and the duration of warm spells.

Harsher Fire Weather

Fire weather is a measure of fuel dryness and hot, dry, windy conditions. Climate change is likely to result in harsher fire-weather in the future.

Fewer Frosts

A substantial decrease in the frequency of frost risk days is projected by the end of the century.

Reduced Rainfall and More Intense Downpours

High climate variability is likely to remain the major factor influencing rainfall changes in the next few decades. Rainfall projections for 2070 show little change or a decrease, particularly in winter and spring; however, the projections show high variability. The intensity of heavy rainfall events is expected to increase.

The Climate Change in Queensland report, published by the Queensland Government (2019b) outlined:

Increase in Drought

Projecting changes in the frequency and duration of drought is difficult. However, by late this century, under a high emissions scenario, it is likely that the region will experience more time in drought.

The climate is changing across Queensland. Average temperatures across the state are currently 1°C higher than they were 100 years ago. Recent decades have shown a clear warming trend. Our climate is already highly variable, but climate change is leading to shifts beyond this natural variability.”

3.7 Climate Change and Disaster Management

Weather events and disaster management go hand in hand. Through the creation of our Disaster Management Plan, South Burnett Regional Council is prepared to face major disasters. Unfortunately, drought is not acknowledged as a disaster in the Queensland State Disaster Management Plan (Queensland Disaster Management Committee, 2023), and most funding and support packages do not kick in until a drought is formally declared, and when they do, they are generally focused on the support of the family unit, rather than helping to feed, water and save cattle or crops.

Disaster management planning is generally focused on response, recovery, and resilience, rather than pre-planning and preparedness. Drought isn't an overnight disaster – it can take months of dry weather before a drought is declared, and planning for it is crucial.

Council has identified “drought preparedness” as a gap in the disaster management planning process. An important part of this process for the South Burnett region is knowledge sharing between long-term landowners and Traditional Owners, and newcomers to the area.

These multi-generational agriculturists and Traditional Owners understand how to prepare for, mitigate against and manage their way through a drought. These long-term locals know the land and how to best navigate a dry spell as a drought approaches. They have learned experiences and insights that could and should be shared that will assist lifestyle farm and hobby farm owners long before the assistance packages kick in.

Several priority actions pertaining to drought preparedness and disaster management have been identified in this Action Plan, including:

- 1) Create a Drought Preparedness Plan, to be delivered in coordination with the Disaster Management Plan.
- 2) Support First Nations people / Traditional Owners (and multi-generational rural landholders) to share stories, knowledge and practices in sustainable land management activities relevant to the changing climate, through events, resources, and online platforms.

4 It's Time for Action

4.1 Mitigation, Adaptation, Resilience

Our focus moving forward will be to address three key elements of resilience, in regard to preparing for a changing climate:

1) **Mitigation:** reducing and avoiding emissions, and to increase use of renewables.

Mitigation is addressing the root cause of the problem rather than dealing with its impacts. The IPCC describes mitigation as “human intervention to reduce the sources or enhance the sinks of greenhouse gases”. In this Plan we use the term “emission reduction” when referring to actions that will help to mitigate climate change. Emissions reduction occurs locally too but is a contribution to a global effort that requires others to act too. A dual pathway is needed.

2) **Adaptation:** responding to the impacts of a changing climate. Identifying transition and physical risks and plan to respond to these risks and predicted impacts.

The IPCC (2018) defines adaptation as “the process of adjustment to actual or expected climate and its effects.” It is doing what we can to live with and minimise the destruction and suffering caused by climate change. Adaptation occurs locally as a response to local impacts.

3) **Resilience Building:** to have an increased level of adaptive capacity across the organisation, and the community. This will enable us to consider embedding climate change resilience into all corporate governance.

Our vision will see a resilient region that will be adaptable and diverse. Our ability to bounce back after change or difficulty and undertaking proactive actions in a changing climate will result in improved outcomes for the South Burnett region and its residents and industry.

We have begun the journey to improve climate change resilience management in a strategic and considered approach. We will be responsive and resilient to climate change risks. We are supportive of innovative and sustainable solutions. We will continue to develop plans and implement adaptation actions to reduce and mitigate impacts to the organisation, our community, natural environment, and economy.

As the IPCC (2010) stated: “Many adaptation and mitigation options can help address climate change, but no single option is sufficient by itself. Effective implementation depends on policies and cooperation at all scales and can be enhanced through integrated responses that link mitigation and adaptation.”

Environment	Governance
Built environment. Water management. Natural environment. Sustainable transport. Waste & recycling management. Emission reduction & energy efficiency.	Financial management. Council culture & education. Engagement & partnerships. Risk & disaster management. Council policies, procedures & plans.
Community	Commerce and Industry
First Nations / Traditional Owners engagement & knowledge sharing. Community resilience, education & support.	Knowledge sharing. Commerce & industry resilience, education & support.

Under these four pillars, nine high level goals have been identified:

5. Environmental Action

- b. To develop an understanding of Council's current greenhouse gas emissions as a baseline for future action.
- c. To ensure a climate responsive built environment.
- d. To protect and enhance our natural environment.
- e. To transition to a circular economy.
- f. To reduce our emissions by embracing affordable, efficient, and renewable energy solutions.

6. Governance and Operations

- b. Council will lead in climate change preparedness and management, with an educated, mindful, responsive culture within its own operations, and encourage other sectors in the South Burnett region to do the same.
- c. To strengthen resilience as an organisation, ensuring Council is prepared, ready and adaptive to climate change related events.

7. Community Action

- b. To build an educated, engaged, resilient and responsive community through conversations, workshops, and information sharing.

8. Commerce and Industry Action

- b. To work proactively and collaboratively with local business, industry, and other agencies to build a more resilient and supportive business network within the region that has strong connections both within and external to the region.

4.2 Roadmap

This Action Plan sets out our road map to building resilience of our organisation's environment, community, business and industry, and governance to a variable and changing climate to enhance our climate resilience.

This is just one component of a multi-faceted approach to mitigating, adapting to and building resilience against the effects of a changing climate. Managing a changing climate is a trans-boundary issue.

Actions (or inaction) by one stakeholder can both improve and erode the resilience of another. Economies of scale and collectively sharing knowledge can improve climate change governance. An important part of the institutional arrangements and engagement with external stakeholders is the clarification of roles and responsibilities that are associated with climate change governance.

4.3 Climate Resilience Action Plan

The actions that have been identified on the basis that they, generally, can be implemented via existing Council programs and projects. The intention is that by utilising a climate change adaptation lens over existing policies, programs and proposed projects, many of the actions can be delivered at no additional cost to Council and can be achieved through existing business resources.

The exception is the development of a drought preparedness plan which was identified as a key priority in late 2023.

PILLAR	DELIVERY AREA	ACTION	METRICS	TIMELINE	DELIVERY
ENVIRONMENT	Built environment	Incorporate sustainable building elements into council buildings where there is a sound business case to do so, including incorporating solar panels on Council buildings and utilising batteries to store energy.	Council Procurement Policy.	As required	Internal
	Built environment	Incorporate sustainable built elements into the planning scheme	Amended Planning Scheme	3 years	Internal
	Emissions reduction & energy efficiency	Undertake an organisational wide emissions profile report to assist council in understanding Council's current greenhouse gas emissions footprint, and to provide a baseline for future action.	Council Emissions Profile	2 years	Internal
	Emissions reduction & energy efficiency	Following the delivery of an emissions profile, Council will be in the position to review and set emissions-related targets for its operations.	Council Climate Change Policy Developed	6 months	Internal
	Emissions reduction & energy efficiency	Undertake an energy efficiency review of Council assets, including depots, parks and buildings, in regard to energy use, white goods efficiency, renewable energy use etc.	Included in Asset Management Plan	18 months	Internal
	Emissions reduction & energy efficiency	Change lighting to LED or solar lighting, at all public facilities, subject to meeting lighting guidelines.	Inclusion in Asset Management Plan	Ongoing	Internal

PILLAR	DELIVERY AREA	ACTION	METRICS	TIMELINE	DELIVERY
	Emissions reduction & energy efficiency	Review and progressively transition Council buildings off natural gas, where it is cost effective to do so.	Included in Asset Management Plan	2 years	Internal
	Emissions reduction & energy efficiency	Create a policy that clarifies Council's support of renewable energy developments and outlines its expectations of providers around increased collaboration, community engagement, and social licence.	Development of Council Climate Change Policy	18 months	External
	Sustainable transport	Accelerate the transition to low emissions options for Council's fleet where it is cost effective to do so	Amendment to Procurement Policy – Fleet	Ongoing	Internal
	Sustainable transport	Review the availability of and access to EV charging network for Council vehicles and deliver solutions to address any gaps.	Charging station review	3 years	
	Sustainable transport	Transition Council's small machines to electric powered alternatives, where operationally viable and cost effective to do so.	Procurement Policy Amended	Ongoing	Internal
	Natural environment	Deliver a strategy for preserving our natural environment that considers:	Voluntary Conservation	3 years	

PILLAR	DELIVERY AREA	ACTION	METRICS	TIMELINE	DELIVERY
		<ul style="list-style-type: none"> • Identification of climate change refugia for native flora and fauna, • Protection and enhancement of the ecological values of identified wildlife corridors by increasing tree canopy cover across the region, and • Supporting private land holders to protect, conserve and enhance ecologically significant areas on private property. 	Agreement Program established		
	Natural environment	Create a street tree planting program to support the transition of our urban canopy to one that is resilient and future proofed and provides shade and urban cooling – replace all trees removed with street trees, review species, and focus the planting of street trees in high rental areas.	Street Tree program developed	Ongoing	
	Waste & recycling management	<p>Continue to implement the Waste Strategy 2023-2029 to monitor and reduce waste and ensure continued focus on a circular economy. Consider:</p> <ul style="list-style-type: none"> • New / increased recycling options for the local community to access • Use of recycled products in public places and spaces • Eliminating non-essential use of single-use plastic at Council-sponsored and organised events, • Food waste recycling in Council offices, and • Increased bottle collection points in all council buildings etc. 	Partnering with COEX public places program	Ongoing	Internal

PILLAR	DELIVERY AREA	ACTION	METRICS	TIMELINE	DELIVERY
GOVERNANCE	Water management	Review the management of water and provide recommendations for an integrated approach (to be included in the Drought Preparedness Plan). Consider: <ul style="list-style-type: none"> • Water harvesting at Council buildings, parks and sports grounds, • Reviewing irrigation systems in our parks, and • Utilising recycled water in our parks. • Water harvesting at Council buildings, parks and sports grounds – review irrigation systems in our parks and use recycled water in parks. 	Asset Management Plan	18 months	Internal
	Engagement & partnerships	Utilise the Climate Risk Management Framework for Queensland Local Government framework.	Implement Climate Risk Management Framework within Council operations	Ongoing	Internal
	Engagement & partnerships	Consider the establishment of a Changing Climate Resilience Reference Group, to focus on preparedness for major climate related disasters, as well as drought (with representatives from the local community, industry, business and environmental groups).	Establishment of Reference Group	12 months	
	Risk & disaster management	Prepare a Drought Preparedness Plan, focused on a longer-term regional response and preparedness to drought (as the lead coordination agency in times of drought).	Development of Drought Preparedness Plan	2 Years	Internal

PILLAR	DELIVERY AREA	ACTION	METRICS	TIMELINE	DELIVERY
	Risk & disaster management	Enhance our risk assessment process and explicably quantify the extent of climate change risks into our corporate risk register and risk management framework.	Updated Risk Register	18 months	Internal
	Council policies, procedures and plans	Review purchasing and procurement policies for sustainability clauses, focused on renewable energy.	Revised Procurement Policy	12 months	Internal
	Council policies, procedures and plans	Review all key policies, procedures, strategies and plans, with a changing climate lens, and update where relevant. Key Council documents may include: <ul style="list-style-type: none"> Administration Waste Reduction Policy, Asset Management Policy, Community Grants Policy, Community Group Infrastructure Changes, Construction of Unmade Roads, Corporate Risk and Internal Audit Framework, Corporate Risk Management Policy, Demolition, Removal or Relocation of Buildings Policy, Disposal of Assets Policy, Environment and Sustainability Policy, Financial Sustainability Policy, Council Fact Sheets, Procurement Policy, Policy Governance Framework, Water Restrictions Policy, Trade Waste Management Policy, Risk Management Policy, Water and Waste Water Customer Service Standards, Planning Scheme, Local Laws, Disaster Dashboard, Emergency Kit, Advocacy Action Plan, Asset Management Plans, Business Continuity and Recovery Plan, Operational Plan, Corporate Plan, 	Revised Policies	18 months	Internal

PILLAR	DELIVERY AREA	ACTION	METRICS	TIMELINE	DELIVERY
		<p>Regional Development Strategy, and Agriculture Strategy.</p> <p>Note: Internal consultation will be required to complete this list.</p>			
	Council policies, procedures and plans	Report annually on Council's Climate Change Adaptation Strategy performance and deliverables.	Annual Climate Change Adaptation report prepared	Annual reporting	Internal
	Council policies, procedures and plans	Explore the opportunity to introduce funding for a small business climate adaptation grants program, as part of Council's grants framework that seeks to support improved business practices and operations (eg improved lighting, energy efficiency, solar and energy storage, mechanical ventilation options, improved building design, shade tree plantings)	Funding explored and considered by Council	2 Years	Internal
	Council culture & education	<p>Create a changing climate aware culture at SBRC, and to continue to build climate change capabilities and strengthen accountability, with consideration given to:</p> <ul style="list-style-type: none"> • Ongoing training for elected representatives and staff around climate change and other relevant sustainability issues, • Explore the development of a Volunteering Policy, to support staff volunteering opportunities to actively respond to weather events, 	Change Management Plan developed	12 months	Internal

PILLAR	DELIVERY AREA	ACTION	METRICS	TIMELINE	DELIVERY
		<ul style="list-style-type: none"> • Include climate action education as part of staff induction, and Embed climate action into staff roles and responsibilities and performance management,			
	Financial management	Identify and monitor infrastructure assets at risk due to climate change and prioritise actions (assessing financial implications etc).	Asset Management Plan	18 months	Internal
		As part of this process, identify funding and grant opportunities to fund these initiatives over the next 10 years.	Funding opportunities identified	10 years	Internal
COMMUNITY	Community resilience, education & support	Ongoing focus on the beautification of Council owned gardens and parks including increased shade options (both natural (eg shade trees) and built form structures for all users).	Annual Capital program	Ongoing	

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