Sunshine Coast Council and Climate Change



Proactive and evidence-based action

Council recognises climate change as a global issue and that we are in a state of climate emergency requiring urgent and sustained effort.

Council has consistently taken a proactive approach to developing and implementing strong climate change policy that is evidence based and aligned with the best available science. Council continues to see this as an effective strategy to drive investment and deliver meaningful onground outcomes to address the potential impacts of climate change.

Council has been on its sustainability journey since 2010 when it developed its Climate Change and Peak Oil Strategy, laying the foundation for a number of climate change and sustainability related initiatives, including the construction of our utility scale (15MW) Sunshine Coast Solar Farm, which was commissioned in July 2017.

Council has updated its strategic directions for delivering a healthy environment with the adoption of its 2017 Environment and Liveability Strategy¹ (ELS). Utilising the latest climate science, the Strategy integrates a number of natural, built and sustainability related themes to provide a contemporary approach to delivering a healthy environment and liveable Sunshine Coast by 2041.

Taking action on climate change and building the resilience of our region is a fundamental part of the strategy, as reflected in a number of policy positions and Transformational Actions including targets for:

- 1. Council to be a net-zero emissions organisation by 2041, and
- 2. The community to be low-carbon by 2041.

Furthermore, responses to climate change such as increasing our adaptive capacity and reducing climate risk, are integrated into all of the 12 themes in the ELS to ensure that these aspects are integral to the way in which our natural and built environment are managed and developed over the coming years.

Similarly, Council's other key strategic and planning documents – the Regional Economic Development Strategy, the Community Strategy, Corporate Plan and Planning Scheme also support a range of climate related actions.

Whilst Council is working hard to reduce its own emissions, it also acknowledges the importance of reducing community emissions - which result from sources such as transportation, the use of electricity in homes and businesses, waste sent to landfills, land-use changes and industrial processes. Reducing these emissions also requires long-term action by other levels of government, non-government community organisations and our residents and businesses working together.

Council is committed to playing our part in this by taking direct action, while continuing to advocate to other levels of government for investment in public transport and carbon abatement projects, and to support

https://els.sunshinecoast.qld.gov.au/





¹ For more information about the Environment and Liveability Strategy:

our community to adopt low-carbon behaviours.

Through Council's commitment to mitigating and adapting to a changing climate, a wide range of actions have already been taken, such as:

- Renewable energy: Sunshine Coast Council developed the first localgovernment owned utility scale solar farm to offset Council's entire electricity consumption across all facilities and operations via revenue generated from renewable energy. The model and learnings developed by Council during this ground-breaking process are now being used by other local governments around Australia. As of November 2021, the solar farm has generated a total of 122GWh of renewable electricity² and contributed to the reduction of Ausralia's carbon emissions by avoiding 97,000 tC02e. In addition, Council continues to install solar PV on many of its buildings and facilities, taking our total installed capacity to 15,479kW.
- **Transport**: Council has continued to build its case for an integrated mass transit system to service the Sunshine Coast's growing population. That effort has been ongoing since 2012 and in October 2021 Council endorsed the submission the Queensland to Government of the Sunshine Coast Mass Transit Options Analysis. This represents the completion of the second stage of a three stage assessment process to ready the project for investment by the Queensland and Commonwealth Governments³. Given transport produces around a quarter of the region's greenhouse gas emissions, access to an efficient mass transit

- system would be critical to enabling a low-carbon future for the Sunshine Coast.
- **Industry transformation**: Through the ELS Regional **Economic** and Development Strategy. Council is committed to supporting and building the region's clean technology sector as part of a low-carbon future. Already, the clean technologies industry on the Sunshine Coast employs almost 1500 people and contributes an estimated \$228.2 million to the regional economy annually. Council established a regional CleanTech Effect conference showcase and build the sector's capacity⁴.
- Carbon Neutral Certified Airport: In 2017, the Sunshine Coast Airport became the first Australian airport to achieve Level 3+ Neutrality under the Airports Council International Airport Carbon Accreditation program, led by Sunshine Coast Council⁵. The learning from this process continues to inform Council's carbon abatement work.
- Earth Check verification Venue 114: In 2020 Council's owned and operated community venue at Bokarina, Venue 114 had its sustainability commitment recognised by the world's leading scientific benchmarking certification and advisory group for travel and tourism. The 'EarthCheck Evaluate' verification acknowledges the venue's sustainable practices.
- International recognition: Sunshine Coast Council is leading a nomination for the local government area to become a UNESCO Biosphere. Becoming a biosphere would further

² For more information, visit the Sunshine Coast Solar Farm:

https://www.sunshinecoast.qld.gov.au/Environment/Sunshine-Coast-Solar-Farm

³ For more information, visit the Mass Transit site: https://haveyoursay.sunshinecoast.qld.gov.au/sunshine-coast-mass-transit-how-will-you-make-your-way

⁴ For more information about industry investment, please see: https://invest.sunshinecoast.gld.gov.au/

⁵ For more information about the airport, please see: https://www.sunshinecoastairport.com.au/corporate/community/environment/

enhance the Sunshine Coast's national and international reputation outstanding environmental value and scenic amenity, as well as help create niche markets for sustainable products, services, facilities and practices. This is significant for the agricultural, forestry, fisheries and tourism sectors. UNESCO Biosphere credential will support Council to deliver its clear vision to maintain and enhance our lifestyle and environment for future generations. It aligns with our vision to be Australia's most sustainable region - healthy, smart. creative⁶.

- carbon sequestration Innovative approaches: The 'Blue Heart' project within the Maroochy River Catchment is between partnership Council. Unitywater and the State Government develop an Australian-first investigation of the potential of blue carbon (carbon stored in plants and soils of wetlands and coastal areas) to reduce carbon emissions while creating new economic, social, cultural and ecological opportunities, as well as providing flood mitigation to increase the resilience of the region. As with all regions, Council acknowledges that a combination of emissions reduction and sequestration carbon and offset activities will be required to achieve a net-zero emissions target. This is why Council is investing in the Blue Heart project to support Sunshine Coast's climate mitigation efforts and provide evidence of this approach to others⁷.
- National partnership and commitments: Council is a member Council of the Climate Council's Cities Power Partnership program – Australian

- councils pledging and taking action on a number of climate change mitigation actions. In 2020 Council was recognised nationally by the Climate Council for its innovative Blue Heart project – winning the Regional Innovation award for climate action.
- Community support and engagement: Council provides a range of community engagement programs and events aimed at supporting sustainable living, including emissions reduction, via its successful Living Smart Program⁸, waste-reduction initiatives, Land for Wildlife and community treeplanting days.
- Crafting a Circular Economy conversation series: Council has led a community conversation series on crafting a circular economy approach to business. These conversations have showcased collaborators who believe in reducing waste, increasing efficiencies and creating exceptional products and services to continue to find improved ways of doing things.
- Measuring emissions: Each year, Council's organisational emissions are Organisational reported in its **Environmental Sustainability Benchmark** report⁹. Sunshine Coast Council is one of only a few councils in Australia that publishes its annual performance in a consolidated way. This reporting demonstrates Council's commitment to robust, accountable and transparent decision making. Over the coming year, Council will begin the process to measure community greenhouse gas emissions to similarly provide

https://www.sunshinecoast.qld.gov.au/Council/Planning-and-Projects/Major-Regional-Projects/Nomination-for-Biosphere

https://www.sunshinecoast.qld.gov.au/Council/Planning-and-Projects/Major-Regional-Projects/The-Blue-Heart

⁶ For more information, please see:

⁷ For more information, please see:

⁸ For more information about Living Smart, please see: https://www.livingsmartqld.com.au/

⁹ For more information, please see: https://www.sunshinecoast.qld.gov.au/Council/Budget-Financial-and-Annual-Reports/Organisational-Environmental-Sustainability-Reporting

- benchmark and detailed inventory to support future action.
- **Zero-net emissions planning:** Work has commenced on developing an organisational Zero-net **Emissions** (ZNE) Plan - a strategic and integrated action plan to reduce greenhouse gas emissions across the organisation (e.g., waste, fleet, assets and infrastructure, procurement). The plan will ensure alignment with best practice energy demand management and optimisation approaches, resource efficiency/circular economy principles, waste to energy technologies and support sustainable design outcomes with a view to maximising operational cost savings.
- Continued expansion of the Council conservation estate: continues to invest in expanding the region's conservation estate through land acquisitions to increase protection, connectivity and resilience of priority habitat areas. This includes land purchased for revegetation¹⁰. Council's conservation estate is one of the largest local government owned conservation assets in south east Queensland.
- Adapting to climate change: Council endorsed its Coastal Hazard Adaptation Strategy (called Our Resilient Coast. Our Future¹¹) to better understand and plan for current and future impacts of coastal hazards (including sea level rise) and identify innovative management options to make our coastal areas and communities more resilient. A 0.8 metre sea level rise has been factored into the Sunshine Coast Planning Scheme 2014 in relation to the management of coastal hazards (erosion and inundation) under future climate conditions. Council is significant continuing to invest

- resources in risk reduction and disaster prevention planning, including development of Queensland's first Disaster Resilience Plan.
- Better data and analytics: Through Council's Smart City project and broader digital information investments, Council is rapidly improving its data collection operations and using across its analytics to identify and implement efficiencies and better understand urban heat island effects. This has to-date allowed us to significantly reduce energy consumption at sports stadiums and administrative buildings, to reduce fuel use in fleet cars, to reduce water consumption for irrigation (with associated Scope 3 greenhouse gas emissions) - and Council is further exploring how it could reduce energy used for street lighting and other applications.
- Landfill biogas to energy facility: Council is now converting landfill gas (mostly methane) to energy at its Caloundra Renewable Energy Facility. In a first for the region, the facility creates enough energy to power 1200 homes 24-hours a day, seven days a week. The facility officially opened in November 2020, is linked to the power grid, and generates 7000 megawatt hours of renewable electricity per annum, and reduces greenhouse gas emissions by approximately 41,000 tonnes each year, which is the equivalent to removing approximately 9000 cars from the road. Previously, the landfill biogas was combusted via a biogas flare and released into the atmosphere.
- Food organics and garden waste bin: Sunshine Coast residents have spoken loudly and clearly: they want to reduce

¹⁰ For more information, please see: https://www.sunshinecoast.qld.gov.au/Environment/Environment-Levy

¹¹ For more information about Our Resilient Coast. Our Future:

https://www.sunshinecoast.qld.gov.au/Council/Planning-and-Projects/Council-Strategies/Coastal-Hazard-Adaptation-Strategy

greenhouse gas emissions and have given the green thumbs up for an opt-out garden waste bin service so they can do their bit for our environment.

Community feedback from more than 7,500 residents revealed overwhelming support for the garden waste bin service which will be expanded to households across the Sunshine Coast from July 2022 to create a cleaner, greener environment. This project could see the Sunshine Coast divert more than half of our household bin waste from landfill. This project has the potential to put the Sunshine Coast on a path to achieving international, national and state greenhouse gas reduction targets.

- Sustainable design for our built environment: Sunshine Coast City Hall achieved its formal Green Building Council of Australia 5-Star Green Star certification for the Design Review stage, representing Australian excellence in environmentally sustainable building practices.
- Stormwater Management Strategy:
 Council has endorsed its Stormwater Management Strategy to help ensure we have an integrated stormwater network that is effective, sustainable and contributes to waterway health. The strategy identifies challenges, such as population growth and climate change, and outlines ways they can be addressed.
- Collaborative approach responds to climate change: Sunshine Coast Council in partnership with Noosa Shire Council have received a Department of Environment and Science and Local Government Association of Queensland (LGAQ) grant to further build our region's resilience to climate change through collaborative planning and action.

This approach assists us to better understand the scale and distribution of climate change impacts and the way our industries and communities can proactively respond as we work and live across both local government areas.

Through this project, both councils will work with regional industry stakeholders, community leaders and state government bodies to identify current and emerging climate risks and how we can work collaboratively to reduce our greenhouse gas emissions, proactively manage transition and adapt to future changes.

 Climate Resilient Alliance: Sunshine Coast Council is also collaborating with other south east Queensland regional councils through a Climate Resilient Alliance.

This alliance, led by Logan City Council, will develop innovative, regional projects that reduce greenhouse gas emissions and build resilience to climate change, with a focus on community orientated actions.

Councils participating in this Alliance include:

- Ipswich City Council
- Logan City Council
- Noosa Shire Council
- Sunshine Coast Council
- Brisbane City Council.

Council is also proud to support and partner with the community to reducing community emissions and build on the significant actions already occurring in the region. Some examples of this include:

 Solar PV on homes and businesses: Over 50% of dwellings have solar panels on the Sunshine Coast, with a total of 349MW of installed capacity as of November 2021¹². This rate of

¹² For more information on Photovoltaic installations please refer to https://pv-map.apvi.org.au/historical

installation across the region shows the strong commitment from the Sunshine Coast community to renewable energy.

- Australia's largest 6-star Green Star healthcare facility: The Sunshine Coast University Hospital is the largest public healthcare facility in Australia to earn a 6-star Green Star Healthcare v1 Design and As-Built rating. This will ensure the hospital is highly energy efficiency in its operations.
- The first solar thermal battery at an Australian university: The University of Sunshine Coast completed the installation of a 2.1MW solar PV system, panels spread across campus with rooftops and carpark structures, which produces enough energy to cool 4.5 megalitres of water, effectively acting as a seven-megawatt battery to run the University's district coolina (air conditioning) system. The system is expected to save more than 92,000 tonnes of CO₂ emissions over 25 years, equivalent to the carbon emissions of 525 average Australian houses for the same period. It will lead to an estimated \$100 million saving over the 25-year life of the project.
- Aspire platform: Council has invested in ASPIRE, a free online business to business tool for organisations with up to 100 staff who need to list (and trade) unwanted waste streams and be connected to other businesses who can use this input as a resource. The uptake of the Aspire platform is gaining momentum with many SEQ Councils now onboard as supporting partners to offer a regional approach to waste reduction, reuse and establishing new economic opportunities¹³.
- Collaboration with our community: Sunshine Coast has a number of

passionate and driven community groups advocating and delivering programs and initiatives to educate and act on the impacts of climate change. Council connects and supports community organisations to build on this action.

These initiatives as well as many others, represent a strong and enduring platform to proactively respond and adapt to the impacts of climate change. Council does, and will continue, to use the best available science and evidence-based data when planning for this complex issue. Council's ongoing commitment and program of activity in this area are real, tangible and impactful responses to managing the implications of a changing climate.

¹³ For more information refer to https://www.sunshinecoast.qld.gov.au/Business/Busine ss-Programs/Circular-Economy