ACKNOWLEDGMENTS

This document was made possible thanks to the continued effort and support of the members of the Sustainability Working Group and various Action Groups. Particular thanks go to Ruth Tregale and Belinda Bean for assisting with the development and editing of the document. Thanks also to Paul Bowler, Deputy Vice Chancellor and Chief Operating Officer for being a constant source of support for sustainability at Macquarie University.

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Photography by Iain Brew

PDF Version is available for download from www.mq.edu.au/sustainability.

Disclaimer: While reasonable efforts have been made to ensure that the contents of this publication are factually correct, Macquarie University does not accept responsibility for the completeness of the information. All goals, indicators and targets have been reviewed by those who will ultimately be responsible for achieving them though Macquarie University is not contractually bound to achieving them.

This publication has been printed on recycled paper.
At Town Hall meetings, at sustainable development group meetings and in response to our Divisional consultations, the Macquarie University community has made it clear that it wants the University to become a model of sustainability. Our researchers have revealed the impacts of climate change and our economists and scientists have modelled what can be done to combat its effects. It is only fitting that the University, as an institution, works towards sustainability through all that it does, from building to teaching.

A sustainable organisation is one that operates in ways that avoid compromising the ability of future generations to access resources that we now take for granted. It is an organisation committed to understanding its impacts on society and the environment, while working to benefit each.

Over time, we have come to understand that sustainability is not a program, nor even a set of priorities. Rather, it requires changes to our way of thinking, decision-making and to our actions.

At Macquarie, we have acknowledged this and are seriously beginning to challenge our organisational patterns, attempting to work across structures and embody the principles of sustainability into all that we do – from the way we construct our buildings to our management practices and processes. We have achieved much, but more remains to be done.

Macquarie University is in a great position to bring about the cultural change required to become more sustainable thanks to the enthusiasm and support of students and staff. The best way to ensure this support continues is to be seen to be taking sustainability seriously at all levels.

This Sustainability Strategy represents a commitment from Macquarie University to improve its sustainability performance across a wide array of areas across campus. It seeks to guide the approach we will take in our change towards sustainability. It also serves as a useful document for communicating with Macquarie’s internal and external community.

Professor Steven Schwartz, Vice-Chancellor, Macquarie University
15 Mar 09
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLOSSARY OF TERMS</td>
<td>5</td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>6</td>
</tr>
<tr>
<td>2. PURPOSE</td>
<td>6</td>
</tr>
<tr>
<td>3. SCOPE</td>
<td>6</td>
</tr>
<tr>
<td>4. UNDERSTANDING</td>
<td>7</td>
</tr>
<tr>
<td>5. IMPERATIVES FOR CHANGE</td>
<td>8</td>
</tr>
<tr>
<td>5.1 Policy, Declarations and Charters</td>
<td>8</td>
</tr>
<tr>
<td>5.2 Economic Savings</td>
<td>9</td>
</tr>
<tr>
<td>5.3 Corporate Social Responsibility</td>
<td>9</td>
</tr>
<tr>
<td>5.4 Marketing</td>
<td>9</td>
</tr>
<tr>
<td>5.5 Lead by Example</td>
<td>9</td>
</tr>
<tr>
<td>6. GOVERNANCE</td>
<td>10</td>
</tr>
<tr>
<td>6.1 Sustainability Working Group</td>
<td>11</td>
</tr>
<tr>
<td>6.2 Action Groups</td>
<td>11</td>
</tr>
<tr>
<td>7. SUSTAINABILITY VISION AND GOALS</td>
<td>12</td>
</tr>
<tr>
<td>7.1 Vision for 2020</td>
<td>12</td>
</tr>
<tr>
<td>7.2 Goals</td>
<td>12</td>
</tr>
<tr>
<td>7.3 Review</td>
<td>15</td>
</tr>
<tr>
<td>7.4 Challenges and Opportunities</td>
<td>16</td>
</tr>
<tr>
<td>8. OBJECTIVES AND TARGETS</td>
<td>17</td>
</tr>
<tr>
<td>8.1 Biodiversity</td>
<td>17</td>
</tr>
<tr>
<td>8.2 Energy and Emissions</td>
<td>18</td>
</tr>
<tr>
<td>8.3 Fair Trade</td>
<td>19</td>
</tr>
<tr>
<td>8.4 Governance</td>
<td>20</td>
</tr>
<tr>
<td>8.5 Human Resources</td>
<td>21</td>
</tr>
<tr>
<td>8.6 Learning and Teaching</td>
<td>22</td>
</tr>
<tr>
<td>8.7 Planning and Development</td>
<td>23</td>
</tr>
<tr>
<td>8.8 Procurement</td>
<td>24</td>
</tr>
<tr>
<td>8.9 Sustainability Reporting</td>
<td>25</td>
</tr>
<tr>
<td>8.10 Research</td>
<td>26</td>
</tr>
<tr>
<td>8.11 Transport</td>
<td>27</td>
</tr>
<tr>
<td>8.12 Waste</td>
<td>28</td>
</tr>
<tr>
<td>8.13 Water</td>
<td>29</td>
</tr>
<tr>
<td>9. SUSTAINABILITY POLICY AND PROCEDURE</td>
<td>30</td>
</tr>
<tr>
<td>10. STRATEGIC COMMUNICATIONS PLAN</td>
<td>30</td>
</tr>
<tr>
<td>11. TRACKING AND REPORTING PERFORMANCE</td>
<td>34</td>
</tr>
<tr>
<td>APPENDIX A</td>
<td>35</td>
</tr>
</tbody>
</table>
Biodiversity - Biodiversity refers to the variety of life on earth - plants, animals and microorganisms, as well as the variety of genetic material they contain and of the ecological systems in which they occur. In Article 2 of the 1992 United Nations CBD (United Nations CBD 1992a), biodiversity was defined as:

1. the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems.

This definition was repeated in Australia’s Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act), and the NSCABD (Commonwealth of Australia 1996) expands on the three levels at which biodiversity occurs. These levels of biodiversity are:

1. genetic: the variety of genetic information contained in all of the individual plants, animals and microorganisms that inhabit the earth - genetic diversity occurs within and between the populations of organisms that comprise individual species as well as among species
2. species: the variety of species on earth
3. ecosystem: the variety of habitats, biotic communities and ecological processes.

Biodiversity corridor - Biodiversity corridors are dedicated parts of a managed landscape, where a locally-representative native vegetation association is retained or restored, ideally in a contiguous layout. When sufficiently networked with larger intact natural areas (eg > 2 hectares), biodiversity corridors provide for fauna movement and genetic exchange between suitable habitat patches. They may also comprise limited local habitat in their own right amidst surrounding non-natural land uses.

DVC External Relations - The role of Deputy Vice-Chancellor Development and External Relations has a broad range of responsibilities including marketing, both domestic and international, all international student recruitment and support, and the office of institutional advancement.

DVC Research - The Deputy Vice-Chancellor (Research) is ex officio, Chair of the Research Strategy and Policy Committee accepts full managerial responsibility for all aspects of research administration at the University, including policy formulation, disbursement and administration of internal research funds, administration of applications and grants from formal external agencies, administration related to contract research, the administration of matters relating to the three ethics committees, and matters involving intellectual property.

EFTP - Equivalent Full Time Persons. It is a total of the number of equivalent full time students and equivalent full time staff at Macquarie University in the reporting year.

Global community - The interconnected system; recognizing the integral and interdependent nature of the Earth.

Global Futures Program - The Global Futures Program, which will commence in 2010 in conjunction with the University’s new curriculum. Its aim is to develop partnerships, both local and international, which make valuable contributions to communities, and which are mutually beneficial. Programs will be developed in conjunction with local community groups, regional and remote councils, Indigenous groups, and nations throughout the South Pacific and South East Asia.

All students will be required to incorporate the Global Futures Program into their degree with each placement earning students academic credit.

Local community - Local community is a geographically defined community of place, a group of people living close to each other. The term community suggests that its members have some relations that are communal - experiences, values, and/or interests may be shared, they may interact with each other and are concerned about mutual and collective well-being.

Procurement - Procurement is described as the securing of goods and/or services made by an organisation in delivering their core activities to serve their community.

Provost - As chief academic officer of the University, the Deputy Vice-Chancellor (Provost) provides leadership in planning, policy development and management of resources to ensure the fulfilment of the University’s mission through the achievement of strategic goals. The Provost has overall responsibility for the planning, quality and delivery of education provided to Macquarie’s undergraduate and graduate students.

Sustainability - Refer to Section 4: Understanding for a complete definition of sustainability.

Sustainable development - Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Sustainability principles - Incorporating the integration between environmental protection, social advancement and economic well-being into actions and practices.

Sustainable procurement - Sustainable procurement has been defined by the United Kingdom Government commissioned Sustainable Procurement Taskforce as “… a process whereby organisations meet their needs for goods, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organisation, but also to society and the economy, whilst minimising damage to the environment.”

The University - Refers to Macquarie University.

U@MQ - U@MQ Limited is a subsidiary company of Macquarie University, providing the non-academic services and facilities that help students and staff achieve a healthy and balanced approach to university life.

University community - Refers to the staff, students and community members associated with Macquarie University on a regular basis.

Glossary of Terms

Biodiversity - Biodiversity refers to the variety of life on earth - plants, animals and microorganisms, as well as the variety of genetic material they contain and of the ecological systems in which they occur. In Article 2 of the 1992 United Nations CBD (United Nations CBD 1992a), biodiversity was defined as:

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3 UN Commission on Environment and Development (1987)
4 Procuring the Future, Sustainable Procurement Task Force, 2006
As the world population grows, amid depleting resources, poverty, inequality and environmental degradation, the need for change towards sustainability becomes more apparent. No longer can society ignore its responsibilities to sustain current and future generations, nor can organisations assume they have no part to play in this change. Educational institutions in particular have an obligation to ensure they not only become models of best practice, but are able to pass on the capabilities required to ensure staff and students become responsible global citizens.

In May 2007, Macquarie University recognised its responsibility in protecting the integrity of environmental and social systems. The Australian Research Institute in Education for Sustainability (ARIES) was contracted to establish a Sustainability Office (now recognised as Sustainability@MQ) and begin a process of change towards sustainability. Initial efforts included identifying actions for the University to undertake in order to improve its sustainability performance. Guided by a whole systems approach, these actions incorporated all aspects of the University’s operations from learning and teaching to resource management.

In 2008, sustainability was identified as a core strategic direction for Macquarie University (see Strategic Directions 2008-2012 available at http://www.mq.edu.au/quality/auqa2.htm). As such, Sustainability@MQ has begun to formalise the change processes required to achieve this objective. This document recognises the goals of the key areas of the University, being Research, Learning and Teaching, and External Relations, and brings them together with the goals of Sustainability@MQ. In doing so, this document provides the direction required over the next five to six years to improve the University’s organisational sustainability and performance with an aim to become a leader in the higher education sector.

This strategy takes account of the need to influence what we do on a day-to-day basis, and incorporate the principles of sustainability into the longer-term plans of the University. Most importantly, it lays out the systemic approach to be taken in addressing all of the core aspects of the University’s functionality.

The Sustainability Strategy refers to the policies, plans, procedures and practices in place at Macquarie University. The Strategy concentrates on embedding the commitment to sustainability into the University’s governance and formal structures, establishing systems to evaluate and report on performance and increasing participation and ownership of the change towards sustainability amongst the community. Having this Strategy focuses on the need to have long term plans which ensure accountability within the University.

The Strategy covers a period until December 2014. It includes clear policy commitments, long term objectives and targets that are reviewed annually.
The term sustainability is used in a variety of contexts. Therefore understanding Macquarie University’s interpretation of the word is important for successful implementation of initiatives and for embedding its principles into the culture of the campus.

Sustainability is best understood within the context of sustainable development. Sustainable development was first defined by the UN Commission on Environment and Development (1987) as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’. Sustainability aims for a balance between the principles of:

- **Environmental protection**: To the best of our abilities, negate the impact of our activities upon the environment to maintain or enhance the integrity, quality and quantity of existing biodiversity. This includes ensuring efficient use of resources.

- **Social justice**: Provide the opportunity for equal employment, decent living and working conditions. “Further consolidat(e) … the efforts of the international community in poverty eradication, promotion of full employment and decent work, gender equity and access to social well-being and justice for all”.

- **Economic well-being**: Recognised as maintaining and/or improving the economic position of the University to the benefit of staff, students and the community, though not at the expense of other principles. “Economic well-being is a crucial element of human well-being because most aspects of well-being in modern human society have to be purchased, including food, water, shelter, health care and many forms of recreation”.

- **Diversity**: “Diversity in this context covers gender, age, language, ethnicity, cultural background, sexual orientation, religious belief and family responsibilities. Diversity also refers to the other ways in which people are different, such as educational level, life experience, work experience, (disability and impairment), socio-economic background, personality and marital status”. It involves recognising and appreciating the value of individual differences. This includes recognising that individuals learn by different means, therefore diversity in learning and teaching styles is essential.

The University aligns itself with this definition, recognising that:

- **Sustainability is both a journey and an end point, aiming for a balance between social justice, environmental protection and economic growth**;

- **Sustainability requires challenges to peoples thinking and practices on a continual basis in order change mindsets and build better relationships between people, and between people and their environment**;

- **Education plays a key role in change towards sustainability and the University is in a position to provide this through operational examples of best practice, educational activities and research direction**;

- **Issues associated with internationalisation, ethical practice, equality, health, climate change, planning and development, resource use, diversity and biodiversity are all intertwined and linked to sustainability**; and,

- **The active engagement and participation of students and staff is encouraged and considered integral to the successful implementation of initiatives for change**.

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5 United Nations, 2007
6 Department of the Environment, Water, Heritage and the Arts, 2002
7 Australian Public Service Commission, 2001
Universities are obliged to practice what they preach to become more environmentally and socially conscious. Apart from its ethical imperatives and the fact that it is a good catalyst for academic praxis, sustainability in universities can have numerous other benefits such as financial savings, enhanced public relations image and improved student recruitment. This section provides reasons for a greater change towards sustainability at Macquarie University.

5.1 Policy, Declarations and Charters

The principles of sustainable development are firmly entrenched in Government policy and legislation in Australia and internationally. Table 1 outlines Australian Federal and State Government requirements and the major declarations and organisations endorsed by Australian universities, with each calling for universities to make a strong commitment to the implementation of sustainability.

Table 1 Declarations and Charters

<table>
<thead>
<tr>
<th>DECLARATIONS AND CHARTERS</th>
<th>ORGANISATION OR EVENT</th>
<th>MAIN GOAL</th>
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<tbody>
<tr>
<td>Agenda 21 (particularly Chapter 36 [Education, Public Awareness and Training])</td>
<td>UNESCO</td>
<td>Global sustainable development agenda to set into place a range of activities designed to implement sustainability. It advocates a holistic approach to environmental education.</td>
</tr>
<tr>
<td>United Nations Decade of Education for Sustainable Development (DESD) 2005-2014</td>
<td>UNESCO</td>
<td>Focuses on the global implementation of environmental education for everyone’s benefit, while working to build the community’s capacity to co-create a sustainable future.</td>
</tr>
<tr>
<td>AVCC Policy on Education for Sustainable Development</td>
<td>Australian Vice-Chancellor’s Committee (now Universities Australia)</td>
<td>Declares a commitment to Education for Sustainable Development, and acknowledges the leading role played by universities in furthering the goals of the UN DESD.</td>
</tr>
<tr>
<td>Talloires Declaration</td>
<td>University Leaders for a Sustainable Future</td>
<td>The first official statement made by university administrators of a commitment to environmental sustainability in higher education. The Talloires Declaration is a ten-point action plan for incorporating sustainability and environmental literacy in teaching, research, operations and outreach at colleges and universities.</td>
</tr>
<tr>
<td>Australian Universities Ecological Development (UAED) Charter</td>
<td>National Union of Students</td>
<td>This charter is similar in content to the Talloires Declaration and provides a strong framework to guide sustainability within Australian Universities.</td>
</tr>
<tr>
<td>Kyoto Declaration on Sustainable Development</td>
<td>IUA</td>
<td>To urge universities worldwide to seek, establish and disseminate a clearer understanding of Sustainable Development. It is recommended that each university have its own action plan which makes an institutional commitment to the principle and practice of sustainable development.</td>
</tr>
<tr>
<td>Sapporo Sustainability Declaration</td>
<td>G8 University Summit</td>
<td>Declaration outlining the responsibility of universities to contribute toward the attainment of sustainability, and the specific actions they must undertake to fulfil that responsibility. It recognises 8 principles concerning the role of universities in global efforts to attain sustainability.</td>
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<tr>
<th>GOVERNMENT LEGISLATION AND REQUIREMENTS</th>
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<th>MAIN GOAL</th>
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<tr>
<td>National Greenhouse and Energy Reporting Act 2007</td>
<td>Federal Government</td>
<td>An Act to provide for the reporting and dissemination of information related to greenhouse gas emissions, greenhouse gas projects, energy production and energy consumption, and for other purposes. Entities emitting over 25 kt of carbon dioxide equivalent in a financial year are required to register and report.</td>
</tr>
<tr>
<td>Energy Savings Action Plan</td>
<td>NSW Department of the Environment and Climate Change</td>
<td>Mandatory implementation of cost effective energy savings measures identified by users in organisations energy savings action plans, prepared under requirements of the Energy and Utilities Administration Act 1987.</td>
</tr>
<tr>
<td>Water Savings Action Plan</td>
<td>NSW Department of the Environment and Climate Change</td>
<td>Mandatory implementation of cost effective water savings measures identified by users in organisations water savings action plans, prepared under requirements of the Energy and Utilities Administration Act 1987.</td>
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The cost of operating universities in Australia is quite substantial. Yet, considerable evidence exists to suggest that this cost can be noticeably reduced while simultaneously decreasing environmental burdens. "Green" projects at universities can and have saved thousands of dollars in operating expenses. These savings can be accomplished at Macquarie University.

Corporations can no longer function without consideration being given to the social and environmental impacts placed on the community as a result of purely financial decisions. Universities are large organisations with substantial water and energy consumption. With climate change and continuing drought conditions, it is the responsibility of management to ensure that all aspects of university campus are successfully managing water and energy efficiency. With Macquarie University planning further development of its land holdings, this provides additional reasons for embracing social responsibility, particularly as we are much wiser about our impacts on society and the environment than at the conception of Macquarie University in 1964. Ensuring future developments and buildings are both water and energy efficient, inter alia, is an essential corporate responsibility.

More students are questioning the current practices of prospective institutes of higher learning, as well as future employers. This is reflected in the questions potential university students are asking. Questions of sustainability are not only confined to those students interested in pursuing Environmental Management and Sustainability, but are also being asked by the broader community. Practicing sustainability on campus and incorporating sustainability into learning and teaching allows Macquarie University to increase its positive image, and offer students a degree of significance, with the likely outcome of attracting more students locally and internationally.

As cornerstones for knowledge and education, universities appear hypocritical when faculty teaches students one thing in class concerning environmental and social matters, while administrators demonstrate the opposite on campus. It is an objective to make the operations of Macquarie University a model of best practice with regard to the environment and sustainability. Faculty should not simply pass on extant knowledge but rather act as catalysts of change and encourage students to take ownership of the environment in which they learn and live.

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5.2 Economic Savings

5.3 Corporate Social Responsibility

5.4 Marketing

5.5 Lead by Example

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8 NSW CEE (2006)
The overarching sustainability program is directed and managed by the Director of Sustainability, reporting to the Vice Chancellor. Sustainability@MQ is the main body responsible for delivery of strategy commitments, with guidance and support issuing from the Sustainability Working Group (SWG). Actions to embed sustainability into the structure of the University are currently facilitated by Sustainability@MQ and the Office of Facilities Management with the support of a number of Action Groups (see Figure 1). The Sustainability@MQ team also works with various departments and offices who have responsibility for student and staff services such as U@MQ, Marketing Unit and Student Well-being.

While identified actions are facilitated through Sustainability@MQ, implementation requires planning and communications across all departments. It is intended for each department to have a Sustainability Representative to enable good communication and information dissemination, but more than this it is proposed that sustainability be included on the agenda of all existing committees.

Figure 1: Governance Structure
6.1 Sustainability Working Group

The Sustainability Working Group provides advice to the Sustainability@MQ regarding plans, programs, activities and communications which seek to improve the sustainability performance of Macquarie University. The SWG is chaired by the Deputy Vice Chancellor and Chief Operating Officer (or equivalent) of the University and includes representatives from a range of departments:

- Director of Sustainability
- One executive staff member from Human Resources
- Two executive staff members from student and staff services (U@MQ)
- One executive staff member from MGSM
- One academic or research staff member from each of the Faculties
- One academic/professional staff member from professional development
- One professional staff member from administration
- One professional staff member from IT services
- One executive and one professional staff member from campus management/operations
- One representative from planning and development
- One undergraduate student
- One postgraduate student

For a more detailed understanding of the remit of the SWG please refer to the SWG Terms of Reference accessible at http://www.mq.edu.au/sustainability/

6.2

Action Groups represent all aspects of the University including campus management and operations, research, learning and teaching and human resources. New action groups may be developed and/or existing groups may be absorbed into other groups or discontinued when practice is successfully embedded into culture and no longer requires guidance. Action Groups (see Figure 1) are responsible for providing direction and support to both the Sustainability@MQ and the Sustainability Working Group for initiation and implementation of initiatives which improve sustainability performance and embed sustainability into the practices of the University. Each Action Group ideally consists of staff and students from across the University, with one member designated the Group Leader. The Group Leader is responsible for coordinating Group meetings every six to eight weeks, as well as dissemination of actions and tasks amongst Group members. The Group Leader is also a member of the SWG, reporting back to the SWG at each designated meeting and ensuring copies of the minutes from each meeting are sent to the Sustainability@MQ for Records and Archives.
7 SUSTAINABILITY VISION AND GOALS

7.1 Vision for 2020

Having a vision is an important step in defining your journey towards sustainability. It announces to the community what Macquarie University wants to become. The vision represented here has been developed in consultation and with the active participation of staff and students through workshops, meetings and surveys. It is an accumulation of themes and ideas deemed important by the Macquarie University community.

“Macquarie University is ecologically sound, socially just and economically viable in all of its activities”

This means:

- As an institution we function as a sustainable community, embodying responsible consumption of energy, water, food, products and transport;
- We actively support sustainability in our local community and region;
- Macquarie students leave the University prepared to contribute as working citizens to an environmentally healthy and equitable society;
- Macquarie University has a reputation for being the place to learn, to work and to connect with the local and global community; and
- We actively seek to meet the changing social, environmental and economic conditions as part of the global effort to reduce the impact of climate change upon the environment.

We will reach this through embracing the following principles:

- Global social and community awareness;
- Staff, student and community participation;
- An inclusive campus community;
- Accepting shared responsibility;
- Demonstrating best practice and leadership;
- Open and transparent processes;
- Utilizing the precautionary principle;
- Innovation and creativity; and
- A whole systems approach to change.

7.2 Goals

In order to achieve Macquarie University’s sustainability vision it is necessary to define goals and objectives. Whilst divided into domains of People, Planet and Participation, these are not to be considered in isolation, as they are all interconnected. For example, using resources efficiently not only benefits environmental objectives, but also assists in achieving economical viability.

7.2.1 People

1. Improved health and wellbeing of staff and students
   Objective:
   a. Provide staff and students with appropriate support and services to ensure the best opportunity for optimum physical and mental health

2. Embedded sustainability in governance
   Objective:
   - Policies and procedures will incorporate sustainability
   - Committees and Groups will address sustainability issues
   - Sustainability will be incorporated into key performance indicators

3. Macquarie University as a model Sustainable Community
   Objective:
   - Create a campus in which people are proud of their environment
   - Meet ethical and environmental standards of practice
   - Receive Fair Trade certification

4. Economic viability ensured through diversified income sources
   Objective:
   - Keep tuition fees fair and equitable and in line with expectations
   - Ensure investment seeks to maintain ethical and environmental standards
   - Secure external funding through appropriate grants

5. The utilisation of existing and future infrastructure is maximised
   Objective:
   - Use space efficiently and control infrastructure costs
   - Build to ensure energy and water efficiency
   - Make the best use of available infrastructure
In order to achieve these goals Sustainability@MQ will:

- Support implementation of Macquarie University and U@MQ Healthy Campus Initiatives
- Assist in defining sustainability in terms of graduate capabilities and curriculum development to embed sustainability across course offerings
- Work with Human Resources to find appropriate ways to embed sustainability into the framework of the University through avenues such as staff training courses, Performance Development and Review, Key Performance Indicators and Induction
- Establish a sustainability research network for students and staff
- Provide staff and students opportunities to participate in sustainability forums, workshops and initiatives
- Continually monitor and report on progress to the community through the sustainability website, internal and external publications and conferences, and an annual sustainability report
- Work with U@MQ to achieve Fair Trade certification
- Establish new and strengthen existing partnerships with local and global organisations and institutions including local schools
- Review University policies and procedures to integrate sustainability
- Work with the Office of Facilities Management to ensure infrastructure is used to maximum capability and efficiency
- Review investment portfolios and highlight those which breach ethical and environmental standards with a view to find alternative investments where possible
- Actively participate in the Infrastructure and Planning Project Control Group to ensure sustainability is incorporated in future refurbishments and developments through appropriate design standards
- Promote socially and environmentally responsible behaviour to the University community
- Involve staff and students in the development and implementation of sustainability plans and processes
SUSTAINABILITY VISION AND GOALS

7.2 Goals

7.2.2 Planet

Enhancement and protection of biodiversity

Objectives:

- Ensure hazardous materials are used only when absolutely necessary
- Ensure all decisions, and in particular development, minimises impact to biodiversity
- Ensure the community understands the value of a healthy ecosystem
- Connect learning with practical experience in assisting to maintain and improve biodiversity on campus

Reduced waste and pollutant emissions

Objective:

- Reduce air pollution and in particular, greenhouse gas emissions
- Reduce waste to landfill and improve waste processes
- Improve stormwater quality
- Reduce reliance on single passenger vehicle transportation

Resources used efficiently

Objective:

- Increase energy efficiency and supply from renewable resources
- Decrease volume of water wasted across campus
- Decrease per capita potable water consumption

In order to achieve these goals Sustainability@MQ will:

- Work with the Office of Facilities Management to identify and implement initiatives to increase water and energy efficiency and to ensure all refurbished buildings meet Best Practice requirements
- Work with the Office of Facilities Management to divert waste from landfill and increase recycling
- Work with the Office of Major Projects to ensure all new buildings meet, at a minimum, GBCA 5 green star standards
- Develop resource education packages for use in workshops and forums with staff, students and the broader community
- Develop a sustainability indicator framework which identifies indicators and targets and provides the basis for Triple Bottom Line reporting
- Develop biodiversity and resource management procedures and plans
- Source and apply for appropriate external funding for various initiatives particularly relating to energy and water efficiency, as well as improving biodiversity on campus
- Gather baseline data and develop systems and processes for regular collection and collation of information
- Ensure our tendering and subcontracting processes reflect our sustainability values
- Establish connections with units of study which could provide practical assessment work relating to the enhancement of the campus environment
- Purchase green energy and investigate the possibility for generation of electricity on campus via more energy and carbon efficient means
- Provide training for purchasing staff to help increase understanding and awareness of sustainable procurement responsibilities and requirements
- Review existing processes to see where efficiencies can be made through utilisation of online technologies
7.2.3 Participation

1 Increased understanding and awareness of sustainability throughout the University community

Objective:
• Strengthen staff and student awareness and understanding of sustainability and global citizenship through learning, research and community service

2 Engaged local and global citizens

Objective:
• Staff and students will:
  • have an understanding of the connectivity between local and global issues and the need to work collectively as well as individually
  • ensure ethical practice in relation to social, environmental and economic responsibility
  • display a willingness to contribute to creating a wiser and better society
  • have an awareness of social disadvantage and social justice issues
  • have knowledge of, and openness to, other cultures and perspectives

3 Increased staff and student communications and participation

Objective:
• Utilise various media and methods of communication
• Encourage and reward participation in actions and initiatives

4 Increased participation with the local and global community

Objective:
• Connect with the greater community to promote sustainability and global citizenship through outreach programs, partnerships and collaborations.

5 Foster an inclusive campus community

Objective:
• Ensure that all staff and students, regardless of religion, gender, sexual orientation, socio-economic background, age, disability or ethnicity feel as though they are a part of the University and the local community

In order to achieve these goals Sustainability@MQ will:

• Establish an incentive system to reward and recognise staff and students who actively assist with the implementation of initiatives
• Support the opportunities provided through the Global Futures program
• Ensure all staff and students are given various opportunities and methodologies by which to keep abreast of what is happening at the University
• Work with various offices and departments across the campus whose key objectives are to improve communications and staff and student experiences such as (though not limited to) U@MQ, PR and Marketing Unit, and the Student Well-being team
• Continually seek to include articles in campus publications which highlight staff and student innovation and enthusiasm towards sustainability
• Ensure that staff and students are consulted and given the opportunity to comment upon changes occurring at the University through various avenues such as workshops, departmental meetings and online systems
• Seek partnerships with businesses, institutions and government organisations locally, nationally and internationally
• Attend and where appropriate present at conferences and forums to showcase the work of Sustainability@MQ
• Continually update the Macquarie University website (including the sustainability section) to maintain its usefulness as a resource for the community
• Communicate internally and externally that acceptance of diversity forms part of our sustainability response
• Seek to adhere to and improve the communication plan developed
• Collaborate with other institutions of higher education to establish better unity in efforts to achieve change towards sustainability
7 SUSTAINABILITY VISION AND GOALS

7.3 Review

The vision, goals and objectives will be reviewed on an annual basis in consultation with staff and students. This process will ensure that our statements are still valid in the context of an ever changing environment, as well as assess our progress towards them.

7.4 Challenges and Opportunities

1. Communication with staff and students needs attention as current systems do not allow for adequate interaction.
2. Ongoing community support is essential to the success of the sustainability programme, both in the community taking action and in supporting sustainability decisions. Sustainability@MQ must inform and maintain dialogue with the community.
3. Technological improvements are necessary to support communication, education and awareness. For example the incorporation of multi-media technology improves the likelihood of engagement.
4. Integration of interdisciplinary study into graduate education should be stressed. We must develop more effective ways to break down or transcend disciplinary silos that shape the graduate degree structure.
5. Corporate and administrative departments are currently working in isolation. Traditional demarcations need to be blurred to ensure that inter department communication occurs, thereby allowing better relationships to be built, barriers to be identified and opportunities to be embraced.
6. There currently exists a skills shortage at the University to address the demands of change towards sustainability. It is essential to identify which areas require assistance and attend to those areas by providing adequate resources and training.
7. The University has an abundance of knowledge and skills within its student and staff base, whose expertise can be drawn upon to the benefit of change towards sustainability in all aspects of the programme.
8. An economic focus currently dominates thinking and decision making processes. This focus is unbalanced and needs to change if we are to embed sustainability into our daily procedures.
9. Economic savings can be made as a result of initiatives to increase resource efficiency and decrease resource use. This is a useful leverage for undertaking energy and water savings actions.
10. Funding constraints may constrict the successful implementation of the Sustainability@MQ programme. However, rapidly increasing energy, water and waste costs, impacts of natural disasters as a result of climate change, and social/political value shifts add weight to the argument that sufficient funding is necessary to address each of these areas.
11. Lack of understanding as to what ‘sustainability’ means. General tendency is to see it as ‘green’, focusing on operational aspects thereby missing the social aspect. Gaining understanding and awareness of the broader implications of sustainability will be a continuing process.
12. The term ‘sustainability’ has been overused of late and as a result many people ‘switch off’ when it is mentioned. It will be necessary to approach its use cautiously with consideration for the audience in which it is being addressed.
13. Despite the overuse of ‘sustainability’ there is a strong and growing awareness amongst the community that individuals and organisations need to do something to address environmental and social concerns. It is essential to embrace this awareness and build on its strength.
14. Embedding sustainability throughout operations, learning and teaching, management, processes and practices provides the University with a distinct market advantage. More and more demand will be placed upon institutions through mandatory requirements and user insistence to demonstrate how they are responding to the challenges of a changing environment. Starting a whole systems change towards sustainability process before the increased pressure will see Macquarie University in front.
15. Many changes to the structure of the University are occurring simultaneously. Staff feel overwhelmed at the level of change and sustainability initiatives appear to add to the weight and expectation. Working with staff on a personal basis may help to ease the unrest.
16. New departments and curriculum reviews as a result of change processes provide an opportunity to align with University strategies and, in particular, a way to embed sustainability into structures. As change occurs it is ideal to work with each area of change to see how sustainability fits.
17. The substantial amount of planned development on campus has the potential to negatively impact upon our ability to meet defined targets and objectives, particularly those relating to ‘Planet’ (see section 7.2.2). Yet if we approach this development rationally and within defined and recognised sustainable building frameworks (such as the Green Building Council of Australia), there is the potential to limit negative impacts and showcase the campus as a model of sustainability in built design.
18. The amount of development predicted to occur over the next forty years brings opportunities to invest in alternative and on campus energy production solutions such as tri-generation in order to cope with the increased demand on the public electricity grid.
19. New State and Federal Government legislation, such as the Carbon Emissions Trading Scheme, ensures that organisations take responsibility for their actions and provides a basis upon which the University can use to make significant changes to existing systems.
OBJECTIVES AND TARGETS

To achieve the goals and objectives listed above Sustainability@MQ must work in conjunction with other areas of the campus, such as the Office of Facilities Management, U@MQ, the Office of Major Projects, Student Well-being, DVC External Relations, DVC Research and the DVC Provost, utilising the plans, goals and targets set by these areas. Each Action Group working directly with Sustainability@MQ has developed an Action Plan which can be found on the sustainability website (www.mq.edu.au/sustainability). These Plans provide Action Groups with the direction required to reach objectives, key performance indicators (KPIs) and targets as outlined in the following sections.

It should be noted that activities within one area will unquestionably affect activities in another area. Therefore understanding that each must be viewed in a holistic manner is essential. For example, it will be difficult to reach energy and water objectives and targets if the actions addressing planning and development do not reach high standards in energy and water efficiency in design. Similarly it will be difficult to gain support and ownership of sustainability initiatives if staff and students are dissatisfied with their work and study environment.

8.1 Biodiversity

Macquarie University stands out amongst all Universities in Sydney because of its large areas of natural space that make for a more enjoyable learning and teaching environment. The University has recognised the importance of these areas and has maintenance and restoration of natural areas as a key priority.

The University is also unique in that the grounds contain a number of threatened ecological vegetation communities. This gives both benefits and responsibilities. The benefits include the amenity values and the ability of students to implement theoretical learnings in the local area, as well as the intangible environmental benefits that accrue. Responsibilities include the need to manage these areas appropriately for future generations and to link with our neighbours in creating biodiversity corridors through the region.

**Aim:** To ensure minimal management natural systems at Macquarie University campus by detailing, protecting, enhancing and linking existing biodiversity nodes.

**Objectives:**

1. To develop a learning and teaching environment that includes management of biodiversity and geodiversity on campus
2. To ensure best practice management of existing biodiversity and improve the biodiversity values on campus
3. To ensure that all University policies and procedures consider the importance of biodiversity values on campus and that development and maintenance works on campus enhance these values
4. To work with our neighbours to ensure that Macquarie University is a valuable biodiversity corridor in the region

**Key Performance Indicators and Targets**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2014 target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of inorganic fertilisers</td>
<td>Decrease by 60%</td>
</tr>
<tr>
<td>Use of pesticides</td>
<td>Decrease by 60%</td>
</tr>
<tr>
<td>Natural areas protected for the long-term by policy, covenant, or other non-alterable protection strategy</td>
<td>100%</td>
</tr>
<tr>
<td>Total area (ha) of managed green space restored to natural landscape</td>
<td>At least 15%</td>
</tr>
</tbody>
</table>
There is little doubt that climate change poses one of the biggest challenges of the 21st century for individuals and institutions alike. The extent of the change is uncertain, its effects cumulative and erratic. Yet despite the complexity and at times uncertainty surrounding the impact of climate change, the solution to the problem is somewhat clearer. Greenhouse gas emissions need to be reduced below current levels. What is also clear is that immediate action is essential.

One solution for Macquarie University is to halt the growth in activities and developments that have traditionally resulted in the increase of greenhouse gas emissions. This solution is, however, unfeasible given the University’s objectives to increase academic and research opportunities, as well as non-academic developments across the campus. The approach we must instead take is to change the way we procure and manage emission generating activities through innovation and creativity in our thinking.

Arguably, many of the energy consumption issues we are facing today have come about as a result of cheap energy. As we move forward, the impact of energy cost increases further enhances the requirements for high energy efficiency and importantly starts to make a significant impact on using alternative energy. It is for this reason, in conjunction with the need to preserve resources and the environment that Macquarie University must plan well into the future with regards to energy and emissions patterns.

Aim: To use energy efficiently, becoming a producer of ‘clean’ energy to ensure we do not unnecessarily contribute to the climate change problem. Targeting a trajectory to “no net carbon emissions by 2050”.

Objectives:

1. Investigate possibilities for energy production on campus, utilising technology that is not emissions intensive
2. Undertake carbon emissions auditing on a regular basis to ensure we are consistently decreasing our emissions to a globally acceptable level
3. Ensure all equipment purchased maximises energy efficiency
4. Educate staff, students and the wider community through a Power Saving Campaign, which highlights what individuals can do to make a difference

Key Performance Indicators and Targets

<table>
<thead>
<tr>
<th>Indicator:</th>
<th>2014 target:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total energy consumption per year per EFTP</td>
<td>Reduce by 15% / EFTP from 2005</td>
</tr>
<tr>
<td>Percent of energy generated on site</td>
<td>20-30%</td>
</tr>
<tr>
<td>Total GHG emissions produced per year for campus operations per EFTP</td>
<td>Reduced by 30% of 2005 emissions</td>
</tr>
</tbody>
</table>
Fair Trade accreditation has been available for universities in the United States and United Kingdom for some time. At the end of 2008, the Fair Trade Association of Australia and New Zealand introduced the possibility for Fair Trade accreditation into this area. As a result, Macquarie University is striving to meet the accreditation requirements.

Essentially, becoming a Fair Trade University assists Macquarie University to meet social sustainability goals. Not only does the accreditation help build community awareness about the inequalities in international trade, but it helps to ensure people will make socially responsible choices with their buying power. The benefits of Fair Trade are provided to those who need it the most through improving the standard of living for disadvantaged producers in less fortunate countries by offering a fair price for goods produced.

**Aim:** To become Fair Trade accredited.

**Objectives:**

1. Gain Student Union and University Council support through the passing of a resolution in support of Fair Trade.
2. Establish a Fair Trade Steering Group comprised of staff and students.
3. Ensure Fair Trade certified products are readily available for sale in shops, restaurants and bars on campus for a reasonable price.
4. Ensure that Fair Trade certified products (such as coffee and tea) are served at all meetings hosted by the University and the Student Union and in University offices and departments.
5. A commitment to increase consumption of Fair Trade certified products on campus.

**Key Performance Indicators and Targets**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2014 target:</th>
</tr>
</thead>
<tbody>
<tr>
<td>University administrative units (e.g. departments, faculties) using Fairtrade certified coffee and tea during meetings hosted by the University</td>
<td>80%</td>
</tr>
<tr>
<td>Fair Trade items stocked in retail outlets in cases where a Fair Trade alternative is available</td>
<td>50% of all possible stocks lines</td>
</tr>
<tr>
<td>Fair Trade Coffee, Tea and Hot Chocolate sold in all Food &amp; Beverage Outlets on campus</td>
<td>100%</td>
</tr>
</tbody>
</table>
Operational actions can lead to changes in resource use but to embed sustainability into the framework of any organisation it is essential to address governance. It is insufficient to assume that technological changes along with educational and awareness campaigns will lead to sustained change over the long term. Reviewing the very core of an organisation however, will better support any and all change towards sustainability. To do this, Macquarie University needs to review existing policies and procedures, as well as stated values, visions, missions and key performance indicators to ensure that sustainability is encompassed within these.

**Aim:** To have sustainability embedded into the core of Macquarie University.

**Objectives:**
1. To ensure appropriate policies and procedures are in place
2. Work with senior executives, directors, heads of departments and managers to assist them in understanding what it means to incorporate sustainability into daily practices
3. Incorporate sustainability into key performance indicators
4. Align the strategic direction of the University with the strategic direction of the sustainability program
5. Ensure departments and faculties have sustainability representatives and include sustainability on the agenda at meetings

### Key Performance Indicators and Targets

<table>
<thead>
<tr>
<th>Indicator:</th>
<th>2014 target:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of policies in place supporting sustainability</td>
<td>100% of possible policies</td>
</tr>
<tr>
<td>Total number of departments with sustainability representatives and/or committees</td>
<td>100%</td>
</tr>
<tr>
<td>Percentage of total funding spent on staffing and operations of sustainability focused programs and initiatives</td>
<td>Increased on a continual basis</td>
</tr>
</tbody>
</table>
### 8.5 Human Resources

Traditionally, considerations of sustainability within universities have been limited to inclusion in operational aspects and resource efficiency. Macquarie University however, is taking a far more systemic approach to embed sustainability into its culture. In an effort to make substantial changes towards sustainability, it is necessary to consider staff employment and training conditions. The Human Resources action group has the task of identifying and assisting the Human Resources department to make the necessary changes, ensuring staff are aware of the responsibility they also have in assisting changes.

**Aim:** To have sustainability incorporated into all aspects of Human Resources and for Macquarie University to become an employer of choice because of its commitment to sustainability.

**Objectives:**

1. To ensure new employees are aware of Macquarie’s commitment to sustainability
2. To incorporate sustainability into training and professional development
3. To ensure staff are provided with regular training and information to implement sustainable practices.
4. To improve the retention rate, health and satisfaction of staff

#### Key Performance Indicators and Targets

<table>
<thead>
<tr>
<th>Indicator:</th>
<th>2014 target:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total area allocated as smoking space</td>
<td>10% or less of total area</td>
</tr>
<tr>
<td>Percentage of open space which is considered ‘usable’ i.e. available for</td>
<td>20%</td>
</tr>
<tr>
<td>student and staff to utilise for work or breaks in most weather conditions</td>
<td></td>
</tr>
<tr>
<td>Total number of PD courses with sustainability content included</td>
<td>At least 60%</td>
</tr>
<tr>
<td>(incorporating health and safety; resource use and efficiency;</td>
<td></td>
</tr>
<tr>
<td>environmental and social considerations)</td>
<td></td>
</tr>
<tr>
<td>Total number of new staff receiving induction training which</td>
<td>100%</td>
</tr>
<tr>
<td>includes information on sustainability values</td>
<td></td>
</tr>
<tr>
<td>Total number of new students receiving orientation training which</td>
<td>At least 75%</td>
</tr>
<tr>
<td>includes information on sustainability values</td>
<td></td>
</tr>
<tr>
<td>Total number of managers/directors, heads of school with sustainability</td>
<td>100%</td>
</tr>
<tr>
<td>as a KPI</td>
<td></td>
</tr>
</tbody>
</table>
8.6 Learning and Teaching

Sustainability has been referred to in higher education learning and teaching for many years following initial drives to ‘green’ the curriculum. How to incorporate issues of sustainability into the higher education experience of students continues to promote debate not least because the meaning of sustainability varies across individuals, programs and institutions. Likewise there are many ideas about how best to incorporate education for such a capability into the curriculum. At Macquarie University there is a growing emphasis on sustainability in learning and teaching as indicated by the Learning and Teaching plan, the integration of ‘planet, people and participation’ into program design, and the incorporation of sustainability into the framework of graduate capabilities. Sustainability in the curriculum aligns with drivers such as the UN Decade of Education for Sustainable Development 2005 – 2014 and the NSW Council of Environmental Education who have resolved that:

The NSW Government to communicate with all NSW universities to recommend they take appropriate action to increase the level and quality of the teaching of sustainability across degree programs … to encourage a proactive approach to promoting the enhancement of the teaching of sustainability in universities through consultation with the National Environmental Education Council and relevant professional associations (see http://www.environment.nsw.gov.au/resources/cee/2006347_ifsenvedplan20072010.pdf).

The Australian Vice-Chancellors’ Committee (now Universities Australia) has also developed a policy on Education for Sustainable Development aimed at promoting an appropriate institutional culture of sustainable development and building capacity in the community by educating the next generation of professionals and leaders to become fully aware of sustainability.

Aim: Incorporate sustainability into the learning and teaching of the University.

Objectives:

1. To stimulate academic debate and discourse about sustainability, its meaning, values and approaches to learning and teaching
2. To engage the University community in reflecting on and incorporating sustainability in learning and teaching
3. To foster the development of engaged and ethical local and global citizens who are aware of the challenges of contemporary society and willing to participate in the creation of a wiser and better world
4. To articulate the principles of sustainability for the community
5. To ensure incorporation into the curriculum via graduate capability statements
6. To make more explicit to students those aspects of sustainability already incorporated in learning and teaching programs

<table>
<thead>
<tr>
<th>Key Performance Indicators and Targets</th>
<th>2014 target:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of programs that have sustainability as a component</td>
<td>At least 75%</td>
</tr>
<tr>
<td>Total number of students having taken at least one unit with substantial sustainability content</td>
<td>At least 80%</td>
</tr>
<tr>
<td>Total number of courses that have an applied research/learning element on or off campus</td>
<td>100%</td>
</tr>
<tr>
<td>Total tenured faculty ‘specialised’ in sustainability focused teaching</td>
<td>At least 50%</td>
</tr>
</tbody>
</table>
A Davis Langdon report from 2006 states that “responsible development is in line with growing community expectations and complies with emerging socially responsible investor requirements”. With approximately 40% of the campus earmarked for future development, Macquarie University has an important role to play in ensuring developers incorporate principles of sustainability in their developments. The good news is that building Green buildings has benefits such as longer lifespan, reduced replacement and lower operating costs. Additionally, carbon emissions are reduced and environmental and social responsibility is accounted for.

The Green Building Council of Australia (GBCA) has already found that Green buildings are having a market impact. The GBC Valuing Green report states that “at the very least, non-Green Star buildings face accelerated value depreciation”. Additionally, more energy efficient buildings will be less affected by the impending carbon emissions trading scheme, so it makes sense for Macquarie University to set goals, objectives and targets in relation to building design. Furthermore, it is important to recognise the significant role building design can and will have upon reaching other goals, objectives and targets set out within this Strategy.

**Aim:** To reach minimum best practice standards in accordance with GBCA frameworks in building design for all future development.

### Objectives:

1. Inform all stakeholders about principles and practices that guide the approach to sustainability in planning and development
2. Detail the fundamental design elements for Environmentally Sustainable Design
3. Conserve and protect natural resources by protecting non-renewable resources; encouraging efficient buildings for energy and water conservation and minimisation of waste and pollution
4. Maximise the long-term value of the development by catering for future generations of users
5. Develop a collaborative approach to planning and development by establishing partnerships and collaboration between stakeholders
6. Set Performance Indicators and minimum standards
7. Continually improve to meet market and community expectations
8. Develop healthy buildings and urban spaces to assist in the goal to become a healthy campus

### Key Performance Indicators and Targets

| Indicator: GBCA certified 5 star buildings | 2014 target: At least 70% of all new buildings |
8.8 Procurement

Current procurement practices at Macquarie University do not adequately account for impacts incurred when not considering the whole of life process in purchasing decisions. By incorporating sustainability principles and practices, sustainable procurement can minimise the environmental impacts of the University, as well as benefit society, the natural environment and reduce overall operating costs. Good procurement practice serves efficient and cost-effective operations and it is clear that the procurement practices of the University have great potential to contribute to broader economic, environmental and social objectives. For example, through sustainable procurement, we can drive the production of environmentally and socially friendly goods and services and educate our students and staff about the impact of their purchasing decisions.

**Aim:** To only purchase goods when absolutely necessary, incorporating the whole-of-life impacts of products when doing so. To work with current suppliers and seek future suppliers who will support us to meet goals and objectives.

**Objectives:**

1. Adopt strategies to avoid unnecessary consumption and manage demand
2. Select products and services which have lower environmental impacts across their life cycle compared with competing products and services
3. Support suppliers who are environmentally and socially responsible and adopt ethical practices
4. Support businesses and industry groups that demonstrate innovation in sustainability

### Key Performance Indicators and Targets

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2014 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total amount of paper (of all types) purchased by all departments</td>
<td>Reduce by 40% of base year figures</td>
</tr>
<tr>
<td>Local goods production - 'local' means within a 600km radius of the campus</td>
<td>At least 25% of product lines</td>
</tr>
<tr>
<td>Percentage of equipment purchased with maximum efficiency ratings for water and energy or composing of recycled content</td>
<td>At least 90%</td>
</tr>
<tr>
<td>Total percent of MQ merchandise purchased which is fair trade/environmetally/socially sound declared produce</td>
<td>At least 45%</td>
</tr>
</tbody>
</table>
As part of its obligations to the community, Macquarie University needs to report and communicate its progress towards achieving sustainability. As such, the University has committed to reporting the results in an easily understood format.

The annual report of the University is a mandatory requirement in fulfilling the organisations external and internal accountability to stakeholders. The University currently does not have any coordinated and consistent approach to sustainability reporting, nor have previous annual reports contained information on a variety of sustainability initiatives. Macquarie University has committed itself to incorporating sustainability into all aspects of its operations. A significant component of this commitment is the importance of being able to measure and disclose sustainability actions through formal and informal reporting mechanisms to the University’s stakeholders.

Stakeholders (employees, students, government, the community) are increasingly demanding information on organisational performance beyond purely financial criteria. Social and environmental aspects are seen as important aspects of accountability. The inclusion of social and environmental criteria presents a challenge to the current reporting format as much of this information is voluntary and not captured within the existing mandatory reporting framework. Consequently, the sustainability reporting action group has been established to help facilitate sustainability reporting throughout the University and help achieve best practice in sustainability reporting.

Aim - The Reporting Action Group will aim to:
1. Develop a reporting framework that closely aligns with the sustainable reporting guidelines of the Global Reporting Initiative
2. Support the development and implementation of measurement and data management systems to regulate reporting standards
3. Develop and present an annual report detailing the University's progress towards sustainability
4. Effectively communicate findings to all stakeholders through an appropriate strategy
5. Analyse the key results of progress to establish the annual benchmarking targets and priorities

Objectives:
1. Incorporate sustainability information within the Macquarie University annual report on a yearly basis, and to gradually improve the quality of this information over time.
2. Develop and maintain the Sustainability Indicator Framework to ensure it incorporates as many aspects of the University's practices as possible and remains a useful reporting tool
3. Develop and standardise measurement systems and data collection and storage techniques for all relevant areas
4. Produce an annual report which is consistent and measurable over time
5. Regularly check the effectiveness of the annual report with key stakeholders
6. As part of communicating progress towards sustainability, utilise a variety of communicative methods such as the Sustainability@MQ website, staff and student publications, etc.
7. Recommend areas of priority attention to the Sustainability Working Group and associated Action Groups

<table>
<thead>
<tr>
<th><strong>Key Performance Indicators and Targets</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indicator:</strong></td>
</tr>
<tr>
<td>Indicator Framework</td>
</tr>
<tr>
<td>Annual sustainability report</td>
</tr>
</tbody>
</table>
8.10 Research

It is clear from Macquarie@50 that nationally and internationally recognised and reviewed research is a goal for Macquarie University. To become a leading research institute and take our place amongst the top 200 research universities in the world, we need to undertake research that is useful to society as a whole. With the establishment of the Concentrations of Research Excellence, particularly those focusing on Social, Cultural & Political Change; Climate Risk/ Ecology & Evolution; and Social Inclusion it appears we are taking those steps. Also important is establishing inter-disciplinary research collaboration as a way to further engage staff and students in sustainability research.

Aim: To become a leading research institute known for its contribution to achieving environmental and societal goals

Objectives:
1. Undertake an analysis of research to establish the amount of collaborative projects
2. Encourage and support research related to sustainability, providing a platform for sharing findings and recommendations
3. Support student research into social and/or environmental issues

Key Performance Indicators and Targets

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2014 target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of on campus research projects involving two or more on-campus departments</td>
<td>At least 40% of total research</td>
</tr>
<tr>
<td>Total tenured faculty ‘specialised’ in sustainability focused research</td>
<td>At least 20% of tenured staff</td>
</tr>
<tr>
<td>Total research dollars spent on sustainability based projects</td>
<td>Continued increase</td>
</tr>
</tbody>
</table>
The option of driving by car to and from Macquarie University is currently very attractive as a result of the extensive road network (i.e. M2, Epping Road, Ryde Road etc) and a high level of car parking within the University grounds. As a result, single passenger private vehicles are the predominant form of transport for staff and students. The current car culture seen at the University is in direct conflict with other sustainability goals and objectives such as reducing greenhouse gas emissions. As such, it is necessary to implement actions to change single passenger private vehicle dependency.

Postcode data reveals that 50% of students and 40% of staff live within a 10km radius of the University. The University is currently serviced by regular bus services and is soon to have its own railway station. Furthermore, Macquarie University grounds are now recognised by the NSW Department of Planning (DOP) as a “site of state significance” with all future development planning approvals determined directly through the DOP. These factors combined provide a good platform to work with to increase the utilisation of alternative forms of transport.

Aim: Achieve a Transport Greenhouse Gas Reduction target of 40% over the next 5-10 years based on 2008 levels

Objectives:

1. Establish a support group/s and network/s to provide motivation, drive and support for implementation of the Sustainable Transport plan
2. Change current travel patterns towards more sustainable modes using two approaches:
   a. use initiatives which encourage and make it easier to change
   b. use discouragement initiatives which make the car driving experience less attractive
3. Reduce the need to travel
4. Limit the environmental impact as much as possible for those who continue to drive regardless of the consequences.

Key Performance Indicators and Targets

<table>
<thead>
<tr>
<th>Indicator:</th>
<th>2014 target:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of EFTP primarily travelling alone in a car to/from campus</td>
<td>30% of total EFTP</td>
</tr>
</tbody>
</table>
To date, Macquarie University’s performance with regard to waste management has been poor. Apart from recycling stations run by U@MQ and ad hoc paper and cardboard recycling, little else is being done to address the large amount of ‘waste’ produced by the University and subsequently taken to landfill. Moreover, there are at least 10 or 11 different waste contractors currently emptying all the waste bins, on a per bin basis, regardless of whether the bin is full or not. Neither of these situations is sustainable or responsible and as a result, the Waste Action Group has been tasked with finding a better solution to Macquarie’s waste issue.

Aim: To increase recycling across campus to 70% and decrease waste to landfill to 30%.

Objectives:
1. To ensure all waste that can be recycled is recycled, including (but not limited to)
   • glass, plastic, cartons, aluminium cans (commingled)
   • paper/cardboard
   • furniture
   • food waste/organics
   • e-waste
2. To educate and raise awareness amongst the University community with regard to sustainable waste management practices (rethink, reduce, reuse, recycle)
3. To promote an environment which embraces creative and innovative solutions to reduce waste to landfill
4. To gather data and report on progress on an annual basis

Key Performance Indicators and Targets

<table>
<thead>
<tr>
<th>Indicator:</th>
<th>2014 target:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total amount of solid waste produced per year figures</td>
<td>Reduced by 20% of 2008</td>
</tr>
<tr>
<td>Percentage of solid waste going to landfill</td>
<td>Less than 30% of total waste</td>
</tr>
<tr>
<td>Percentage of solid waste diverted from landfill waste (tonnes)</td>
<td>At least 70% of total</td>
</tr>
<tr>
<td>- includes organic, cardboard, metals, paper, glass, plastic etc</td>
<td></td>
</tr>
</tbody>
</table>
8.13 Water

Australia has recently suffered one of the worst dry periods in known history. The intermittent and uncertain supply of water has led individuals and organisations to take account of their water usage. In 2006, The Department of the Environment and Climate Change (DECC) conducted a survey which gauged attitudes to water. Findings revealed that the people of NSW see water conservation as one of the most important challenges. In fact, water was listed as a top environmental issue by more people than any other area of concern. Stemming from this and other imperatives to conserve water was the DECC initiative for the top 200 water users in NSW to submit a Water Savings Action Plan to the State Government. Macquarie University is obliged to submit a Plan and report under this legislation. In addition to legislative requirements, the University accepts its responsibility to become an efficient water user and demonstrate to the community the place water conservation has in future developments.

**Aim:** To reduce water usage and increase water capture and recycling across Macquarie University.

**Objectives:**

1. To achieve continual improvement in water conservation
2. To investigate and consider implementation of new technology
3. To raise awareness amongst the University’s community regarding the need to conserve water
4. To reach Five Star rating in the Every Drop Counts Business Program
5. To ensure Trade Waste compliance in all areas of the University

**Key Performance Indicators and Targets**

<table>
<thead>
<tr>
<th>Indicator:</th>
<th>2014 target:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total consumption per EFTP</td>
<td>Reduced by 40% of 2007 figures</td>
</tr>
</tbody>
</table>
The Sustainability Strategy is endorsed by Macquarie University’s Sustainability Policy and Procedure. Please visit Policy Central to view these documents (see http://www.mq.edu.au/policy/all.html#s).

Background
To be successful in changing current patterns of thinking and practice requires effective communications. In addition, addressing sustainability provides Macquarie University with an opportunity to effectively market its actions to current and future staff, students, the community and businesses. The following Plan seeks to define the communication strategy.

Purpose of the Plan
To specify strategies that will allow effective communication about Macquarie University’s sustainability vision, actions and plans to both the University’s internal community and to its external stakeholders.

Objectives:
1. A high profile and a clear image locally, nationally and internationally through effective promotion of the University, its vision and its actions
2. Recognition of the University’s contribution towards change for sustainability
3. Improved management of sustainability issues
4. Improved awareness and understanding by staff and students towards sustainability at Macquarie

<table>
<thead>
<tr>
<th>Audience</th>
<th>Local Community:</th>
<th>Media:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainability@MQ team</td>
<td>Community groups, the education community, individual community leaders</td>
<td>MQ media: News@MQ, The Globe, student publication</td>
</tr>
<tr>
<td>University community: Staff, Students, University Council, Alumni Association and Foundation</td>
<td></td>
<td>Editors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Journalists</td>
</tr>
<tr>
<td>Local Government</td>
<td></td>
<td>National/international</td>
</tr>
<tr>
<td>Politicians (State &amp; Federal)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business, Industry &amp; the Professions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Established partnerships</td>
<td></td>
<td>Education/sustainability-specific media.</td>
</tr>
<tr>
<td>STRATEGY</td>
<td>METHOD</td>
<td>ACTION</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Organise and coordinate work with Sustainability@MQ team</td>
<td>Coordinate actions, relate progress, organise next steps through team meetings</td>
<td>DS/SO/DS/SO/OA</td>
</tr>
<tr>
<td>Organise and coordinate work with Office of Facilities Management</td>
<td>Coordinate actions, relate progress, organise next steps through team meetings</td>
<td>DS/MSP</td>
</tr>
<tr>
<td>Relate progress and gain input and advice from DVC and COO</td>
<td>Meetings</td>
<td>DS</td>
</tr>
<tr>
<td>Coordinated, unified &amp; sustained communication of the University's Sustainability Vision</td>
<td>Demonstrate commitment to the Vision in written and verbal communication with staff in Faculties, Schools &amp; Divisions where appropriate</td>
<td>VC, DVCs, and Deans</td>
</tr>
<tr>
<td></td>
<td>SMG meetings/forums</td>
<td>DVC and COO</td>
</tr>
<tr>
<td></td>
<td>SWG meetings</td>
<td>DVC and COO/DS</td>
</tr>
<tr>
<td></td>
<td>Town Hall meetings</td>
<td>VC/DVC/DS</td>
</tr>
<tr>
<td></td>
<td>Establish &amp; agree key messages communicate key messages internally and externally</td>
<td>VC/DVC and COO/SWG</td>
</tr>
<tr>
<td>Promotion of Sustainability@MQ actions and plans</td>
<td>Promote success internally through: MQ publications</td>
<td>VC/DVC and COO/DS</td>
</tr>
<tr>
<td></td>
<td>Meetings</td>
<td>VC/DVC and COO/DS/ SWG members</td>
</tr>
<tr>
<td></td>
<td>Sustainability website</td>
<td>OA (info supplied by action groups)</td>
</tr>
<tr>
<td></td>
<td>Annual Report</td>
<td>Reporting Group</td>
</tr>
<tr>
<td></td>
<td>Promote success externally through: Relevant higher education publications</td>
<td>DS/SO/PR unit</td>
</tr>
<tr>
<td></td>
<td>Local community publications</td>
<td></td>
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<tr>
<td></td>
<td>Other print media</td>
<td></td>
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<tr>
<td>STRATEGY</td>
<td>METHOD</td>
<td>ACTION</td>
</tr>
<tr>
<td>----------</td>
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</tr>
<tr>
<td>High standard of publications, events and public communications</td>
<td>Maintain consistent quality of design and publication</td>
<td>DS/SO</td>
</tr>
<tr>
<td></td>
<td>Ensure event management is effective including attention to planning</td>
<td></td>
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<tr>
<td></td>
<td>Ensure public communications are well versed and professional</td>
<td></td>
</tr>
<tr>
<td>Interaction with local communities</td>
<td>Partnership with Ryde Council to promote sustainability in the local community</td>
<td>Ryde Council/DS/SO</td>
</tr>
<tr>
<td>Inform and involve relevant groups in policy &amp; planning, issues and strategies</td>
<td>Identify key agents within the University (dependent on policy, issue etc being addressed)</td>
<td>DS/SO/SWG</td>
</tr>
<tr>
<td></td>
<td>Post information and gather input on the sustainability website</td>
<td>OA</td>
</tr>
<tr>
<td></td>
<td>Hold regular meetings for staff and students to gain input</td>
<td>DS/SO</td>
</tr>
<tr>
<td>Maintenance of a productive relationship with key media</td>
<td>Compile and regularly update an experts list</td>
<td>DS/SO</td>
</tr>
<tr>
<td></td>
<td>Maintain productive networks with Media</td>
<td>PR/DS</td>
</tr>
<tr>
<td></td>
<td>Chancellor/VC meetings with Editors (MQ publications, Northern Express, Sydney papers)</td>
<td>Chancellor/VC</td>
</tr>
<tr>
<td>Communicate and involve staff and students in the direction the University is taking</td>
<td>Advise to use the Forum</td>
<td>OA/SO/DS/MQ Announcements</td>
</tr>
<tr>
<td></td>
<td>Meetings with staff and students</td>
<td>DS/SO</td>
</tr>
<tr>
<td></td>
<td>Meetings with students</td>
<td>DS/SO/SM</td>
</tr>
<tr>
<td>STRATEGY</td>
<td>METHOD</td>
<td>ACTION</td>
</tr>
<tr>
<td>----------</td>
<td>--------</td>
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</tr>
<tr>
<td>Improve relations with business/industry groups with an objective to improve sustainability linkages</td>
<td>Support GSE844 which actively seeks to build partnerships with business</td>
<td>DS/GSE, VC/DVC’s to communicate</td>
</tr>
<tr>
<td></td>
<td>Identify VC’s/DVC’s interaction with business (how often, what format etc), use these forums to promote sustainability actions</td>
<td>VC/DVC and COO/DS</td>
</tr>
<tr>
<td></td>
<td>Seek strategic partnerships with sustainable companies</td>
<td>DVC and COO/DS</td>
</tr>
<tr>
<td></td>
<td>Meet with business park groups to communicate University sustainability vision and plans. Seek cooperation, provide support to engage in similar changes towards sustainability</td>
<td>DS/SO</td>
</tr>
<tr>
<td></td>
<td>Celebrate partnerships with business/industry through regular stories in MQ publications, industry and professional newsletters</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promote and support existing partnerships with university and community groups</td>
<td>Through the sustainability website Internal and local media communication co-ordinated through PR</td>
<td>SO/OA, PR</td>
</tr>
</tbody>
</table>

DS = Director of Sustainability  
SO = Sustainability Support Officer  
OA = Online Systems Administrator  
SM = Sustainability Manager U@MQ  
MSP = Manager Sustainable Projects OFM  
VC = Vice Chancellor  
DVC and COO = Deputy Vice Chancellor and Chief Operating Officer  
PR = Public Relations Unit  
GSE = Graduate School of the Environment  
SWG = Sustainability Working Group
Progress made and performance against targets will be reported at each Sustainability Working Group meeting. Biannual reports will be submitted by Action Groups to the Director of Sustainability and summarised for placement on the Sustainability@MQ website (see Appendix A). An annual report of performance will be approved by the SWG and presented to the Vice Chancellor and then to University Council in May of each year. It is intended that this report will be published and made available to internal and external stakeholders in the form of an annual Sustainability Report. The sustainability indicator framework developed through the Reporting Action Group will enable tracking of long-term trends and progress to be made against the sustainability objectives and available for viewing via the Sustainability website. Data collection processes to report on progress are being systematically developed.

The methodology used for this Strategy and for all reporting is one of adaptive planning management. This methodology is iterative and therefore enables Sustainability@MQ to update and change reports with new information as required. Any changes made to existing documents will be made transparent through announcements and amendments.
Background

The Sustainability Working Group (SWG) was formed in July 2007 as the advisory and support body for the Sustainability Office regarding plans, programs, activities and communications which seek to improve the sustainability performance of Macquarie. Stemming from the SWG are a number of Action Groups which address the numerous aspects of the University from operations, to human resources and learning and teaching.

To date, the SWG and the Action groups have been loosely structured to allow time for each to find its place in the scheme of the change Macquarie is making towards sustainability. After eight months, it is time to begin formalising the commitment the SWG and in particular the various Action Groups have towards the change Macquarie is seeking. As a result, this document has been prepared to assist Groups with regards to identifying next steps and reporting on progress made.

Progress Report

The aim of the progress report is to provide information on:

- progress in each of the action groups,
- progress against objectives (as identified in the Action Plans),
- any issues and learnings, and
- next steps.

The report will be informed by actions identified in the Action Plans, and provides content for the Sustainability@MQ website. The report will be no longer than one page and capture key issues/outcomes from meetings/workshops etc. including:

- Group learning, such as – ongoing learning, research undertaken, strategy developed, collaboration with community, policy/practice implications etc.
- Key outcomes - any unexpected and expected ongoing impacts/outcomes and recommendations, in particular, tangible outcomes such as new policies, plans, knowledge and networks, increased awareness, improved efficiencies etc.

The format for progress reports should follow:

i) Project focus (expected outcomes) – brief overview
ii) Activities and progress (including any communication e.g. meetings with stakeholders)
iii) Reflections/insights (capturing learning of the process undertaken e.g. approach used was successful/unsuccesful)
iv) Next steps - including possible associated costs or resources required.

Progress reports should be provided on a biannual basis, covering the periods: Jan-Jun; Jul-Dec. Reports should be submitted to the Director of Sustainability.