



UniSC Carbon Management Plan **2023**



Contents

Foreword	2
1.0 Context for action	3
1.1 The scientific basis	3
1.2 The economic basis	4
1.3 The government basis	4
1.4 The university sector basis	5
2.0 Approach	6
2.1 Pillars	7
2.2 Commitments	7
2.3 Emissions boundary	8
2.4 UniSC carbon footprint	9
2.5 Forecast emissions	11
2.6 Workshops	12
3.0 Strategies and action plans	14
3.1 Vision	14
3.2 Commitments	14
3.3 Risks and benefits	14
3.4 Engagement action plan	14
3.5 Carbon abatement action plan	15
3.6 Teaching and research action plan	15
3.7 Management systems action plan	15
4.0 Action plans	16
4.1 Engagement action plan	16
4.2 Abatement action plan	17
4.3 Teaching and research action plan	18
4.4 Management systems action plan	20



Foreword

UniSC provides leadership, skills and solutions to tackle the complex issues impacting our communities – locally and globally.



Among the most critical issues of our generation is climate change, therefore it is vital we reduce emissions and embed sustainability across everything we do.

This revised Carbon Management Plan provides a road map to reducing UniSC's emissions over the short, medium and long term; while expanding our carbon management action across teaching and research.

We are very clear about our goals: To source 100 percent of grid-delivered electricity from renewable sources by 2029; and to reach carbon neutrality by 2029 even as we hold ourselves to new and even higher levels of accountability.

These goals will require commitment across the University. As we expand our reach and campus footprint, sustainable decision-making is critical to ensure we operate in the most resource-efficient way possible. Our students should also understand the importance of sustainability, regardless of what career they pursue, so we must embed the principles across our courses. And as research leaders we must share our knowledge with those who have the power to influence sustainability action beyond our campuses.

UniSC's holistic approach to sustainability is also reflected in our overarching Strategic Plan – where it contributes to our ultimate goal of enriching our regions, connecting with our communities and creating opportunities for all.

A handwritten signature in black ink that reads "Helen Bartlett". The signature is fluid and cursive.

Professor Helen Bartlett
Vice-Chancellor and President



1.0 Context for action

A Carbon Management Plan (CMP) is essential for universities to reduce their greenhouse gas emissions and tackle climate change. An effective plan establishes measurable targets, monitors progress and involves the entire university community. It provides an opportunity for universities to lead by example and demonstrate the practical steps that can be taken to create a more sustainable future.

Furthermore, it helps to establish a strong culture of sustainability within the university and communicate a commitment to environmental stewardship, particularly to students. Having a CMP in place demonstrates to students that their university is taking responsibility for, and is committed to reducing, harmful environmental impacts. Universities with strong CMPs are well positioned to align with global efforts to tackle the climate crisis and improve their environmental rankings.

1.1 The scientific basis

Due to historical carbon emissions, average global temperatures have increased by approximately one-degree Celsius from pre-industrial levels; in Australia it is higher at approximately 1.4° C. The Intergovernmental Panel on Climate Change's (IPCC) report, *Climate Change 2021: the Physical Science Basis* issued the strongest call to date for urgent and deep cuts to be made to global greenhouse gas emissions. The Working Group I Report¹ (WGI) concluded the window to deliver the "deep emissions cuts" needed to prevent the worst impacts of climate change is closing rapidly. Subsequent Working Group reports (WGII and WGIII) set out the impacts of climate change based on the latest data and the mitigation solutions, progress and pledges. These reports highlighted that while solutions to decarbonise are commercially available, current pledges and progress fall short of what is required.

A key message emerged from the WGI report: rapid reductions in emissions are required this decade to prevent long-term ecological and climate breakdown. The report predicts with near certainty that warming will exceed 1.5° C in the next two decades but accelerated abatement and removals can reverse this situation beyond 2050. Society has a fifty-fifty chance to limit warming to 1.5° C if we stay within an added global carbon budget of 500 billion tonnes. This gives us under ten years before exceeding 1.5° C, assuming pre-pandemic global emission rates.

If we want a better chance – two in three – of holding to 1.5° C of warming by mid-century, we can globally emit just 400 billion tonnes CO₂-e. We have even less time to act. The pathway for a safe future climate is to start today, make deep cuts to emissions and persist on the path towards net zero emissions.

¹ Climate Change 2021: The Physical Science Basis. Working Group I Contribution to the IPCC Sixth Assessment Report. 6 August 2021. <https://www.ipcc.ch/report/sixth-assessment-report-working-group-i/>

1.2 The economic basis

The *World Economic Forum's Global Risks Report 2023*² highlights that the failure to act on climate change remains the most severe global risk over the next decade, notwithstanding short-term global cost-of-living pressures. Climate change and biodiversity crises occupy the top four risks over the next decade, and six of the top ten (see Figure 1). The report highlights the need for governments and organisations to invest in sustainable solutions to mitigate their impacts and build a more resilient world.

1.3 The governmental basis

In June 2022, the new Australian Government committed to increase Australia's Nationally Determined Contribution (NDC) under the Paris Agreement. The updated commitment to the United Nations Framework Convention on Climate Change (UNFCCC) commits Australia to reduce greenhouse gas emissions by forty-three percent below 2005 levels by 2030 and reaffirms the commitment to reach net zero emissions by 2050. These targets have now been legislated.

At a sub-national level, the Queensland State Government increased its ambition to action on climate change and emissions in 2022.

The following five targets were set³:

- 50 percent renewable energy target by 2030
- 30 percent emissions reduction below 2005 levels by 2030
- 70 percent renewable energy by 2032
- 80 percent renewable energy by 2035
- Zero net emissions by 2050.

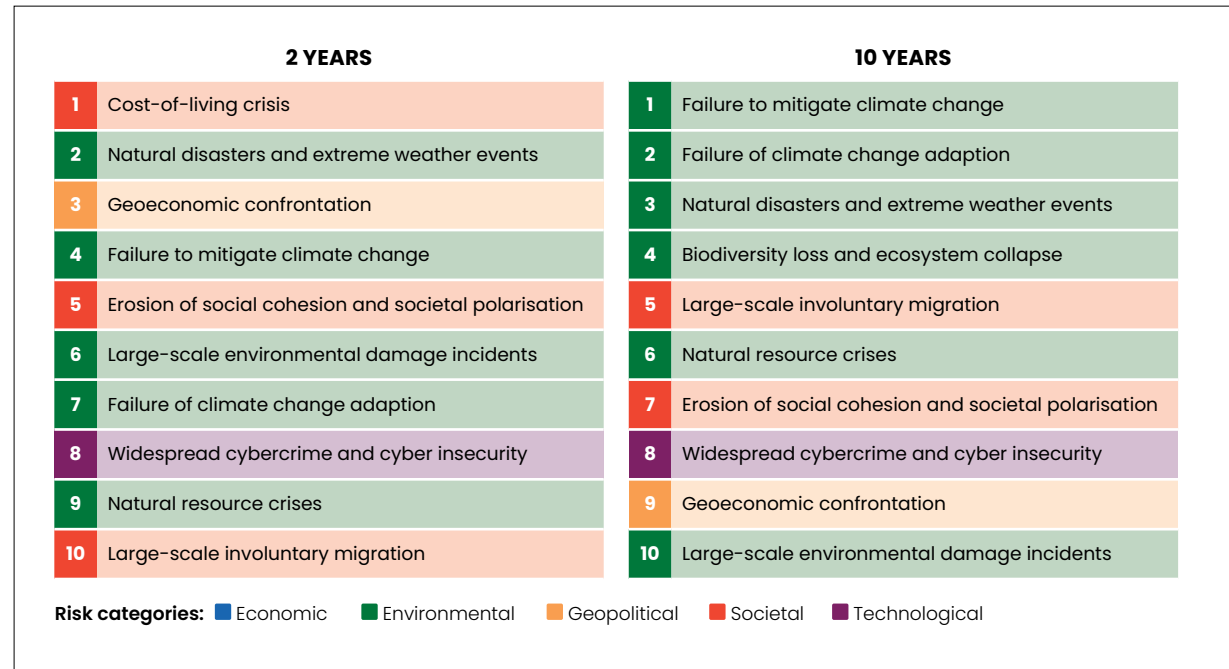


Figure 1: Global Risks Report: Risks to the global economy.

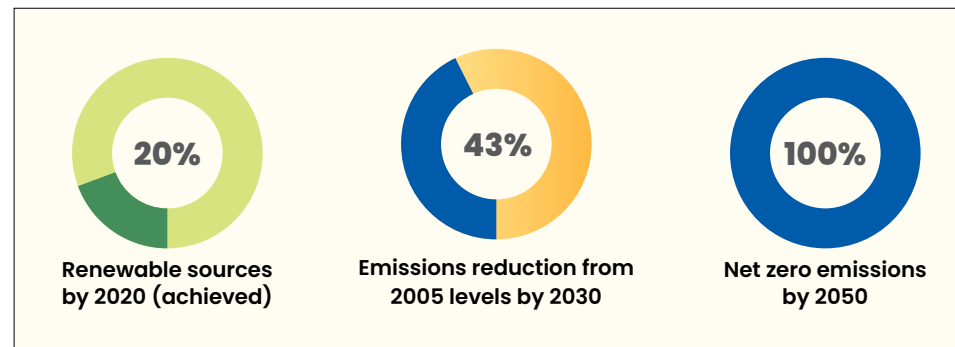


Figure 2: Australia's national renewable energy and emissions reduction goals.

2 Global Risks Report 2023. World Economic Forum. 11 January 2023. <https://www.weforum.org/reports/global-risks-report-2023/>

3 <https://www.des.qld.gov.au/climateaction>

1.4 The university sector basis

A total of twenty-four of Australia's universities had declared ambitious commitments for action to reduce greenhouse gas emissions by mid-2022. The majority of the sector's leaders have set out goals for 100 percent renewable electricity and carbon neutrality by 2030 or earlier; in terms of the scale and timing of commitments the sector is comfortably at the forefront of action by Australian organisations.

Times Higher Education (THE) Impact rankings⁴




The 2023 THE Impact rankings included fifteen Australian universities within the top 100 universities worldwide, including the top ranked institution in Western Sydney University, and nine in the top fifty, including the University of the Sunshine Coast (equal 29th).

Leading Australian universities are among the top fifty universities in both the overall rankings and specific Sustainable Development Goal (SDG) rankings related to action on climate change.

The University of the Sunshine Coast ranks 28th for its performance on SDG 13 (Climate Action), which is comparable to University of Technology Sydney.

Australia's highest ranked universities on climate action are University of Tasmania (ranked first), University of New South Wales Sydney (ranked second) and Western Sydney University (ranked seventh). University of Tasmania and Western Sydney University are both certified carbon neutral under the Australian Government's Climate Active standard.

Table 1: Climate related THE Impact rankings 2023: Australian universities.

University	Overall Impact ranking	 Affordable and Clean Energy	 Sustainable Cities and Communities	 Climate Action
Western Sydney University	1	21	5	7
University of Tasmania	5	=29	13	1
RMIT University	=7	=37	19	17
University of Technology Sydney	=14		24	=26
UNSW Sydney	=18	36	9	2
Monash University	21		=7	47
University of Newcastle	28		6	12
University of the Sunshine Coast	=29			28
Macquarie University	39	=33	36	13
The University of Queensland			18	
Australian National University				19
University of Wollongong				=41

⁴ The Times Higher Education Impact Rankings are the only global performance tables that assess universities against the UN Sustainable Development Goals. Sourced from <https://www.timeshighereducation.com/impactrankings>



2.0 Approach

UniSC adopted a Carbon Management Plan (CMP) in 2016 that committed the University to become carbon neutral. Acknowledging significant changes including the opening of the Moreton Bay campus, personnel and structural changes that have slowed progress in implementing the CMP and the financial downturn from COVID-19, UniSC engaged consultants, 100% Renewables, to conduct a review and revision of the CMP.

This revised CMP was developed after extensive consultation with a broad range of stakeholders and site visits across multiple campuses. It relies on an updated global and national context for emission reduction as well as a revised CY2021 UniSC carbon footprint. Key inputs include:

- A review of the key pillars and actions that were developed for the 2016 CMP was conducted to identify pillars and actions that should be retained and updated to reflect the current context.
- The scope of UniSC's carbon footprint was expanded to encompass more value chain Scope 3 greenhouse gas (GHG) emissions sources, bringing the University in line with the leading universities that are measuring and seeking to abate and offset more of their carbon footprint.
- Interviews were conducted to understand the plans for future expansion of UniSC Moreton Bay.
- Site visits to UniSC Moreton Bay and UniSC Caboolture were held to gain insight and compare the University's operations at large and small campuses.
- Engagement activities were conducted at multiple levels with students, academic and other staff and UniSC's Executive Team to gather input regarding targets, pillars and actions that should be developed and implemented in coming years.

The refreshed CMP serves as a road map for the University to drive initiatives that will enable it to reduce emissions and raise its profile in the tertiary education sector.

2.1 Pillars

The CMP includes action plans divided into four themes or pillars:

Engagement	Focused on improving the level of sustainability literacy amongst the broader community and driving behaviour change.
Abatement	A series of recommendations to actively reduce emissions and/or offset the University's carbon footprint.
Teaching and Research	A new focus for the CMP that provides an action plan for the integration of sustainability in the core of the University's purpose, equipping students with the tools required to be successful in a society where decarbonisation will become the norm.
Management	Provides a series of recommendations to support the successful implementation of the rest of the CMP.

2.2 Commitments

UniSC to source 100 percent of grid-delivered electricity from renewable energy sources by 2029

This commitment will have the highest impact on emissions (emissions reduction estimated at 42 percent of current footprint) and has the potential to secure longer term electricity prices in an unstable market. However, this instability also means that exact costs and benefits are hard to forecast. Furthermore, the pace of grid decarbonisation might reduce the total impact on emissions of this initiative.

UniSC to reach carbon neutrality (Scopes 1, 2 and 3) for its operations by 2029, including scope 1, 2 and key scope 3 emissions

This commitment is impacted by the larger footprint of UniSC (due to new campuses and facilities and the wider boundary requirements from Climate Active) and the significant increase in the cost of offsets.

As a result, the University would have to pay A\$135,000 to A\$600,000 on an annual basis for offset purchases at current price assuming its electricity consumption is all from renewable sources. On the other hand, achieving carbon neutrality will positively impact UniSC's THE Impact ranking.



2.3 Emissions boundary

A key improvement from the adopted 2016 CMP is this Plan's comprehensive assessment of UniSC's value chain, or scope 3 carbon footprint. Whereas the 2016 CMP included corporate business travel as its main non-energy scope 3 emissions source, this Plan has looked at the University's carbon footprint through the lens of the GHG Protocol's Corporate Value Chain (Scope 3) standard. This standard is adopted by the Australian Government's Climate Active standard, which is used by organisations to achieve carbon neutrality.

The standard organises scope 3 emissions into 15 categories. There are eight categories of upstream scope 3 emissions and seven categories of downstream scope 3 emissions that should be considered. In conducting voluntary emissions reporting, it is considered standard best practice for organisations to include scope 1 and 2 as well as material scope 3 emission sources in their boundary. This ensures the completeness and transparency of the carbon inventory.

Categories of scope 3 emissions sources that need to be considered are: purchased goods and services, capital goods, fuel and energy-related activities (not included in scope 1 or scope 2), upstream transportation and distribution, waste generated in operations, business travel, employee commuting, upstream leased assets, downstream transportation and distribution, processing of sold products, use of sold products, end-of-life treatment of sold products, downstream leased assets, franchises, and investments.

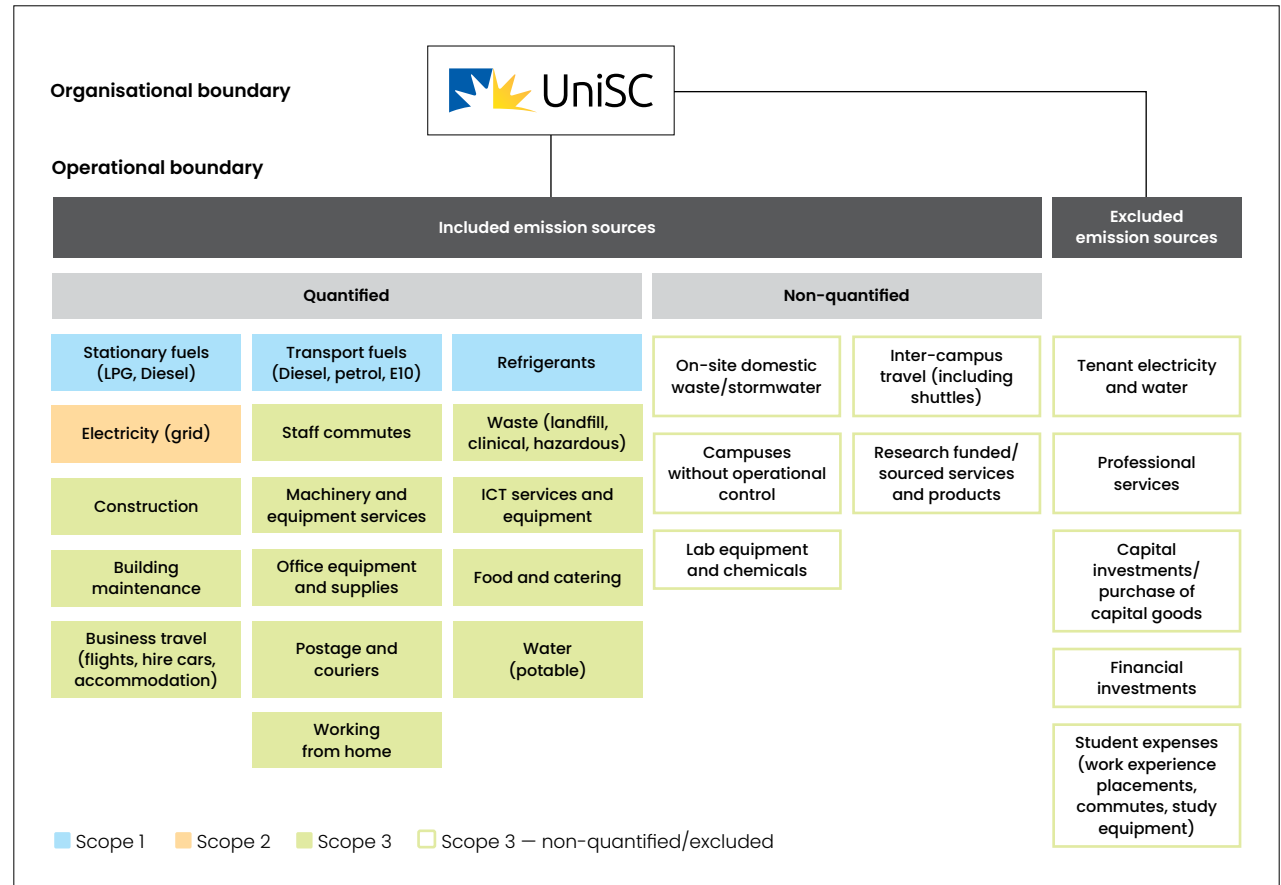


Figure 3: UniSC's carbon footprint boundary.

A boundary assessment workshop was conducted with University stakeholders to define the boundary of UniSC's carbon footprint. The assessment was conducted in line with Climate Active guidelines to define which emissions are relevant to the University's carbon footprint. The result is illustrated in figure 3.

New emissions sources can be added to UniSC's footprint in future years. With reference to other universities, the most likely near-term inclusions are professional services, capital investments/purchase of capital goods, and potentially electricity use by UniSC tenants. In the longer term, investments and student-related emissions could be considered.

2.4 UniSC carbon footprint

UniSC's carbon footprint within the selected boundary for CY2021 is shown below. It can be seen that while the single largest emissions source is electricity supplied to UniSC's campuses, scope 3 emissions are larger than both scope 1 and 2 emissions combined. Furthermore, due to Covid-19 restrictions, some emissions have fallen steeply from 'business-as-usual' trends, especially business travel. It is expected that future years will see a rebound of these emissions. As more buildings are built at Moreton Bay, scope 3 emissions for construction will also increase.

Emission source	Activity data	Unit	Scope 1	Scope 2	Scope 3	Total t CO ₂ -e	%
LPG – stationary	6	kl	10 t CO ₂ -e		1 t CO ₂ -e	11 t CO ₂ -e	0.04%
Diesel – stationary	33	kl	88 t CO ₂ -e		5 t CO ₂ -e	93 t CO ₂ -e	0.37%
Diesel – fleet	41	kl	112 t CO ₂ -e		6 t CO ₂ -e	118 t CO ₂ -e	0.47%
Petrol – fleet	54	kl	125 t CO ₂ -e		7 t CO ₂ -e	131 t CO ₂ -e	0.52%
Ethanol – fleet	0	kl	0 t CO ₂ -e		0 t CO ₂ -e	0 t CO ₂ -e	0.00%
Refrigerants	2,711	kg	138 t CO ₂ -e			138 t CO ₂ -e	0.55%
Electricity	12,858,239	kWh		9,387 t CO ₂ -e	1,029 t CO ₂ -e	10,415 t CO ₂ -e	41.69%
Employee commute	3,115	t CO ₂ -e			3,115 t CO ₂ -e	3,115 t CO ₂ -e	12.47%
ICT services and equipment	10,094,859	\$			2,572 t CO ₂ -e	2,572 t CO ₂ -e	10.29%
Construction of University buildings	9,089,615	\$			2,296 t CO ₂ -e	2,296 t CO ₂ -e	9.19%
Office equipment and supplies	8,747,569	\$			2,354 t CO ₂ -e	2,354 t CO ₂ -e	9.42%
Machinery equipment and services	14,347,749	\$			1,544 t CO ₂ -e	1,544 t CO ₂ -e	6.18%
Building maintenance	6,005,009	\$			1,268 t CO ₂ -e	1,268 t CO ₂ -e	5.08%
Food and catering	915,973	\$			355 t CO ₂ -e	355 t CO ₂ -e	1.42%
Air travel	1,071,488	km			225 t CO ₂ -e	225 t CO ₂ -e	0.90%
C and I waste	123	t			160 t CO ₂ -e	160 t CO ₂ -e	0.64%
Water supply	36,352	kl			82 t CO ₂ -e	82 t CO ₂ -e	0.33%
Postage and couriers	175,205	\$			63 t CO ₂ -e	63 t CO ₂ -e	0.25%
Business accommodation	1,022	nights			44 t CO ₂ -e	44 t CO ₂ -e	0.18%
Green waste	32	t			1 t CO ₂ -e	1 t CO ₂ -e	0.006%
Working from home	-7	t CO ₂ -e			-7 t CO ₂ -e	-7 t CO ₂ -e	-0.028%
TOTAL			473 t CO₂-e	9,387 t CO₂-e	15,124 t CO₂-e	24,984 t CO₂-e	100.00%

Table 2: UniSC detailed carbon footprint.



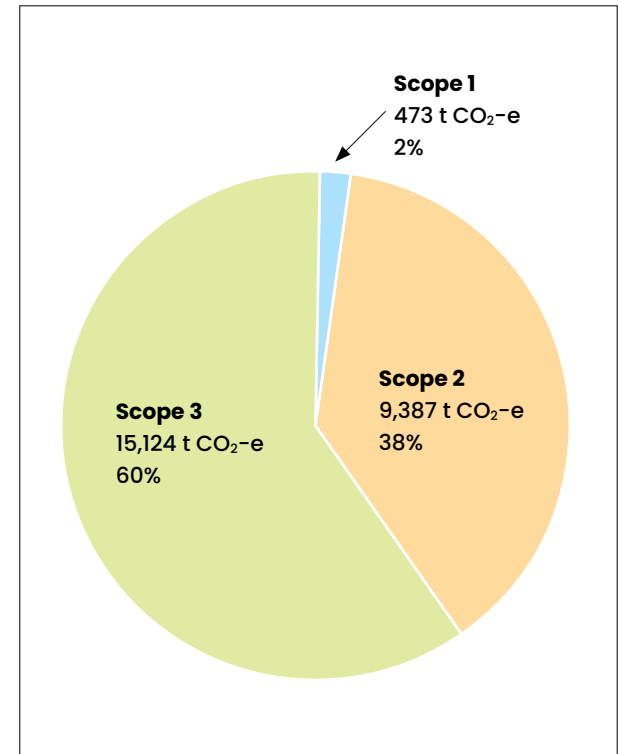
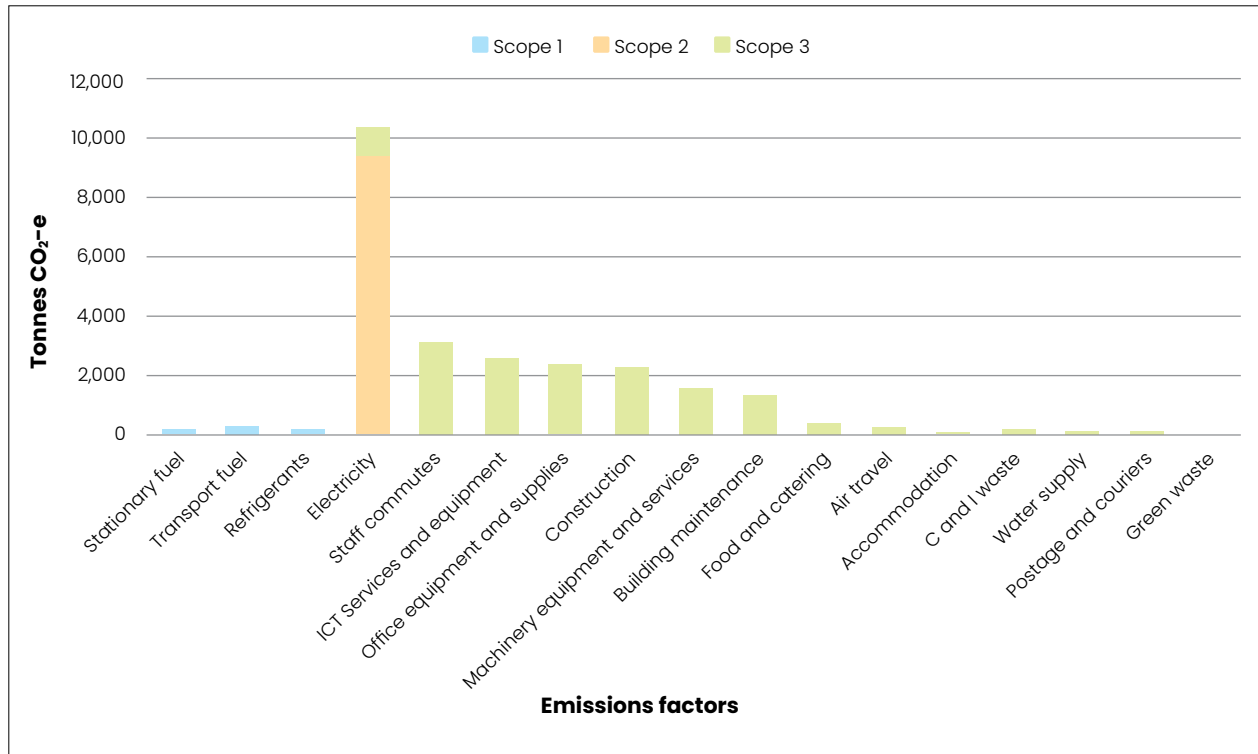


Figure 4: Detailed carbon footprint by emission source.

Figure 5: Carbon footprint by emissions scope.

2.5 Forecast emissions

The University of the Sunshine Coast is a growing institution, with future development of the UniSC Sunshine Coast campus and expansion of the UniSC Moreton Bay campus among the major areas of future growth, along with increases in student and staff numbers.

Forecasting of future energy demand, supply chain services and associated emissions is helpful so that an estimate of the carbon abatement task can be made. The following assumptions about growth were made drawing on information from UniSC, as well as on past changes in energy use and emissions:

- Underlying growth in energy demand and supply chain services of two percent per annum. Actual changes in demand for services such as business travel, employee commute, novated leasing, and the addition of EV charging on-campus with an associated decrease in petrol and diesel fleet will vary from this simple assumption. For simplicity within this strategy a straight-line two percent growth rate is used.
- Grid decarbonisation in the National Electricity Market (NEM) occurs aligned with the rate of change forecast by DISER (October 2021) applied to NEM emissions factors using electricity market-based accounting. Changes to the grid may occur sooner, with most States announcing accelerated transition to renewables (for example, Queensland State targets for renewable energy are now 50 percent by 2030, 70 percent by 2032 and 80 percent by 2035).
- No change is assumed to the current arrangements for treatment of LGCs from Sippy Downs on-site solar PV system.
- Step increase in Sunshine Coast electricity demand of five percent in CY2030 with campus improvement and development projects assumed to commence prior this time.

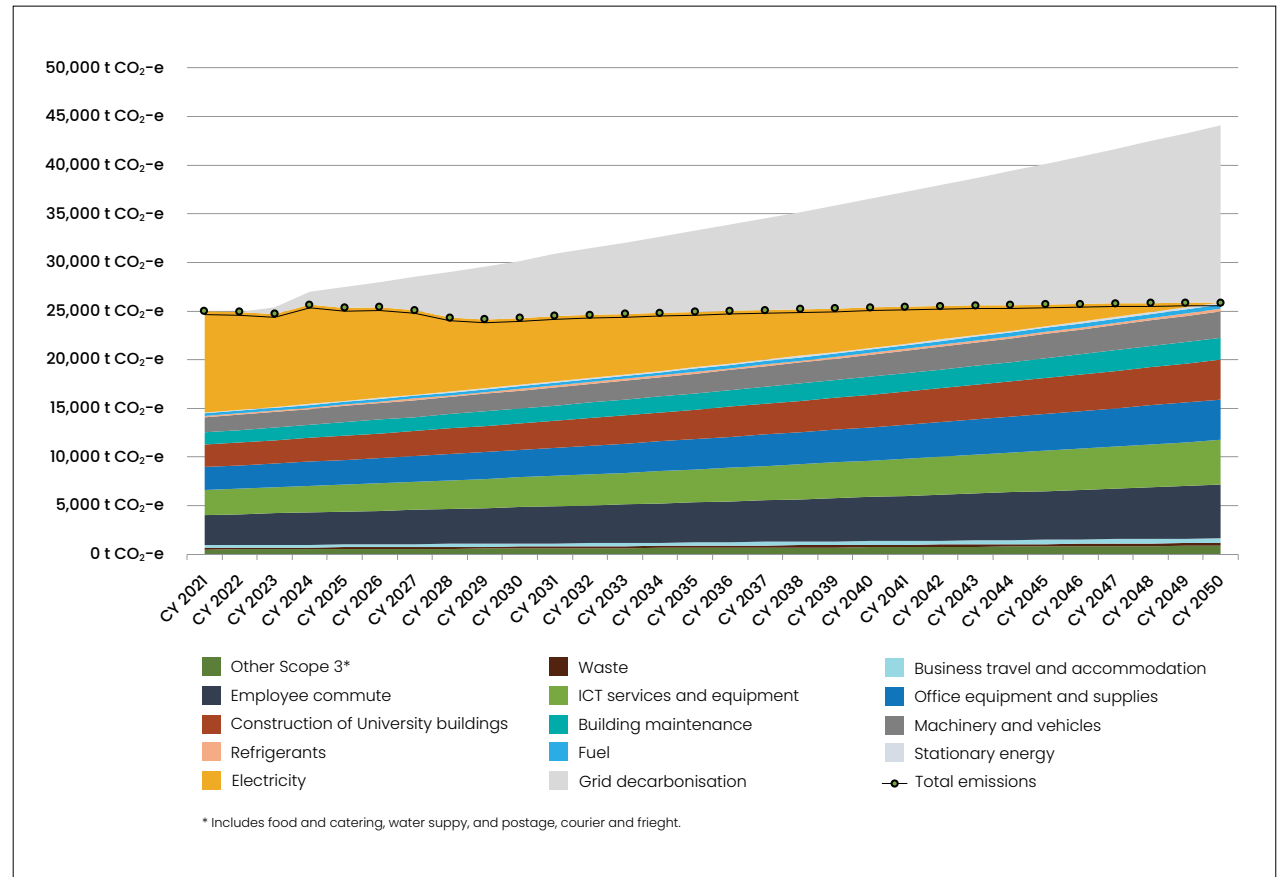


Figure 6: Business as usual emissions projection for UniSC.

- Increase in electricity demand for Moreton Bay of 1,512,401 kWh at CY2024 based on the opening of three new buildings and increased student load in line with estimates prepared by UniSC.

Actual changes year-on-year and changes to forecasts can be made by UniSC as the CMP evolves; however this provides a reasonable basis from which to forecast changes in future carbon emissions and develop abatement plans.

The key highlight to draw from this is that even with strong underlying growth in energy demand or supply chain services, the likely rapid decarbonisation of the grid will most likely result in little, if any, overall growth in total organisational emissions. In addition, as the grid decarbonises, the carbon footprint of some value chain services will also likely decline, so the business as usual (BaU) forecast of UniSC's emissions may be more favourable than is indicated in figure 6.

2.6 Workshops

Three workshops were delivered online with UniSC stakeholders across executive, academic staff, administrative staff and students. Global, sectoral context and UniSC's prior achievements and carbon footprint were presented to frame the workshops.

The key input that was sought from stakeholders was their responses to two questions.

1. What are three key justifications that support your view that the CMP has been successful (key success factors)?
2. List the top three priority abatement opportunities for UniSC to include in the new CMP (key abatement opportunities).

Success factors

A total of 142 free-text responses were received to this question across the three workshops, and these were arranged into nine themes. The top six success factors overall are, in ranked order:

1. Tangible emissions reduction
2. Improved stakeholder and community engagement
3. Climate leadership
4. Carbon neutral certification
5. More sustainable education, research and development
6. Improved governance and policies

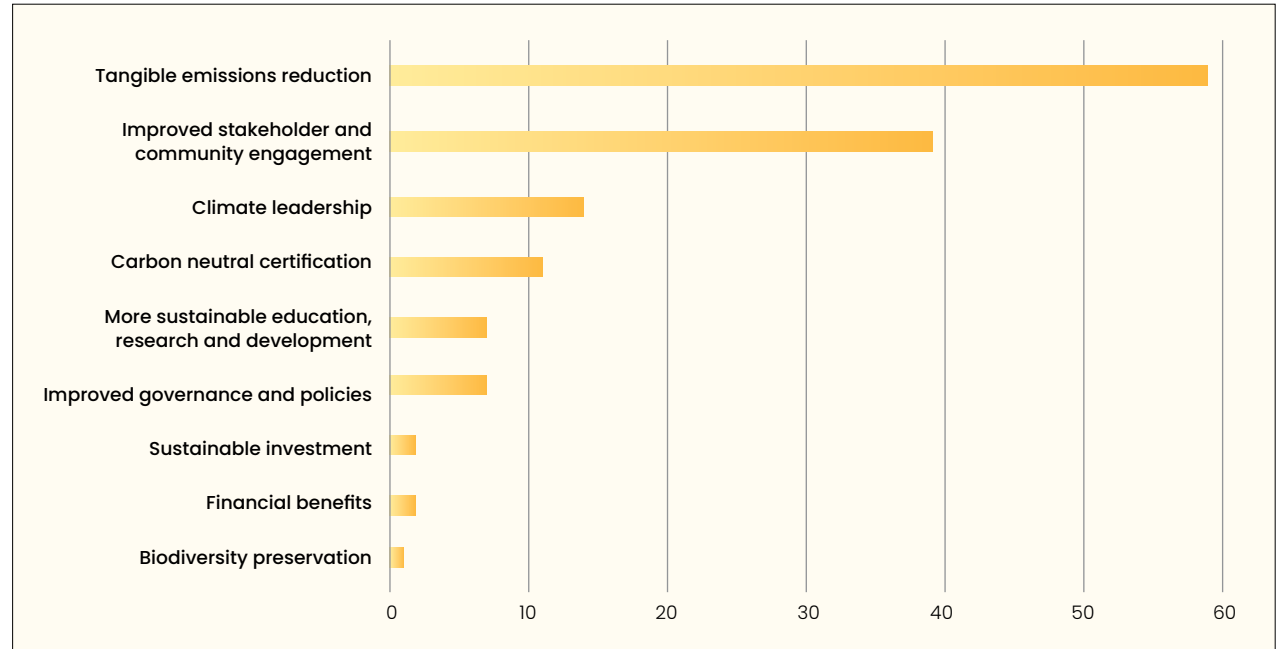


Figure 7: Stakeholders key success factors for the CMP.

Abatement opportunities

A total of 144 free-text responses were received to this question across the three workshops, and these were arranged into nine themes. The top six abatement opportunities overall are, in ranked order:

1. Sustainable transport
2. Sustainable procurement
3. Offset/Inset
4. Waste management and reduction
5. Energy efficiency
6. Renewable energy

After discussion with the executive team, the themes of stakeholder engagement and research and development were also retained as key aspects of abatement opportunities. Taking all of the inputs to this CMP into account – CMP2016, site visits, stakeholder engagement and carbon footprint analysis – a proposed revised CMP structure was developed.

The revised CMP builds on CMP2016, with the following additional components:

- Development of a clear vision for UniSC as a leader in climate action to guide implementation of all pillars of the CMP, and which is an outcome that can result from achievement of UniSC’s targets.
- Re-setting UniSC’s climate action targets for renewable energy and carbon emissions, having regard for the expanded scope of emissions that are included in this CMP; and extending the targets to aim for greater on-campus sustainable energy development that can support research, learning and industry engagement.
- The addition of a fourth ‘pillar’ of action in the ‘teaching and research’ area to more closely link UniSC’s abatement efforts to the core services of the university.

The updated structure of the CMP is shown in figure 9.

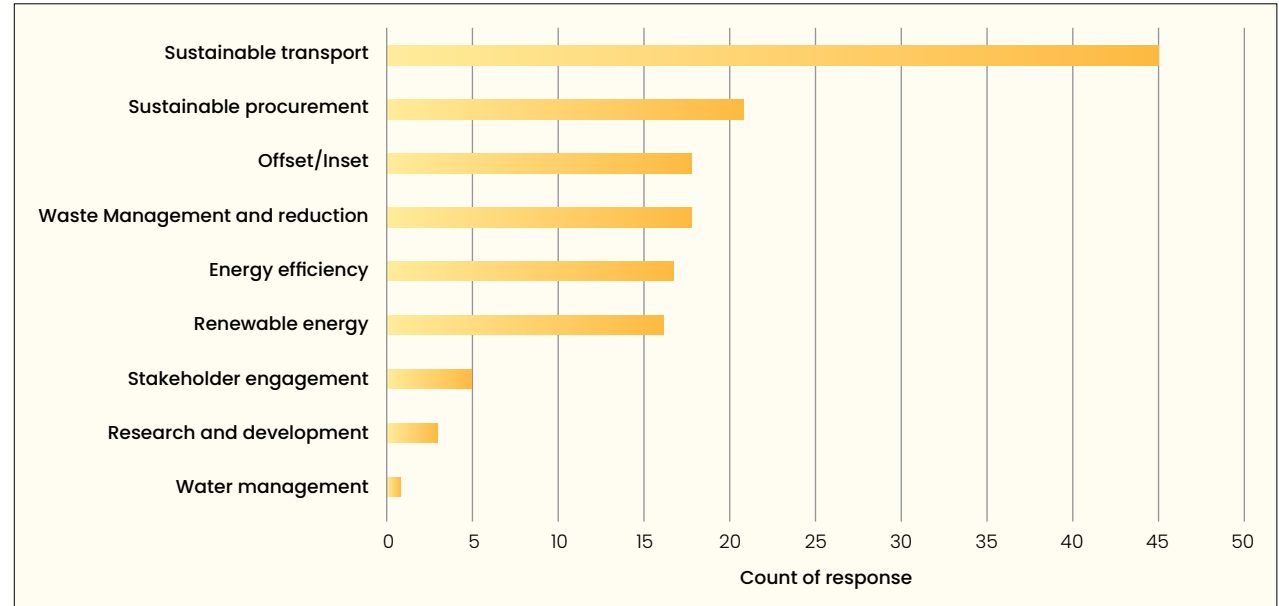


Figure 8: Stakeholders key abatement opportunities for the CMP.

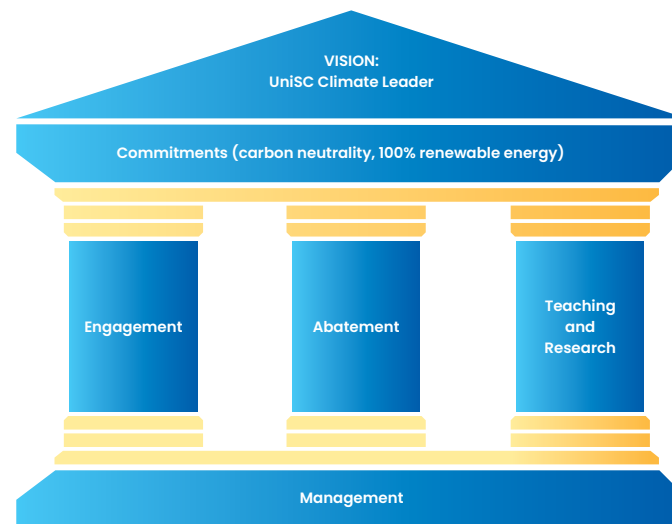


Figure 9: Four pillars of the CMP.

The key actions that sit under each of the elements of the CMP are listed in the next section, as well as the more detailed action plans.



3.0 CMP strategies and action plans

3.1 Vision

The University's Sustainability Operational Policy establishes the vision to create a sustainable future through teaching, research, community engagement and operations. This policy and its vision statement forms the basis for the vision of the CMP.

3.2 Commitments

The University of the Sunshine Coast is making two core commitments as part of this CMP: become carbon neutral in 2029 and source 100 percent grid-delivered electricity from renewable sources by 2029. Beyond this, UniSC is committing to progress the other actions within the revised CMP. For both targets and the actions that sit underneath them UniSC will seek to develop and implement solutions that are feasible and in line with the University's financial and asset management strategies.

3.3 Risks and benefits

The two main commitments and underlying Action Plan are designed to generate benefits, including a core focus of significantly reducing emissions. The abatement actions regarding renewable energy can provide stability in the currently volatile electricity market, reduce emissions and lessen the amount of offsets required to reach carbon neutrality. The engagement and teaching and research actions can increase the profile of sustainability amongst students and provide state-of-the-art research and teaching to drive climate action. The management actions are designed to build strong governance and align the University's core business with its strategic goals.

The risks inherent in this CMP are centred around opportunity costs. A commitment to carbon neutrality, with an expanded Scope 3 boundary, commits the University to ongoing costs including maintenance of on-site renewables and offset purchasing. Shifts in governmental policy, in particular towards grid decarbonisation, can cut into payback periods and reduce individual impact should that shift to accelerated action. The ability to provide an accurate cost/benefit analysis of each initiative is difficult in the space where technology and policy are rapidly changing.

3.4 CMP engagement action plan

Engagement actions in UniSC's Carbon Management Plan are based around four key measurable areas:

1. Develop and deliver communication and awareness programs.
2. Student and staff engagement initiatives.
3. Measurement and reporting of emissions and abatement.
4. Embedding sustainability in Human Resources (HR) processes.

3.5 CMP carbon abatement action plan

Nine key actions across UniSC will be developed and implemented to deliver a net zero emissions outcome, including:

1. 100 percent renewable energy power purchase agreement or equivalent
2. On-site solar PV
3. Energy efficiency maintenance
4. Ecologically Sustainable Design for new works
5. Sustainable waste and circular economy strategy
6. Sustainable value chain (procurement and tender) strategy
7. Sustainable transport strategy
8. Sustainable business travel strategy
9. Carbon neutral and offset strategy

3.6 CMP teaching and research action plan

In adding a fourth pillar on teaching and research, UniSC recognises the potential for its core services to continue to make valuable contributions to climate-related research and for its courses to educate and produce graduate students who have 'net zero' skills and knowledge that they will be able to apply in their career across all sectors.

The core actions that will be pursued include:

1. Develop learning-lab models across key disciplines at UniSC
2. Develop partnerships to apply and implement research done at UniSC
3. Develop cross-discipline partnerships within UniSC to design and pursue new research
4. Identify and investigate new areas of climate-related research
5. Build in climate-related learning across UniSC courses

3.7 CMP management systems action plan

This action plan includes management systems and processes that underpin the CMP, including:

1. Governance of the CMP
2. Measurement and reporting
3. Communication action plan



4.0 Action Plan

The Action Plan is the University's road map to becoming carbon neutral. The Plan is organised according to the four identified pillars: engagement, abatement, teaching and research, and management.

4.1: Engagement action plan

Initiative	Description	Sample actions	Location	Departments
Communication and Awareness Programs	The success of abatement actions often rely on behaviour change. Raising awareness of sustainability initiatives that staff/students can participate in is important to ensure abatement happens.	Sustainable UniSC Week; Tours; Benchmarking Programs; BYO Cup promotions; Champions awards; Creating a Marketing presence on sustainability issues.	Marketing across all of UniSC; Tours at Sunshine Coast and Moreton Bay campuses	FM, M&C, SS&E
Student and Staff Engagement	Students and staff contribute to the University's emissions and, as such, have the power to reduce those emissions. Engaging staff and students can empower them to become a part of the solution.	Awareness campaigns; Provide opportunities for feedback/idea sharing; Run informative sessions; Run sustainable events; Provide guidance tools for sustainable decision making	All of UniSC	FM, P&C, SS&E, M&C
Measure and report emissions and abatement	Measuring and reporting on emissions brings transparency and accountability to the University's sustainability efforts and can lead to higher levels of commitment and engagement.	Regular internal and external reporting; Facility level energy reporting; Visual displays of live resource consumption.	Reporting across all of UniSC; Displays across all UniSC campuses	FM
Embed sustainability in Human Resources processes	Staff, students and relevant contractors are more likely to take positive action on climate change if they are supported and understand what actions they can take.	Contractor inductions, review and revision of current policies and procedures, Student orientation, sustainability course.	Location: All of UniSC	FM, P&C

4.2: Abatement action plan

Initiative	Description	Sample actions	Location/s	Departments
On-site Solar PV	Electricity is the University's largest emissions factor. Roof space and condition at UniSC owned buildings are suitable for solar, which could significantly lower energy-related emissions.	Rooftop solar PV arrays at: <ul style="list-style-type: none"> - Moreton Bay (Foundation Building and new buildings) - Gympie - Thompson Institute - Fraser Coast 	Moreton Bay; Gympie; Thompson Institute; Fraser Coast	FM
Energy Efficiency Maintenance	One of the main ways to reduce electricity-related emissions is to reduce electricity use. Initiatives that invest in upgraded, more efficient equipment and change the way that equipment is used can reduce emissions.	<ul style="list-style-type: none"> - Continue to replace lighting with more efficient (ie LED) lighting - Ongoing HVAC upgrades (Sunshine Coast, Fraser Coast, Thompson Institute) 	Sunshine Coast; Fraser Coast; Thompson Institute; Gympie; South Bank	FM
Ecologically Sustainable Design (ESD)	The best method to ensure building resource efficiency is to build it in from the start.	Update University design guidelines to incorporate ESD principles as mandatory components of new buildings/ construction.	Primarily: Moreton Bay; Sunshine Coast	FM, FIN
Circular Economy Strategy	Waste emissions can be reduced by producing less waste initially and diverting the waste that is produced from landfill. Reduce, repurpose, reuse, recycle.	Continue to expand waste streaming as new recycling streams (ie soft plastics) become available; Reduce food and beverage related waste through reusable cutlery/plates/bowls and appropriate food portions; Investigate opportunities to generate energy from waste; Establish guidelines for furniture, technology and white goods that ensure less need to be purchased over time.	All campuses where the University has operational control	FM, FIN, ASU
Sustainable Procurement and Tender Strategy	Making wise purchasing decisions can reduce the emissions associated with the operation, disposal and replacement of goods. Extending these decisions to tenders ensures that contractors have sustainability considerations in the goods and services they provide to the University.	Revise procurement strategy and tender documentation to preference sustainable choices. Develop tools that provide guidance to staff on how to make sustainable choices in relation to IT equipment, furniture, machinery, food and beverages, white goods, transport and similar goods.	All of UniSC	FM, FIN

Initiative	Description	Sample actions	Location/s	Departments
Sustainable Travel	Emissions from business travel (flights, accommodation, hire cars) have consistently been in the top 3 emissions prior to COVID. A strategy to prevent these emissions from reaching pre-COVID levels can help to reduce the University's overall emissions.	Establish a policy or guidelines to reduce resource-intensive travel and to select sustainable options when travel is booked; Promote research design that minimises travel; Track and share travel emissions within the University to raise awareness; Invest in technologies to enable e-conferences.	All of UniSC	FM, Finance, Executive, Decision-making: all of UniSC
Transport	Transport is one of the hardest areas to achieve significant levels of emissions reductions due to the external forces involved. Engagement actions can address behaviour change aspects related to transport, but some abatement actions should be enacted to reduce those fuel related emissions where the University has control.	Development of Electric Vehicle (EV) and EV charging policies/strategies; Optimise shuttle bus offerings; Active and public transport initiatives.	All of UniSC	FM, EXEC
100% Renewable Energy Purchase	On-site renewables can't make up 100% of the electricity supply so the purchase of renewable energy can make up the difference between total energy used and renewable on-site energy produced. If managed correctly the cost can be the same as/minimal added cost to standard grid energy purchases.	Power Purchase Agreement; Purchase of Large-scale generation certificates (LGCs); Green Power purchase. Work with lessors to purchase Green Power in leased spaces.	All sites where the University holds operational control: – Sunshine Coast – Moreton Bay – Thompson Institute – Fraser Coast	FM, FIN
Offset Strategy	The University generates emissions, particularly Scope 3 emissions, that cannot be completely mitigated. UniSC must, therefore, invest in offsets in order to achieve carbon neutrality.	Develop an offset strategy that clarifies the University's approach regarding: – Type of offset – Source of offset – Certification or accreditation – Cost	All of UniSC	FM, EXEC, GRM

4.3: Teaching and research action plan

Initiative	Description	Sample actions	Location/s	Departments
Learning Lab	As an institution of learning, the University should use its sustainability initiatives as tools for teaching its students. The University can also benefit from the analysis of current initiatives that students can perform by using the results to improve the initiatives.	Map expertise of academics and Schools; Establish a working group or governing body to give shape to learning lab models; Identify and pursue potential funding and potential partners; Initiate projects.	Sunshine Coast; Moreton Bay; Fraser Coast	Schools, FM, RI
Industry Partnerships	Collaboration with industry can provide added value to both the University and its industry partners. This value can be financial, but more often it includes filling knowledge gaps, expanding scope and removing barriers to learning.	Identify sectors that align with the University's academic and research priorities; Establish networks and avenues for industry to link with researchers; Establish a strategy to guide the selection and development of partnerships; Track and report on partnership progress.	All of UniSC	SCH, EXEC, GRS
Cross-disciplinary Partnerships	Partnerships have the potential to generate creative multidisciplinary projects that expand the impact of those projects. They are tools to develop solutions that are technological, financially sound and encompass a range of sustainability considerations. Barriers to this work are common but can be overcome with concerted efforts.	Establish a cross-disciplinary research group, with terms of reference and governance structure, focussed on sustainability and climate change; Communicate progress and outcomes from the partnerships	All of UniSC	SCH, GRS, EXEC
Climate Research	Many gaps exist in the understanding and development of climate change solutions. The University has academics already working in fields relevant to climate change but there is room to expand that work to fill those gaps which place UniSC at the forefront of developing solutions.	Establish a research committee to identify knowledge gaps and University strengths; Establish a framework/ plan to prioritise climate research at the University; Establish sub-groups to focus on identified research opportunities.	All of UniSC	SCH, GRS

Initiative	Description	Sample actions	Location/s	Departments
Climate Teaching	The University has already begun the process of embedding the Sustainable Development Goals (SDGs) across the curriculum. Given the importance of climate change efforts should be made to use the SDG processes to expand coverage of climate change in courses across the University.	Develop a program or training to assist academics less comfortable with climate change to learn from climate specialists; Establish a public repository of all climate-related courses and experts at the University; Create online tools (courses, presentations) to expand climate literacy, available to staff and students; Ensure climate/ carbon literacy is a core component of the University's sustainability commitments; Establish a role or committee to share climate teaching initiatives across the Schools and to reduce the load on academics and researchers.	All of UniSC	SCH; GRS



4.4: Management System action plan

Initiative	Description	Sample actions	Location/s	Departments
Governance	The participation in all other initiatives within this CMP will depend on a strong commitment from the highest levels of the University. Progress on these initiatives will benefit from structures to measure and track work and outcomes.	<p>Establish some form of governing body or committee to set priorities, check on progress, allocate resources and reshape initiatives where necessary.</p> <p>This committee should include an Executive sponsor and representatives from the academic, research and operational areas of the University.</p> <p>Establish clear delineation of where responsibility and accountability lie for each action in the CMP.</p> <p>Build CMP actions into the annual budgets and strategic plans for all relevant departments.</p>	All of UniSC	EXEC, SCH, GRS, Operations (FM, M&C, SS&E, FIN)
Measurement and Reporting	The measurement of progress on the CMP will ensure actions are being taken and barriers to action are identified in a timely fashion. Reporting on progress will allow the University to benchmark its progress against others in the sector.	<p>Develop a reporting framework outlining all emissions related reports.</p> <p>Identify gaps in reporting and establish strategy to fill gaps.</p> <p>Secure appropriate contractors and data management systems for data capture and storage.</p> <p>Establish strategy and training to capture information from contractors/suppliers/etc.</p>	All of UniSC	FM, FIN, P&C
Communication Action Plan	Progress should be shared up the internal reporting chain to ensure progress to ensure accountability, and externally to ensure transparency.	Conduct a communication needs analysis (who, what, how, when); Develop a plan for rolling out communications to all of the University.	All of UniSC	FM, M&C, EXEC

Abbreviations used in this document:

ASU Academic Support Unit
BaU Business as usual
CMP Carbon Management Plan
CO₂-e Carbon dioxide equivalent
CY Calendar year
DISER Department of Industry, Science,
Energy and Resources
ESD Environmentally Sustainable Design
EV Electric vehicle
FIN Financial Services

FM Facilities Management
GHG Greenhouse Gas
GRM Governance and Risk Management
GRS Graduate Research School
HVAC Heating, ventilation, and air conditioning
IPCC Intergovernmental Panel on Climate Change
LED Light-emitting diode
LGC Large-scale generation certificates
M&C Marketing and Communications
NDC Nationally Determined Contribution

NEM National Electricity Market
P&C People and Culture
PV Photovoltaic
RI Research Institutes
SCH Schools
SDG Sustainable Development Goals
SS&E Student Services and Engagement
THE Times Higher Education
UNFCCC United Nations Framework
Convention on Climate Change





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