

## 5.9. CORPORATE SUSTAINABILITY STRATEGY

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### RECOMMENDATION

**That Council adopts the Corporate Sustainability Strategy 2017-2020.**

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### EXECUTIVE SUMMARY

The Corporate Sustainability Strategy commits Council to 28 sustainable actions over the next three financial years (July 2017 – June 2020).

### BACKGROUND

On 16 March 2017 Council adopted the Corporate Sustainability General Policy (the Policy) which recognises Council's commitment to the protection of the natural environment and the importance of developing and integrating suitable sustainable environmental practices across Council operations. The Policy commits Council to six (6) Environmentally Sustainable Principles, which are:

1. Preserve and restore the natural environment
2. Utilise resources efficiently
3. Protect and enhance biodiversity
4. Monitor and reduce Council's environmental footprint
5. Strengthen Council's resilience to climate change
6. Display strong environmental leadership

The intent of the Corporate Sustainability Strategy (the Strategy) is to present sustainable actions which align with the six Environmentally Sustainable Principles.

### COMMENT

The Strategy highlights the importance of the region's natural assets and aims to make Council's operations more sustainable. It proposes that Council undertakes 28 actions over the next three (3) financial years (July 2017-2020). Each action is underpinned by one or more of Council's six adopted Environmental Sustainable Principles. The proposed 28 actions are grouped under the following headings:

1. Climate Change Mitigation
2. Climate Change Adaptation
3. Internal Processes
4. Government Engagement
5. Community Engagement
6. Internal Engagement
7. Reporting

The Strategy will be a dynamic document which will need to be reviewed on a regular basis to account for improved climate science, available information, and changing risks and associated impacts.

## PROPOSAL

That Council adopts the Corporate Sustainability Strategy 2017-2020.

## FINANCIAL/RESOURCE IMPLICATIONS

The 28 Sustainable Actions will be resourced appropriately within the relevant Operational Plans over the three (3) year period. Council is resourced to undertake the actions attributed to 2017/18, as identified in Appendix Two of the Strategy. Notably, Action 2.2 and 2.3, relating to the Coastal Hazard Adaptation Strategy will be 98% funded by a State grant which was awarded in June 2017.

## SUSTAINABILITY IMPLICATIONS

**Economic:** Council commits to utilising resources efficiently which, over time, should be of economic benefit to Council. Financial implications remain a part of Council's decision making, however environmental sustainability implications must be taken into account in line with the Policy.

**Environmental:** The adoption of the Strategy will commit Council to 28 Sustainable Actions which aim to protect and preserve the natural environment. Importantly actions to help address climate change are key actions and climate change is a major threat to the flora and fauna of the Wet Tropics, the Great Barrier Reef and coastline in Douglas

**Social:** The adoption of the Strategy will commit Council to displaying strong environmental leadership to the communities within Douglas, with an overall aim to improve the total quality of life, both now and in the future.

## CORPORATE/OPERATIONAL PLAN, POLICY REFERENCE

This report has been prepared in accordance with the following:

### Corporate Plan 2014-2019 Initiatives:

#### **Theme 3 - Improve Environmental Performance**

*3.1.5 - Investigate opportunities for improved recycling and re-use of waste deposited at landfill sites.*

*3.2.1 - Identify and invest in energy reduction initiatives in Council-owned facilities and in the delivery of services.*

#### **Theme 4 - Engage, Plan, Partner**

*4.1.2 - Undertake community engagement activities that are clearly identified and are appropriate in relation to the project.*

*4.2.2 - Provide leadership to secure beneficial social, environmental and economic outcomes for the Shire.*

## **Operational Plan 2015-2016 Actions:**

3.1.2 - Development of the Sustainability Strategy incorporating targets for reducing Council's carbon footprint.

### **COUNCIL'S ROLE**

Council can play a number of different roles in certain circumstances and it is important to be clear about which role is appropriate for a specific purpose or circumstance. The implementation of actions will be a collective effort and Council's involvement will vary from information only through to full responsibility for delivery.

The following areas outline where Council has a clear responsibility to act:

<b>Advocate</b>	Supporting communities and groups by advocating for certain actions from other organisations (usually other levels of government).
<b>Fully-Responsible</b>	Funding the full cost of a program or activity
<b>Information Provider</b>	Bringing people together to develop solutions to problems.

### **CONSULTATION**

**Internal:** Cross-departmental consultation has taken place in the development of the Strategy.

**External:** Nil

### **COMMUNITY ENGAGEMENT**

Consultation with the Douglas Communities will take place through various actions outlined within the Strategy.

### **ATTACHMENTS**

1. Corporate Sustainability Strategy 2017-2020 **[5.9.1]**

# CORPORATE SUSTAINABILITY STRATEGY

*2017-2020*

6 June 2017



*Improving Environmental Performance  
Ngaral Kulji Bubungu - Eastern Kuku Yalanji  
Pulmpa dakit jarral-a-kaling - Yirrganydji*

Image: Great Barrier Reef

Ordinary Council Meeting - 20 June 2017





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## Introduction

The Douglas region is comprised of World Heritage listed areas of natural beauty, ancient and complex ecosystems and is renowned for the biodiversity of its flora and fauna. The rainforests of the Wet Tropics and the reefs and waters of the Great Barrier Reef (GBR) support a strong economy, with 1.2 million tourists visiting the Shire every year. Council is committed to protecting the natural environment and recognises the importance of developing and integrating suitable sustainable environmental practices across Council operations.

The Corporate Sustainability Strategy 2017-2020 (the Strategy) outlines actions which Council is committed to taking over the next three financial years to make its operations more sustainable. Each action is underpinned by one or more of Council's six adopted Sustainable Principles, which are: 1. Preserve and restore the natural environment; 2. Utilise resources efficiently; 3. Protect and enhance biodiversity; 4. Monitor and reduce Council's environmental footprint; 5. Strengthen Council's resilience to climate change; 6. Display strong environmental leadership.

The Strategy will be a dynamic, integrated and ongoing process which considers activities and decisions in terms of improved climate science, available information, changing risks and associated impacts. The Strategy will be reviewed on a regular basis to account for these changes and allow Council to make informed decisions based on the best available evidence and knowledge.

## Background

Our region's world renowned natural assets and environment are critical for biodiversity, cultural tradition, scientific research and maintaining the economic success of the region. However, the GBR, the Wet Tropics bioregion and our native species are under significant pressure from a number of factors, including climate change.

### Great Barrier Reef

Stretching more than 2,300 kilometres along the Queensland coast and covering an area of 38,000 square kilometres, the GBR contains the world's largest collection of coral reefs, with 400 types of coral, 1,500 species of fish and 4,000 types of mollusc (invertebrate animals) [UNESCO 2017]. The contribution of the GBR to the Queensland and Australian economy is estimated to be close to \$6 billion a year, generating over 69,000 jobs across the tourism, recreation, commercial fishing, scientific research and management industries [Great Barrier Reef Water Science Taskforce 2016]. Whilst the GBR is located outside of the Douglas Shire it is a key feature of the surrounding natural landscape and is affected by policies and practices within the shire. The GBR is under pressure from a range of sources, including climate change, poor water quality from land-based run-off, impacts from coastal development and direct use, which includes fishing, shipping and port activities. Long term monitoring by the Australian Institute of Marine Science shows the GBR has lost half its coral cover in the past 27 years [AIMS 2017a]. According to the Reef Water Quality Protection Plan 2013 this loss was due to storm damage (48%), crown-of-thorns starfish (42%) and bleaching (10%) [The State of Queensland 2013]. The GBR has experienced mass coral bleaching over two consecutive years (2016 & 2017), which has been a consequence of higher than average water temperatures and lack of cloud cover. Not all bleached coral will die, however corals under extensive periods of stress have less ability to make a full recovery [AIMS 2017b].

### Wet Tropics Bioregion

The Wet Tropics bioregion has some of the oldest continuously surviving tropical rainforests on earth [Wet Tropics Management Authority 2016a]. It provides an important record of the ecological and evolutionary

processes that has shaped the flora and fauna of Australia over the past 415 million years [Wet Tropics Management Authority 2016b]. Despite comprising a small proportion of Australia, the bioregion supports the highest biodiversity of any region. Over 2,800 plant species from 221 families are found in the bioregion, with more than 700 species (25%) being endemic to the area [Wet Tropics Management Authority 2016b]. Long term monitoring indicates that the biodiversity of the Wet Tropics is declining, with many species already reduced in both distribution area and population size. This is mainly due to disease, climate change, habitat fragmentation, weeds and feral animals [Wet Tropics Management Authority 2017b]. The number of known weeds in the Wet Tropics bioregion has grown rapidly over the past 50 years to over 500 species. Weeds can invade, disrupt and transform ecosystems, which can severely affect native species. There are a number of feral animals in the bioregion, which include feral pigs, dogs, cattle, cane toads, cats, rats and Indian mynas. Whilst limited data is currently available on the numbers and impact of feral animals, it has been estimated that there are approximately 27,000 feral pigs living in the bioregion. Climate change poses a serious risk to the Wet Tropics, it is predicted that seven frog species, five mammal species, three bird species and three skink species would lose over half their present habitat with only a 1°C temperature increase [Wet Tropics Management Authority 2017c].

### Iconic Fauna and Flora

The Douglas Shire and surrounding marine areas are home to many iconic species of fauna and flora, including the southern cassowary, dugongs, fan palms and mangroves.

The southern cassowary is an iconic symbol of the Wet Tropics and is considered a 'keystone species', due to its critical role in dispersing rainforest plant seeds. However Queensland's Wet Tropics cassowary population is in decline. The greatest threat to their survival is the destruction and fragmentation of their habitat, car strikes, dog attacks and possibly disease [Wet Tropics Management Authority 2017c]. The GBR is an important area of habitat for Dugongs as this is one of the few marine protected areas in the world where they are protected. In recent decades there has been a decline in dugong numbers in the GBR. Dugongs are subject to a range of human threats, including entanglement in shark and fishing nets, entanglement in marine debris, loss and degradation of important habitats such as seagrass meadows, hunting and collision with boats [Commonwealth of Australia 2015].

The iconic fan palm (*Licuala ramsayi*) is one of the most distinctive palms in the region. Fan palms grow to a height of over six meters and prefer shady, protected stream banks and areas of poor drainage [Wet Tropics Management Authority 2017e]. The fan palm is a slow growing species and susceptible to habitat fragmentation, hydrology changes and invasions from weeds, such as pond apple (*Annona glabra*) [Wet Tropics Management Authority 2017f]. Mangroves are the collection of salt tolerant plants that are found along coastal areas and up rivers in the tropics and subtropics. Mangrove forests provide shelter and food for a wide range of animals, especially invertebrates and juvenile marine species. They provide a living buffer between the land and the sea, the dense silt amassed by their root systems prevents erosion from their landward side while it also minimises erosion from wave activity on the seaward side [Wet Tropics Management Authority 2017g]. They are also important carbon sinks, storing two to four times the amount of carbon that tropical rainforests can store [ABC Science 2011].

### Climate Change

Climate change is a change in the pattern of weather and related changes in oceans, land surfaces and ice sheets, occurring over a period of ten years or longer [Australian Academy of Science 2017]. Warming of the climate system is unequivocal, and since the 1950s there have been noticeable changes on a global scale. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, and sea level has risen [IPCC 2014]. This is largely the result of increasing anthropogenic (human induced)

greenhouse gas emissions which have increased since the pre-industrial era, driven largely by economic and population growth, and are now higher than ever. This has led to atmospheric concentrations of carbon dioxide, methane and nitrous oxide that are unprecedented in at least the last 800,000 years [IPCC 2014].

At the 21st United Nations Framework Convention on Climate Change staged in Paris in December 2015, more than 200 nations, including Australia, accepted unanimously that urgent action is required to reduce global carbon emissions [Queensland Government 2017]. Following the convention Australia ratified the Paris Agreement, a global climate agreement which aims to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels; and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius [UNFCCC 2017]. The Federal Government plans to reduce carbon emissions by boosting energy productivity, reducing waste, rehabilitating degraded land, increasing renewable energy and driving innovation [Department of the Environment and Energy 2017].

### **Council's Six Sustainable Principles**

Council has adopted six sustainable principles, which are:

1. Preserve and restore the natural environment
2. Utilise resources efficiently
3. Protect and enhance biodiversity
4. Monitor and reduce Council's environmental footprint (*climate change mitigation*)
5. Strengthen Council's resilience to climate change (*climate change adaptation*)
6. Display strong environmental leadership

The sustainable principles are included within the Corporate Sustainability General Policy and are described in detail below.

#### **1. Preserve and Restore the Natural Environment**

Council has a duty to preserve the natural environment and to ensure that all operations and works are completed with the least amount of disruption to the environment as practically possible. This is linked to the Intergenerational Equality Principle, where the present generation has a guardian duty to protect the natural environment for future generations. Council acknowledges the importance of environmental restoration activities and has incorporated many of these activities into business as usual operations. Council currently undertakes revegetation projects in optimal locations across the Shire. This can involve the planting of native species to stabilise dunes in erosion prone areas.

#### **2. Utilise Resources Efficiently**

Council is committed to utilising resources in an efficient manner. This involves incorporating the Waste Management Hierarchy into Council decision making. The Waste Hierarchy is a guide for prioritising waste management practices with the objective of achieving optimal environmental outcomes. The most preferable option in the hierarchy is to avoid producing the waste in the first place, this is followed by reduce, reuse, recycle, recover, treat and disposal. The Procurement General Policy sets out Council's position on procuring goods and services. Council is committed to obtaining value for money in all purchasing activities whilst advancing economic, social and environmental priorities and commitments.



### **3. Protect and Enhance Biodiversity**

Biodiversity, or biological diversity, is the variety of all life forms. This includes the different animals, plants, micro-organisms and fungi, their genetic diversity and the marine, terrestrial and freshwater ecosystems that they form. Biodiversity is essential to the maintenance of life on earth. It provides the basis for our economic prosperity and social wellbeing, as well as providing ecosystem services such as clean air and water. However, biodiversity is also vulnerable, specifically to habitat degradation, species population decline and potential extinction from threatening processes such as habitat fragmentation and land use changes. Council is committed to protecting and enhancing the biodiversity in the Douglas Shire by ensuring it operates sustainably and through targeted projects, such as weed and pest management.

### **4. Monitor and Reduce Council's Environmental Footprint**

Council is committed to playing its role in the mitigation of climate change by monitoring and reducing its environmental footprint. Council will do this by calculating a carbon footprint baseline. A carbon footprint is the total greenhouse gas (GHG) emissions caused directly and indirectly by an individual, organisation, event or product and is expressed as a carbon dioxide equivalent (CO<sub>2</sub>e). A carbon footprint accounts for the six Kyoto GHG emissions, which are: Carbon Dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), Nitrous Oxide (N<sub>2</sub>O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs) and Sulphur Hexafluoride (SF<sub>6</sub>) [UNFCCC 2014]. Climate change is one of the biggest threats to the natural environment and it is widely acknowledged that reducing global carbon emissions is critical if we are to save the GBR. Calculating a carbon footprint will help Council to quantify the impact operations have on the natural environment and will provide a benchmark for future reductions. In addition, it will help Council to identify and prioritise effective opportunities to reduce its environmental impact.

### **5. Strengthen Council's Resilience to Climate Change**

Climate projections for Queensland's coastline indicate that by 2100 sea level is likely to rise by 0.8 meters and tropical cyclone activity will shift southwards. Whilst there is predicted to be fewer cyclones, there will be an increase in cyclone and coastal low intensity of up to 10% [QCoast<sub>2100</sub> 2016a]. The impact of these climatic changes on the Queensland coast is likely to be extensive and include accelerated coastal erosion, an increase in areas impacted by storm surges and king tides, and lead to the permanent inundation of low lying areas. The Douglas Shire is particularly at risk due to a high proportion of the population and assets being located on low lying land in close proximity to the coast. It is therefore important that Council considers the impact of climate change on the shire and incorporates this into Council's strategic and long-term planning. This will include consideration of any potential financial implications on Council and the community, and alignment with existing governance mechanisms.

### **6. Display Strong Environmental Leadership**

Council has a key role to play in displaying strong environmental leadership. As an elected body, Council responds to the aspirations of the Douglas Shire community to safeguard the long-term environment for future generations while meeting today's needs through policies, programs, partnerships, community engagement and advocacy.

## **Sustainability Strategy Actions**

Council has committed to undertaking 28 actions over the next three financial years with these being underpinned by Council's Six Sustainable Principles (*see Appendix One*). The 28 actions will be undertaken over the 2017/18, 2018/19 and 2019/20 financial year period (*see Appendix Two*) subject to available budget and resources. The actions primarily focus on environmental issues, whilst also considering linkages

across social, financial and cultural objectives. The Strategy aims to capture a number of actions, some of which are cross-departmental; however it does not capture a number of biodiversity, weed and pest management activities, as these are considered in detail in the Pest Management Action Plans. The Strategy outlines the 28 actions under seven headings, which are: 1. Climate Change Mitigation, 2. Climate Change Adaptation, 3. Internal Processes, 4. Government Engagement, 5. Community Engagement, 6. Internal Engagement and 7. Reporting.

### 1. Climate Change Mitigation

Council is committed to monitoring and reducing its environmental footprint by calculating a carbon footprint covering Council's operations. This will involve calculating a carbon footprint baseline for the financial year 2015/16 covering emissions from a number of sources, such as energy use, waste, water and business travel. Council will verify this carbon footprint either internally or externally before committing to carbon reduction targets, for example an X% reduction by 2025 based on 2015/16 levels. The carbon footprint will help Council understand its most carbon intensive operations and identify and prioritise effective opportunities to reduce its environmental impact. In addition, Council will develop a Climate Change Policy outlining Council's position on mitigating and adapting to climate change. The five sustainability actions linked to Council's carbon footprint have been summarised below:

<b>Climate Change Mitigation Sustainability Actions</b>	
<i>1.1</i>	<i>Calculate Carbon Footprint Baseline</i>
<i>1.2</i>	<i>Verify Carbon Footprint Baseline</i>
<i>1.3</i>	<i>Set Carbon Reduction Targets</i>
<i>1.4</i>	<i>Explore Carbon Reduction Opportunities</i>
<i>1.5</i>	<i>Climate Change Policy</i>

### 2. Climate Change Adaptation

In 2016 the Queensland Government launched QCoast<sub>2100</sub>, a program which gives local governments impacted by coastal hazards the framework and funds to develop a Coastal Hazard Adaptation Strategy (CHAS). The CHAS will enable Council to develop a medium to long term coastal management plan addressing projected sea level rises, more intense cyclones and accelerated coastal erosion. In addition, the strategy will include a stakeholder engagement and consultation component, which is crucial for managing expectations around adaptation, disaster management and resilience. The LGAQ Minimum Standards and Guidelines working document provides guidance and minimum requirements for the CHAS [QCoast<sub>2100</sub> 2016b]. The Guidelines require Council to work through eight phases, which are:

Phase 1: Plan for life-of-project stakeholder communication and engagement

Phase 2: Scope coastal hazard issues for the area of interest

Phase 3: Identify areas exposed to current and future coastal hazards

Phase 4: Identify key assets potentially impacted

Phase 5: Undertake a risk assessment of key assets in coastal hazard areas

Phase 6: Identify potential adaptation options

Phase 7: Undertake a socio-economic appraisal of adaptation options

Phase 8: Strategy development, implementation and review

Council completed Phases 1 and 2 in the financial year 2016/17 and will continue to progress through the phases as grant funds are released. Whilst undertaking Phase 2 it was identified that there was a need to undertake local erosion mapping for the Douglas Shire, this has therefore been factored into the CHAS. The four sustainability actions linked to the CHAS have been summarised below:

<b>Climate Change Adaptation Sustainability Actions</b>	
2.1	<i>Commission Local Erosion Mapping</i>
2.2	<i>CHAS Program Phases 3-4</i>
2.3	<i>CHAS Program Phases 5-8</i>
2.4	<i>Commence CHAS Implementation</i>

### 3. Internal Processes

Council is committed to integrating sustainability practices and activities into business as usual operations and work practices by developing a series of departmental specific environmental plans. An overarching Environmental Policy for Council will be developed initially, which will outline the purpose and aims of plans. Departmental plans will follow after extensive consultation and input from the relevant department subject to adequate resources and budget. Council officers are working on a Closure and Post Closure Plan for Killaloe Landfill as the site nears its end of life. This Plan will set out the decommissioning process and will extend for at least thirty years after closure, considering a number of factors such as groundwater and surface water evaluation, and maintenance of vegetation in the area. In addition, Council aims to integrate sustainable principles and practices into all existing management frameworks. It is acknowledged that some management frameworks, such as the Capital Works Scorecard and Procurement General Policy, already consider sustainability principles. The four sustainability actions linked to internal processes have been summarised below:

<b>Internal Processes Sustainability Actions</b>	
3.1	<i>Environmental Policy</i>
3.2	<i>Environmental Plans</i>
3.3	<i>Development of a Closure and Post Closure Plan for Killaloe Landfill</i>
3.4	<i>Integrate Sustainable Principles into Management Frameworks</i>

### 4. Government Engagement

Council acknowledges its responsibility to engage and work with governmental departments on sustainability related issues. Council is a member of the Great Barrier Reef Marine Park Authority's Reef Guardian Council stewardship program. The Reef Guardian Council program recognises the actions councils take to protect the GBR and provides a forum for information sharing and best practice between councils located in the Reef catchment. Council will continue to be an active member of the Reef Guardian Council Steering Group and the Reef Guardian Council Working Group. Council also prepares two annual reports as part of its Reef Guardian Council membership which are considered under the Sustainability Strategy Action 7 Reporting.

In 2017 Council became a Wet Tropics Healthy Waterways partner. The partnership program is an initiative of the Reef 2050 Long-Term Sustainability Plan and aims to coordinate the pooling of shared water quality monitoring data. The Partnership releases an annual Wet Tropics Pilot Report Card which aims to highlight

the health of the Wet Tropics waterways and the quality of water flowing to the GBR. Council has agreed to expand its current water monitoring, particularly in Dickson Inlet and the Mossman River, to help fill gaps in the current report card. In addition, Council will continue to respond to government department requests for comments on a range of environmental topics, including proposed policy changes and requests for information. The three sustainability actions linked to government engagement have been summarised below:

<b>Government Engagement Sustainability Actions</b>	
4.1	<i>Reef Guardian Council</i>
4.2	<i>Wet Tropics Healthy Waterways Partnership</i>
4.3	<i>State/Agency Submissions on Environmental Topics</i>

## 5. Community Engagement

Council recognises the strong sustainability aspirations of the Douglas Shire community and endeavours to work with the community on a number of sustainability initiatives. This includes engaging with local community groups, such as the Douglas Local Marine Advisory Committee (Douglas LMAC) and the Douglas Shire Sustainability Group (DSSG). Council will continue to support the 'Plastic Free Douglas' campaign which encourages retailers and shoppers within the shire to voluntarily refrain from using single-use plastic bags. Council supports the Queensland Government's commitment to implement a State-wide ban on retailers issuing light-weight disposable plastic bags by June 2018.

Council will prepare a Douglas Communities Sustainability Strategy, which will include public consultation to capture the community's key sustainability concerns and aspirations. From 2018 Council will support the World Wildlife Fund for Nature's annual event Earth Hour. This event encourages individuals, businesses and organisations to turn off all lights for one hour to highlight the need for global action around climate change. In 2017 3,100 landmarks around the world, including the Sydney Opera House and London's Big Ben which turned off their lights for one hour in support of climate change action [WWF 2017].

Council will facilitate a number of public workshops in the Shire aiming to educate the community on environmental issues and sustainable practices. This could include interactive recycling workshops teaching schools and the Douglas Communities what items can be recycled in the Shire. In addition, Council is committed to engaging with local businesses on sustainability issues, this will require further scoping out, but initially could involve investigating a Local Business Sustainability Award sponsored by Council. The six sustainability actions linked to community engagement have been summarised below:

<b>Community Engagement Sustainability Actions</b>	
5.1	<i>Engage with Local Community Groups</i>
5.2	<i>Plastic Free Douglas</i>
5.3	<i>Douglas Communities Sustainability Strategy</i>
5.4	<i>Participate in Earth Hour</i>
5.5	<i>Public Workshops on Environmental Topics</i>
5.6	<i>Investigate a Local Business Sustainability Award</i>

## 6. Internal Engagement

Council is committed to operating sustainably and encourages all Council employees to adopt sustainable practices in the workplace. Council aims to do this through a series of internal engagement activities.

Phase one will include the preparation and distribution of a Sustainability E-Newsletter, highlighting sustainable practices in the workplace, myth busters and sustainability activities Council is currently undertaking. It will also include the distribution of Council branded reusable bags to employees to reduce the amount of single-use plastic bags used particularly at lunch-time. Phase two will involve a sustainability section on Council's intranet page which will share information on Council's carbon footprint and sustainability messaging. The two sustainability actions linked to internal engagement have been summarised below:

<b>Internal Engagement Sustainability Actions</b>	
6.1	<i>Internal Engagement Phase 1</i>
6.2	<i>Internal Engagement Phase 2</i>

## 7. Reporting

Council is committed to reporting on sustainability and environmental action it undertakes. Council's membership of the Reef Guardian Council program requires it to publish an annual Reef Guardian Council Action Plan and an annual Reef Guardian Council Highlights Report. The purpose of the Reef Guardian Council Action Plan is to document council actions and projects that contribute to the health of the GBR. All actions should align with the GBR 2050 Long-Term Sustainability Plan, which has seven overarching themes: ecosystem health, biodiversity, heritage, water quality, community benefits, economic benefits and governance. The annual Reef Guardian Council Highlights Report showcases actions undertaken by councils, promoting best practice and innovative action taken to protect the GBR.

In 2017/18 Council will prepare an annual Carbon Footprint Report which will document emissions released through Council's operations and include Council's carbon reduction commitment targets. In addition, Council will publish a State of Environment Report, documenting all activities Council is undertaking to improve the Douglas Shire environment. This will include biodiversity and biosecurity activities, such as pest and weed management and community education programs. The four sustainability actions linked to reporting have been summarised below:

<b>Reporting Sustainability Actions</b>	
7.1	<i>Reef Guardian Council Action Plan</i>
7.2	<i>Reef Guardian Council Highlights Report</i>
7.3	<i>Carbon Footprint Report</i>
7.4	<i>State of Environment Report</i>

## Conclusion

This Strategy outlines the 28 Sustainability Actions which Council has committed to undertaking over the next three financial years. Each action is underpinned by one or more of Council's six adopted Sustainable Principles, which are: 1. Preserve and restore the natural environment; 2. Utilise resources efficiently; 3. Protect and enhance biodiversity; 4. Monitor and reduce Council's environmental footprint; 5. Strengthen Council's resilience to climate change; 6. Display strong environmental leadership. Council recognises the importance of the region's natural assets and is committed to play its role in their protection and long-term sustainability.



## Appendix One

**Table One: Sustainability Strategy Actions Linked to Council's Six Sustainable Principles**

Category	Sustainability Strategy Actions	1	2	3	4	5	6
		Preserve & Restore the Natural Environment	Utilise Resources Efficiently	Protect & Enhance Biodiversity	Monitor & Reduce Council's Environmental Footprint	Strengthen Council's Resilience to Climate Change	Display Strong Environmental Leadership
Climate Change Mitigation	1.1 Calculate Carbon Footprint Baseline				X		
	1.2 Verify Carbon Footprint Baseline				X		
	1.3 Set Carbon Reduction Targets				X		
	1.4 Explore Carbon Reduction Opportunities		X		X		
	1.5 Climate Change Policy	X	X	X	X	X	X
Climate Change Adaptation	2.1 Commission Local Erosion Mapping					X	
	2.2 CHAS Program Phases 3-4					X	
	2.3 CHAS Program Phases 5-8					X	
	2.4 Commence CHAS Implementation					X	X
Internal Processes	3.1 Environmental Policy	X	X	X			X
	3.2 Environmental Plans	X	X	X	X		X
	3.3 Development of a Closure and Post Closure Plan for Killaloe Landfill	X		X	X		
	3.4 Integrate Sustainable Principles into Management Frameworks	X	X	X	X		X
Government Engagement	4.1 Reef Guardian Council	X					X
	4.2 Wet Tropics Healthy Waterways Partnership	X					X
	4.3 State/Agency Submissions on Environmental Topics						X
Community Engagement	5.1 Engage with Local Community Groups	X	X	X			
	5.2 Plastic Free Douglas						X
	5.3 Douglas Communities Sustainability Strategy	X	X	X	X	X	X
	5.4 Participate in Earth Hour						X
	5.5 Public Workshops on Environmental Topics	X	X	X			X
	5.6 Investigate a Local Business Sustainability Award						X
Internal Engagement	6.1 Internal Engagement Phase 1	X	X	X	X		
	6.2 Internal Engagement Phase 2	X	X	X	X		
Reporting	7.1 Reef Guardian Council Action Plan	X		X			X
	7.2 Reef Guardian Council Highlights Report						X
	7.3 Carbon Footprint Report				X		X
	7.4 State of Environment Report						X

## Appendix Two

**Table Two: Sustainability Strategy Actions by Financial Year**

Category	Sustainable Strategy Actions	2017/18	2018/19	2019/20
Climate Change Mitigation	1.1 Calculate Carbon Footprint Baseline	X		
	1.2 Verify Carbon Footprint Baseline	X		
	1.3 Set Carbon Reduction Targets	X		
	1.4 Explore Carbon Reduction Opportunities		X	X
	1.5 Climate Change Policy	X	X	
Climate Change Adaptation	2.1 Commission Local Erosion Mapping	X		
	2.2 CHAS Program Phases 3-4	X		
	2.3 CHAS Program Phases 5-8		X	
	2.4 Commence CHAS Implementation			X
Internal Processes	3.1 Environmental Policy	X		
	3.2 Environmental Plans		X	X
	3.3 Development of a Closure and Post Closure Plan for Killaloe Landfill	X	X	
	3.4 Integrate Sustainable Principles into Management Frameworks		X	X
Government Engagement	4.1 Reef Guardian Council	X	X	X
	4.2 Wet Tropics Healthy Waterways Partnership	X	X	X
	4.3 State/Agency Submissions on Environmental Topics	X	X	X
Community Engagement	5.1 Engage with Local Community Groups	X	X	X
	5.2 Plastic Free Douglas	X	X	X
	5.3 Douglas Communities Sustainability Strategy		X	X
	5.4 Participate in Earth Hour	X	X	X
	5.5 Public Workshops on Environmental Topics		X	
	5.6 Investigate a Local Business Sustainability Award			X
Internal Engagement	6.1 Internal Engagement Phase 1	X		
	6.2 Internal Engagement Phase 2		X	
Reporting	7.1 Reef Guardian Council Action Plan	X	X	X
	7.2 Reef Guardian Council Highlights Report	X	X	X
	7.3 Carbon Footprint Report	X	X	X
	7.4 State of Environment Report		X	X

## References

- ABC Science 2011. Mangroves excel at storing carbon. [ONLINE] Available at: <http://www.abc.net.au/science/articles/2011/04/04/3181798.htm> [Accessed 29 May 2017].
- AIMS 2017a. State of the Great Barrier Reef. [ONLINE] Available at: <http://www.aims.gov.au/factsheets> [Accessed 29 May 2017].
- AIMS 2017b. Media Release – Second wave of mass bleaching unfolding on Great Barrier Reef. [ONLINE] Available at: <http://www.aims.gov.au/docs/media/latest-releases> [Accessed 29 May 2017].
- Australian Academy of Science 2017. Climate Change. [ONLINE] Available at: <https://www.science.org.au/learning/general-audience/science-booklets-0/science-climate-change/1-what-climate-change> [Accessed 29 May 2017].
- Commonwealth of Australia 2015. Reef 2050 Long-Term Sustainability Plan. [ONLINE] Available at: <https://www.environment.gov.au/marine/gbr/long-term-sustainability-plan> [Accessed 29 May 2017].
- Department of the Environment and Energy 2017. Climate Change. [ONLINE] Available at: <http://www.environment.gov.au/climate-change> [Accessed 29 May 2017].
- Great Barrier Reef Water Science Taskforce 2016. Final Report. [ONLINE] Available at: <http://www.ehp.qld.gov.au/assets/documents/reef/gbrwst-finalreport-2016.pdf> [Accessed 29 May 2017].
- IPCC 2014 Climate Change 2014 Synthesis Report Summary for Policymakers. [ONLINE] Available at: <https://www.ipcc.ch/report/ar5/syr/> [Accessed 29 May 2017].
- QCoast<sub>2100</sub> 2016a. Queensland Local Government Coastal Hazard Adaptation Program. [ONLINE] Available at: [http://www.qcoast2100.com.au/documents/6143606/6155749/QCoast2100\\_Program%20Flyer.pdf](http://www.qcoast2100.com.au/documents/6143606/6155749/QCoast2100_Program%20Flyer.pdf) [Accessed 29 May 2017].
- QCoast<sub>2100</sub> 2016b. Developing a Coastal Hazard Adaptation Strategy: Minimum Standards and Guideline for Queensland Local Governments. [ONLINE] Available at: <http://www.qcoast2100.com.au/documents/6143606/6155749/Minimum%20Standards%20and%20Guideline> [Accessed 29 May 2017].
- Queensland Government 2017. Climate Change Mitigation. [ONLINE] Available at: <https://www.qld.gov.au/environment/climate/mitigating-effects/> [Accessed 29 May 2017].
- The State of Queensland 2013. Reef Water Quality Protection Plan 2013 [ONLINE] Available at: <http://www.reefplan.qld.gov.au/> [Accessed 29 May 2017].
- UNESCO 2017. Great Barrier Reef. [ONLINE] Available at: <http://whc.unesco.org/en/list/154> [Accessed 29 May 2017].
- UNFCCC 2014 Kyoto Protocol. [ONLINE] Available at: [http://unfccc.int/kyoto\\_protocol/items/3145.php](http://unfccc.int/kyoto_protocol/items/3145.php) [Accessed 29 May 2017].
- UNFCCC 2017. The Paris Agreement. [ONLINE] Available at: [http://unfccc.int/paris\\_agreement/items/9485.php](http://unfccc.int/paris_agreement/items/9485.php) [Accessed 29 May 2017].
- Wet Tropics Management Authority 2016a. Invasive Pests. [ONLINE] Available at: <http://wettropics.gov.au/site/user-assets/docs/invasivepestsbrochure2016lr.pdf> [Accessed 29 May 2017].
- Wet Tropics Management Authority 2016b. State of Wet Tropics Report 2015-2016 [ONLINE] Available at: <http://www.wettropics.gov.au/site/user-assets/docs/sowt2015-16b5-lres.pdf> [Accessed 29 May 2017].
- Wet Tropics Management Authority 2017a. Plants and Animals. [ONLINE] Available at: <http://www.wettropics.gov.au/plants-animals> [Accessed 29 May 2017].

Wet Tropics Management Authority 2017b. Threats to the World Heritage Area. [ONLINE] Available at: <http://wettropics.gov.au/other-threats-to-the-wha> [Accessed 29 May 2017].

Wet Tropics Management Authority 2017c. Threats to the World Heritage Area. [ONLINE] Available at: <http://wettropics.gov.au/climate-change> [Accessed 29 May 2017].

Wet Tropics Management Authority 2017d. Cassowaries. [ONLINE] Available at: <http://www.wettropics.gov.au/cassowaries> [Accessed 29 May 2017].

Wet Tropics Management Authority 2017e. Palms. [ONLINE] Available at: <http://www.wettropics.gov.au/palms> [Accessed 29 May 2017].

Wet Tropics Management Authority 2017f. Palm Leaf Rainforests of the Wet Tropics Bioregion. [ONLINE] Available at: <https://www.wettropics.gov.au/site/user-assets/docs/factsheets/wtmaVMWTB4a5b.pdf> [Accessed 29 May 2017].

Wet Tropics Management Authority 2017g. Mangroves. [ONLINE] Available at: <http://www.wettropics.gov.au/mangroves-info> [Accessed 29 May 2017].

WWF 2017. 2017 Highlights. [ONLINE] Available at: <https://www.earthhour.org/2017-highlights> [Accessed 29 May 2017].

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