

Attachments

Under Separate Cover

Ordinary Meeting

Wednesday, 24 January 2024

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11.2 Scenic Rim Climate Change Roadmap 2024-2034, 3 Year Action Plan 2024-2026 and community engagement survey results

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SCENIC RIM REGIONAL COUNCIL
CLIMATE CHANGE ROADMAP 2024-2034
SURVEY REPORT

SCENIC RIM

REGIONAL COUNCIL

Introduction

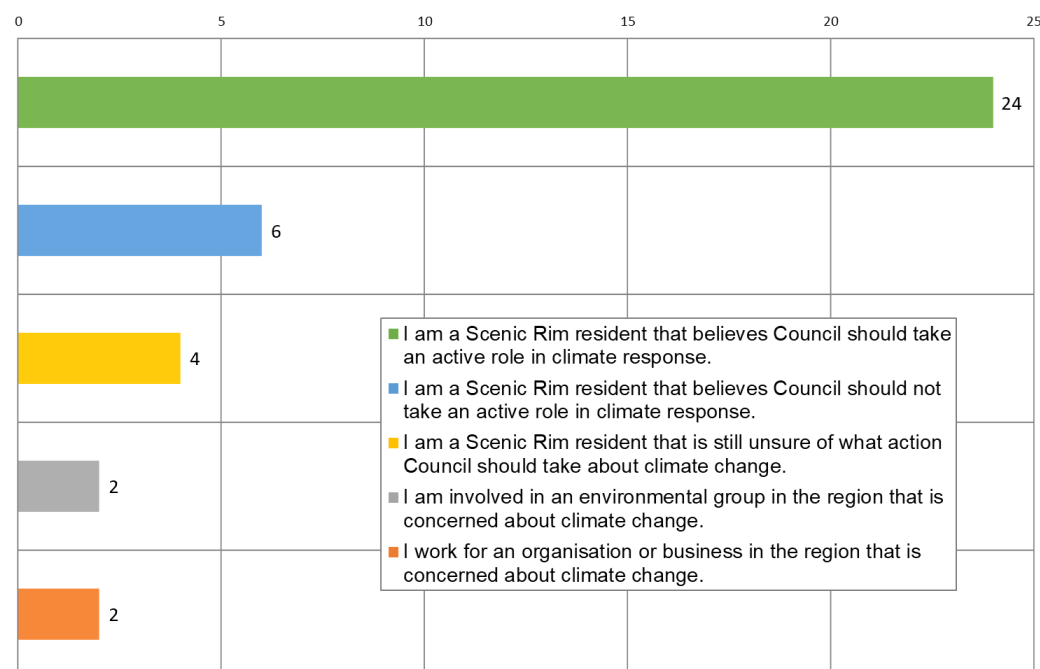
Community consultation was carried out 25 September 2023 to 27 October 2023 via a survey on the Let's Talk platform to obtain community feedback on the *Scenic Rim Climate Change Roadmap 2024-2034* and associated *Action Plan 2024-2026*. Survey materials were distributed through snowball emails and hard copies were available at libraries and customer service centres. The first part of the survey included questions relating to demographic information. The main survey consisted of questions relating to (i) Council's role in responding to climate change, (ii) prioritisation of actions, perceived benefit to the region of these actions, and suggested amendments to the list of actions under the Roadmap's six themes, and (iii) whether the overall Roadmap seeks to achieve a desirable outcome for the Scenic Rim region.

Participation Statistics

- 100 informed participants including 59 document downloads
- 161 aware participants (visited at least one page)
- 36 completed survey participants

Survey Question Results and Responses

Q7 Which of the following statements would you say best fits your current interest in Council's response to climate change

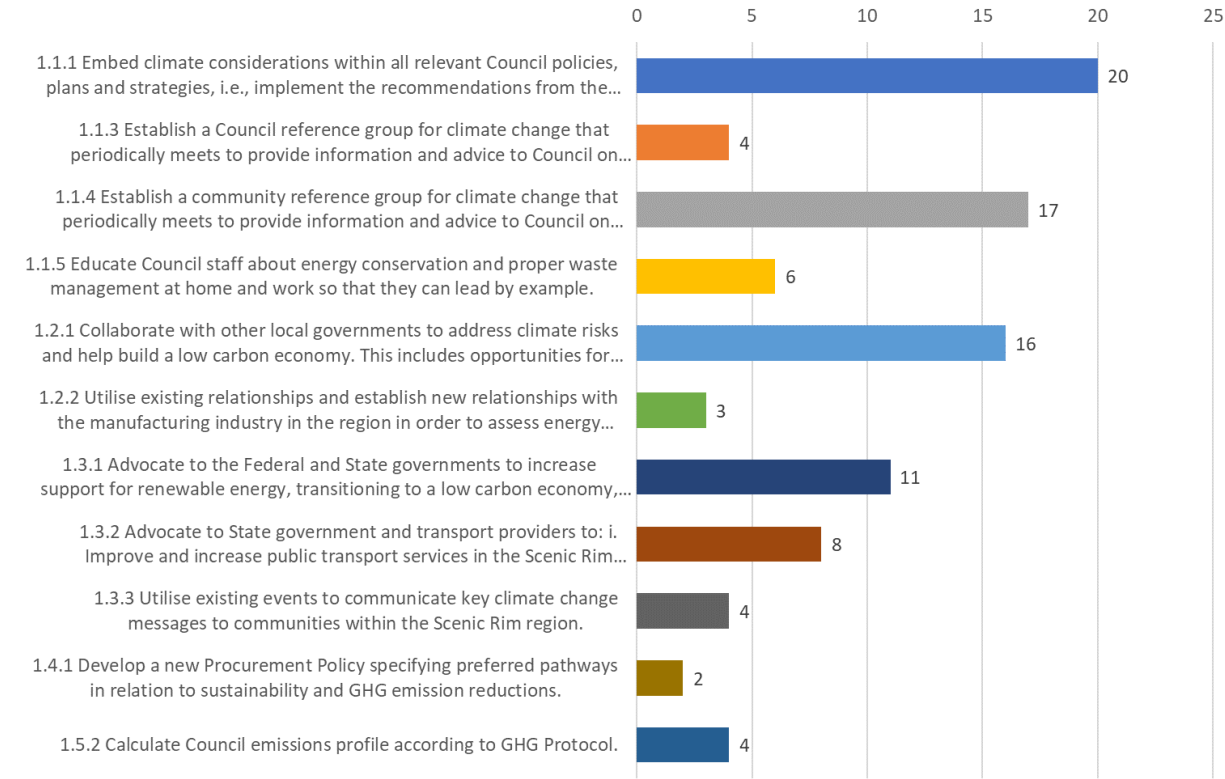


Respondents were allowed to pick more than one option for this question. Of the top three responses, 24 respondents (70%) believe that Council should take an active role in climate response, while 6 (18%) believe that Council should not take an active role, and 4 (12%) are still unsure of what action Council should take relating to climate change.

For each of the six themes in the Roadmap Summary of Actions, high level actions were listed and participants were asked to select their top three for prioritisation.

Theme 1: Strong Leadership and Governance

Q8 From the list below, please select your top three (3) actions you would like to see prioritised by Council



The three most popular actions for prioritization are Actions 1.1.1, 1.1.4 and 1.2.1.

- Action 1.1.1 is already progressing.
- Action 1.2.1: It is planned that Scenic Rim Regional Council will join the Southeast Queensland Climate Resilient Alliance (SEQCRA) in the first half of 2024.
- Action 1.1.4: The formation of a community reference group has been allocated to the second Action Plan 2027-2029 and could be moved forward to align with community priorities. However, it is considered best to have some time for Council to make progress, particularly in the areas of energy efficiency and renewable energy, before involving community members.

Q9 Do you think these actions will benefit the Scenic Rim region? If No, please specify

Thirty-one (86%) respondents said Yes, they do think the actions under Theme 1: Strong Leadership and Governance will benefit the Scenic Rim region. Five respondents (14%) said No.

COMMENT		RESPONSE AND RECOMMENDATION
Q9a	Council reference is roads, rubbish, rates.	• The responsibilities of Council extend further than roads, rubbish, and rates. The following is from the <i>Queensland Local Government Act 2009</i>. A local government "has the power to do anything that is necessary or convenient for the good rule and local government of its local government area" and must do so in accordance with the following local government principles: "(a) transparent and effective processes, and decision-making in the public interest; (b) sustainable development and management of assets and infrastructure, and delivery of effective services; (c) democratic representation, social inclusion and meaningful community engagement; and (d) good governance of, and by, local government". <i>Local Government Act 2009</i> • The Scenic Rim Regional Council is committed to upholding the guiding expectations identified in the <i>Scenic Rim Community Plan 2011-2026 (Revised 2018)</i>. These can broadly be summarised as ensuring the long term economic, social and environmental sustainability of the region. • There is also an expectation that local Councils will contribute to Federal and State Emissions Reduction Targets. This may well be legislated in the future <i>Climate Change Act 2022</i>. <i>Queensland Climate Action</i> In the 2022 Climate Change Survey, 72% of respondents stated that they were extremely concerned about climate change.
Q9b	I don't believe the council has any responsibility in this area and would like to understand how the council see that EV benefit the environment	• Refer to Q9a • In addition to CO₂ emissions, fossil fuel-powered vehicles are the main contributors of poisonous carbon monoxide and nitrogen dioxide to the atmosphere, producing smog on hot days and causing respiratory illnesses. High levels of nitrogen dioxide are also harmful to vegetation—damaging foliage,

COMMENT		RESPONSE AND RECOMMENDATION
		decreasing growth, or reducing crop yields. Nitrogen Oxides - At this stage, the manufacture of EVs produces more CO₂ emissions than the manufacture of internal combustion engines (ICEs) and the amount of emissions produced by an EV over its lifetime is variable depending on the renewable energy percentage of the charging grid. However, many studies have found that even with 100% fossil fuel electricity generation, an EV will still produce less CO₂ than an ICE over its lifetime, although the catch-up period will be longer than for grids with some percentage of renewable energy. EVs vs Gasoline. As Australian electricity grids are decarbonised, the catch-up time will grow shorter and shorter, and could be as low as 6 months for a charging grid that is powered by 100% renewable energy. - Batteries that have reached the end of their life as a power source for EVs can be re-used as battery storage for energy generated using a solar PV systems, for example. In addition, recycling EV batteries once they are no longer viable as a power source can further reduce the emissions associated with making an EV by reducing the need for new materials. - Other environmental concerns relate to the mining of lithium, cobalt, and rare earth minerals necessary for EV batteries and the disposal of these batteries when they reach end-of-life. Manufacturers are working on improving the recycling process for EV batteries when they do reach the end of their working life, in order to maximise salvaged materials as mining companies work on more sustainable mining methods and processes. Incidentally, issues around cobalt also exist for ICEs as it's used to cleanse sulphur from petroleum. Electric Vehicle Myths, Internal Combustion vs EVs, More Sustainable EV Batteries. - The transition to EVs is happening regardless. - The Federal and State governments have been focusing on transitioning to electric vehicles for a number of years now. QLD Zero Emission Vehicle Strategy, National Electric Vehicle Strategy - In addition, many car manufacturers are planning to either greatly reduce or entirely phase out combustion-engine vehicles over the next two decades. Countries phasing out ICEs, Leading Car Companies Stop Producing ICEs
Q9c	none of Council's business. Individual's responsibility. Council to concentrate on roads, rubbish collection	Refer to Q9a
Q9d	Climate change is a scare tactic & made up phenomenon to benefit a select few. Despite the hysteria in the media, there are many many scientists who do not	The vast majority of actively publishing climate scientists – 97 percent – agree that humans are causing climate change. Most of the leading science organisations around the world have issued public statements expressing this, including international and Australian Science Institutions and Universities, the United Nations Intergovernmental Panel on Climate Change, and a whole host of

COMMENT	RESPONSE AND RECOMMENDATION
agree with the hypothesis put forward. There may be minor changes to our climate but CO2 is not the culprit. We need to look at the giant heat sinks we are building in the form of concrete jungles & sprawling urban concrete pads & roads. We need to stop polluting our oceans & environments with plastic & allowing poor management to erode our ecosystems & using harmful chemicals the way we do. There is plenty we can do for our environment but focussing on climate change is not one of them!	reputable scientific bodies around the world. A list of these organisations is provided here -Worldwide Scientific Organisations • There are ample lines of evidence that show anthropogenic global warming (human-induced climate change) has been and is occurring. See, for example, Skeptical Science • Actions relating to GHG emissions reductions often have environmental co-benefits, for example, planting native trees for carbon sequestration or regenerative agriculture practices on a farm (refer to Theme 3). See the following references for other co-benefits. The Co-Benefits of Climate Action, The co-benefits of climate change mitigation • Please refer to Theme 3 for actions related to heat island effect mitigation. Recommendation: Action 5.1.4 Advocate to State and Federal governments to lift standards across the building and development sectors to climate adaptation best practice for cooling of heat island effects, improved amenity, and reducing energy demand.

Q9e Climate change is a farce

- Refer to Q9d

Q10 From the list of actions under Theme 1: Strong Leadership and Governance, is there anything you would change, add or remove?

COMMENT	RESPONSE AND RECOMMENDATION
Q10a I would be realistic about the options and give everyone something to choose. Cost of living continue to go up and this stuff will add additional cost to rates	• Please refer to the <i>3-Year Action Plan 2024-2026</i> where funding is explained. Only short-term and small-scale actions will be funded by Council and will not have an effect on rates. Larger projects will rely on funding from Federal and/or State programs, some of which are listed in the Action Plan. • Some actions will actually lead to savings for Council and possibly extra income.
Q10b Everything, complete waste of rate payers money	• Refer to Q9a, Q9d, Q10a
Q10ci 1.1.1 - remove entirely. Focus on the people & prosperity of the region instead. Utilising & preserving what we	• Council has other strategies in place that focus on regional prosperity. Green solutions, such as energy efficiency measures and renewable energy are not only better for the environment, they can also provide financial benefits in the long term.

COMMENT	RESPONSE AND RECOMMENDATION
	• Refer to the actions under Theme 3 and Theme 4.
Q10cii 1.1.2 - research it & take a look at the opposing views. Also look into the reality of “green” solutions & how expensive for & harmful to the population they are.	• Many green solutions lead to financial savings in the long term. As it is not clear exactly what green solutions are being referred to, it is difficult to provide a response to the claim that they are harmful to the population. However, there are innumerable examples of where the extraction, processing and use of fossil fuels have been detrimental to human health. See Pollution from Fossil Fuel Combustion, Fossil Fuels & Health • Refer to Q9d
Q10iii 1.1.3 - ensure that the reference group has equal representation from those who believe climate change is real & those scientists & specialists who do not. It is vital that council does not become caught up in hysteria & makes decisions based on all of the information, not just a biased argument. 1.1.4 - as above.	• Refer Q9d • The purpose of the community reference group would be to assist and advise Council in matters relating to reducing emissions (and regional emissions) and climate change adaptation, not to argue whether anthropogenic global warming is occurring or not.
Q10civ 1.2.1 - absolutely collaborate but not in relation to EVs & batteries as they are not a way forward. Instead focus on environmental greening (planting trees), weed management & maintaining the health of our waterways!	• Council is already involved in environmental greening, weed management and improving the health of our waterways through initiatives such as the Resilient Rivers Initiative and Land for Wildlife in addition to providing community environmental grants. Refer to Theme 3 Improving the Health and Resilience of Natural Systems in our Region. • Refer to Q9b
Q10cv 1.2.2 - absolutely work with manufacturing companies but not in relation carbon & energy. Work in relation to disposal of waste, using less harmful methods/chemicals in their processes & maintaining land &	• Council will support industry and business with emissions reductions and climate adaptation where there is an interest. Projects may involve energy efficiency or renewable energy systems. • The oversight of manufacturing processes is not within the scope of this Roadmap and Action Plan. See Australia's Industrial Chemical Roadmap and Queensland Environmental Protection Act 1994. • Waste emissions reduction actions are covered under Theme 6. • Disposal of waste is primarily dealt with by our Waste Services team. Please refer to the Waste

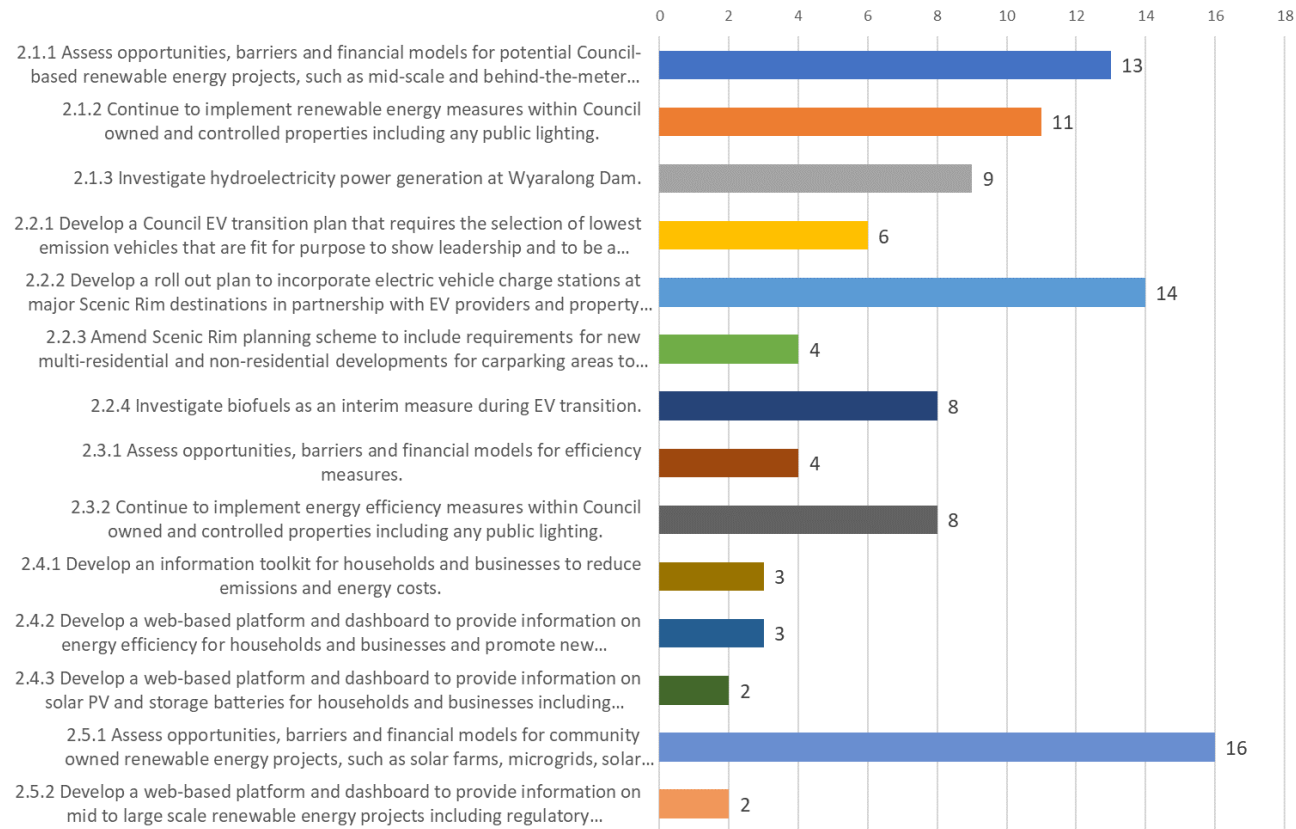
COMMENT		RESPONSE AND RECOMMENDATION
	premises appropriately.	<u>Management and Resource Recovery Strategy.</u>
Q10cvi	1.3.1 - do not go down the paths of renewables but rather focus on support when disasters hit (natural, normal & cyclic) & how people can rebuild & minimise environmental impact.	• Please refer to the actions under Theme 5 Resilient Communities, Businesses and Built Environments. Also <u>Scenic Rim Local Disaster Management Plan</u> and <u>Scenic Rim Disaster Dashboard</u> • Fossil fuel consumption not only increases the concentration of CO₂ in the atmosphere, coal, oil, and gas mining and development can lead to land degradation, waterway pollution and the release toxic airborne pollutants that negatively impact environmental and human health, <u>Pollution from Fossil Fuel Combustion</u>, <u>Oil Spills</u>, <u>Fossil Fuel Disasters</u>, <u>Coal Mining & Toxic Metals</u>. Coal-fired power plants emit dangerous mercury emissions, sulphur dioxide emissions (which contribute to acid rain) and soot. The replacement of fossil fuel energy by renewable energy systems significantly reduces levels of these pollutants in the atmosphere and the manufacture and installation of renewable energy systems has very little chance of resulting in disasters such as the ones described in the hyperlinks above.
Q10cvii	1.3.2 - absolutely increase public transport in the scenic rim but do not go down the path of EVs - they are neither cost effective in the long term, nor safe. Take a look into the environmental impacts that manufacturing EVs has on our environment.	• Noted • Refer to Q9b
Q10cviii	1.3.3 - remove this & keep climate change out of our events. People are sick of being bombarded with this fear & hype & some events need not have an environmental element at all. Teaching people respect for their environment by cleaning up after themselves & not over using resources is a long & slow process & only one that can be done by example, not bombarding with the wrong messages.	• Any messages would be for the education of the community regarding waste reduction, energy efficiency, opportunities for getting involved in habitat restoration (carbon sequestration) projects and overall tips for reducing emissions and looking after the environment. It would not be a fear-based approach, but rather making the information available to those that are interested and only at appropriate events. • Council is trying to lead by example through the actions in this Roadmap and does not have the power to force people to become more energy efficient, reduce consumption, or plant more trees. Council can only offer information and at times, financial assistance, that may facilitate people in the community who are motivated to do so.
Q10cix	1.4.1 - do not focus on emissions as they are not the issue.	• Refer to Q9b • Greenhouse gas (GHG) emissions are the issue. These questions relate to Council's <i>Scenic Rim</i>

COMMENT		RESPONSE AND RECOMMENDATION
		<i>Climate Change Roadmap 2024-2034</i> , the aims of which are to reduce greenhouse gas (GHG) emissions, build climate resilience within our communities and ecosystems, and enable our region to withstand and recover quickly from climate change impacts.
Q10cx	1.5.1 - remove this entirely. There is no point tracking something that has not been proven to be the cause. Look into carbon & how much is required to sustain life on earth.	- Refer to Q9b. - Carbon can take many forms and is important for sustaining life. However, if you have too much carbon in one form, e.g. CO₂ in the atmosphere as a result of burning fossil fuels, the carbon cycle is out of balance, and naturally this has consequences for the planet. See The Carbon Cycle. In the case of CO₂ and other GHGs such as CH₄, N₂O, HFCs, etc, these consequences are rising temperatures, melting icecaps and rising sea levels.
Q10cxi	1.5.2 - remove entirely	We have already calculated Council's emissions for 2020-2021 (see Roadmap) and will continue to do so for each financial year.
Q10d	These are nothing but motherhood statements	There are quite a few practical actions within this list which will develop into meaningful progress.
Q10e	Why not combine 11.3 and 11.4, makes more sense as everyone will be stronger for it with better discussion and communication.	This is a good suggestion. Certainly members from the Council Climate Change and Sustainability Taskforce and a Council or Executive representative would be present at Community Reference Group meetings. However, these details have not been finalised and it would be best if Council to makes progress with Roadmap actions before involving the community.
Q10f	Remove 1.1.1 because we do not need to embed Climate change considerations into ALL council policy and related decision making or it will bog down the decision- making process. Aim for a more refined approach.	Note that "relevant" is inserted between "all" and "Council". However, GHG emissions reduction and climate change adaptation do relate to many policy areas.
Q10g	I would remove any actions that either dictate to residents what they should be doing and that is not supported by clear evidence as to the benefit.	Council will make guidance and advice freely available to those that are interested.
Q10h	I would remove any actions that depend on other bodies for support.	Most of the actions within the Roadmap will be implemented by Council alone. However, Council's budget is limited so funding will need to be sought from state and Federal funding bodies.

COMMENT		RESPONSE AND RECOMMENDATION
		Collaboration with other Councils could also lead to financial benefits.
Q10i	The starting point for addressing any aspect of "climate change" should commence at a grassroots level, and whereby the council can role model positive change.	It is Council's aim to lead by example and also support community and business projects that lead to mitigation of GHGs or climate change adaptation benefits.
Q10k	Such things as waste reduction/recycling efforts (I didn't see anything about recycling in the list above) and the purification of water sources/restoration of native habitats (where appropriate) are genuine projects that will have a real impact on those that work and live in the scenic rim and will practically address issues of waste, pollution, "climate change" and sustainability.	- Please refer to Theme 6 Waste Emissions Reduction and also to <u>Scenic Rim Waste Management and Resource Recovery Strategy</u> - Regarding improving the quality of Scenic Rim catchment waters and restoring native habitats, see Theme 3 Healthy and Resilient Natural Systems and Carbon Sequestration. Council is already involved in environmental greening, weed management and improving the health of our waterways through initiatives such as Resilient Rivers Initiatives and Land for Wildlife in addition to providing community environmental grants.
Q10l	Of the list above, clearly public transport links need improving - this should be a priority to reduce car emissions.	Council has been advocating to State and Federal governments about improving and increasing public transport services in the Scenic Rim region and will continue to do so.
Q10m	Incentivise low GHG activities, and penalise high GHG activities.	- Council does incentivise emission reduction activities, such as through the <u>Compost Bin and Worm Farm Rebate Program</u>. - The One Million Trees initiative provides free trees for planting to the Scenic Rim Community. - Community efforts to restore, revegetate or rehabilitate can also be supported through Council's environmental grants program - <u>Scenic Rim Environmental Grants</u>.

Theme 2: Energy Efficiency and Renewable Energy

Q11 From the list below, please select your top three (3) actions you would like to see prioritised by Council



The three most popular actions for prioritisation are Actions 2.5.1, 2.2.2 and 2.1.1.

- Action 2.5.1 should be completed in the first half of 2024.
- Some work has already been completed in relation to 2.1.1 and 2.5.1. A final report on Action 2.1.1 will be presented to the ELT in the third quarter of 2024, informed by 2.5.1 which should be finalised in the first half of 2024.
- Regarding Action 2.2.2, although Council has so far missed out on State funding to install EV Charging Stations, efforts continue to seek funding from State or Federal programs. Council also encourages businesses within the community to consider installing charging stations by utilising governmental grants and/or in partnership with EV providers. At this stage, a format roll-out plan for Council is unrealistic. **Recommendation:** The division of this action into two actions and rewording to reflect the above is suggested.

Q12 Do you think these actions will benefit the Scenic Rim region? If No, please specify

Thirty (86%) respondents said Yes, they do think the actions under Theme 2: Energy Efficiency and Renewable Energy will benefit the Scenic Rim region. Five respondents (14%) said No.

COMMENT	RESPONSE AND RECOMMENDATION
Q12a Rubbish, roads and rates. The other is for Qld Gov & Feds. Our rates are better spent on same rather than puffing up Council chests to show 'look at what we can do'.	• Refer to Q9a and Q10a
Q12b It is not the council's job.	• Refer to Q9a
Q12c The selected ones will be of benefit. If council does it's research correctly & does not rely on the erroneous modelling it would be great to see a region buck the trends of preparing for the use of flawed "green" options such as EVs & Lithium batteries.	• Refer to Q9b
Q12d Wind and solar are not as reliable what has been so rekiabke	• Storage batteries when used in conjunction with solar PV or wind energy systems can provide very reliable power sources. However, even if there is no battery storage system in place, using renewable energy directly when there is sufficient sunlight or wind will still reduce emissions and power bills.

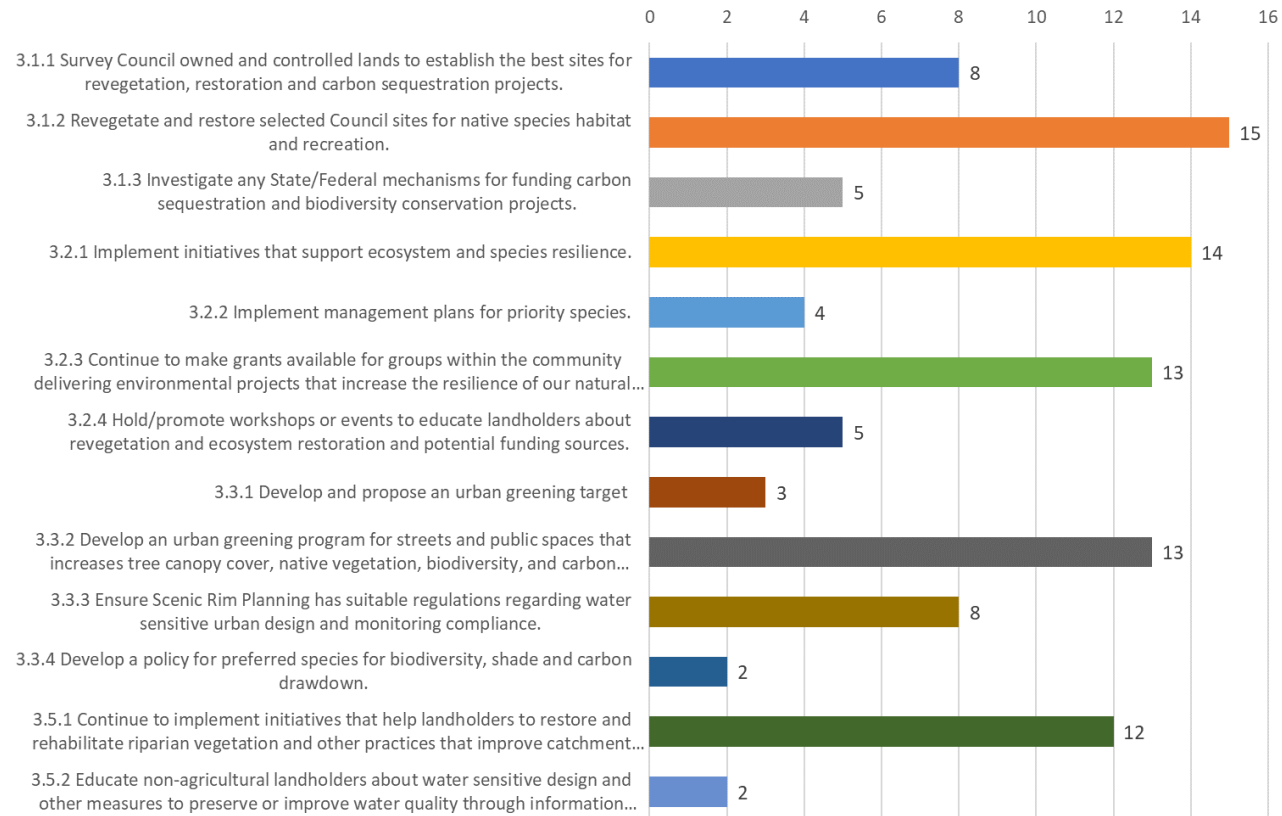
Q13 From the list of actions under Theme 2: Energy Efficiency and Renewable Energy, is there anything you would change, add or remove?

COMMENT	RESPONSE AND RECOMMENDATION
Q13a The selected ones will be of benefit. If council does it's research correctly & does not rely on the erroneous modelling it would be great to see a region buck the trends of preparing for the use of flawed "green" options such as EVs & Lithium batteries. Please see previous comments relating to category 1 which are also relevant here.	Refer to Q9b
Q13b Remove 2.1.3 utilise solar. Hydro is too expensive	Seqwater would be responsible for any hydroelectricity projects in the region and Council would have a consulting role only so this action should be removed. Recommendation: Delete Action
Q13c Personally I feel EV will not become the way of the future. Battery technology is so bad. Bio fuels or energy emissions reducer will replace EV's shortly. We need more innovation and not let EV incentives dictate the future.	- Investigating biofuels as an interim measure is Action 2.2.4. - Please refer to Q9b. - Both Federal and Queensland State Governments have EV transition plans. Queensland QLD Zero Emission Vehicle Strategy, National Electric Vehicle Strategy, Federal National Electric Vehicle Strategy. - At the end of 2022, electric-vehicle sales made up just 3.1 per cent of our new-car market in Australia. However, in August this year (2023) electric cars accounted for 6.4% of the 109,966 vehicles reported as sold. The year-to-date figure is even higher, with 7.2% of all new cars reported as sold so far this year (August 2023) running on batteries alone— up 291% on 2022. if you combine plug-in hybrid sales data, in the first eight months of 2023, Australia has bought more "electric" vehicles than in the past 12 years combined. - In 2022, EVs accounted for 14% of new car sales globally and are expected to account for 18% in 2023. Electric car sales break new records - Further, many vehicle manufacturers have stopped or are planning to stop manufacturing ICEs altogether.
Q13d No wind farms or panels	- Council has no plans to develop its own wind farms at this stage. - It would be very difficult (virtually impossible) to reduce CO₂ emissions without using renewable energy sources such as wind or solar - one of the main

COMMENT		RESPONSE AND RECOMMENDATION
		objectives of this Roadmap. In addition, on-site, P2P or microgrid-based renewable energy sources decrease reliance on grid electricity. This can be very useful if weather or bushfire events take down transmission lines.
Q13e	I would remove any reference to projects that fall outside of the remit of a council body such as hydroelectricity power station at the dam (2.1.3). More detail is required for some items such as 2.5.1	• Noted. Please refer to Q13b. • Action 2.5.1 - This assessment will be to determine what issues might arise for community groups wishing to develop their own renewable energy projects as well as opportunities such as grant funding. These types of projects can be quite complex so a thorough investigation should be completed before commencement. For example, where will the project be located, how will the electricity be distributed and to whom, and what will be the financial costs now and in the future (financial modelling).
Q13f	Hydro at Wyaralong 2.2.2 Develop a roll out plan to incorporate electric vehicle charge stations at major Scenic Rim destinations in partnership with EV providers and property owners	Assuming the respondent wishes to remove these actions - • Refer to Q13b • Refer to Q9b, Q13c
Q13g	EV are not a safe or practical option. They are dangerous and it has been proven to build a EV it creates more of a carbon footprint than other sustainable vehicle options. I would prefer to see the move more towards promoting Hydrogen vehicles. EVs are rapidly losing favour across the world due to their unreliability and they are also dangerous with the lithium batteries exploding	• Refer to Q9b, Q13c
Q13h	Promote locally produced, plant-based diets.	• Please refer to Theme 4 actions. • Noted.

Theme 3: Healthy and Resilient Natural Systems and Carbon Sequestration

Q14 From the list below, please select your top three (3) actions you would like to see prioritised by Council



The four (two tied for third) most popular actions for prioritisation under the theme Healthy and Resilient Natural Systems and Carbon Sequestration are Actions 3.1.2, 3.2.1, 3.2.3 and 3.3.2.

- The commencement of Action 3.1.2 is scheduled for the second half of 2025.
- Work has been progressing for some time on Action 3.2.1 with the Resilient Rivers Initiative and Land for Wildlife programs. Further initiatives may arise relating to Actions 3.1.2 and 3.2.2. Council's Environmental Grants scheme is continuing and other relevant environmental grants will be publicised through the Let's Talk platform and educational workshops (3.2.4).
- Some work has already been completed in relation to Action 3.3.1 which is a predecessor to 3.3.2.
- Action 3.3.2 is scheduled to commence in the next 18 months and will be delivered using a grant from the Disaster Ready Fund.

Q15 Do you think these actions will benefit the Scenic Rim region? If No, please specify

Thirty-three (94%) respondents said Yes, they do think the actions under Theme 3: Resilient and Healthy Natural Systems and Carbon Sequestration will benefit the Scenic Rim region. Two respondents (6%) said No.

COMMENT		RESPONSE AND RECOMMENDATION
Q15a	Not council responsibility	• Refer to Q9a
Q15b	It's all a farce	• Refer to Q9d, Q10l

Q16 From the list of actions under Theme 3: Resilient and Resilient Natural Systems and Carbon Sequestration, is there anything you would change, add or remove?

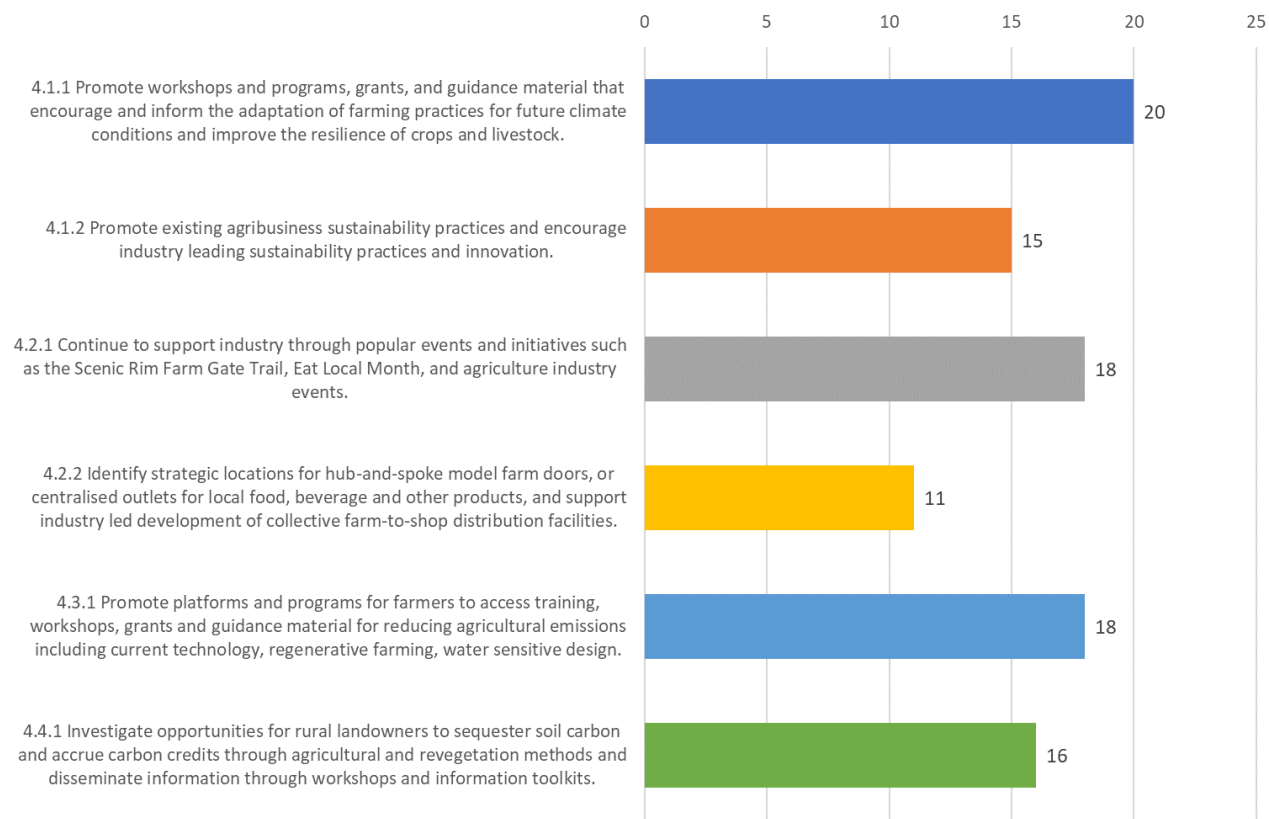
COMMENT		RESPONSE AND RECOMMENDATION
Q16a	Need council to focus on it core responsibility	• Refer to Q9a
Q16b	Wholeheartedly agree with focus on revegetation & water catchment preservation. Would need to ensure that education & assistance is provided in a manner that does not unnecessarily restrict land use for productive purpose such as farming & recreational use. People's livelihood should not be affected unnecessarily for environmental reasons.	• Refer to the Theme 4: Sustainable Agriculture and Food Systems. One of the aims of the Roadmap is to support farmers to employ practices that are beneficial both for land productivity and natural systems. • Also see Scenic Rim Biodiversity Strategy 2021-2026.
Q16c	Prevent housing development outside townships so that this	• Noted. However, planning regulations are not the focus of this Roadmap. Refer to

COMMENT	RESPONSE AND RECOMMENDATION
land can be used for revegetation. Prioritize building amenity close to towns to encourage housing developments there.	Council's <u>Growth Management Strategy 2014</u> and <u>Scenic Rim Planning Scheme 2020</u>. • There may be amendments made to the Planning Scheme and other relevant Council policies as a result of the Roadmap actions under Theme 5: Resilient Communities, Businesses and Built Environments as well as Theme 3 regarding vegetation management in general and in the context of buffers and Matters of State and/or Local Environmental Significance.
Q16d More thoughtful planning considerations need to be implemented as over development has a huge impact on flora and fauna in the region. Rural residential sized housing blocks would be better for the region over low to medium dense development	• Refer to Q16c
Q16e It's all nonsense	• Noted
Q16f It may be necessary to mandate certain actions, both within Council and for landowners. It is all very well to have plans and guidelines, but Staff must have the intent and ability to follow them (e.g. recent clearing of remnant roadside vegetation by Council in Beechmont clearly DID NOT follow guideline stating that every effort must be made to avoid such behaviour. Given that critical World Heritage areas are within Scenic Rim, much greater emphasis should be placed on retaining and restoring buffer zones surrounding them.	• Please refer to the <u>Scenic Rim Vegetation Clearing Factsheet</u> for vegetation clearing exemptions. Apparently, this clearing was carried out because the vegetation was impacting visibility for motorists. Council appreciates your concerns around the removal of this native flora and always endeavours to maintain native flora wherever possible. • And the <u>Scenic Rim E-plan</u> for further information. • There may be amendments made to the Planning Scheme and other relevant Council policies as a result of the Roadmap actions under Theme 5: Resilient Communities, Businesses and Built Environments as well as Theme 3 regarding vegetation management in general and in the context of buffers and Matters of State and/or Local Environmental Significance.
Q16g Develop mechanisms to ensure there is no more land clearing which is evident around the southern scenic rim leading to greater GhG and erosion.	• Council's <u>Growth Management Strategy</u> includes the following: Principle #16 Development protects, maintains and enhances native vegetation, urban vegetation and habitat trees to retain biodiversity and increase resilience to climate change. • There may be amendments made to the Planning Scheme and other relevant Council policies as a result of the Roadmap actions under Theme 5: Resilient Communities, Businesses and Built Environments as well as Theme 3 regarding vegetation management in general and in the context of buffers and Matters of

COMMENT		RESPONSE AND RECOMMENDATION
		State and/or Local Environmental Significance.
Q16h	3.1.1 Ensure the Lagoon owned by Council in Kooralbyn is included in the survey	• Noted and included for consideration.
Q16i	3.3.2 Ensure the land beside the Lagoon in Kooralbyn is included in a greening programme	• Noted and included for consideration.

Theme 4: Sustainable Agriculture and Food Production Systems

Q17 From the list below, please select your top three (3) actions you would like to see prioritised by Council



The three most popular actions for prioritization under the theme Sustainable Agriculture and Food Production Systems are Actions 4.1.1, 4.2.1 and 4.3.1. The promotion of Landcare, HLW and other workshops, programs and grants for farmers is already in progress (Actions 4.1.1 and 4.3.1) as is Action 4.2.1. The development of further materials relating to climate change adaptation and mitigation in agriculture is scheduled for the first half of 2025 in the Implementation Plan. These materials will be made available through the Let's Talk Platform, emails, and hardcopy for events.

Q18 Do you think these actions will benefit the Scenic Rim region? If No, please specify

Thirty-three (94%) respondents said Yes, they do think the actions under Theme 4: Sustainable Agriculture and Food Production Systems will benefit the Scenic Rim region. Two respondents (6%) said No.

COMMENT	RESPONSE AND RECOMMENDATION
Q18a Simply "promoting" and "investigating" is unlikely to result in action	- Promotion by Council is viewed as an incentive for farmers to take up sustainable farming practices. Please see the Scenic Rim Agribusiness Roadmap for more detail on these types of actions. If particular agribusinesses are seen to be promoted by Council due to their sustainable practices, it may well entice others to employ those practices. - As a way to support farmers that wish to become involved in carbon sequestration projects, information relating to funding, obtaining ACCUs, resources, tools, and different methods, will be synthesized (investigation) for dissemination through workshops and toolkits. Some organisations are already doing this type of work, i.e. Landcare and Carbon Farmers Australia, through webinars, workshops and conferences. The aim here is to provide and promote all of these resources through a centralised Council platform.
Q18b I wish they would but they won't. any agriculture efforts will be drowned out by tourism operators and land for wildlife applicants.	- Noted. See Queensland Agritourism Roadmap, and the Scenic Rim Agribusiness Roadmap. - Being a Land for Wildlife member involves revegetating and/or restoring land to provide habitat for native species. - Sometimes the land is unproductive and not useful for agriculture in its current state (see Land for Wildlife Case Study). - Planting trees and other vegetation not only sequesters carbon, it also improves the quality of ecosystem services that natural systems provide and that humankind relies on. Examples of ecosystem services are flood regulation, erosion prevention, pollination and water and air filtration. - Land for Wildlife practices upstream can improve water quality and lower the spread of invasive species to farms downstream and nearby. - Ecotourism and tourism in general are not within the scope of the Climate Change Roadmap. Refer to Scenic Rim Nature-based Tourism Strategy and Scenic Rim Growth Management Strategy 2041.
Q18c We have to protect the existing GHG sinks (vegetation), and promote	Numerous actions within the endorsed Biodiversity Strategy Implementation Plan are planned for, in order to improve vegetation policy and protection across the Scenic Rim, e.g., 1.1 Protect the region's biodiversity and natural assets from impacts of a degraded environment by developing planning tools to address key threats such

more area to be reforested.

as vegetation loss, plant and animal pests, salinity, poor water quality, soil loss for the benefit of people and their welfare, 1.2 Include an environmental offset policy in the Scenic Rim Regional Council Planning Scheme to mitigate the impacts of development, and 1.6 Develop planning mechanisms for the protection of Bushland in significant corridors. This work aims to address existing vegetation, which is needed before investigating or planning for an increased level of vegetation cover. See [Scenic Rim Biodiversity Strategy 2021-2026](#).

- There may be amendments made to the Planning Scheme and other relevant Council policies as a result of the Roadmap actions under Theme 5: Resilient Communities, Businesses and Built Environments as well as Theme 3 regarding vegetation management in general and in the context of buffers and Matters of State and/or Local Environmental Significance.
- [Scenic Rim Growth Management Strategy 2041](#) does include the following: Principle #16 Development protects, maintains and enhances native vegetation, urban vegetation and habitat trees to retain biodiversity and increase resilience to climate change.
- Council does also make environmental grants available to landholders that wish to create or improve native habitat on their land and is involved in the Resilient Rivers and Land for Wildlife Initiatives which promote reforestation and weed control - see Theme 3 actions.

Q19 From the list of actions under Sustainable Agriculture and Food Systems, is there anything you would change, add or remove?

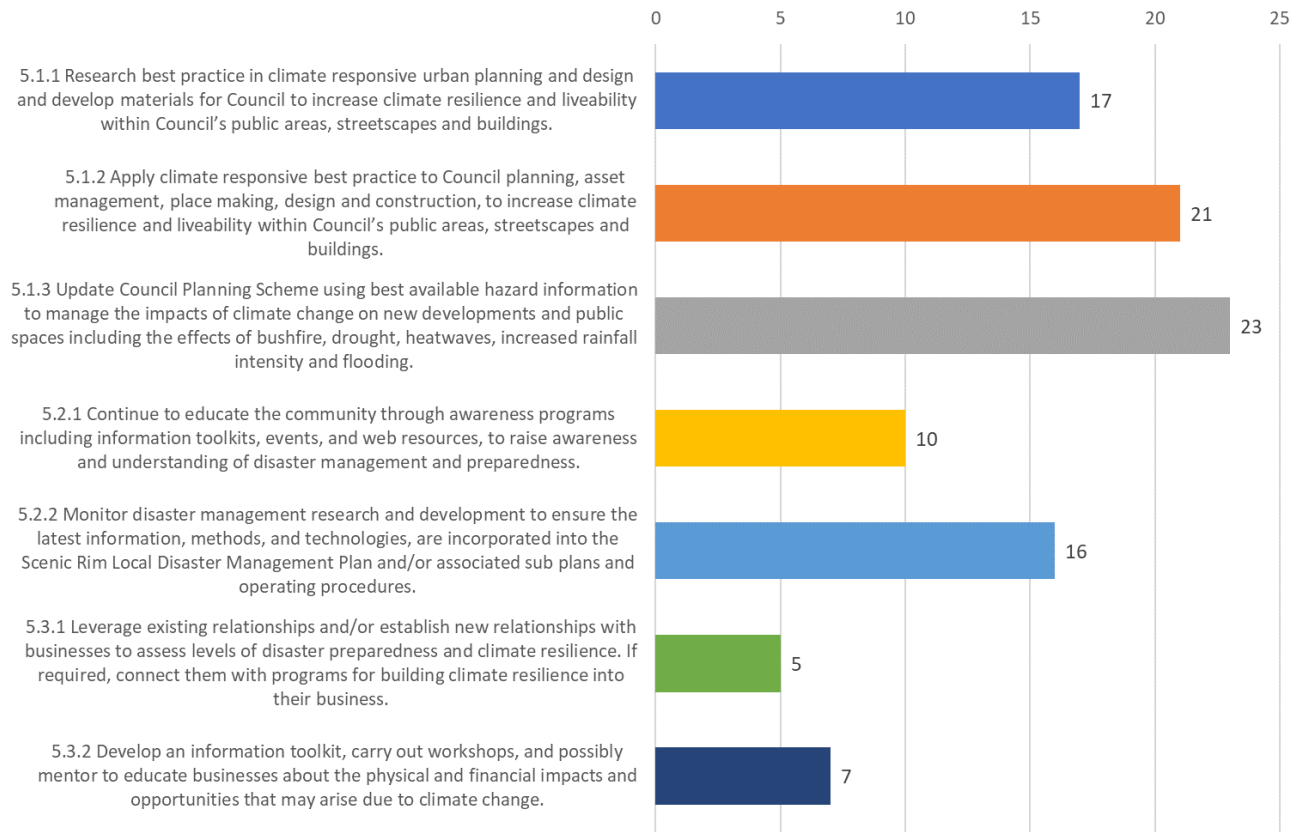
COMMENT	RESPONSE AND RECOMMENDATION
Q19a Council need to start focusing what benefit ratepayers and reducing cost of living pressures	• Many of the actions within this Roadmap have the potential benefit ratepayers, not only through mitigating and adapting to climate change, but also through the many associated co-benefits. These include: • Savings on energy costs through increased efficiency and self-generation for Council and community. • Job creation through renewable energy and revegetation/rehabilitation projects. • Improving waterway and ecosystem health. • Support farmers to improve soil fertility. • Greener and more attractive urban environments increase sense of well-being in the community. • Reducing cost of living pressures is not within the scope of this Roadmap but may be indirectly achieved by educating the community on energy efficiency and renewable energy opportunities and through job creation.

COMMENT		RESPONSE AND RECOMMENDATION
Q19b	Try to avoid impinging on areas that are more suited to State and/or Federal responsibilities (4.1.1 and 4.1.2) because there is only so much that can be done at Council level.	- Noted. See Scenic Rim Agribusiness Roadmap. - Organisations such as Healthy Land and Water, Carbon Farmers Australia, Landcare, Farmers for Climate Action among others have already held and continue to hold workshops and disseminate information regarding adaptation of farming practices for future climate conditions, in the Scenic Rim region and online.
Q19c	I would change the focus from carbon emissions to affordability & ensuring food will continue to be available into the future. Keeping farmers in business & allowing them to produce food as necessary with a focus on better farming practices that do not use harmful chemicals & rely more on ecological diversity to maintain high crop yields, higher revenue directly to growers (cut out the middle-man) & less impact on the environment (erosion & soil leaching). Growing more nutrient dense foods by looking after the soil, growing more suitable crops & cutting down storage times by making produce available locally (and therefore cutting costs) would be of benefit to all.	- See Action 4.1.2, 4.3.1, 4.4.1. - See 18b and 19a - Refer to Scenic Rim Agribusiness Roadmap.
Q19d	Encourage residents to grow more of their own food (in a sustainable way, e.g. edibles that do not require heavy watering).	Noted. Recommendation: This suggestion has been added as a subtask in the implementation plan.
Q19e	Develop mechanisms to ensure there is no more land clearing which is evident around the southern scenic rim leading to greater GhG and erosion.	- Numerous actions within the endorsed Biodiversity Strategy Implementation Plan are planned for, in order to improve vegetation policy and protection across the Scenic Rim, e.g., 1.1 Protect the region's biodiversity and natural assets from impacts of a degraded environment by developing planning tools to address key threats such as vegetation loss, plant and animal pests, salinity, poor water quality, soil loss for the benefit of people and their welfare, 1.2 Include an environmental offset policy in the Scenic Rim Regional Council Planning Scheme to mitigate the impacts of development, and 1.6 Develop planning mechanisms for the protection of Bushland in significant corridors. See Scenic Rim Biodiversity Strategy 2021-2026. - There may be amendments made to the Planning Scheme and other

COMMENT		RESPONSE AND RECOMMENDATION
		relevant Council policies as a result of the Roadmap actions under Theme 5: Resilient Communities, Businesses and Built Environments as well as Theme 3 regarding vegetation management in general and in the context of buffers and Matters of State and/or Local Environmental Significance. • <i>Council's Growth Management Strategy (Scenic Rim Growth Management Strategy 2041)</i> does include the following: Principle #16 Development protects, maintains and enhances native vegetation, urban vegetation and habitat trees to retain biodiversity and increase resilience to climate change.
Q19f	4.1.1 there is a lot of information and reports available through the learned Academies, particularly the Australian Academy of Technological Sciences and Engineering and the Crawford Fund.	Noted. Thank you for the advice.
Q19g	We need a vegetation cover target across all catchments to address our actual GHG emissions - net zero.	Noted. Numerous actions within the endorsed Biodiversity Strategy Implementation Plan are planned for, in order to improve vegetation policy and protection across the Scenic Rim, e.g., 1.1 Protect the region's biodiversity and natural assets from impacts of a degraded environment by developing planning tools to address key threats such as vegetation loss, plant and animal pests, salinity, poor water quality, soil loss for the benefit of people and their welfare, 1.2 Include an environmental offset policy in the Scenic Rim Regional Council Planning Scheme to mitigate the impacts of development, and 1.6 Develop planning mechanisms for the protection of Bushland in significant corridors. This work aims to address existing vegetation, which is needed before investigating or planning for an increased level of vegetation cover. See Scenic Rim Biodiversity Strategy 2021-2026.

Theme 5: Resilient Communities, Businesses and Built Environments

Q20 From the list below, please select your top three (3) actions you would like to see prioritised by Council



The three most popular actions for prioritisation under the theme Resilient Communities, Businesses and Built Environments are Actions 5.1.3, 5.1.2 and 5.1.1.

- The only other action not included in the first *Action Plan 2024-2026* is "Action 5.1.3 Update Council Planning Scheme using best available hazard information to manage the impacts of climate change on new developments and public spaces including the effects of bushfire, drought, heatwaves, increased rainfall intensity and flooding". The *Scenic Rim Planning Scheme 2020* is scheduled to be amended according to any new flood, bushfire hazard, or other climate change impact modelling studies in the timeframe 2027-2029 so this action should remain in the second *Action Plan 2027-2029*.
- Action 5.1.1 is a predecessor to 5.1.2 and is scheduled for the first half of 2025. The delivery of Action 5.1.2 will be reliant on the integration of this best practice (5.1.1) into operational procedures and guidelines in addition to obtaining any extra funding required. Note that these procedures and guidelines will not include Building Assessment Provisions, such as building standards to withstand fire risk. These are provided in the National Construction Code.

Q21 Do you think these actions will benefit the Scenic Rim region? If No, please specify

Twenty-nine (83%) respondents said Yes, they do think these actions will benefit the Scenic Rim region. Six respondents (17%) said No.

COMMENT	RESPONSE AND RECOMMENDATION
Q21a These themes do not seem to promote much beyond business as usual, which, given the likely scale of the predicted catastrophe, are not enough. Perhaps certain mandates will be required, e.g. passive solar building only, etc	• We acknowledge that real solutions on the ground, e.g. passive solar building, cool roofing and building materials with lower solar absorbance, can address heat impacts and energy consumption costs for new homes. • Council has limited powers in relation to mandating building design and construction. As it stands developers/builders must adhere to the <u>National Construction Code</u> and <u>Queensland Development Code</u>. There is a role here for advocacy to the Federal and State governments to help lift standards across the building sector for high quality and best practice, including elements of passive solar design, performance-based planning policy and standards in urban design, greening and water sensitive urban design. • The urban greening project listed under Theme 3 will go some way to mitigating heat island effects in the more densely populated areas of the Scenic Rim region. • There may be amendments made to the Planning Scheme and other relevant Council policies as a result of the Roadmap actions under

COMMENT	RESPONSE AND RECOMMENDATION
	this Theme. Recommendation: Action 5.1.4 Advocate to State and Federal governments to lift standards across the building and development sectors to climate adaptation best practice for cooling of heat island effects, improved amenity, and reducing energy demand.
Q21b Particularly if using the Council website. I found can no longer look at some things on Council website as my computers etc have out of date operating systems. Can't afford to keep up with the latest technology.	• Scenic Rim <u>libraries</u> have computers that can be used.
Q21c Only some of these items will truly benefit the region - there is a lot of suggestions which are just a waste of tax payer dollars. In regards to the items related to planning: 5.1.1 & 5.1.2 - the council has already demonstrated a complete disregard for current best practice related to urban design (for example the newly approved development near Hoya Road, Hoya) - there is opportunity for council to truly embrace sustainable and environmentally friendly designs/town planning whilst ensuring that developments retain old growth trees for biodiversity, shade (which reduces temperatures on ground), and has greater aesthetic value (for example Edenbrook estate in Seventeen Mile Rocks, and Sunrise at 1770 estate). We should be progressing eco-estates, and estates that utilise sustainable designs and building products.	• Please refer to Q21a. • Planning regulations are not the focus of this Roadmap. Please refer to Council's Growth Management Strategy 2014 https://www.scenicrim.qld.gov.au/downloads/file/5643/scenic-rim-growth-management-strategy-2041 and Scenic Rim Planning Scheme 2020 https://planningscheme.scenicrim.qld.gov.au/eplan/rules/0/177/0/10094/0/73. • However, there may be amendments made to the Planning Scheme and other relevant Council policies as a result of the Roadmap actions under this Theme as well as Theme 3 regarding vegetation management in general and in the context of buffers and Matters of State and/or Local Environmental Significance. • Although Council's powers are limited in relation to the broader community, recommendations from best practice research (Action 5.1.1) into urban planning and design will be distributed to appropriate areas of Council. This information will also be available to property owners and developers.
Q21d Not Councils role	• Refer to Q9a
Q21e I think the council should do more than communicate and research. There are practical actions that can be taken to improve liveability in a changing climate. In the short run there is the issue of increased heat - which probably costs more lives than disasters - so who can afford air	• Refer to Actions 3.1.2 and 3.3.2, Q21a, Q21c. • For issues related to disaster management and prevention, please refer to <u>Scenic Rim Local Disaster Management Plan</u> and <u>Disaster Dashboard</u>.

COMMENT	RESPONSE AND RECOMMENDATION
conditioners? etc what might be done to assist those most vulnerable. what passive alternatives are there to air con? Shade etc In the longer run are the increasing number and severity of extreme weather - winds, fires and floods. What can be done to increase housing resilience against hurricane force storms? eg., Additional engineering to hold roofs down? How could council support this? The most dangerous is probably bushfire - what can be done to ensure that evacuation ""centres"" (on Tamborine mountain one is a park) can be fit for purpose. How can council support this? Floods - dangerous zones can be pinpointed early and signed with warnings. How does council work with community disaster organisations to assist evacuations?	Recommendation: Action 5.1.4 Advocate to State and Federal governments to lift standards across the building and development sectors to climate adaptation best practice for cooling of heat island effects, improved amenity, and reducing energy demand.
Q21k Don't recommend new developments on Tambourine mountain especially cook road	• Planning regulations are not the focus of this Roadmap. Please refer to Council's Growth Management Strategy 2041 and Scenic Rim Planning Scheme 2020. • There may be amendments made to the Planning Scheme and other relevant Council policies as a result of the Roadmap actions under Theme 5: Resilient Communities, Businesses and Built Environments as well as Theme 3 regarding vegetation management in general, and in the context of buffers and Matters of State and/or Local Environmental Significance.

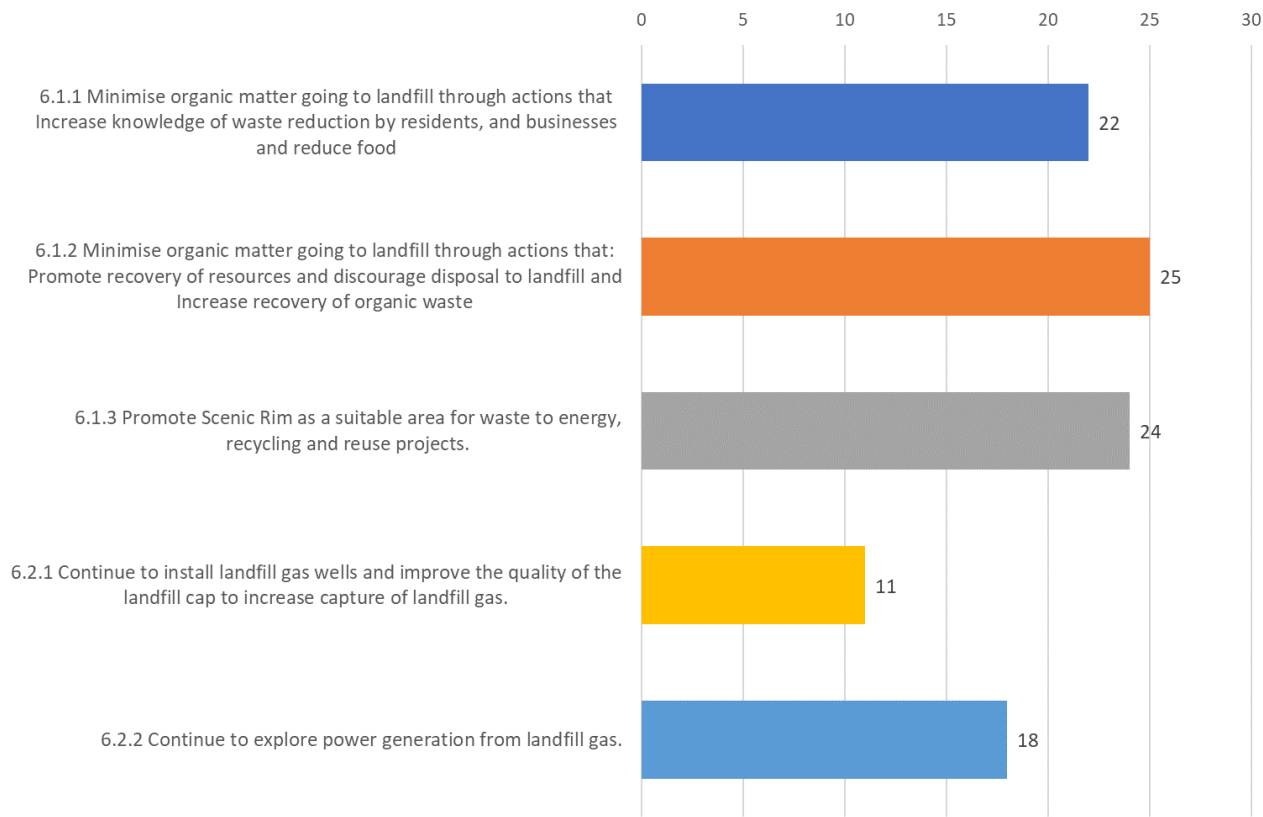
Q22 From the list of actions under Theme 5: Resilient Communities, Businesses and Built Environments, is there anything you would change, add or remove?

COMMENT	RESPONSE AND RECOMMENDATION
Q22a Have an option to add or disagree with what has been put forward	• This survey was designed with this option in mind. Questions 7, 9, 10, 12, 13, 15, 16, 18, 19, 21, 22, 24, 25 and the last question all give participants the opportunity to state that they disagree with what has been put forward and why.
Q22b Update the Council Planning scheme Fire Hazard Overlay Code	• The Planning Scheme is only able to regulate new development that is

COMMENT	RESPONSE AND RECOMMENDATION
to include existing development and not just new development. Council cannot ensure an acceptable outcome for PO19 and AO19 for the existing Kooralbyn Community	proposed in the region. There are other strategies outside the planning framework that can be used to manage bushfire risk, such as controlled burning and vegetation management. Awareness campaigns also encourage property owners to minimise bushfire risk on existing properties.
Q22d Plant more trees everywhere Be aware in planning approvals of slope slippage on Tamborine Mt Use Indigenous burning for fire reduction Cancel water extraction activities on Tamborine Mt - in the event of a fire we will need the water.	• Refer to Theme 3 Actions regarding tree planting and greening in general. • The Scenic Rim Planning Scheme provides a framework for managing development in areas that are at risk of landslide. These are identified in the Landslide and Steep Slope Overlay, which has the purpose of ensuring development on land containing unstable slopes or steep slopes protects people, property and the environment from landslide hazards. • Our Environmental Operations team uses indigenous burning methods within reserves when possible. • There is no opportunity for Council to cancel water extraction activities that are operating in accordance with a Development Permit under the Planning Act 2016.
Q22e Plant a lot more trees to cool down the towns in the region, especially Beaudesert	• See Actions 3.1.2 and 3.3.2. • Also refer to revitalisation plans for Beaudesert and other Scenic Rim town centres - Vibrant and Active Towns and Villages
Q22f I believe we are seeing more devastating natural disasters, not due to climate change but because more & more people are building in unsafe areas such as in the forest & developing within known flood areas & low lying land. It is up to council & state government to ensure that land release is safe for humans to minimise the impacts of flooding & fire events.	• Noted.
Q22g avoid trying to reinvent whats already being done by councils and states who are ahead of the curve just copy and focus on implementation-	• This Roadmap was developed with reference to Climate Change Strategies from many Councils located in Queensland and interstate. However, there are important demographic features and predicted future climate change impacts that are specific to Scenic Rim region that have been considered here.
Q22h 5.2.1 Look at ways to reuse, rather than recycling, which takes energy and communicate/educate businesses and individuals	• Please refer to Theme 6.

Theme 6: Waste Emissions Reduction

Q23 From the list below, please select your top three (3) actions you would like to see prioritised by Council



Actions 6.1.2, 6.1.3, and 6.1.1 are the most popular actions for Waste Emissions Reduction. Actions 6.1.1 and 6.1.2 are Strategic Outcomes from the *Waste Management & Resource Recovery Strategy 2021-2026* and are already in progress as is Action 6.1.3.

Q24 Do you think these actions will benefit the Scenic Rim region? If No, please specify

Thirty-four (97%) respondents said Yes, they do think these actions will benefit the Scenic Rim region. One respondent (3%) said No.

COMMENT	RESPONSE AND RECOMMENDATION
Q24a minimise any need to have waste centers and waste gas wells	Please refer to the <i>Waste Management & Resource Recovery Strategy 2021-2026</i>.

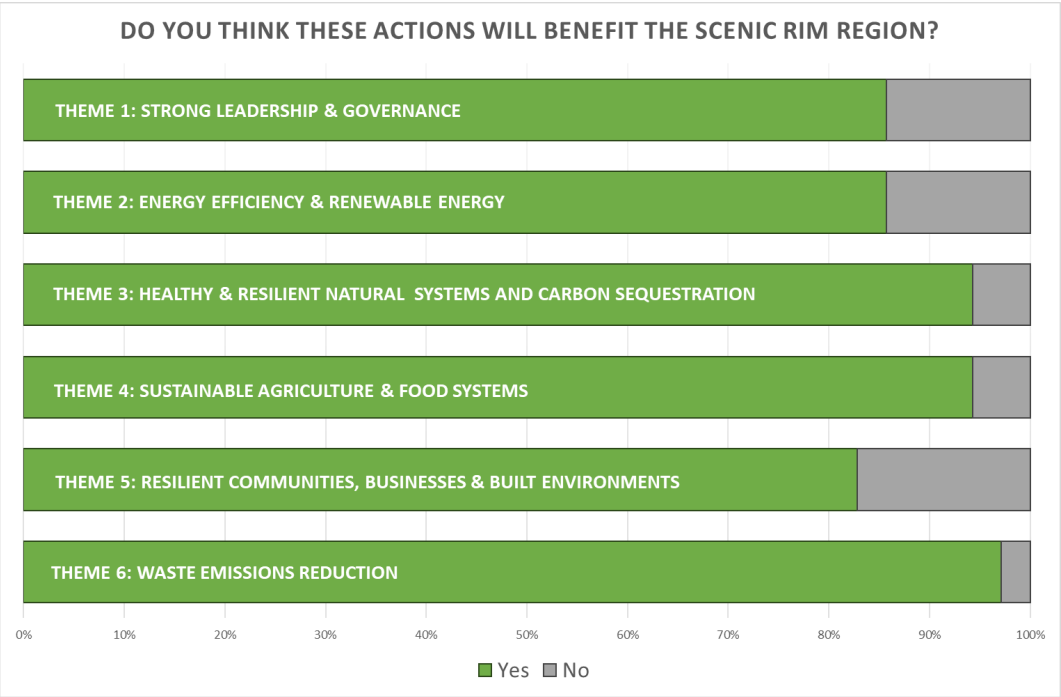
Q25 From the list of actions under Theme 6: Waste Emissions Reduction, is there anything you would change, add or remove?

COMMENT	RESPONSE AND RECOMMENDATION
Q25a Provide a green waste bin for ratepayers	Please refer to the <i>Waste Management & Resource Recovery Strategy 2021-2026</i>
Q25b I hope the Council introduces "Green Bins" for households.	Noted.
Q25c Could we create-sell compost?	Please refer to the <i>Waste Management & Resource Recovery Strategy 2021-2026</i>
Q25d At this point we are way beyond "explore ways". Name some pilot projects. Use local expertise. Run competitions like the X prize (which used to be about more than space) to gather initiatives from locals . Give prize money. Crowd source innovation and ingenuity	Noted. Thank you for your suggestions. Refer to <i>Waste Management & Resource Recovery Strategy 2021-2026</i> for more details.
Q25e Again, these actions seem quite minimal, although it is acknowledged that this is a 'whole of society' problem. Provision of free or reduced cost home composting units/ worm farms?	Please see <i>Worm farm and compost bin rebates</i> regarding Council rebates on worm farms and composting bins.
Q25f 6.1.2 given that many ratepayers and residents are farming, it would be worth	Noted. This advice will be included in future materials for

COMMENT		RESPONSE AND RECOMMENDATION
	investigating such recycling systems such as Goterra https://goterra.au/food-waste-management/#:~:text=Modular%20waste%20management%20units&text=Black%20soldier%20fly%20larvae%20convert,no%20disruption%20to%20your%20services.	distribution and forwarded to the Waste Services team.
Q25g	6.1.1 - should read "reduce food waste" not reduce food. We should absolutely focus on recycling & reusing. Organic matter should not be put into landfill not because it causes "GHG" but because it causes harmful gases to human life & it would be more beneficial to return the carbon & other nutrients to the earth for growing more.	• Noted. Due to the character limit for entries on the Let's Talk platform, unfortunately, "waste" was dropped off the end of this Action. • Yes. Methane is a potentially harmful gas. It is also a greenhouse gas (GHG). See Methane General Information.

Summary: Do you think these actions will benefit the Scenic Rim region? [Q9, Q12, Q15, Q18, Q21, Q24]

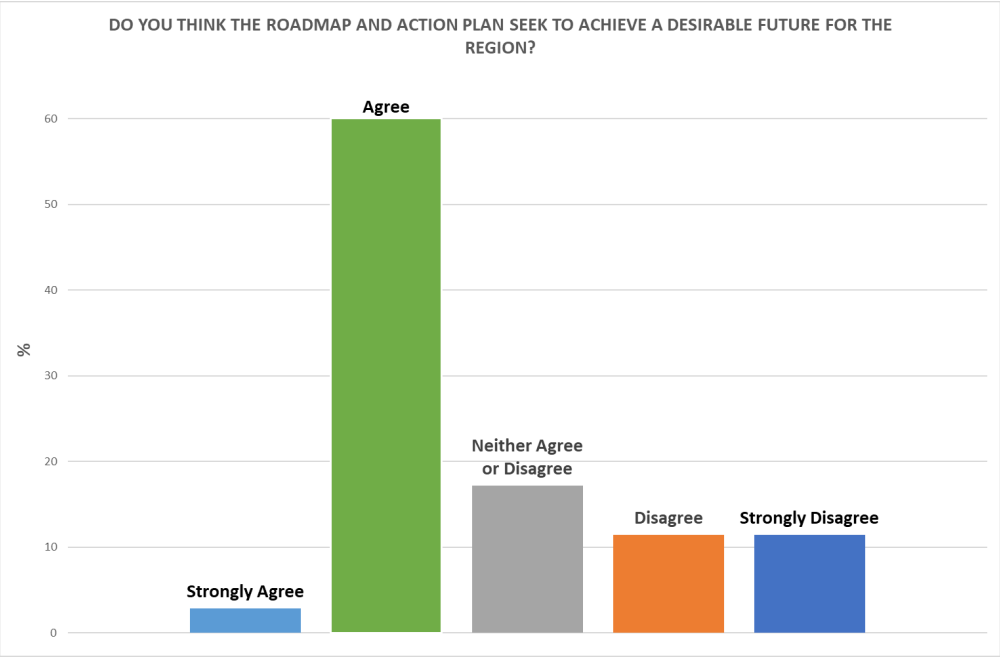
After selecting their top 3 actions for Council to prioritise under each theme, survey participants were asked if they thought that the listed actions will benefit the Scenic Rim region. These responses are summarised in the chart below.



There is a greater than 80% agreement that actions under all themes will benefit the Scenic Region, with strongest support for actions under the Theme 6: Waste Emissions Reduction followed by Theme 3: Healthy & Resilient Natural Systems and Carbon Sequestration and Theme 4: Sustainable Agriculture & Food Systems. These are all areas that require collaboration between industry and business, community and Council.

Do you think the Draft Scenic Rim Climate Change Roadmap 2024-2034 and associated Action Plan seek to achieve a desirable future for the region?

The final question was designed to obtain an overall opinion of the Roadmap and Action Plan.



Although this question and the Theme questions on perceived benefit - "Do you think these actions will benefit the Scenic rim region?" are quite similar, results are significantly different. The lowest percentage of participants agreeing that the list of actions under each theme would benefit the region was 83% where as if the "agree" responses and "disagree" responses are combined for the above question, the result is 60%. It is still a majority but less than implied by a similar question placed within the context of the themes. One interpretation of these results is that generally respondents feel positive about the actions in isolation, but when considering the overall picture, some respondents may have a more negative outlook.

Summary

- 70% of respondents think that Council should take an active role in climate response, 18% of respondents think that Council should not take an active role in climate response, and 12% are unsure.
- Respondent priorities often coincide with actions that are already in progress. All except two actions placed in the top three are due to commence during Action Plan I 2024-2026.
- There is a greater than 80% agreement that actions will benefit the Scenic Rim region under all six themes.
- When asked at the completion of the survey if respondents thought that the Roadmap and Action seek to achieve a desirable outcome for the region, 60% agreed, 22% disagreed, and 18% neither agreed nor disagreed.

Key findings

- There would appear to be a lack of awareness in the community in relation to Council's roles and functions. Comments like "roads, rates, and rubbish" (two respondents) do not reflect the many areas of governance that Council covers. Two respondents were also concerned that rates would increase in order to finance Roadmap actions. Information relating to funding of Roadmap actions is in the Action Plan.
- Two respondents were opposed the development of renewable energy projects.
- There is notable anti-EV sentiment in the community (five respondents or 14%). However, there was strong support for "Action 2.2.2 Develop a roll out plan to incorporate electric vehicle charge stations at major Scenic Rim destinations in partnership with EV providers and property owners", with 14 (39%) respondents listing this in their top three actions for prioritisation.
- Four respondents made comments that imply that these actions are not adequate to mitigate and/or adapt to climate change in the region.
- Comments overall emphasised the following environmental issues; (i) waste reduction and recycling efforts - four respondents, (ii) catchment water resources - three respondents, and (iv) native habitat restoration (greening) and remnant vegetation conservation - eight respondents.
- Two respondents suggested green bins would be useful for reducing methane emissions from landfill.
- Five respondents expressed concerns about rising temperatures and heat island effects. Three of these respondents suggested changes to building regulations to mitigate these effects.

Alterations to Summary of Actions in Roadmap and Action Plan

- Action 2.1.3 Investigate hydroelectricity power generation at Wyaralong Dam.
Suggest deletion as hydroelectricity schemes are not within Council's remit (correctly pointed out by one respondent) and would only perform in a consulting role if such a scheme does eventuate.
- Action 2.2.2 Develop a roll out plan to incorporate electric vehicle charge stations at major Scenic Rim destinations in partnership with EV providers and property owners. As a roll-out plan specific to Council is unlikely, splitting this into two actions and rewording is suggested.
 - Action 2.2.2 Continue to seek funding for Council owned/controlled EV charging stations to increase the availability for residents and visitors

- in the Scenic Rim region and, in the longer term, for Council's own fleet
- Action 2.2.3 Encourage businesses to take advantage of co-funding opportunities available through government grants and form partnerships with EV providers to increase the availability of EV charging stations in the Scenic Rim region.
- and any subsequent renumbering of actions under 2.2 required.
- Include additional action based on respondents' concerns about heat island effects.
 - Action 5.1.4 Advocate to State and Federal governments to lift standards across the building and development sectors to climate adaptation best practice for cooling of heat island effects, improved amenity, and reducing energy demand.

Conclusion

Overall, there are a few respondents that think that the actions go too far either due to climate science contrarianism, or a belief that Council should concentrate on roads, rates, and rubbish and leave other matters to State and Federal governance. There are also a few that think that the actions do not go far enough to be an effective climate response by Council.

However, from the sample obtained for this survey, the majority of respondents believe that Council should take an active role in climate response and support the Roadmap actions.



CLIMATE CHANGE ROADMAP 2024-2034

SCENIC RIM

REGIONAL COUNCIL

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Abbreviations

BoM	Bureau of Meteorology
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CCFBIP	Council Carbon Footprint/Baseline Inventory & Pathway
EV	Electric Vehicle
FFDI	Forest Fire Danger Index. The FFDI is an indicator of dangerous fire weather conditions for a given location.
GHG	A greenhouse gas (GHG or GhG) is a gas that absorbs and emits radiant energy at thermal infrared wavelengths, causing the greenhouse effect. The primary greenhouse gases in Earth's atmosphere are water vapor (H ₂ O), carbon dioxide (CO ₂), methane (CH ₄), nitrous oxide (N ₂ O), and ozone (O ₃).
ICE	Internal Combustion Engine
ICLEI	International Council for Local Environmental Initiatives
IPCC	Intergovernmental Panel on Climate Change
QCRC	Queensland Climate Resilient Councils
SEQCRA	South East Queensland Climate Resilient Councils
SoA	Summary of Actions
Sol	Statement of Intent
SRRC	Scenic Rim Regional Council

1. Overview

Located in South East Queensland, the Scenic Rim boundaries stretch from Peak Crossing and Gleneagle in the north down to the New South Wales border, and from Tamborine Mountain in the east, to Cunningham's Gap in the west. The region is home to a population of more than 43,000 people where residents and visitors value the scenic views and natural environment, country heritage and rural lifestyle, and friendly caring and connected communities (Scenic Rim Regional Council, 2018). The agricultural sector is the second highest employer in the Scenic Rim providing jobs through diverse agribusinesses and agritourism.

Climate Change has the potential to diminish the region's environmental, social and economic values by impacting our natural ecosystems, agricultural productivity, businesses, built environment, and communities. The Scenic Rim has already seen an increase in extreme fire weather days, a change in rainfall distribution patterns, and a decrease in streamflows (Refer - 3. Why we are doing this). The predicted impacts of climate change pose a very real threat to the Region and we will be increasingly affected by changes in temperature, rainfall, and extreme weather conditions (BoM & CSIRO, 2022) that can result in floods, bushfire and unseasonal weather events.

The role of the Scenic Rim Regional Council, in collaboration with the local community and other levels of government, is to provide essential services, manage local risks, and support disaster recovery. Supporting Council's adopted *Climate Change Statement of Intent*, this *Scenic Rim Climate Change Roadmap 2024-2034* (Roadmap) has been developed to guide Council and the Scenic Rim region towards reducing greenhouse gas (GHG) emissions, building climate resilience within our communities and ecosystems, and enabling our region to withstand and recover quickly from the risks posed by a changing climate.

This Roadmap will enable Council to embed climate change considerations into corporate decision-making and guide our planning and response to both slow moving and fast changes in our climate. It includes strategic objectives and high level actions for improving the adaptive capacity of our region and for reducing GHG emissions and do our part in contributing to global climate change mitigation over the next ten years. In order to make the achievement of the strategic objectives more manageable, three 3 Year Action Plans will be developed. The first of these plans, *Scenic Rim Climate Change 3 Year Action Plan 2024-2026*, accompanies this Roadmap and contains a detailed inventory of high-level actions to be implemented over the next three years, relevant stakeholder roles and responsibilities, and funding opportunities.

Vision

"By 2034, the Scenic Rim will have made significant progress in moving towards net zero emissions and have greater resilience to climate change impacts. The region will be responsive to climate change as a catalyst for reducing our dependence on natural resources, increasing the sustainability of our businesses and industries, and for improving the resilience of our natural systems, communities, and built environment."

Climate change has the potential to impact all aspects of our lives and, as such, requires action by all areas of Council. Consequently, the objectives and actions within this Roadmap are interlinked with objectives in many Council strategies and plans. Achieving this vision will require collaboration among various groups internal and external to Council and will be supported by this Roadmap and associated Action Plans.

2. Policy Context

In 2019, Council resolved to acknowledge that climate change is a risk that requires prompt and ongoing focus by Council. Subsequently an *Interim Climate Change Statement of Intent* was developed and adopted 20 January 2020. On the 22 November 2022 Council agreed to the content and release of the final *Scenic Rim Regional Council Climate Change Statement of Intent* (see below) and to progress with the development of the *Scenic Rim Climate Change (this) Roadmap 2024-2034*.

Scenic Rim Regional Council Climate Change Statement of Intent

The Scenic Rim Regional Council is committed to upholding the guiding expectations identified in the *Scenic Rim Community Plan 2011-2026 (Revised 2018)*. These can broadly be summarised as ensuring the long term economic, social and environmental sustainability of the region. Council recognises the significant impacts that climate change presents for our region along with the direct and indirect impacts of severe weather and disaster events including flood, fire and drought. In the face of global uncertainty, we need to consider the challenge of climate change as a threat to achieving the best future for our region.

While the future presents many challenges, Council is well placed to work together with local communities, businesses, industries and other levels of government in mitigating and adapting to climate change. It is our intent to rise to this challenge, ensuring our Council plays a pivotal role in support of our unique and diverse region.

The key themes below provide a focus for further action.

- 1 Respect and learn from the strong scientific evidence surrounding human influence on climate and the associated impacts on human and natural systems including threats to our life supporting ecosystems;
- 2 Acknowledge the Scenic Rim region is at risk from climate change, with associated impacts for community health and wellbeing, economic productivity, the natural environment, biodiversity and essential infrastructure and services;
- 3 Commit to a more sustainable future through exploring how climate change adaptation and mitigation can be mainstreamed into decision making;
- 4 Engage with our diverse communities to ensure the path forward is unifying for the Scenic Rim region;
- 5 Lead our local community through advocacy and collaboration in reducing our dependence on natural resources as we transition to a carbon neutral economy;
- 6 Recognise that transition to a carbon neutral economy will bring challenges and costs to Council and the community;
- 7 Develop strong partnerships and alliances with community, industry and partners to achieve mutually beneficial outcomes;
- 8 Advocate at all levels of government to support and contribute in our response to climate change through practical action to ensure the financial burden of such actions does not land unfairly on Council or our communities.

This Roadmap uses the *Statement of Intent* themes stated above as guiding principles for the strategic objectives and actions for Council's climate change response. Interlinked themes are listed in the Strategic Objectives tables in Section 5 by number.

Federal, State and Regional Policy

All levels of government are responding to the current and projected impacts of climate change. Table 1 identifies the key international, national, state, regional and local level agreements, legislation, strategies and plans that are relevant to this Roadmap.

Table 1 Relevant international, national, state, regional and local level agreements, legislation, strategies and plans relating to climate change

Strategic Document	Strategic Level Link	Strategy
<i>2016 Paris Climate Change Agreement – Australian Ratification</i>	International Climate Change Agreement	Target: Keep global temperature rise below 2°C above pre-industrial levels and pursue efforts to limit the increase to 1.5°C. Article 7: covers a range of climate change adaptation recognitions and commitments.
<i>Sendai Framework for Disaster Risk Reduction 2015-2030</i>	International Agreement adopted by UN Member States	Outlines targets and priority actions to address climate change risks through a disaster risk reduction focus.
<i>Climate Change Act 2022</i>	Australian Government Legislation	The Act operates as 'umbrella' legislation to implement Australia's net-zero commitments and codifies Australia's emissions reductions targets under the Paris Agreement. • Reduce net GHG emissions to 43% below 2005 levels by 2030. • Reduce net GHG emissions to zero by 2050.
<i>National Climate Resilience and Adaptation Strategy 2021-2025</i>	Australian Government Strategy	Provides a set of principles to guide effective adaptation practice and resilience building within a changing climate.
<i>Queensland Climate Action Plan</i>	Queensland State Government Plan	Queensland State Government's commitments currently are • 50% renewable energy target by 2030. • 70% renewable energy target by 2032. • 80% renewable energy target by 2035. • 30% emission reduction below 2005 levels by 2030. • Zero net emissions by 2050.
<i>Queensland Climate Transition Bill 2023 [if passed]</i>	Queensland State Government Bill	This bill puts forward state targets required to meet Paris Agreement obligations based on current science and modelling. • 75% reduction in emissions on 2005 levels by 2030. • Net zero emissions by 2035.

Strategic Document	Strategic Level Link	Strategy
<i>Pathways to a climate resilient Queensland: Climate Adaptation Strategy 2017-2030 (Q-CAS)</i>	Queensland State Government Strategy	Provides a partnership framework for local governments to develop regional innovative adaptation solutions, embedding climate risk in planning and development decisions for a changing climate via Queensland Climate Resilient Councils (Q-CRC) and QCoast2100 programs.
<i>Queensland Strategy for Disaster Resilience</i>	Queensland State Government Strategy	Provides a partnership with local governments and other stakeholders to deliver and implement disaster resilience policy and proactive resilience initiatives to reduce exposure and vulnerability to risk.
<i>Queensland State Planning Policy (SPP)</i>	Queensland State Government Policy	Recognises planning must consider climate change mitigation and adaptation at all levels.
<i>Queensland Planning Act 2016</i>	Government Legislation	Requires local government planning schemes to consider and respond to climate change.
<i>Queensland Disaster Management Act 2003</i>	Government Legislation	Requires local governments to prepare a disaster management plan in line with State Guidelines. This includes emergency and disaster response and recovery actions in relation to climatic events.
<i>Queensland Waste Reduction and Recycling Act 2011</i>	Government Legislation	Requires local government to consider and plan waste management operations and practice with the aim of reducing climate change impacts of waste management and disposal.
<i>ShapingSEQ: South East Queensland Regional Plan 2017</i>	Regional Plan	Provides a framework for growth management, and sets planning direction for sustainable growth, global economic competitiveness and high-quality living to ensure the effects of climate change are managed to optimise safety and resilience for communities and the natural environment. Goal 4: Sustain. Element 9: Climate change.
<i>ShapingSEQ Review</i>	Amendment to ShapingSEQ - in process	Targeted amendment to ensure ShapingSEQ's benchmarks and expectations for dwelling growth and critically, housing choice and diversity, are updated to reflect real housing need.
<i>Scenic Rim Community Plan 2011-2026 (Revised 2018)</i>	Council Plan	Ensure the long term economic, social and environmental sustainability of the region.
<i>Scenic Rim Regional Council Corporate Plan 2026</i>	Council Plan	Area of Focus - Adaptation to changing climate and weather patterns: Develop a program of work to facilitate climate adaptation across the region (see Operational Plan).

Strategic Document	Strategic Level Link	Strategy
<i>SRRC Operational Plan 2022-2023</i>	Council Plan	Area of Focus - Adaptation to changing climate and weather patterns. Activities including the development of this Strategy, increase community awareness, incorporate disaster mitigation in design and operation of Council's facilities and assets, increase environmental sustainability, and evaluation of options for increasing water resilience, continue 1 Million Trees Program.
<i>Scenic Rim Regional Council Climate Change Statement of Intent</i>	Statement of Intent	Themes in the Roadmap and Action Plan are interlinked with the themes stated in the Sol.

3. Why we are doing this

Australia has warmed, on average, 1.44 ± 0.24 °C since national records began in 1910, with most warming occurring since 1950 (Figure 1). The warming in Australia is consistent with global trends, with the degree of warming similar to the overall average across the world's land areas. In the south-east of Australia, there has been a decrease of around 10 per cent in April to October rainfall since the late 1990s and a decrease in streamflow at most gauges across Australia since 1975. There has been an increase in extreme fire weather and a longer fire season across large parts of the country since the 1950s (BoM & CSIRO, 2022).

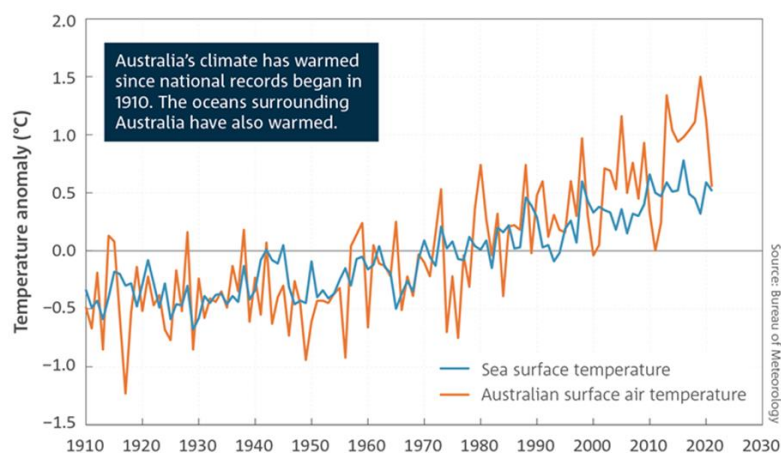


Figure 1 Line chart of the temperature anomaly relative to the 1961 to 1990 average, in degrees Celsius, from 1910 to 2021, for temperatures over Australia and for sea surface temperatures in the Australian region. Source: BoM & CSIRO (2022)

Warming is observed across Australia in all months with both day and night-time temperatures increasing. This shift is accompanied by an increased number of extreme nationally averaged daily heat events across all months, including a greater frequency of very hot days in summer. For example, 2019 experienced 41 extremely warm days, about triple the highest number in any year prior to 2000 (Figure 2). Also in 2019, there were 33 days when national daily average maximum temperatures exceeded 39°C, a larger number than seen in the 59 years from 1960–2018 combined. When relatively cooler years do occur, it is because natural drivers that typically cool Australia’s climate, such as La Niña, act to partially offset the background warming trend (BoM & CSIRO, 2022).

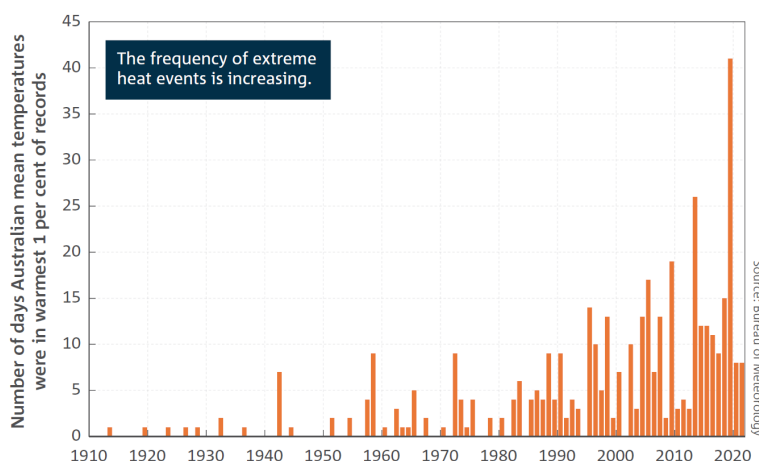


Figure 2 Number of days each year where the Australian area-averaged daily mean temperature for each month is extreme (extremely warm days). Extremely warm days are defined as those where daily mean temperatures are the warmest 1 per cent of days for each month, calculated for the period from 1910–2021. Source: BoM & CSIRO (2022)

The frequency of dangerous fire weather days (Figure 3) has increased significantly in recent decades across many regions of Australia, especially in the south and east. These increases are particularly evident during spring and summer and are associated with an earlier start to the southern fire weather season (Figure 4).

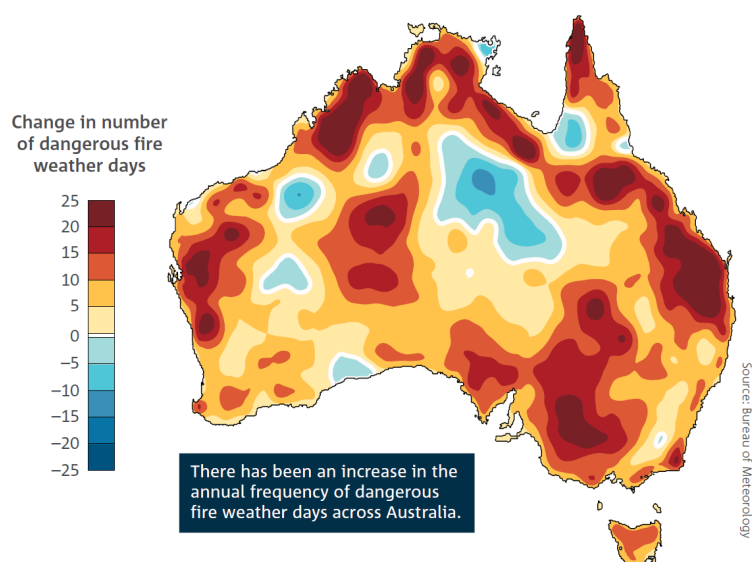


Figure 3 Change in the annual (July to June) number of days that the Forest Fire Danger Index (FFDI) exceeds its 90th percentile between the two periods: July 1950 to June 1986 and July 1986 to June 2022. The FFDI is an indicator of dangerous fire weather conditions for a given location. Source: BoM & CSIRO (2022).

The average temperature of each future year is now expected to be warmer than any year prior to the commencement of human-caused climate change. This is scientifically referred to as climate change 'emergence'. A longer fire season for the south and east and an increase in the number of days experiencing dangerous fire weather is projected. Australia's cool season rainfall is projected to decrease across many regions of the south and east, likely leading to more time spent in drought. As the climate warms, heavy rainfall is expected to become more intense throughout Australia (BoM & CSIRO, 2022).

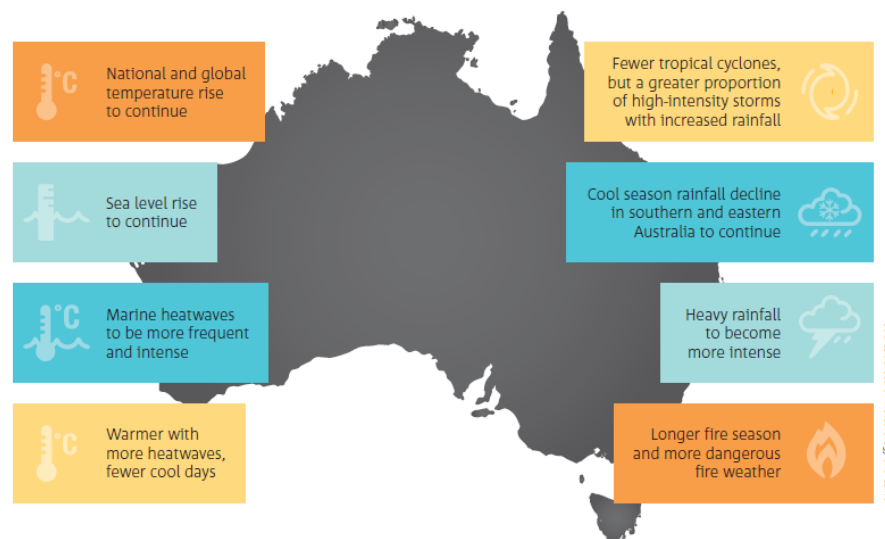


Figure 4 Overall predicted trends in the Australian climate due to climate change. Source: BoM & CSIRO (2022)

Australia is projected to continue to get hotter into the future, with more extremely hot days and fewer extremely cool days. Ongoing climate variability means each year will not necessarily be hotter than the last, but the underlying probabilities are changing. This leads to less chance of cool years and a greater chance of repeatedly breaking Australia's record annual average temperature (e.g. record set in 2005 was subsequently broken in 2013 and then again in 2019). While the previous decade was warmer than any other decade in the 20th century, it is likely to be the coolest decade for the 21st century (Figure 5) (BoM & CSIRO, 2022).

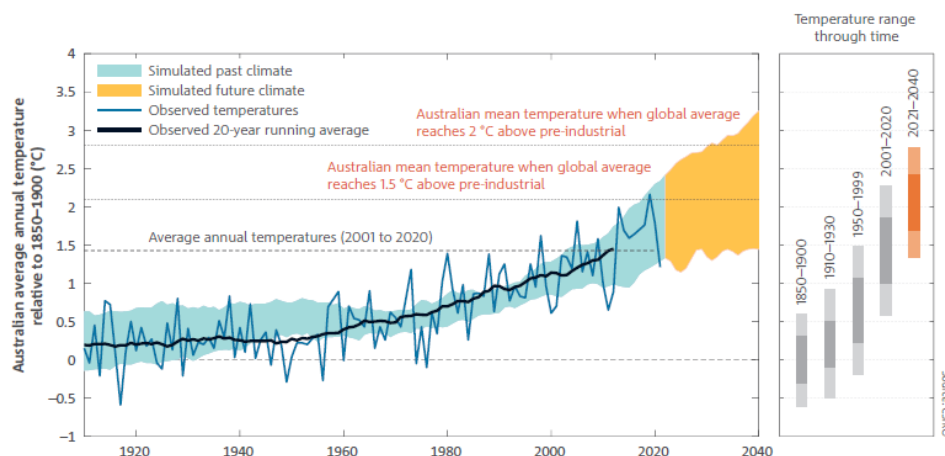


Figure 5 Recorded Australian average annual temperature relative to 1850-1900 (blue) and predicted temperature to 2040 based on BAU (yellow). Source: BoM & CSIRO (2022)

Local climate change effects

Temperature

Scenic Rim's average, maximum and minimum temperatures are projected to continue to rise. For the near future (2030), the annually averaged warming is projected to be around 0.97°C above the climate baseline of 1986–2005, 19.9°C¹. By the year 2070, the projected range of warming will reach between 2.1 to 3.8°C above the baseline temperature. Scenic Rim's baseline mean maximum summer temperature is close to 31.1°C. This could result in the following mean maximum summer temperatures for RCP8.5² and RCP4.5 (Syktus et al. 2020).

RCP ²	YEAR	Mean Maximum Summer Temperature (°C)
	1986-2005 Baseline	31.1
RCP8.5	2030	32.1
	2050	33.2
	2070	34.4
	2090	35.6
RCP4.5	2030	32.3
	2050	32.7
	2070	33.3
	2090	33.5

Such rapid changes in temperature could have an effect on the lifecycles of local flora and fauna, the viability of agricultural enterprises, and increase the prevalence of mosquito-borne diseases and other harmful pests. Increases in the average and maximum temperatures will also increase cooling costs for private and publicly owned buildings.

The frequency, intensity and duration of all heatwaves over the past decade has exceeded predictions for 2030. This has and is likely to increasingly impact all sectors of Queensland's communities and there is likely to be a substantial increase in the frequency and duration of heatwaves yet to come (BoM & CSIRO, 2022; Queensland Department of Environment and Science, 2022). The duration of heatwaves is projected to increase by 0.31 days by 2030, 1.3 days by 2050, 3.6 days by 2070, and 7.6 days by 2090 for the Scenic Rim (Syktus et al. 2020). Such a change represents one of the most significant climate risks to our region.

In Queensland, heatwaves are responsible for more deaths than all other natural hazards combined. Those groups most at risk include the elderly, the homeless, and those with pre-existing health conditions. In addition to people, heatwaves can have an impact on critical infrastructure services, livestock and other agricultural practices, building cooling costs, and local flora and fauna.

¹ Based on average of mean minimum and maximum monthly temperatures for the period 1986-2005 at Amberley AMO (040004). Amberley data is used here as it is the closest weather station that has data that covers the required time period for these calculations.

² The representative concentration pathway or RCP corresponds to the amount of radiative forcing in W/m² used to model different potential climate outcomes.

Rainfall

High climate variability is likely to remain the major factor influencing rainfall changes in the next few decades. By the year 2090, projections of average total annual rainfall show little change across the Scenic Rim region. However, the temporal distribution of rainfall will change with wet seasons becoming wetter and dry seasons drier. Consecutive dry days are projected to increase by 2.5 by the year 2090. By late this century, it is likely that the region will experience more time in drought compared to the present day (Syktus et al. 2020).

The combination of a drier dry season and wetter wet seasons, and an increase in drought conditions, could lead to a range of risks and changes such as soil loss through erosion (during heavy rainfall), localised flooding, compaction of soils leading to reduced absorption of rainfall, soil movement leading to fractures in built structures, and impacts on agricultural enterprises and native flora and fauna.

Extreme Weather events

A warmer world is likely to result in an increase in the severity of extreme wind and storm events. An increase in the severity of storm and tropical cyclone events will lead to increased risks to people, private property, important infrastructure, agricultural enterprise and the local environment with more intense and frequent flash flooding, and more frequent severe or extreme wind events.

Perhaps of most concern to the Scenic Rim will be the increase in FFDIs. Bushfire weather is a measure of fuel dryness and hot, dry, windy conditions. The bushfire events experienced in 2019 have highlighted the ever-present risk of bushfire. The combination of higher average temperatures, more frequent and longer heatwaves, and an overall drying trend is likely to result in an increase in bushfire risks across the Scenic Rim region.

The economic cost of climate change

Climate change exposes Council to a variety of financial risks. After adjusting for inflation, the economic cost of extreme weather in Australia during the period 2010-2019 was more than double the cost of extreme weather in the 1970s, totaling \$35 billion (Climate Council, 2021). By around mid-century, extreme weather events exacerbated by climate change, as well as the impacts caused by rising sea levels, could cost the Australian economy \$100 billion every year (Climate Council, 2021). Impacts from climate-related events have been highest in Queensland with cumulative economic damages of approximately \$30 billion in the period 1970-2019.

Increasing natural hazard risk associated with climate change can also affect insurance affordability and financing ability. Longer term impacts of repeat events can impact investor confidence and the socioeconomic wellbeing of the region (Burton & Dredge, 2007). Climate-related financial risks should be viewed as an added incentive to reduce GHG emissions and increase the adaptive capacity of our region more rapidly.

Physical and Infrastructure Risks

Physical risks are disruptions to economic activity or reductions in asset values resulting from the physical impacts of climate change. As climate impacts including flooding, bushfire, and extreme weather events continue to accelerate, the risk to council infrastructure and services increases as do community needs (Burton & Dredge, 2007). Along with increased costs due to replacing or repairing damaged infrastructure, there are also increased costs associated with obtaining insurance cover for those assets.

Transition Risks

Transition risks relate to the impact of changes in regulation or pricing introduced to facilitate a transition to a low-carbon economy. These impacts primarily arise from actions taken by governments, but also individuals and businesses. One example is a regulatory requirement to place a levy on carbon emissions. The introduction of a carbon levy would increase the cost of doing business for Council.

A more direct economic transition risk is the shift from internal combustion engine (ICE) vehicles to electric vehicles (EV). For example, an owner of an ICE vehicle may have to accept much less for the resale of their vehicle in the future, as buyer preferences switch to EVs. The sale of vehicles powered by petrol and diesel are considered to be in structural decline [globally], having peaked at 86 million sales in 2017. In 2022, one in every seven passenger cars sold around the world was an electric vehicle, up from one in every 70 in 2017 (Climate Council, 2023).

Liability Risk

An inadequate response towards climate change adaptation also raises the potential for legal risk (Reserve Bank of Australia, 2019). Members of the community may seek redress due to property loss or damage as a result of inadequate consideration of possible future climate change impacts. One of the most common concerns for councils as climate impacts escalate is increasing litigation, with 21% of coastal councils surveyed in 2019 citing this as their highest concern (Climate Council, 2021).

Planning and Policy Risk

At some point, the Queensland State and Federal governments may employ regulatory or other coercive measures to force local government compliance in achieving renewable energy and emissions reduction targets. If this eventuates, Council will be faced with substantial costs. For example, transitioning to EVs sooner rather than later is likely to minimise pressure on future budgets for Scenic Rim Regional Council, as it will spread the costs over time.

Climate impacts and risks for key local sectors

Climate change was considered the sixth highest public sector risk overall in a survey of Council leaders in Australia in 2022/23 (JLT Public Sector, 2023) with 25% of respondents ranking it as the highest. Furthermore, the *Climate of the Nation Report 2022* (Quicke & Venketasubramanian, 2022) survey found that 75% of Australians are concerned about climate change in general, 83% of Australians are concerned climate change will result in more bushfires, droughts and flooding affecting crop production and food supply, and that 79% of Australians support a phase out of coal-fired power stations. Failure to make efforts to reduce GHG emissions could harm the region's reputation and lead to dissatisfaction within the community.

Figure 6 illustrates climate stressors, hazards and impacts and Table 2 lists specific climate risks and impacts for key sectors within the Scenic Rim region.

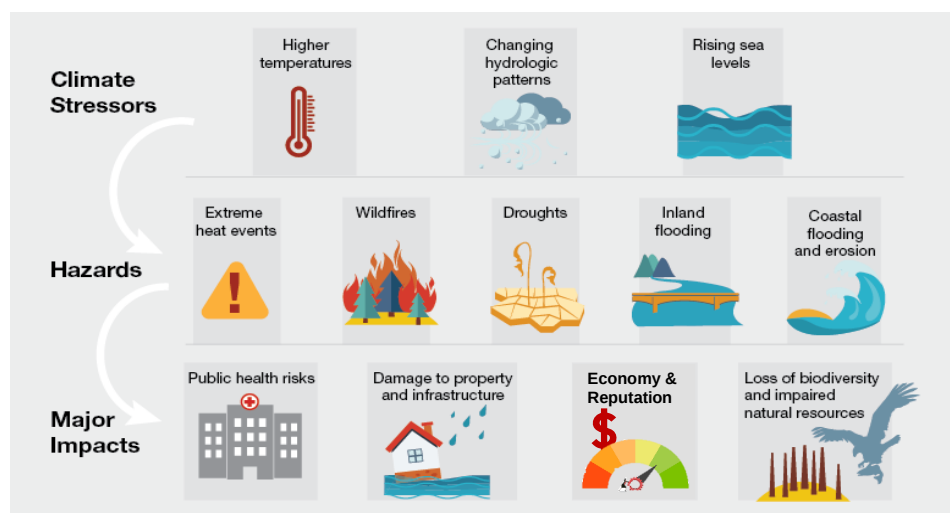


Figure 6 Generalised stressors, hazards and major impacts due to climate change based on Ehlers (2022)

Table 2 Climate Risks and Impacts for the Scenic Rim region

	Sector	Climate Risks and Impacts
Loss of Biodiversity and Impaired Natural Resources	Biodiversity	- Increased bushfire risk - Reduced rainfall and drought - Increased risk of landslip due to more intense rainfall events - Wider distribution of invasive species - Increased rates of runoff, erosion and soil loss, flowing into local streams and rivers - Harmful algal blooms
	Agriculture	- Increased costs of raw materials - Changing or unpredictable flowering and yields - Drier winter and spring months leading to declines in crop and livestock returns - Increased heat stress reducing animal productivity - Greater damage due to increased bushfire season and other extreme weather events - Depletion in soil fertility (native nitrogen stocks) and decline in soil structure - Changing customer behaviour and preferences
Economy and Reputation	Economy	- Impacts to agribusiness, agritourism due to changing weather patterns - Impacts to nature-based tourism and manufacturing industries due to extreme weather events - Impacts to transport/logistics industry due to damaged roads and infrastructure - Loss of business confidence due to increased technological uncertainty - Increased building energy and water use and costs
	Reputation	- Not keeping up with community needs or expectations - Impact on reputation as a sustainable destination - Increased community emissions due to lack of leadership in relation to sustainable transport, energy efficiency and renewable energy

	Sector	Climate Risks and Impacts
Damage to Property and Infrastructure	Built Environment, Infrastructure and Services	• Disruption to critical services from more frequent extreme weather events and heatwaves • Increased risk of damage by bushfire • Increased landfill fire risks • Damage to roads and other public assets due to flooding
Public Health Risks	Human Health	• Increased demand on health and emergency services • Increased risk of mosquito-borne diseases • Increased mental stress in the community due to impacts • Exacerbation of asthma and respiratory allergies due to increased allergens • Heat related illness and death, cardiovascular failure

Since 2008, an average of more than 20 million people per year (world-wide) have been displaced by extreme weather events, many of which were exacerbated by climate change, according to the IPCC (2022). In the long term, there could be significant increases in the number of people forced to migrate due to climate change impacts such as sea level rise, long-term drought, floods and fire and large-scale conflict due to competition for food, water and energy.

Co-benefits & trade-offs

Some carbon sequestration projects may have benefits for broader sustainability objectives (co-benefits), including biodiversity conservation and improving catchment water systems, while others may have a risk of negatively impacting these sustainability objectives (trade-offs). It is essential to identify potential co-benefits and trade-offs when planning any project, whether it relates to adaptation to or mitigation of climate change impacts.

Depending on the approach taken, converting biomass to biofuels may have the co-benefits of waste to energy and wild-fire risk management, but it can have negative consequences for catchment drainage systems, soil fertility, and biodiversity.

The establishment of single-species plantations over large areas for forestry plantations may contribute to carbon sequestration but may reduce biodiversity and diminish adaptive capacity to climate change.

Regenerative agriculture and carbon farming, on the other hand, can have positive outcomes (co-benefits) for biodiversity and ecosystem health, in addition to sequestering carbon.

Adaptation measures also need to be considered in this context. Building dams to secure water supplies can have extremely adverse effects on catchment ecosystems as can fire hazard reduction burning on rural and forest ecosystems, ultimately degrading the ecosystem services³ on which we rely.

Whether environmental management actions aimed at climate mitigation and adaptation simultaneously enhance or undermine other sustainability objectives will depend on how they are implemented at regional and local scales.

³ Ecosystem services are defined as the direct and indirect contributions of ecosystems to human well-being, and have an impact on our survival and quality of life. There are four types of ecosystem services: provisioning, regulating, cultural and supporting services (Pearce, 2023).

4. Where are we now

The following sections provide an overview of the *SRRC Climate Change Governance Assessment* carried out by Queensland Climate Resilient Councils (Climate Planning, 2018), the *Council Carbon Footprint/Baseline Inventory and Pathway* (100% Renewables, 2022), and *Scenic Rim Municipal Emissions Snapshot* using the Snapshot Community Climate Tool (Ironbark Sustainability and Beyond Zero Emissions, 2023).

Climate Change Adaptation Governance Assessment

As part of Council's membership of the Queensland Climate Resilient Councils (QCRC) program, a review of key corporate documents was undertaken in 2018 (Climate Planning, 2018). The process contained two key stages:

- Stage 1: Information Analysis - typology-based review of local government inclusion and influence of climate change in publicly available corporate documents
- Stage 2: Governance Assessment - qualitative review of local government consideration of climate change adaptation governance in corporate documents.

The results of the corporate document analysis showed that only two of the fifteen corporate documents analysed had at least one climate-related typology present. For the governance assessment, seven publicly available documents that were considered to either drive organisational decision-making or report on the effectiveness of those processes were assessed against ten core governance indicators. Only one of these documents made reference to climate change.

Overall, this assessment identified that formal recognition of climate change in Scenic Rim Regional Council's governance documents was inadequate. In order for Council to improve its climate change governance performance, QCRC recommended that Council create a climate change policy and also embed climate change into the Corporate Plan as soon as practical (Climate Planning, 2018).

However, since this assessment was completed (2018), many of these documents have been superseded or updated by SRRC. 'Adaptation to changing climate and weather patterns' is now an area of focus in the *SRRC Corporate Plan*. In addition, climate considerations have now been included in the *SRRC Operational Plan*, *Scenic Rim Community Plan 2011-2026 (Revised 2018)*, *Scenic Rim Regional Prosperity Strategy*, *Waste Management and Resource Recovery Strategy*, *Scenic Rim Agribusiness and Agritourism 10-Year Roadmap* and the *SRRC Biodiversity Strategy*.

Council will further improve its performance through implementation of this Roadmap. Strategic objectives to enhance Council's adaptation governance are included under Theme 1 in the Summary of Actions.

Council Carbon Footprint/Baseline Inventory & Pathway

In order to understand the context and position of Council in the greenhouse emissions landscape, Council engaged a consultant to audit Council's greenhouse emissions (see Table 3 and Figure 7) and carbon footprint for the 2020/2021 financial year. Council's carbon footprint was developed in accordance with the Australian Government's Climate Active Standard⁴ for included emissions sources. Council now has the ability to calculate its own emissions inventory annually using this

⁴ The Climate Active program is delivered by the Australian Government Department of Industry, Science, Energy and Resources, and accounting for emissions aligns with the international GHG Protocol.

methodology.

Council's 2020/21 carbon footprint was 65,127 tonnes of carbon dioxide equivalent (t CO₂-e). 82% of this was from landfill waste and 10% from professional services. Emissions associated with landfill waste are expected to increase further from 2025 onwards due to anticipated higher intake of waste from neighbouring Councils (100% Renewables, 2022).

Table 3 Council's Carbon Footprint (100% Renewables, 2022)

	Emission source	Activity data	Units	Scope 1 (t CO ₂ -e)	Scope 2 (t CO ₂ -e)	Scope 3 (t CO ₂ -e)	Total (t CO ₂ -e)	Ratio (%)
	Landfill waste	42,964	t	53,463			53,463	82.1
	Professional services	33,762,300	\$			6,752	6,752	10.4
	Diesel	900	kL	2,447		125	2,572	3.9
	Electricity	1,845,275	kWh		1,436	166	1,602	2.5
	Streetlighting	375,207	kWh		-	326	326	0.5
	Petrol	41	kL	94		5	99	0.2
	Concrete	160,757	\$			158	158	0.2
	Asphalt	227,380	\$			93	93	0.1
	LPG - Stationary	27	kL	41.30		2.45	44	0.1
	Diesel - Stationary	1	kL	2.15		0	2	0.0
	Petrol - Stationary	4	kL	2.04		1	3	0.0
	Refrigerants	83	kg	13			13	0.0
	Total			56,062	1,436	7,629	65,127	100.0

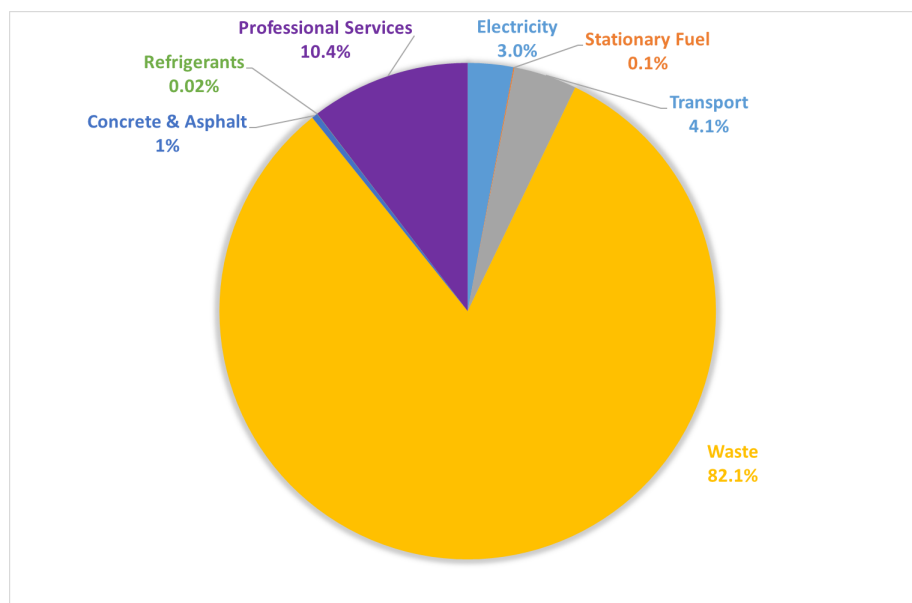


Figure 7 Simplified Council emissions inventory (100% Renewables, 2022)

General abatement opportunities and more detailed potential energy efficiency and renewable energy projects are described in the resulting report *Council Carbon Footprint/Baseline Inventory & Pathway (CCFBIP)* (100% Renewables, 2022). These include scope for abatement, risks and mitigation, costs and benefits, and specific site assessments. Recommendations for sustainable transport, sustainable procurement, design, equipment and services specifications are also stated. This information will be used to guide the implementation of this Roadmap and associated Action Plan.

Community Climate Tool Municipal Emissions Snapshot

The Snapshot Climate portal (Ironbark Sustainability and Beyond Zero Emissions, 2023) has been developed to give councils and communities free access to high quality community emissions data to support climate action planning. The Snapshot Community Climate Tool uses a common framework to estimate emissions for every municipality in Australia allowing for comparisons between regions. All the local profiles add up to the national emissions total, meaning that no emissions go unaccounted for.

All Snapshot profiles, both historical and current, have been calculated in line with the *Global Protocol for Community-Scale Greenhouse Gas Inventories* (GPC) developed by the World Resources Institute, C40 Cities and ICLEI (Ironbark Sustainability, 2022).

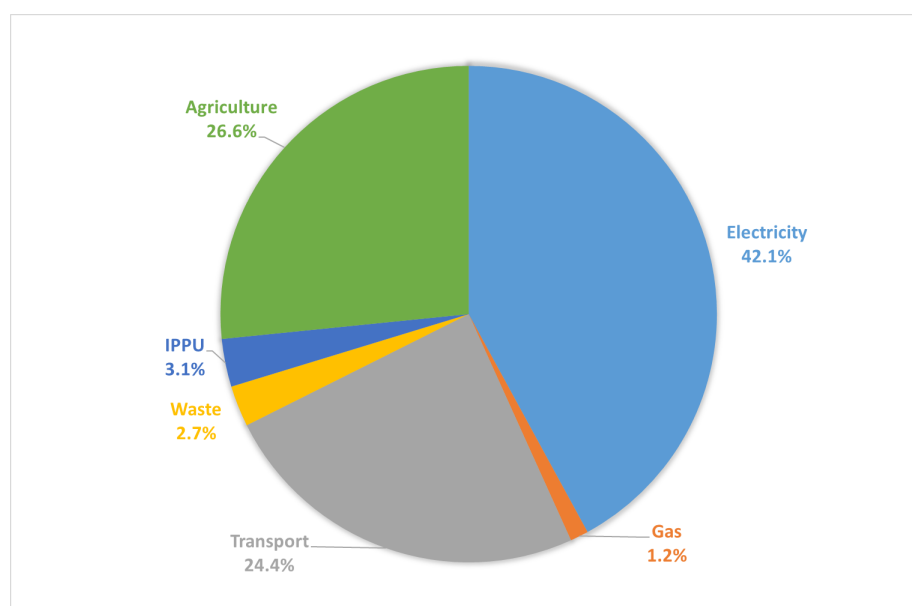


Figure 8 Municipal Emissions Snapshot 2020/2021 (Ironbark Sustainability and Beyond Zero Emissions, 2023)

There is more than a 35,000 t CO₂-e difference between the emissions from waste calculated in the CCFBIP and the estimated emissions from the Municipal Snapshot. The CCFBIP report was based on landfill intake data whereas the Snapshot uses State/Region population proportionality and State level solid waste generation to determine Municipal waste emissions. This method assumes that the scaling factors used for moving from the state to municipal levels are appropriate (Ironbark Sustainability, 2022). In this case, the scaling factor has significantly underestimated the emissions from waste in the Scenic Rim region. Electricity, gas, Industrial Processes and Product Use (IPPU),

transport and agriculture all include some degree of local activity data and therefore can be considered more accurate. Certainly, data provided for emission sources other than waste in the snapshot are a good first step to understanding community emissions activity in the Scenic Rim.

5. What we are going to do

Responding to climate change requires a multifaceted approach that includes

- Adapting to climate change by building resilience in our local communities, built environment, economy and natural systems to reduce our vulnerability to the effects of climate change.
- Mitigating climate change by reducing the levels of heat-trapping greenhouse gases in the atmosphere through: eliminating the sources of these gases (such as the burning of fossil fuels for electricity and transport and from waste emissions); adopting sustainable development solutions in energy, land, infrastructure and industrial systems; and enhancing the sinks that store these gases including vegetation and soils (referred to as carbon drawdown or sequestration)
- Assisting our rural and urban industries to mitigate and adapt to the impacts of climate change

Mitigating and adapting to climate change means transitioning beyond business as usual to making a systemic shift across a range of sectors. The following themes and strategic objectives will support this shift. High-level actions associated with these themes and objectives are listed in the Summary of Actions.

Theme 1: Strong leadership and governance

1.1	Embed climate change considerations in all aspects of government decision-making (Sol Principles 1,2,3,5,6)
1.2	Strengthen partnerships with governments and stakeholders to take urgent action to achieve a low carbon economy and resilient community (Sol Principles 4,5,7)
1.3	Advocate to all levels of government and encourage the community to drive decisive climate action (Sol Principles 4,5,8)
1.4	Pursue sustainable supply chains (Sol Principles 3,6,7)
1.5	Report on Council GHG emissions annually (Sol Principles 1,2,5)

Since the completion of the *Climate Change Adaptation Governance Assessment* (Climate Planning, 2018), Council has made substantial progress towards embedding climate consideration into Council documents and is starting to set an example of positive climate action through the *Climate Change Statement of Intent*. There is still work to be done to ensure climate change is considered in all relevant aspects of Council operations. High level actions in the following section include implementing the recommendations from the *Climate Change Adaptation Governance Assessment*.

Council is currently actively participating in the Queensland Climate Resilient Councils (QCRC) and International Council for Local Environmental Initiatives (ICLEI) and is also an active participant in the Council of Mayors (SEQ) Waste Working Group. This Working Group has a number of shared goals, including the reduction of waste to landfill, the largest source of emissions for Scenic Rim Regional Council.

Theme 2: Energy efficiency and renewable energy

2.1	Transition Council toward 100% renewable energy and ensure the transition is within the capacity of Council to do so (Sol Themes 1,2,3,6,7,8)
2.2	Transition Council and community to sustainable transport (Sol Themes 3,5,6,7,8)
2.3	Invest in energy efficiency measures within Council and for Council owned buildings (Sol Themes 3,6,7,8)
2.4	Educate community and business on ways to reduce energy consumption [Sol Principles 3,6,7,8]
2.5	Provide information to community groups and businesses on available resources for mid to large scale renewable energy projects [Sol Principles 1,2,4,5,7,8]

The Community Climate Tool (Ironbark Sustainability and Beyond Zero Emissions, 2023) estimates that 283,000 t CO₂-e (42% of total regional emissions) is emitted due to electricity use in the Scenic Rim Region. Energy efficiency remains the cheapest form of GHG abatement in many situations. Council has already taken some measures towards energy efficiency. Further energy efficiency recommendations are provided in the *CCFBIP*.

One opportunity for carbon emission reductions is on-site solar in combination with storage battery systems (behind-the-meter solar) to supply electricity to Council owned buildings and for Council operations. The *CCFBIP* also recommends that Council consider building its own mid-scale solar farm to offset its emissions associated with electricity consumption (100% Renewables, 2022). Both of these options will reduce emissions and provide long-term financial savings.

In addition to the economic advantages of mid-scale and behind-the-meter solar, these systems could have the ability to disconnect from the grid. Bushfires and severe weather events can disrupt power supply by bringing down high voltage transmission lines. The ability to disconnect from the grid will increase the resilience of Council and community electricity networks to potential climate change impacts.

Transport is 4.1% of Council emissions. Moving towards sustainable transport means reducing reliance on car travel, switching to low/zero-emissions vehicles, increasing uptake of active transport like walking and cycling, improved pathway connectivity, and supporting working from home and home-based businesses.

Council has already developed a *Flexible Work Arrangements Policy and Procedure* to enable staff to work partially from home. Reducing cars on the road will contribute to mitigation of direct transport emissions as well as decreasing GHG emissions associated with Council's road maintenance and the manufacturing of asphalt and concrete required for road repairs and resurfacing.

The Scenic Rim region currently has only eight EV charging stations. The *CCFBIP* recommends Council install public EV charging stations at multiple sites within each town centre. Uptake of charging stations has been seen among facilities such as hotels and motels, with local businesses seeking to provide charging for guests driving EVs. The convenience of well-placed public charging stations may well encourage more visitors to the Scenic Rim and will be useful to Council staff once Council fleet starts transitioning to EVs. As 80 to 90% of tourists are day visitors that drive to and from the region, there will be an increasing demand for EV charging stations with uptake of EVs and hybrid vehicles in Australia.

Theme 3: Healthy and resilient natural systems and carbon sequestration

3.1	Undertake revegetation and ecosystem restoration of Council owned and controlled land to support ecosystem and species resilience, and for carbon sequestration [Sol Principles 1,2,5,7]
3.2	Undertake revegetation and ecosystem restoration of privately owned non-agricultural rural landscapes to support ecosystem and species resilience, and for carbon sequestration [Sol Principles 1,2,5,7]
3.3	Encourage and increase revegetation and greening in urban and peri-urban spaces and promote use of water-sensitive urban design to reduce urban heating and increase carbon drawdown (Sol 1,2,4,5,7)
3.4	Investigate options regarding the sale and purchase of carbon offsets by Council (Sol 2,6)
3.5	Increase the adaptive capacity of ecosystems and rural water supply sources by improving the condition of regional surface and subsurface catchment water systems (Sol 2,5,7,8)

The Scenic Rim region has a wealth of biodiversity, with a vast array of plants and animals, ecosystems and geology creating an iconic landscape. Within the region there are many recognisable ecosystems such as Brigalow scrub, cloud forests, wet eucalypt forests and blue gum flats providing home for over 2,300 recorded native plants and animals including over 150 rare and threatened species. The region also encapsulates the head waters of four of the major river systems in South East Queensland: the Logan, Albert, Bremer and Coomera Rivers.

Enhancing resilience of natural systems is widely regarded as a key aspect of climate change adaptation and sustainability. Council already has a variety of programs and projects that contribute to carbon sequestration, biodiversity conservation and the improvement of catchment waterways. High level actions in this Roadmap include the continuation of existing initiatives and the development of new projects that relate to urban and peri-urban greening and carbon offsets.

Theme 4: Sustainable agriculture and food production systems

4.1	Support the creation of a sustainable and regenerative food system that includes consideration of and preparation for climate change risks (Sol 1,2,4,5,6,7,8)
4.2	Promote sustainable, locally produced food and improve local food distribution for farmers and access for residents and visitors (Sol 1,5,7,8)
4.3	Support farmers to reduce their emissions through changes in agricultural practices and technology implementation (Sol 2,5,7)
4.4	Encourage farmers to take up opportunities for income generation through carbon sequestration activities (Sol 2,5,7)

The Scenic Rim is a food bowl for Queensland and markets further afield. During winter the alluvial valleys produce vegetables for markets up and down the Australian east coast and overseas (Scenic Rim Regional Council, 2017). The Scenic Rim is also home to leading beef, pork and poultry producers and boasts growing boutique and gourmet food, wine and craft beer industries.

The agriculture and tourism industries in the Scenic Rim together account for over \$400 million of the regional economy's Gross Regional Product (GRP) and employ over 3,000 locals (idcommunity, 2021).

In the Scenic Rim Region, Agriculture, Forestry and Fishing, is the second largest employer, generating 1,618 jobs, and a total agricultural output of \$276m in 2020/21 (idcommunity, 2021). The largest commodity is livestock, which accounted for 45.3% of the Scenic Rim Region's total agricultural output (idcommunity, 2021). Scenic Rim is also a popular agritourism destination (Scenic Rim Regional Council, 2022). Increasing the resilience of agricultural systems to climate change impacts is of great importance to economic and social sustainability in the Scenic Rim region. In addition, opportunities to reduce emissions through regenerative farming practices and technology, and carbon sequestration activities should have co-benefits for biodiversity and soil health and economic gain for landholders.

Theme 5: Resilient communities, businesses and built environments

5.1	Create a resilient built environment by considering potential climate change impacts (Sol 1,2,3,7,8)
5.2	Build Council and community awareness and preparedness for climate change and extreme weather events (1,2,4,7)
5.3	Educate business and industry on potential climate change impacts and encourage them to take action to increase their resilience to these impacts (Sol 1,2,4,7,8)

Projected climate changes from *Queensland Government Sector Adaptation Plans* (Queensland Government, 2023) and *Queensland Climate Adaptation Strategy (Q-CAS) 2017-2030* (Department of Environment and Heritage Protection, 2017) will be considered for adaptation activities, where necessary, to the Scenic Rim region and Scenic Rim Local Disaster Management Group (Scenic Rim Regional Council, 2019).

Council has already made progress with building community awareness and preparedness for weather-related and other disasters and updating bushfire and flood hazard mapping incorporating climate change assumptions. Further objectives and high-level actions to increase the resilience of communities, businesses and built environments in the region are provided in the SoA.

Theme 6: Waste emissions reduction

6.1	Reduce amount of organic material going to landfill
6.2	Manage landfill in accordance with best practice to minimise greenhouse gas emissions

As discussed in Section 4, landfill waste is the largest contributor of GHG emissions in the Council carbon footprint at 82.1%. In June 2021, Council adopted the *Waste Management and Resource Recovery Strategy 2021 - 2026 (WMRRS)* which aims to generate 25 per cent less waste by 2051, with only 10 per cent of all waste disposed in landfill (in alignment with state targets) by increasing the diversion of waste from landfill, increasing the recovery of valuable organic resources from all waste streams, and priority waste resource recovery, amongst other strategies.

High level actions relating to waste emissions reduction are provided in the Sol, although plans and actions relating to this theme lie primarily within the purview of the Waste Services.

The following Summary of Actions lists the strategic objectives above, related high level actions, metrics to measure effectiveness or success, and commencement and completion times. The actions will commence as scheduled in the Action Plans. These are shown in the table below.

Commencement	Timeframe
Action Plan I	2024-2026
Action Plan II	2027-2029
Action Plan III	2030-2032

6. Summary of actions

Strategic Objectives What are our objectives over the 10 year life of this Roadmap?	High Level Actions How will we achieve our strategic objectives or encourage positive change?	Metrics How will we measure effectiveness or success of actions?	Commencement When will the action commence?	Completion Anticipated year of completion
Theme 1 – Strong leadership and governance				
1.1 Embed climate change considerations in all aspects of government decision-making [Sol Principles 1,2,3,5,6]	1.1.1 Embed climate considerations within all relevant Council policies, plans and strategies, i.e., implement the recommendations from the <i>Climate Change Adaptation Governance Assessment 2018</i> .	- Council-wide policies have incorporated a climate response - Strategies and plans have incorporated climate response objectives and actions	Action Plan I 2024-2026	2026
	1.1.2 Establish a Council reference group for climate change that periodically meets to provide information and advice to Council on climate issues, required actions, barriers and successes, and ongoing program development.	- Number of Council briefings - Number of successful action completions	Action Plan I 2024-2026	2032
	1.1.3 Establish a community reference group for climate change that periodically meets to provide information and advice to Council on climate issues, barriers and opportunities, and monitors Council's Roadmap and Action Plan progress.	- Number of meetings - Number of successful action completions	Action Plan II 2027-2029	2032
	1.1.4 Educate Council staff about energy conservation and proper waste management at home and work so that they can lead by example.	Staff survey indicates an improvement in understanding of energy conservation and waste management	Action Plan I 2024-2026	2032
1.2 Strengthen partnerships with governments and stakeholders to take urgent action to achieve a low carbon economy and resilient community [Sol Principles 4,5,7]	1.2.1 Collaborate with other local governments to address climate risks and help build a low carbon economy. This includes opportunities for bulk buying of EVs, storage batteries, etc., as well as collaborative community education and carbon reduction initiatives across local government areas in SEQ.	- Collaborations with other local governments and progress made - Bulk buys leading to Council savings	Action Plan I 2024-2026	2032
	1.2.2 Utilise existing relationships and establish new relationships with the manufacturing industry in the region in order to assess energy efficiency and emissions reduction efforts and provide guidance and support if needed.	Number of assessments made	Action Plan I 2024-2026	2029
1.3 Advocate to all levels of government and encourage the community to drive decisive climate action [Sol Principles 4,5,8]	1.3.1 Advocate to the Federal and State governments to increase support for renewable energy, transitioning to a low carbon economy, and addressing climate risk impacts from flooding, drought, heat risk, bushfires and biodiversity loss in regional areas.	- Climate advocacy actions - Available grants, incentives and funding	Action Plan I 2024-2026	2032
	1.3.2 Advocate to State government and transport providers to: - Improve and increase public transport services in the Scenic Rim region - Provide leadership, direction and incentives regarding EV technologies and investment.	- Number of advocacy actions - Number of available grants, incentives and funding opportunities	Action Plan I 2024-2026	2032
	1.3.3 Utilise existing events to communicate key climate change messages to communities within the Scenic Rim region.	- Events and promotion activities - Numbers of attendees at events	Action Plan I 2024-2026	2029
1.4 Pursue sustainable value chains [Sol Principles 3,6,7]	1.4.1 Develop a new Procurement Policy specifying preferred pathways in relation to sustainability and GHG emission reductions.	- Reduction in professional services emissions - Number of local suppliers providing goods and services to Council and dollar value of local expenditure (SR RPS)	Action Plan II 2027-2029	2029

Strategic Objectives What are our objectives over the10 year life of this Roadmap?	High Level Actions How will we achieve our strategic objectives or encourage positive change?	Metrics How will we measure effectiveness or success of actions?	Commencement When will the action commence?	Completion Anticipated year of completion
Theme 1 – Strong leadership and governance				
1.5 Report on Council GHG emissions annually (Sol Principles 1,2,5)	1.5.1 Develop a GHG data management system.	• Corporate GHG data management system established that enables easy data collection and calculation	Action Plan I 2024-2026	2024
	1.5.2 Calculate Council emissions profile according to GHG Protocol.	• Emissions profile for financial year calculated and reported by the end of the corresponding calendar year	Action Plan I 2024-2026	2032

Strategic Objectives What are our objectives over the 10 year life of this Roadmap?	High Level Actions How will we achieve our strategic objectives or encourage positive change?	Metrics How will we measure effectiveness or success of actions?	Commencement When will the action commence?	Completion Anticipated year of completion
Theme 2 - Energy efficiency and renewable energy				
2.1 Transition Scenic Rim Council to renewable energy and ensure the transition is within the capacity of Council to do so [Sol Principles 1,2,3,6,7,8]	2.1.1 Assess opportunities, barriers and financial models for potential Council-based renewable energy projects, such as mid-scale and behind-the-meter solar including batteries for solar power storage.	Pathway identified including next steps for implementation	Action Plan I 2024-2026	2026
	2.1.2 Continue to implement renewable energy measures within Council owned and controlled properties including any public lighting.	- kWh of renewable energy generated for Council operations increases - Council's grid electricity and stationary fuel use decreases	Action Plan I 2024-2026	2032
2.2 Transition Council and the community to sustainable transport use [Sol Principles 3,5,6,7,8]	2.2.1 Develop a Council EV transition plan that requires the selection of lowest emission vehicles that are fit for purpose to show leadership and to be a positive example of climate action.	Plan developed and next steps for implementation identified	Action Plan I 2024-2026	2024
	2.2.2 Continue to seek funding for Council owned/controlled EV charging stations to increase the availability for residents and visitors in the Scenic rim region and, in the longer term, for Council's own fleet.	Number of EV charging stations installed by Council	Action Plan I 2024-2026	2032
	2.2.3 Encourage businesses to take advantage of co-funding opportunities available through government grants and form partnerships with EV providers to increase the availability of EV charging stations in the Scenic Rim region.	Number of EV charging stations in the Scenic Rim	Action Plan I 2024-2026	2029
	2.2.4 Amend Scenic Rim planning scheme to include requirements for new multi-residential and non-residential developments for carparking areas to be 'EV ready'.	- EVs factored into development requirements - Number of EV charging stations in Scenic Rim region	Action Plan I 2024-2026	2026
	2.2.5 Investigate biofuels as an interim measure during EV transition.	Sustainability assessment of available biofuels complete	Action Plan I 2024-2026	2024
2.3 Invest in energy efficiency measures within Council and for Council owned buildings [Sol Principles 3,6,7,8]	2.3.1 Assess opportunities, barriers and financial models for efficiency measures.	Pathway identified including next steps for implementation	Action Plan I 2024-2026	2026
	2.3.2 Continue to implement energy efficiency measures within Council owned and controlled properties including any public lighting.	Council's grid electricity and stationary fuel use decreases	Action Plan I 2024-2026	2029
2.4 Inform community and business on ways to reduce energy consumption [Sol Principles 3,6,7,8]	2.4.1 Make an information toolkit available to assist households and businesses to reduce emissions and energy costs.	Information tool kit developed	Action Plan I 2024-2026	2026
	2.4.2 Provide information on energy efficiency to households and businesses and promote new technologies and tools that assist with sustainable behaviour change, through a web-based platform.	- Website and dashboard developed and updated - Number of website visits	Action Plan I 2024-2026	2026
	2.4.3 Provide information on solar PV and storage batteries for households and businesses including mechanisms for savings and funding, through a web-based platform.	- Website and dashboard developed and updated - Number of website visits % of solar PV systems installed annually	Action Plan I 2024-2026	2026
2.5 Provide information to community groups and business	2.5.1 Assess opportunities, barriers and financial models for community owned renewable energy projects, such as solar farms, microgrids, solar gardens, community batteries for solar storage.	Assessment complete and next steps identified	Action Plan I 2024-2026	2026

on available resources for mid to large scale renewable energy projects [Sol Principles 1,2,4,5,7,8]	2.5.2 Develop a web-based platform and dashboard to provide information on mid to large scale renewable energy projects including regulatory requirements and funding mechanisms.	- Website and dashboard developed and updated - Number of website visits - Number of mid to large scale projects in the region	Action Plan I 2024-2026	2032
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Strategic Objectives What are our objectives over the 10 year life of this Roadmap?	High Level Actions How will we achieve our strategic objectives or encourage positive change?	Metrics How will we measure effectiveness or success of actions?	Commencement When will the action commence?	Completion Anticipated year of completion
Theme 3 - Healthy and resilient natural systems and carbon sequestration				
3.1 Undertake revegetation and ecosystem restoration of Council-owned and controlled land to support ecosystem and species resilience, and for carbon sequestration [Sol Principles 1,2,5,7]	3.1.1 Survey Council owned and controlled lands to establish the best sites for revegetation, restoration and carbon sequestration projects.	- Number of trees planted by Council - Flora and fauna surveys % of Council area managed for its environmental values	Action Plan I	2026
	3.1.2 Revegetate and restore selected Council sites for native species habitat and recreation.	Area of land revegetated	Action Plan I	2032
	3.1.3 Investigate any State/Federal mechanisms for funding carbon sequestration and biodiversity conservation projects.	- Investigation complete - Funding (\$)	Action Plan I	2024
3.2 Undertake revegetation and ecosystem restoration of privately owned non-agricultural rural landscapes to support ecosystem and species resilience, and for carbon sequestration [Sol Principles 1,2,5,7]	3.2.1 Implement initiatives that support ecosystem and species resilience.	- One Million Trees program - number of trees distributed - Land for Wildlife - number of property registrations - Partnerships in other initiatives	Action Plan I 2024-2026	2032
	3.2.2 Implement management plans for priority species.	Protection and condition improvements for threatened plant and animal species	Action Plan I 2024-2026	2029
	3.2.3 Continue to make grants available for groups within the community delivering environmental projects that increase the resilience of our natural systems and/or sequester carbon.	Number of environmental grants provided for initiatives with climate change mitigation or adaptation outcomes	Action Plan I 2024-2026	2032
	3.2.4 Hold/promote workshops or events to educate landholders about revegetation and ecosystem restoration and potential funding sources.	- Number of events - Survey or visit to determine progress	Action Plan I 2024-2026	2029
3.3 Encourage and increase revegetation and greening in urban and peri-urban spaces and promote use of water-sensitive urban design to reduce urban heating and increase carbon drawdown [Sol Principles 1,2,4,5,7]	3.3.1 Develop and propose an urban greening target (Action 1.1f Biodiversity Strategy Implementation Plan)	Whether action is completed	Action Plan I 2024-2026	2026
	3.3.2 Develop an urban greening program for streets and public spaces that increases tree canopy cover, native vegetation, biodiversity, and carbon drawdown and reduces urban heating.	- Number trees planted % urban canopy cover (long term)	Action Plan I 2024-2026	2026
	3.3.3 Ensure Scenic Rim Planning has suitable regulations regarding water sensitive urban design and monitoring compliance.	Whether action is completed	Action Plan II 2027-2029	2029
	3.3.4 Develop a policy for preferred species for biodiversity, shade and carbon drawdown.	Whether action is completed	Action Plan I 2024-2026	2029
3.4 Investigate options regarding the sale and purchase of carbon offsets by Council [Sol Principles 2,6]	3.4.1 Determine costs and benefits of purchasing different types of carbon offsets.	Investigation is completed and next steps identified	Action Plan I 2024-2026	2024
	3.4.2 Investigate requirements for Council to receive ACCUs for restoration/revegetation projects through ERF and LRF.	Investigation is completed and next steps identified	Action Plan I 2024-2026	2026
3.5 Increase the adaptive capacity of ecosystems and rural water supply sources by	3.5.1 Continue to implement initiatives that help landholders to restore and rehabilitate riparian vegetation and other practices that improve catchment water quality.	- Number of landholders involved in Resilient Rivers Initiative and related programs. % of mapped vegetated riparian zones (long term)	Action Plan I 2024-2026	2032

improving the condition of regional surface and subsurface catchment water systems [Sol Principles 2,5,7,8]		• Aquatic biota surveys		
	3.5.2 Educate non-agricultural landholders about water sensitive design and other measures to preserve or improve water quality through information toolkits and web-based platforms.	• Website and toolkit developed • Number of website visits • Number of toolkits distributed	Action Plan I 2024-2026	2032

Strategic Objectives What are our objectives over the 10 year life of this Roadmap?	High Level Actions How will we achieve our strategic objectives or encourage positive change?	Metrics How will we measure effectiveness or success of actions?	Commencement When will the action commence?	Completion Anticipated year of completion
Theme 4 - Sustainable agriculture and food production systems				
4.1 Support the creation of a sustainable and regenerative food system that includes consideration of and preparation for climate change risks [Sol Principles 1,2,4,5,6,7,8]	4.1.1 Promote Landcare and other workshops and programs, grants, and guidance material, including access to climate projections, that encourage and inform the adaptation of farming practices for future climate conditions and improve the resilience of crops and livestock.	Number of farmers participating in on-ground actions through land management programs	Action Plan I 2024-2026	2032
	4.1.2 Through the <i>Scenic Rim Agribusiness and Agritourism Three-Year Action Plan</i> and <i>10-Year Roadmap</i> : Diversified and Sustainable Agribusinesses: Initiative 1.8 Promote existing agribusiness sustainability practices and encourage industry leading sustainability practices and innovation	- Increased diversity in agribusiness products and services within the region - Carbon reduction in agribusiness activities - Research and development grants	Action Plan I 2024-2026	2032
4.2 Promote sustainable, locally produced food and improve local food access for farmers, residents and visitors [Sol Principles 1,5,7,8]	4.2.1 Through the <i>Scenic Rim Agribusiness and Agritourism Three-Year Action Plan</i> and <i>10-Year Roadmap</i> : Continue to support industry through popular events and initiatives such as the Scenic Rim Farm Gate Trail, Eat Local Month, and agriculture industry events	- Survey/phone call to determine if there is an associated increase in revenue due to promotion - Increased visitors at key events	Action Plan I 2024-2026	2032
	4.2.2 Through the <i>Scenic Rim Agribusiness and Agritourism Three-Year Action Plan</i> and <i>10-Year Roadmap</i> : Identify strategic locations for hub-and-spoke model farm doors, or centralised outlets for local food, beverage and other products, and support industry led development of collective farm-to-shop distribution facilities which support the vibrancy and sustainability of existing towns and villages.	Increased availability and sales of local agri-products	Action Plan I 2024-2026	2026
4.3 Support farmers to reduce their emissions through changes in agricultural practices and technology implementation [Sol Principles 2,5,7]	4.3.1 Promote platforms and programs for farmers to access training, workshops, grants and guidance material for reducing agricultural emissions including current technology, regenerative farming, water sensitive design.	- Number of workshop/training attendees - Website visits	Action Plan I 2024-2026	2032
4.4 Encourage farmers to take up opportunities for income generation through carbon sequestration activities [Sol Principles 2,5,7]	4.4.1 Investigate opportunities to encourage rural landowners to sequester soil carbon and accrue carbon credits through agricultural and revegetation methods (e.g. ERF, LRF, Carbon Farmers of Australia) and disseminate information through workshops and information toolkits.	Number of carbon sequestration projects	Action Plan I 2024-2026	2026

Strategic Objectives What are our objectives over the 10 year life of this Roadmap?	High Level Actions How will we achieve our strategic objectives or encourage positive change?	Metrics How will we measure effectiveness or success of actions?	Commencement When will the action commence?	Completion Anticipated year of completion
Theme 5 - Resilient communities, businesses and built environments				
5.1 Create a resilient built environment by considering potential climate change impacts [Sol Principles 1,2,3,7,8]	5.1.1 Research best practice in climate responsive urban planning and design and develop materials for Council planning, asset management, place making, design and construction, to increase climate resilience and liveability within Council's public areas, streetscapes and buildings.	Best practice information made available to relevant areas of Council	Action Plan I 2024-2026	2024
	5.1.2 Apply climate responsive best practice to Council planning, asset management, place making, design and construction, to increase climate resilience and liveability within Council's public areas, streetscapes and buildings.	Best practice incorporated into Council planning, design and construction	Action Plan I 2024-2026	2032
	5.1.3 Update Council Planning Scheme using best available hazard information to manage the impacts of climate change on new developments and public spaces including the effects of bushfire, drought, heatwaves, increased rainfall intensity and flooding.	Climate change and heat risks factored into land use planning	Action Plan II 2027-2029	2032
	5.1.4 Advocate to State and Federal governments to lift standards across the building and development sectors to climate adaptation best practice for cooling of heat island effects, improved amenity, and reducing energy demand.	- Climate advocacy actions - Changes to construction and development standards that address predicted temperature increases	Action Plan I	2026
5.2 Build Council and community awareness and preparedness for climate change and extreme weather events [Sol Principles 1,2,4,7]	5.2.1 Continue to educate the community through awareness programs including information toolkits, events, and web resources, to raise awareness and understanding of disaster management and preparedness.	- Number of information toolkits distributed - Number of events - Website visits (Disaster Dashboard)	Action Plan I 2024-2026	2032
	5.2.2 Monitor disaster management research and development to ensure the latest information, methods, and technologies, are incorporated into the Scenic Rim Local Disaster Management Plan and/or associated sub plans and disaster management standard operating procedures.	Scenic Rim disaster management plans are current in relation to developments and trends	Action Plan I 2024-2026	2032
5.3 Educate business and industry on potential climate change impacts and encourage them to take action to increase their resilience to these impacts [Sol Principles 1,2,4,7,8]	5.3.1 Leverage existing relationships and/or establish new relationships with businesses in order to assess levels of disaster preparedness and climate resilience. If they require assistance, connect them with programs for disaster preparedness and building adaptive capacity within their business.	Number of assessments made	Action Plan I 2024-2026	2029
	5.3.2 Develop an information toolkit, carry out workshops, and possibly mentor to educate businesses about the physical and financial impacts and opportunities that may arise due to climate change.	- Number of positive responses from businesses regarding usefulness of toolkit - Changes to operations and plans as a result	Action Plan II 2027-2029	2032

Strategic Objectives What are our objectives over the 10 year life of this Roadmap?	High Level Actions How will we achieve our strategic objectives or encourage positive change?	Metrics How will we measure effectiveness or success of actions?	Commencement When will the action commence?	Completion Anticipated year of completion
Theme 6 - Waste emissions reduction				
6.1 Minimise organic matter going to landfill	6.1.1 Minimise organic matter going to landfill through actions related to the <i>Waste Management & Resource Recovery Strategy 2021-2026</i> : • Strategic Outcome 6: Increase knowledge of waste reduction by residents and businesses • Strategic Outcome 7: Reduce food waste generated by residents and businesses	- Website, workshops and toolkits developed - Feedback from workshop participants - Bin waste audit results	Action Plan I 2024-2026	2026
	6.1.2 Minimise organic matter going to landfill through actions related to the <i>Waste Management & Resource Recovery Strategy 2021-2026</i> : • Strategic Outcome 10: Promote recovery of resources and discourage disposal to landfill • Strategic Outcome 11: Increase recovery of organic waste	Amount of organic waste diverted for re-use	Action Plan I 2024-2026	2026
	6.1.3 Promote Scenic Rim as a suitable area for waste to energy, recycling and reuse projects.	Number of interactions with investors	Action Plan I 2024-2026	2029
6.2 Manage the landfill in accordance with best practice to minimise greenhouse gas emissions [Sol Principles 1,2,3,4,8]	6.2.1 Continue to install landfill gas wells and improve the quality of the landfill cap to increase capture of landfill gas.	Increase in captured and flared methane	Action Plan I 2024-2026	2026
	6.2.2 Continue to explore power generation from landfill gas.	Investigation complete and next steps identified	Action Plan II 2027-2029	2029

7. Implementation

Council has developed a *Scenic Rim Climate Change 3-Year Action Plan* (Action Plan) to drive and manage implementation of the high level actions identified in this Roadmap, and to ensure the objectives are achieved.

The Action Plan focuses on short to medium-term actions that initiate and progress the overarching 10-year Roadmap. The Action Plan Summary of Actions includes information listed in Section 6 as well as lead and additional stakeholders, related objectives or actions, and implementation timeframes for those high level actions in this Roadmap that have already commenced or are due to commence 2024-2026. In addition, information relating to stakeholders, roles and responsibilities, and potential funding sources for these actions is included.

8. Monitoring and review

Understanding how climate actions are actually reducing vulnerability or emissions or increasing the adaptive capacity of communities and organisations is complex. Monitoring and reporting on progress are critical to understanding the effectiveness of actions and to ensure delivery of the objectives and high level actions in this Roadmap. A review of progress against the objectives, actions and metrics will occur at the end of each 3-Year Action Plan to allow Council to assess progress and the effectiveness of actions taken and to inform subsequent Action Plans. Smaller interim reporting will also occur as required to inform Council budget process and planning.

Another key performance indicator is Council's carbon footprint which will be recalculated on an annual basis and reported to Council. Further municipal emissions profiles for the Scenic Rim will also be available through the Snapshot Community Climate Tool.

At the conclusion of the third Action Plan, in 2033, progress of the overall Roadmap will be reviewed and reported to Council. This review will inform the development of any further Roadmaps, Strategies or Plans going forwards. However, an adaptive approach should be taken with respect to actions overall. Keeping abreast of new developments in the sphere of climate change is essential. Our understanding of climate change is evolving in terms of what makes people, communities and environments vulnerable to climate impacts, and what to do about it. Actions that reflect new climate change mitigation and adaptation knowledge, technology, legislation, ideas or lessons learnt may need to be added or substituted at any time.

9. Council Reference Group

The Climate Change and Sustainability Taskforce (CCST) was formed in 2022 and is made up of representatives from Council's key portfolios.

The purpose of the CCST is to provide a collaborative forum to address climate change and sustainability matters in the Scenic Rim Region. The CCST will facilitate a coordinated economically, environmentally and socially responsible approach in guiding the delivery of the *Scenic Rim Interim Climate Change Statement of Intent*.

The functions of the CCST include:

- Understanding the range of current knowledge, studies, policies and actions in relation to climate change that apply to the group and its function
- Ongoing learning development through relevant emerging information relating to climate change matters
- Developing an improved understanding of the energy and resources consumed by Council (baseline inventory) in the conduct of its business
- Developing an improved understanding of community use (baseline inventory) of energy and

resources

- Seeking sustainability, emissions and carbon lowering opportunities (reduction and offsets) available for both corporate and community action
- Developing a range of recommendations on regulatory, policy and planning measures to improve sustainability and climate change response
- Developing a range of initiatives for both Council and the wider community regarding carbon lowering, emission reduction and sustainable practices
- Developing climate change and sustainability pathways for consideration by the Executive Leadership Team and Council.

Definitions

Adaptation	Regarding climate change, adaptation is the process of adjustment to actual or expected climate and its effects. It seeks to moderate or avoid harm or take advantage of beneficial opportunities.
Adaptive capacity	The ability of a system to adjust, modify or change its characteristics or actions to moderate potential damage, take advantage of opportunities, or cope with consequences of shock or stress. Low adaptive capacity generally leads to increased vulnerability, but resilience can increase adaptive capacity.
Carbon sequestration	The removal of carbon from the atmosphere by capturing or storing it through biological, chemical and physical processes. Otherwise referred to as 'carbon drawdown'.
Circular economy	In a circular economy, things are made and consumed in a way that minimizes our use of the world's resources, cuts waste, and reduces carbon emissions. Products are kept in use for as long as possible, through repairing, recycling and redesign – so they can be used again and again
Climate	Relates to the average weather over various timescales, including over a period of months up to millions of years.
Climate Change	Any change in the climate lasting for several decades, including changes in temperature, rainfall and wind patterns. It refers to the average weather conditions over a period of 30 years or longer. Climate change is different from weather. Weather refers to what you seen and feel outside from day to day (e.g. sunny, rainy).
CO₂-e	An amount in units of CO ₂ -e is simply the combination of GHGs (CH ₄ , N ₂ O, CFCs, etc.) that contribute to climate change adjusted using their global warming potential. This can be calculated by manually summing the mass of the pollutants multiplied by their global warming potentials. For example, CH ₄ (methane) is 28 (global warming potential = 28) times more potent as a greenhouse gas than carbon dioxide, so the CH ₄ equivalent in CO ₂ would be the amount of CH ₄ multiplied by 28.
Ecosystem services	Ecosystem services are defined as the direct and indirect contributions of ecosystems to human well-being, and have an impact on our survival and quality of life. There are four types of ecosystem services: provisioning, regulating, cultural and supporting services.
Hazard	The potential occurrence of a natural or human-induced event, trend or impact that may cause damage, including loss to property, infrastructure, livelihoods, service provision, and ecosystems.
Intergovernmental	Established by the United Nations, the IPCC is the leading

Panel on Climate Change	international body for the assessment of climate change, with representatives from 195 countries.
Mitigation	In relation to climate change - a human intervention to reduce the sources or enhance the sinks of greenhouse gases.
Resilience	The capacity of social, economic, and environmental systems to cope with a hazardous event, trend, or disturbance, responding or reorganising in ways that maintain their essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation.
Risk	is the potential for consequences where something of value is at stake and where the outcome is uncertain, recognising the diversity of values. Risk is often represented as probability of occurrence of hazardous events (likelihood) multiplied by the impacts (or consequences) should these events or trends occur.
t CO₂-e	Metric tonnes of CO ₂ -e
Vulnerability	The quality or state of being exposed to the possibility of being attacked or harmed, either physically or emotionally. Climate change vulnerability (or climate vulnerability or climate risk vulnerability) is a concept that describes how strongly people or ecosystems are likely to be affected by climate change. This can be thought of as the opposite of adaptive capacity.
Water Sensitive Urban Design	A holistic approach to water management that integrates urban design and planning with social and physical sciences in order to deliver water services and protect aquatic environments in an urban setting

References

- 100% Renewables. (2022). *Scenic Rim Regional Council Carbon Footprint/Baseline Inventory & Pathway: Final Report*. North Sydney: 100% Renewables.
- BoM & CSIRO. (2022). *State of the Climate 2022*. Retrieved from <http://www.bom.gov.au/state-of-the-climate/2022/documents/2022-state-of-the-climate-web.pdf>
- Burton, D., & Dredge, D. (2007). *Framing Climate: Implications for Local Government Policy Response Capacity*. School of Urban and Environmental Planning, Griffith University.
- Carbon Tracker Initiative. (2017). *Stranded Assets*. Retrieved from Carbon Tracker: <https://carbontracker.org/terms/stranded-assets/#:~:text=Examples%20of%20stranded%20assets%20in%20the%20oil%20and,e.g.%20processing%20terminals.%20Distribution%20infrastructure%2C%20e.g.%20pipelines%2C%20tanks>
- Centers for Disease Control and Prevention. (2022). *Climate Effects on Health*. Retrieved from <https://www.cdc.gov/climateandhealth/effects/default.htm>
- Climate Council. (2021). *Hitting Home: The Compounding Costs of Climate Inaction*. Retrieved from <https://www.climatecouncil.org.au/wp-content/uploads/2022/01/hitting-home-report-V7-210122.pdf>
- Climate Council. (2021). *Neighbourhood Issue: Climate Costs & Risks for Council*. Retrieved from <https://www.climatecouncil.org.au/resources/neighbourhood-issue-climate-costs-risks-council/>

- Climate Council. (2023). *Shifting Gears: The Path to Cleaner Transport*. Retrieved from https://www.climatecouncil.org.au/wp-content/uploads/2023/05/CC_MVSA0354-CC-Report-Road-to-Personal-Transport_V5-FA-Screen-Single.pdf
- Climate Planning. (2018). *Climate Change Adaptation Governance Assessment*. Brisbane: State of Queensland.
- Councillor Greg Christensen. (2020). *Mayoral Minute: Scenic Rim Interim Climate Statement of Intent*. Beaudesert: Scenic Rim Regional Council.
- Department of Environment and Heritage Protection. (2017). *Pathways to a climate resilient Queensland: Queensland Climate Adaptation Strategy 2017-2030*. Retrieved from Queensland Government: https://www.qld.gov.au/__data/assets/pdf_file/0017/67301/qld-climate-adaptation-strategy.pdf
- Ehlers, R. (2022). *Climate Change Impacts Across California: Crosscutting Issues*. Retrieved from Legislative Analyst's Officer, California: <https://lao.ca.gov/reports/2022/4575/Climate-Change-Impacts-Crosscutting-Issues-040522.pdf>
- idcommunity. (2021). *Agriculture*. Retrieved from Scenic Rim Regional Council: Economic Profile: <https://economy.id.com.au/scenic-rim/value-of-agriculture>
- Intergovernmental Panel on Climate Change. (2019). Technical Summary. In H. Portner, D. Roberts, V. Masson-Delmotte, P. Zhai, E. Poloczanska, K. Mintenbeck, . . . E. Poloczanska, *IPCC Special Report on the Ocean and Cryosphere in a Changing Climate*.
- IPCC. (2022). *Climate Change 2022: Impacts, Adaptation, and Vulnerability*. In D. R. H.-O. Pörtner, *Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press.
- Ironbark Sustainability. (2022). *Snapshot Methodology 2022*. Retrieved from Snapshot Climate: <https://ssnanpshotclimate.com.au/resources/>
- Ironbark Sustainability and Beyond Zero Emissions. (2023). *Scenic Rim 2020/21 Municipal Emissions Snapshot*. Retrieved from Snapshot — community climate tool: <https://snapshotclimate.com.au/locality/municipality/australia/queensland/scenic-rim/>
- JLT Public Sector. (2023). *JLT Public Sector Risk Report 2022/23*.
- Pearce, R. (2023). *What are Ecosystem Services?* Retrieved from Earth.org: <https://earth.org/what-are-ecosystem-services/>
- Queensland Department of Environment and Science. (2022). *Heatwaves*. Retrieved from State of the Environment Report 2022: <https://www.stateoftheenvironment.des.qld.gov.au/climate/climate-observations/heatwave-events>
- Queensland Government. (2023). *Sector Adaptation Planning*. Retrieved from Environment: <https://www.qld.gov.au/environment/climate/climate-change/adapting/sectors-systems#:~:text=The%20seven%20Sector%20Adaptation%20Plans%20are%3A%201%20Small, and%20the%20Cath%20Moran%20Ecological%20Consultancy%20More%20items>
- Quicke, A., & Venketasubramanian, S. (2022). *Climate of the Nation 2022*. Retrieved from The Australia Institute: <https://australiainstitute.org.au/wp-content/uploads/2022/11/Climate-of-the-Nation-2022.pdf>
- Reserve Bank of Australia. (2019). *Box C: Financial Stability Risks from Climate Change*. Retrieved from Financial Stability Review: <https://www.rba.gov.au/publications/fsr/2019/oct/box-c-financial->

stability-risks-from-climate-change.html

Scenic Rim Regional Council. (2015). *Scenic Rim Regional Council Biodiversity Strategy 2015-2025*. Retrieved from <https://www.scenicrim.qld.gov.au/downloads/file/928/01-scenic-rim-biodiversity-strategy-pdf>

Scenic Rim Regional Council. (2017). *Agriculture*. Retrieved from Invest Scenic Rim: <https://www.investscenicrim.com.au/agriculture/#:~:text=The%20Scenic%20Rim%20is%20a%20food%20bowl%20for,and%20gourmet%20food%2C%20wine%20and%20craft%20beer%20industries.>

Scenic Rim Regional Council. (2018). *Scenic Rim Community Plan 2011-2026*. Beaudesert.

Scenic Rim Regional Council. (2019). *Local Disaster Management Plan: Version 9.0*. Retrieved from Corporate Publications: <https://www.scenicrim.qld.gov.au/downloads/file/991/01-local-disaster-management-plan>

Scenic Rim Regional Council. (2020). *Scenic Rim Regional Prosperity Strategy 2020-2025*. Retrieved from Corporate Publications: <https://www.scenicrim.qld.gov.au/downloads/file/3454/scenic-rim-regional-prosperity-strategy-2020-2025>

Scenic Rim Regional Council. (2021). *Scenic Rim Snapshot 2020-21*. Retrieved from <https://www.scenicrim.qld.gov.au/downloads/file/5115/scenic-rim-regional-council-economic-snapshot-2022>

Scenic Rim Regional Council. (2021). *Waste Management and Resource Recovery Strategy 2021-2026*. Retrieved from Corporate Publications: <https://www.scenicrim.qld.gov.au/say/draft-waste-management-resource-recovery-strategy-2021-2026/1>

Scenic Rim Regional Council. (2022). *Scenic Rim Agribusiness and Agritourism 10 year Roadmap 2022-2032*. Retrieved May 11, 2023, from <https://www.scenicrim.qld.gov.au/downloads/file/5604/scenic-rim-agribusiness-and-agritourism-10-year-roadmap-2022-2032>

Scenic Rim Regional Council. (2022). *Scenic Rim Agribusiness and Agritourism 3-year Action Plan 2022-2025*. Retrieved from Corporate Publications: <https://www.scenicrim.qld.gov.au/downloads/file/5605/scenic-rim-agribusiness-and-agritourism-three-year-action-plan-2022-2025>

Syktus, J., Trancosco, R., Ahrens, D., Toombs, N., & Wong, K. (2023, May 1). Retrieved from Queensland Future Climate Dashboard: Downscaled CMIP5 climate projections for Queensland: <http://www.longpaddock.qld.gov.au/qld-future-climate>

Talis Consultants. (2023). *Waste Services Resilience Roadmap*. Scenic Rim Regional Council.



CLIMATE CHANGE 3 YEAR ACTION PLAN 2024-2026

SCENIC RIM
REGIONAL COUNCIL

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Overview

Council has developed this *Scenic Rim Climate Change 3 Year Action Plan 2024-2026* (Action Plan) to drive and manage implementation of the high level actions identified in the *Scenic Rim Climate Change Roadmap 2024-2034* intended to improve the resilience and adaptive capacity of the Scenic Rim and reduce regional greenhouse gas (GHG) emissions over the next 3 years.

The Action Plan Summary of Actions includes metrics, lead and additional stakeholders, related objectives or actions, and anticipated time for completion for those high level actions that have already commenced or are due to commence 2024-2026. Information relating to stakeholders, roles and responsibilities, and potential funding sources for these actions is also included in the following sections.

Vision

"By 2034, the Scenic Rim will have made significant progress in moving towards net zero emissions and have greater resilience to climate change impacts. The region will be responsive to climate change as a catalyst for reducing our dependence on natural resources, increasing the sustainability of our businesses and industries, and for improving the resilience of our natural systems, communities, and built environment."

Climate change has the potential to impact all aspects of our lives and, as such, requires action by all areas of Council. Consequently, the objectives and actions within this Roadmap are interlinked with objectives in many Council strategies and plans. The following are some examples.

- The *Scenic Rim Community Plan 2011-2026* states "Adapting to a changing climate" and "Reducing resource consumption, lowering our carbon footprint and moving the renewable energy" as priorities.
- The *Scenic Rim Corporate Plan 2026* lists 'Adaptation to changing climate and weather patterns' as an area of focus.
- The *Scenic Rim Regional Prosperity Strategy 2020-2025* includes Climate Change as a risk to the future economic development of the Scenic Rim.
- From the *Scenic Rim Growth Management Strategy 2041*, "Land use planning directions ... ensure that new development is resilient to the effects of climate change, including the effects of bushfire, drought, heatwaves, increased rainfall intensity and flooding".
- The *Scenic Rim Agribusiness and Agritourism 10-Year Roadmap 2023-2033* lists "Agriculture sector recognised for role in reducing and sequestering greenhouse gas emissions" as a desired outcome.

Achieving these aims will require collaboration among various groups internal and external to Council and will be supported by this Action Plan. The following section lists various stakeholders that will be involved in implementing these actions and describes their roles and responsibilities.

Stakeholders, roles and responsibilities

Scenic Rim Regional Council

The role of the Scenic Rim Regional Council, in collaboration with the local community and other levels of government, is to provide essential services, manage local risks, and support disaster recovery. Supporting Council's adopted *Climate Change Statement of Intent*, the *Scenic Rim Climate Change Roadmap 2024-2034* (Roadmap) and this Action Plan have

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been developed to guide Council and the Scenic Rim region towards reducing GHG emissions, building climate resilience within our communities and ecosystems, and enabling our region to withstand and recover quickly from climate change impacts.

The Council also plays a key role in advocating for the Scenic Rim at Queensland and Australian Government levels to ensure the needs of the region are represented in broader government policy and initiatives.

Queensland and Australian Governments

The Queensland and Australian Governments play critical roles in supporting the Scenic Rim Regional Council vision for climate change resilience and emission reductions whether this be through policy settings, planning and regulatory frameworks, supporting soft and hard infrastructure, or provision of financial support. Some of the relevant Queensland and Australian Government agencies and departments are Queensland Climate Resilience Councils, Queensland Department of Environment and Science (DES), Queensland Department of Energy and Public Works, Queensland Department of Transport and Main Roads, Queensland Reconstruction Authority, Australian Department of Climate Change, Energy, the Environment and Water, Australian Renewable Energy Agency (ARENA), Australian Department of Infrastructure, Transport, Regional Development, Communications and the Arts, the Clean Energy Regulator (CER) and Clean Energy Finance Corporation (CEFC), and will be consulted to support the development and/or implementation of actions in this Action Plan where necessary.

Non-Governmental Organisations

Various Natural Resource Management (NRM) groups carry out science and research, onground actions, training and workshops, and collaborate with government, private industry, and the community. They also drive and influence decisions, policy and actions by government, with the objective of improving the health of land and water in Queensland.

Landcare is a national not-for-profit organisation that supports the Landcare community with funding, capacity-building, on-ground projects, information, networking and promotion of Landcare achievements. There are four active Landcare groups in the Scenic Rim region.

Scenic Rim Regional Council currently collaborates with local NRM groups, Landcare, and community groups on projects that contribute to environmental resilience.

Scenic Rim Community

There are various environmental community groups in the Scenic Rim including Boonah Organisation for a Sustainable Shire (BOSS), Logan Albert Conservation Association (LACA), Logan and Albert Rivers Catchment Association (LARCA), Bremer Catchment Association, Wild Mountains Trust, Scenic Rim Wildlife, and regional indigenous leaders, the Mununjali Elders, that may be willing to contribute to or take ownership of some of these actions.

The following Summary of Actions lists metrics to assess success, action leads and additional stakeholders, related objectives or actions, and estimated time for completion for high level actions to be initiated in the next 3 years (2024-2026). For further information on the themes, please refer to the Roadmap.

3 Year Action Plan Summary of Actions

Strategic Objectives What are our objectives over the 3 year life of this Action Plan?	High Level Actions How will we achieve our strategic objectives or encourage positive change?	Metrics How will we measure effectiveness or success of actions?	Implementation Lead Who has the primary responsibility for this action?	Additional Stakeholders Who will collaborate with or assist the Lead?	Related Objectives or Actions	Completion Anticipated year of completion
Theme 1 – Strong leadership and governance						
1.1 Embed climate change considerations in all aspects of government decision-making	1.1.1 Embed climate considerations within all relevant Council policies, plans and strategies, i.e., implement the recommendations from the <i>Climate Change Adaptation Governance Assessment 2018</i> .	- Relevant Council policies have incorporated a climate response - Strategies and plans have incorporated climate response objectives and actions	- Biodiversity & Climate Change - Governance and Corporate Assurance	• All of Council	1.4, 5.1, 2.2.3	2026
	1.1.2 Establish a Council reference group for climate change that periodically meets to provide information and advice to Council on climate issues, required actions, barriers and successes, and ongoing program development.	- No. Council briefings - No. successful action completions	Biodiversity & Climate Change	CCST		2032
	1.1.3 Educate Council staff about energy conservation and proper waste management at home and work so that they can lead by example.	Staff survey indicates an improvement in understanding of energy conservation and waste management	Biodiversity & Climate Change	Waste Services		2032
1.2 Strengthen partnerships with governments and stakeholders to take urgent action to achieve a low carbon economy and resilient community	1.2.1 Collaborate with other local governments to address climate risks and help build a low carbon economy. This includes opportunities for bulk buying of EVs, storage batteries, etc., as well as collaborative community education and carbon reduction initiatives across local government areas in SEQ.	- Collaborations with other local governments and progress made - Bulk buys leading to Council savings	All of Council	Biodiversity & Climate Change	2.1, 2.2	2032
	1.2.2 Utilise existing relationships and establish new relationships with the manufacturing industry in the region in order to assess energy efficiency and emissions reduction efforts and provide guidance and support if needed.	Number of assessments made	Regional Prosperity	- State Development - Trade and Investment QLD - Other QLD and Australian agencies	1.2.2	2029
1.3 Advocate to all levels of government and encourage the community to drive decisive climate action	1.3.1 Advocate to the Federal and State governments to increase support for renewable energy, transitioning to a low carbon economy, and addressing climate risk impacts from flooding, drought, heat risk, bushfires and biodiversity loss in regional areas.	- Climate advocacy actions - Available grants, incentives and funding	All of Council	- Biodiversity & Climate Change - CoMSEQ		2032
	1.3.2 Advocate to State government and transport providers to: - Improve and increase public transport services in the Scenic Rim region - Provide leadership, direction and incentives regarding EV technologies and investment.	- Advocacy actions - Available grants, incentives and funding	- Capital Works & Asset Management - Regional Prosperity	- DTMR - CoMSEQ	2.2	2032
	1.3.3 Utilise existing events to communicate key climate change messages to communities within the Scenic Rim region.	- Events and promotion activities - Numbers of attendees at events	- Community Development - Comms & Marketing	Biodiversity & Climate Change		2029
1.5 Report on Council GHG emissions annually	1.5.1 Develop a GHG data management system.	Corporate GHG data management system established that enables easy	Biodiversity & Climate Change			2024

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Strategic Objectives What are our objectives over the 3 year life of this Action Plan?	High Level Actions How will we achieve our strategic objectives or encourage positive change?	Metrics How will we measure effectiveness or success of actions?	Implementation Lead Who has the primary responsibility for this action?	Additional Stakeholders Who will collaborate with or assist the Lead?	Related Objectives or Actions	Completion Anticipated year of completion
Theme 1 – Strong leadership and governance						
		data collection and calculation				
	1.5.2 Calculate Council emissions profile according to GHG Protocol.	• Emissions profile for financial year calculated and reported by the end of the corresponding calendar year	Biodiversity & Climate Change	All of Council		2032

Strategic Objectives What are our objectives over the 3 year life of this Action Plan?	High Level Actions How will we achieve our strategic objectives or encourage positive change?	Metrics How will we measure effectiveness or success of actions?	Implementation Lead Who has the primary responsibility for this action?	Additional Stakeholders Who will collaborate with or assist the Lead?	Related Objectives or Actions	Completion Anticipated year of completion
Theme 2 - Energy efficiency and renewable energy						
2.1 Transition Scenic Rim Council to renewable energy and ensure the transition is within the capacity of Council to do so	2.1.1 Assess opportunities, barriers and financial models for potential Council-based renewable energy projects, such as mid-scale and behind-the-meter solar including batteries for solar power storage.	• Pathway identified including next steps for implementation	• Capital Works & Asset Management • Biodiversity & Climate Change		1.2	2026
	2.1.2 Continue to implement renewable energy measures within Council owned and controlled properties including any public lighting.	• kWh of renewable energy generated for Council operations increases • Council's grid electricity and stationary fuel use decreases	Capital Works & Asset Management	Biodiversity & Climate Change	1.2	2032
2.2 Transition Council and the community to sustainable transport use	2.2.1 Develop a Council EV transition plan that requires the selection of lowest emission vehicles that are fit for purpose to show leadership and to be a positive example of climate action.	• Plan developed and next steps for implementation identified	Fleet Management		1.2	2024
	2.2.2 Continue to seek funding for Council owned/controlled EV charging stations to increase the availability for residents and visitors in the Scenic rim region and, in the longer term, for Council's own fleet.	• Number of EV charging stations installed by Council	Capital Works & Asset Management	Fleet Management		2032
	2.2.3 Encourage businesses to take advantage of co-funding opportunities available through government grants and form partnerships with EV providers to increase the availability of EV charging stations in the Scenic Rim region.	• Number of EV charging stations in the Scenic Rim	Regional Prosperity	Strategic Planning	1.2	2029
	2.2.4 Amend Scenic Rim planning scheme to include requirements for new multi-residential and non-residential developments for carparking areas to be 'EV ready'.	• EVs factored into development requirements • Number of EV charging stations in Scenic Rim region	Strategic Planning		1.2	2026
	2.2.5 Investigate biofuels as an interim measure during EV transition	• Sustainability assessment of available biofuels complete	Fleet Management	Biodiversity & Climate Change		2024
2.3 Invest in energy efficiency measures within Council and for Council owned buildings	2.3.1 Assess opportunities, barriers and financial models for efficiency measures.	• Pathway identified including next steps for implementation	• Capital Works & Asset Management • Biodiversity & Climate Change		2.3.2 Predecessor	2026
	2.3.2 Continue to implement energy efficiency measures within Council owned and controlled properties including any public lighting.	• Council's grid electricity and stationary fuel use decreases	Capital Works & Asset Management	Biodiversity & Climate Change	2.3.1	2029
2.4 Inform community and business on ways to reduce energy consumption	2.4.1 Make an information toolkit available to assist households and businesses to reduce emissions and energy costs.	• Information tool kit developed	Biodiversity & Climate Change	Communications & Marketing	1.3.3	2026
	2.4.2 Provide information on energy efficiency to households and businesses and promote new technologies and tools that assist with sustainable behaviour change, through a web-based platform.	• Website and dashboard developed and updated • Number of website visits	Biodiversity & Climate Change	Communications & Marketing		2026
	2.4.3 Provide information on solar PV and storage batteries to households	• Website and dashboard developed and	Biodiversity & Climate	Communications &		2026

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Strategic Objectives What are our objectives over the 3 year life of this Action Plan?	High Level Actions How will we achieve our strategic objectives or encourage positive change?	Metrics How will we measure effectiveness or success of actions?	Implementation Lead Who has the primary responsibility for this action?	Additional Stakeholders Who will collaborate with or assist the Lead?	Related Objectives or Actions	Completion Anticipated year of completion
Theme 2 - Energy efficiency and renewable energy						
	and businesses including mechanisms for savings and funding, through a web-based platform.	updated • Number of website visits • % of solar PV systems installed annually	Change	Marketing		
2.5 Provide information to community groups and business on available resources for mid to large scale renewable energy projects	2.5.1 Assess opportunities, barriers and financial models for community owned renewable energy projects, such as solar farms, microgrids, solar gardens, community batteries for solar storage.	• Assessment complete and next steps identified	Biodiversity & Climate Change	Financial Management		2026
	2.5.2 Develop a web-based platform and dashboard to provide information on mid to large scale renewable energy projects including regulatory requirements and funding mechanisms.	• Website and dashboard developed and updated • Number of website visits • Number of mid to large scale projects in the region	Biodiversity & Climate Change	Community Development	2.5.1 Predecessor	2032

Strategic Objectives What are our objectives over the 3 year life of this Action Plan?	High Level Actions How will we achieve our strategic objectives or encourage positive change?	Metrics How will we measure effectiveness or success of actions?	Implementation Lead Who has the primary responsibility for this action?	Additional Stakeholders Who will collaborate with or assist the Lead?	Related Objectives or Actions	Completion Anticipated year of completion
Theme 3 - Healthy and resilient natural systems and carbon sequestration						
3.1 Increase revegetation and ecosystem restoration of Council owned and controlled land to support ecosystem and species resilience, and for carbon sequestration	3.1.1 Survey Council owned and controlled lands to establish the best sites for revegetation, restoration and carbon sequestration projects.	Investigation of Council land suitable for revegetation, restoration and carbon sequestration projects complete	Biodiversity & Climate Change	Property Management	3.1.2	2026
	3.1.2 Revegetate and restore selected Council sites for native species habitat and recreation.	Area of land revegetated	Biodiversity & Climate Change	- Land for Wildlife - Landcare	3.1.1	2032
	3.1.3 Investigate any State/Federal mechanisms for funding carbon sequestration and biodiversity conservation projects.	- Investigation complete - Funding (\$) - Grants (including disaster and resilience)	Biodiversity & Climate Change		3.1.1	2024
3.2 Increase revegetation and ecosystem restoration of privately owned non-agricultural rural landscapes to support ecosystem and species resilience, and for carbon sequestration	3.2.1 Continue existing initiatives/partnerships and seek out new initiatives/partnerships that support ecosystem and species resilience.	- One Million Trees program - number of trees distributed - Land for Wildlife - number of property registrations - Partnerships in other initiatives	Biodiversity & Climate Change	Land for Wildlife		2032
	3.2.2 Implement management plans for priority species.	Protection and condition improvements for threatened plant and animal species	Biodiversity & Climate Change			2029
	3.2.3 Continue to make grants available for groups within the community delivering environmental projects that increase the resilience of our natural systems and/or sequester carbon.	Number of environmental grants provided for initiatives with potential climate change mitigation and/or adaptation outcomes	Biodiversity & Climate Change	- Community Groups - NGOs - Businesses - Schools - Property Owners		2032
	3.2.4 Hold/promote workshops or events to educate landholders about revegetation and ecosystem restoration and potential funding sources.	- Number of events - Survey or visit to determine progress	Biodiversity & Climate Change	- Community Development - Comms & Marketing - Healthy Land & Water - Landcare - Watergum - Queensland Trust for Nature	1.3.3	2029
3.3 Encourage and increase revegetation and greening in urban and peri-urban spaces and promote use of water-sensitive urban design to	3.3.1 Develop and propose an urban greening target (Action 1.1f Biodiversity Strategy Implementation Plan)	Whether action is completed	Biodiversity and Climate Change	Strategic Planning	3.2.2, 5.1	2026
	3.3.2 Develop an urban greening program for streets and public spaces that increases tree canopy cover, native vegetation, biodiversity, and carbon	- No. trees planted % urban canopy cover (long term)	Biodiversity & Climate Change (1)	Asset Management (2)	3.2.1, 5.1	2026

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Strategic Objectives What are our objectives over the 3 year life of this Action Plan?	High Level Actions How will we achieve our strategic objectives or encourage positive change?	Metrics How will we measure effectiveness or success of actions?	Implementation Lead Who has the primary responsibility for this action?	Additional Stakeholders Who will collaborate with or assist the Lead?	Related Objectives or Actions	Completion Anticipated year of completion
Theme 3 - Healthy and resilient natural systems and carbon sequestration						
reduce urban heating and increase carbon drawdown	drawdown and reduces urban heating.			- Parks & Landscape Maintenance (2) - Capital Works or Survey & Design (2) - Strategic Planning (3)		
	3.3.4 Develop a policy for preferred species for biodiversity, shade and carbon drawdown.	Whether action is completed	Biodiversity & Climate Change		5.1	2029
3.4 Investigate options regarding the sale and purchase of carbon offsets by Council	3.4.1 Determine costs and benefits of purchasing different types of carbon offsets.	Investigation is completed and next steps identified	Biodiversity & Climate Change	Financial Management		2024
	3.4.2 Investigate requirements for Council to receive ACCUs for restoration/revegetation projects through ERF and LRF.	Investigation is completed and next steps identified	Biodiversity & Climate Change	Financial Management		2026
3.5 Increase the adaptive capacity of ecosystems and rural water supply sources by improving the condition of regional surface and subsurface catchment water systems	3.5.1 Continue to implement initiatives that help landholders to restore and rehabilitate riparian vegetation and other practices that improve catchment water quality.	- Number of landholders involved in Resilient Rivers Initiative and related programs. % of mapped vegetated riparian zones (long term) - Aquatic biota surveys	Biodiversity & Climate Change			2032
	3.5.2 Educate non-agricultural landholders about water sensitive design and other measures to preserve or improve water quality through information toolkits and web-based platforms.	- Website and toolkit developed - Number of website visits - Number of toolkits distributed	Biodiversity & Climate Change			2032

Strategic Objectives What are our objectives over the 3 year life of this Action Plan?	High Level Actions How will we achieve our strategic objectives or encourage positive change?	Metrics How will we measure effectiveness or success of actions?	Implementation Lead Who has the primary responsibility for this action?	Additional Stakeholders Who will collaborate with or assist the Lead?	Related Objectives or Actions	Completion Anticipated year of completion
Theme 4 - Sustainable agriculture and food production systems						
4.1 Support the creation of a sustainable and regenerative food system that includes consideration of and preparation for climate change risks	4.1.1 Promote Landcare and other workshops and programs, grants, and guidance material, including access to climate projections, that encourage and inform the adaptation of farming practices for future climate conditions and improve the resilience of crops and livestock.	Number of farmers participating in on-ground actions through land management programs	- Regional Prosperity - Biodiversity & Climate Change	- Landcare - Healthy Land & Water - Carbon Farmers of Australia - QLD Farmer's Federation - QLD and Australian agencies	4.1.2, 4.3.1	2032
	4.1.2 Through the <i>Scenic Rim Agribusiness and Agritourism Three-Year Action Plan</i> and <i>10-Year Roadmap</i> : Diversified and Sustainable Agribusinesses: Initiative 1.8 Promote existing agribusiness sustainability practices and encourage industry leading sustainability practices and innovation	- Increased diversity in agribusiness products and services within the region - Carbon reduction in agribusiness activities - Research and development grants	Regional Prosperity	- Industry Representative Groups - Australian Certified Organic - QLD and Australian Agencies	4.1.1, 4.3.1	2032
4.2 Promote sustainable, locally produced food and improve local food access for farmers, residents and visitors	4.2.1 Through the <i>Scenic Rim Agribusiness and Agritourism Three-Year Action Plan</i> and <i>10-Year Roadmap</i> : Action 2.2.2 Continue to support industry through popular events and initiatives such as the Scenic Rim Farm Gate Trail, Eat Local Month, and agriculture industry events	- Survey/phone call to determine if there is an associated increase in revenue due to promotion - Action 2.2.2: Increased visitors at key events	- Regional Prosperity - Destination Scenic Rim	- Industry Representative Groups - QLD Government Agencies - Local Industry		2032
	4.2.2 Through the <i>Scenic Rim Agribusiness and Agritourism Three-Year Action Plan</i> and <i>10-Year Roadmap</i> : Action 2.3.1: Identify strategic locations for hub-and-spoke model farm doors, or centralised outlets for local food, beverage and other products, and support industry led development of collective farm-to-shop distribution facilities which support the vibrancy and sustainability of existing towns and villages.	Action 2.3.1: Increased availability and sales of local agri-products	Regional Prosperity	Local growers and Producers		2026
4.3 Support farmers to reduce their emissions through changes in agricultural practices and technology implementation	4.3.1 Promote platforms and programs for farmers to access training, workshops, grants and guidance material for reducing agricultural emissions including current technology, regenerative farming, water sensitive design.	- Number of workshop/training attendees - Website visits	Regional Prosperity	- Biodiversity & Climate Change - Healthy Land & Water - Landcare - Carbon Farmers of Australia	4.1.1, 4.1.2	2032
4.4 Encourage farmers to take up opportunities for income generation	4.4.1 Investigate opportunities to encourage rural landowners to sequester soil carbon and accrue carbon credits through agricultural and revegetation	Number of carbon sequestration projects	Biodiversity & Climate Change			2026

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through carbon sequestration activities	methods (e.g. ERF, LRF, Carbon Farmers of Australia) and disseminate information through workshops and information toolkits.		• Regional Prosperity			
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Strategic Objectives What are our objectives over the 3 year life of this Action Plan?	High Level Actions How will we achieve our strategic objectives or encourage positive change?	Metrics How will we measure effectiveness or success of actions?	Implementation Lead Who has the primary responsibility for this action?	Additional Stakeholders Who will collaborate with or assist the Lead?	Related Objectives or Actions	Completion Anticipated year of completion
Theme 5 - Resilient communities, businesses and built environments						
5.1 Create a resilient built environment by considering potential climate change impacts	5.1.1 Research best practice in climate responsive urban planning and design and develop materials for Council planning, asset management, place making, design and construction, to increase climate resilience and liveability within Council's public areas, streetscapes and buildings.	• Best practice information made available to relevant areas of Council	• Biodiversity & Climate Change	• Capital Works • Asset Management • Parks & Landscape Maintenance	3.2	2024
	5.1.2 Apply climate responsive best practice to Council planning, asset management, place making, design and construction, to increase climate resilience and liveability within Council's public areas, streetscapes and buildings.	• Best practice incorporated into Council planning, design and construction	• Capital Works • Asset Management • Parks & Landscape Maintenance	• Strategic Planning • Biodiversity & Climate Change	3.2	2032
	5.1.4 Advocate to State and Federal governments to lift standards across the building and development sectors to climate adaptation best practice for cooling of heat island effects, improved amenity, and reducing energy demand.	• Climate advocacy actions • Changes to construction and development standards that address predicted temperature increases	Biodiversity & Climate Change			2026
5.2 Build Council and community awareness and preparedness for climate change and extreme weather events	5.2.1 Continue to educate the community through awareness programs including information toolkits, events, and web resources, to raise awareness and understanding of disaster management and preparedness.	• Number of information toolkits distributed • Number of events • Website visits (Disaster Dashboard)	• Disaster Management • Local Disaster Management Group	Biodiversity & Climate Change		2032
	5.2.2 Monitor disaster management research and development to ensure the latest information, methods, and technologies, are incorporated into the Scenic Rim Local Disaster Management Plan and/or associated sub plans and disaster management standard operating procedures.	• Scenic Rim disaster management plans are current in relation to developments and trends	Disaster Management	Local Disaster Management Group		2032
5.3 Educate business and industry on potential climate change impacts and encourage them to take action to increase their resilience to these impacts	5.3.1 Leverage existing relationships and/or establish new relationships with businesses in order to assess levels of disaster preparedness and climate resilience. If they require assistance, connect them with programs for disaster preparedness and building adaptive capacity within their business.	• Number of assessments made	• Regional Prosperity • Disaster Management			2029

Strategic Objectives What are our objectives over the 3 year life of this Action Plan?	High Level Actions How will we achieve our strategic objectives or encourage positive change?	Metrics How will we measure effectiveness or success of actions?	Implementation Lead Who has the primary responsibility for this action?	Additional Stakeholders Who will collaborate with or assist the Lead?	Related Objectives or Actions	Completion Anticipated year of completion
Theme 6 - Waste emissions reduction						
6.1 Minimise organic matter going to landfill	6.1.1 Minimise organic matter going to landfill through actions related to the <i>Waste Management & Resource Recovery Strategy 2021-2026</i> : • Strategic Outcome 6: Increase knowledge of waste reduction by residents and businesses • Strategic Outcome 7: Reduce food waste generated by residents and businesses	- Website, workshops and toolkits developed - Feedback from workshop participants - Bin waste audit results	Waste Services	Biodiversity & Climate Change	Integrate with 1.4.1	2026
	6.1.2 Minimise organic matter going to landfill through actions related to the <i>Waste Management & Resource Recovery Strategy 2021-2026</i> : • Strategic Outcome 10: Promote recovery of resources and discourage disposal to landfill • Strategic Outcome 11: Increase recovery of organic waste	Amount of organic waste diverted for re-use	Waste Services	- Biodiversity & Climate Change - Regional Prosperity		2026
	6.1.3 Promote Scenic Rim as a suitable area for waste to energy, recycling and reuse projects.	Number of interactions with investors	Regional Prosperity	- State Development - Trade and Investment QLD - Other QLD and Australian agencies	1.2.3	2029
6.2 Manage the landfill in accordance with best practice to minimise greenhouse gas emissions	6.2.1 Continue to install landfill gas wells and improve the quality of the landfill cap to increase capture of landfill gas	Increase in captured and flared methane	Landfill			2026

Funding Opportunities

Internal

Some short-term and smaller scale actions will be funded by Council. Some actions will not require additional funding allocation and will be implemented using existing resources.

There are environmental grants that can be provided by Council to encourage and assist community involvement to preserve the Scenic Rim's natural environment. Projects that involve habitat enhancement and extension, riparian restoration, and species recovery, increase ecosystem resilience and often have additional carbon sequestration benefits. Community grant-in-kind could also assist with workshops/events involving community groups.

External

Council will require additional or external funding to implement some of these actions. There are a number of Queensland and Australian Government programs that may be suitable, and align with the strategic priorities of the *Scenic Rim Climate Change Roadmap 2024-2034* and this Action Plan.

Queensland Government Grants and Funding

Get Ready Fund

The Get Ready Queensland funding program provides a total of \$2 million in Queensland Government funding to help local governments improve their communities' resilience. Get Ready Queensland is about building resilience to deal with the extreme weather and natural disasters that are part of living in Queensland.

Australian Government Grants and Funding

Community Energy Upgrades Fund

The Australian Government is partnering with local governments to deliver energy upgrades for community facilities like local pools, sporting clubs and community centres. This financial assistance will help councils cut their emissions and reduce their energy bills. The program will be open by the end of 2023.

Growing Regions Program

The *Growing Regions Program* will deliver community and economic benefits by investing in community-focused infrastructure which revitalises regions and enhances amenity and liveability throughout regional Australia. One of the intended outcomes of the program is to contribute to the achievement of broader Government priorities such as net zero emissions. Council would need to co-fund 50% of project costs.

Disaster Ready Fund Round Two 2024-2025

The *Disaster Ready Fund* is providing up to one billion dollars over the next five years, from 2023-24 for natural disaster resilience and risk reduction across Australia.

Regional Australia Microgrid Pilots Program (RAMPP) - Stage 2: \$20 million available from CY2023

RAMPP aims to improve the resilience and reliability of electricity supply in regional

*Scenic Rim Climate Change 3 Year Action Plan 2024-2026*¹²

communities, and demonstrate solutions to technical, regulatory or commercial barriers to the deployment of microgrid technologies in Australia.

Emissions Reduction Fund

The Emissions Reduction Fund offers landholders, communities and businesses the opportunity to run projects in Australia that avoid the release of greenhouse gas emissions or remove and sequester carbon from the atmosphere. A number of activities are eligible under the scheme and participants can earn Australian carbon credit units (ACCUs). Each ACCU represents one tonne of carbon dioxide equivalent (t CO₂-e) emissions stored or avoided by a project. ACCUs can be sold to generate income, either to the Australian Government through a carbon abatement contract, or to companies and other private buyers in the secondary market.

Nature Repair Market Bill

The Australia Federal Government is currently working towards a world first nature repair market to reward landholders who restore and protect nature. The Nature Repair Market will make it easier for companies and other businesses to invest in and drive nature repair across Australia.

Demand for the market is expected to come from several sources, including:

- carbon market participants seeking projects which also benefit nature
- philanthropic and Environmental, Social and Corporate Governance (ESG) motivated investment, driven by reporting and disclosure requirements such as the Taskforce for Nature Related Financial Disclosures.

Projects may include:

- improving or restoring native vegetation through activities such as fencing or weeding
- planting a mix of local native species
- protecting rare grasslands that provide habitat for an endangered species.

Monitoring and review

Understanding how climate actions are actually reducing vulnerability or emissions or increasing the adaptive capacity of communities and organisations is complex. Monitoring and reporting on progress are critical to understanding the effectiveness of actions and to ensure delivery of the objectives and high level actions in this Action Plan. A review of progress against the objectives, actions and metrics will occur in 2026 at the end of the term for this Action Plan to allow Council to assess progress and the effectiveness of actions taken and to inform the next Action Plan. Smaller interim reporting will also occur as required to inform Council budget process and planning.

An overall performance indicator is Council's carbon footprint, which will be recalculated on an annual basis and reported to Council and the community. Further municipal emissions profiles for the Scenic Rim will be available through the Snapshot Community Climate Tool.

An adaptive approach should be taken with respect to actions overall. Keeping abreast of new developments in the sphere of climate change is essential. Our understanding of climate change is evolving in terms of what makes people, communities and environments vulnerable to climate impacts, and what to do about it. Actions that reflect new climate change mitigation and adaptation knowledge, technology, legislation, ideas or lessons learnt may need to be added or substituted at any time.

Definitions

*Scenic Rim Climate Change 3 Year Action Plan 2024-2026*¹³

Adaptation	Regarding climate change, adaptation is the process of adjustment to actual or expected climate and its effects. It seeks to moderate or avoid harm or take advantage of beneficial opportunities.
Adaptive Capacity	The ability of a system to adjust, modify or change its characteristics or actions to moderate potential damage, take advantage of opportunities, or cope with consequences of shock or stress. Low adaptive capacity generally leads to increased vulnerability, but resilience can increase adaptive capacity.
Carbon sequestration	The removal of carbon from the atmosphere by capturing or storing it through biological, chemical and physical processes. Otherwise referred to as 'carbon drawdown'.
Climate	Relates to the average weather over various timescales, including over a period of months up to millions of years.
Climate Change	Any change in the climate lasting for several decades, including changes in temperature, rainfall and wind patterns. It refers to the average weather conditions over a period of 30 years or longer. Climate change is different from weather. Weather refers to what you see and feel outside from day to day (e.g. sunny, rainy).
CO₂-e	CO ₂ -e is the combination of the GHGs that contribute to climate change adjusted using their global warming potential. This can be calculated by multiplying the individual GHGs by their global warming potentials and then summing these results to get total GHG emissions in CO ₂ -e. For example, CH ₄ (methane) is 28 times more potent as a greenhouse gas than carbon dioxide so you would multiply the amount of methane by 28 to get its equivalent in CO ₂ GHG potency and specify units as CO ₂ -e.
Hazard	The potential occurrence of a natural or human-induced event, trend or impact that may cause damage, including loss to property, infrastructure, livelihoods, service provision, and ecosystems.
Mitigation	With respect to climate change, mitigation is a human intervention to reduce the sources or enhance the sinks of greenhouse gases.
Resilience	The capacity of social, economic, and environmental systems to cope with a hazardous event, trend, or disturbance, responding or reorganising in ways that maintain their essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation.
Risk	Risk is often represented as probability of occurrence of hazardous events (likelihood) multiplied by the impacts (or consequences) should these events or trends occur.
t CO₂-e	Metric tonnes of CO ₂ -e
Vulnerability	Climate change vulnerability (or climate vulnerability or climate risk vulnerability) is a concept that describes how strongly people or ecosystems are likely to be affected by climate change. This can be thought of as the opposite of adaptive capacity.
Water sensitive urban design	A holistic approach to water management that integrates urban design and planning with social and physical sciences in order to deliver water services and protect aquatic environments in an urban setting.