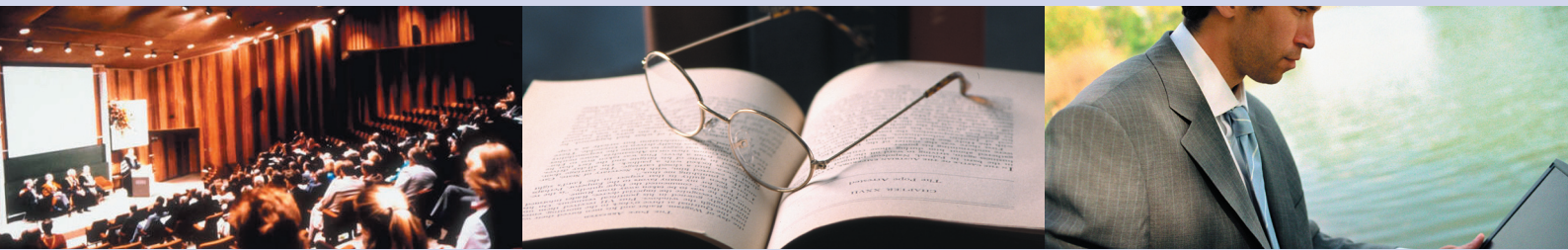


Education *about* and *for* Sustainability in Australian Business Schools



Australian Government
Department of the
Environment and Heritage

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EDUCATION ABOUT AND FOR SUSTAINABILITY IN AUSTRALIAN BUSINESS SCHOOLS

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Abbreviations Box

AGSM – Australian Graduate School of Management
AIM – Asian Institute of Management
BGP – Beyond Grey Pinstripes
CMER – Centre for the Management of Environmental and Social Responsibility, INSEAD
DEH – Department of the Environment and Heritage
GSB – Graduate School of Business
MBA – Masters of Business Administration
MBS – Melbourne Business School
MGSM – Macquarie Graduate School of Management
MU – Macquarie University
RMIT – Royal Melbourne Institute of Technology
UNSW – University of New South Wales
UTS – University of Technology, Sydney

EXECUTIVE SUMMARY

The sustainability agenda is gaining significant ground in the business sector internationally – although in Australia this is happening at a slower pace. The limited number of opportunities across Australia, to build capacity for sustainability in the business and industry sector, may help explain why the increasing interest in the area of sustainability nationally has not resulted in a reorientation of business strategy or practice.

In this study, Business Schools in Australia and overseas were examined to identify education about and for sustainability in MBA curriculum and short courses. The study identified current best practice overseas through a benchmarking process which adopted three levels of performance criteria. The same criteria were applied to thirty-three Australian Business School MBA programs in order to understand how they address sustainability content and teaching of skills for sustainability. Four additional Australian Business Schools participated in research studies, independent of the benchmarking process, to provide more in-depth information regarding their MBA degrees and the education content about and for sustainability. Findings from the benchmarking and review of in-depth responses informed the recommendations of this study.

The study found that there are no specialised sustainability MBA programs or core sustainability courses in postgraduate business education in Australia. However, environmental or social sustainability themes do feature in elective subjects and one Business School is planning to offer a sub-major relating to sustainability. The skills needed to empower graduates for strategic change towards sustainability are lacking in the majority of Australian MBA degrees. However there are signs of change with one Business School showing high student demand for electives which address sustainability. The main barrier to education about and for sustainability in Australian Business Schools was a shortage of staff available with the experience and knowledge to teach sustainability, lack of faculty support as well as a lack of demand for such courses.

In addition, executive education offered to professionals who have chosen not to study for an MBA was analysed in this study. Some Business Schools in Australia offer short courses dealing with traditional business, leadership and management topics. However, very few of these courses explicitly include or integrate sustainability content or education for sustainability.

The study also described the extensive range of non-university programs and training courses for sustainability available via public and private organisations in Australia. It was identified that very little training needs analysis has been conducted into the requirements of mainstream business to be able to advance sustainability policies and practices.

The study argues that Australian industry could benefit from educated graduates with the ability to contribute to change for sustainability in corporate Australia. To achieve this there is a need to:

- Identify and build relationships with **champions** in the corporate sector thus providing a critical link between the sustainability needs of business and curriculum offerings;
- **Raise student demand and faculty support** for sustainability courses;
- Undertake a **needs analysis** into business requirements and expectations of MBA and other business graduates in the area of sustainability;
- Provide incentives and support for **MBA staff to develop their knowledge and skills** in sustainability and education for sustainability;
- Provide incentives and support to Business Schools to revise **core courses** and develop **new optional courses** to address education for sustainability;
- Develop **new resources** to support integration of education for sustainability in core courses - in particular documenting industry case studies;
- Develop **industry partnerships** that provide work placements and mentoring; and
- Encourage integration of **international experience** to promote change/ research.

This study has recommended a research and development project which seeks change outcomes in short and long-term timeframes. It proposes a project which addresses needs identified by this study and in the short term, would promote the mainstreaming of sustainability across the major Business Schools. The project would assist with the development of a Leading Edge course (and the demand for that course) which could be established in the longer term.

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1. EDUCATION *ABOUT* AND *FOR* SUSTAINABILITY

1.1 Introduction

If today's businesses are to remain competitive in their industry they will need to meet not only the financial but also the social and environmental challenges increasingly faced by corporations¹. It is within this context, that the sustainability agenda is gaining significant ground in the business sector internationally² – although in Australia this is happening at slower pace³. The limited number of opportunities across Australia, to build capacity for sustainability in the business and industry sector, may help explain why the increasing interest in the area of sustainability nationally has not resulted in a reorientation of business strategy or practice.

Business Schools can assist with the shift towards sustainability by providing education and capacity building as well as leadership in sustainability across a range of business sectors⁴. This study seeks to identify current best practice in sustainability within MBA programs internationally and across Australia. The intention is to review current opportunities and provide recommendations for enhancing education *about* and *for* sustainability within MBA programs and related professional short courses. A key component of the study was the development of partnerships with the top ranking Business Schools in Australia in order to ensure that the findings were valid and accurate and recommendations realistic⁵.

1.2 Education *About* and *For* Sustainability

Since Agenda 21, education and capacity building have been increasingly recognised as critical to help shift societies towards sustainability⁶. These processes are vital to enhance people's abilities to find solutions to *unsustainable practice*. They also help *strengthen governance* and *partnerships* which build *institutional support for change* towards sustainability.

Education *for* sustainability has crystallised over the past ten years⁷. Originally perceived as education *about* sustainability it is being increasingly recognised, through the influence of *Agenda 21*⁸ and the more recent Johannesburg Summit⁹, as more than the dissemination of knowledge. It is now understood that sustainability is a process of adaptive management and systems thinking, requiring creativity, flexibility and critical reflection¹⁰. Through team work – stakeholder dialogue and decision making - and working across disciplines, social groups learn from each other as they consider options and the consequences of these options to the future. Critical to education *for* sustainability is learning how to motivate and manage change towards sustainability within organisations or institutions¹¹. It differs from the traditional Environmental Education approaches in that it goes beyond addressing values and attitudes of the individual to build their capacity for instigating and managing change¹².

Education *about* sustainability focuses on addressing the content matter of sustainable development including the issues pertaining to human actions considered unsustainable such as non-renewable resource use, over-consumption, climate change, loss of biodiversity and

¹ Dunphy et al (2003)

² United Nations (2002)

³ Tilbury et al (2004)

⁴ Benn & Bubna-Litic (2003); Tilbury (2003)

⁵ This partnership approach is aligned with the concept of sustainability and research for sustainability approach advocated by this study.

⁶ UNESCO (1992)

⁷ Fien and Tilbury (2002) in Tilbury et al (2002)

⁸ UNESCO (1992)

⁹ United Nations (2002)

¹⁰ Benn (1999); Benn & Bubna-Litic (2004); Tilbury (2004)

¹¹ Tilbury (2004); IUCN (2004); PCE(2004)

¹² Fien (1993); Tilbury (1993), Sterling (2001); IUCN (2004);

other aspects that are generally categorised under the triple bottom line headings of environment, social and economic.

When combined, education *about* and *for* sustainability provide people with not just the knowledge and understanding to engage with sustainability issues but also the skills and capacity to plan, motivate and manage change towards sustainability within an organisation or industry.

1.3 Master of Business Administration

The Master of Business Administration (MBA) program is probably the worlds best known and most well recognised post graduate program. The MBA originated in the USA in the early 1900s but started its phenomenal growth in prominence and popularity in the 1960's.

'Contemporary MBA programs have become the primary vehicle to prepare graduates for management and leadership roles within large and small organisations¹³.'

The MBA is a professional program, intended for those working in all aspects of business and management regardless of industry or sector. Now offered in Business Schools worldwide, the MBA program traditionally provides general and specialist curriculum in core areas such as accounting and finance, economics, organisational behaviour, marketing, general and strategic management and human resource management. The training provided in the MBA program is founded on a strong theoretical basis of what constitutes effective management including an understanding of the internal operations of a firm and its interface with society and environment¹⁴.

Since the inception of the MBA program in the USA in the early 1900s - but especially since the more widespread adoption of MBA programs in other parts of the world - the MBA program has been in a state of continual innovation and change. Initially most programs were full time and two years duration, but now there is a wide range of program structures and durations including part time, distance learning and executive MBAs¹⁵.

'In Australia, MBA programs have been offered since early 1960's, first at the University of Adelaide, University of Melbourne and University of New South Wales. Australian MBA curriculum has been adopted and adapted from American Business Schools MBA programs perhaps indicating that a unique Australian perspective of management education does not underpin the curriculum¹⁶.'

A key factor in the popularity of MBAs appears to be its ability to attract a premium in the labour market¹⁷. Many of the MBA ranking surveys such as the Financial Times MBA Ranking Survey¹⁸ include the weighted salary of graduates as an indicator of Business School performance in the market place.

1.4 Emerging Issues for the MBA

There has been a recent critical review of the ability of MBA programs to deliver education *about* or *for* sustainability as very few MBA programs in Australia or overseas include sustainability themes outside of electives or courses commonly regarded as 'stand-alone' units or aspects of a specialised program¹⁹. It has been argued that:

¹³ Benn & Bubna-Litic (2003, p.2)

¹⁴ Benn & Bubna-Litic (2004)

¹⁵ See <http://www.MBAinfo.com>

¹⁶ Benn & Bubna-Litic (2003, p.2)

¹⁷ Ashenden & Milligan (2001)

¹⁸ See <http://specials.ft.com/spdocs/FT3543AD2BD.pdf>

¹⁹ Benn & Bubna-Litic (2004)

‘The MBA does not meet the requirements of sustainability, which call for graduates with an ability to develop reflexivity in action, who can broach different worldviews and who have skills that can negotiate corporate transformations required for sustainability²⁰.’

As most corporations are judged on their ability to make a profit, Business Schools have reflected this need in their core values and teachings. It has been traditional to ignore corporate activities relating to what are often perceived as social and environmental externalities²¹. Mintzberg and Gosling²² argue that:

‘The MBA continues to produce functional specialists drilled in analytical decision-making rather than the collaborative, worldly and reflective managers needed to provide leadership and foster success in today’s business environment²³.’

Recent research also suggests that the MBA is a program resistant to change and that it is ‘stuck’ at the technocentric, functionalist and centralised decision making end of the sustainability spectrum²⁴. Thus making it insensitive to the need for corporations to contribute to a more communal and collaborative society, and to those of future generations.

Some Business Schools, such as the Kenan-Flagler Business School at the University of North Carolina Chapel Hill, have recently responded to sustainability through integration of sustainability issues across courses in the curriculum (see **Section 4.2.1**). This is one of the world’s top-ranking Business Schools which has seen the need to mainstream knowledge and skills for sustainability. A handful of schools adopted a different approach providing opportunities for specialist training and building leadership in sustainability - they capture a different niche in the market. An example of this is the Bainbridge Graduate Institute which offers students an MBA in Sustainable Business (see **Section 4.2.2**). Examples of Business Schools from overseas that address sustainability through their MBA programs can be found in Chapter 4 of this report.

In Australia, limited research into the extent of integration of or specialisation on sustainability into MBA courses has occurred. Consideration of educational approaches and development of graduate skills (and not just sustainability knowledge) as part of this process have only just begun to enter into this dialogue²⁵.

²⁰ Benn & Bubna-Litic (2004)

²¹ Benn & Bubna-Litic (2004)

²² Mintzberg & Gosling (2002) in Benn & Bubna-Litic (2004, p.3)

²³ Benn & Bubna-Litic (2004)

²⁴ Benn & Bubna-Litic (2004)

²⁵ Tilbury & Cooke (2002)

2. THE FOCUS OF THE STUDY

2.1 Introduction

This study has been commissioned by the Department of Environment and Heritage, Australian Government and conducted by the Australian Research Institute in Education for Sustainability (ARIES) and Arup Sustainability. It forms part of a series of initiatives supported by the National Environmental Education Council which aim to assist with increasing profile and possibilities for sustainability through education.

The key questions addressed by this study are:

- What exists in terms of education *about* and *for* sustainability in MBAs and professional short courses for business and industry within Australia?
- What is current best practice within MBAs and associated short courses in Australia?
- How does this compare with international best practice?
- Does current practice meet the needs of business and industry in sustainability?
- Where are the opportunities within MBAs and associated short courses for increasing opportunities in this area?

2.2 Data Sources

This study investigates the progress by Australian Business Schools towards education *about* and *for* sustainability. Beyond an earlier study investigating the place of sustainability in postgraduate business education in Australia²⁶, little available material in the form of relevant published studies or documented information has been found. This research study reviewed relevant information from internet sources as well as from related published literature. However, the core of the data relating to Australian situation arose out of Business School reports commissioned by this study (see **Appendix B**).

2.2.1 Review of Documented Experiences and Literature

The first point of reference for the study was *Beyond Grey Pinstripes 2003: Preparing MBA's for Social and Environmental Stewardship*. The Beyond Grey Pinstripes (BGP) report presents the results of a biennial survey which assesses to what extent MBA programs in the United States prepare graduates professionally for social and environmental stewardship²⁷.

'Beyond Grey Pinstripes 2003 identifies the leading schools and faculty that are devoting the deepest attention to social impact and environmental management as well as those that are beginning to weave together this triple bottom line. Ultimately, graduates from such programs will be better equipped to lead competitive businesses that are outstanding performers in terms of financial success, social value, and environmental quality²⁸.'

The BGP survey is conducted annually and aims to go beyond traditional MBA ranking systems which focus on graduate salaries and student results to rank MBA programs according to their inclusion of 'social impact' and 'environmental management' content in the curriculum. One hundred Business Schools responded to the BGP survey, with only one school from Australia – the Curtin Business School, Curtin University of Technology, Western Australia, responding. A total of five schools from Asia responded as well as one from South Africa, seventeen from Europe, four from South America, four from Canada and the remainder from the USA.

²⁶ Benn and Bubna-Litic (2004)

²⁷ The survey was conducted by the World Resources Institute (Sustainable Enterprise Program) and the Aspen Institute (Business and Society Program). See <http://www.beyondgreypinstripes.org>

²⁸ See www.beyondgreypinstripes.org

The BGP report provides details about Cutting Edge programs as well as information about other Business Schools. The schools not considered Cutting Edge by BGP have been ranked by other international best practice index surveys of Business School performance (including the Financial Times International MBA Rankings).

The Financial Times International MBA rankings²⁹ are conducted on an annual basis and the position of a school in the rankings is still determined by its performance in three broad areas: the career progression accrued from the MBA, particularly its 'purchasing' power in the marketplace, diversity of experience and the school's research qualities.

These indices were used as a starting point for identifying institutions that may have experience, awareness, expertise and/or funding required for addressing sustainability into MBA curriculum. Internet search engines were also used to identify Business Schools potentially excluded from the mainstream index surveys but had also endeavoured to integrate education *about* and *for* sustainability within MBA curriculum.

Previous surveys have been undertaken of the extent to which sustainability themes are being incorporated into the principle MBA programs of Australian Business Schools. The results of these surveys conducted in 1999, 2000 and 2001 into the MBA programs at 25 institutions are provided below³⁰:

- Four of the responding institutions (Monash, Mt Eliza, RMIT, and University of South Australia) have core courses in general MBA programs that deal with sustainability or core matters such as corporate environmental or social responsibility;
- Nine MBA programs (James Cook University, University of Central Queensland, University of Tasmania, University of Queensland, AGSM, University of Sydney, UNSW, RMIT and UTS) have elective courses in environmental or social responsibility areas;
- Three institutions (University of Southern Queensland, Griffith University and Murdoch University) have a specialised MBA in environmental management;
- Six MBA programs mentioned ethics-based course areas where environment or sustainability-related themes occur in their programs;
- Environmental and social electives or courses were seen as stand alone or as an aspect of a specialised program;
- Environmental management was relegated to the technical as distinct from the social realm of decision making; and
- Only 25% of the total respondents offered any course dealing with sustainability from an integrated perspective.

In addition, published literature such as journals and books were reviewed to provide additional detail on the varying approaches, benefits and challenges faced by Business Schools when addressing sustainability through MBA programs. A full list of references is provided on **page 68**.

2.3 Involvement of Australian Business Schools

Links with Australian Business Schools are critical to providing an accurate in-depth inquiry into education *about* and *for* sustainability practice in Business Schools. To this end specific key partnerships were developed for this study, this also was taken as an opportunity to engage these key players in the process from the outset. Partnerships have been initiated with the following institutions:

- Australian Graduate School of Management, (AGSM) - University of Sydney and University of New South Wales;
- Graduate School of Business (UTS) - University Technology of Sydney;
- Macquarie Graduate School of Management (MGSM) – Macquarie University, Sydney;
- Melbourne Business School Ltd (MBS) - Associated with the University of Melbourne, Victoria.

²⁹ See <http://specials.ft.com/spdocs/FT3543AD2BD.pdf>

³⁰ Benn et al (2001)

Each Business School engaged in a research inquiry into education *about* and *for* sustainability within their MBA curriculum. The inquiry was guided by a set of questions which were developed in partnership with the Business Schools through an internet dialogue (see **APPENDIX A**). They were intended to provoke reflection, raise awareness, provide a platform for comparison and encourage the provision of information regarding the barriers to and opportunities for enhancing the delivery of education *about* and *for* sustainability in the respective schools.

Questions guiding the Business Schools inquiries focused on the following:

- Profile of sustainability or education *for* sustainability within the Business School;
- Interpretations of sustainability by the Business School, the academic staff and MBA programs;
- Identification of curriculum areas perceived by staff to be more closely aligned with sustainability;
- Distinguishing the business case from the normative case for sustainability;
- Provision of education *about* and *for* sustainability in courses, specialisations, assessments within the MBA;
- Extent of education *about* and *for* sustainability in non-MBA short/professional courses offered by the Business School;
- Student feedback on learning about sustainability and skills for sustainability;
- Opportunities for business/industry stakeholders to input into MBA curriculum; and
- Opportunities for enhancing and identification of barriers to delivering education *about* and *for* sustainability in Business School.

In addition, each school was required to provide recommendations for the advancement of sustainability and education *for* sustainability in Australia. The complete Business School reports are included in **APPENDIX B**.

2.4 Professional Training and Short Courses

The project brief recognises that materials from an MBA program could also form the basis of sustainability corporate short courses and executive series courses occasionally offered by Business Schools. In order to also explore experience and possibilities in this area, Global Knowledge Ventures (GKV) was commissioned to conduct a study of current Australian and overseas professional training/short courses relating to sustainability. This report, together with the Business Schools inquiries into short courses, provides a snapshot which helps to inform this study (see **APPENDIX C**).

2.5 Limitation of this Study

The study was undertaken over a period of three months. The research methodology and type of feedback data collected were limited by time constraints. The study was informed by the results of the Business Schools' research inquiry as well as information obtained from internet searches and documented experiences. It would have benefited from a more in-depth inquiry which could have involved dialogues with all Australian Business Schools, profiling of MBA students and an evaluation of their needs and skills in this area. Some of these issues have been highlighted in the recommendations for further research.

3. BENCHMARKING CRITERIA

3.1 Introduction

A number of criteria have been set forth in order to categorise the status of MBA programs ranging from programs demonstrating the greatest incorporation of sustainability to those demonstrating the least. This section of the study presents the criteria developed for benchmarking international and Australian MBA programs.

3.2 Benchmarking Criteria for Business School MBAs

In order to provide criteria for benchmarking MBA programs, an approach was developed which sourced benchmarking criteria from three main sources:

- The Beyond Grey Pinstripes report and the criteria it developed for its analysis of Business Schools including course content, faculty research and extracurricular activities (see detailed criteria in box below);
- The inquiry questions developed jointly by the MU research team and the Australian Business Schools (AGSM, MBS, MGSM and UTS) which participated in the in-depth case study research; and
- Authoritative documents and recent research relating to education *about* and *for* sustainability. These criteria in particular focused on the core intentions of education *about* and *for* sustainability which highlight the critical skills and conditions required to enable MBA students to understand, motivate and manage change toward sustainability in a business environment.

Beyond Grey Pinstripes Report criteria for cutting edge schools:

- More significant infusion of social and environmental content into core courses and, on average, three times as many relevant elective courses;
- Extensive faculty research on topics bearing directly on management of social and environmental impacts, accounting for 21% of the research identified through the survey; and
- More extracurricular and student initiated activities – including conferences, seminars, and speakers – that broaden understanding of social and environmental stewardship.

Three main categories have been developed which define the status of MBA programs. These categories range from schools demonstrating the most characteristics relating to sustainability to those delivering the least. They include *Leading Edge*, *Good Practice* and *Acceptable Standard* schools delivering education *about* and *for* sustainability.

3.2.1 *Leading Edge* Schools

Criteria which must be demonstrated in *Leading Edge* MBA programs include:

- a) *Building Leadership* - in relation to sustainability through specialist courses;

Or alternatively,

- b) *Mainstreaming* - has a considerable number of core and elective courses based on education *about* and *for* sustainability.

In addition, at least five of the following additional criteria must be met in order to be considered a *Leading Edge* school:

- The Business School includes staff who have teaching and/or research expertise in the area of education *for* sustainability;
- Staff and senior management recognise the importance of developing sustainability knowledge and skills amongst business graduates. This is articulated through course material and promotional information;
- MBA course and generic outcomes or MBA graduate profiles include sustainability;
- Students have the opportunity to address sustainability through their assignments;
- Students are encouraged to construct their own understanding of sustainability across the program;
- Students would develop skills in areas considered important to the understanding and implementation of strategic change toward sustainability such as of critical reflective

thinking, systemic thinking, change management, stakeholder engagement, futures thinking;

- Extracurricular and student initiated activities on sustainability such as conferences, seminars, would be offered as part of the curriculum;
- Key industry stakeholders in the area of sustainability are significantly involved in framing the MBA curriculum – examples can range from involvement in course steering committees, course reviews and evaluations to lecturing and assessing student assessments and/or facilitation of industrial work placements; and
- The Business School offers short courses on sustainability for those who cannot commit to an MBA.

3.2.2 **Good Practice Schools**

Criteria that must be demonstrated in *Good Practice* schools include:

- Core and elective MBA course offerings, which include education *about* and *for* sustainability, are offered.

At least five of the following criteria must be achieved:

- There is at least one member of staff who has teaching and/or research expertise in the area of education *for* sustainability. This person advises program developers on how to address sustainability within the program;
- Some courses/units articulate course and generic outcomes which include sustainability;
- Students have the opportunity to address sustainability through their assignments;
- Students would develop skills in areas considered important to the understanding and implementation of strategic change toward sustainability. Such skills would include critical reflective thinking, systemic thinking, change management, stakeholder engagement and futures thinking;
- Extracurricular and student initiated activities on sustainability such as conferences, seminars, would be offered as part of the curriculum;
- Key industry stakeholders in the area of sustainability are involved in the MBA curriculum – examples can range from involvement in course steering committees, course reviews and evaluations to lecturing and assessing student assessments and/or facilitation of industrial work placements; and
- The Business School offers short courses on sustainability for those who cannot commit to an MBA.

3.2.3 **Acceptable Standard Schools**

Criteria that must be demonstrated in *Acceptable Standard* schools include:

- Electives specifically addressing education *about* or *for* sustainability.

At least three of the following criteria must be demonstrated:

- Students have the opportunity to address sustainability through their assignments;
- Faculty are moving into areas of research for sustainability;
- Limited opportunities are offered to students to equip them with the pre-requisite knowledge or skills important to the understanding and implementation of strategic change toward sustainability in the business context; and
- Limited involvement of industry stakeholders in the MBA program.

The performance of Australian and overseas Business Schools have been compared against the criteria outlined above using referenced sources. The following sections provide only some examples of how these schools have met the criteria, the performance against the

remaining criteria is summarised in the **Tables 1 through 3** in **Section 4** and **Tables 4 and 5** in **Section 5**.

4. BENCHMARKING INTERNATIONAL BEST PRACTICE

4.1 Introduction

A number of overseas Business Schools have addressed sustainability to varying degrees in their MBA programs. This section of the study describes and compares *Leading Edge*, *Good Practice* and *Acceptable Practice* overseas Business Schools, important curriculum components and examples of each.

4.2. *Leading Edge* Overseas Business Schools

4.2.1 University MBAs

The following section focuses on university Business Schools from overseas that are successfully addressing sustainability in their MBA courses. These schools have been chosen as examples in this study as they demonstrate many of the criteria associated with *Leading Edge* schools in the way they address sustainability.

SCHULICH SCHOOL OF BUSINESS, YORK UNIVERSITY, CANADA

The Schulich School of Business at York University in Toronto, Canada offers several MBA specialisations relating to sustainability including:

- Business and Sustainability;
- Business Ethics; and
- Non-Profit Management and Leadership.

Compulsory core courses specifically relate to aspects of sustainability, for example, *Managing in a Contemporary Context* which focuses on management and international awareness from a Canadian perspective as well as entrepreneurial spirit and concern for the environment and professional ethics³¹. Some examples of elective courses related to sustainability include *Business Strategies for Sustainability*, *Ethics and Social Responsibility in Management* and *Management Practices for Sustainable Business*. All of these courses have assessment related to sustainability.

Business Strategies for Sustainability (MBA Elective Course) - Schulich School of Business

'All organizations impact the natural and social environment. However, it is only recently that sustainability has become a strategic issue for business and its managers. For increasing numbers of companies, sustainability is now an integrated part of organizational strategy formulation and implementation. Through a series of 'live cases', this course is designed to introduce students to the critical strategic and managerial issues in developing, implementing and adapting strategy to create environmental, social and economic value³².'

Significant faculty research has been conducted into how to address sustainability across a range of disciplines including organisational behaviour, business ethics and marketing and accounting at the Schulich School of Business. Faculty staff are also encouraged to research management trends and incorporate findings in the MBA curriculum³³. For example, one

³¹ See www.beyondgreypinstripes.org

³² See <http://www.schulich.yorku.ca/>

³³ See <http://www.schulich.yorku.ca/>

faculty member has published an article in the *Journal of Business Administration and Policy Analysis* entitled 'Graduate Learning for Business and Sustainability'³⁴.

MBA students are encouraged to actively engage in learning to develop skills necessary for strategic change at the Schulich School of Business. This is accomplished through mandatory leadership and management skill development that confronts, explores, challenges and potentially changes the assumptions students bring to the course³⁵. A required core course is entitled *Skills for Leadership and Governance* 'provides students with competencies in critical thinking, reflection and building of learning communities. It also teaches practical skills such as negotiations, valuing diversity and team building'³⁶.

Extracurricular activities include the *Net Impact - New Leaders for Responsible Business* student club. *Net Impact* is a network of emerging business leaders committed to using the power of business to create a better world. Originally founded in 1993, *Net Impact* has evolved into a network of over 9,000 students from over 90 student and professional chapters worldwide, committed to promoting sustainable business. The Schulich chapter of *Net Impact*, established in 2002, is interdisciplinary and includes students from the School of Business, Faculty of Environmental Studies and Osgoode Law Hall, allowing a broad perspective. *Net Impact* provides members with the opportunity to broaden their business education through a consulting group, speaker series, the *Sustainable Learning Series* and site visits.

The Schulich School of Business also founded the *Sustainable Enterprise Academy* whose aim is to assist business in the transformation to corporate sustainability by providing senior executives in business, government, and civil society with the vision, education, tools and support necessary to champion sustainable development in their organisations³⁷.

Generic outcomes such as sustainability within the MBA are often reflected in the school's efforts to provide students with job opportunities which relate to sustainability. Examples may include recruitment events such as the sustainability career event of held annually at the Schulich School of Business for students interested in Not-for-Profit and Responsible Business Sectors³⁸.

³⁴ See www.beyondgreypinstripes.org

³⁵ See <http://www.schulich.yorku.ca/>

³⁶ See <http://www.schulich.yorku.ca/>

³⁷ The Sustainable Enterprise Academy was founded by the Erivan K. Haub Program in Business and Sustainability at the Schulich School of Business, York University. The Academy is North America's premier executive education program on sustainable development. See <http://www.schulich.yorku.ca/ssb-extra/sea.nsf>

³⁸ See <http://www.schulich.yorku.ca/>

SCHOOL OF BUSINESS & ECONOMICS, UNIVERSITY OF JYVAESKYLAE, FINLAND

The School of Business and Economics at the University of Jyvaeskylae in Finland is a European Business School that offers an MBA specialising in *Corporate Environmental Management*. Core courses include topics relating to sustainability such as business ethics, corporate citizenship, corporate environmental management, globalisation, stakeholder management, corporate social and environmental responsibility and human resource management.

Core course Business, Society and the Environment offered in the MBA curriculum at University of Jyvaeskylae in Finland deals with the following content:

- Forces shaping the business environment: globalization, regulation and rise in the power of various stakeholders;
- Stakeholder thinking and management;
- Challenges of sustainable development to companies;
- Social and environmental responsibility of companies; and
- Introduction to corporate citizenship and corporate environmental management³⁹.

Elective courses address various aspects of sustainability including environmental reporting, accounting, economics, environmental management systems (EMS) and social sustainability including business ethics and relationship management. By introducing sustainability into different disciplines, the school aims to 'ensure that sustainability issues are not just a specialty area of a small expert group⁴⁰.' It strongly supports the mainstreaming of sustainability across business activity.

The *Centre for Economic Research*, also located within the School of Business and Economics, is one of Finland's leading research centres in the field of regional economics, entrepreneurship, and impact analyses (economic, social and environmental impacts)⁴¹. They have conducted research into business and globalisation, as well as and technical aspects of environmental and economic material flow such as life cycle analysis⁴². Their website gives a high profile to environmental considerations.

The Business School participated and conducted seminars as part of the *Africa 2002: People and Development Conference* in Helsinki. It also has a number of networks and clubs including, the *Business and Organisation Ethics Network* which is a faculty club that organises seminars relating to business and organisation ethics. Other departments within the University are also incorporating more specific and detailed issues relating to sustainability such as the Faculty of Mathematics and Science who offer a Masters program in *Renewable Energy*. The program curriculum includes three themes; technology (physics, chemistry, mathematics, statistics), environment (biology and environmental studies) and socio-economy (social science, economics).

The school is also a founding member of the *Finnish Business and Society* which is a network of businesses aiming to create a partnership between the public sector, private sector and citizens and promote corporate responsibility⁴³.

³⁹ See <http://www.jyu.fi/economics/ymparistojohtaminen/cem.html>

⁴⁰ See www.beyondgreypinstripes.org

⁴¹ See <http://www.jyu.fi/economics/ymparistojohtaminen/cem.html>

⁴² See www.beyondgreypinstripes.org

⁴³ See www.beyondgreypinstripes.org

KENAN-FLAGLER BUSINESS SCHOOL, UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL, USA

The Kenan-Flagler School of Business at the University of North Carolina (Kenan-Flagler School of Business) offers an MBA concentration in *Sustainable Enterprise*. Education *about* sustainability is integrated into the core curriculum via courses dealing with economics, ethics, globalisation and the North/South gap, industry and innovation as well as efficiency of operations⁴⁴. Students are required to complete these courses in the first year of their MBA program and are able to choose from elective courses addressing sustainability in their second year. Electives address topics such as corporate social responsibility, sustainable enterprise, finance and sustainability, business strategy and sustainability, human resource management and non-profit marketing⁴⁵.

Financial Analysis: Integrating Sustainability (MBA elective course at Kenan-Flagler School of Business)

'This course is designed to educate students on the issues facing financial institutions globally as the institutions evaluate and quantify how environmental and sustainability issues affect the financial performance of their corporate clients and investments. These issues will have a direct impact on risk exposure and the quality of their individual credits, investments and underwriting activities. By the end of the course, each student will understand the issues and be able to apply various approaches to risk management in quantifying and measuring how environmental issues and performance correlates to financial performance⁴⁶'.

The *Centre for Sustainable Enterprise* which is located within Kenan-Flagler School of Business offers education, research and outreach to Business School students and external organisations to assist with the transition to sustainability. The school offers its faculty a Professorship in *Sustainable Enterprise* and a large proportion of the staff conduct rigorous research into Sustainable Enterprise topics such as Global Corporate Responsibility, Societal Marketing, Eco-efficiency and Environmental Policy. This research is reflected in MBA curriculum and executive education courses throughout the school.

Skills for strategic change are strongly emphasised in the MBA *Sustainable Enterprise* to enable students to create competitive advantage for organisations.

MBA *Sustainable Enterprise* at the **Kenan-Flagler School of Business** equips students with the skills and tools necessary to identify and capitalize on opportunities that create competitive advantage for firms and nonprofits via strategic approaches to matters such as stakeholder issues, value creation in untapped markets and entrepreneurial solutions for urban renewal⁴⁷.

Examples of these skills are:

- Practicum elective course entitled ***Topics in Corporate Social Responsibility: Power and Ecotourism on the Nile*** allows students to assess the feasibility of a proposed power project on the Nile in Bujagali, Uganda. Students meet with a range of stakeholders and present their findings to the Government of Uganda and other interested parties: and
- ***A Living Case: The North Carolina Economic Opportunities Fund*** (the Fund) elective course allows students to apply principles of venture capital and community capitalism to the real world example of Dogwood Equity (a private equity fund). Students are introduced to the range of opportunities, difficulties, options and choices faced by the organisers and managers of the Fund, especially when considering issues of creating community wealth and investor return simultaneously. Students are expected to actively participate in making and critiquing critical choices through class participation and group projects, drawing upon the experience of the Fund and of similar entities⁴⁸.

⁴⁴ See <http://www.kenan-flagler.unc.edu/>

⁴⁵ See <http://www.kenan-flagler.unc.edu/>

⁴⁶ See www.beyondgreypinstripes.org

⁴⁷ See <http://www.kenan-flagler.unc.edu/>

⁴⁸ See www.beyondgreypinstripes.org

Extracurricular activity is embedded into the MBA *Sustainable Enterprise* to include workshops during orientation, speaker series, student clubs and the annual Career Fair. Examples of conferences recently held relating to aspects of sustainability include the National *Net Impact Conference: Redefining the Bottom Line* held in 2001 and *Corporate Leadership in the Community Conference* held in 2002. As part of the curriculum, students complete a practicum and work with host organisations to address a sustainable enterprise-related project⁴⁹.

Centre for Sustainable Enterprise Practice – elective practicum course at Kenan Flagler School of Business

'Teams of three to five students receive guidance as they work with host organizations to address a sustainable-enterprise related project that addresses a particular environmental or social issue over a 14-week period. Host organizations may be in the private, public or non-profit sectors.

Project opportunities are available from the *Centre for Sustainable Enterprise*, but students also are encouraged to identify and pursue opportunities specific to their particular interests. This for-credit immersion experience provides a real-world application of business principles for MBA students. The end product of each project is a written report from students summarizing key insights and detailing specific company recommendations and next steps for implementation. Students also make a formal presentation of their findings to company representatives⁵⁰.

The Advisory Board to the *Centre for Sustainable Enterprise* (the Centre) is made up of key stakeholders with extensive sustainable development experience and knowledge. These board members 'are a tremendous resource for students, faculty and alumni of the Centre, serving as a source of knowledge and insight through career counselling, participation in the Sustainable Enterprise Career Fair and speaking engagements at UNC Kenan-Flagler⁵¹.'

Students have the opportunity to address sustainability through assessment in many of the core and elective courses offered in the MBA *Sustainable Enterprise* concentration at the Kenan-Flagler School of Business. The core course *Entrepreneurship and Minority Economic Development* sets written assignments and participation in on-going research projects relating to economic and social sustainability of organisations. The assessment for this course is outlined in the box below.

Assessment requirements for ***Entrepreneurship and Minority Economic Development*** core course in the MBA Sustainable Enterprise concentration

'Students will have the opportunity to participate in an on-going research project that seeks to identify and document innovative entrepreneurial approaches to poverty alleviation, job creation, and community development in U.S. economically distressed communities. Specifically, working in teams, you will be asked to:

- Identify a "real world" instance in which a U.S. based civic organization (i.e., a non-profit and/or government agency) is engaging in an entrepreneurial venture(s) to raise money to sustain its operations and support its social mission(s); and
- Prepare a case that describes the initiative and evaluate its overall utility as an entrepreneurial venture.

In addition, there are two written assignments: a report presenting the results of your case analysis of a "best practice" of civic entrepreneurship, and a take-home final examination⁵².

4.2.2 Non-University MBAs

While many university Business Schools are successfully addressing sustainability into their MBA programs, there are a number of non-university institutions that have been developed

⁴⁹ See www.beyondgreypinstripes.org

⁵⁰ See www.beyondgreypinstripes.org

⁵¹ See <http://www.kenan-flagler.unc.edu/>

⁵² See <http://www.kenan-flagler.unc.edu/>

specifically for postgraduate studies and offer specialised MBA programs dealing with sustainability and business.

BAINBRIDGE GRADUATE INSTITUTE, USA

The Bainbridge Graduate Institute (Bainbridge), located on Bainbridge Island Washington, offers students an MBA in *Sustainable Business* and Certificate in *Sustainable Business*. While not recognised as a Business School, Bainbridge conforms to US education legislation and is authorised to grant programs by the Washington State Higher Education Board⁵³.

Bainbridge is made up of faculty from various Business Schools and operates solely for graduate studies in *Sustainable Business*. Bainbridge's advantage over other Business Schools (which often experience difficulty incorporating sustainability into existing MBA studies) has been its ability to integrate sustainability holistically in all MBA curriculum since Bainbridge was opened in 2002⁵⁴.

The MBA *Sustainable Business* is offered as a two or three year program and delivers a set of compulsory courses over that time. The program focuses on entrepreneurship for sustainability and prepares students to start their own sustainable enterprises or to be effective change agents within existing organisations⁵⁵. The courses are highly integrated and address topics such as: definitions and frameworks of sustainable business, systems thinking, leadership, economics, management, marketing, finance, statistics, stakeholder analysis, community and social justice, sustainable operations, organisational change and entrepreneurship⁵⁶. The *Topics in Sustainable Business* course allows students choice between short courses, experimental offerings, independent study and action learning.

The MBA program offered by Bainbridge is designed for working individuals and aims to give students skills in strategic change which can be used in real organisational environments. The course on *Organisational Change* aims to address:

'Topics of theory and practice of organizational change and analyse specific challenges of leading change toward sustainability⁵⁷.'

In addition, Bainbridge's unique curriculum attracts students with priorities which move beyond conventional preferences for enrolling in MBA programs.

Bainbridge Graduate Institute

'The majority of our students are getting an MBA for reasons other than the benefit of employability conferred by the program itself. They believe that the knowledge, not the program, will be most helpful in achieving their aims. This is not surprising when you consider that over half of our students either are or plan to be entrepreneurs or are already working for an ESR (environmentally and socially responsible) enterprise or in a sustainability-related function with a more mainstream employer. We believe there is a large opportunity space for entrepreneurs who want their work to reflect their values⁵⁸.'

Extracurricular activities are beginning to be established at Bainbridge and students can choose to attend conferences relating to sustainable business topics. Senior management at Bainbridge understand the importance of developing sustainability skills amongst business graduates. This understanding has been conveyed in the profile of a board member from promotional information available from the Bainbridge website.

⁵³ See <http://www.bgiedu.org/>

⁵⁴ See <http://www.bgiedu.org/>

⁵⁵ See <http://www.bgiedu.org/>

⁵⁶ See <http://www.bgiedu.org/>

⁵⁷ See <http://www.bgiedu.org/>

⁵⁸ Dunsy et al (2003)

OTHER INSTITUTIONS

Other non- university institutions offering sustainability related MBA curriculum are the *Green MBA* offered by the New College of California in the USA, the MBA on *Sustainable Management* offered by Alliant International University in conjunction with Presidio World College in San Francisco in the USA (see below), The Master of Science in *Business Responsibility and Practice* offered by the University of Bath School of Management, and the Masters in *Integrated Sustainable Management for Business* offered by the Centre for Sustainable and Environmental Management (validated by Middlesex University) in the UK.

Alliant International University is an independent, non-profit university which is accredited by the Western Association of Schools and Colleges and complies with relevant legislation. The MBA program aims to: 'integrate a rigorous business studies curriculum with the values of social and environmental responsibility and prepare decision-makers to meet current needs without jeopardizing the needs and health of future generations.'

The curriculum offers one course per semester from four strands; money, markets, sustainability and people. The courses include topics relating to management, economics, finance, leadership, ethics, operations, systems and implementation. A business internship is also offered where students can take part in practical application of sustainable management in a private, non-profit or government organisation.

The *Sustainability Implementation* course aims to integrate skills and knowledge by exploring the 'step-by-step process for transforming a company both internally and externally'⁵⁹.

The **Centre for Action Research in Professional Practice** at the University of Bath School of Management in partnership with the New Academy of Business offers a Master of Science in Business Responsibility and Practice. The New Academy of Business is an independent educational organisation established in 1995 by Anita Roddick, founder of The Body Shop International.

The courses address topics such as globalisation and business, new economics, ecology and sustainable development, sustainable corporate management, humanity and enterprise, corporate citizenship, diversity and self and world futures. The main aims of the Masters program are for students to carry out action-experiments in their own workplaces, and develop skills in disciplined action-learning and develop their capacities as informed and self-aware individuals and as contributors to organisational change⁶⁰.

⁵⁹ See <http://www.alliant.edu/usicb/mba/mbastm.htm>

⁶⁰ See <http://www.bath.ac.uk/carpp/msc.htm>

4.2.3 Summary

Table 1 provides an overall summary of the performance of the MBA programs from *Leading Edge* international Business Schools against the criteria developed for this benchmark.

Table 1 – *Leading Edge* Business Schools Overseas

LEADING EDGE SCHOOLS				
CRITERIA	Schulich School of Business, York University, Canada	School of Business and Economics, University of Jyväskylä, Finland	Kenan-Flagler Business School, University of North Carolina at Chapel Hill, USA	Bainbridge Graduate Institute, USA
The MBA program:				
a) Is specialised in relation to sustainability (<i>building leadership</i>);	Yes	Yes	Yes	Yes
Or alternatively,				
b) Has a considerable number of core and elective courses based on education <i>about</i> and <i>for</i> sustainability (<i>mainstreaming</i>).	Yes	Yes	Yes	Yes
The Business School includes staff who have teaching and/or research expertise in the area of education <i>for</i> sustainability.	Yes	Yes	Yes	Yes
Staff and senior management recognise the importance of developing sustainability knowledge and skills amongst business graduates. This is articulated through course material and promotional information.	Yes	Yes	Yes	Yes
MBA course and generic outcomes or MBA graduate profiles include sustainability.	Yes	Yes	Yes	Yes
Students have the opportunity to address sustainability through their assignments.	Yes	Yes	Yes	Yes
Students are encouraged to construct their own understanding of sustainability across the program.	Yes	*Unknown	Yes	Yes
Students would develop skills in areas considered important to the understanding and implementation of strategic change toward sustainability such as of critical reflective thinking, systemic thinking, change management, stakeholder engagement, futures thinking.	Yes	Yes	Yes	Yes
Extracurricular and student initiated activities such as conferences, seminars, would be offered as part of the curriculum.	Yes	Yes	Yes	Yes
Key industry stakeholders in the area of sustainability are significantly involved in framing the MBA curriculum – examples can range from involvement in course steering committees, course reviews and evaluations to lecturing and assessing student assessments and/or facilitation of industrial work placements.	Yes	*Unknown	Yes	Yes
The Business School offers short courses on sustainability for those who cannot commit to an MBA.	Yes	*Unknown	Yes	No

*Unknown – Information could not be obtained through references used for this report. Further in-depth research would be required.

4.3 Good Practice Overseas Business Schools

The schools identified as *Good Practice* Business Schools are those which offer core and elective MBA courses relating to sustainability and meet at least five of the *Good Practice* criteria outlined in **Section 3.2.2**. These schools are believed to achieve a high level of integration of education *about* and *for* sustainability within their MBA curriculum (mainstreaming) or offer sub-specialisations (or tracks) within the MBA programs on sustainability (building leadership). *Good Practice* MBA programs maintain performance levels above *Acceptable Standard* but below *Leading Edge* in delivering graduates possessing skills and knowledge necessary for strategic change in organisations. Evidence is provided in the examples below.

INSEAD, FRANCE

Core and elective courses offered by the MBA program at INSEAD relate specifically to models for strategic planning, risk, environmental regulation, corporate social responsibility, business ethics and sustainable development⁶¹. The *Corporate Social Responsibility Challenge* is a hypothetical practicum course offered over one day, which aims to:

‘Show the impact of managerial, economical and social decisions (taken by a company management team) on the financial results and on the company image (represented by a ‘corporate social responsibility index’)⁶².’

INSEAD faculty at the *Centre for the Management of Environmental and Social Responsibility* (CMER) conduct significant sustainability research dealing with the topics of environmental economics and trade policy, industrial ecology, sustainable operations and sustainable strategies⁶³.

The *Environmental Sustainability and Competitive Advantage* course within the MBA program looks at strategies, drivers and management tools and methods for sustainability transformation⁶⁴.

The CMER presents several conferences such as the *Balanced Scorecard and Sustainability Conference* in held 2003 and research seminars such as *Corporate Social Responsibility: Science or Religion* held in February 2004⁶⁵. MBA students are actively involved in extracurricular activities of CMER, such as the 2002 *Sustainable Venture Finance Workshop* and a panel discussion on *Social Entrepreneurship: Business Making a Difference* held in June 2002⁶⁶. Student clubs are also active within the MBA program at INSEAD.

‘INDEVOR is a student and partner-run organization at INSEAD that serves as a forum for those interested in social, environmental, and ethical issues, often bridging the gap between business and the social sector’⁶⁷.

Key stakeholders with expertise in sustainability have been involved in the MBA curriculum at INSEAD. For example, visiting faculty from other Business Schools are involved in teaching, research and conferences within the CMER.

ASIAN INSTITUTE OF MANAGEMENT, PHILIPPINES

Washington SyCip Graduate School of Business at the Asian Institute of Management (AIM) in the Philippines offers a wide variety of core and elective courses dealing explicitly with

⁶¹ See www.beyondgreypinstripes.org

⁶² See www.beyondgreypinstripes.org

⁶³ See <http://www.insead.edu/CMER/>

⁶⁴ See <http://www.insead.edu/CMER/>

⁶⁵ See <http://www.insead.edu/CMER/>

⁶⁶ See www.beyondgreypinstripes.org

⁶⁷ See www.beyondgreypinstripes.org

sustainability in the MBA program. Courses such as *Asian Business Systems, Operations Management and Development of Enterprise* deal with issues such as corporate social responsibility, new economy and product quality and development⁶⁸.

The Management of Change elective course 'introduces participants to the forces and dynamics of change as they appear and impact on various structures from the individual to the global level'⁶⁹.

The Ramon V. del Rosario, Sr. Centre for Corporate Responsibility promotes social responsibility by expanding students' understanding of the ethical, environmental, economic, financial and managerial influences on corporate governance and business responsibility in the Asian context⁷⁰.

In addition to explicit sustainability curriculum, AIM has a range of research centres such as the *Centre for Corporate Responsibility* and the *Centre for Development Management* and human development programs such as the *Environmental Governance* program which involve extensive research into aspects of sustainability⁷¹.

BRANDEIS UNIVERSITY, USA

The Heller School for Social Policy and Management at Brandeis University in Massachusetts (Brandeis) offers a MBA in *Mission Driven Management* with a concentration in *Sustainable Development*. While sustainability is not integrated into the core MBA courses, students are required to complete two separate courses *Framework for Sustainable Development* and *Rights Based Approach to Development* and two elective courses from a list including topics such as natural resource management, Geographical Information Systems, ecology, environmental impact assessment, conflict resolution, development management and cost effectiveness analysis⁷². These courses are added on to the full MBA curriculum and little integration exists between business, management and leadership with social, economic or environmental considerations.

The MBA offered at Brandeis aims to give students knowledge and examples of sustainable development through course content in the required courses. This aims to:

'Help students gain an understanding of the current state of world development and will engage students in critical thinking about reducing poverty, hunger and human inequality, and in conserving the environment'⁷³.

Skills for application are addressed implicitly in the optional courses to teach students a:

'Rights-based approach to social change and....opportunity to take courses in project planning, implementation, monitoring and evaluation'⁷⁴.

The *Centre for International Development* at the Heller School for Social Policy and Management engages faculty and students in research on aspects of sustainability such as community resource management, poverty alleviation, gender and development, non-governmental organisations and religion and development⁷⁵.

Completing an MBA in *Mission Driven Management* with a concentration in *Sustainable Development* at Brandeis University may not be adequate in order to successfully apply knowledge and skills in an organisation and create effective change toward sustainability.

⁶⁸ See www.beyondgreypinstripes.org

⁶⁹ See www.beyondgreypinstripes.org

⁷⁰ See www.beyondgreypinstripes.org

⁷¹ See www.beyondgreypinstripes.org

⁷² See <http://www.heller.brandeis.edu/>

⁷³ See <http://www.heller.brandeis.edu/>

⁷⁴ See <http://www.heller.brandeis.edu/>

⁷⁵ See <http://www.heller.brandeis.edu/>

Education *about* sustainability is nevertheless available to students at this school through the core course. Students can also undertake education *for* sustainability should they choose to enrol in particular courses outlined above.

4.3.1 **Summary**

Table 2 below provides an overall summary of the performance of the MBA programs from *Good Practice* overseas Business Schools against the criteria developed for this benchmark.

Table 2 - Good Practice Business Schools Overseas

GOOD PRACTICE SCHOOLS	INSEAD - France	Asian Institute of Management - Philippines	Brandeis University - USA
CRITERIA			
Core and elective MBA courses, which include education <i>about</i> and <i>for</i> sustainability, are offered.	Yes	Yes	Yes
There is at least one member of staff who has teaching and/or research expertise in the area of education <i>for</i> sustainability. This person advises program developers on how to address sustainability within the program.	Yes	Yes	Yes
Some courses/units articulate course and generic outcomes which include sustainability	Yes	Yes	Yes
Students have the opportunity to address sustainability through their assignments.	Yes	Yes	Yes
Students would develop skills in areas considered important to the understanding and implementation of strategic change toward sustainability such as of critical reflective thinking, systemic thinking, change management, stakeholder engagement, futures thinking.	Yes	Yes	No
Extracurricular and student initiated activities such as conferences, seminars, would be offered as part of the curriculum.	Yes	Yes	Yes
Key industry stakeholders in the area of sustainability are involved in the MBA curriculum – examples can range from involvement in course steering committees, course reviews and evaluations to lecturing and assessing student assessments and/or facilitation of industrial work placements.	Yes	*Unknown	Yes
The Business School offers short courses on sustainability for those who cannot commit to an MBA.	Executive Program planned	Yes	*Unknown

*Unknown – Information could not be obtained through references used for this report. Further in-depth research would be required.

4.4 **Acceptable Standard Overseas Business Schools**

UNIVERSITY OF WALES SWANSEA, UNITED KINGDOM

The European Business Management School at the University of Wales in Swansea offers an elective course relating to one aspect of sustainability as part of its MBA program. The *Environmental Management* course covers principles and practice of implementing environmental management systems, development of environmental policy and its impact on industry and techniques of environmental operations management⁷⁶. This course can be chosen as one of two optional electives to be taken in parallel with core MBA curriculum which covers topics of law, economics, finance, statistics, human resource management, marketing, organisational behaviour and strategic management⁷⁷. One staff member at the Business School has conducted research and published an article on resource conservation entitled *Developing Markets for Recycling: Perspectives from South Wales*⁷⁸.

Although the focus of the current offering is on environmental management with few links to sustainability, there is evidence to suggest that the school is slowly responding to the sustainability agenda.

In 2002, the school held a research colloquium on *Negotiating Multi-stakeholder Arrangements: The Politics of Social, Natural and Symbolic Capital* which included guest speaker Suzanne Benn from the University of Technology in Sydney.

INSTITUTO DE EMPRESA, SPAIN

The Instituto de Empresa in Madrid offers a number of elective courses relating to sustainability as part of its MBA program. The courses focus on topics such as organisational ethics, environmental and sustainability strategy and corporate environmental management⁷⁹. These courses aim to provide a good understanding of the connections between aspects of environmental (EMS) and social (ethics) sustainability and organisations.

Skills and knowledge on sustainability taught in the MBA program are complimented by the strong values promoted to students once they are enrolled at the University.

'Instituto de Empresa Community believes that honesty, integrity and respect for others are the kind of qualities required to strengthen trust among all members of the academic community (students, faculty and administrative staff), which plays an essential role in achieving educational and professional excellence⁸⁰.'

Maintaining this code is strictly enforced within the community and breaches can lead to expulsion from the MBA program.

The *Challenges and Opportunities in Corporate Management* elective is designed 'to help students develop their own strategies to respond to the new environmental and sustainability challenges⁸¹.'

Courses also touch on management strategies and tools including paradigms for overcoming challenges.

Two faculty members have conducted research into sustainability topics such as *The Transfer of Technology* and the *Sustainable Development of Emerging Economies* via the University's *Centre for Environmental Innovation and Sustainable Development*. Conferences have also

⁷⁶ See <http://www.swan.ac.uk/ebms/mba/>

⁷⁷ See <http://www.swan.ac.uk/ebms/mba/>

⁷⁸ See www.beyondgreypinstripes.org

⁷⁹ See www.beyondgreypinstripes.org

⁸⁰ See www.beyondgreypinstripes.org

⁸¹ See www.beyondgreypinstripes.org

been held on *Corporate Environmental Management, Organisational Behaviour, and Leadership and Business*.

The Instituto de Impresa is also part of the *Sumaq Alliance* which comprises eight leading Spanish/Portuguese Business Schools that aim to ‘enhance the capacity of member Schools to serve the needs of international corporations as they increasingly demand across-the-border programs to foster their global leadership⁸²’.

4.4.1 Summary

Table 3 below provides an overall summary of the performance of the MBA programs from *Acceptable Standard* overseas Business Schools against the criteria developed for this benchmark.

Table 3 - Acceptable Standard Business Schools Overseas

ACCEPTABLE STANDARD SCHOOLS		
CRITERIA	University of Wales Swansea	Instituto de Impresa - Madrid, Spain
Optional electives specifically addressing education <i>about</i> or <i>for</i> sustainability.	Yes	Yes
Students have the opportunity to address sustainability through their assignments	Yes	Yes
Faculty moving into areas of research for sustainability.	Yes	Yes
Limited opportunities are offered to students to equip them with the pre-requisite knowledge or skills important to the understanding and implementation of strategic change toward sustainability in the business context.	Yes	Yes
Limited involvement of industry stakeholders in the MBA program.	No	Yes

⁸² See <http://www.ie.edu/>

5. BENCHMARKING BEST PRACTICE IN AUSTRALIA

5.1 Introduction

Over fifty-five MBA programs are currently offered in thirty-seven university Business Schools throughout Australia⁸³. The MBA programs of these thirty-seven Australian Business Schools were reviewed for the purpose of this study (for a list of the schools see **Appendix E**). Thirty-three Business Schools were analysed via website information only, and four Business Schools participated in research studies to provide more detailed information on their MBA programs. This section of the study describes and compares *Good Practice* and *Acceptable Practice* Business Schools reviewed within Australia.

5.1.1 Summary Review of Australian Business Schools

Of those thirty-seven Business Schools reviewed, thirty-three schools were analysed using Internet sources only. Websites were accessed for these schools and the information on MBA curriculum was reviewed. Using the benchmarking criteria explained in **Section 3.2**, the following summarises the key findings for the thirty-three Business Schools.

- Seventeen of the Business Schools reviewed did not include sustainability in core or elective courses of their MBA programs;
- Thirteen of the Business Schools are rated within the category of Acceptable Standard, generally due to the incorporation of electives that address education about and for sustainability within MBA programs;
- Three of the Business Schools' MBA programs are rated within the category of Good Practice; and
- None of the Australian Business Schools considered through internet review were considered to be Leading Edge.

The basis of these ratings and details of some of the MBA courses that seek to address sustainability in the curriculum are provided in **Sections 5.2, 5.3** and **5.4**.

5.1.2 In-Depth Review of Four Australian Business Schools

Of those thirty-seven Business Schools reviewed, four provided detailed information arising out of a research inquiry commissioned by this study. This information provides the detail necessary to elicit a deeper understanding of the curriculum arrangements *about* and *for* sustainability and a summary is detailed in **Section 5.4**. These four Business Schools also provided information relating to short professional courses offered independent of their MBA programs which is analysed in **Section 5.4.1**. It was decided at the onset of the project that these four Business Schools were not to be included in the benchmarking process as their in-depth inquiries places them with an advantage over the other Business Schools who were rated according to publicly available information.

Good Practice Australian Business Schools

The characteristics of three particular Australian Business Schools identified them as *Good Practice* Schools in relation to education *about* and *for* sustainability in their MBA programs. These were the:

- International Graduate School of Management at the University of South Australia;
- School of Management at the Royal Melbourne Institute of Technology; and
- Graduate School of Marine Resource Management at the Australian Maritime College.

⁸³ See <http://www.goodguides.com.au>

Each of these Business Schools offer core courses which specifically address sustainability or contain topics relating to sustainability.

The International Graduate School of Management at the University of South Australia offers a MBA core course entitled *Sustainable Corporate Strategy* which addresses various sustainability topics relating to corporate sustainability and environment.

University of South Australia MBA core course Sustainable Corporate Strategy addresses concepts of:

- Antecedents and consequences of corporate environmentalism;
- Corporate citizenship and corporate social responsibility;
- The relationship between business firms and the natural environment;
- Current debates around sustainable development;
- Corporate environmental strategies;
- Building a sustainable corporation;
- Developing a green portfolio;
- Triple bottom line approaches to strategy development;
- Generic environmental strategies;
- Social auditing; and
- corporate, business and functional environmental strategies⁸⁴.

The International Graduate School of Management at the University of South Australia has key staff who serve on advisory boards with industry leaders. Teaching at this school is guided by industry practitioners to 'supplement and provide a business perspective' and case studies are used in the management courses as a result of graduates interaction with Australian companies⁸⁵.

The University of South Australia also offers an *Australian Business Experience* component in the MBA program which allows students to undertake an internship program for six months. This placement is done in close cooperation with the student and considers special needs including 'length, scope and outcomes to be achieved'⁸⁶.

The Royal Melbourne Institute of Technology (RMIT) offers a core course within its MBA program entitled *Global Business Environment* which addresses topics of:

'Managing an international workforce, the parameters of ethical consideration in international business, effectiveness of MNC performance, managing supplies of goods and services, sustainability of businesses within the demands of the global economy and managing risks in international operations'⁸⁷.

The RMIT MBA program also offers elective courses which include education *for* sustainability. The *Emergent Leadership and Organisational Transformation* course is about:

'Stretching participants into new paradigms of thinking, patterning and leadership. The course helps participants identify the right leadership questions, reflect upon them and then take action to facilitate profound organisational transformation'⁸⁸.

⁸⁴ See <http://business.unisa.edu.au/igsm/mba/>

⁸⁵ See <http://business.unisa.edu.au/igsm/mba/>

⁸⁶ See <http://business.unisa.edu.au/igsm/mba/>

⁸⁷ See <http://www.rmit.edu.au/>

⁸⁸ See <http://www.rmit.edu.au/>

The Emergent Leadership and Organisational Transformation elective course in the RMIT MBA program addresses the following topics:

- Emergent leadership delivers an approach to leadership that is concerned about the “Triple Bottom Line” of financial viability, justice in relationships and ecological sustainability;
- Emergent leadership grows from self-knowledge, higher order decision making and discovery within complex organisational and relational contexts;
- Emergent leadership is about developing the skills and interpretative framework for assisting organisations to move through profound organisational change;
- Emergent leadership transforms people and organisations because it works from assumptions that relational fields can be powerful transforming agents in times of complexity and uncertainty.
- Emergent leadership is about creating sustainable organisational futures; and
- Emergent leadership is value driven leadership that is sensitive to the relationship interconnectedness and interdependence between life and organisational systems⁸⁹.

The (RMIT) faculty have an *Organisational Accountability, Stakeholders and Ecological Sustainability (OASES)* research group consisting of several of the school’s professors who conduct research into various topics relating to accountability, stakeholder relations and ecological sustainability⁹⁰. One objective of the OASES research group is to attract students to conduct research into new approaches for implementing sustainability in organisations.

Primary research areas conducted by the Royal Melbourne Institute of Technology School of Management OASES Research Group include:

- New approaches to corporate accountability, including new forms of reporting, social auditing, triple bottom line accounting. How can current accounting and reporting practices be expanded to include positive and negative externalities of business activity? What are the costs and benefits of developing these new practices?;
- Stakeholder approaches, including stakeholder salience, integration of stakeholder needs, best practices of stakeholder management, corporate social responsibility, and strategic alliances with government and non-government organisations; and
- Ecological sustainability, including theoretical approaches to ecologically sustainable organizations, practical implications of corporate environmentalism, total quality environmental management, environmental accounting and reporting, environmental auditing, environmental economics, environmental marketing, corporate environmental strategy, environmental alliances, regulation and public policy, global environmental policies⁹¹.

Education *for* sustainability is reflected in the requirements and outcomes for MBA students at the RMIT School of Management to ‘require the will and capacity to explore alternative ways of thinking, learning and behaving...be encouraged to review, act and reflect on professional practice using such principles as organisational and ecological sustainability and justice in relationships.’⁹²

The Graduate School of Marine Resource Management at the Australian Maritime College in Tasmania is an example of an Australian Business School at the forefront of addressing sustainability within its course. The school offers a distance, part time MBA specialising in *Marine Resource Management* that fully integrates management and sustainability in the context of marine resources.

⁸⁹ See <http://www.rmit.edu.au/>

⁹⁰ See <http://www.rmit.edu.au/>

⁹¹ See <http://www.rmit.edu.au/>

⁹² See <http://www.rmit.edu.au/>

MBA *Marine Resource Management* – Australian Maritime College

‘As well as developing an understanding of traditional MBA courses such as financial management, marketing and strategic planning, graduates will acquire expertise in areas such as marine ecology, resource economics and environmental management and policy⁹³.’

Core units deal with policies, processes, strategies and management techniques to deal with marine resources by addressing environmental, economic and social factors. Topics such as financial management, risk, reporting, marketing and public relations are also addressed as part of the core⁹⁴. Elective courses range from environmental courses such as *Aquaculture Species Biology & Ecology* and *Coastal Zone Management* to social courses such as *Indigenous and Customary Sea Use Issues* and *Social Context of Marine Resource Management* and economic courses such as *Managing Corporate Finance*⁹⁵.

Skills and knowledge are taught to students to assist them towards change for sustainable marine resource management. The *Fisheries Management* elective teaches students not only about the strengths and weaknesses of fisheries management in a historical context but also includes units on ‘developing a fisheries management plan and participate in the fisheries management process⁹⁶.’

The school also holds accelerated courses from 5-10 days in length which address similar topics as the MBA program such as *Aquaculture Management, Policy and Planning* and *Social Context of Marine Resource Management*. The *Fisheries Management* accelerated course addresses topics such as ecologically sustainable development and stakeholder conflict and resolution in the context of fisheries management⁹⁷.

5.1.3 Summary

Table 4 overleaf provides an overall summary of the performance of the MBA programs from *Good Practice* Australian Business Schools against the criteria developed for this benchmark.

⁹³ See <http://www.gsmrm.amc.edu.au/>

⁹⁴ See <http://www.gsmrm.amc.edu.au/>

⁹⁵ See <http://www.gsmrm.amc.edu.au/>

⁹⁶ See <http://www.gsmrm.amc.edu.au/>

⁹⁷ See <http://www.gsmrm.amc.edu.au/>

Table 4 – Good Practice Business Schools in Australia

GOOD PRACTICE SCHOOLS	University of South Australia - International Graduate School of Management	Royal Melbourne Institute of Technology - School of Management	Australian Maritime College – Graduate School of Marine Resource Management
CRITERIA			
Core and elective MBA courses which include education <i>about</i> and <i>for</i> sustainability are offered.	Yes	Yes	Yes
There is at least one member of staff who has teaching and/or research expertise in the area of education <i>for</i> sustainability. This person advises program developers on how to address sustainability within the program.	Yes	Yes	Yes
Some courses/units articulate course and generic outcomes which include sustainability.	Yes	Yes	Yes
Students have the opportunity to address sustainability through their assignments.	Yes	Yes	Yes
Students would develop skills in areas considered important to the understanding and implementation of strategic change toward sustainability such as of critical reflective thinking, systemic thinking, change management, stakeholder engagement, and futures thinking.	Yes	Yes	Yes
Extracurricular and student initiated activities such as conferences, and seminars would be offered as part of the curriculum.	No	Yes	*Unknown
Key industry stakeholders in the area of sustainability are involved in the MBA curriculum – examples can range from involvement in course steering committees, course reviews and evaluations to lecturing and assessing student assessments and/or facilitation of industrial work placements.	Yes	*Unknown	*Unknown
The Business School offers short courses on sustainability for those who cannot commit to an MBA.	No	*Unknown	Yes

*Unknown – Information could not be obtained through references used for this report. Further in-depth research would be required.

5.2 *Acceptable Standard* Australian Business Schools

Thirteen of the Australian Business Schools have been rated as *Acceptable Standard* according to the benchmarking criteria. These schools are characterised by a low level of integration of sustainability into the curriculum and limited research and extra curricula activities within the Business School relating to sustainability. This section of the report focuses on six of those Business Schools located at Central Queensland University, the University of Canberra, James Cook University, the University of Queensland, the Queensland University of Technology and the University of Southern Queensland.

Only two of the *Acceptable Standard* Business Schools have integrated sustainability into the core courses of their MBA programs. These were Central Queensland University and the University of Canberra. These schools have not been ranked as *Good Practice* because neither of these universities met all of the criteria required for rating as a *Good Practice* Business Schools (see **Section 3.2.2**). Central Queensland University offers an MBA specialisation in *Environmental Stewardship* with a core course in *Corporate Environmental Management* and elective courses such as *Models of Sustainable Development*, *Environmental Economics* and *Environmental Law and Regulation*⁹⁸.

The *Management Ethics* core course in the MBA program at the University of Canberra addresses ethical theory, corporate social responsibility, environmental protection and international business and global ethics. The course also focuses on skills for socially sustainable business practices⁹⁹.

University of Canberra MBA

The course Management Ethics aims to assist students to acquire and develop critical thinking skills required for the successful practice of business within the framework of societal values. These skills include the ability to perceive the ethical implications of a situation, engage in sound moral reasoning and develop practical problem solving strategies¹⁰⁰.

The remainder of the Business Schools in this category have generally addressed sustainability through elective courses. At James Cook University School of Business in Townsville the elective course *Business, Environment and Sustainability* analyses:

‘The reasons for the introduction of a sustainable development approach to management and how business is successfully adopting the strategy within Australia and overseas¹⁰¹.’

Faculty research at James Cook University includes topics on organisational design and behaviour, employee relations, regional development strategies and environmentally sustainable business strategies¹⁰². Although such research is limited to one or two faculty members, this research illustrates an attempt to incorporate education *about* sustainability into the Business School curriculum.

The University of Queensland Business School's MBA (UQ) program offers electives such as *Ecological and Environmental Economics*, *Economics of Natural Resources* and *Ethical Issues in Management* which address various topics relating to sustainability¹⁰³. One member of faculty at UQ has conducted extensive research into change management and has published several books and journal articles on the organisational change to sustainability. In addition elective courses available to MBA students allow them to address sustainability through assignments by:

⁹⁸ See <http://www.bus.cqu.edu.au/>

⁹⁹ See <http://www.blis.canberra.edu.au/mbaprogram/>

¹⁰⁰ See <http://www.blis.canberra.edu.au/mbaprogram/>

¹⁰¹ See <http://www.jcu.edu.au/flbca/business/>

¹⁰² See <http://www.jcu.edu.au/flbca/business/>

¹⁰³ See <http://www.uq.edu.au/bel/>

‘Examining the impact that sustainability has had on innovative product and process development in individual organisations’¹⁰⁴.

The University of Queensland Business School is also planning and researching a proposed future Executive MBA program which involves a specialisation in business and sustainability through a group of four elective courses including *Natural Capitalism*, *Triple Bottom Line*, *Corporate Sustainability* and *The Sustainable Business Organisation*. Industry stakeholders are currently involved in the development and reviewing of current Executive MBA courses in corporate sustainability. Representatives from the Queensland Environmental Protection Authority (EPA) and CSIRO have had input into the course development¹⁰⁵.

University of Queensland Business School– Proposed Executive MBA program in business and sustainability

The purpose of the new course offerings is to:

- To increase engagement and dialogue between industry and academe on strategic business issues in the area of sustainability;
- To develop and offer an academically sound and rigorous set of courses pitched at the post-graduate level; and
- To build on our existing competencies in corporate sustainability research and external activity.

Course 1: Natural Capitalism

This is a foundation course that provides the building blocks for the program. It focuses on an understanding of the interaction between the environment, social impact and business. The course includes coverage of general environment issues, social policy, globalisation, benefit-cost analysis, externalities, and markets. The course also shows how a ‘natural capitalism’ approach creates opportunities to develop new products, services and technologies that create environmentally more efficient firms and sustainability oriented industries. A key aim is an understanding of how markets can provide efficient solutions and what tools can be used to make markets work.

Course 2: Corporate Sustainability

This course builds on Natural Capitalism and takes a more micro approach to sustainability issues. The course challenges students to think more broadly of a business organisation and how managers can influence the organisation toward sustainability values. Topics include environmental management systems, stakeholder engagement, business ethics, sustainable product development, corporate social responsibility, international trends and the development of types of capabilities associated with the attainment of corporate sustainability.

Course 3: Triple Bottom Line

This course focuses on the financial aspects of managing sustainability. The course is heavily focused on valuation and reporting matters. These include valuing externalities, valuing natural resources, environmental accounting, financial statement reporting and disclosure. Other stakeholder management and measurement approaches are also examined.

Course 4: The Sustainable Business Organisation

This course represents a capstone to the program. It focuses on how managers can implement effective strategies in relation to sustainability issues in their organisation. Topics include social and environmental marketing, cultural change, financial considerations, value versus values, and leadership in sustainability, the citizen CEO. The focus of this course is much more on the change strategies – incremental and transformational - required to shift organisations towards sustainability. In particular, the course examines the role played by business managers, CEOs and other stakeholders as change agents for sustainability¹⁰⁶.

The Queensland University of Technology (QUT) offers a concentration in *Corporate Governance* which contains an elective course entitled *Sustainable Development and*

¹⁰⁴ Andrew Griffiths personal correspondence [10th June 2004]

¹⁰⁵ Andrew Griffiths personal correspondence [10th June 2004]

¹⁰⁶ Brailsford & Griffiths (2004)

*Competitive Advantage*¹⁰⁷. This course requires that the students specifically address sustainability through all assignments.

<p>QUT MBA <i>Corporate Governance</i> concentration</p> <p><i>Sustainable Development and Competitive Advantage</i> elective course assignment objectives</p> <p>In completing this assignment students are required to demonstrate that they:</p> <ol style="list-style-type: none"> 1. Have good understanding of the aims of ecological economics and the four strategies of natural capitalism; 2. Have gained a thorough appreciation of the need for businesses to adjust to changing patterns of scarcity; and 3. Be able to evaluate, critically, the likely competitive effects on an organisation of a business model founded on sustainable development¹⁰⁸.

A *Global Economy* specialisation is offered in the MBA program at the University of Southern Queensland's (USQ) Faculty of Business with an *Environmental Economics for Sustainable Growth* elective course which relates to economic aspects of sustainability¹⁰⁹. USQ also offers a specialisation in *Environmental Management* which gives students the opportunity to gain skills for the implementation of change in the environmental industry and forms a basis for strategic change toward sustainability.

5.2.1 Summary

Table 5 below provides an overall summary of the performance of the MBA programs from a selection of six *Acceptable Standard* Australian Business Schools (which have been the focus of this section) against the criteria developed for this benchmark.

Table 5 – Example of six *Acceptable Standard* Business Schools in Australia

ACCEPTABLE STANDARD SCHOOLS	Central Queensland University – Faculty of Business and Law	University of Canberra – School of Business and Government	James Cook University – School of Business	QUT – Brisbane Graduate School of Management	University of Queensland – Faculty of Business, Economics and Law	University of Southern Queensland – Faculty of Business
CRITERIA						
Optional electives specifically addressing education <i>about</i> or <i>for</i> sustainability.	Yes	Yes	Yes	Yes	Yes	Yes
Students have the opportunity to address sustainability through their assignments.	Yes	Yes	Yes	Yes	Yes	Yes
Faculty attempting to move into areas of research for sustainability.	Yes	Yes	Yes	Yes	Yes	Yes
Limited opportunities are offered to students to equip them with the pre-requisite knowledge or skills important to the understanding and implementation of strategic change toward sustainability in the business context.	Yes	Yes	Yes	Yes	Yes	Yes
Limited involvement of industry stakeholders in the MBA program.	*Unknown	*Unknown	*Unknown	Yes	Involved in review and development of new Executive MBA	Yes

¹⁰⁷ See http://studentservices.qut.com/advice/studentcentre/css_docs/GS40.pdf

¹⁰⁸ See <http://www.bgsb.qut.edu.au/>

¹⁰⁹ See <http://www.usq.edu.au/business/default.htm>

*Unknown – Information could not be obtained through references used for this report. Further in-depth research would be required.

5.3 The Remaining Australian Business Schools

Of the thirty-seven Australian Business Schools analysed in this study, seventeen have been identified as having very little or no education *about* or *for* sustainability contained in their MBA programs.

MBA programs ranked in this category, such as the one offered by Swinburne University of Technology, touch on the topic of sustainability via the *Entrepreneurial eBusiness and Strategic Transformation* elective course¹¹⁰. The Charles Sturt University Faculty of Commerce offers a specialisation on the *Management of Organisational Change*, however, application of these cultural and organisational change principles to the context of sustainability is absent from the courses within this specialisation¹¹¹. Similar courses which limit the inclusion of practical sustainability principles are offered in the MBA program developed by the Adelaide School of Business¹¹² and Bond University Faculty of Business¹¹³.

Many Australian Business Schools do not provide extensive information on MBA elective courses which created difficulty during this study. Electives such as *Business, Government and Globalisation* offered by the Victoria University Faculty of Business MBA¹¹⁴, *Managing Change and Management Ethics* offered by Edith Cowan University MBA¹¹⁵, University of Ballarat's MBA¹¹⁶ elective on *Issues in Corporate Governance and Accountability* and the *Globalisation and International Corporate Practice* course offered by Griffith University¹¹⁷ may cover topics on sustainability but this is not publicised or profiled on the university marketing material for their MBA programs.

5.4 Findings From In-Depth Inquiry of Australian Business Schools

The following section focuses in detail on the findings from the in-depth inquiry into education *about* and *for* sustainability at four Australian Business Schools:

- Australian Graduate School of Management (University of Sydney and University of New South Wales);
- Graduate School of Business (University of Technology Sydney);
- Macquarie Graduate School of Management (Macquarie University); and
- Melbourne Business School (Melbourne University).

These four schools each conducted a research study to elicit a deeper understanding of how sustainability is addressed within their own MBA program, the profile of sustainability within the Business School and any barriers or opportunities to delivering education *about* and *for* sustainability. The format of this section utilises questions that the Business Schools developed in partnership with Macquarie University and a summary of their collective responses. **Appendix B** provides detailed reports from the Business Schools.

Is sustainability integrated into the core of the programs?

Whilst none of the Business Schools integrated sustainability explicitly into the core courses of their MBA programs, some of the participating schools stated that their core courses did, however, include the broader context of sustainability by indirect or incomplete methods such as:

¹¹⁰ See <http://www.swin.edu.au/business/>

¹¹¹ See http://www.csu.edu.au/mba/frame_courses.htm

¹¹² See <http://www.agsb.adelaide.edu.au/apps/program/index.php?PCID=19>

¹¹³ See <http://www.bond.edu.au/bus/programs/pgpro/pg-mba-structure.htm>

¹¹⁴ See <http://www.business.uvic.ca/mba/fulltime.html>

¹¹⁵ See <http://www.business.ecu.edu.au/courses/master/coursework/mba.htm>

¹¹⁶ See http://www.ballarat.edu.au/ard/business/courses/grad_courses/MBACourseStructure.shtml

¹¹⁷ See http://www.gu.edu.au/faculty/gsm/prospect/home_prospective.html

- The underlying philosophy of social responsibility of the Business School guiding all courses in the MBA program; and
- Limited teaching (one lecture) relating to environmental economics as part of the core curriculum¹¹⁸.

Melbourne Business School

'Part of the philosophy of the program is to incorporate elements relating to social responsibility into the program wherever this is appropriate. Wherever possible teachers in the core courses are encouraged to include discussion of ethics and corporate and individual social responsibility into their courses and it would be possible to cover sustainability within this broad umbrella¹¹⁹.'

While sustainability may be implicitly addressed via Melbourne Business School's (MBS) philosophy and topics within existing courses, this does not reflect an integrated sustainability curriculum with the general MBA curriculum but rather a piecemeal approach to education *about* and *for* sustainability. Past attempts to integrate sustainability courses into core curriculum by the MBS were unsuccessful. One course was introduced to the MBA core program in 2003 which addressed social responsibility, ethics, personal values, environmental economics and sustainability. However, timetable changes saw these courses drop from the core curriculum to become electives.

While sustainability is not explicitly taught to MBA students at the Australian Graduate School of Management (AGSM), there is a strong belief in students understanding of ethical morals throughout teaching of the courses.

Australian Graduate School of Management

'Courses in the AGSM MBA programmes are explicitly agnostic with respect to sustainability, although (as with business ethics) implicitly in teaching at the AGSM is the strong norm that the students will not act or advocate actions which are inappropriate¹²⁰.'

Macquarie Graduate School of Management (MGSM) offers 'no core courses that explicitly deal with the skills involved in social, environmental and economic stewardship', however the school believes their MBA program provides students with an 'insight into fundamental management skills essential for management generally....these skills could be applied to the management of change towards sustainability¹²¹'.

At University of Technology Sydney (UTS) there is an integrated approach to business education *for* sustainability. Through the introduction of the *Sustainable Enterprise* course into the undergraduate program, the development of specialised electives available to the postgraduate program including the MBA, increasing numbers of postgraduate research students and a strong and internationally recognised research presence in the area of sustainable business, sustainability is becoming one of the key themes for the UTS School of Management. Five faculty members now have specialised research interests in sustainability.

Are there any units devoted to sustainability or education for sustainability?

Three of the four participating Business Schools stated that sustainability or education *for* sustainability had been integrated into the program via optional elective courses available to MBA students. These schools were the MBS, UTS and MGSM. For example, the UTS offers four non-core courses which are specifically designed to address the content areas of corporate social responsibility, sustainability, sustainable tourism and governance¹²².

¹¹⁸ See Melbourne Business School research study by Mark Crosby in **Appendix B**

¹¹⁹ See Melbourne Business School research study by Mark Crosby in **Appendix B**

¹²⁰ See Australian Graduate School of Management research study by Robert Marks in **Appendix B**

¹²¹ See Macquarie Graduate School of Management research study by Robin Kramer in **Appendix B**

¹²² See University of Technology Sydney research study by Dexter Dunphy, Suzanne Benn and Omer Enginertan in **Appendix B**

University of Technology Sydney MBA elective courses

- *Corporate Governance and Business Ethics;*
- *Managing for Sustainability;*
- *Responsible Business; and*
- *Sustainable Tourism Management.*

These courses are included in the following MBA majors: Tourism Management, Management Consulting and Change, Strategic Management, Operations Management. Because Managing for Sustainability is now included in the very popular Strategic Management major, student demand is high - currently 35 students per semester¹²³.

Examples of some elective courses addressing sustainability offered by the participating Australian Business Schools are summarised in Table 6 below.

Table 6 - Examples of elective courses offered by In-Depth study Business Schools

BUSINESS SCHOOL	ELECTIVE COURSE	SUSTAINABILITY CONCEPTS ADDRESSED
University of Technology Sydney – Graduate School of Business ¹²⁴	<i>Responsible Business</i>	<ul style="list-style-type: none"> • Ethics • Social Justice • Environmental Sustainability • New Economic Theories
The University of Melbourne - Melbourne Business School ¹²⁵	<i>The Managerial Environment</i>	<ul style="list-style-type: none"> • Economic, social, political, legal and regulatory facets of the managerial environment • Impact of major changes in global economic environment
Macquarie University - Macquarie Graduate School of Management ¹²⁶	<i>Innovations in Organisational Performance Management</i>	<ul style="list-style-type: none"> • Corporate Social Responsibility • Sustainable Performance • Stakeholder Value Management

The AGSM at the University of New South Wales has offered elective courses specific to sustainability in past years, however, due to lack of student interest, no electives are currently offered which explicitly relate to sustainability. The lack of student interest/demand for sustainability courses was seen as a reason why opportunities in this area were limited.

Are there opportunities for students to specialise in the area of sustainability?

Another opportunity for students to specialise in sustainability is the availability of specialisations within MBA elective courses. Some universities offer a custom made set of electives specialising in a particular topic.

Beginning in 2005, UTS will offer a new sub-major in Governance and Sustainability.

¹²³ See University of Technology Sydney research study by Dexter Dunphy, Suzanne Benn and Omer Enginertan in **Appendix B**

¹²⁴ See University of Technology Sydney research study by Dexter Dunphy, Suzanne Benn and Omer Enginertan in **Appendix B**

¹²⁵ See Melbourne Business School research study by Mark Crosby in **Appendix B**

¹²⁶ See Macquarie Graduate School of Management research study by Robin Kramer in **Appendix B**

UTS sub major in Governance and Sustainability

Course 1: *Managing for Sustainability*

This subject provides students with a framework for incorporating the natural environment into business strategies and practices. It provides an opportunity to systematically understand business-environment relationships and integrate concepts and techniques from disciplines ranging from operations management to environmental sociology. It provides a unique set of skills for future managers to transform environmental challenges into business opportunities.

Course 2: *Managing Responsible Business*

This course integrates ethics, social justice, environmental sustainability, new economic theories and Triple Bottom Line concepts into management studies. This subject provides a systematic examination of how business can demonstrate responsible practices toward other stakeholders, including communities and trading partners locally and globally, and the general environment. It addresses these issues from multiple perspectives and at levels ranging from the individual to the international community

Course 3: *Change Management*

This subject provides managers with a framework for rethinking their past change management experiences, and for gaining a critical appreciation of future change management practices. It takes students through four aspects of change management: leading change; managing individual experiences of change; conceptualising the need for change; and critiquing specific change management programs.

Course 4: *Corporate Governance and Business Ethics*

Corporate governance and business ethics have become prominent public concerns in recent years. Issues of corporate governance originated in the separation of ownership and control in the modern corporation, and various explanations of the resulting problems of control. The subject examines the different institutional elements of corporate governance and how these impact on economic performance. The internal mechanisms of governance are considered, and the wider influence of investors and stakeholders. The case for corporate social and environmental responsibility is also considered, and the continuing challenges and dilemmas of corporate governance¹²⁷.

Although no elective courses are offered at AGSM which deal explicitly with sustainability, students who take a strong interest in sustainability do have some opportunity to specialise. In the latter stages of the MBA program at the AGSM, students have the opportunity to conduct *Individual Studies in Management* or *Management Projects* where they have flexibility (depending on students interests) to specialise in sustainability during hands on experience with alliance organisations of the School.

Is there flexibility to focus on assignments addressing issues of sustainability?

Most of the schools offer flexibility to focus on assignments that address issues of sustainability. Some schools offer assignment topics explicitly outlined as part of elective courses such as the *Managing Supply Chain* course offered at UTS. Assignments may also be chosen by the MBA students, for example, MBS allows students enrolled in the *Non Profit Management* course to choose an appropriate sustainability focused non-profit organisation for analysis¹²⁸. At UTS, faculty in charge of courses not related to sustainability are 'free to include assignments addressing sustainability issues'¹²⁹.

¹²⁷ Suzanne Benn (2004)

¹²⁸ See Melbourne Business School research study by Mark Crosby in **Appendix B**

¹²⁹ See University of Technology Sydney research study by Dexter Dunphy, Suzanne Benn and Omer Enginertan in **Appendix B**

How is sustainability currently interpreted by: a) Your Business School, b) The MBA programs?

Sustainability within MBA programs in the participating Business Schools is currently interpreted across a range of course areas including corporate social responsibility, organisational (structural and cultural) change and its management, environmental management systems, environmental compliance, triple bottom line considerations, innovation management, ethics, corporate governance, stakeholder value management & engagement, corporate community involvement, future scenario planning/strategic thinking, performance reporting and systems thinking. The program and detail of each topic and extent to which students gain this knowledge is limited by inclusion into elective courses only.

Is the business case for sustainability distinguished from the normative case for sustainability within the MBA curriculum?

Three of the four schools commented on the differentiation of the business case for sustainability from the normative case for sustainability. Only a few courses offered in the MBA programs of these schools dealt with this differentiation. In the case of UTS, one session in twelve of the *Managing for Sustainability* course:

‘Focuses on the characteristics of the ideal or sustaining organisation and the change processes required for the corporation to move to this stage of sustainability¹³⁰.’

What is the general understanding of sustainability among academics at your Business School?

The general understanding of sustainability among academics at the participating Business Schools was diverse, depending on the area of expertise. Staff who teach courses relating to sustainability at MBS see sustainability as the maintenance or survival of the ‘physical environment¹³¹.’

UTS conducted a more thorough analysis of faculty perspectives, which concluded ‘the business case for sustainability dominates their understanding as is to be expected in a business faculty¹³².’ At UTS, those faculty members concerned with human sustainability had expertise in Industrial Relations or Human Resources, whereas financial management faculty did not recognise sustainability as a relevant body of theory¹³³.

What opportunities does your Business School offer to students matriculating from TAFE?

Each of the Business Schools offers pathways for students enrolling without traditional undergraduate programs. In most schools, these students are permitted to study for a Graduate Certificate or Diploma¹³⁴ and some schools require these students to have significant work experience¹³⁵. The number of students in this category who enrol in MBA programs is small (less than 10 per year) in the majority of the Business Schools participating in the in-depth study¹³⁶.

¹³⁰ See University of Technology Sydney research study by Dexter Dunphy, Suzanne Benn and Omer Enginertan in **Appendix B**

¹³¹ See Melbourne Business School research study by Mark Crosby in **Appendix B**

¹³² See University of Technology Sydney research study by Dexter Dunphy, Suzanne Benn and Omer Enginertan in **Appendix B**

¹³³ See University of Technology Sydney research study by Dexter Dunphy, Suzanne Benn and Omer Enginertan in **Appendix B**

¹³⁴ See Melbourne Business School research study by Mark Crosby in **Appendix B**

¹³⁵ See University of Technology Sydney research study by Dexter Dunphy, Suzanne Benn and Omer Enginertan in **Appendix B**

¹³⁶ See Melbourne Business School research study by Mark Crosby in **Appendix B**

What messages/interpretation of sustainability do students take away from the MBA programs?

It is important to note that student interest in the topic of sustainability in the MBA programs in Australia (of those participating schools) is limited. The number of students who have chosen to take courses relating to sustainability is low in all of the four Business Schools.

UTS has reported that interest in sustainability differs amongst the international students depending upon their countries of origin. Those students from developing countries seem to place stronger emphasis on economic sustainability in comparison with students from developed areas of the world who believe sustainability is related to environmental and social priorities.

It was found that students from South-East Asia 'expect that a sustainability course will deal with the long term economic viability of the firm', however students from Australia and Northern Europe believe 'sustainability relates to natural environment and corporate responsibility'¹³⁷. Feedback from the faculty at UTS communicated that students with limited work experience (LWE students) appear to have limited interest in the business case for sustainability.

Is there an emphasis on the challenges faced by multi-nationals in maintaining consistent sustainability standards across their operations in the Global North and Global South?

Although there is little response from the four Australian Business Schools on teaching or curriculum content regarding challenges faced by multi-nationals in maintaining consistent sustainability standards across the Global North and South, there appeared to be a common understanding amongst the Business School faculty on the variation in sustainability standards globally across jurisdictions, cultures and domestic economies.

However, the UTS Business School highlighted a lack of organisational case-studies available to faculty for use in teaching on issues relating to sustainability in real life businesses¹³⁸. This may explain the lack of delivery on the topic of sustainability standards across the Global North and South into MBA curriculum despite the apparently clear understanding of faculty on this issue.

Faculty feedback on integrating sustainability into courses at **University of Technology in Sydney**:

Strategic Management course area:

'We need lots of applied examples...we need to connect with the students in how it affects their own environment or job opportunities – then move to the macro level'

Human Resource Management course area:

'We need more case studies to show that efforts aimed at human sustainability in the workplace is not a cost but a profit source.'¹³⁹

Is it understood as merely Triple Bottom Line reporting?

Student interpretations of sustainability on completion of the MBA programs have been analysed by the Business Schools via surveys of their student population or analysis of course content within the MBA programs. All of the Business Schools believe that students who enrol in courses relating to sustainability gain a broader understanding of sustainability than simply Triple Bottom Line reporting.

¹³⁷ See University of Technology Sydney research study by Dexter Dunphy, Suzanne Benn and Omer Enginertan in **Appendix B**

¹³⁸ See University of Technology Sydney research study by Dexter Dunphy, Suzanne Benn and Omer Enginertan in **Appendix B**

¹³⁹ See University of Technology Sydney research study by Dexter Dunphy, Suzanne Benn and Omer Enginertan in **Appendix B**

Is it linked to a) management of change, b) cultural change, c) leadership. Are models of change compared in the sustainability context?

All the Business Schools participating in this study emphasised the link between sustainability learning and the topics of management for change, cultural change, leadership and models of change. The following are examples of these links:

- MBS offers the elective courses *Management and Ethics* and *Leadership and Change* which discuss:
- ‘Mechanisms of co-regulation, structural and cultural change in organisations, as well as leadership, asking ‘what does ethical leadership look like?’ and how might we encourage/teach others to adopt a leadership role?’¹⁴⁰,
- *Organisational Change for Corporate Sustainability* (Dunphy, Griffiths and Benn 2003) is the text for the elective course entitled *Managing for Sustainability* at UTS which includes information on change for sustainability with separate chapters focused on cultural change and leadership which are used as topics in the course¹⁴¹. The new *Sustainability and Governance* MBA sub-major includes *Managing Change* as a course; and
- UTS *Managing for Sustainability* course also ‘compares efficiency and strategic models of sustainability in both human and ecological terms’¹⁴².

What knowledge and skills do students acquire through the programs that will help them make a contribution to sustainability within business/industry?

Knowledge and skills to contribute to sustainability within business/industry is acquired by students at varying levels of detail in each Business School MBA program. For example, students learn about paradigm shifts for sustainability explicitly within elective courses at UTS only¹⁴³.

All of the Business Schools teach knowledge and skills in stakeholder engagement and futures strategic thinking within their MBA programs. Some schools offer practical experience in using these skills, for example, in the *Managing for Sustainability* elective course at UTS students engage in stakeholder dialogue activities¹⁴⁴.

Socially critical thinking skills for general management are gained through the MGSM MBA program, however, this is not linked with sustainability but faculty believe this ‘provides a sound basis for students for further issues of sustainability in a range of environments’¹⁴⁵.

Each of the Business Schools teaches knowledge and skills to assist students to contribute to sustainability; however, the approach is considered detailed and explicit in some skill areas but implicit in other areas.

At AGSM, the elective course entitled *Systems, Strategy and Sustainability* last offered in 2000, analysed the ‘means for ensuring change within organisations, in response to changes within the natural environment and society’ and also utilised Ven Sim, a simulation computer software package to assist students with skills for system thinking¹⁴⁶.

One MGSM MBA elective course develops skills required by managers for stakeholder management and future planning.

¹⁴⁰ See Melbourne Business School research study by Mark Crosby in **Appendix B**

¹⁴¹ See University of Technology Sydney research study by Dexter Dunphy, Suzanne Benn and Omer Enginertan in **Appendix B**

¹⁴² See University of Technology Sydney research study by Dexter Dunphy, Suzanne Benn and Omer Enginertan in **Appendix B**

¹⁴³ See University of Technology Sydney research study by Dexter Dunphy, Suzanne Benn and Omer Enginertan in **Appendix B**

¹⁴⁴ See University of Technology Sydney research study by Dexter Dunphy, Suzanne Benn and Omer Enginertan in **Appendix B**

¹⁴⁵ See Macquarie Graduate School of Management research study by Robin Kramer in **Appendix B**

¹⁴⁶ See Australian Graduate School of Management research study by Robert Marks in **Appendix B**

MGSM *Advanced Human Resource Management* elective MBA course aims to develop skills for:

- Managing competing stakeholder expectations;
- Managing people and human resource professionals;
- Planning for the future on the basis of past developments; and
- Future analysis¹⁴⁷.

What do students learn about how to motivate/manage change towards sustainability within business/industry?

As with skills and knowledge for contributing to sustainability, there are varying programs in which each Business School offers students the opportunity to learn how to motivate/manage change toward sustainability. UTS offers a specific elective course which focuses on this topic and the compulsory textbook *Organisational Change for Corporate Sustainability* by Dunphy, Griffiths and Benn (2003), which is the accepted leading international text in the area¹⁴⁸.

MBS offers courses dealing with change management and tools to manage change in organisations, however relating these topics to change for sustainability is at the discretion of the lecturers¹⁴⁹.

What opportunities exist for business and industry to inform/influence the MBA curriculum? How are the educational needs of business and industry in sustainability assessed or met?

While business and industry have an opportunity to influence the MBA curriculum in most Australian Business Schools, very few address the educational needs of business and industry in sustainability.

Melbourne Business School

'At this stage we do not consider that the case for sustainability education has been expressed by business, as distinct from a more general need for greater education in social responsibility and ethics¹⁵⁰.'

The following methods are some examples of how the participating Australian Business Schools incorporate the needs and input of business and industry into MBA programs:

- MBS is responsive to business needs in designing curriculum through Board and Alumni forums;
- MGSM has external influences on curriculum via external review by members of Australian business and academic communities (recommendations are implemented through Task Forces) and curriculum feedback from students; and
- UTS incorporates business needs via *Sustainable Business Forums* (presentations and discussions of leading experts inform curriculum development) and their *Corporate Sustainability* project which develops case studies of industry best practice to be used in teaching and learning.

¹⁴⁷ See Macquarie Graduate School of Management research study by Robin Kramer in **Appendix B**

¹⁴⁸ See University of Technology Sydney research study by Dexter Dunphy, Suzanne Benn and Omer Enginertan in **Appendix B**

¹⁴⁹ See Melbourne Business School research study by Mark Crosby in **Appendix B**

¹⁵⁰ See Melbourne Business School research study by Mark Crosby in **Appendix B**

What profile does sustainability/education for sustainability receive within the Business School? Why?

The profile for sustainability or education for sustainability is minimal in the four Australian Business Schools. Little or no promotion of sustainability is communicated to the public via marketing material or websites for the MBA programs¹⁵¹.

Melbourne Business School

'A key issue for MBS is to recruit world calibre Business School faculty. Our main focus is to maintain critical mass in core areas of the Business School's activity – with sustainability being outside the core, it would have to be the case that potential recruit would need interest in a core area, and in sustainability to be considered a strong candidate¹⁵².'

Availability of elective courses and assessment relating to sustainability is not explicit. Movement towards incorporating additional sustainability context in MBA curriculum is limited due to insufficient demand for sustainability courses from students and lack of sustainability knowledge of the faculties concerned. The recruitment of teaching personnel is therefore negligible. The Business School inquiries suggest that until sustainability becomes a core area of study for students, its profile will continue to be low and education *about* and *for* sustainability within MBA programs will remain piecemeal.

What are the key opportunities for enhancing education about and for sustainability in Business Schools?

Key opportunities highlighted by the participating Business Schools for enhancing education *about* and *for* sustainability can be summarised in the following points:

- Develop a specialist capability in sustainability teaching and research. UTS supports a Corporate Sustainability Project (the Project), with the aim of promoting sustainability in the Faculty of Business, including the MBA program. Two members of staff funded through the Project are authors of an internationally recognised publication on corporate sustainability (UTS);
- Raising awareness of student clubs (eg: *Net Impact*) relating to sustainability to increase demand for sustainability offerings inside and outside of academic programs (MBS);
- Introduce a core course drawing together sustainability, ethics and governance to meet demand for these topics by students (UTS);
- Build on existing skills and courses to explicitly include sustainability to enable students to apply concepts and techniques to real life case studies (MGSM); and
- Integration of sustainability into short courses in the future. There is a possibility of incorporation of the previously offered *Systems, Strategy and Sustainability* course in the MBA as a 5-day Interactive Program on sustainability co-taught by faculty members from different disciplines within the full time MBA program (AGSM)¹⁵³.

¹⁵¹ See Melbourne Business School research study by Mark Crosby in **Appendix B**

¹⁵² See Melbourne Business School research study by Mark Crosby in **Appendix B**

¹⁵³ See Australian Graduate School of Management research study by Robert Marks in **Appendix B**

What are the key barriers/challenges to education about and for sustainability?

The main barrier to education *about* and *for* sustainability highlighted by the participating Business Schools appears to be a lack of student demand for such courses.

At the AGSM, the number of students enrolled in environmental courses in the full time MBA program dropped from 13 students in 1989 to 2 students in 2000¹⁵⁴. AGSM also put forward the reluctance of the school 'to espouse to wider socio-political issues' against 'training students with technique in the various disciplines of the school' as a barrier to change¹⁵⁵.

Australian Graduate School of Management
 'Increased emphasis (on sustainability) would come at the expense of other parts of the current MBA curriculum, and these changes would not occur easily'¹⁵⁶.

At the UTS there are a high proportion of international students who have limited work experience and different priorities on expected outcomes of an MBA program. For example, some overseas students from developing nations believe electives on sustainability are 'a waste of money for international students'¹⁵⁷.

The demand for education *about* and *for* sustainability is not sufficient to 'develop a standalone elective' at the MBS¹⁵⁸. MBS also included the lack of staff to teach sustainability electives as a challenge for the school.

Melbourne Business School
 'A key barrier to any offering is the ability to hire world class faculty. At this stage we do not have anyone who is available and interested in teaching a sustainability elective.'

Other barriers include the need for Business Schools to remain successful in their operation and avoid major changes to the MBA program which may threaten progress of the school¹⁵⁹. UTS highlighted that a lack of real life case studies may also serve as a challenge to faculty staff when attempting to engage students in topics relating to sustainability.

MGSM acknowledged the piecemeal approach to integrating education *about* and *for* sustainability into their MBA program and the issue of holistic inclusion in all course areas.

Macquarie Graduate School of Management
 'Education for and education about sustainability is at an early stage of development at MGSM. The treatment of sustainability is fragmented, uneven across the management areas and does not explicitly deal with aspects of environmental sustainability as part management .The courses and programs address issues and develop skills required for sustainable development. However, there is no systematic, explicit treatment of the complex nature of sustainability in the courses, nor is there an integrating framework or course that synthesises the content of courses that address sustainability'¹⁶⁰.

5.4.1 Short Courses Offered by Australian Business Schools

The four Australian Business Schools who participated in the in-depth inquiry into education *about* and *for* sustainability in MBA programs also provided information about short professional courses offered independent of MBA programs.

¹⁵⁴ See Australian Graduate School of Management research study by Robert Marks in **Appendix B**

¹⁵⁵ See Australian Graduate School of Management research study by Robert Marks in **Appendix B**

¹⁵⁶ See Australian Graduate School of Management research study by Robert Marks in **Appendix B**

¹⁵⁷ See University of Technology Sydney research study by Dexter Dunphy, Suzanne Benn and Omer Enginertan in **Appendix B**

¹⁵⁸ See Melbourne Business School research study by Mark Crosby in **Appendix B**

¹⁵⁹ See University of Technology Sydney research study by Dexter Dunphy, Suzanne Benn and Omer Enginertan in **Appendix B**

¹⁶⁰ See Macquarie Graduate School of Management research study by Robin Kramar in **Appendix B**

Only one Business School offers executive education that, while not explicitly delivering education *for* sustainability, addresses topics of sustainability within short professional courses on offer. MBS recently partnered with Mt Eliza Business School to form the Mt Eliza Centre for Executive Education. Executive development programs are offered for managers at all stages of their careers to develop specialisations in leadership, general management and strategy¹⁶¹. The Leadership programs address issues related to sustainability by considering future trends. For example, one day of the five day course *Creating the Path to the New Organisation*, incorporates sustainability by considering future trends¹⁶².

Mt Eliza Centre for Executive Education (Melbourne Business School) – Leadership Executive Development Program

Creating the Path to the New Organisation is a 5 day course that in day 1 covers the future, managing stakeholders, and the quadruple bottom line (valuing community involvement)¹⁶³.

UTS does not offer professional short courses which deliver education *about* and *for* sustainability to business or industry. However, faculty within the Business School do conduct longer (8 weeks) executive development courses for industry and corporate organisations via action learning projects which address topics of sustainability.

University of Technology Sydney – Executive Development course

'Professor Dunphy and Humphrey Armstrong offer an Executive Development course in Organisational Change over 8 weeks which has a strong emphasis on corporate sustainability¹⁶⁴.'

MGSM and AGSM do not currently offer short professional courses dealing explicitly with sustainability. However, AGSM has run short courses addressing environment and sustainability in past years and executive programs may be offered in the future. Executive education offered at MGSM contributes toward skills necessary for the promotion of sustainability, however issues of sustainability are not currently included in professional development due to a lack of demand from corporate executive clients.

AGSM Executive Education

'In past years we have run a one-day course (*Finding the Middle Ground*) which brought together business leaders, academics, and representatives from non-government organisations to discuss issues of the environment and sustainability. We have started discussions about offering an executive programme for companies focussed on corporate social responsibility, including sustainability¹⁶⁵.'

MGSM Executive Education

'Programs for corporate and executive clients are developed in close partnership with the client organisation. At the present, issues of sustainability are not raised by MGSM program developers as issues to be addressed in the programs. The client's perceived needs and their demands provide the basis for program development. MGSM does offer courses that contribute to the development of skills necessary for the promotion of sustainability. These courses include

- High Impact Leadership – A Leaders Coaching Program;
- Enhancing Personal and Managerial Effectiveness;
- Corporate Governance;
- Influencing and Negotiation Skills; and
- Present, Communicate, Influence¹⁶⁶.'

¹⁶¹ See <http://www.mteliza.edu.au/>

¹⁶² See Melbourne Business School research study by Mark Crosby in **Appendix B**

¹⁶³ See Melbourne Business School research study by Mark Crosby in **Appendix B**

¹⁶⁴ See University of Technology Sydney research study by Dexter Dunphy, Suzanne Benn and Omer Enginertan in **Appendix B**

¹⁶⁵ See Australian Graduate School of Management research study by Robert Marks in **Appendix B**

¹⁶⁶ See Macquarie Graduate School of Management research study by Robin Kramer in **Appendix B**

6. PROFESSIONAL SHORT / TRAINING COURSES

6.1 Introduction

Global Knowledge Ventures (GKV) was commissioned to research and write the following section which reviews professional short training courses on sustainability for business.

There is a large range of providers and potential providers of non-university 'business education' and education-related activities in Australia. Broadly, these providers consist of:

- Government Departments and Authorities;
- Federal; and
- State.
- Business and Industry Associations;
- NGO's, Think-tanks and Not-for-Profit organisations; and
- Private/commercial organisations.
- Training organisations;
- Consultants – offering training programs;
- Conference/seminar management organisations; and
- The Media, including magazines and websites.

The breadth and diversity of relevant educational activities undertaken by these groups makes it difficult to undertake a comprehensive analysis of the programs¹⁶⁷. However, in order to undertake a systematic approach to the analysis of activities in the non-formal education sector, an overview of each of the above groups has been provided and one or several representative programs selected as an example(s) of the programs on offer. Comments are also made on the drivers behind the developments of these programs and the delivery mode and educational content.

6.2 Government

The results of surveys undertaken by GKV indicate that, in Australia, the greatest amount of non-formal education *about* or *for* sustainability comes from government.

In recent years, federal and state governments have introduced more stringent disclosure regulations such as the Environment Protection and Biodiversity Conservation Act¹⁶⁸ and Financial Services Reform Act¹⁶⁹, as well as stronger state based environmental compliance regulations. This changing legislative environment has driven business to identify and manage new sustainability risks and issues. As regulation is a significant driver of corporate change and performance improvement, organisations need the capacity to understand the new sustainability risks and skills to develop appropriate strategies if they are to comply with evolving legislation.

Federal, state and local governments throughout Australia directly provide large volumes of sustainability information, educational materials as well as training, seminars, workshops and courses aimed at educating and training the public. Many of these programs are aimed specifically at the industry and business sector. All levels of government are also active in indirectly providing education, training and also professional development for the industry and business sector through sponsorship, funding and support of training courses, seminars and conferences on sustainability.

¹⁶⁷ Department of Environment & Heritage's Reference Group on Environmental Education (1999)

¹⁶⁸ See <http://www.deh.gov.au/epbc/>

¹⁶⁹ The *Financial Services Reform Act* requires companies that issue financial products with an investment component to disclose the extent to which labour standards or environmental, social or ethical considerations are taken into account when making investment decisions.

6.2.1 Federal Government Programs

The main federal government body involved in sustainability education is the Department of the Environment and Heritage (DEH). However, there are also a number of other federal departments providing sustainability education, including:

- Department of the Prime Minister and Cabinet;
- Department of Transport and Regional Services;
- Department of Agriculture, Forestry and Fisheries;
- Department of Education, Science and Training;
- Department of Foreign Affairs and Trade; and
- Department of Industry, Tourism and Resources.

In addition, the Department of the Treasury; the Attorney General's Department; the Department of Communications, Information Technology and the Arts; and the Department of Immigration and Multicultural and Indigenous Affairs also provide some limited educational services in the areas of sustainable development.

The DEH has a large portfolio, broadly tasked with helping Australia achieve ecologically sustainable development. To this end, the DEH has formulated a large number of initiatives aimed at promoting and facilitating sustainable development at the local, regional and national level. These include the development of legislation, strategies, policies and guidelines and the formation of programs such as Local Agenda 21 and the Environment Resource Officer Scheme. Specific sustainability initiatives are targeted to industry groups, Australian Government departments and local governments¹⁷⁰.

Over the last decade, care of land, ocean areas and biodiversity have been major themes for the government-initiated business training programs. However, over the last few years the focus for the federal government and of business has shifted somewhat and sustainability issues such as greenhouse gas (GHG) management, community and public involvement (corporate social responsibility – CSR), and triple-bottom line (TBL) reporting have become important programs.

The **Triple Bottom Line Reporting Guide** (the Guide) is an example of educating business on sustainability. The **Department of the Environment and Heritage** has developed the Guide which is one in a series of three produced by the Australian Government to assist with TBL reporting. The Guide is intended to support voluntary reporting on environmental performance by organisations in Australia by providing guidance on selecting suitable environmental indicators, and demonstrating simple methodologies, which where possible incorporate existing Australian initiatives. This guide enables organisations to determine performance in relation to selected indicators that are consistent with the Global Reporting Initiative's environmental indicators.

¹⁷⁰ In addition, the portfolio also contains the following other bodies, which play roles in education about or for sustainable development:

- Antarctic Science Advisory Committee
- Australian Greenhouse Office
- Australian Heritage Commission
- Bureau of Meteorology
- Environment Protection and Heritage Council
- Great Barrier Reef Marine Park Authority
- National Cultural Heritage Committee
- National Environment Protection Council
- National Oceans Office
- Office of the Renewable Energy Regulator
- Science Program Management Committee
- Wet Tropics Ministerial Council.

The DEH is working in partnership with Australian business and industry in the promotion and implementation of initiatives and best practice to improve corporate environmental performance. These initiatives include the uptake tools such as voluntary corporate sustainability or TBL reporting, eco efficiency and cleaner production strategies, Environmental Management Systems (EMS), life cycle assessment techniques, environmental management accounting, supply chain management and other tools with wide applicability to a range of industries¹⁷¹.

Consequently, Commonwealth-State-Ministerial Councils such as the Australian Greenhouse Office (AGO) and Environment Protection and Heritage Council (EPHC – including the National Environment Protection Council) have become important providers of education *about* and *for* sustainability for business and industry.

6.2.2 State Government

Each state government in Australia has developed active engagement with business on sustainability issues. A number of these initiatives have been developed under the guidance of the state Environment Protection Authorities (EPA).

Through its Sustainable Industries Division, of the **Queensland EPA** offers help and advice, a consumer information service and training support services. Many programs have been established within the Queensland EPA to help industries achieve competitive advantage by moving beyond compliance levels of environmental performance to new standards of eco-efficiency and eco-marketing. Training is delivered largely through key industry associations. Sustainability tools provided to business include the Business Sustainability Roadmap which is a strategy map providing a contextual framework for businesses serious about taking up the challenges and opportunities of sustainable development.

The Victorian, New South Wales, South Australian, Western Australian and Queensland EPAs have specific sustainability programs that have grown out of their role as a regulator of industry's environmental performance. State government programs generally focus on the industries significant to the particular state.

The **EPA South Australia** runs a Small Business Eco-efficiency Training Program which offers training courses to small and medium sized businesses throughout the State. These courses are run in cooperation with various agencies including local councils and catchment water management boards. The Small Business Eco-efficiency Training Program aims to help businesses understand what eco-efficiency means and how they can benefit. Tools and techniques are provided to help identify efficiencies that in many cases result in financial benefit and reduced environmental impacts.

EPA Victoria sponsors a partnership lead by the Australian Industry Group (AiG) to assist small to medium enterprises (SMEs) in the Bendigo region to implement eco-efficient practices. EPA Victoria has encouraged business to use cleaner production as an effective means of addressing its environmental impacts since 1988. Through partnerships with business, industry sectors and other stakeholders, the program has demonstrated that participating businesses can reduce their environmental impacts, improve efficiency and save money.

The **International Council for Local Government Environment Initiatives**, (ICLEI) serves as an information clearing house on local government initiatives. ICLEI has performed this service through the publication of newsletters, a case study series, and a variety of technical manuals on topics ranging from financing energy efficiency projects to solid waste management to the use of municipal economic instruments to increase environmental performance.

¹⁷¹ See <http://www.deh.gov.au/industry/corporate>

6.2.3 Local Government

Local governments have also been active in sustainability training but the main Australia training entities, ICLEI and Environs¹⁷² primarily cater to training of local government employees rather than businesses within in the municipality.

The provision of government sustainability programs described above indicate that the training approach from government is fragmented with many different government bodies, from all three levels of government, designing and implementing education programs for business. These tend to operate independently with each organisation spending time and money on design, development and marketing of programs. Each program promotes different steps that business can take reflecting the focus of the department or section that they belong to¹⁷³. In addition, the content of sustainability programs tends to very technical and industry specific. For example, a heavy emphasis is placed on cleaner production solutions in manufacturing environments. There does not appear to be significant evidence of training needs analysis covering contemporary business needs. In the development of any future government sustainability training initiatives, it would be beneficial if business were involved in the design of government programs. Such involvement would likely prompt inclusion of content related to broader skill development in communication, stakeholder engagement and risk management.

At the federal level, there has been a lot of focus on environmental/sustainability reporting but there is a lack of agreed indicators that measure progress toward sustainability. In the development of programs and tools there has been little focus on the more business specific areas of how sustainability adds shareholder value.

More capacity building is required to help companies develop and use tools to implement, monitor and measure outcomes of sustainability policies and practices and more focus on training that can help companies build the argument on how sustainability can add long term shareholder value.

6.3 Business / Industry Peak Association and Professional Bodies

The course matter relating to sustainability is beginning to move from the margin of Australian business to the mainstream. This is evidenced by the number of companies, across all industry sectors that have developed public sustainability policies and have conducted external reporting¹⁷⁴. However there has not been a corresponding focus on capacity building within companies to enable them to implement their own policies guidelines and those of their industry peers. In recognition that sustainability issues are increasingly impacting many areas of industry activity, many diverse business and industry peak bodies have begun to provide sustainability education, training and also professional development for their members.

The **Property Council of Australia** (PCA) is leading the way in environmental issues with its proactive work on energy efficiency guidelines and the co-development of a voluntary greenhouse and energy protocol for commercial buildings. Their programs are designed to develop the specific vocational knowledge and skills required in an increasingly competitive marketplace. Recently the PCA launched Australia's first sustainable development guide for the commercial property industry. The *Sustainable Development Guide: A Roadmap for the Commercial Property Industry* provides property owners, investors, managers and developers with clear guidance on how sustainability issues affect their business.

Driving some of the training related developments has been the establishment of voluntary industry sustainability standards and codes of practice such as those in mining and

¹⁷² See <http://www.environs.org.au/cases> and <http://www.iclei.org/anz>

¹⁷³ Smith (2002)

¹⁷⁴ Hogarth (KPMG Partner, Audit and Risk Advisory Services) undertook a report on corporate Australia and found that "Evidence from our research reveals that even though Australia was a late bloomer compared to the rest of the world in adopting sustainability reporting, sustainability reporting has greatly increased in Australia in the past five years with over 100 companies and government entities producing such reports."

property¹⁷⁵. In addition, some industry wide codes, such as the ASX Corporate Governance Council's 10 *Principles' of Good Governance*, have been developed¹⁷⁶. Understanding the relevant obligations of these codes requires companies to meet the industry expectations and build their capacity to continually improve policies, strategies and performance.

A number of sustainability initiatives of today have grown out of environmental programs of the late 1990's. For example the Australian Industry Group (AIG) has produced environment management handbooks specifically tailored for small industry in each state and territory since 1996. Today AIG also regularly run comprehensive training workshops and seminars in New South Wales, Queensland and Victoria in order for members to further expand their business skills and knowledge.

The **AIG Managing Environmental Issues** Training Program is a practical one-day program that provides participants with a basic understanding of environmental laws, regulations and policies applying to manufacturing and construction companies, due diligence principles, environmental assessment and environmental management plans/ systems.

For business, sustainability issues have traditionally focused on pollution issues and cleaner production, regulatory approvals and licences, and protection of land, water, air and biodiversity. The industry associations have historically provided sector specific programs in these areas. Bodies such as the Plastics and Chemicals Institute of Australia (PACIA) have developed training programs – often partnered with government – to provide its member companies and individual professionals with education and information on specific courses or government/legislative initiatives. The federal government's *Cleaner Production Program* was one such initiative where government directly provided or indirectly funded training facilitated by industry groups, under an overarching course heading of sustainability.

The development of linkages between industry associations and universities for the design, development and delivery of accredited training programs is quite advanced in areas such as finance and law. However there are few industry associations that have expanded their university partnerships into accredited training programs for sustainability issues within their specific sectors. An exception is the Institution of Engineers who conducts professional development programs in conjunction with formal education providers (universities and TAFE's) and often has entered in collaborative programs where members are able to gain formal academic accreditation for their participation in these programs.

The **Enviro 04 Convention and Exhibition** is the premier industry forum on sustainability for 2004. It is a platform for five environment industry associations to run their annual or biennial conferences and showcase their technology, products, services and research in a combined trade exhibition. Enviro provides the infrastructure for these conferences and the exhibition to take place and incorporates a full program of social and technical events and tours, promoting cross-fertilisation between the different disciplines.

There are a number of business associations whose members include companies classified as being from the environmental and sustainability "Industry". These organisations include Australian Water Association (AWA), Waste Management Association of Australia, Australian Business Council for Sustainable Energy (BSE), Environment Business Australia (EBA) and the Clean Air Society of Australia and New Zealand. These organisations run conferences and seminars on topics that relate to their members interests and increasingly focus on, and highlight, sustainability and business issues of significance. Although these peak sustainability industry bodies consistently provide conferences and seminars they have not expanded their membership offerings into the development of fee based training courses for members.

¹⁷⁵ See

www.epa.qld.gov.au/environmental_management/planning_and_guidelines/codes_of_practice/industry_environmental_codes/

¹⁷⁶ See

http://www.biomebourne.org/fileadmin/Download_Files/Download_Reports/ASX_Corp_Gov_Guidelines/ASX_Corporate_Governance_Guidelines.pdf

The finance sector plays a central role in the Australian economy and there is now a growing interest from the financial sector in business education *for* sustainability. In response to the introduction of the Financial Services Reform Act¹⁷⁷ and the growth of Socially Responsible Investment (SRI), the Ethical Investment Association has begun the development of education programs for financial planners to understand the nature and SRI products being offered in the market. In addition, three of the major banks in Australia have joined the UNEP Finance Initiative¹⁷⁸, which offers a capacity building service.

Industry bodies are now actively expanding the content of their sustainability programs and are looking to partner with government to facilitate education and training in the areas such as of energy efficiency, GHG abatement and climate change management. The business case is another area that is receiving attention. There have been many studies highlighting the business case for implementation and integration of sustainability management practices within businesses¹⁷⁹. In almost every survey on the business case for sustainability, certain factors such as reputation, operational efficiency, licence to operate and the attraction of employees are cited¹⁸⁰. In a global survey of CEOs, PricewaterhouseCoopers found that 'more than ever before, CEOs are saying that sustainability is an integral part of value creation, not an add-on or a simple cost item¹⁸¹.' Industry associations have a role to play in the development of capacity building programs to help their members make and communicate the business case for sustainability and to develop strategies that will deliver shareholder value from good environmental and social performance.

A problem in the development of coordinated industry wide programs is that sustainability issues vary widely across industry and within sectors. Language and definition are a problem and there is no agreed business definition of sustainability that makes it difficult to engage with business and to develop broadly applicable programs.

Despite many positive developments, there are still certain industry and business segments lacking any formal training offerings by their business organisations. For example, there is little training related material offered for company directors. The banking and insurance associations also lack any real sustainability initiatives. The financial community is important to engage and educate as companies that have made significant progress in advancing sustainability initiatives within their own organisations struggle to communicate their sustainability strategies for growth to the capital markets. There is very little dialogue between business and the capital markets on sustainability and virtually no training programs that help business more effectively translate the evolving language of sustainability into the language of finance.

6.4 Non-Governmental Organisation, Think-Tanks and Not-For-Profit Organisation

Non-governmental organisations (NGOs), think-tanks and not-for-profit 'cause-related' organisations have played an important and interesting role in Education *about* and *for* sustainability in Australia.

In the mid- to late-1990's, organisations such as Greenpeace, the Australian Conservation Foundation (ACF), World Wildlife Fund (WWF) and Wilderness Society were instrumental in providing 'awareness-raising' and public education *about* sustainability issues such as land and water quality degradation, biodiversity conservation, sustainable forestry and more recently GHG abatement and climate change.

¹⁷⁷ Under the FSR Act fund managers must declare the extent that environmental, social, ethical and labour standards are incorporated into their investment decisions

¹⁷⁸ See www.unepfi.net

¹⁷⁹ Perhaps the most referenced example is Elkington (2001)

¹⁸⁰ See SAM 2003 analysis of over 1000 companies who rated the areas where most value was added from their sustainability strategy

¹⁸¹ PricewaterhouseCoopers (2003)

Over the last 3 to 4 years some of these groups (such as WWF and The Environment Centre - TEC) have actively partnered with (or been partnered by) industry and companies to provide awareness-raising, educational, training and professional development, particularly through the joint provision of specialist seminars and conferences. While still in the formative stages, it is expected that these organisations will develop accredited training packages in partnership with industry. The seminars run by groups such as the TEC have been well attended by sustainability professionals seeking insights into sustainability which they may be able to utilise in their professional roles, and also to liaise with other professionals, government regulators, consultants and other service providers.

Green Capital is an initiative of the **Total Environment Centre (TEC)**, which aims to encourage and facilitate the development of CSR (which includes environmental sustainability) both in its own right and in bringing together the key stakeholders from industry, government and civil society groups to build a platform for constructive dialogue and debate on key issues. Green Capital aims to develop active working relationships with market-leading businesses looking to work cooperatively across the spectrum of corporate sustainability. TEC have facilitated a number of seminars under specific programs/themes such as 'How Green Is My Footprint' and 'Green Capital', which have sponsored high-profile speakers from academia, government, business, industry and peak bodies.

In addition to the large, well-funded NGOs, a number of smaller organisations, such as Vox Bandicoot and Green Skills Inc have also developed training initiatives to focus on business.

Green Skills Inc. is a quality endorsed training organisation registered with the WA Department of Education and Training, has been delivering quality training in the environmental field for 14 years. Green Skills Inc is a community non-profit organisation, established in September 1989, who specialise in linking environmental training and employment programs to practical conservation work and sustainable development. The organisation has formed long term partnerships with local businesses, community groups and individuals, and state and local government agencies.

Vox Bandicoot provides ecological sustainability culture change programs with industry and local government including ISO 14001 training, environmental sustainability education with community groups and schools, conference/program launch sustainability performances and community capacity building relating to sustainability

The NGO community has highlighted that the reputation, ethics and sustainability performance of corporations are increasingly becoming deciding factors in decisions to interact with a company. Such interactions may include a consumer's decision to purchase a product or service, a government's decision to grant a licence to operate, an investors decision to buy shares and an individuals decision to seek employment in a firm. Organisations need to be able to understand and meet the expectations of diverse stakeholders on environmental, social and corporate governance issues as well as develop their stakeholder engagement skills. There is a lack of training programs that help companies effectively engage with the NGO community and then to develop methodologies to incorporate stakeholder views and expectations into corporate strategy and policy.

6.5 Private / Commercial Organisations

6.5.1 Training Organisations and Consultants

The last major group involved in the provision of non-formal education *about* and *for* sustainability in Australia is the private commercial education and training sector. These groups include professional training organisations and consultants, which overlaps somewhat with the conference/seminar sector, as well as 'in-house' training functions within industry peak bodies and professional bodies, and 'in-house' training departments within companies.

There are a large number of consultants in Australia providing general advisory and specific services in the area of sustainability. These consultants range from the large multi-national

business consultants (eg McKinsey, Arthur D Little Inc); the large accounting/business services firms (eg Ernst and Young; PricewaterhouseCoopers; KPMG); the large multinational engineering and environmental management consulting firms (eg URS Corporation; Environmental Resources Management), through to smaller engineering and environmental advisory firms and businesses and finally, a few specialist training firms.

Many of the consultants offer training services broadly, or purport to be able to provide sustainability training courses tailored for clients. However, very few organisations appear to have actually conducted courses or are able to provide a current course curriculum for preview. A few specialist companies exist that state that their core business is to provide training and education services in or about sustainability for business. Three of those companies include: Sustainable Learning Australasia Pty Ltd, EcoSTEPS and The Sustainability Centre.

For a number of years, **EcoSTEPS** has run a one-day workshop "Understanding Sustainability". The program is based on The Natural Step (TNS) which can be used as a planning framework for business which equips participants to balance economic, environmental and social needs.

The Sustainability Centre provides short training courses in sustainable development, of length from half a day to 5 days or more. The courses involve lectures, discussions and field trips. Teaching staff are drawn from Sustainability Centre, several universities in Sydney, state and local governments, and non-government organisations. Courses are tailored to the needs of our client groups, whether they be from government, business or the community at large.

Sustainable Learning Australasia provides a variety of learning services. Principally they provide client specific and competency based training programs for business in the areas of waste management and sustainable business. Sustainable Learning have partnered with Gordon TAFE to offer accredited training, tailored to meet the needs of those employed in the waste industry

Companies that offer specialised training programs for business include the assurance and accreditation firms that offer services to companies seeking and maintaining international standards such as ISO14000. The training programs, offered by companies such as NCS and SAI Global are generally related to environmental management systems implementation and auditing (see Box below).

NCS International Pty Ltd (or NCSI) is a wholly owned subsidiary of the National Association of Testing Authorities, Australia, provides Management systems over a range of courses that provide the essential knowledge and skills to complement certification and assist business to get the most benefit from their management systems. Courses include Understanding the ISO 14000 Series, Implementing an Environmental Management System, and Environmental Lead Auditor Training Course.

SAI Global Assurance Services is a Registered Training Organisation that offers competency-based training program, and is accredited and registered with the Australian National Training Authority. The programs include Environmental Management Systems, Environmental Management for sustainable business, Improving Environmental Performance and integrated risk management.

The role performed by some sustainability consultants has an increasingly educative function. Numerous multinational corporations, such as BP, Shell, Du Pont, Interface and Ford have established sustainability policies. Australian based offices are required to deliver business performance that meets with their parent company policy expectations. Similarly many Australian companies have adopted sustainability policies and are now required to implement those. The challenge for business managers is to convert these policy positions into tangible actions that deliver business value through the development and use of best practice

sustainability tools and techniques. Consultants are working within organisations and often directly with business executives to run internal seminars and training on sustainability¹⁸².

There is also an increasing requirement for business to respond to questionnaires and other information requests from ratings agencies and analysts on their environmental and social performance¹⁸³. Businesses need to be able to identify, capture and measure the sources of requested sustainability information within their own business and effectively communicate this to the various interested parties. Private training companies and consultants have the capacity to focus on the broader business management issues of integrating sustainability across the organisation and can develop programs to help companies communicate their performance to the wider market.

It was difficult to find any examples of partnerships between private training companies and universities for the development of sustainability training programs. Existing university programs have not been incorporated or integrated in the commercial services that consultants and private training companies offer their business clients.

For private training companies to successfully develop commercial training programs they need to overcome a number of obstacles. Although industry demand for non-university training and education is growing, it is not perceived to be a high priority. The training programs offered need to demonstrate market benefits. The value proposition needs to be very strong and a good business case for investment prepared. The lack of a compelling case for undertaking training has inhibited a number of proposed programs in Australia succeeding. In addition, there have been examples where company sustainability practitioners have been 'gatekeepers' inhibiting the development, uptake and delivery of programs and capacity building within their own companies.

6.5.2 Conference / Seminar Management Companies

In addition to conferences and seminars facilitated and provided by government, industry, business groups and NGO's, there has been a burgeoning development of these forums by professional conference facilitation companies. These commercial entities have seen and acted on market needs and opportunities to facilitate the provision of these services specifically *about* and *for* sustainability, and for those organisations and (professional) people involved in sustainability. A number of the business sustainability conferences are conducted with a seminar/workshop format added as an additional professional development option.

There is a growing network of people involved in sustainability and forums where business people can interact and debate the business and sustainability issues have increased.

Edmonds Management has convened seven sustainability conference series over seven successive years. Each year the conference organisers determine a current sustainability theme of contemporary interest to Australian business and organise an event in every state capital. In 2004 the Series highlighted the special opportunities and risks that this convergence of globalisation and sustainability poses for business and government, at all levels, in Australia.

Many recent conferences and seminars organised as business education initiatives have focussed on the Business Case for Sustainability (CSR/TBL) as well as numerous conferences on renewable energy. There exists an opportunity to develop tailored training programs that run parallel to the theme of the conference¹⁸⁴.

¹⁸² It is difficult to cite the specific examples in this case due to commercial confidentiality reasons, however the author is aware of specific training programs that being run with Australian banks, mining companies, chemical companies and oil and gas companies.

¹⁸³ See <http://www.reputex.com.au/> and Socially Responsible Investment questionnaires such as those from SIRIS, SAM and Monash Sustainability Enterprises.

¹⁸⁴ The Ethical Investment Association of Australia plans to run their national conference in 2004 with three streams of accredited education programs, conducted by industry experts running in parallel.

Country Conferences Pty Ltd is a professional conference management company with two offices in country NSW - Armidale and Bourke. The company specialises in conference, seminar and event design, coordination and management for clients throughout Australia. Recently they conducted a one day interactive seminar on Leadership in Sustainable Development. This is a seminar for professionals who are developing or re-evaluating the sustainable development agenda within their organisations. The course emphasises the importance of a sound business case to underpin corporate social, financial and environmental responsibility. Using actual case studies the course examines the spectrum of elements needed to successfully assess, implement, manage and audit a sustainable development agenda.

6.6 Media

The electronic media is a valuable source for business for information and knowledge on sustainability. In recent years the mainstream business press has increased its coverage of sustainability, corporate responsibility, socially responsible investment and corporate governance issues. The Fairfax press have included several supplements such as a TBL feature in the Financial Review and an annual feature on the reputation rating of Australia's top 100 companies.

The Internet has spawned numerous websites and listservers dedicated to sustainability. Sites such as the World Business Council for Sustainable Development (WBCSD), Business for Social Responsibility, Ethical Corporation provide enormous amounts of resources for individuals seeking tools, techniques, standards, guidelines and reports on sustainability.

There are many successful news sites that have a significant and growing subscription level in Australia. News, views and issue providers include: Greenleap, Planet Ark, Ethical Investor, CSR Wire, Enviro Info, Greenbuzz, Sustainable Business.com, and Environment News Service.

The emergence of information dissemination utilizing the electronic media has led to the emergence of on-line education initiatives dealing specifically with sustainability topics. In recent times there have been a number of on-line forums, conferences and seminars offering individuals the opportunity to engage in furthering their knowledge at their convenience.

The electronic media sources of educational and training material are perhaps the most diverse and contemporary in their content. Through the advent of electronic service channels, there is a growing ability to access the latest information, news, reports and developments in sustainability that cover virtually all topics and content areas.

In the development of future business education programs *about* and *for* sustainability, it will be important to recognise the reach and accessibility of electronic media in the program design and delivery.

6.7 Self-Education

The other major area of education *about* and *for* sustainability and factor in the analysis of this topic is that of self-education. Our research has indicated many professionals have pointed to the absence of accessible, career value-adding and needs-tailored formal education services for or about sustainability. As a result, many sustainability professionals have sought and undertaken their professional development largely through self-education, often privately funded and conducted outside work or as an adjunct, through their employers, via the large amounts of non- and informal awareness and educational materials.

6.8 International Educational Services Providers

Programs that help develop professional skills in sustainability are beginning to emerge at the international level.

Some national professional and industry bodies, and in particular some international industry peak bodies (WBCSD and the World Resources Institute), provide excellent educational, training and professional development resources for companies and sustainability professionals in Australia.

These bodies are usually funded by companies (and often collaboratively with international donor organisations such as the United Nations or national governments) and provide portals for industry and business, government and the international donor organisations to share information and case studies on best practice, commission and publish focussed research including data or information reports. These international education service providers may also directly or indirectly provide training courses, seminars and conferences.

Some examples of international business education initiatives are detailed in the following examples.

Leadership for Environment and Development (LEAD) International is a global network of individuals and non-governmental organisations, committed to sustainable development. LEAD is an independent, not-for-profit organisation, established in 1991 by The Rockefeller Foundation. LEAD carries out its mission through capacity development and strategic, outcome-oriented activities consisting of policy, research, action-on-the-ground, communications, and training. Capacity development includes training programmes in sustainable development and leadership skills for a variety of publics. Today, there are more than 1400 LEAD Fellows from the worlds of business, media, public sector, universities and NGOs in over 80 countries.

MHCi is a research and consulting company that offers advice and research on corporate social responsibility issues. MHCi runs a CSR masterclass. Their format is highly interactive, ensuring that participants and contributing specialists are tested to the full. The masterclasses are aimed at CSR professionals and HR specialists and cover issues such as CSR and Labour dealing with the main issues that confront managers in dealing with their employees and suppliers. Experts in the field share their views in an interactive workshop setting.

Surveys conducted by GKV of some large, medium and small Australian companies indicated that many sustainability professionals¹⁸⁵ seek and gain a great deal of their (informal) professional development from accessing educational materials provided by the WBCSD, World Resources Institute as well as the United Nations Environment Program (UNEP). These organisations have been at the vanguard of developing and disseminating business cases for sustainable development which have been used by companies and sustainability professions to drive education *about* and *for* sustainability into and through their organisations and for those companies to achieve sustainability outcomes.

One organisation that has made significant progress in providing a forum to educate business is the **UNEP Finance Initiative (FI)**. UNEP FI's aim is to identify, promote, and realise the adoption of best environmental and sustainability practice at all levels of financial institution operations. UNEP FI comprises members from the global financial institutions such as banks, insurers, re-insurers, pension funds and asset management companies. UNEP FI provides members with practical research; capacity building; and information exchange services. The products provided range from professional development programmes and action-oriented reports to major international conferences that bring together professionals from around the globe.

International Finance Corporation has conducted a series of workshops since 1996 entitled Competitive Environmental Advantage: Managing Environmental Risk in the Emerging Markets. The workshops, which are held on a quarterly basis, examine techniques for banks, funds, leasing companies, venture capital firms and other financial organizations to transform the increasing risk posed by environmental and social issues into commercial opportunity.

As companies recognise environmental and social stewardship as a competitive advantage, increasing numbers of Business Schools are emphasising education in environmental issues. A biannual comprehensive study by the World Resources Institute on business education and

¹⁸⁵ Professional or technical staff employed in industry or business to undertake roles in, about to related to sustainability.

sustainability highlights the most innovative MBA programs and faculty infusing environmental and social impact management into the Business School curriculum. Although complimentary of Business Schools that have developed their curricula in this area, the report identifies that there is little information on specific outcomes of the results, and graduate successes, of broadening the scope and reach of business education in this area¹⁸⁶. There has been no similar comprehensive study undertaken on non-university providers of education *about and for* sustainability.

In contrast to graduate Business School programs, there are very few training programs for company directors. As the requirements for sustainability have evolved, the skills and knowledge of directors and diversity of boards have not kept up. Most directors, particularly non-executive directors (NED's) are selected for their independence and particular experience and knowledge in corporate areas such as financial performance, cash flow analysis and projections. However, the roles, duties, accountabilities and responsibilities of modern company directors have moved well beyond the traditional areas of finance and legal issues management. A KPMG survey of FTSE 350 NED's shows that 40 per cent didn't feel they had sufficient knowledge of non-financial indicators, such as market, environmental, political and employment issues that could have a material impact on the future business performance of a company¹⁸⁷.

Several renowned international programs such as the *Sustainable Enterprise Academy*¹⁸⁸ and Cambridge Program for Industry¹⁸⁹ assist business in the transformation to corporate sustainability by providing senior executives in business, government and civil society with the vision, education, tools and support necessary to champion sustainable development in their organizations. Although these programs have a significant input from the business sector, they are still programs that are linked directly to universities.

6.9 Findings and Recommendation from GKV Report

Very little training needs analysis has been done to identify the specific requirements of mainstream business to be able to advance their sustainability policies and practices. In the absence of this analysis the non-university programs and materials that have been developed have not been effectively tailored and uptake has been inconsistent.

Overall, the skills needed by business have not effectively been conveyed to the universities. Consequently recent graduates are not in a position to meet the expectations of business managers to progress sustainability initiatives. Similarly, there is a lack of alignment with sustainability policies and recruiting policies, so employees don't have the necessary skills to effectively implement the company's sustainability strategy. There needs to be a better method developed of communicating the needs of business to the university leaders who are setting curriculum.

It appears that Australian companies do not have access to many best practice tools and techniques to address sustainability that have been developed internationally. There is a need to identify the tools in use and train Australian business in the customisation and use of business sustainability tools.

There are few programs that take into account the way companies are organised and how decisions can be effected across the big organisations. Programs need to be developed at different levels- senior executive level as well as management level. Focus at the executive

¹⁸⁶ See <http://www.beyondgreypinstripes.org>

¹⁸⁷ See <http://www.kpmg.co.uk/aci/docs/NEDsurveyUSwebversion.pdf>

¹⁸⁸ The Sustainable Enterprise Academy is North America's premier executive education program on sustainable development. The role of capital markets and sustainability is a discussed on a number of occasions in the Academy's flagship four day program

¹⁸⁹ The Cambridge Program for Industry works with prestigious partners in the delivery of its learning programmes. It draws on the rich expertise and scholarship of the University of Cambridge, and mobilises thought from the best minds and institutions globally. CPI operates beyond the boundaries of any particular department or course area, allowing it to respond flexibly to its clients' needs. Programmes typically have a strong interdisciplinary component. They focus on 'pre-competitive' business themes and appeal to fast-moving and innovative enterprises. Current topics include sustainable development, intercultural management, social inclusion, health leadership, partnership brokerage and future technology.

level is critical to get engagement and uptake of sustainability programs. Because time commitments at the executive level are limited, the potential role of short courses for company directors or a high profile lecture series should be considered as complementary to the overall strategy. However access and time commitments are limited. At the management level there is an increasing need to offer programs to guide managers on the tools and techniques to implement and operationalise sustainability.

There needs to be developed a compelling business case for undertaking training. A number of private sustainability training initiatives have not received corporate support because of the perceived cost rather than the perceived value of the program.

7. SUMMARY OF FINDINGS

7.1 Introduction

Overseas *Leading Edge* MBA programs demonstrate specializations in sustainability as a fundamental aspect of their business studies. Characteristics of these overseas programs are examined and the likelihood of those models being applied in the Australian context is explored. This section also describes the extent to which education *about* and *for* sustainability occurs in Australian MBA programs. In addition, opportunities for short courses and their connection to the sustainability needs of business and industry are discussed.

7.2 Overseas MBA Programs

Several overseas MBA programs have embraced sustainability and education *for* sustainability as core to their work and interests. Major Business Schools in the Americas, Asia and Europe offer Master Programs demonstrating *Leading Edge* education *about* and *for* sustainability.

These *Leading Edge* schools have either specialised sustainability MBA programs or have delivered education *about* and *for* sustainability as a fundamental aspect of business studies. In other words, they have mainstreamed sustainability into the compulsory core requirements. *Leading Edge* Business Schools also conduct significant research into sustainability and business through faculty champions and established research centres within the schools. It is precisely this *Leading Edge* model that may prove effective in mainstreaming sustainability and establishing champions in Australian Business Schools and ensuring a greater role for these champions.

There are several models of *Leading Edge* practice that Australian Business Schools could draw from. One school highlighted by our study as leading education *about* and *for* sustainability was the Bainbridge Graduate Institute in the United States which offers a specialised MBA on *Sustainable Business*. These programs help build leadership capacity within business and industry in the area of sustainability.

Several university-owned Business Schools who have offered traditional MBA courses for decades also demonstrate *Leading Edge* practice through evolution of their existing MBA programs to include education *about* and *for* sustainability.

These *Leading Edge* Business Schools which mainstream education *for* sustainability in a systemic way across the curriculum and are all characterised by the following:

- A considerable number of core and elective subjects based on education *about* and *for* sustainability and a sub-specialisation stream in sustainability;
- Staff who have teaching and/or research expertise in the area of education *for* sustainability;
- Staff and senior management who recognise the importance of developing sustainability knowledge and skills amongst business graduates. This is articulated through course material and promotional information;
- MBA subject and generic outcomes or MBA graduate profiles which include sustainability;
- Students are provided with the opportunity to address sustainability through their assignments;
- Students' skills are developed in areas considered important to the understanding and implementation of strategic change toward sustainability such as critical reflective thinking, systemic thinking, change management, stakeholder engagement, futures thinking; and
- Extracurricular and student initiated activities such as conferences, seminars are offered as part of the curriculum.

While sustainability curriculum may not be as highly integrated as the *Leading Edge* schools, many other overseas Business Schools analysed in this study demonstrate *Good Practice* education *about* and *for* sustainability. These *Good Practice* schools offer elective subjects for MBA students to select as part of the curriculum according to their interest in learning about sustainability topics and skills for strategic change toward sustainability within organisations.

7.3 MBA Programs in Australia

What exists in terms of education about and for sustainability in MBAs and professional short courses for business and industry within Australia? What is current best practice within MBA and associated short courses in Australia?

Thirty-seven Business Schools were analysed for the purposes of this study. The following points identify what exists within these Business Schools in terms of education *about* and *for* sustainability in MBA's and professional short courses.

- Nineteen of the Business Schools reviewed did not include sustainability in core or elective subjects of their MBA programs;
- Thirteen of the Business Schools are rated within the category of *Acceptable Standard*, generally due to the incorporation of elective subjects that address education *about* and *for* sustainability within MBA programs;
- Three of the Business Schools' MBA programs are rated within the category of *Good Practice* that is core and elective subjects which include education *about* and *for* sustainability are offered;
- None of the Australian Business Schools reviewed were considered to be in the category *Leading Edge* for the delivery of an MBA course that is specialised in relation to sustainability (or a considerable number of core and elective courses are offered). However, one school has chosen to develop the profile of education for sustainability and will be offering a specialised sub-major in Governance and Sustainability beginning in 2005; and
- Short professional courses on offer at Australian Business Schools do not explicitly address education *about* and *for* sustainability. The current inclusion of sustainability in short courses is via disconnected, piecemeal methods within existing short courses addressing business topics.

How does this compare with international best practice?

Very few Australian Business School MBAs offer integrated or specialised curriculum explicitly dealing with business and sustainability, particularly when compared with overseas *Leading Edge* programs. The *Good Practice* Business Schools in Australia are those considered best practice and are characterised by a lesser extent of integration of sustainability via a limited number of core courses as part of the existing MBA curriculum. In addition, a limited number of Australian Business Schools have staff and research centres dedicated to education *about* and *for* sustainability.

Does current practice meet the needs of business and industry in sustainability?

Significant information gaps exist in the promotional information available on education *about* and *for* sustainability in Australian Business Schools. Of the schools reviewed via website information, there appeared to be a limited amount of evidence of feedback from business and industry as to their need for graduates with the ability to understand and operationalise sustainability.

In the four Business Schools conducting in-depth research it was evident that business does have opportunities to inform MBA curriculum through forums, advisory boards and committees. However, only one of these four schools identified that they specifically consult with sustainability focused businesses to contribute to their MBA curriculum, as opposed to

involving business to inform traditional MBA curriculum. Further research into the needs of business and industry would provide a greater understanding of the extent to which education *about* and *for* sustainability is required in MBA curriculum and could merit a separate study.

The Global Knowledge Ventures research further supports this idea in its recommendations for professional short courses in Australia in the following statement:

‘There has been a lack of communication of the skills business needs to the universities. Consequently recent graduates are not in a position to meet the expectations of business managers to progress sustainability initiatives. Similarly, there is a lack of alignment with sustainability policies and recruiting policies, so employees don’t have the necessary skills to effectively implement the company’s sustainability strategy. There needs to be a better method developed of communicating the needs of business to the university leaders who are setting curriculum¹⁹⁰.’

Where are the opportunities within MBAs and associated short courses for increasing opportunities in this area?

Opportunity does exist for future inclusion of education *about* and *for* sustainability in Australian MBA programs and minimal opportunities in short professional courses. For example, two of the Business Schools which conducted in-depth research studies identified opportunities for this area. UTS is about to commence a specialised sub-major in Sustainability and Governance and has high student demand for the existing subject Managing for Sustainability. A new fully integrated executive MBA program explicitly addressing sustainability and business is being developed at the University of Queensland. There is also a possibility of inclusion of a short course relating to sustainability and strategy (where no core courses are currently offered) at the Australian Graduate School of Management (University of Sydney and University of New South Wales). Other Australian Business Schools identified opportunities through such activities as raising awareness of sustainability through student clubs, offering education *about* sustainability within core courses and introducing education *for* sustainability by building on existing skills offered through subjects in the MBA program. However, most schools did not identify opportunity for growth in short courses.

The findings of the study suggest that there is a strong need to create new opportunities in this area specifically to address weaknesses in Australian provision. New incentives are specifically needed for encouraging Business Schools to:

- Identify and build relationships with ***champions*** in the corporate sector thus providing a critical link between the sustainability needs of business and curriculum offerings;
- Raise student demand and faculty support for sustainability courses;
- Undertake a ***needs analysis*** into business requirements and expectations of MBA and other business graduates in the area of sustainability;
- Provide incentives and support for ***MBA staff to develop their knowledge and skills*** in sustainability and education for sustainability;
- Provide incentives and support to Business Schools to revise ***core courses*** and develop ***new optional courses*** to address education *for* sustainability;
- Develop ***new resources*** to support integration of education *for* sustainability in core courses - in particular documenting industry case studies;
- Develop ***industry partnerships*** that provide work placements and mentoring; and
- Encourage integration of ***international experience*** to promote change/ research.

The incentives and actions will help Business Schools address the ***criteria*** associated with *Leading Edge* Schools in the area of education *about* and *for* sustainability.

¹⁹⁰ See Global Knowledge Ventures research study in **Appendix C**

7.4 Limitations

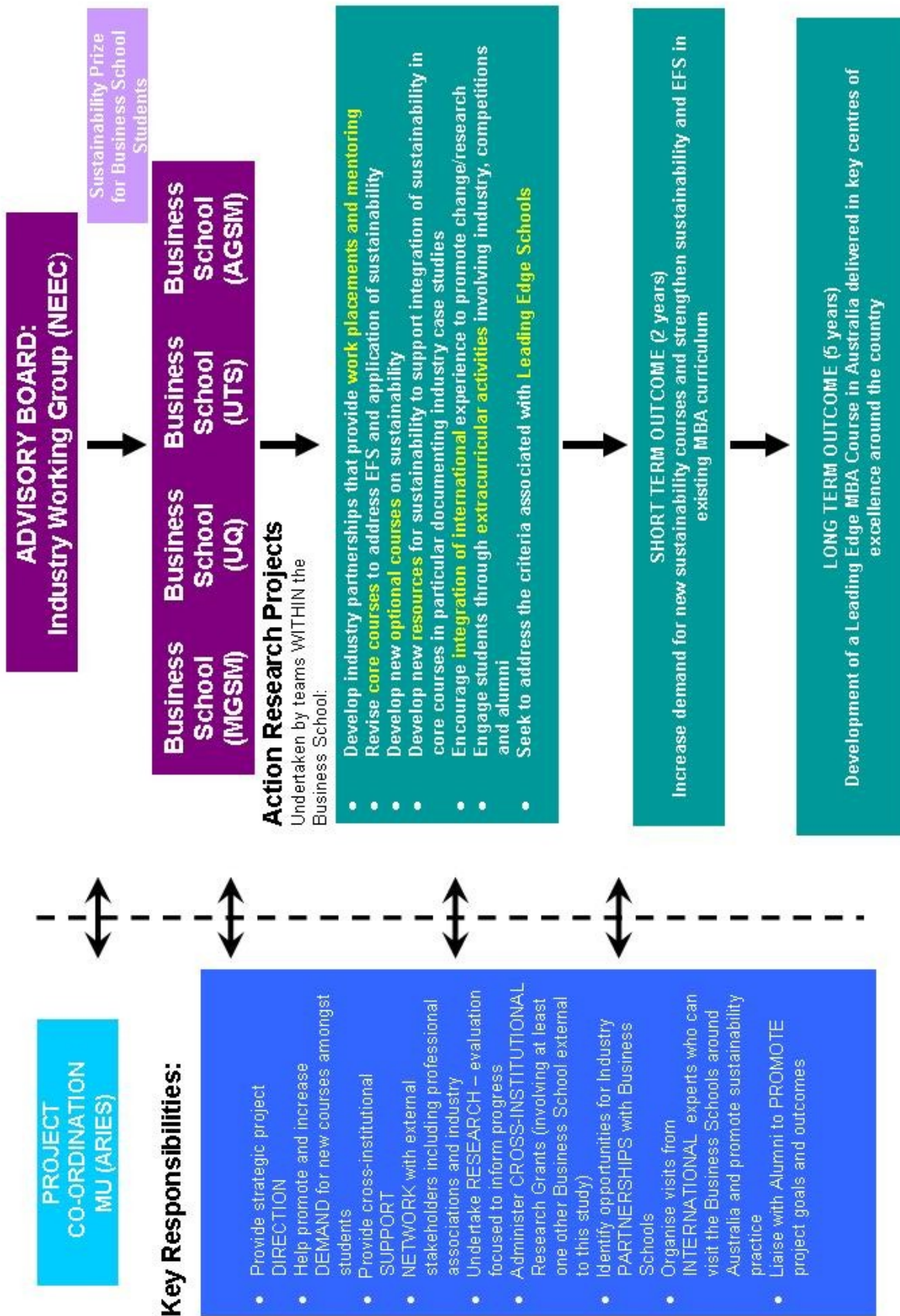
These findings need to be considered within the context of the research methodology and timeline. A key shortcoming of this research was the lack of information provided by Business Schools on their websites in relation to education *about* and *for* sustainability. Information relating to sustainability in MBA programs is not explicitly addressed or promoted through marketing by many schools when compared to information available for general content of MBA programs. It was therefore difficult to identify with certainty the performance of Business Schools without additional detailed information or assessment of graduate skills. This would require a longer and more exhaustive study.

8. RECOMMENDATION AND OUTCOMES

8.1 Introduction

On 4th June 2004 a workshop was held at MGSM City Campus in Sydney to reflect on the findings of the study and to identify relevant and realistic recommendations. Ten people who informed the research of this project attended the workshop (See **Appendix F** for attendees). Those in attendance studied the findings carefully and explored a number of options that formed the basis of the following recommendation. Figure 1 overleaf provides a graphical representation of the recommendation. In addition, a more in-depth discussion of recommendations for action research projects is discussed as well as long and short term key project outcomes.

Figure 1 – Graphical Representation of Recommendation



8.2 Recommendation

This study recommends a research project that seeks change outcomes in both *short* and *long-term* timeframes. The project aims to strengthen sustainability and education *for* sustainability **across the existing MBA curriculum** in the short term. It also aims to provide **Leading Edge Sustainability MBA courses** and demand for these courses throughout Australia in the long term.

These outcomes could be accomplished by awarding Business Schools with funds to undertake **action research projects** which address needs identified by this study. These needs include:

- Identify and build relationships with **champions** in the corporate sector thus providing a critical link between the sustainability needs of business and curriculum offerings;
- **Raise student demand and faculty support** for sustainability courses;
- Undertake a **needs analysis** into business requirements and expectations of MBA and other business graduates in the area of sustainability;
- Provide incentives and support for **MBA staff to develop their knowledge and skills** in sustainability and education for sustainability;
- Provide incentives and support to Business Schools to revise **core courses** and develop **new optional courses** to address education *for* sustainability;
- Develop **new resources** to support integration of education *for* sustainability in core courses - in particular documenting industry case studies;
- Develop **industry partnerships** that provide work placements and mentoring; and
- Encourage integration of **international experience** to promote change/research.

The process of action research proposed in the recommendations listed above is the most effective means of initiating action and change toward sustainability. Involving key Business Schools in the action research process rather than adopting an external consultant role will provide significant impetus for the schools to critically examine their own programs.

Providing funds to undertake action research projects will provide significant incentive for Business Schools to become agents of change within their own institutions. By empowering those within the schools needed to make change, significantly greater impact toward sustainability can be achieved.

The recommendations will be implemented in such a way that the actual outcomes of the research are action *and* change within the Business Schools. In addition, acting upon the above recommendations will help Business Schools achieve **criteria** associated with *Leading Edge* schools in the area of education *about* and *for* sustainability.

Although the research identifies opportunities for providing sustainability-related course offerings, additional information gaps exist. It is imperative these information gaps and inconsistencies are addressed.

In parallel to the action research studies recommended, other studies could be undertaken to:

- Analyse needs of mainstream business requirements to advance sustainability policy and practice; and
- Further explore the educational training background undertaken by CEOs and upper level managers to fully understanding the role of short courses and non-university coursework in their training.

8.3 Key Project Outcomes

The above mentioned action research projects are intended to contribute to the overall outcomes of this study which are:

Short Term Outcome (within 2 years): Increase demand for new sustainability courses and strengthen sustainability content (and education *for* sustainability) in the existing curriculum offered by the participating Business Schools. Funding would be required for the two-year duration of this short term program with the aim of creating self-sustaining partnerships between the Business Schools. Once partnerships are established, it is envisioned the Business Schools will possess sufficient capacity and networking to achieve the longer-term outcome identified below.

Long Term Outcome (within 5 years): Development of a Leading Edge MBA course *about* and *for* sustainability in Australia delivered through a number of centres of excellence located throughout Australia.

9. PROJECT ADVISORY AND DELIVERY STRUCTURE

9.1 Introduction

In order to successfully accomplish key short and long term project outcomes described in **Section 8**, an advisory as well as a co-ordination group would be needed. Project management and coordination (involving ARIES) and advisory structures (involving NEEC Industry Working Group) would be setup to enable long term collaboration to occur between a number of interested Business Schools.

9.2 Project Advisory and Delivery

There are two core groups that comprise the project advisory and delivery structure. The first group is an *Advisory Board comprised of the NEEC Industry Working Group*. This group of people is anticipated to provide a hand-on role in strategic project direction. The group comprise key players well regarded as champions for sustainability from the business sectors. It is considered that this group would also be able to provide valuable feedback with respect to how MBA curriculum *about* and *for* sustainability could best serve the need of targeted industry sectors. They would also judge an annual 'Sustainability Prize' for Business School students from across Australia.

The *Business Schools* taking a leading role on this project would comprise the second core group. At the workshop held on 4th June 2004, AGSM, MGSM, UQ and UTS all expressed an interest in collaborating on this project. MBS may also be interested in participating.

Each Business School would undertake its own action research (involving a minimum of 3 staff) but also work in collaboration (with the support of the Project Coordination Team). This collaboration was with a view to not only sharing materials developed through this project but more fundamentally seeking to deliver a *Leading Edge* MBA by building on the core strengths of each of the current Business Schools MBA curriculum. An example of such collaboration may involve the cross-crediting of specialist sustainability courses between participating schools.

It is understood that other Business Schools may also want to be represented in this group and that this could be a feasible opportunity to be explored. A key representative from each Business School would become part of a group that meets regularly (with the project co-ordination group) to discuss project aims, activities, funding, deliverables and outcomes. It would also be important to have student representation within this group.

9.2 Project Co-ordination Group

The project would be comprised of a project director, project manager and support staff. This could be undertaken by ARIES, Macquarie University. Key responsibilities of this group would be as follows:

- Project management and strategic co-ordination, organizing on-going project meetings between the Business Schools and other key groups involved, developing terms of reference for the groups involved, maintaining and allocating project funds to Business Schools and other key stakeholders in the project;
- Providing a marketing function (with specialist professional input) for the courses developed by the Business Schools to help promote and increase demand for new courses. Networking with industry, professional bodies and other relevant stakeholders to achieve this;
- The project co-ordination group would also help to facilitate cross-institutional resource sharing through the development of useful systems;
- Liaise closely with industry and industry associations to identify opportunities for industry partnerships with the Business Schools;

- Organise visits from international experts who can provide expertise learnt from overseas experiences and that have the ability to help build capacity within Australian Business Schools and
- Co-ordinate research involving staff from Business Schools in the action research study as well as staff from Business Schools *not* involved in the action research study. This research would involve a) market research as well as b) evaluation focused research to inform progress. The Group could keep track of students graduating - assessing their competence in sustainability as well as their employment opportunities.

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APPENDIX A

QUESTIONS GUIDING AUSTRALIAN BUSINESS SCHOOL IN-DEPTH
RESEARCH STUDIES

Inquiry Questions - Critically Examining Education *About* and *For* Sustainability within MBA Courses

1. Does sustainability and education *for* sustainability feature within the MBA course in your institution? If so where?

Q. Is sustainability integrated into the core of the course?

Q. Are there any units devoted to sustainability or education *for* sustainability?

Q. Are there opportunities for students to specialise in the area of sustainability?

Q. Which curriculum areas are seen as more closely aligned to sustainability and education *for* sustainability within your institution?

Q. Is there flexibility to focus on assignments addressing issues of sustainability?

Q. How is sustainability currently interpreted by:

- a) the institution and
- b) the MBA course – is it seen to be concerned with environmental compliance, putting environmental management systems in place, environmental risk management, corporate social responsibility, organizational change, management of change, generic skills, TBL, other?

Q. Is the business case for sustainability distinguished from the normative case for sustainability within the MBA curriculum?

Q. How is sustainability integrated into all courses within the course?

Q. What is the general understanding of sustainability among academics at your School?

Q. What short professional courses are offered by your School that are independent of the MBA?

Q. What opportunities does your School offer to students matriculating from TAFE?

2. What messages/interpretation of sustainability do students take away from the MBA course?

Q. Is it understood as merely TBL reporting?

Q. Is it linked to:

- c) management of change?
- d) cultural change?
- e) leadership?

Q. Are models of change compared in the sustainability context?

Q. Is there an emphasis on the challenges faced by multinationals in maintaining consistent sustainability standards across their operations in the Global North and Global South?

3. What knowledge and skills do they acquire through the course that will help them make a contribution to sustainability within business/industry?

Q. Do learn about paradigm shifts for sustainability?

Q. Do they learn stakeholder engagement and management skills?

Q. Do they learn how to engage with futures strategic thinking?

Q. Do they learn systems thinking skills?

Q. Do they learn socially critical thinking skills?

Q. Do they learn about the different discourses of sustainability, the spectrum of sustainability and the values-basis to sustainable management?

4. What do students learn about how to motivate/manage change towards sustainability within business/industry?

5. What opportunities exist for business and industry to inform/influence the MBA curriculum? How are the educational needs of business and industry in sustainability assessed or met?

6. What profile does sustainability/education *for* sustainability receive within your institution? Why?

Q. How is this articulated through promotional material/web/image of the MBA course?

Q. How is this articulated through assessment?

Q. How is this articulated through recruitment/promotion/professional development of staff?

7. What are the key opportunities for enhancing education about and for sustainability in your institution?

8. What are the key barriers/challenges to education about and for sustainability in your institution?

9. What specific recommendations would you make to the Commonwealth Government to advance the agenda of sustainability and education *for* sustainability within MBA's in Australia?

APPENDIX B

AUSTRALIAN BUSINESS SCHOOL IN-DEPTH RESEARCH STUDIES

APPENDIX B1

AUSTRALIAN GRADUATE SCHOOL OF MANAGEMENT RESEARCH STUDY
(UNIVERSITY OF SYDNEY & UNIVERSITY OF NEW SOUTH WALES)

APPENDIX B2

MELBOURNE BUSINESS SCHOOL RESEARCH STUDY
(MELBOURNE UNIVERSITY)

APPENDIX B3

MACQUARIE GRADUATE SCHOOL OF MANAGEMENT RESEARCH STUDY
(MACQUARIE UNIVERSITY)

APPENDIX B4

GRADUATE SCHOOL OF BUSINESS RESEARCH STUDY
(UNIVERSITY OF TECHNOLOGY SYDNEY)

APPENDIX B1

AUSTRALIAN GRADUATE SCHOOL OF MANAGEMENT RESEARCH
STUDY (UNIVERSITY OF SYDNEY & UNIVERSITY OF NEW SOUTH
WALES)

Critically Examining Education About and For Sustainability within MBA programs at the AGSM

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1. Does sustainability and education for sustainability feature within the MBA programs at the AGSM? If so, where?

There are two MBA programs at the AGSM: the full-time (FT) MBA program and the part-time Executive MBA (EMBA) program. We shall discuss them separately. (There is also an MBA course in Hong Kong, but we shall not refer to this explicitly in the following document.). The main distinction between the two programmes is that the FT MBA offers students many electives after they have completed the 8 core courses over the first 3 terms and have taken 2 of the 3 core Integrative Programs or IPs (4-, or 5-day intensive cross disciplinary courses taught in a week in the break between the 10-week terms).

The core 10-week courses are: Core Economics, Accounting, Finance, Marketing Management, Organisational Behaviour, Organisational Structure and Change, Data Analysis, Mathematical Concepts and Methods, Operations Management, Information Technology and Organisational Performance, and Strategy. The three core IPs are Business Ethics, Corporate Governance, and Management in Action (currently an alliance with the Sydney Symphony). The AGSM's part-time MBA (Executive) program (EMBA) is specifically designed for practising managers. There are two parts: the Graduate Diploma in Management (GDM) and the Executive Year (EY). To successfully complete the GDM a student must undertake 8 courses: 6 core courses and 2 elective courses. The 6 core courses are: Accounting and Financial Management, Corporate Finance, Data Analysis and Statistical Modelling for Business, Managers, Markets and Prices, Managing People and Organisations, and Marketing Principles. The 4 electives are: Law for Practising Managers, Managerial Skills, Managing Change, and Managing Information Technology. The final stage of the MBA (Executive) is the EY. Study is undertaken in two 18-week sessions (Strategic Management I and Strategic Management II), which include a variety of disciplinary material, but which are differentiated from the GDM by the study of cases and the application of earlier theory to these.

Q. Is sustainability integrated into the core of the programs?

No. Neither program includes sections explicitly on sustainability, as seen above in the lists of core courses.

Q. Are there any units devoted to sustainability or education for sustainability?

Over the past twenty-odd years we have offered electives related to Sustainability in the FT MBA program, but with little take-up from students. This lack of sufficient student interest is the main barrier to further offerings and integration, and has affected the material covered in the EMBA as well. The history of environmental issues in the 27 years of the full-time MBA programs at the AGSM is mixed, at best, as a consequence mainly of a reluctance of students to place a high priority on such courses as The Economics of Natural Resources, Resource Markets and Management, Managers the Environment and Resource Markets, and, most recently,

Systems Strategy and Sustainability, despite the prominence given to the last of these by the then Acting Dean. I have been involved with all of these, which in consequence have had an economics focus, following my Stanford PhD dissertation, *Non-Renewable Resources and Disequilibrium Macrodynamics* (NY: Garland, 1979). A further focus has been energy economics, since the oil crises of the early 'seventies and 'eighties drew attention to issues of energy, the environment, and sustainability. Of course, in 1977 the term "sustainability" was not in common use, and indeed might not yet have been coined, but courses in environmental and resource economics were undertaken by students. Records over the past 27 years revealed that the number of students enrolled in the environment/sustainable subjects/courses is as follows:

Year:	'83	'84	'85	'86	'87	'88	89	92	'00
Numbers:	7	3	5	12	13	7	13	6	2

Table 1: Numbers of students enrolled in Environmental Courses, by Year, in the FT MBA

Programme at AGSM These figures are very low, but show the apparent degree of student interest in environment/energy and sustainability, when pitted against the other elective alternatives (in all the disciplines offered at the AGSM). The 2000 enrollments are especially disappointing because the then Acting Dean was very keen to get this course up successfully. There were four academics involved: an economist with green leanings, a lawyer/entrepreneur with green leanings, an ethicist, and a change management expert. There were, unfortunately, more academics than students. As well as the economics, O.B., and institutional analysis of sustainability issues, the course gave the students instruction in VenSim, a computer-simulation package. This was judged useful for two reasons: to help students develop expertise in analysing sustainability issues systematically, and to provide a tool that would be valuable in analyzing other issues, across the board. (See material on this course, Systems, Strategy, and Sustainability, in the Appendix.)

Q. Are there opportunities for students to specialise in the area of sustainability?

Not in the EMBA, where the small range of electives and absence of Individual Study in Management courses means that there is virtually no scope to move outside the approaches offered, as described above. In the FT MBA, however, it might be possible for a student to spend a significant amount of time on sustainability by undertaking, first, the elective course Economic Investment Appraisal (which includes lectures on valuing nonmarket-traded goods and services, such as environmental amenity, clean air, clean water, etc.); second, a number of Individual Studies in Management one-on-one with a faculty member of issues of sustainability, and, third, working on projects related to sustainability which might be proposed by organisations in alliance with the AGSM: these Management Projects allow the students to experience hands-on work under the supervision of a member of faculty and to expose the outside organisation to the high abilities and training of AGSM students who have completed their core courses. The outside organisation will propose the questions/issues to be answered by the students, who generally write a report and present its results and conclusions to the sponsoring organisation.

Q. Which curriculum areas are seen as more closely aligned to sustainability and education for sustainability within the AGSM?

Because of particular faculty interest and expertise, courses aligned with sustainability have been offered in the Economics area (see discussion above) or at least have included an Economist amongst academics from other disciplines. Although the course Management, Environment and Resource Markets (formerly known as Economics of Natural Resources and Resource Markets and Management) has not been offered for some years, the existing elective subject Economic Investment Appraisal includes several lectures related to the economics of sustainability, and the possibility of enrolled students writing a term project on the application of the concepts of sustainability to a real-world issue. The course, Systems, Strategy, and Sustainability, offered last in 2000 includes faculty from Economics, General Management, and Organisational Behaviour; all of these curriculum areas can contribute to the student's understanding and application of ideas to sustainability in the organisation.

Q. Is there flexibility to focus on assignments addressing issues of sustainability?

Yes, even with no electives in the past three years that explicitly address issues of sustainability, students have the possibility of choosing a term project topic or in arranging Individual Study in Management in the fulltime program and hence focusing on a sustainability topic. Moreover, as discussed above, a group of students could spend a term completing a Management Project on application of sustainability to an outside organisation's issues, where requested.

Q. How is sustainability currently interpreted by a) the AGSM and b) the MBA programs — is it seen to be concerned with environmental compliance, putting environmental management systems in place, environmental risk management, corporate social responsibility, organizational change, management of change, generic skills, Triple Bottom Line (TBL), other?

As mentioned above, there is no focus on sustainability in the EMBA. In the full-time program, the most recent elective offered that included issues of sustainability explicitly (Systems, Strategy, and Sustainability) had the goals of:

- a. providing an integrated perspective on issues of ecological sustainability, social equity, and economic performance;

b. pointing the way towards opportunities which may arise at the intersection between these considerations; and

c. providing students with the thinking frameworks to allow them to engage constructively with complex systems management issues. As such, it was concerned with corporate social responsibility, organisational change and its management, and methods to provide the right incentives for attaining environmental compliance with appropriate environmental management systems.

Q. *Is the business case for sustainability distinguished from the normative case for sustainability within the MBA curriculum?*

Yes, clearly. Since we do not see our role as educators to preach to our students (who are adults, with their own ethical systems and beliefs), we do not push any normative case for sustainability. Instead, we emphasise the business case of enlightened self-interest in pursuing sustainability. That is, if the firm does not address issues of sustainability (and perhaps take public credit for doing so), then the government may regulate at some time to ensure that sustainability is addressed in some manner, with the possibility of much greater restrictions (indeed, inefficient means of regulation are not unknown) than the firm or industry would face if it had acted earlier, voluntarily.

Q. *How is sustainability integrated into all subjects within the programs?*

We have not attempted to integrate sustainability into all courses in the programmes: some electives deal explicitly with sustainability and environmental issues, but otherwise (as with business ethics) courses in the AGSM MBA programmes are explicitly agnostic with respect to sustainability, although (as with business ethics) implicit in teaching at the AGSM is the strong norm that students will not act or advocate actions which are inappropriate. In the FT MBA programme at the AGSM, there is some coordination of content across the core courses, but faculty have a wide degree of freedom in designing their elective courses, without central oversight. In the EMBA, where content and materials are prepared in Sydney, there is the possibility in the GDM for greater coordination, and also in the EY stage, where the students attend residential programmes in cohorts.

Q. *What is the general understanding of sustainability among academics at your school?*

Without a high response rate from a survey, it is difficult to be sure, but I believe most would see it as the relationship between the long-term survival of the organisation and its physical environment. Some academics would see sustainable issues having a high priority, some would see them as having a low priority, and some would see sustainability as a vogue topic.

Q. *What short professional courses are offered by your school that are independent of the MBA?*

There are many: at least 30 courses of between 1 days and 2 weeks duration per year. As well, there are in-house courses, designed in consultation with the client companies. (See the AGSM web site for a list.) At the moment, none of these explicitly addresses issues of sustainability, although in past years we have run a one-day course (Finding the Middle Ground) which brought together business leaders, academics, and representatives from non-government organisations to discuss issues of the environment and sustainability. We have started discussions about offering an executive programme for companies focussed on corporate social responsibility, including sustainability.

Q. *What opportunities does your school offer to students matriculating from TAFE?*

We do have a small number of students entering the MBA programme without a first degree, and more students start the EMBA/GDM without a first degree, but we pay no automatic credit for TAFE matriculants. Entry to the FT MBA is highly competitive, and non-graduates must show exceptional attainments in their careers before such people can gain entry to the FT MBA programme.

2. *What messages/interpretation of sustainability do students take away from the MBA programs?*

Without explicit focus on sustainability, students will be aware of the importance of the firm attempting to establish a sustainable comparative advantage, but will also be aware of the difficulty of doing this. In the long run, one dimension of this will be sustainability of its operations: sourcing inputs, selling its outputs, without exhausting its surroundings.

Q. Is it understood as merely TBL reporting?

The numbers of students who have chosen to take a course embodying a large or small emphasis on sustainability in recent years is small. But those who have done so would not believe that merely reporting the TBL was even a large part of sustainability.

Q. Is it linked to a) management of change? b) cultural change? c) leadership?

In the course Systems, Strategy, and Sustainability we tie an understanding of sustainability to the need to achieve organisational change. Such change is facilitated by leadership, but explicit leadership is not necessary for organisational change, which can percolate from the lower levels of the organisation up, as well as being imposed from the top down. Similarly, while wider cultural change may facilitate organisational change, it is not necessary: firms can lead as well as follow in the wider social and political and industry context. (See the Appendix.)

Q. Are models of change compared in the sustainability context?

The rationale of Systems, Strategy, and Sustainability is to develop a case for organisational change, using tools of analysis from law, economics, and organisational behaviour, and then analyse how best to attain the kinds of changed behaviour so identified. So the models of change are subordinate to the analysis of sustainability, and its conclusions.

Q. Is there an emphasis on the challenges faced by multi-nationals in maintaining consistent sustainability standards across their operations in the Global North and Global South?

Not primarily. There is a tension between the need for consistency in dealing with issues of sustainability (as with business ethics) across jurisdictions and cultures on the one hand, and the economics of sustainability on the other: richer countries (whose wealth perhaps in part derives from past non-sustainable use of the environment) will more readily be able to afford the costs of sustainable actions than will poorer countries. Perhaps this is not as clear cut as business ethics in different countries, jurisdictions, and cultures. Environmental standards will vary across countries and cultures, and with them attitudes to sustainability of the firm and its physical environment. A multi-lateral approach to issues of sustainability might be more effective, with richer countries paying in part for poorer countries to change their business practices.

3. What knowledge and skills do they acquire through the programs that will help them make a contribution to sustainability within business/industry?

It is difficult to identify any of the skills and knowledge that students acquire at the AGSM that would *not* help them: a sustainable corporation must be responsible, flexible, innovative, responsive and profitable. All of the education at the AGSM is directed towards these ends.

Q. Do they learn about paradigm shifts for sustainability?

The Systems, Strategy, and Sustainability course does discuss changing cultural and social attitudes, without explicitly labelling these as “paradigm shifts”.

Q. Do they learn stakeholder engagement and management skills?

There is a debate about the importance and responsibility of the organisation or firm (especially) being accountable to groups other than its shareholders, and perhaps its customers and employees. As with business ethics, this is an area where sustainability affects several groups of stakeholders.

Q. Do they learn how to engage with futures strategic thinking?

Scenario building is one technique in training students to consider the future in strategic planning. Other methods of strategic thinking encourage “Looking forward and reasoning backwards.” Of course, the relative importance of future outcomes is a function of the discount rate used: the higher the discount rate, the less the weight of future consequences. For this reason there is increasing use of so-called hyperbolic discount rates in weighing the costs and benefits relatively far in the future of actions today, so that sustainable actions are more likely.

Q. Do they learn systems thinking skills?

The course Systems, Strategy, and Sustainability spends several lectures in the computer lab training the students in the techniques of systems thinking and analysis, using the VenSim simulation software package. This is a version of the systems dynamics tools developed at MIT for the Limits to Growth debate thirty years ago, one of the first attempts to consider sustainability.

Q. Do they learn socially critical thinking skills?

Such skills are widely encouraged in many MBA courses, and are explicitly taught in the FT MBA at the AGSM (in particular, Barbara Minto's The Pyramid Principle).

Q. Do they learn about the different discourses of sustainability, the spectrum of sustainability and the values-basis to sustainable management?

These have not been offered to students explicitly.

4. What do students learn about how to motivate/manage change towards sustainability within business/industry?

There are several courses that provide students with tools to manage change in organisations, all offered within the Organisational Behaviour cluster, in both the FT MBA and the EMBA. Indeed, for some years the EMBA has included a Graduate Certificate in Change Management qualification as an alternative in progressing to the Graduate Diploma in Management via a Graduate Qualification in Management, a necessary step to the final EY and the eventual EMBA degree. The O.B. cluster has seen managing change as an integral part of their teaching in both MBA programs, as well as in their Executive Program offerings to non award participants. Whether such change is towards sustainability is not explicitly addressed.

5. What opportunities exist for business and industry to inform/influence the MBA curriculum? How are the educational needs of business and industry in sustainability assessed or met?

The AGSM maintains on continuing dialogue, both formal and informal, with businesses and organisations that see themselves as stake-holders of the School, as potential employers of our graduates, as customers of our Executive Programs and in-company educational programs, or as donors and participants in our corporate Advisory Board. When our stake holders suggest new departures or emphases in teaching, such as sustainability, we respond, within our abilities to do so. The most effective means, however, of encouraging students in the relevance and importance of such studies would be a clearer emphasis on sustainability studies as a desirable attribute in their future employees among the MBA graduates.

6. What profile does sustainability/education for sustainability receive within the AGSM? Why?

The profile for sustainability received within the AGSM is not high, partly because of the priorities demonstrated by the students' choices.

Q. How is this articulated through promotional material/web/image of the MBA pro grams?

The promotional material of the AGSM has included such courses as Systems, Strategy, and Sustainability in the lists of FT MBA electives, although it is not currently on offer. As discussed above, there is less scope for such electives in the EMBA programme.

Q. How is this articulated through assessment?

Not explicitly.

Q. How is this articulated through recruitment/promotion/professional development of staff?

Where there is clear student demand for instruction in an area, the School responds by hiring instructors, either adjunct or full-time. In general, the

School sees its main opportunity for altering the mix of interests and skills of its full-time faculty at the time of appointment: the School has had only limited success at encouraging the research interests of its existing faculty to respond to outside pressures.

7. What are the key opportunities for enhancing education about and for sustainability in the AGSM?

At the moment there is limited opportunity for including education about (and for) sustainability in the EMBA, in the absence of much stronger student demand for such emphasis. In the FT MBA programme, the possibility exists to offer an intensive version of the Systems, Strategy, and Sustainability course as a 5-day IP, co-taught by faculty members from different disciplinary clusters, such as Organisational Behaviour and Economics or General Management. The pages on the course Systems, Strategy, and Sustainability listed in the Appendix provide a template for such a course.

8. What are the key barriers/challenges to education about and for sustainability in the AGSM?

The key barriers to more teaching about (and for) sustainability are, first, lack of sufficient student demand for such courses, and, second, a reluctance of the AGSM to espouse wider socio-political issues, as against training the students with techniques of analysis and management in the various academic disciplines of the School.

9. *What specific recommendations would you make to the Commonwealth Government to advance the agenda of sustainability and education for sustainability within MBAs in Australia?*

The Commonwealth could provide more money for Australian business schools to attract academics with a strong research and teaching interest in sustainability from the organisation's perspective. Since business education should be driven at one level by the future employers of MBA graduates, the firms and other organisations, the Commonwealth government could poll CEOs and publicise their opinions, if favourable to an enlargement of sustainability in the MBA student's education. Of course, such increased emphasis would come at the expense of other parts of the current MBA curriculum, and these changes would not occur easily. The Commonwealth should consider long and hard whether it should influence the teaching of MBA students at this level of detail.

Systems, Strategy and Sustainability

Faculty

This special topic is to be jointly offered by Bob Mark, Marc Orlitzky, Paul Martin, and James Carlopio. It is to provide a multi-disciplinary perspective on the management of issues of sustainability. The framework for exploring these issues across disciplines is the use of System Dynamics.

Background to the proposal

The proposal arises in part out of enquiries from outside the school and in part from awareness that a growing number of business schools are beginning to realise the importance of having a capability in the environmental management aspects of management. Many other business schools and universities have begun to address this need, including UTS and Macquarie. There is a growing range of international courses targeting this area.

Preparatory work

A substantial amount of preparatory work has been done for this subject, and other arrangements are in hand for additional work. This is in response to the request of the Acting Dean that this subject be given priority. The work to date consists of the assembly of research information about the sector and the issues that are driving it, background analysis of firms within the sector, and research of the systems thinking and analytic tools which are appropriate to the task. Substantial work has been done on the legal and strategic context; on the system thinking framework; and on developing a collection of information about waste management. This is intended to be a case study area, as it incorporates many of the key issues on which the subject is focused, and is relatively easy for students to come to grips with, regardless of their origin or interest.

A case study has also been researched which deals with barriers (legal, political, technical and community) to the implementation of 'green development principles, in an urban setting. Detail work is underway on the systems issues in the regulation of natural resource management. The next stage will conduct a system dynamic workshop between the relevant instructors and selected environmental sector experts, to bring the content and structure issues.

A rationale for offering the subject

Why offer this subject?

Because it offers a potential to deliver to students a number of educational benefits that they will not otherwise obtain, and because it positions the AGSM in an area that is growing in importance.

The cross-disciplinary, systems thinking approach provides students with a repertoire of thinking tools that have proven to be useful in understanding complex management problems. These tools are not otherwise available to students within the AGSM.

The focus on sustainability issues provides an opportunity to overlay these tools' benefit with an understanding of one of the most challenging areas of management and policy, which spans understanding of physical systems, law and policy formulation, economic, incentive systems.

Is there a market?

This is as yet untested. But the overlay of the two areas of interest (environment and systems thinking) and a multi-disciplinary perspective should create a market within the school. Even more important – if the AGSM wants to maintain leadership in the market, it cannot do so by shaping its offering to the status quo – there are some areas where it needs to develop competence and a position in the marketplace, and this is one of these areas.

Course objectives

The objectives of this course are to:

1. Provide an integrated perspective on issues of ecological sustainability, and economic performance within the context of conflicting interests within society;
2. Point the way towards strategic business opportunities which may arise at the intersection between these considerations; and
3. Provide students with systems thinking frameworks to allow them to engage constructively with complex systems management issues.

Approach

This course draws on systems thinking (in a number of forms) as an integrative framework across a range of disciplinary perspectives on complex questions of ecology, economics, and competing stakeholder claims. These disciplinary perspectives span the physical sciences, economics, law, organisational behaviour and philosophy. The subject uses systems dynamics, open and closed systems, aspects of purposeful system, and social systems to provide distinct management insights.

The course progress through consideration of natural (open) systems, to a consideration of organizations as an action/decision making subsystem, whereby society draws on and deploys natural resources, at the intersection between individual and collective choices. It highlights the distinct processes of information flows, values and meaning, and tangible resource flows within this system.

Armed with these foundation concepts, we will then go on to explore particular aspects of the operation of these systems. Particular matters to be considered include:

- The role of pricing, both as signals (information) and incentives for behaviour (resource flows);
- The particular instance of the tragedy of the commons, which reflects the combined effect of particular aspects of incentives, information asymmetries, and personal values;
- Mechanisms for moderating and regulating self interest, which include not only regulations, but also international standards, value system interventions, and sanction and reward frameworks;
- Corporate responses to these challenges of sustainability, equity and economic achievement;
- Individual responses to these challenges;
- Strategic environmental management; and
- Means for ensuring change within organizations, in response to changes within the natural environment and society.

STUDENT OUTCOMES

At the end of this course students should expect that they will have the following competencies and skills:

- a) An ability to map out system relationships for the purpose of understanding complex systems relationships and determining management approaches to complex problems;
- b) The capacity to perceive and explain the interconnection between business, natural systems, and social systems; and
- c) The capacity to design strategies which can bring into alignment the requirements of sustainability, stakeholder claims, and economic performance of organizations.

Assessment

Assessment of the student's achievement of the outcomes noted above is through the satisfactory completion of a project within which the student will analyse a complex sustainability/systems issue, through to the generation of an actionable strategy. This will be done in a number of stages throughout the course. The overall criteria for judging this work will be whether the student has been able to demonstrate:

- a) An understanding of systems thinking, and its use in understanding the interaction between natural systems, individual and organization decision systems and social systems;
- b) Insightful identification of system elements, interactions and processes which underpin the behaviour of the system; and
- c) The capacity to determine actionable sustainability-promoting strategies on the basis of this analysis.

TIMETABLE

UNIT/TOPIC	CONTENT	ACTIVITY
1. Framing the Issues (PM)	The logic of the subject Why is sustainability a hot topic for business and government? Some indications of the business aspects of environment The course content and timetable	Selection of target issue for analysis (Sample problem)
2,3 and 4.	A one day intensive program. Systems thinking tools An illustrative problem Skills development in the use of systems analysis toolset. (Vensim)	System modelling exercises
5,6. Choice systems (PM)	Individual, organisational and societal choice system. The elements in each Subsystem The key flows Implications for community decision making and action	Identification of decision System components for the case study problem. Submit Study report #1
7. Economic systems	Examination of the operation of economic systems (as subset of the broader systems framework for regulating resource use within society)	Case studies of resource pricing
8. Pricing and resource use (RM)	The special case of pricing and society's decisions about natural resources use. <ul style="list-style-type: none"> • Pricing or resourcing • Pricing externalities • Trading • Penalties and taxation 	Case studies on Greenhouse Gas Emissions and possible solutions.
9. Pricing and signals (RM)	The role of information about pricing and other economic signals <ul style="list-style-type: none"> • Economic signals • Reporting and accountability • Indirect signals (such as insurance premiums, market access issues etc) 	Case studies of environmental applications.
10. Preserving the commons (RM)	The recurrent problem of preserving the commons.	Case studies of the Prisoner's Dilemma, the Tragedy of the Commons, and possible solutions. Submit Study report #2
11,12. Regulatory mechanisms (PM)	Mechanisms for moderating self interest. <ul style="list-style-type: none"> • The system logic • Regulatory mechanisms • Court made mechanisms • Regulation inter-partes • International Trends • Implications for decision making and action. 	Strategy problem – Exploring the link between regulation and entrepreneurial opportunity. Submit study report #3

13. Values, Nature and Culture: Environment ethics within organisations (Marc Orlitzky)	The natural environment Environmental ethics and values <i>Case: Shell and Nigerian Oil</i>	
14 Interactions between individual choice systems social systems, and natural systems (MO)	<i>Case: The Burma Pipeline</i>	
15 Strategic Environmental Management (1) (MO)	<i>Case: Australian Paper Manufacturers</i>	
16. Strategic Environmental Management (2) (MO)	<i>Case: Environmental Risk Management at Chevron Corporation</i>	Study Report #4 due (case analysis)
17, 18 and 19. Systematic organisational change (JC)	1-day intensive considering the ways in which decisions are made and translated into action.	Action learning
20. Synthesis and strategy	Identification of policy, Organisational change and individual choice initiatives	Submit Study report #5 (end of exam week)

Prerequisite

This subject assumes that the student has been exposed to basic managerial logics and techniques, including economics, strategy, and organisational behaviour.

Further studies

Further in-depth development of the issues addressed in this subject is possible by agreement with the lectures in this subject. The focus for such development through applications projects in conjunction with environment groups, such as Earthwatch.

APPENDIX B2

MELBOURNE BUSINESS SCHOOL RESEARCH STUDY
(MELBOURNE UNIVERSITY)

Melbourne Business School Submission

Critically Examining Education *About* and *For* Sustainability within MBA courses at Melbourne Business School

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Executive Summary

At present education for and about sustainability within our MBA programs is limited to discussion within a number of elective subjects, and a ninety minute discussion of general environmental economic issues within the core of our MBA program. The philosophy at MBS of developing awareness among students about issues relating to social responsibility and ethics would not rule out greater treatment of sustainability, but at present this topic will pass a lot of students by. Sustainability is not taught as a stand alone subject, and it is unlikely that this will change in the foreseeable future. Within the executive MBA and our executive education offerings there is no significant delivery related to sustainability.

1. Does sustainability and education for sustainability feature within the MBA course in your institution? If so where?

MBS is currently in the integration phase of the recent merger with Mt. Eliza Business School. After this phase is complete, MBS will have both a full and a part-time MBA program, and an EMBA program, and the Mt. Eliza Centre for Executive Education. The EMBA program comprises four four-week modules offered over an elapsed time of 14 months, and is aimed at upper-level managers (average age of the current intake is 41). The current intake is mid-way through this program. At this stage the EMBA has no significant discussion of sustainability, though this program is continuously tweaked and issues related to corporate and individual social responsibility are discussed – it would be possible to incorporate some discussion of sustainability into these discussions. In the detailed answers below I will focus on our part and full time MBA programs.

The full time and part-time MBA both comprise 20 subjects to complete the degree, with nine subjects forming the core. The core comprises World of Management (an integrative, intensive subject at the commencement of the program), Managerial Economics, Organisations, Accounting for Managers, Data and Decisions, Marketing, Managing Processes, Economics and Public Policy, Financial Management and Business Strategy.

Part of the philosophy of the program is to incorporate elements relating to social responsibility into the program wherever this is appropriate. Wherever possible teachers in the core subjects are encouraged to include discussion of ethics and corporate and individual social responsibility into their subjects, and it would be possible to cover sustainability within this broad umbrella. However, at present only one subject in the core reports coverage of sustainability.

Q. Is sustainability integrated into the core of the course?

Yes, though only in the limited sense that one lecture (90 minutes) of an Economics and Public Policy lecture will be devoted to discussion of environmental economics. In the past this lecture has covered such topics as the business case for the Kyoto protocol and the economic and social case for the Three Gorges Dam. In 2003 we had a second integrative subject (aside from World of Management) as a part of the core. The Managerial Environment (TME – see Appendix 1) was an intensive course that examined the relationship between managers and stakeholders external to the firm. In this subject social responsibility, ethics and personal values were discussed as well as a more detailed discussion of environmental economics and sustainability. To accommodate TME into the program required an experimental timetable in 2003, and in 2004 it was decided to revert to the traditional 3 thirteen week term timetable, with TME dropping from the core to become an elective subject.

Q. Are there any units devoted to sustainability or education for sustainability?

No. There is no unit devoted solely to sustainability.

Q. Are there opportunities for students to specialise in the area of sustainability?

There is no ability to specialise in subject/subjects devoted entirely to sustainability. However, there are two possible avenues for students to take if they are interested in developing knowledge in this area. Firstly, Net Impact, a club for MBS students (see Appendix 2) focuses on issues related to social responsibility. Net Impact focuses on corporate social responsibility and sponsors many activities, such as conferences, essay competitions and internships. Local chapters are often important places for students to share their concerns and work together to think about and address important questions. Net Impact organises speakers and events for students and faculty, and in 2003 this group devoted a panel session to the topic of sustainability. In 2004 the students are organising a sustainability week, with a number of open lectures relating to sustainability. This week will be organised by a chapter of Net Impact devoted to sustainability. More detail on Net Impact is in the Appendix, but it is notable that around 50% of MBS students express an interest in participating in Net Impact forums.

The second direction that students interested in sustainability could take would be to participate in a new subject in managing non-profit organisations. In principle it would be possible for a student to choose a non-profit with a sustainability focus. The subject will begin by surveying the literature in the area and studying the history of non-profits in Australia. Students will then be assigned to an organisation for a period of 4 – 6 months. During this time they will attend board meetings and work on an integrative project for the organisation.

The idea for the subject was suggested by one of our full-time students last year. It derives from a program set up at Stanford University which places students onto non-profit boards as a Board Internship scheme. The Melbourne Business School's Net Impact student club has continued to develop the idea along with help from the School and we expect to offer it for the first time later in 2004.

The genesis of the subject in non-profit management is an example of the close relationship between the formal curriculum at the Melbourne Business School and the student "extra-curricular" clubs. The School regards Net Impact as a vitally important part of the life of the School and a valid part of the educational process. We support the club by providing administrative assistance, some small financial grants and mentors from the faculty. We expect this relationship to continue to generate new subjects for study in the curriculum.

A second vibrant extra-curricular student club at Melbourne Business School is our Entrepreneurs' Challenge. Student teams compete for prizes for the best business plan. The Sustainable Energy Authority of Victoria has donated a prize for the best plan that emphasises sustainable energy.

Q. Which curriculum areas are seen as more closely aligned to sustainability and education for sustainability within your institution?

In the appendices to this document are included some details of the following subjects that incorporate a significant element of sustainability related material – these are The Managerial Environment, Organisations, Managing Innovation, Management and Ethics, and Leadership and Change. Included in the appendices is some detail on how each of these subjects approach sustainability. As can be seen, sustainability is addressed from a number of different perspectives, and while not being the sole focus of any subject, is broached across a number of disciplines. The student survey at the end of this document also bears out the fact that students see that sustainability is addressed in a number of subjects.

Q. Is there flexibility to focus on assignments addressing issues of sustainability?

Yes. In Managing Innovation, Management and Ethics, Leadership and Change and in the Managerial Environment there is scope to include sustainability in the assessment project. As noted above, the new subject in non-profits could also offer scope to study sustainability issues,

depending on the interests of the relevant student and in the ability of a match with an appropriate sustainability focused non-profit.

Q. How is sustainability currently interpreted by a) the institution and b) the MBA course – is it seen to be concerned with environmental compliance, putting environmental management systems in place, environmental risk management, corporate social responsibility, organizational change, management of change, generic skills, TBL, other?

I have included in the Appendices reports from faculty on their subjects and how they are related to sustainability. As can be seen, all of the above are interpretations given by one or other faculty member.

Q. Is the business case for sustainability distinguished from the normative case for sustainability within the MBA curriculum?

Yes. In both Managing Innovation and in the aims of the Net Impact group the business case is addressed and distinguished from the normative case. The economics related subjects probably emphasise the normative case, but the business case is not ignored.

Q. How is sustainability integrated into all subjects within the course?

Sustainability is not integrated into all subjects within the programs. As is outlined above, a number of subjects include elements related to sustainability. In the past Accounting has included TBL, but at present this is not part of the Accounting material presented. Where and how to place emphasis on topics is something over which individual faculty have a large amount of discretion. Incorporating ethics and social responsibility is something that is encouraged, but not forced on faculty/subjects.

Q. What is the general understanding of sustainability among academics at your school?

My own view is that sustainability is the maintenance of the physical environment. Others may have subtly different views, but I see the Appendix reports being consistent with this view.

Q. What short professional courses are offered by your school that are independent of the MBA?

MBS has recently merged with Mt. Eliza Business School. MEBS has become the MBS Mt. Eliza Centre for Executive Education, and is the focus of the School's exec-ed offerings. The Centre currently has a wide range of offerings, particularly in the area of Leadership. Within most of the leadership offerings is treatment of issues related to sustainability through consideration of future trends – for example "Creating the Path to the New Organisation" is a 5 day course that in day 1 covers the future, managing stakeholders, and the quadruple bottom line (valuing community involvement).

Q. What opportunities does your school offer to students matriculating from TAFE?

The School accepts students without traditional undergraduate degrees into our graduate certificate and postgraduate diploma programs. Upon successful completion, students are able to transfer into a masters degree program. A small number of full-time students (1 or 2 each year) and part-time students (5 – 10 each year) enter the School using this route.

2. What messages/interpretation of sustainability do students take away from the MBA course?

Here I've summarised responses to a survey undertaken by the students. The response rate to the survey is low, with a probable bias towards students having a greater interest in sustainability.

Q. Is it understood as merely TBL reporting?

No. Once again, a number of subjects cover sustainability, (and TBL is not currently covered), and I think that students do understand sustainability similarly to faculty.

Q. Is it linked to a) management of change? b) cultural change? c) leadership?

Yes for students who take the courses in Management and Ethics and Leadership and Change, otherwise this is less clear.

Q. Are models of change compared in the sustainability context?

Yes, again in both Management and Ethics and in Leadership and Change.

Q. Is there an emphasis on the challenges faced by multinationals in maintaining consistent sustainability standards across their operations in the Global North and Global South?

No I do not think this is a focus of any of the courses.

3. What knowledge and skills do they acquire through the course that will help them make a contribution to sustainability within business/industry?

Q. Do learn about paradigm shifts for sustainability?

No.

Q. Do they learn stakeholder engagement and management skills?

Yes. Stakeholder engagement is a key component of the Managerial Environment, Management and Ethics and Leadership and Change. Again, see the detailed course descriptions below.

Q. Do they learn how to engage with futures strategic thinking?

A component of The Managerial Environment is scenario analysis, involving one lecture on futures strategic thinking. Within the EMBA there is also a unit on future trends, which covers this material. Finally, within Leadership and Change the topic of visioning is covered.

Q. Do they learn systems thinking skills?

No.

Q. Do they learn socially critical thinking skills?

We've had a bit of trouble interpreting this question. Critical thinking skills are taught widely through the program. If by socially critical skills is meant applying critical thinking to questions of social policy then Organisations, Managing Innovation, Management and Ethics, Leadership and Change and the Managerial Environment all discuss these issues.

Q. Do they learn about the different discourses of sustainability, the spectrum of sustainability and the values-basis to sustainable management?

No.

4. What do students learn about how to motivate/manage change towards sustainability within business/industry?

Within the core, Organisations will have discussion of change management, but whether this also includes sustainability will depend on the lecturer. See the discussion of Management and Change below. Again, since this is an elective not all students will cover this ground. Similarly with Managing Innovation this topic is discussed, though managing change is not the main focus.

5. What opportunities exist for business and industry to inform/influence the MBA curriculum? How are the educational needs of business and industry in sustainability assessed or met?

MBS is responsive to business needs in designing the curriculum through various communications with business through our Board and Alumni forums. However, ultimate responsibility for the curriculum rests with the curriculum committee, comprised of a faculty member from each discipline in MBS. At this stage we do not consider that the case for sustainability education has been expressed by business, as distinct from a more general need for greater education in social responsibility and ethics.

6. What profile does sustainability/education for sustainability receive within your institution? Why?

Q. How is this articulated through promotional material/web/image of the MBA course?

Not at all.

Q. How is this articulated through assessment?

Again, only to the limited extent that students may choose to focus on sustainability in assessments in a number of elective subjects.

Q. How is this articulated through recruitment/promotion/professional development of staff?

A key issue for MBS is to recruit world calibre Business School faculty. Our main focus is to maintain critical mass in core areas of the school's activity – with sustainability being outside the core, it would have to be the case that a potential recruit would need interest in a core area, and in sustainability to be considered a strong candidate. Promotion and professional development does not have any emphasis on sustainability.

7. What are the key opportunities for enhancing education about and for sustainability in your institution?

The key opportunity is through raising awareness of Net Impact, and more particularly stronger involvement in the sustainability chapter of Net Impact. If this chapter were to receive very strong support from the student body, through participation in projects and through attendance at events, we would see that as evidence of a very strong interest in the issues. This would lead to further opportunities for growing the sustainability offerings both inside and outside the academic programs in the school.

8. What are the key barriers/challenges to education about and for sustainability in your institution?

On the demand side we would need to see strong student demand for education about sustainability in order for MBS to develop a standalone elective in sustainability. At this stage we do not see that demand as existing, and so outside of the offerings tabled in this document we do not anticipate further sustainability related issues covered in our courses.

On the supply side, as noted in point 6. above, a key barrier to any offering is the ability to hire world class faculty. At this stage we do not have anyone who is available and interested in teaching a sustainability elective.

9. What specific recommendations would you make to the Commonwealth Government to advance the agenda of sustainability and education for sustainability within MBA's in Australia?

One specific recommendation would be to fund cases that relate to sustainability, for use within business schools. A second option might be a Federal Government sponsored Chair in Sustainability, with the Chair to split time teaching an elective in a number of participant institutions. Finally, raising the profile of sustainability in the business community is critical to generating stakeholder interest in this issue.

Appendix 1: Integrative subject – The Managerial Environment

This subject builds on the concepts and techniques addressed during the core of the program to encourage students to think more broadly about the environment within which management operates and about the value-implications of managerial actions. It considers not only the economic dimension of the managerial environment, but also its social, political, legal and regulatory aspects. It covers the impact of major changes in the global economic environment, and the economic impact of government on business. It is founded on a recognition that, in order to function profitably, companies need permission, resources, and co-operation from players in their broader environments, and consequently have to act in ways that increase the likelihood of receiving such co-operation.

Subject Objectives

The aim of this subject is to provide students with an understanding of the various facets of the managerial environment – economic, social, political, legal and regulatory. At the end of the subject, students should:

- Understand the dynamics of the world business environment, and the challenges of change in that environment;
- Have an appreciation of government's economic impact on business;
- Be aware of why understanding and influencing stakeholders is important for managers, and of techniques for doing so; and
- Be able to recognize key features of the legal and regulatory context for business, and understand concepts and techniques for responding to regulation.

Assessment Task

Topic: Select a company of which you have some knowledge and:

- Analyse its environment, broadly conceived, utilizing concepts from the course; and
- Recommend how the company's strategy or operations might usefully be altered, if at all, in the light of your analysis.

You do not need to do detailed field research, but rather do enough documentary or web research to get a reasonable idea of the activity in order to apply concepts from the course to it. The aim of the assignment is to test your ability to apply the concepts, not your knowledge of the details of the activity.

Appendix 2 Organisations and Managing Innovation, Peter Cebon

I teach two subjects at the Melbourne Business School, to students in our award programs. One subject, *Organisations*, is a core course for all students. The other, *Managing Innovation* is an advanced elective which, despite its name, is as much about Innovation strategy as Organisational design for innovation.

Organisations.

Course objectives

- To introduce major theories, concepts, and ideas underlying our understanding of organisations, behaviour of people and groups in organisations, and organisations in society. To give students the capacity to analyse various organisational settings and events;
- To give students the skills for dealing with organisational and interpersonal problems, and an awareness of places where they can improve your skills. These skills will give you the capacity to use the individual and group level theories to develop strategies for action; and
- To give students the skills to go into an organisation and understand “what is going on”, and why. To enable students to apply their learning at the organisational level to compare different approaches to the structure, design, and change processes in organisations.

Sustainability-related Course content

Sustainability issues are woven through the course, reflecting both the students' interest in the subject and my research in the areas of pollution prevention and organizational safety.

The main places where sustainability-related issues are introduced are as follows:

- To illustrate the ways in which issues of individual perception - attribution and schematic perception -- interact with different facets of organizational structure, particularly its design, politics, and culture, we review several cases from my dissertation. The cases involve different aspects of safety management in a large chemical corporation;
- In the class on Organisational Change, we spend 90 minutes discussing the “new class” or organizational change problems which cut across traditional organizational political agglomerations, i.e. work/family conflict, environmental management, etc;
- In the class on Issue Selling the central case involves an engineer who has developed a revolutionary scrubber and must work out how to get support within the organization for its development;
- In the class on the management of organizational boundaries, we do a case on the decision of whether (and how) to commercialization of the abortion drug – RU486. One of the central issues managerial issues is the possibility of providing cheap safe abortions in the third world and how management should trade that off against political and profit considerations; and
- Students do projects in which they study organizations of their own choice. Regularly, students choose to study organizations deeply involved in sustainability issues. For example, in my class this year, there were 10 student groups. One group studied ‘Environment Victoria’. Another group studied ‘Save the Children’.

Managing Innovation

Course objectives:

This course has two broad aims:

- To give managers an appreciation of why innovation management is so difficult; and
- To give managers a set of tools that will help them to both recognize the innovation situation they are in, and manage that situation.

Sustainability issues

Once again, sustainability issues are woven through the course, reflecting both the students' interest in the subject and my research in the areas of pollution prevention and organizational safety.

- The class where we discuss the difficulties of predicting market size in ambiguous environments, and particularly introduce ideas of emergence and the role of sense-making in strategy is built around a case study of the Grameen Bank;
- We do a case on the problems of predicting the technology trajectory for high temperature superconducting materials, and particularly focus on their use in power transmission with low transmission losses;
- We do a session on the construction of public policy for innovation in which we discuss how one might construct policies either to get people to use more energy-efficient forms of transport or to foster the development of more energy-efficient transportation technologies;
- Solar cells and fuel cells are used repeatedly as examples of technologies which start in small niches and (potentially) spread out and colonise the market;
- I have written a case on Pollution Prevention at Dow Chemical, which I have taught in the course several times; and
- Students design a 'lead user' study for some new market need. They also prepare a commercialization plan for a novel technology. Often students pick environmental technologies, and in the past I have sourced projects from Ecorecycle Victoria.

Appendix 3: Management and Ethics, and Leadership and Change, Amanda Sinclair**Sustainability in the courses that I teach at Melbourne Business School**

In two of the subjects I teach to MBA students, *Management and Ethics* and *Leadership and Change*, (both electives available to full-time and part-time students) there are philosophical and pedagogical themes related to sustainability, as well as content around sustainability. Both subjects place central emphasis on the management of change, how to lead change, change management tools and the change agents roles. In the following I outline how themes around sustainability, ethics and change are included in these subjects.

Course objectives

- Fostering critical thinking, developing skills of critique and dialogue;
- Developing skills and techniques of reflectiveness: journaling, meditation etc; and
- Understanding the role of leaders as requiring long term visioning and viability compared to simply managing existing resources

Course content

In *Management and Ethics*, we spend the first section establishing why business needs to see beyond the shareholder model to identify and strategically work with various stakeholder groups, including interest groups traditionally spurned by business such as Green groups.

The central section of the course (about 10 classes) discussing various ethical issues such as environmental management, safety management, disaster and crisis management, and international issues such as subcontracting to parts of the world with minimal regulation. We look at cases, mostly Australian ones, to reveal the complexity of managing these issues. The 'solution' developed out of these discussions rests on taking a longer-term, sustainable and culturally sensitive view but also recognising the power of large corporates to lead and set a model for governments. We include coverage of the 'deep ecology view', that is valuing the environment and non-human species in themselves and not for the value they provide to humans. So, across a range of issues, we develop the business case for ethical behaviour but we also develop a normative case, that is why one should act ethically even when there are no 'business' reasons for doing so.

I also have guest speakers from different fields eg mining and indigenous issues, to come and talk to the students. The aim is to start to learn the value of developing long-term relationships with communities in which companies operate, not just as an employer but as a partner. We discuss the different relationship aboriginal communities have to their land and under what circumstances a company should simply not exploit a resource.

In the third part of the course we address strategies for improving ethics and the aim here is to go much further than the standard kneejerk responses including CSR and TBL. We discuss mechanisms of co-regulation, structural and cultural change in organisations, as well as leadership, asking 'what does ethical leadership look like?' and how might we encourage/teach others to adopt a leadership role.

In *Leadership and Change* the whole of the second section is devoted to issues of leading change in organisations. The final part explicitly introduces the role of values in leadership and aligning one's work with how one wants to contribute in the world.

Assessment

In various assessment tasks for both subjects I encourage the students to undertake projects involving critical evaluation of how management responded to various crises, including developing and defining ethical criteria. These often include emphases on sustainability considerations.

Scope and Barriers

I believe there is scope to teach MBA students more in this area but there are very significant obstacles. Issues like sustainability and ethics are not seen as 'core' business issues by many students (or indeed lecturers) and most particularly by those who we might argue, need such subject matter most. Some of my

colleagues are most sceptical about the value of such material believing that the only good business school education is very traditionally instructed corporate finance/economics. This is by no means the case with all and, for example, our lecturer in accounting has in the past covered material on TBL.

After many years of experience (about 15) teaching this material I believe it is very difficult to teach it as a compulsory subject with most of your efforts involved in simply establishing its basic legitimacy. This is why I much prefer to teach Ethics as an elective.

An additional obstacle is resourcing. Virtually all of the case material on Australian and international organisations I use I have built up myself and from my research (often unfunded). There are significant problems in relying on the traditional American case libraries for material and I don't use these sources.

AMANDA SINCLAIR

Professor of Management (Diversity and Change)

Appendix 4: Net Impact at MBS (written by Chris Brown, first-year MBS student)

Net Impact is a network of MBA graduates and emerging business leaders from leading business schools from around the world who are focused on applying our business skills to create positive social impacts while creating economic value by:

- Raising awareness of the impact that business decisions have on the world around us;
- Providing an opportunity for education, discussion and debate;
- Developing resources that support members in incorporating social responsibility into their careers; and
- Serving as a link to a network of individuals, schools, and businesses who share similar visions.

Our programs at MBS are designed to support our network, equip and educate our members, and inspire our members to take action.

Net-Impact (Sustainability Special Interest Group - SSIG)**Overview**

“The idea that it is the business of business schools to teach future execs how to solve social and environmental problems – along with such traditional topics as finance and marketing – has been slowly infiltrating B-schools around the world.”

Knowledge at Wharton - Public Policy and Management, 2004

The following quote has been taken from the Net Impact parent web site and echoes the goals of the Melbourne Business School Net Impact Sustainability Special Interest Group.

Governments around the world, including the Federal and State governments of Australia, are increasingly moving toward acknowledging the need for Sustainable development practices. This is particularly true as governments from rich and poor countries alike seek to balance the needs of growing populations and expanding economies against finite resources and potential environment impact. Examples of this, very relevant in today’s society, include energy and water production, sewage and waste disposal.

The need to address these “non-financial” issues when considering future developments are evident from the growing push for reporting standards such as TBL (triple bottom line) and other such measures. Many companies are also using these standards to provide greater disclosure to the public, as demanded by the government and / or shareholders, on issues relating to both social and environmental impacts as well as usual economical performance.

The need to thus inform and provide discussion on sustainability to the next generation of MBA graduates is critical and forms the goal of the Net-Impact Sustainability Special Interest Group.

Core Concepts

It is the belief of Net-Impact that sustainability should be considered a core value of business management in the 21st century. As such, the aims of the SSIG are:

- To increase the knowledge and awareness of sustainability issues among students at MBS;
- To dispel any misconception that sustainability is anathema to business interests;
- To explore current business applications of sustainable technologies; and
- To promote emerging opportunities in the field of sustainability.

Through these actions, we hope that sustainability will become a part of the core dialogue within the MBS community.

Initiatives

Our actions will explore two primary areas:

1. Social and Environmental responsibility –
 - Examine the current challenges that businesses face in dealing with a range of sustainability issues as well as those they will need to confront in the future; and
 - Explore best practices relating to how businesses are dealing with these issues.
2. Business opportunities in sustainability –
 - Seek out and promote current business opportunities in the field of sustainability and sustainable technology;
 - Foster discussion and awareness of future opportunities in the field of; and
 - Understand and promote government initiatives to promote sustainability.

In order to achieve these goals, the Net-Impact SSIG has proposed that a “Sustainability Week” is held in second semester. This initiative will promote and organise the following events:

- Guest Speakers;
- Tours of businesses involved in Sustainable technology;
- Promotion of the Sustainable Energy Authority Victoria (SEAV) prize in the Melbourne; and University Entrepreneurial Challenge (MUEC).

In addition to sustainability week, further speakers and the establishment of a register for interested MBS students and Alumni are also being planned by the SSIG.

Appendix 5: Survey of students (written by Neil Formica, first-year MBS student).**Sampling frame and sampling methodology**

During late April and early May the attached survey form was sent to all full and part-time students attending MBS. Response to the survey was low, with 20 responses comprising 12 first year and 8 second year students, most of whom were on the Net Impact mailing list – the results are probably biased towards the views of students more interested in sustainability. First-year full time students have only been at the business school for 3 months at the time of the survey, whereas second-year full time students have been at the school for 15 months.

Results**First-year students (12 full-time)****Recall of subjects teaching something about sustainability**

- Only a single student specified a subject (Managerial Economics – topic on co-operation)

Recall of subjects involving thinking about Change Management

- 10/12 (83%) of students specified that change management had been addressed (in an unspecified subject).

Recall of issues of sustainability being raised in the context of managing change

- No students reported any sustainability related issues being addressed in the context of managing change.

Aspects of sustainability students would like to see addressed in future (not addressed currently)

The general themes were related to:

- General awareness raising
 - “I do not understand what the definition of sustainability is?”;
 - There needs to be “some” (as opposed to none);
 - Consider introducing concept in the first subject – World of Management, with some case studies;
 - “Create awareness as part of Term 1 activities”; and
 - “MBS should be addressing sustainability in every course, as it is a key factor that we will need to address as future managers”... “MBS is failing to keep up with competitor programs in this area.”
- Addressing relevance for future managers
 - Sustainability as an emerging business opportunity; and
 - Environmental sustainability issues related to venture capital.
- Applied teaching suggestions
 - Triple bottom line (TBL) assessments;
 - Application in an office setting (micro-environmental) or at the level of government policy (macro-environmental);
 - How can developing countries help developing countries with sustainability issues; and
 - Relationship between economics and ecology

Other business school related contexts in which sustainability was considered

A number of students referred to both the Net Impact club and MUEC (Entrepreneur’s group) as having a potential focus on sustainability issues. Net Impact is organising speaking events around sustainability issues that tie in with MUEC activities.

One student addressed sustainability as part of an organisational change assignment.

Second-year students (7 full-time, 1 part-time)**Recall of subjects teaching something about sustainability**

Subject	Topics	Lecturer
Understanding Economic Policy	Sustainable economic development	Crosby
Managerial Environment	Had a sustainability speaker from BHP Billiton	Crosby
Corporate Strategy	Tas Hydro case	Lewis
Management and ethics	Not specified	Sinclair
Corporate governance	General	Grundy
Managerial Economics	Discussion on externalities	De Fontenay
Business and World Trade	Trade and the environment	Sampson

A single respondent commented that “most subjects touched on (sustainability) in some way” – but without giving further details.

Recall of subjects involving thinking about Change Management

- 7/8 (88%) of students specified that change management had been addressed (in an unspecified subject)

Recall of issues of sustainability being raised in the context of managing change

- 1/8 (13%) of students reported any sustainability related issues being addressed in the context of managing change (but without giving further details)

Aspects of sustainability students would like to see addressed in future (not addressed currently)

The general themes were related to:

- General awareness raising and addressing relevance for future managers
 - “Haven’t considered this before – It is important to build awareness and to provide students with contacts/tools to delve deeper into this area.”;
 - “I am unsure what is meant by sustainability, it seems to mean different things to different people. Introduce it during the World of Management course and inform how it impacts on students future careers”; and
 - Need to understand about building the business rationale for sustainability related changes – not “changing for the sake of changing alone.”
- Applied teaching suggestions
 - Discussion of “global and local sustainability imperatives”;
 - Discussion of “financial opportunities of sustainability – cost-savings and revenue enhancements”;
 - “How can business be used as a key tool to promote sustainable practices”; and
 - Introducing subjects around environmental sustainability – one student is intending to do a subject entitled “Managing environmental sustainability” whilst on an exchange program in Madrid during 2004

Other business school related contexts in which sustainability issues were considered

A number of students referred to Net Impact club speaker events, including a reference about a speaker on sustainability and mining. MUEC (Entrepreneur’s group) had SEAV sponsorship for a prize. One student addressed sustainability as part of marketing assignment, and addressed the potential conflict between profit motives and water conservation objectives for a water retailing company. Some students reported having casual conversations with other students about sustainability issues.

Conclusions

Due to the low response rates for the surveys it is not possible to generalise the results to the general business school student population at Melbourne Business School. However, there is a growing awareness amongst a significant sub-set of full-time students about issues of corporate social responsibility and sustainability (as reflected by increasing participation rates for new students in the Net

Impact - 52% of new full-time students registering interest in 2004). There is also some concern expressed by these students that these issues aren't being broadly addressed within the current curriculum.

Second year students contributed feedback about a range of subjects that addressed sustainability in some way. First year students had limited exposure to subjects up to the time of completion of the survey. Second year students reported that although managing change was being taught, managing sustainability issues in the context of managing change were not being significantly addressed currently.

In general terms, both first and second year students reported that for sustainability to be addressed through the teaching program, the following activities should occur:

- Increased awareness raising during early stages of the MBA program of what is sustainability, what are the major issues, and why is it relevant to future managers; and
- Applied examples could then be subsequently introduced into a range of subjects to equip future managers with tools for future application.

Education for sustainability in the MBA

SAMPLE SURVEY FORM

MBS is looking at how issues of sustainability are addressed in the MBA. We would like your opinions and impressions. We'd be grateful if you could spend a few minutes on this survey.

Please circle: FT first year FT second year PT student

Net Impact member: Yes/ No

So far during the MBA in which subjects have you learned something about sustainability? (Please also mention specific topics if you remember them)

<u>Subject</u>	<u>Topics</u>	<u>Lecturer</u>
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Have you done or are you doing any subjects that involved thinking about Change Management?

Yes No

If yes, were issues of sustainability raised in the context of managing change?

Yes No

If yes, please provide a few details

What aspects of sustainability would you like to see addressed in the MBA that are not currently?

Are there other contexts within the business school in which you have thought about sustainability? (Examples might be clubs or societies, guest speakers, functions and events, syndicate groups, casual conversations with students and/or lecturers, a particular project for a subject etc.). Please give brief details on the back of this sheet.

APPENDIX B3

MACQUARIE GRADUATE SCHOOL OF MANAGEMENT RESEARCH
STUDY (MACQUARIE UNIVERSITY)

**EDUCATION *FOR* AND *ABOUT* SUSTAINABILITY IN AUSTRALIAN
BUSINESS**

MACQUARIE GRADUATE SCHOOL OF MANAGEMENT

PROFESSOR ROBIN KRAMAR

14 MAY 2004

EDUCATION *FOR* AND *ABOUT* SUSTAINABILITY IN AUSTRALIAN BUSINESS

This paper reports on the way in which MGSM educates MBA students about and for sustainability. The report is divided into 8 parts. The first part outlines the key concepts. The second part provides an overview of the Macquarie Graduate School of Management and the third part examines the issue of sustainability for MBA students at MGSM. This part describes the core courses in all MGSM programs, the MBA and the nature of Research at MGSM. The fourth part examines Corporate and Executive Education, while the fifth part briefly describes articulation and accreditation opportunities. The sixth part describes student outcomes and sustainability and the seventh part explores the external influences on the MBA curriculum and the eight and final part briefly examines the issue of enhancing education for and about sustainability at MGSM.

KEY CONCEPTS

EDUCATION *ABOUT* AND *FOR* SUSTAINABILITY

Sustainability as a concept is difficult to define, and much effort has been misdirected into attempting to generate a simple description. Both education *about* and *for* sustainability move beyond this development of a definition, and past the recognition of sustainability as merely environmental management or triple bottom line.

Education *about* sustainability focuses on addressing the subject matter of sustainable development, including:

- The inevitable outcomes of what is not sustainable, including poverty, over-consumption, biodiversity decline, climate change and any other issue relating to the three pillars of sustainable development (environmental, social and economic considerations);
- The history of sustainable development, from conception of the term through to the latest global efforts to advance the concept; and
- Actions that characterise progress towards sustainability, including establishment of partnerships, encouragement of participative/ collaborative and representative decision-making, etc.

Education for sustainability is a process that empowers people (in this case students) to engage in the management of change towards sustainability. It alternatively encourages the development of generic skills and a deeper understanding of actions needed to advance sustainability.

Education *for* sustainability is particularly characterised by:

- Recognition of the roles played by power, politics, partnerships and participation in eliciting sustainable outcomes;
- Movement beyond behaviour change to long-term shifts in lifestyle and quality of life choices
- A move away from reflecting on the past to scoping and mapping the future; and
- Inclusion of critical reflexivity in practice that moves past that associated with professional development ie, critical analysis of assumptions, beliefs and values that underpin present perception and action.

Ultimately, in the context of tertiary study, the employment of the student-centred, participatory learning techniques espoused by education for sustainability empowers students to motivate and manage change for sustainable development.

MACQUARIE GRADUATE SCHOOL OF MANAGEMENT

Macquarie Graduate School of Management (MGSM) is part of Macquarie University. MGSM has an international reputation for excellence in management education.

STATEMENT OF PURPOSE

Macquarie Graduate School of Management believes that its purpose is:

Enabling people of high potential to become successful business leaders who bring lasting prosperity to their organizations and communities

The statement of purpose defines who we are as an organization as well as a direction for the future. Such a statement infers values (listed below) and indicates what MGSM is committed to in dealing with our stakeholders, both externally to clients and students and also internally to colleagues and staff. These values indicate our commitment to continual process of transformation, so that in our interactions and systems we may better manifest these values. Values assist us to discriminate in matters of choice. They assist in generating principles and indicating behaviours.

MGSM VALUES

MGSM is committed to:

- | | |
|-------------------------------------|---|
| 1. Cooperation | through mentoring, nurturing and collaboration. |
| 2. Effectiveness | through outstanding performance and achieving potential |
| 3. Excellence | through high quality and continuous improvement |
| 4. Imagination | through creative strategic thinking and entrepreneurial drive |
| 5. Integration | by applying diverse knowledge and experience to all endeavours |
| 6. Integrity | through personal, corporate and social responsibility |
| 7. International Perspective | by appreciating diversity across cultural boundaries |
| 8. Mutual Respect | by valuing oneself and others through effective communication |
| 9. Pragmatism | through applying theory, research and experience to practice |
| 10. Wisdom | by a capacity to learn from experience to make better judgments |

These values and the statement of purpose were developed following the Strategic Review of MGSM in 2002. A Task Force on Values was established and it developed these values as a basis for the operation of MGSM.

MGSM is structured into four Disciplinary areas

- Human Resource Management and Organisational Behaviour;
- Marketing and Strategic Management;
- Accounting and Financial Management; and
- Logistics, Operations and Technology Management.

The postgraduate programs in the Graduate School of Management are characterised by flexibility and choice. Flexibility is provided in a number of ways at MGSM. MGSM adopts a building block approach to management and business education. It offers a suite of integrated programs that ultimately lead to a Master of Business Administration (MBA). The suite of programs offer a number of entry points, graduation points and opportunities to progress from one program to another. This enables students to tailor their study to match their individual needs and provides a range of options from a Single Unit to the completion of sixteen units required for the MBA. All course units are taught at the same academic level and the program therefore enables to articulate from one program to another as they need. Figure 1 outlines the suite of programs and the entry requirements required for each program.

This figure also indicates MGSM also offers a Doctor of Business Administration that is designed to develop people for an industry career in management research. The curriculum enables students to master the concepts and skills of research directly relevant to solving business management problems.

MGSM also provides flexibility in terms of types of programs. The MBA is designed for those people wanting to pursue a career in general management, a Master of Management is designed for those wanting a career within a specific field, such as human resource management, the postgraduate diploma is designed for those wanting to consolidate their work experience and/or advancing their career in a specific field such as marketing, while a postgraduate certificate provides fundamental management skills. The Master of Management and the MBA provide students with the opportunity to choose subjects from an elective list.

MGSM has an international reputation for excellence in management education and is consistently ranked a leading business school in the Asia-Pacific region. It is ranked as number 1 in Asia and Australia and has been rated number 42 in the world for its full-time MBA program (Economist Intelligence Unit, Which MBA? Global Full-Time MBA Rankings, 2002), equal first for Australian MBA program (Australian Financial Review BOSS Magazine, 2002) and in the top 40 business schools worldwide for executive education (London Financial Times, 2003).

MGSM is an alliance partner of Reputex Social Responsibility Rating System. This system provides an independent, transparent and publicly available system to measure social responsibility performance in four areas: environmental impact, corporate governance, social impact and workplace practices. MGSM is involved in the post release analysis of trends and results.

All of the postgraduate management programs at MGSM are designed to achieve the following outcomes:

- Understanding and speaking the language of business;
- Confidence in communicating and conducting business with people at all levels;
- The ability to ask the right questions of the right people;
- The ability to critically analyse business issues from a variety of perspectives;
- The ability to present and clearly articulate and defend your ideas;
- Working effectively in teams; and
- An impressive network of contacts.

SUSTAINABILITY AT MGSM

The programs at MGSM provide for education about sustainability and education for sustainability. The three pillars of sustainable development, those of environmental, social and economic, are integrated to varying degrees within a number of courses within the programs.

Core courses

The three core courses of the Postgraduate Certificate, the Postgraduate Diploma, the Master of Management and the MBA programs provide students with an insight into 'fundamental' management skills essential for management generally. These skills could be applied to the management of change towards sustainability, however, there are no core courses that explicitly deal with the skills involved in social, environmental and economic stewardship.

Some of the subject matter involved in the broad area of sustainability are also an implicit component of the content of these core courses.

The Human Resource Management (HRM) course explores the policies, practices and processes that are used to manage people in the workplace. It seeks to demonstrate how the HRM course can contribute to longer term sustainable outcomes, such as individual, societal and community wellbeing. It also addresses how particular HRM practices contribute to the economic outcomes of organisations. It does this by exploring the possible impact of HRM policies, such as job design, work place conditions, remuneration and training on the health of individuals, families and communities.

The requirement that all students enrolled in MGSM programs complete the HRM, Marketing Management and Accounting for Managers courses enables students to view management issues from a variety of

perspectives and equips them with a with a range of skills essential as a basis for the management of change. **Attachment 1** provides a brief outline of these courses.

MBA

In addition to the three core courses common to all programs, MGSM requires students complete seven other core subjects in order to complete the MBA. These courses are designed to expose students to the perspectives of functional managers, adopt the perspective of the general manager and develop the expertise to steer organisations towards achieving and sustaining competitive advantage. These courses are the Economic Context of Management, Financial Management, Foundations of Management Thought, Information and Decision Analysis, Operations Management, Organisational Behaviour and Strategic Management. Six electives can be chosen from General Management, Financial Management, Human Resource Management, Information Technology Management, International Management, Logistics, Operations and Technology Management, Marketing Management, Strategic Management and Research.

Although there are no courses directly related to the subject matter of sustainability in terms of social, environmental and economic pillars, there are individual courses that address particular aspects of sustainability. There are also courses that enable the development of skills involved in the management of change and managing for future developments, including managing for sustainability. These courses are drawn from a number of areas and many of them are designed to enable students to challenge conventional ways of thinking about aspects of management, future planning and the outcomes of organisations.

Courses addressing sustainability

In the General Management area these courses include Ethical Issues in Management, Leadership and Motivation, Managing Change, International Perspectives in Management Study Tour and Foundations of Management Thought.

In the Financial Management area the Corporate Governance and the Innovations in Organisational Performance Management course explicitly address issues of corporate social responsibility (CSR), sustainable performance and stakeholder value management.

In the Human Resource Management area, the courses of Advanced Human Resource Management, Introduction to Conflict Management and Resolution, Negotiation: Theory and Practice and Managerial Self Development develop skills required by managers to develop the tensions associated with managing competing stakeholder expectations. The Advanced Human Resource Management subject also includes a topic on Corporate Community Involvement and Sustainability and specifically addresses the implications for managing people and human resource professionals. This course also critiques the process of planning for the future on the basis of past developments and requires students to develop futures analysis skills.

In the International Management area, the Competition and Strategy in Asia-Pacific, Cross-Cultural Management and Global Strategic Management. The Logistics, Operations and Technology Management area provide one course that addresses issues of sustainability. This is the Management of Innovation course.

The Competitive Intelligence for Global Business and the Strategic Management courses in the Strategic Management area and the four of the courses (Marketing Management, International Management, Marketing Research and Strategic Marketing) in the Marketing area facilitate the development of skills associated with scoping the future and thinking about the future.

Within the Research area students are given the opportunity to undertake research in an area that interests them. Three courses, project, Report 1 and Report 2, provide the opportunity for students to research and write a thesis on a topic negotiated and approved by an academic and the Director of Research. **Attachment 2** provides a brief description of these courses.

As described above, all course areas provide the opportunity for students to address specific aspects of management that deal with matters of sustainability, such as CSR, reporting of organisational performance and organisational sustainability. These courses also provide the development of a variety of skills involved in negotiation, decision making and planning for sustainability.

However, education for and education about sustainability is at an early stage of development at MGSM. The treatment of sustainability is fragmented, uneven across the management areas and does not

explicitly deal with aspects of environmental sustainability as part management. The courses and programs address issues and develop skills required for sustainable development. However, there is no systematic, explicit treatment of the complex nature of sustainability in the courses, nor is there an integrating framework or course that synthesises the content of courses that address sustainability.

RESEARCH AT MGSM

Research at MGSM can be considered in terms of ? areas. It can be considered in terms of research degrees and academic research.

Research Degrees

MGSM offers a number of research degrees. These include the Doctor of Business Administration (DBA) and the Doctor of Philosophy (PhD). The DBA is of equal academic standing to a PhD and it requires candidates to apply advanced research techniques to current work-related issues and it requires the application of knowledge to a work-related issue. The DBA thesis is 80,000 words in length. The PhD is a research degree also requires a thesis of 80,000 words. Research needs to make a significant contribution to an area of knowledge. In contrast, the DBA research needs to make a significant contribution to practice, policy or strategy. The research involved in a DBA is applicable to a business issue(s) and is carried out in the context of professional practice.

Academic Research

Research at MGSM varies across a range of areas. There are four research centres: The Centre for Australasian Human Resource Management, The Centre for Management Innovation and Technology, MGSM Public Sector Transformation Centre and the Centre for the Management of Knowledge Capital. These research centres disseminate information through academic publications, conference, briefing papers and other forms of communication.

The Centre for the Management of Knowledge Capital at MGSM involves a Group of academics drawn from across the Disciplinary Clusters in MGSM and is concerned with enhancing the research and development of processes and methodologies associated with the identification, management and measurement of intellectual capital, knowledge management and other like technologies. The aim of the Group is to improve the performance and efficiency of Australian and international organisations by promoting research, learning and the sharing of knowledge in these areas via case studies and executive development courses. The Centre has the full support of the Australian Government Consultative Committee on Knowledge Capital and the National Office for the Information Economy (NOIE), Australia.

This Centre is currently undertaking two projects dealing with an aspect of sustainability. These include "NSW Public Sector Reporting of Intellectual Capital: a study of implementation", "Understanding the Management, Measurement and Reporting of Intellectual Capital Within a Sample of Italian Hospitals: A Stakeholder Perspective" and "Corporate Social Responsibility: Corporations, Fund Managers and the Financial Services Reform Act in practice". Future research projects proposed include:

- Rodwell, J and Guthrie, J. (2004), "Managing Knowledge to Create and Maintain Intellectual Capital in Selected Australian Industries," Australian Research Council, Discovery projects Application Form For Funding Commencing In 2005, Amount: \$750,000 over 3 years;
- Part of a Major Network of Excellence Expression of Interest for the European Commission (EC) Programme (sixth framework). Amount: Euros 20 million over four years; and
- Guthrie, J and Unerman, J. (2003), "UK Intellectual Capital Reporting". Detailed Research Proposal for the ICAEW Centre for Business Performance Amount: \$90,000.

All these projects address the following issues:

- Operationalising the field of Knowledge Capital;
- Examining how we can best establish a common language, key theoretical concepts and a framework that may underpin this field, is applicable across organisations whilst recognising their individual and potential unique knowledge challenges;
- Establishing a number of case studies of Australian best practice;
- Establishing guidelines for the field of Knowledge Capital, in terms of its management, measurement and reporting; and

- Contributing to international debates about Knowledge Capital and its importance in knowledge economies.

It is noteworthy that a framework is being developed as part of the project of reporting intellectual capital in the public sector that is able to account for the value of human capital, financial capital and external capital. Such a framework will be particularly useful with regard to ensuring the sustainability of organisations by representing their worth in a variety of ways.

A number of staff in the Accounting and Finance discipline have used the outcomes of their research as a basis for recently developed courses that reflect issues associated with sustainability. The Course MGSM 985 “Innovations in Organisational Performance Management” deals with the analysis and evaluation of the issues surrounding the measurement and management of organisational performance. It addresses the limitations of financial performance measurement. The course MGSM 985g Corporate Governance addresses the issue of the need to address corporate governance from a variety of perspectives. It requires students to recommend ways organisations could become self-governing on a reliable, sustainable and socially desirable basis.

In addition to the research in the broad area of knowledge management, other research in areas associated with sustainability undertaken by academics at MGSM include diversity management and its relationship to corporate social responsibility, the politics of environmental management and organisational change.

The topics undertaken by students doing research degrees, either a DBA or PhD degrees vary widely, as indicated in **Attachment 2**. Some of the topics of these research degrees involve aspects of the area of education for sustainability. For instance, the topic, the Role of Organisational Structure in Knowledge Creation explicitly deals with the way particular forms of organisational structure create knowledge and innovation.

MGSM also runs a Seminar series for staff, students, alumni and other interested parties (**Attachment 3**).

Corporate and Executive Education

MGSM provides corporate and executive education in a number of ways. It offers a comprehensive suite of executive education programs that are designed to provide contemporary and relevant professional development options. It also designs and delivers customised management development programs that focus on the specific needs of corporate clients. In addition, it offers company-specific programs that provide organisations with an opportunity for their employees to gain accreditation towards MGSM’s postgraduate qualifications at Certificate, Diploma or Masters level.

Programs for corporate and executive clients are developed in close partnership with the client organisation. At the present, issues of sustainability are not raised by MGSM program developers as issues to be addressed in the programs. The client’s perceived needs and their demands provide the basis for program development.

MGSM does offer courses that contribute to the development of skills necessary for the promotion of sustainability. These courses include

- High impact leadership – a leaders coaching program;
- Enhancing personal and managerial effectiveness;
- Corporate governance;
- Influencing and negotiation skills; and
- Present, communicate, influence.

Articulation and Accreditation Opportunities

MGSM provides postgraduate management education for students with significant amounts of management experience. It provides opportunities for students with good results in courses studied at MGSM to articulate from one program, such as a Postgraduate Diploma, to another Program such as the MBA. However, it does not provide students with a TAFE qualification with direct entry to the MBA.

In some circumstances students who have studied other postgraduate courses outside MGSM are able to apply on a case by case basis for either a credit or a substitution for subjects. **Attachment 4** provides the details of this.

Student outcomes and sustainability

The MBA at MGSM explicitly develops skills necessary for people to promote sustainability. The courses taken as a whole aim to develop

- A big picture understanding of the various stakeholder perspectives of business and the managerial context. It is specifically concerned with developing an understanding of the evolution of these contexts, the differences of these contexts in various cultural environments, the identification of possible future issues and the implications of these changes for business from a number of management perspectives;
- The skills, knowledge and confidence needed to take an active role at senior general management and to develop relevant achievable strategic objectives for an organisation, locally, regionally and globally. These skills will also involve being able to liaise effectively with functional managers in developing and reviewing strategy, especially in terms of managing people, money, markets and technology;
- The skills, knowledge and confidence needed to manage and implement the tactical moves required to achieve broader strategic objectives;
- Strong, analytical, reasoning and problem solving skills required of an outstanding general manager. These skills include a knowledge of specific relevant disciplinary concepts, analytical frameworks and problem solving techniques; and
- Strong communication, presentation, and people management skills required by an outstanding general manager and necessary to deal effectively with managers from specific functional areas.

These skills are applied to the general process of management and are not directly applied to the management of issues about sustainability. They enable students to think and solve problems at strategic and tactical levels, to communicate effectively, to develop perseverance, to think systemically and to analyse situations from a variety of perspectives. These skills provide a sound basis for students to further issues of sustainability in a range of environments. They implicitly learn about stakeholder engagement, futures strategic thinking, systems thinking skills and socially critical thinking skills.

The core content of the courses undertaken as part of the MBA does not specifically address sustainability. Some of the key concepts involved in sustainability, the history and development of sustainability, the outcomes of organisational activities on the environment, communities and society and the economy are dealt with implicitly in a variety of courses but not in an integrated, coherent way. Students are made aware of some of the concepts associated with sustainability such as the triple bottom line (TLB), CSR, Balanced Scorecard, ethics in decision making and. These concepts are referred to in a number of these core courses, such as Human Resource Management and Accounting for Management. However, there is no explicit learning about different discourses of sustainability, the spectrum of sustainability or the values basis of sustainable management.

Students who are particularly interested in pursuing aspects of sustainability are able to select elective courses as part of their program. There are electives available from the Financial Management discipline area which develop knowledge and skills about managing competing stakeholder requirements, reporting on performance from a variety of perspectives and issues of corporate governance.

The Managing Change, Leadership and Motivation, Ethical Issues in Management and International Perspectives in Management Study Tour in the General Management discipline area and the Advanced Human Resource Management in the Human Resource Management discipline area provide exposure to a variety of concepts associated with sustainability, such as CSR, futures analysis, scenarios and alternative methods of leadership and management. These courses provide ideas about alternative outcomes for organisations but do not explicitly address sustainability in terms of organisational impact on economic, social and environmental outcomes.

EXTERNAL INFLUENCES ON MBA CURRICULUM

The MBA Curriculum is regularly reviewed. It was reviewed in 1999-2000 and again in 2003.

In early 2003, an external review of the School by distinguished members of the Australian business and academic communities was initiated. Their recommendations are now being implemented and as a result, MGSM has developed a renewed focus on those strengths for which it is renowned – the quality of its faculty, its teaching and research, and its students.

As a consequence of the Review a series of Task Forces were established. These task forces involved members of MGSM, alumni and external experts. Part of this Review involved reviewing the curriculum of the MBA.

In addition to these formal reviews the curriculum is influenced by feedback from students. Every course is evaluated and the feedback from students taken into account by the staff delivering the courses. Staff also respond to ideas from students and external stakeholders, such as managers and professional associations, about the need for particular new courses. Courses are sometimes developed and run under the framework of a Special Topic course. This enables the course to meet a perceived management need.

ENHANCING EDUCATION FOR AND ABOUT SUSTAINABILITY AT MGSM

Education for and about sustainability at MGSM and particularly in the MBA is at an early stage (see **Figure 2**) and could be enhanced in a variety of ways. The courses provide an excellent grounding in the generic skills involved in promoting sustainability issues, however these are not directly related to sustainability issues. The opportunity exists to relate these skills explicitly to sustainability in a number of areas. There is also some exposure to concepts associated with sustainability in the existing courses and the flexible program structure and availability of choice provides the opportunity for the development of specific courses that address sustainability. The structure of the courses is designed to enable students to apply the concepts and techniques examined to real life situations. Therefore there exists the opportunity to include case study material that addresses sustainability in the courses.

Opportunities

The flexible structure of the program provides the opportunity to explicitly address issues associated with sustainability.

If there was student demand and a business need for the introduction of a course dealing explicitly with sustainability, there is scope for such a course to be developed and run, once a series of quality measures have been followed. Such a course could be run as a Special Topic initially.

The aspects about sustainability could also be integrated into courses within the program. The need for such a development could be brought to the attention of staff in a number of ways. It could be addressed through individual Discipline groups or it could be dealt with through the Academic Programs Committee (APC).

Figure 1 MGSM PROGRAMS

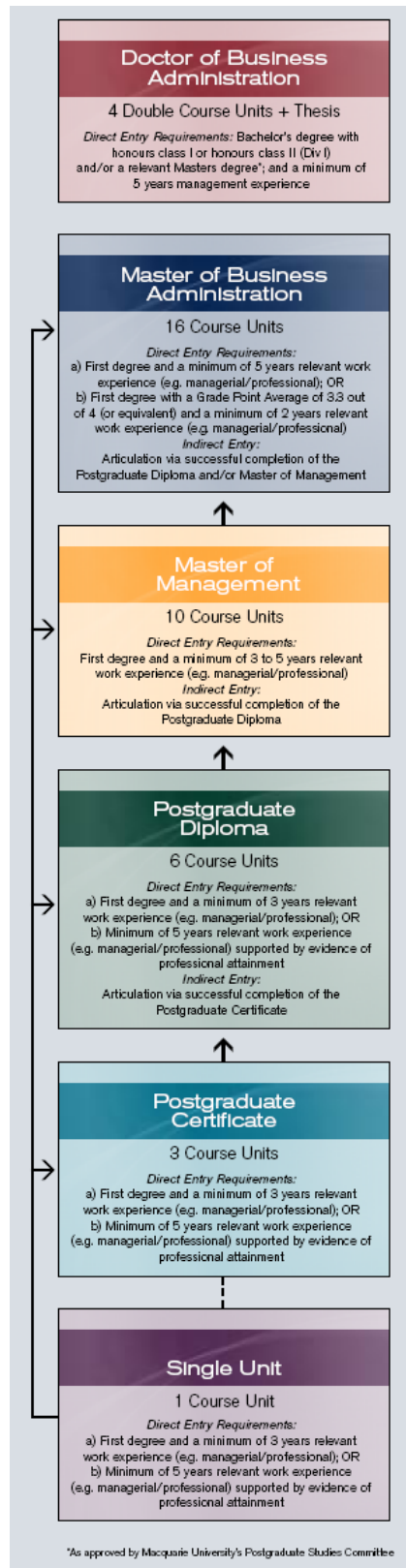


Figure 2 PRELIMINARY FRAMEWORK FOR UNDERSTANDING THE EVOLUTION OF EDUCATION IN MBA'S ABOUT SUSTAINABILITY ABOUT AND FOR SUSTAINABILITY

	Stage 1	Stage 2	Stage 3
Education about sustainability	<ul style="list-style-type: none"> ◆ Aspects of the subject matter of sustainability implicitly included as part of courses in programs ◆ Research ◆ Extracurricula activities eg seminars 	<ul style="list-style-type: none"> ◆ Courses explicitly concerning the subject matter of sustainability are available as electives ◆ Research ◆ Extracurricula activities such as seminars 	<ul style="list-style-type: none"> ◆ The core or compulsory courses of all programs include courses explicitly concerning the subject matter of sustainability ◆ Course available that address the knowledge and skills required for managers to successfully deal with sustainable development ◆ Research: <ul style="list-style-type: none"> ◆ part of the research strategy is to develop an integrated program of research projects that address issues associated with sustainability ◆ research concentration on sustainability topics eg a number of research students doing research on sustainability, collaborative links with other research organisations ◆ funding is sought to undertake these research projects ◆ Extracurricula activities such as seminars ◆ Corporate and Executive Education ◆ Program developers initiate the inclusion of topics and skills associated with sustainability when working with clients
Education for sustainability	<ul style="list-style-type: none"> ◆ Courses that develop skills associated with the management of change and general management skills required to develop aspects of the three pillars of sustainability are available. The use of these skills for the development of sustainability is implicit. 	<ul style="list-style-type: none"> ◆ Courses that develop skills associated with the management of change and general management skills required to develop aspects of the three pillars of sustainability are available. The use of these skills for the development of sustainability is explicitly highlighted in the courses through case studies and examples, etc. 	<ul style="list-style-type: none"> ◆ Courses are available that explicitly develop skills associated with the management of a range of stakeholders within the organisation and external to the organisation. These courses explicitly address the impact of decisions on social, economic and environmental outcomes
Sustainability of the management school	<ul style="list-style-type: none"> ◆ Stakeholders identified as groups directly involved in the education process of the school 	<ul style="list-style-type: none"> ◆ Stakeholders are identified as those involved in the key areas of business and education 	<ul style="list-style-type: none"> ◆ Stakeholders are identified broadly as those involved in the wider external community, and could include community groups, environmentalists, families, etc.

ATTACHMENT 1

BRIEF OUTLINE OF COURSES

Ethical Issues in Management MGSM878

Is being moral the same as being ethical? Can I be unfair, yet act justly? This course explores the complexity of understanding ethical dilemmas as they arise in day-to-day business. It seeks to enable managers to make more informed and reasonable contributions to ethical decision making.

Cases are used to analyse ethical issues in a changing world that can be applied to the areas of: human resources, marketing, environment, international business and professionalism. Specific issues are investigated in the course, for example, fraud and corruption, corporate social responsibility, and the psychology of moral reasoning. The course predominantly provides an overview of the philosophical and ethical thought that has shaped Western values, however, it does include a significant comparative base looking at the philosophical and ethical thinking that underpins Eastern values. The course is highly interactive and uses cases from real situations that face business executives.

Leadership and Motivation MGSM876

This unit explores the practices and philosophies of leadership and motivation, encouraging students to challenge conventional approaches. It evaluates theoretical and empirical contributions to these important areas of management and encourages students to develop a style of workplace learning through which their own leadership and motivational practices can grow. It aims to develop an appreciation of the role and value of leadership in organisations both domestically and abroad.

Managing Change MGSM866

This course has been designed to provide the framework and skills for managers who are likely to be involved in strategic initiatives within their organisations. This is a particularly important area of expertise, linking the concerns of strategic management with those of the more directly “people-focused” side of management. The basic premise underlying this unit is that the capacity to implement strategic change is a critical complementary skill to the capacity to conceive new strategic directions.

International Perspectives in Management: Study Tour MGSM989

European Study Tour:

Available to MBA and Master of Management students only.

Prerequisite: Organisational Behaviour

China Study Tour:

Prerequisite: Marketing Management

Northern Italy Study Tour:

Available to MBA and Master of Management students only.

International Perspectives in Management is a double elective unit in which students participate in an overseas study tour of cutting-edge organisations, adopting a project-based experiential learning approach. The unit strives to provide a deep-level learning experience and strike a balance between academic, cultural and intercultural learning. Each study tour adopts a particular focus such as socially-responsible leadership, international marketing, knowledge management, operations and technology. MGSM is currently offering study tours to Europe, China and Northern Italy examining topical issues.

Foundations of Management Thought MGSM880

Available to MBA students only.

This is a course in the history of Western ideas and their relevance for management. It traces the evolution of Western thought from major philosophical perspectives, ancient and modern. Various philosophies of management are pursued through an analysis of distinguished thinkers: Homer, Plato, Machiavelli, Descartes, Hume, Marx, Schopenhauer, Nietzsche, Freud and Sartre. A central theme is that what is important about any explanatory perspective is what it assumes. Since it is assumed that

management is essentially a philosophical activity, the course aims to demonstrate that the field of management, which is of recent origin, necessarily draws on a wide range of ancient wisdom and so introduces students to some of the great thinkers of Western civilization.

Special Topic in Management: Corporate Governance MGSM985

This unit is designed to equip graduates to carry out the role of being a director, active shareholder or regulator but with the insights and professionalism that can only be obtained through the knowledge of a governance architect. The course aims to provide knowledge to management practitioners in the private, public or non-profit sectors on the theory and practice of governing and regulating organisations. Participants will obtain introductory knowledge of: theories of governance; the practice of being a corporate director; governance implications of legal and organisational structures; comparative global corporate governance; the practice, risks and processes of being a shareholder/member; designing a governance system to maximise sustainable performance; corporatisation, privatisation, public/private/partnerships; regulatory frameworks; and benchmarking governance.

Advanced Human Resource Management MGSM801

Prerequisite: Human Resource Management

This unit examines some of the ways in which human resource management policies can enhance individual and collective effectiveness. It is particularly concerned with exploring the ways human resource policies can assist organisational renewal and change. It focuses on the future human resource needs and issues of organisations and explores processes that could be used to manage these needs or issues.

Introduction to Conflict Management and Resolution MGSM882

This unit covers the essential elements in analysing, managing and resolving organisational disputes and conflicts. Key areas of focus include: identifying the source of conflict, preventing conflict, developing conflict handling processes, and managing and resolving conflict. Conflict handling mechanisms such as facilitation, negotiation and mediation will be described and analysed. Through this course the student will become acquainted with the range of theoretical and practical issues which inform the many methods of predicting, preventing, managing and resolving organisational disputes and conflict. Instruction will be through lectures, discussion, projects and simulation.

Negotiation: Theory and Practice MGSM884

This unit examines the theory and practice of negotiation from a number of academic and practical perspectives. The dynamics of integrative, distributive and intra-organisational bargaining are analysed and the critical sub-processes of negotiation are reviewed: persuasion, communication, the social context of negotiation, sources and use of power and influence. The analysis and conduct of a series of negotiation case studies, role plays and a simulation, cover a wide range of managerial and organisational issues.

Management of Innovation MGSM897

The objective of this unit is to provide students with a comprehensive understanding of the process of innovation and its management within the Australian and international context, whether a private sector corporation or government instrumentality, and whether “old economy” or “new economy”. The unit takes a senior/middle management perspective in covering the management of the “fuzzy front end” of the innovation process where problems are identified and new ideas are generated. It examines the innovation process, and new technology-based ways of speeding it up, reducing its cost and improving its success rate in the development of new processes, services, software and physical products. It also examines how effective innovation is achieved through a style of project management and organisational structures that involve the collaboration of individuals and the cooperation and coordination of the groups and functions of the organisation.

Special Topic in Management: Competitive Intelligence for Global Business MGSM985

Recommended: Marketing Management Competitive Intelligence (CI) is concerned with how firms obtain, store and use the information they need to increase their competitiveness. Almost all the top 100 Fortune firms now have in place some form of systematic intelligence gathering knowledge and management system. Traditional management information systems tend to overwhelm decision-makers with information. The “new economy” (ebusiness) has made this problem worse as it provides managers with a flood of information. CI is not spying, it is not just about competitors, and it is not just market research. CI is where the most useful knowledge in “Knowledge Management” comes from. CI is an important aspect of successful strategy. Most successful managers already carry out CI intuitively. The issue now is how to show managers better and more effective ways to carry out CI. This course explores the ways organisations can do this, and puts CI in the context of an evolutionary step by organisations to a fast changing, more competitive and more globalised environment.

Strategic Management MGSM860

Available to MBA and Master of Management students only

Prerequisite: Marketing Management

Recommended: Human Resource Management and Accounting for Management

This unit deals with the foundations of the firm’s competitive strategy. It covers a range of strategic management issues including industry analysis, strategy based on internal capabilities, business-level competitive strategy and strategy implementation.

ATTACHMENT 2

POSTGRADUATE THESIS TOPICS

PhD	enrolled	The Management of IT-Based Risk in Networked Organisations
PhD	enrolled	Formalising the Discipline of Configuration Management (CM) X from 2001
PhD	enrolled	Risk Management in IT Projects
PhD	enrolled	Management of Innovation in Services: A Portfolio Management Approach
PhD	enrolled	Greening Corporate Environmental Accountability in China: The Role of Accounting
DBA	enrolled	Professional Learning Practice - Activities and Outcomes
PhD	enrolled	Intellectual Capital in Sri Lanka
PhD	enrolled	The Measurement of Knowledge Management Systems Effectiveness
PhD	enrolled	Do Entrepreneurs' Psychological Characteristics & Perceptions of A Priori Needs Differ According to the Economic Acts Performed?
PhD	enrolled	Legislation and Effective Privatisation: The Case of Indonesian Seaports
PhD	enrolled	Measuring and Valuing Organisations' Intangible assets: Marketing Databases and Customer Lists
PhD	enrolled	Time to Adopt Knowledge Management Applications: Influences that affect Individual Decisions within a Large IT Service Organisation
DBA	enrolled	Performance Appraisal of Managers in Australian Subsidiaries.
DBA	enrolled	The Determination of the Role of Competition Intelligence in Reimbursement Strategy Formulation in Small Firms in the Australian Medical Equipment Supply Industry
DBA	enrolled	The Relationship between Emotional Intelligence, Job Performance, Job Satisfaction, and other Characteristics of Pharmaceutical Sales Representatives
DBA	enrolled	Implementation and Impact of Business Process Reengineering at the Hong Kong Judiciary
DBA	enrolled	Succession Planning of Chinese Family Business in Hong Kong
DBA	enrolled	The Implementation of Information Security Management System
DBA	enrolled	Impact of Information Technology on Teaching
DBA	enrolled	Academic Industrial Partnership for Universities and Vocational Education in Hong Kong
DBA	enrolled	Housing Reform in China: its strategic implications for property developers
DBA	enrolled	Inaccuracy of Traffic Prognoses in a large container terminal
PhD	enrolled	Intellectual Capital: Challenges to the Development, Management, Measurement and Reporting of the 'New' Intangibles
PhD	enrolled	An Examination of the Linkages Between the Systems of Human Capital of Three Australian Biotechnology Firms, with Emphasis on Work / Life Balance Policies and Practices, with the Future Performance of the Firm
PhD	enrolled	A Sartean Perspective of Boardroom Behaviour
PhD	enrolled	Measurement of Intellectual Capital in Knowledge Intensive Organisations.
PhD	enrolled	The History of Australian Management: Overcoming the Tyranny of Distance
PhD	enrolled	The Management (of adjustments) of Cross Cultural Delivery of Educational Products
DBA	enrolled	Corporate Financial & Non-Financial Reporting in the Australian Telecommunications Industry: Balancing the Balanced Scorecard
PhD	enrolled	Equity Repurchase Decisions
DBA	enrolled	Collaboration in Catholic Healthcare in Australia
PhD	enrolled	The Relationship Between Organisational Type and knowledge management processes.
PhD	enrolled	A comparative analysis of the competency profiles of senior executives in Australian and Indonesian organisations.
PhD	enrolled	Responsibility and Accountability: A New Holistic Theoretical and Applied Approach.
DBA	enrolled	Learning on the Job: the experience of CEOs in Australia
DBA	enrolled	Could outsourcing application development in information technology allow a multinational investment bank to maintain its competitive advantage in the financial markets?
DBA	enrolled	Market orientation and new venture performance in China's transitional economy
DBA	enrolled	Operations Efficiency as a contributor to business success of a global investment bank: an Asia Pacific perspective
DBA	enrolled	Organisational Culture and Change: A Study of the Effects of Adoptive Cultures on a Customer Service Quality Improvement Programme.
DBA	enrolled	Policy Formulation: A Study of the Voluntary Medical Devices Regulations Schemes in Hong Kong and Singapore.
DBA	enrolled	An exploratory study on the learning effectiveness of corporate management training via e-learning methodology
DBA	enrolled	ERP Implementation in SMEs: The Case of Thorn AsaiPacific.
MA(Hons)	enrolled	Interactive Advertsing: How it may be Successfully Employed in Interactive Mediums
PhD	enrolled	Informing Boards of Electronic Commerce Risk
PhD	enrolled	Pole of Service Industries in Contributing to Australian Non-technological and Technological Innovations
PhD	enrolled	Review of Motivational Theories and Application in a Chinese Setting
PhD	enrolled	Managerial Culture in Australia and Canada: An Historical Analysis
DBA	enrolled	Antecedents, Prediction and Consequences of Customer Loyalty in Australian Banking. Completed coursework full-time in 2001
DBA	enrolled	The comparative dynamics of cluster formation
DBA	enrolled	Trade practices compliance: Risk, reward and compliance culture
DBA	enrolled	An Investigation of the Determinants of Satisfaction and Repurchase Intent in Information-intensive Services

ATTACHMENT 3

SEMINAR TOPICS 2002-2003

Research Seminars

Research seminars are conducted on a monthly basis to enable the dissemination of research by MGSM faculty and students. The seminars aim to keep alumni and members of the community up-to-date with the research being conducted at MGSM.

2003

Greg Elliott Professor, MGSM

Seminar: "Efficiency, Profitability and Customer Service in Australian Banking"

Ben Dankbaar, Professor, Nijmegen School Management (NSM) of the University of Nijmegen in The Netherlands. Seminar: "New Organizational concepts: A Critical Assessment"

Ivo Zander, Professor, Stockholm School of Business

Seminar: Why does the Firm come into Existence? Towards an Entrepreneurial Understanding of the Nature of the Firm "

John Rodwell, A/Professor, MGSM

Seminar: "HR Involvement, Strategic Integration and Performance of Public Sector HR Departments in Australia"

Jon Sigurdson PhD, Stockholm School of Economics

Seminar: "Corporate R&D and Global Knowledge Systems - The Case of Ericsson's Survival"

Ernie Jordan, Professor, MGSM.

Seminar: Measuring Performance in Business Continuity

2002

Chris Dubelaar Monash University

Seminar: "Performance Measurement in the Financial Services Industry in Australia"

Andrew Pettigrew PhD Warwick Business School

Seminar: "New Forms of Organising and Company Performance: Findings and Lessons from an International Study"

Catherine Tobin European Case Clearing House (ECCH)

Membership entitlements. ECCH website database. Navigating COLIS

Ernest Mudogo PhD Macquarie University

Seminar: Ethnicity and democratisation in Africa: Toward a local governance and socio-economic development management framework

ATTACHMENT 4

CREDIT OR SUBSTITUTION AT MGSM

ADVANCED STANDING WITH CREDIT

Applicants who have successfully completed one or more units at a postgraduate level in a recognised tertiary institution, where the program of studies is considered substantially equivalent in content to a core unit of the MGSM MBA program, may be granted credit on the recommendation of an MGSM Discipline Convenor and/or the Director of Academic Programs.

The maximum advanced standing granted for previous postgraduate studies is up to 50% of the equivalent MGSM program.

This equates to a:

- Maximum of three units towards a Postgraduate Diploma program
- Maximum of five units towards a Master of Management program
- Maximum of eight units towards an MBA program
- Advanced standing is not granted for elective units.

Qualifications from Professional Bodies

Qualifications from the following professional bodies are also recognised for Advanced Standing with credit:

- ICAA/CPA – Candidates who have completed the Professional Year of the ICAA or ASCPA.
- IAA – Candidates who have completed the IAA Fellowship program.

ADVANCED STANDING WITH SUBSTITUTION

Applicants who have successfully completed units at undergraduate studies level at a recognised tertiary institution, with a major in a subject area that equates to a core unit of the MGSM MBA, may be eligible to substitute that core unit with an elective unit, as approved by a Discipline Convenor and/or the Director, Academic Programs.

ADVANCED STANDING ASSESSMENT AND NOTIFICATION

Advanced Standing with Credit or Substitution is assessed by academic staff. The following factors are relevant to the decision:

- The reputation of the institution and the quality of program undertaken;
- Unit content;
- Assessment methods e.g. group work, individual work, exams etc;
- Hours of total student workload (including face-to-face hours); and
- The final grade achieved in the unit.

APPENDIX B4

GRADUATE SCHOOL OF BUSINESS RESEARCH STUDY (UNIVERSITY OF
TECHNOLOGY SYDNEY)

Critically Examining Education *About* and *For* Sustainability within MBA courses at University of Technology, Sydney

Suzanne Benn, Dexter Dunphy and Omer Enginertan

This report aims to report on research carried out at University of Technology (UTS), Sydney, on current practice towards education about and for sustainability within the MBA Program.¹⁹¹

1. The profile of sustainability at UTS

In order to understand the implementation of sustainability within the MBA Program at UTS, we firstly examine the profile of sustainability at UTS and the commitment that the university and the Faculty of Business has made to its implementation in teaching and research. The sustainability initiatives in the MBA program are only part of a range of university-wide sustainability initiatives.

1.1 UTS Mission Statement and Sustainability Policy

The UTS Mission statement does not refer directly to sustainable development. However, 'the University contributes to the advancement and integration of knowledge, professional skills and technology, and their intelligent, sustainable and enterprising application for the benefit of humanity'.

The UTS Sustainability Policy 'recognises a special responsibility to apply its intellectual resources to ameliorating, even reversing, these trends by identifying, verifying and promoting policies, mechanisms and procedures which lead to sustainability in all aspects of human endeavour'. The University takes this policy to mean that it should ensure that in all its activities it should promote 'the achievement of sustainable futures embracing ecological, economic and social aspects of human existence'.

The UTS approach to sustainability considers the impacts (both positive and negative) of a decision in relation to the environment and the society as well as the economical cost. The University is committed to integrating sustainability into research and consulting, teaching and learning and also operational practices, ie greening the campus. Information on sustainability at UTS is available at <http://www.sustainability.uts.edu.au/>

This policy is reflected in the October 1998 decision to sign the Talloires Declaration, an action plan for incorporating sustainability and environmental literacy in teaching, research, operations and outreach at colleges and universities. It has been signed by over 300 university presidents and chancellors in over 40 countries.

UTS offer interprets its capacity to offer expertise in corporate sustainability in relation to its capabilities in corporate change management; economics of resource efficiency; sustainability in strategic planning and policy development.

1.2 The profile of sustainability at UTS Faculty and Research Centre level

UTS has a number of research centres and areas of disciplinary expertise which specifically focus on various aspects of sustainability. Despite various attempts to integrate sustainability teaching and research functions across the campus, sustainability remains discretely interpreted according to the disciplinary areas of environmental science, law and policy, design and building, arts and humanities and business.

Centres which specialise in local government, water and an interdisciplinary approach to sustainable futures are well established at UTS. The Institute for Sustainable Futures, for instance, adopts 'an interdisciplinary and participatory approach and design workable solutions to real world problems by considering the economic, environmental and social dimensions', working on topic areas which include sustainable building and design and sustainable transport, as well as sustainable democracy and cooperation.

UTS promotes itself specifically as having expertise in corporate sustainability, interpreted on its website as being achieved through the use of the triple bottom line as a framework for measuring and reporting on

¹⁹¹ In this Report, sustainability is interpreted as the equitable allocation of social, economic and environmental resources between and within generations, a goal to be obtained by sustainable development. Corporate sustainability is linked to corporate social responsibility, or the presumption that corporations exist on behalf of society and are responsible to the wider and natural community as well as to shareholders.

performance. It also links its expertise in corporate sustainability to expertise in change management (<http://www.sustainability.uts.edu.au/research/business/index.html>)

1.3 The profile of sustainability in the Faculty of Business

The Faculty of Business has a powerful influence on UTS, in both teaching and research. It makes up one third of the university and its flagship undergraduate program, BBusiness, is one of the most highly regarded in the country. The Faculty has three research centres which have specific links to sustainability: The Centre for Corporate Governance, Centre for Innovative Collaboration and Alliances (ICAN), and the Centre for Event Management.

Corporate Sustainability Project

The appointment of Distinguished Professor Dexter Dunphy in 1999, under an arrangement part-funded by the University and the Faculty of Business, and his subsequent establishment of the Corporate Sustainability Project, has been a driving force for the implementation of sustainability within the Faculty and within the School of Management. Professor Dunphy reports directly to the Pro Vice Chancellor Research and has numerous links and contacts within the business and academic community. He is the author of a number of influential texts in the area.

The School of Management itself is highly influential within the Faculty as it is the largest School in terms of faculty numbers and the most successful in terms of research output. As will be seen later in the Report, it also dominates the core content of the MBA. The Corporate Sustainability Project has been a crucial source of support for introduction of sustainability into the curriculum particularly through its contacts with business, other academics and government bodies established through the Corporate Sustainability Network and the Sustainable Business Forums. The latter are open forums run four times each year in collaboration with partners KPMG, ECOS, Australian Citizenship Alliance and the Institute for Sustainable Futures.

Under the leadership of Professor Thomas Clarke, now Head of the Centre for Corporate Governance at UTS, and himself an internationally published author in corporate sustainability, the School of Management introduced the subject Sustainable Enterprise into the core of the Management major of the BBusiness. Approximately 200 students now take this subject each year. We would argue the successful introduction of this undergraduate subject, which was supported by a Faculty of Business curriculum development grant, underpins the increasingly high profile of sustainability in the postgraduate degrees in the Faculty. Teaching resources and specialist staff expertise are now also available for use in the postgraduate program. Dr Suzanne Benn, who works with Dexter Dunphy in the Corporate Sustainability Project, developed the course content and coordinates Sustainable Enterprise. She is an invited member of the core research group with the Centre for Corporate Governance and a member of the Innovative Collaboration and Alliances (ICAN) Research Centre Management Team.

Sustainability in the MBA Program

The challenges of introducing sustainability into the MBA program at UTS derive from the structure and history of the MBA at UTS. The MBA was established at UTS 24 years ago. There is not in fact, one MBA but five variants on the same basic model (see **Table 1**). Note that LWE refers to 'limited work experience' students.

Course code	Title	Common name	No. of subjects	Minimum work experience	Enrolled students*
CO4014	MBA	"Classic"	16	4 years	670
CO4018	MBA (LWE)	LWE	16	None	767
CO4016	MBA (MI)	Mandarin	16	None	118
CO4015	MBA	Singapore	16	2 years	34
CO4031	Executive MBA	EMBA	12	6 years	17

* Figures are from Spring Semester 2002 and include students enrolled in the associated Graduate Certificates and Graduate Diplomas.

With the exception of the Executive MBA, each MBA variant consists of 16 subjects, 8 of which are compulsory. These eight subjects (and their LWE equivalents) are:

"Classic"	Limited Work Experience
21715 Strategic Management	21715 Strategic Management
21718 Organisation Analysis and Design	21865 Organisation Analysis & Design: Concepts & Applications
21720 Human Resource Management	21866 Human Resource Management: Concepts and Applications
21813 Managing People	21867: Managing People: Concepts and Applications
22747 Accounting for Managerial Decisions	22784 Accounting: Concepts and Applications
24734 Marketing Management	24746 Marketing Management: Concepts and Applications
25706 Economics for Management	25745 Economics: Concepts and Applications
25742 Financial Management	25746 Financial Management: Concepts and Applications

To date, sustainability, ethics and governance have had a low profile within the MBA. The skills associated with managing a sustainable business are not mentioned in the key description of the MBA program. The UTS MBA is distinguished from others through its 'practical, vocational orientation'. Specialist skills are mentioned in areas such as HR, operations management etc but not sustainability skills. Either ethics or governance are not seen as skills or they are not seen as sufficiently 'foundational' to be placed in the core because not seen as required for the general management of a business enterprise. Hence sustainability is not included in the list of core subjects as shown above.

Non-core subjects which include corporate social responsibility or sustainability concepts are included in the following MBA majors: Tourism Management, Management Consulting and Change, Strategic Management, Operations Management- (Subjects: 21012- Corporate Governance and Business Ethics; 21827 Change management; 21832 Managing for Sustainability, Responsible Business, Sustainable Tourism Management).

¹⁹² Source: *MBA Review Report*, Graduate School of Business, UTS, 2003.

¹⁹³ *ibid*

For example, the School of Leisure, Sport and Tourism offers the MBA subject Sustainable Tourism Management 2770. 'This subject provides students with an awareness of significant contemporary issues arising from tourism's impacts on its economic, physical, social and cultural environments, and appropriate policy, planning and management responses to these issues. These issues form a significant part of the context in which modern tourism as a whole and specific firms within it operate

However, opportunities to specialise in the area of sustainability exist through a new MBA sub-major (introduced in 2004) which includes Corporate Governance and Business Ethics; 21827 Change management; 21832 Managing for Sustainability and Responsible Business. Faculty members Professor Thomas Clarke, Suzanne Benn and David Bubna-Litic are currently working to promote this sub-major. Responsible Business is a new subject and is to be run for the first time in intensive mode in Spring Semester 2004, coordinated by David Bubna-Litic. Suzanne Benn coordinates Managing for Sustainability. Enrolments in this subject have increased and are now approximately 30 per semester.

Use of assignments to address issues of sustainability

In some subjects assignments allow some flexibility to address issues of sustainability according to student interest. Besides the subjects whose primary focus is sustainability, corporate governance and CSR, subjects such as Managing Supply Chain, Managing Consulting, Strategic Management do provide students with assignment topics concerning the issues of Sustainability. Faculty in charge of other subjects are free to include assignments addressing sustainability issues.

Example from Managing Supply Chain essay topic list:

Sustainability has emerged as a business issue in the last few years. How can firms react in this domain? Are there economic benefits to be gained by adopting strategies that promote sustainability in supply chain management?

Explain the relevance of Sustainability and how Sustainability affects firms characterised by a significant Supply Chain.

Distinguishing the normative from the business case

Subjects which analyse the topic in detail do examine the difference between giving an intrinsic value to nature and the argument that sustainable business practices should be followed because they add shareholder value. Subjects such as Responsible Business, Corporate Governance and Ethics and Managing for Sustainability all deal with sustainability in terms of ethics. Managing for Sustainability specifically distinguishes between the business and normative cases; one unit of the twelve in this course focusses on the characteristics of the ideal or sustaining organisation and the change processes required for the corporation to move to this stage of sustainability. The subject Responsible Business has one unit which aims to understand: 'the principles of new economic theories based on an alternative set of values including social justice, quality of life and environmental sustainability. Another is entitled 'Indigenous Perspectives, Deep Ecology and a Sense of Place'.

Integration of sustainability into the subjects of the MBA program

Sustainability is not integrated into all subjects in the MBA. Its inclusion in a particular subject is at the discretion of the course coordinator.

General understanding of sustainability among UTS Faculty of Business academics

As is appropriate at a university there are diverse interpretations of sustainability. In order to address this question we have interviewed the coordinators of the core subjects in our MBA program (see Appendix A). The business case for sustainability dominates understanding. Human sustainability is predictably seen as important by those academics whose area of expertise is Industrial Relations or HR. Appendix A also shows that most coordinators are aware of the growing importance of the sustainability voice and include

sustainability examples and cases, although the coordinator of Financial Management did not recognise sustainability as a relevant body of theory.

Short professional courses independent of the MBA

The school does not offer short professional courses in the area of sustainability although various faculty members have developed action learning projects for large corporates and industry sector organisations. For example, each year Professor Dunphy and Humphrey Armstrong offer an Executive Development course in Organisational Change over 8 weeks which has a strong emphasis on corporate sustainability.

Opportunities offered to students matriculating from TAFE

Students are admitted into the Graduate Certificate in Business Administration if they have 'extensive work experience and general or professional qualifications demonstrating suitable educational preparation'. They can then articulate into the Graduate Diploma in Business Administration and the MBA.

1.4 Messages/interpretation of sustainability that students take away from the MBA course

Student understandings of sustainability before they do specialist sustainability subjects

To address this question, six MBA students were interviewed, three who have completed the subject Managing for Sustainability and three who have not. A number of other students were also asked for their comments. Extracts from these interviews are at **Appendix B**. In general international students from SE Asia expect that sustainability subject will deal with the financials of the firm - the long term economic viability. One student gave the example of sustaining the viability of a call centre as one of the topics that might be covered. For Australian students and international students from Northern Europe, sustainability relates to the natural environment and corporate responsibility. According to the subject coordinator of Strategic Management, one of the top rating student subjects at UTS: 'even the business case for triple bottom line versions of sustainability is difficult to sell the LWE students and they do not engage with the idealistic case'; 'the students from Northern Europe have a quite different perspective'.

Student understandings of sustainability after they do specialist sustainability subjects

The subjects Responsible Business and Managing for Sustainability do not treat sustainability as merely TBL reporting. Managing for Sustainability has a strong emphasis on change for sustainability, as the text is *Organisational Change for Corporate Sustainability* (Dunphy, Griffiths and Benn 2003). Cultural change and leadership is seen to underpin corporate sustainability and is dealt with as a separate chapter in the text and each of these topics is covered individually. They are supported with readings and specialised academics/ industry guest speakers where necessary. Various models of change are compared; the Managing for Sustainability course is built around an evolutionary phase model which integrates human and ecological corporate sustainability. For instance, it compares efficiency and strategic models of sustainability in both human and ecological terms. It also places an emphasis through the case studies and readings on the global problems of sustainability and the different issues facing the Global North and South.

Promotional material/web/image of the MBA course

The subject outlines of the subjects mentioned are available on the www.business.uts.edu.au website.

Articulating sustainability through assessment

Managing for Sustainability has assessment tasks which require students to work both as individuals and in groups. The tasks are research case study based, requiring critical reflection and assessment on the progress that organisations from selected industry sectors make towards sustainability according to the phase model. In Responsible Business students have a number of assessment tasks requiring critical reflection. For instance, they are required to an action learning project analysing socially responsible business practices.

Articulation through recruitment/promotion/professional development of staff

Aside from the Corporate Sustainability Project discussed above, there is no specialist staff position for sustainability within the Faculty. Professional development is facilitated through conferences - there are considerable staff incentives and rewards for attending conferences nationally (such as ANZAM) and internationally.

2. Knowledge and skills acquired through the course that will help students make a contribution to sustainability within business/industry?

This question has been addressed in 1.4 above. They learn about paradigm shifts for sustainability through examination of the drivers for change in Managing for Sustainability. In Responsible Business they 'develop a framework for rethinking the responsibilities that accompany the world-wide capability of business organisations individually and collectively through a global shared economic network'. In Managing for Sustainability students engage in stakeholder dialogue activities, do scenario planning exercises and are specifically assessed on their capability to distinguish corporate greenwash and public relations from actual progress to sustainability. A number of subjects across the MBA focus on systems thinking skills - these include the financial management, strategy and supply chain subjects.

As discussed both specialist subjects examine the different discourses of sustainability, the spectrum of sustainability and the values-basis to sustainable management. A strong emphasis is placed on the open and contested nature of sustainability.

The coordinator of the Strategic Management subject made the following comment on how he encourages critical thinking skills using sustainability examples: *Sustainability needs to be contextualised in what is good business practice. It cannot just come from the CEO - it needs to be demonstrated across the organisation. So we use really challenging case studies where students are posed questions for which there is no definite answer. We (Lecturers) need to recognise our own limitations and give students recognition for their intelligencethey need to be given ownership*

As discussed further below, there is a strong connection between sustainability and ethics and governance. The following table taken from the UTS MBA Review (2003) shows the various core subjects as they have been analysed in relation to the core learning objectives of ethics and governance.

To develop an awareness of the principles of ethics and corporate governance in a variety of settings.	21715 ✓✓	22747 ✓✓
	21718 ✓✓	24734 ✓✓
	21720 ✓✓	25706 ✓
	21813 ✓✓	25742 ✓
To develop the capacity to take a leadership role in business situations.	21715 ✓✓	22747 ✓✓
	21718 ✓	24734 ✓✓
	21720 ✓	
To access and critically interpret business statistics and apply them in changing business environments.	21715 ✓✓	22747 ✓
	21718 ✓	24734 ✓
		25706 ✓✓
<p>(1) Legend: ✓ = minor contribution, ✓✓ = major contribution, (2) Only “Classic” MBA subject numbers are listed, however the table also applies to the LWE subjects. The “Classic” and LWE subject equivalencies are as follows:</p>		
21715 Strategic Management	21715 Strategic Management	
21718 Organisation Analysis and Design	21865 Organisation Analysis & Design: Concepts & Applications	
21720 Human Resource Management	21866 Human Resource Management: Concepts and Applications	
21813 Managing People	21867: Managing People: Concepts and Applications	
22747 Accounting for Managerial Decisions	22784 Accounting: Concepts and Applications	
24734 Marketing Management	24746 Marketing Management: Concepts and Applications	
25706 Economics for Management	25745 Economics: Concepts and Applications	
25742 Financial Management	25746 Financial Management: Concepts and Applications	

3. What do students learn about how to motivate/manage change towards sustainability within business/industry?

In Managing for Sustainability, various industry guest speakers discussed this topic in detail. It is a focus of the course and the compulsory textbook, *Organisational Change for Corporate Sustainability*, by Dunphy, Griffiths and Benn (2003), is the accepted leading international text in the area.

4. a) Opportunities for business and industry to inform/influence the MBA curriculum.

Sustainable Business Forums bring together leading experts in various aspects of sustainability. Presentations and discussions inform curriculum development. Case studies developed by the Corporate Sustainability Project give examples of industry best practice and are used in teaching and learning.

b) Assessing and meeting the educational needs of business and industry in sustainability

The Corporate Sustainability Project maintains national and international contacts, carries out case studies, hosts visiting speakers and engages in ongoing dialogue with leading companies such as

Westpac, Fuji Xerox, CUB and IAG. Faculty from the Project also participate in international academic forums such as the European and US Academy of Management.

5. Key opportunities for enhancing education about and for sustainability at UTS

The recent MBA Review Committee (2003) finalised the translation of the Faculty's educational mission into a set of MBA learning goals. Another issue is the question of the relevance of the curriculum in a rapidly changing business environment. The third set of issues for the Review Committee was that of business ethics and corporate governance, obviously prompted by the collapse of Enron and WorldCom in America, and HIH and OneTel in Australia. Recent studies indicated that students want a greater emphasis on ethics in their MBA subjects. The Review made the point firstly, that ethics is linked to globalisation, and secondly, deemed this a difficult problem to address. How to instill ethics into a mature student group, particularly when lecturers have no background in the field, was seen to be a major problem. The Review also saw ethics as a theme, not a distinct area of study.

Selection from UTS MBA Review Report (2003)

'The Aspen Institute conducted a survey of nearly 2000 MBA students who graduated in 2001 from the top 13 business schools in the USA. The results indicated that through their business school experience MBA students become less idealistic and more focussed on the bottom line. "Between the time they entered school and the time they graduated, the students became less concerned about creating quality products, satisfying customers, benefiting the environment, and doing good in the community and more focussed on the maximising shareholder value' (Tyson 2003).

In an attempt to address these issues, one of the core learning goals of the MBA Program is now defined as 'to develop an awareness of the principles of ethics and corporate governance in a variety of settings'. Consideration is now being given to introducing a subject drawing together sustainability, ethics and governance to the core of the program. To be effective it would need to be included in the core because of the breadth of choice - UTS offers MBA students the choice of approximately 150 elective subjects.

The justification is that corporate governance, business ethics and corporate sustainability are inextricably linked concepts. Ethical corporate governance involves establishing appropriate accountabilities and codes of behaviour on behalf of all stakeholders and such codes are essential if the firm is to conduct sustainable business. Sustainability is concerned with achieving equity between and within generations. But as recognised widely in the literature, the concept is open, contested and highly values-based. Key to its achievement is wide community participation in decision-making and collaboration between multiple stakeholders. Issues of governance and ethics are intrinsic to this achievement.

Faculty interviews at **Appendix A** show that the business case for sustainability is strongly perceived as the hook for introduction of sustainability themes. Student comment in Appendix B highlights that students see sustainability, when taught through concepts such as risk and reputation, as highly relevant to the contemporary manager. One of the most revealing aspects of the student interviews was that students see the existing core subjects as being repetitive. To these students sustainability offers variety and challenge.

Linking or embedding ethics into sustainability may also see ethics as being taught in a more practical, less dogmatic, less self-righteous and more engaging fashion. Furthermore, sustainability is a global challenge and interlinked with many of the ethical issues associated with globalisation.

'Most students are aware that working people for longer hours and working them harder is not sustainable. They also recognise that current forces for casualisation are unsustainable given the need for income security within our society. There are huge opportunities and research needs associated with sustainability in the HR subjects' – comment from coordinator of Human Resource Management core subject.

6. Key barriers/challenges to education about and for sustainability at UTS

The MBA Review in 2003 came to several conclusions which may act as a barrier for change toward a greater emphasis on sustainability within its curriculum:

- 'That the program had undergone almost continual change and evolution since the previous review in 1995;
- Moreover, evidence was tendered to the Review Committee that indicated that much of the current structure of the UTS MBA was operating successfully and producing good outcomes; and
- In the light of these facts, the Review Committee agreed that it would take a conservative approach to recommending change.'

As well, UTS has a very high proportion of international students. At Macquarie, 17% of their MBA students are international, compared to approximately 50% at UTS. International students tend to be LWE, to be younger and with less work experience than the 'Classic' MBA student. While the MBA Review emphasised the importance of creating the 'balanced' student body, there are major issues in achieving a balance in an elective subject such as Managing for Sustainability. Difficulty in accessing relevant case study material and language issues in the discursive mode of teaching most suitable to this subject area are major issues with LWE students. Another issue is the higher priority given to economic sustainability in developing nations. This is reflected in the following student comment from the student assessment of Managing for Sustainability in Spring semester 2003 '*This subject is a waste of money for international students*'. The issue, of course, is not whether the student is international or not, but the developed nature of the home economy. For the students from Norway, whose comments can be seen in **Appendix B**, the ecological and social aspects of sustainability make this subject a highlight of their MBA course.

Again echoing the MBA Review Report, we argue that in this area of study, each of the student groups, younger/older, WE/LWE, international/local, can benefit from each other's experience.

7. Specific recommendations to the Australian Government to advance the agenda of sustainability and education for sustainability within MBA's in Australia.

Recommendations

- Announce sustainability as a national priority for training in business in order to encourage the inclusion of subjects which combine ethics, governance and global sustainability in the core of MBA programs;
- Create a high level task force of academics with professional expertise in sustainability and business representatives working in the area to make recommendations for introducing sustainability into MBA programs;
- Fund curriculum development programs to action the committee's recommendations; and
- Fund the development of sustainability cases or cases requiring consideration of complex ethical dilemmas involving multiple stakeholders that are suitable for inclusion in capstone MBA subjects. Suitable models include cases developed by the Harvard Business School.

... 'the government needs to recognise that people really are the key. Sustainability in all of our resources is very important but the pursuit of a sustainable culture can not be developed without an acknowledgement that people themselves are important. It is ridiculous to imagine that people will be concerned with the sustainability of paper, for instance, if the message that people are expandable is sent. The Commonwealth Government should support MBAs which educate individuals as to the importance of sustainability. However, this would be nothing more than a case of perverse window dressing if they do not institute accompanying frameworks to support a more sustainable workforce' – comment from Human Resource Management Coordinator.

Appendix A: Interviews with Coordinators of Core MBA subjects

Table 1: What do you understand by sustainability?

Subject Area	Response
Financial Management	'The use of resources without depleting them eg using renewable resources'
Strategic Management	'it concerns the long term generational aspect and the social licence to operate. Social responsibility has an aspect of sustainability – employees and the wider community give the firm a licence to operate'
Human Resource Management	'The usage of a resource in a way which will not cause it to be depleted in the future; eg its current usage will not cause it to be used up in the current time frame but will leave it able to regenerate for future use'.
Managing People	'Reanalysing business practices with the aim of finding a link between maintaining a viable business and social and ecological sustainability'
Economics	'a very wide concept of maintaining long term quality'
Organisational Analysis and Design	to be forwarded at a later date

Table 2: Is sustainability integrated into the learning objectives of your subject?

Subject Area	Response
Financial Management	'Not as such –mine is an introductory theory subject'
Strategic Management	'It is part of the gospel of sustainable competitive advantage – organisational best practice'.
Human Resource Management	'Yes, in 21720 and 21866 HRM we focus upon corporate social responsibility and upon ethics - we continually challenge students to consider the sustainability issues regarding HRM'
Managing People	'Currently this is up to the individual lecturer. Future intentions are to develop a lecturers package which will include sustainability as one of the voices influencing organisational behaviour'.
Economics	'implicitly – because sustainability is about applying economic theory to the real world. It is about long term viability. We deal with the microeconomic aspect of the discipline first and then consider the long term'

Table 3: Are you aware of lecturers teaching on your subject integrating sustainability into your course as a result of their own interest/ knowledge of the area? What do you think are barriers to introducing education for sustainability into your subject?

Subject Area	Response
Financial Management	'No'
Strategic Management	'My team of lecturers are from different industries. For example lecturers from the building industry and from the airline industry use sustainability examples which are contextualised'. 'My view is very pragmatic – we need lots of applied examples'. 'We need to emphasise the technology and the hard economic impact'. 'We need to connect with the students in how it affects their own environment or job opportunities – then move to

	the macro level'.
Managing People	'it is up to the individual lecturer'. The main issue is that sustainability needs to be given more legitimacy through political support'.
Human Resource Management	' I am aware that there are lecturers who have a deep interest in this area and are building in their own material particularly concerning OH&S and environmental risk issues'. 'The major barrier is one of attitude. Students feel that each time a mention is made of sustainability that they have heard it before. It reminds me of the case of citing 'she' in place of 'he'. It sounds very loud to them. We need more case studies to show that efforts aimed at human sustainability in the workplace is not a cost but a profit source'.
Economics	'Many of the younger lecturers are not aware of these wider issues. They need more monitoring. They do not have the background in policy or life experience to deal with the sustainability issue'. 'There needs to be a special course in logic and sustainability which is compulsory for all business students'.

Appendix B: Interviews with selected MBA students:

Interview with Lars Peter Hoff (from Norway; student of MFS Fall 04; Full-time MBA)

Lars is taking the Managing for Sustainability course this semester. This is Lars's 3rd semester and he has taken all core subjects except Accounting.

- *"The course material is very busy. It is very relevant. Important and interesting but busy. The course should not be delivered in intensive form."*
- *"While I am reading the newspaper, I can relate to a lot of stuff that we have covered in the subject like risk, reputation, social capital."*
- *"I am taking the subject this semester with 3 other subjects and I have used at least one or two titles from the subject's reading list for my other assignments. That's why I know it is relevant and related with all aspects of the business and management."*
- *"I don't think that it is 'The next best thing'. Unlike other popular concepts which come and go, this has a history of evolution."*

Interview with Amit Bhatia (from India; could not take the course; Full-time MBA)

Amit tried to take the subject during Fall 04 but he could not because it was clashing with another subject. This is his last semester. Amit says:

"I wanted to take the subject because it sounded good. Initially I thought that it will be quite a quantitative subject. Some theory on trends, identification of growth, peak, random walk theory. . . later I was told by one of my friends that it is more about environment and stuff. I did not know what "sustainability" meant. Now that I know more about the content I still think it is quite interesting. I would have liked to take the subject for sure".

Student comments on a) the perceived relevance of Managing for Sustainability and b) their recommendation for inclusion of such a subject in the core of the MBA program

- *'It definitely should be included. I heard good things about the course but I did not realize that I would get this much out of it.'*
- *'There is a lot of repetition in the MBA core subjects. Managing People, Employment Relations are nearly the same subjects; OAD is also very similar to above two. So I don't understand why we are trying to cover new and different material in an elective when exactly the same thing is discussed over and over in the core.'*
- *'No, the subject should be a stand alone subject. I think integration would dilute some of the important messages that the subject is trying to give.'*
- *A question on integrating Corporate Governance and Ethics into the same subject and create a new core. "They are already included and covered. I would be very hesitant to take anything out from this subject and even be more careful on including anything else because it is already too intense as far as content."*

Student responses to the question: what are some of the improvements that would add to the course content or teaching sustainability in general?

- *"The examples are local but it is not a problem for me since I can relate the examples and discussions to Norway, I think a lot of student from developed world would think the same thing. I am not sure about people from the developing world."*

Student response to the question of including business ethics and governance courses in their MBA degree.

- *"I would NOT want to take a 13 week course on Ethics. Most of the time those kinds of theory courses are very vague, I can not relate to them. They are very western rules, regulations, and ethics centric. I actually remember that first day I was looking at the core subjects and I thought to my self "Yes, there is no course like philosophy of management or ethics and stuff . . ."*

- “No, I don’t think that same problem exists for sustainability. Or I don’t know. But as far as I understand theory, issues, solutions are more global. Particular issue might be different but how to approach it is the same everywhere. I don’t think the course would suffer a west- centric point of view.
- “There is a lot of repetition in the core subject. It would be nice to have something different. I have not taken the course so I don’t have a very strong opinion on the subject however I wonder if it would be a little specific to be in the core subject” . . . “No; I am not sure what I meant by “specific” . . . I just don’t know enough to make a comment.”

Christian Fagge (Norwegian, student of MFS Spring 03)

Christian also liked the subject. And made a lot of comments on this being one of the most relevant and important subjects that he has taken in MBA. His comments are very similar to Lars.

Christian comments on how the program and subject might be improved.

'I personally found the examples of Fuji-Xerox and I remember a couple of others that we were talking about in the course as quite boring. They were very interesting when I hear them first time but later we have repeated the same examples so many times that they started to be very boring.

This is exactly the kind of stuff that I want to do when I graduate. I have an engineering background and I want to work in Africa in an NGO which promotes environmentally sustainable water practices. If there were 5 more subjects on sustainability I would take it.

I know it is important and everybody should take this subject however my concern on making this subject a core subject is about the interest and quality of students who are taking the subject. When it is an elective everybody who is taking the subject wants to hear about it. (or lets say mostly) but when a subject is mandatory to take, most of the time, half of the students are not even remotely interested in the subject and discussion and topics. That would really ruin it for me. And the class size had to be bigger also. So I am not sure, yes I think it would be a core subject and I am sure it would be one of the favorite subjects but again going forward it would create an erosion on the quality of the material.'

Colin Innes

Lecturer for a core subject Human Resource Management

(Example below is the proof that there are lecturers who might be going the extra mile to mention these topics. UTS students might be exposed to the topic more than we can see from the subject outlines)

(Permission is asked to use his name as an example in the report)

I was a student in his class (Fall 04).

The subject outline does not mention anything about CSR or related terms. (Except an essay topic on Business Ethics in HR)

Lecturer himself is personally very interested, involved and informed on these topics. Throughout the lectures he made many comments and gave examples related to CSR and sustainability issues.

Examples and discussions include but not limited to: a half an hour to forty minute lecture on major milestones in the field (Brent Spar, Enron) a brief discussion on HR related criteria in TBL reporting.

Opportunity is given to students to research and write their individual assignments around a topic which is related to CSR and sustainability in HR practices.

Roger Jenkins**Subject Coordinator for Managing Supply Chain**

He does state very clearly that he is not an environmentalist. He used to teach the course. During a conversation in the course he did state that he is not that interested in the topic anymore because more it became popular, more it turned out to be “a lot of people talking but mostly nonsense’

Three of the 30 essay topics to choose from for individual essay are directly related to sustainability.

Ian Douglas**Subject coordinator for Managing Consulting**

One of the 5 topics covered in the course was consulting issues related to Sustainability.

Appendix B: Interviews with Coordinators of Core MBA subjects

Table 1: What do you understand by sustainability?

Subject Area	Response
Financial Management	‘The use of resources without depleting them eg using renewable resources’
Strategic Management	
Human Resource Management	The usage of a resource in a way which will not cause it to be depleted in the future; eg its current usage will not cause it to be used up in the current time frame but will leave it able to regenerate for future use.

Table 2: Is sustainability integrated into the learning objectives of your subject?

Subject Area	Response
Financial Management	Not as such -mine is an introductory theory subject
Strategic Management	
Human Resource Management	Yes, in 21720 and 21866 HRM we focus upon corporate social responsibility and upon ethics - we continually challenge students to consider the sustainability issues regarding HRM

Table 3: Are you aware of lecturers teaching on your subject integrating sustainability into your course as a result of their own interest/ knowledge of the area?

Subject Area	Response
Financial Management	No
Strategic Management	
Human Resource Management	Yes, I am aware that there are lecturers who have a deep interest in this area and are building in their own material particularly concerning OH&S and environmental risk issues.

Table 4: What do you think are the key opportunities for enhancing education for sustainability in your subject?

Subject Area	Response
Financial Management	None as such -mine is an introductory theory subject
Strategic Management	
Human Resource Management	Most students are aware that working people for longer hours and working them harder is not sustainable. They also recognise that current forces for casualisation are unsustainable given the need for income security within our society. There are huge opportunities and research needs associated with sustainability in the HR subjects.

Table 5: What do you think are the key barriers/challenges to education about for sustainability in your subject?

Subject Area	Response
Financial Management	See above
Strategic Management	
Human Resource Management	The major barrier is one of attitude. Students feel that each time a mention is made of sustainability that they have heard it before. It reminds me of the case of citing 'she' in place of 'he'. It sounds very

	loud to them. We need more case studies to show that efforts aimed at human sustainability in the workplace is not a cost but a profit source.

Table 6: What specific recommendations would you make to the Commonwealth Government to advance the agenda of sustainability and education for sustainability within MBA's in Australia?

Subject Area	Response
Financial Management	None
Strategic Management	
Human Resource Management	That the government needs to recognise that people really are the key. Sustainability in all of our resources is very important but the pursuit of a sustainable culture can not be developed without an acknowledgement that people themselves are important. It is ridiculous to imagine that people will be concerned with the sustainability of paper, for instance, if the message that people are expandable is sent. The Commonwealth Government should support MBAs which educate individuals as to the importance of sustainability. However, this would be nothing more than a case of perverse window dressing if they do not institute accompanying frameworks to support a more sustainable workforce.

APPENDIX C

GLOBAL KNOWLEDGE VENTURES RESEARCH STUDY



Education *About* and *For* Sustainability in Australia A Review of Non-University Provision



A report for Macquarie University – Graduate School of the Environment

May 2004

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Executive Summary

The need for Business Education about and for sustainability is being driven by a number of broader trends. As a consequence the demand for program content that reflect the need for capacity building to address these issues is growing and becoming more defined. Some of these trends and influences on business include; the changing legislative environment, the increasing demands from stakeholders to improve corporate sustainability performance, the establishment of corporate sustainability policies, and the need to meet industry codes and standards.

The range of business education providers includes, governments, industry associations, non-government organisations, consultants, private training companies and the media. The programs themselves range from email subscription services and online advise and network tools, the provision of paper- or CD-based information packs all the way through to seminars, workshops, and courses (free and paid).

However, overall, there is a lack of non-university contemporary tailored programs for business on sustainability issues to meet the emerging demand for capacity building. Although many organisations have developed sustainability training related activities and material there are very few structured courses for business managers to undertake.

Government departments have provided a comprehensive suite of sustainability programs for business, but they have largely been technical in nature. There is also overlap between federal and state jurisdictions.

Many diverse business and industry peak bodies have begun to be active in providing sustainability education, training and also professional development for their members, in recognition that sustainability issues are increasingly impacting on many areas of industry activity.

Non Government Organisations are now actively partnering with (or been partnered by) industry and companies to provide awareness-raising, educational, training and professional development, particularly through the joint provision of specialist seminars and conferences.

There are a large number of consultants in Australia providing general advisory and specific services in the area of sustainability. However, although the role they paly in providing sustainability services to business can be interpreted as an educative role, there is a lack of private training programs that have been developed by private organisations that business can enrol in.

Conferences, networking events and the electronic media have become valuable sources for business for information and knowledge on sustainability.

Programs that help develop professional skills in sustainability are beginning to emerge at the international level. Many large, medium and small Australian companies 'sustainability' professionals seek and gain a great deal of their (informal) professional development from accessing educational materials provided by the international business associations.

1. Introduction

Background

Macquarie University, Graduate School of the Environment (MGSE) has been engaged by the Australian government Department of Environment & Heritage (DEH) to conduct a research project into Education About and For Sustainability in Australian Business Schools. As a component of this project, Global Knowledge Ventures (GKV) have been engaged by MGSE to review and report on existing informal/non-formal programs that offer business training in Australia focussing on Education about and for Sustainability.

Scope and Approach

There is an enormous diversity of products and services that could be classified as business sustainability training programs. In scoping the requirements for this task, we have taken a broad view of what may be defined as 'business training' and have included everything from email subscription services and online advise and network tools, the provision of paper- or CD-based information packs all the way through to seminars, workshops, and courses (free and paid). This range would normally encompass areas such professional journals and magazines. However, we have not discussed these in this report.

The sustainability training programs have been defined in this report to include and encompass programs that have been developed and marketed under various related banner of such as "environment", "corporate social responsibility", "triple bottom line" and "corporate citizenship".

Our research was based on surveying internet-based and other published advertising materials on sustainable education, training, courses and professional development, interviews with a number of business and industry peak bodies as well as some large and small/medium companies and enterprises that engage training, education and professional development services for or about sustainability.

Section 3 provides an overview of the type of Education about and for Sustainability programs being offered in Australia. Some examples of the specific initiatives and the delivery mode and content are described. Section 4 highlights some of the international education service providers. Section 5 provides some recommended key issues to be considered in the design, development and delivery of future business Education about and for Sustainability training initiatives in Australia.

2. Australian Sustainability Educational Services Providers

There is a large range of providers and potential providers of non-university 'business education' and education-related activities in Australia. Broadly, these providers consist of:

Government Departments and Authorities

- o Federal;
- o State;

Business and Industry Associations;

NGO's, Think-tanks and Not-for-Profit organisations;

Private/commercial organisations;

- o Training organisations;
- o Consultants – offering training programs;
- o Conference/seminar management organisations; and
- o The Media, including Magazines, websites

The breadth and diversity of relevant educational activities undertaken by these groups makes it difficult to undertake a comprehensive analysis of the programs.¹⁹⁴ However, in order to undertake a systematic approach to the analysis of activities in the non-formal education sector, an overview of each of the above groups has been provided and one or several representative programs selected as an example(s) of the programs on offer. Comments are also made on the drivers behind the developments of these programs and the delivery mode and educational content.

Government

The results of our surveys indicate that, in Australia, the greatest amount of non-formal Education for or about sustainability comes from government.

In recent years Federal and State governments have introduced more stringent disclosure regulations such as the Environment Protection and Biodiversity Conservation Act¹⁹⁵ and Financial Services Reform Act¹⁹⁶, as well as stronger state based environmental compliance regulations. This changing legislative environment has driven business to identify and manage new sustainability risks and issues. As regulation is a significant driver of corporate change and performance improvement, organisations need the capacity to understand the new sustainability risks and skills to develop appropriate strategies if they are to comply with evolving legislation.

Federal, state and local governments throughout Australia directly provide large volumes of sustainability information, educational materials as well as training, seminars, workshops and courses aimed at educating and training the public. Many of these programs are aimed specifically at the industry and business sector. All levels of government are also active in indirectly providing education, training and also professional development for the industry and business sector through sponsorship, funding and support of training courses, seminars and conferences on sustainability.

Federal Government Programs

The main federal government body involved in sustainability education is the Department of the Environment and Heritage (DEH). However, there are also a number of other federal departments providing sustainability education, including;

¹⁹⁴ This was also noted by the Department of Environment & Heritage's Reference Group on Environmental Education in their report, *Today Shapes Tomorrow: Environmental Education for a Sustainable Future – A Discussion Paper*, Environment Australia, 1999.

¹⁹⁵ See <http://www.deh.gov.au/epbc/>

¹⁹⁶ The Financial Services Reform Act The law requires companies that issue financial products with an investment component to disclose the extent to which labour standards or environmental, social or ethical considerations are taken into account when making investment decisions.



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- Department of the Prime Minister & Cabinet;
- Department of Transport & Regional Services
- Department of Agriculture, Forestry and Fisheries;
- Department of Education, Science and Training;
- Department of Foreign Affairs and Trade; and
- Department of Industry, Tourism and Resources.

In addition, the Departments of Treasury; Attorney General; Communications, Information Technology and the Arts; Immigration and Multicultural Affairs and Indigenous Affairs also provide some limited educational services in the areas of sustainable development.

Department of the Environment and Heritage (DEH)

The DEH is a large portfolio, broadly tasked with helping Australia achieve ecologically sustainable development. To this end, the Department of the Environment and Heritage has formulated a large number of initiatives aimed at promoting and facilitating sustainable development at the local, regional and national level. These include the development of legislation, strategies, policies and guidelines and the formation of programs such as Local Agenda 21 and the Environment Resource Officer Scheme. Specific sustainability initiatives are targeted to industry groups, Australian Government departments and local governments¹⁹⁷.

Over the last decade, care of land, ocean areas and biodiversity have been major themes for the government-initiated business training programs. However, over the last few years the focus for the federal government and of business has shifted somewhat and sustainability issues such as greenhouse gas (GHG) management, community and public involvement (corporate social responsibility – CSR), and triple-bottom line reporting have become important programs.

*The Triple Bottom Line Reporting Guide is an example of educating business on sustainability. The **Department of the Environment and Heritage** has developed the Guide which is one in a series of three produced by the Commonwealth Government to assist with TBL reporting. The Guide is intended to support voluntary reporting on environmental performance by organisations in Australia by providing guidance on selecting suitable environmental indicators, and demonstrating simple methodologies, which where possible incorporate existing Australian initiatives. This guide enables organisations to determine performance in relation to selected indicators that are consistent with the Global Reporting Initiative's environmental indicators.*

The **Department of the Environment and Heritage** is working in partnership with Australian business and industry in the promotion and implementation of initiatives and best practice to improve corporate environmental performance. These initiatives include the uptake tools such as voluntary corporate sustainability or Triple Bottom Line Reporting, eco efficiency and cleaner production

¹⁹⁷ In addition, the portfolio also contains the following other bodies, which play roles in education about or for sustainable development:

Antarctic Science Advisory Committee

- Australian Greenhouse Office
- Australian Heritage Commission
- Bureau of Meteorology
- Environment Protection and Heritage Council
- Great Barrier Reef Marine Park Authority
- National Cultural Heritage Committee
- National Environment Protection Council
- National Oceans Office
- Office of the Renewable Energy Regulator
- Science Program Management Committee
- Wet Tropics Ministerial Council.

strategies, Environmental Management Systems (EMS), life cycle assessment techniques, environmental management accounting, supply chain management and other tools with wide applicability to a range of industries.¹⁹⁸

Consequently, government portfolio bodies such as the Australian Greenhouse Office (AGO) and Environment Protection & Heritage Council (EPHC – formerly the National Environment Protection Council) have become important providers of Education *about* and *for* sustainability for business and industry.

State Governments

Each State Government in Australia has developed active engagement with business on sustainability issues. A number of these initiatives have been developed out of the state Environment Protection Authorities. The Victorian, NSW, SA, WA and Queensland EPAs have specific sustainability programs that have grown out of their role as a regulator of industry's environmental performance. State Government programs generally focus on the industries of significance to the particular state.

The EPA South Australia runs a Small Business Eco-efficiency Training Program which offers training courses to small and medium sized businesses throughout the State. These courses are run in cooperation with various agencies including local councils and catchment water management boards. The Small Business Eco-efficiency Training Program aims to help businesses understand what eco-efficiency means and how they can benefit. Tools and techniques are provided to help identify efficiencies that in many cases result in financial benefit and reduced environmental impacts.

The Victorian EPA is sponsoring a partnership lead by the Australian Industry Group (AiG) to assist small to medium enterprises (SMEs) in the Bendigo region to implement eco-efficient practices. EPA Victoria has encouraged business to use cleaner production as an effective means of addressing its environmental impacts since 1988. Through partnerships with business, industry sectors and other stakeholders, the program has demonstrated that participating businesses can reduce their environmental impacts, improve efficiency and save money.

Through its Sustainable Industries Division, of the Queensland EPA offers help and advice, a consumer information service and training support services. Many programs have been established within the Queensland EPA to help industries achieve competitive advantage by moving beyond compliance levels of environmental performance to new standards of eco-efficiency and eco-marketing. Training is delivered largely through key industry associations. Sustainability tools provided to business include the Business Sustainability Roadmap which is a strategy map providing a contextual framework for businesses serious about taking up the challenges and opportunities of sustainable development.

Local Government

Local Government have also been active in sustainability training but the main Australia training entities, ICLEI and Environs¹⁹⁹ both mainly cater for training of local government employees rather than the businesses in the municipality.

¹⁹⁸ See <http://www.deh.gov.au/industry/corporate>

¹⁹⁹ See <http://www.environs.org.au/cases> and <http://www.iclei.org/anz>

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The International Council for Local Government Environment Initiatives', (ICLEI) fundamental "core" services to its Members is to serve as an information clearinghouse on local environmental initiatives. ICLEI has performed this service through the publication of newsletters, a case study series, and a variety of technical manuals on topics ranging from financing energy efficiency projects to solid waste management to the use of municipal economic instruments to increase environmental performance.

The provision of government sustainability programs described above indicate that the training approach from government is fragmented with many different government bodies, from all three levels of government, designing and implementing education programs for business. These tend to operate independently with each organisation spending time and money on design and development and marketing of programs. Each program promotes different steps that business can take reflecting the focus of the Department or Section that they belong to.²⁰⁰ Therefore there is a high degree of overlap and inefficiency.

In addition, the content of sustainability programs tends to very technical and industry specific; for example there is a heavy emphasis on cleaner productions solutions in manufacturing environments. There does not appear to be significant evidence of extensive training needs analysis covering contemporary business needs. In the development of any future government sustainability training initiatives, it would be beneficial if business was involved in the design of government programs which may lead to programs including content related to broader skill development in communication, stakeholder engagement and risk management.

At the federal level, there has been a lot of focus on environmental/sustainability reporting but there are a lack of agreed indicators that measure progress toward sustainability. In the development of programs and tools there has been little focus on the more business specific areas of how sustainability adds shareholder value.

More capacity building is required to help companies develop and use tools to implement, monitor and measure outcomes of sustainability policies and practices and more focus on training that can help companies build the argument on how sustainability can add long term shareholder value.

Business/Industry Peak Associations and Professional Bodies

*The **Minerals Council of Australia** (MCA) has established a Sustainable Development Committee to better serve its member companies who are actively engaged in the effective integration of the environmental, social and wealth creation elements of minerals resource development. Some key objectives of the MCA include; Industry awareness and effective uptake of sustainable development goals, minerals industry leadership in environmental practices and performance based on continual improvement and excellence and continual improvement in socially responsible minerals development. The MCA aim to achieve their sustainability objectives by running an annual national Sustainable Development Conference, providing guidance on legislative frameworks, the development of a code of environmental management and the production of industry specific publications.*

The subject matter relating to sustainability has moved from the margin of Australian business to the mainstream. This is evidenced by the number of companies, across all industry sectors, that have developed public sustainability policies and have conducted external reporting.²⁰¹ However there has not

²⁰⁰ Jodi Smith, "Developing effective government education programs for business sustainability - a systems approach"

²⁰¹ Hogarth, R. KPMG Partner, Audit and Risk Advisory Services. Undertook a report on corporate Australia and found that "Evidence from our research reveals that even though Australia was a late bloomer compared to the rest of the world in adopting sustainability reporting, sustainability reporting has greatly increased in Australia in the past five years with over 100 companies and government entities producing such reports."

been a corresponding focus on capacity building within companies to enable them to implement their own policies guidelines and those of their industry peers. In recognition that sustainability issues are increasingly impacting on many areas of industry activity, many diverse business and industry peak bodies have begun to be active in providing sustainability education, training and also professional development for their members.

The Property Council of Australia (PCA) is leading the way in environmental issues with its proactive work on energy efficiency guidelines and the co-development of a voluntary greenhouse and energy protocol for commercial buildings. Their programs are designed to develop the specific vocational knowledge and skills required in an increasingly competitive marketplace. Recently the PCA launched Australia's first sustainable development guide for the commercial property industry. The 'Sustainable Development Guide: A Roadmap for the Commercial Property Industry' provides property owners, investors, managers and developers with clear guidance on how sustainability issues affect their business.

Driving some of the training related developments has been the establishment of voluntary industry sustainability standards and codes of practice²⁰², such as in mining and property. In addition, there have recently been some industry wide codes developed such as the ASX Corporate Governance Council's 10 'principles' of good governance²⁰³. Understanding the relevant obligations of these codes requires companies to meet the industry expectations and build their capacity to continually improve policies, strategies and performance.

A number of sustainability initiatives of today have grown out of environmental programs of the late 1990's. For example the Australian Industry Group (AIG) has produced environment management handbooks specifically tailored for small industry in each State and Territory since 1996. Today AIG also regularly run comprehensive training workshops and seminars in NSW, Queensland and Victoria in order for members to further expand their business skills and knowledge.

The AIG Managing Environmental Issues 1 day Training Program is a practical one-day program that provides participants with a basic understanding of environmental laws, regulations and policies applying to manufacturing and construction companies, due diligence principles, environmental assessment and environmental management plans/ systems.

For business, sustainability issues have traditionally focussed on pollution issues and cleaner production, regulatory approvals and licences, and protection of land, water, air and biodiversity. The industry associations have historically provided sector specific programs in these areas. Bodies such as the Plastics and Chemicals Institute of Australia (PACIA) have developed training programs – often partnered with government – to provide its member companies and individual professionals with education and information on specific subjects or government/legislative initiatives. The federal government's 'Cleaner Production Program' was one such initiative where government directly provided or indirectly funded training facilitated by industry groups, under an overarching subject heading of sustainability.

The development of linkages between industry associations and universities for the design, development and delivery of accredited training programs is quite advanced in areas such as finance and law. However there are few industry associations that have expanded their university partnerships into accredited training programs for sustainability issues within their specific sectors. An exception is the Institution of Engineers who conducts professional development programs in conjunction with formal education providers (universities and TAFE's) and often has entered in collaborative programs where members are able to gain formal academic accreditation for their participation in these programs.

There are a number of business associations whose members include companies that can be classified as being from the environmental and sustainability "industry". These organisations include Australian Water Association (AWA), Waste Management Association of Australia, Australian Business Council for

²⁰² See-

www.epa.qld.gov.au/environmental_management/planning_and_guidelines/codes_of_practice/industry_environmental_codes/

²⁰³ see

http://www.biomelbourne.org/fileadmin/Download_Files/Download_Reports/ASX_Corp_Gov_Guidelines/ASX_Corporate_Governance_Guidelines.pdf

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Sustainable Energy (BSE), Environment Business Australia (EBA) and the Clean Air Society of Australia & NZ. These organisations run conferences and seminars on topics that relate to their members interests and increasingly focus on, and highlight, sustainability and business issues of significance. Although these peak sustainability industry bodies consistently provide conferences and seminars they have not expanded their membership offerings into the development of fee based training courses for members.

*The **Enviro 04** Convention & Exhibition is the premier industry forum on sustainability for 2004. It is a platform for five environment industry associations to run their annual or biennial conferences and showcase their technology, products, services and research in a combined trade exhibition. Enviro provides the infrastructure for these conferences and the exhibition to take place and incorporates a full program of social and technical events and tours, promoting cross-fertilisation between the different disciplines.*

The finance sector plays a central role in the Australian economy and there is now a growing interest from the financial sector in business education for sustainability. In response to the introduction of the FSR Act²⁰⁴ and the growth of Socially Responsible Investment (SRI) the Ethical Investment Association has begun the development of education programs for financial planners to understand the nature and SRI products being offered in the market. In addition three of the major banks in Australia have joined the UNEP Finance Initiative²⁰⁵, which offers a capacity building service.

Industry bodies are now actively expanding the content of their sustainability programs and are looking to partner with government to facilitate education and training in the areas such as of energy efficiency greenhouse gas (GHG) abatement and climate change management. The business case is another area that is receiving attention. There have been many studies highlighting the business case for implementation and integration of sustainability management practices within businesses²⁰⁶. In almost every survey on the business case for sustainability certain factors such as reputation, operational efficiency, licence to operate and the attraction of employees are cited.²⁰⁷ In a global survey of CEOs PricewaterhouseCoopers found that “more than ever before, CEO’s are saying that sustainability is an integral part of value creation, not an add-on or a simple cost item”.²⁰⁸ Industry associations have a role to play in the development of capacity building programs to help their members make and communicate the business case for sustainability and to develop strategies that will deliver shareholder value from good environmental and social performance.

A problem in the development of coordinated industry wide programs is that sustainability issues vary widely across industry and within sectors. Language and definition are a problem and there is no agreed business definition of sustainability that makes it difficult to engage with business and to develop broadly applicable programs.

Despite many positive developments, there are still certain industries or business segments lack any formal training offered by their business organisations. For example there is little training related material offered for company Directors. The banking and insurance associations also lack any real sustainability initiatives. The financial community is important to engage and educate as companies that have made significant progress in advancing sustainability initiatives within their own organisations struggle to communicate their strategies for growth to the capital markets. There is very little dialogue between business and the capital markets on sustainability and virtually no training programs that help business more effectively translate the evolving language of sustainability into the language of finance.

²⁰⁴ Under the FSR Act fund managers must declare the extent that environmental, social, ethical and labour standards are incorporated into their investment decisions

²⁰⁵ see www.unepfi.net

²⁰⁶ Perhaps the most referenced example is Elkington, J. “Buried Treasure, the Business case for Sustainable Development” . SustainAbility 2001

²⁰⁷ See SAM 2003 analysis of over 1000 companies who rated the areas where most value was added from their sustainability strategy

²⁰⁸ 6th Annual Global CEO Survey, PricewaterhouseCoopers for World Economic Forum 2003

Non-government Organisations, think-tanks and Not-for-Profit Organisations

Non-government organisations (NGO's), think-tanks and Not-for-profit 'cause-related' organisations have played an important and interesting role in Education about and for sustainability in Australia.

*Green Capital is an initiative of the **Total Environment Centre (TEC)**, which aims to encourage and facilitate the development of CSR (which includes environmental sustainability) both in its own right and in bringing together the key stakeholders from industry, government and civil society groups to build a platform for constructive dialogue and debate on key issues. Green Capital aims to develop active working relationships with market-leading businesses looking to work cooperatively across the spectrum of corporate sustainability. TEC have facilitated a number of seminars under specific programs/themes such as 'How Green Is My Footprint' and 'Green Capital', which have sponsored high-profile speakers from academia, government, business, industry and peak bodies.*

In the mid- to late-1990's, organisations such as Greenpeace, the Australian Conservation Foundation, WWF and Wilderness Society were instrumental in providing 'awareness-raising' and public education about sustainability issues such as land and water quality degradation, biodiversity conservation and sustainable forestry and more recently GHG abatement and climate change.

Over the last 3-4 years some of these groups (such as WWF and The Environment Centre - TEC) have actively partnered with (or been partnered by) industry and companies to provide awareness-raising, educational, training and professional development, particularly through the joint provision of specialist seminars and conferences. While still in the formative stages, it is expected that these organisations will develop accredited training packages in partnership with industry. The seminars run by groups such as the TEC have been well attended by sustainability professionals seeking insights into sustainability which they may be able to utilise in their professional roles, and also to liaise with other professionals, government regulators, consultants and other service providers.

In addition to the large, well-funded NGOs, a number of smaller organisations, such as Vox Bandicoot and Green Skills have also developed training initiatives to focus on business.

***Vox Bandicoot** provides ecological sustainability culture change programs with industry and local government including ISO 14001 training, environmental sustainability education with community groups and schools, conference/program launch sustainability performances and community capacity building relating to sustainability*

***Green Skills**, is a quality endorsed training organisation registered with the WA Department of Education & Training, has been delivering quality training in the environmental field for 14 years. Green Skills Inc is a community non-profit organisation, established in September 1989, who specialise in linking environmental training and employment programs to practical conservation work and sustainable development. The organisation has formed long term partnerships with local businesses, community groups and individuals, and state and local government agencies.*

The NGO community has highlighted that the reputation, ethics and sustainability performance of corporations are increasingly becoming deciding factors in decisions to interact with a company; including a consumers decision to purchase a product or service, a government's decision to grant a licence to operate, an investors decision to buy shares and an individuals decision to seek employment in a firm. Organisations need to be able to understand and meet the expectations of diverse stakeholders on environmental, social and corporate governance issues as well as develop their stakeholder engagement skills. There is a lack of training programs that help companies effectively engage with the NGO community and then to develop methodologies to incorporate stakeholder views and expectations into corporate strategy and policy.

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Private/Commercial Organisations

Training Organisations and Consultants

The last major group involved in the provision of non-formal Education about and for sustainability in Australia is, collectively, the private commercial education and training sectors. These groups include professional training organisations and consultants, which overlaps somewhat with the conference/seminar sector, as well as 'in-house' training functions within industry peak bodies and professional bodies.

There are a large number of consultants in Australia providing general advisory and specific services in the area of sustainability. These consultants range from the large multi-national business consultants (eg McKinsey, Arthur D Little Inc); the large accounting/business services firms (eg Ernst & Young; PricewaterhouseCoopers; KPMG); the large multinational engineering and environmental management consulting firms (eg URS Corporation; Environmental Resource Management), through to smaller engineering and environmental advisory firms and businesses and finally, a few specialist training firms.

Many of the consultants offer training services broadly, or purport to be able to provide sustainability training courses tailored for clients. However, very few organisations appear to have actually conducted courses or are able to provide a current course curriculum for preview. A few specialist companies exist that state that their core business is to provide training and education services in or about sustainability for business.

Three of those companies include; Sustainable Learning Australasia Pty Ltd, EcoSteps and The Sustainability Centre.

*For a number of years, **Ecosteps** have run a one-day workshop "Understanding Sustainability". The program is based on the *The Natural Step (TNS)* framework can be used a planning tool for business to equips participants to balance economic, environmental and social needs.*

***The Sustainability Centre** provides short training courses in sustainable development, of length from half a day to 5 days or more. The courses involve lectures, discussions and field trips. Teaching staff are drawn from Sustainability Centre, several universities in Sydney, state and local governments, and non-government organisations. Courses are tailored to the needs of our client groups, whether they be from government, business or the community at large.*

***Sustainable Learning Australasia** provides a variety of learning services. Principally they provide client specific and competency based training programs for business in the areas of waste management and sustainable business. Sustainable Learning have partnered with Gordon TAFE to offer accredited training, tailored to meet the needs of those employed in the waste industry*

Companies that offer specialised training programs for business include the Assurance and accreditation firms. These companies offer services to businesses seeking and maintaining international standards such as ISO14000. The training programs, offered by companies such as NCS and SAI Global are generally related to environmental management systems implementation and auditing (see box).

NCS International Pty Ltd (or NCSI) is a wholly owned subsidiary of the National Association of Testing Authorities, Australia, provide Management systems over a range of courses that provide the essential knowledge and skills to complement certification and assist business to get the most benefit from their management systems. Courses include Understanding the ISO 14000 Series, Implementing an Environmental Management System, and Environmental Lead Auditor Training Course.

SAI Global Assurance Services is a Registered Training Organisation that offers competency-based training program, and is accredited and registered with the Australian National Training Authority. The programs include Environmental Management Systems, Environmental Management for sustainable business, Improving Environmental Performance and integrated risk management.

Increasingly the role performed by some sustainability consultants has an educative function. Numerous multinational corporations, such as BP, Shell, Du Pont, Interface and Ford have established sustainability policies. Australian based offices are required to deliver business performance that meets with their parent company policy expectations. Similarly many Australian companies have adopted sustainability policies and are now required to implement those. The challenge for business managers is to convert these policy positions into tangible actions that deliver business value through the development and use of best practice sustainability tools and techniques. Consultants are working within organisations, directly with business executives to run internal seminars and training on sustainability.²⁰⁹

There is also an increasing requirement for business to respond to questionnaires and other information requests from ratings agencies and analysts on their environmental and social performance²¹⁰. Businesses need to be able to identify, capture and measure the sources of requested sustainability information within their own business and effectively communicate this to the various interested parties. Private training companies and consultants have the capacity to focus on the broader business management issues of integrating sustainability across the organization and can develop programs to help companies communicate their performance to the wider market.

It was difficult to find any examples of partnerships between private training companies and universities for the development of sustainability training programs. Existing University programs have not been incorporated or integrated in the commercial services that consultants and private training companies offer their business clients.

For private training companies to successfully develop commercial training programs they need to overcome a number of obstacles. Although industry demand for non-university training and education is growing, it is not perceived to be a high priority. The training programs offered need to demonstrate market benefits. The value proposition needs to be very strong and a good business case for investment prepared. The lack of a compelling case for undertaking training has inhibited a number of proposed programs in Australia succeeding. In addition, there have been examples where company sustainability practitioners have been 'gatekeepers' inhibiting the development, uptake and delivery of programs and capacity building within their own companies.

Conference/Seminar Management Companies

In addition to conferences and seminars facilitated and provided by government, industry and business groups and NGO's, there has been a burgeoning in the development of these forums, directly, by professional conference facilitation companies. These commercial entities have seen and acted on market needs and opportunities to facilitate the provision of these services specifically for and about sustainability, and for those organisations and (professional) people involved in sustainability. A number of the business sustainability conferences are conducted with a seminar/workshop format added as an additional professional development option.

²⁰⁹ It is difficult to cite the specific examples in this case due to commercial confidentiality reasons, however the author is aware of specific training programs that being run with Australian banks, mining companies, chemical companies and oil and gas companies.

²¹⁰ The Reputex Survey see <http://www.reputex.com.au/> and Socially Responsible Investment questionnaires such as those from SIRIS, SAM and Monash Sustainability Enterprises.

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There is a growing network of people involved in sustainability and forums where business people can interact and debate the business and sustainability issues have increased.

***Edmonds Management** has convened seven sustainability conference series over seven successive years. Each year the conference organisers determine a current sustainability theme of contemporary interest to Australian business and organise an event in every state capital. In 2004 the Series highlighted the special opportunities and risks that this convergence of globalisation and sustainability poses for business and government, at all levels, in Australia.*

Many recent conferences and seminars organised as business education initiatives have focussed on the Business Case for Sustainability (CSR/Triple Bottom Line) as well as numerous conferences on renewable energy. There exists an opportunity to develop tailored training programs that run parallel to the theme of the²¹¹ conference.

***Country Conferences Pty Ltd** is a professional conference management company with two offices in country NSW - Armidale and Bourke. The company specialises in conference, seminar and event design, coordination and management for clients throughout Australia. Recently they conducted a 1 day interactive seminar on Leadership in Sustainable Development. This seminar for professionals who are developing or re-evaluating the sustainable development agenda within their organisations. The course emphasises the importance of a sound business case to underpin corporate social, financial and environmental responsibility. Using actual case studies the course examines the spectrum of elements needed to successfully assess, implement, manage and audit a sustainable development agenda.*

Media

The electronic media is a valuable source for business for information and knowledge on sustainability. In recent years the mainstream business press has increased its coverage of sustainability, corporate responsibility, socially responsible investment and corporate governance issues. The Fairfax press have included several supplements such as an annual Triple Bottom Line feature in the Financial Review and an annual feature on the reputation rating of Australia's top 100 companies.

The internet has spawned numerous websites and listservers dedicated to sustainability. Sites such as the World Business Council for Sustainable Development (WBCSD), 'Business for Social Responsibility', 'Ethical Corporation' provide enormous amounts of resources for individuals seeking tools, techniques, standards, guidelines and reports on sustainability.

There are many successful news sites that have a significant and growing subscription level in Australia. News, views and issue providers include: 'Greenleap', 'Planet Ark', 'Ethical Investor', 'CSR wire', 'Enviro info', 'Greenbuzz', 'Sustainable business.com', and 'Environment News Service'.

The innovation in the dissemination of information utilizing the electronic media has led to the emergence of on-line education initiatives dealing specifically with sustainability topics. In recent times there have been a number of on-line forums, conferences and seminars offering individuals the opportunity to engage in furthering their knowledge at their convenience.

The electronic media sources of educational and training material are perhaps the most diverse and contemporary in their content. Through the advent of electronic service channels, there is a growing ability to access the latest information, news, reports and developments in sustainability that cover virtually all topics and content areas.

²¹¹ The Ethical Investment Association of Australia plans to run their national conference in 2004 with three streams of accredited education programs, conducted by industry experts running in parallel

In the development of future business education programs about and for sustainability it will be important to recognise the reach and accessibility of electronic media in the program design and delivery.

Self-education

The other major area of education in sustainability and factor in the analysis of this topic is that of 'self-education'. Our research has indicated many professionals have pointed to the absence of accessible, career value-adding and needs-tailored formal education services for or about sustainability. As a result, many sustainability professionals have sought and undertaken their professional development largely through self-education, often privately funded and conducted (in after-work hours) or as an adjunct, through their employers, via the large amounts of non- and informal awareness and educational materials.

3. International Educational Services Providers

Programs that help develop professional skills in sustainability are beginning to emerge at the international level.

Some national professional and industry bodies, and in particular some international industry peak bodies (eg the World Business Council for Sustainable Development and the World Resources Institute), provide excellent educational, training and professional development resources for companies and sustainability professionals in Australia.

These bodies are usually funded by companies (and often collaboratively with international donor organisations such as the UN or national governments) and provide portals for industry and business, government and the international donor organisations to share information and case studies on best practice, commission and publish focussed research, data or information reports as well as provide directly or indirectly training courses, seminars and conferences.

Some examples of international business education initiatives are detailed in the following examples:

Leadership for Environment and Development (LEAD) International is a global network of individuals and non-governmental organizations, committed to sustainable development. LEAD is an independent, not-for-profit organization, established in 1991 by The Rockefeller Foundation. LEAD carries out its mission through capacity development and strategic, outcome-oriented activities consisting of policy, research, action-on-the-ground, communications, and training. Capacity development includes training programmes in sustainable development and leadership skills for a variety of publics. Today, there are more than 1400 LEAD Fellows from the worlds of business, media, public sector, universities and non-governmental organizations in over 80 countries.

MHCi is a research and consulting company that offers advice and research on corporate social responsibility issues. MHCi runs a CSR masterclass. Their format is highly interactive, ensuring that participants and contributing specialists are tested to the full. The masterclasses are aimed at CSR professionals and HR specialists and cover issues such as CSR and Labour dealing with the main issues that confront managers in dealing with their employees and suppliers. Experts in the field share their views in an interactive workshop setting.

One organisation that has made significant progress in providing a forum to educate business is the **UNEP Finance Initiative**. UNEP FI's aim is to identify, promote, and realise the adoption of best environmental and sustainability practice at all levels of financial institution operations. UNEP FI comprises members from the global financial institutions such as banks, insurers, re-insurers, pension funds and asset management companies. UNEP FI provides members with practical research; capacity building; and information exchange services. The products provided range from professional development programmes and action-oriented reports to major international conferences that bring together professionals from around the globe.

International Finance Corporation has conducted a series of workshops since 1996 entitled *Competitive Environmental Advantage: Managing Environmental Risk in the Emerging Markets*. The workshops, which are held on a quarterly basis, examine techniques for banks, funds, leasing companies, venture capital firms and other financial organizations to transform the increasing risk posed by environmental and social issues into commercial opportunity.

Our surveys of some large, medium and small Australian companies indicated that many 'sustainability' professionals²¹² seek and gain a great deal of their (informal) professional development from accessing educational materials provided by the World Business Council for Sustainable Development, World Resources Institute as well as the United Nations Environment Program (UNEP). Importantly, these organisations have been at the vanguard of developing and disseminating 'business cases' for sustainable development which have been used by companies and sustainability professions to drive education about and for sustain sustainability into and through their organisations and for those companies to achieve sustainability outcomes.

As companies recognize environmental and social stewardship as a competitive advantage, increasing numbers of business schools are emphasizing education in environmental issues. A biannual comprehensive study by the World Resources Institute on business education and sustainability highlights the most innovative MBA programs and faculty infusing environmental and social impact management into the business school curriculum. Although complimentary of business schools that have developed their curricula in this area, the report identifies that there is little information on specific outcomes of the results, and graduate successes, of broadening the scope and reach of business education in this area.²¹³ There has been no similar comprehensive study undertaken on non-university providers of Education about and for Sustainability.

At the other end of the spectrum from graduates there are very few training programs for company directors. As the requirements for sustainability have evolved, the skills and knowledge of directors and diversity of Boards have not kept up. Most directors, particularly non-executive directors (NED's) are selected for their independence and particular experience and knowledge in corporate areas such as financial performance, cash flow analysis and projections. However, the roles, duties, accountabilities and responsibilities of modern company directors have moved well beyond the traditional areas of finance and legal issues management. A KPMG survey of FTSE 350 NED's shows that 40 per cent didn't feel they had sufficient knowledge of non-financial indicators, such as market, environmental, political and employment issues that could have a material impact on the future business performance of a company.²¹⁴

Several renowned international programs such as the Sustainable Enterprise Academy²¹⁵ and Cambridge Program for Industry²¹⁶ assist business in the transformation to corporate sustainability by providing senior executives in business, government and civil society with the vision, education, tools and support necessary to champion sustainable development in their organizations. However although these programs have a significant input from the business sector they are still programs that are linked directly to universities.

²¹² Professional or technical staff employed in industry or business to undertake roles in, about to related to sustainability.

²¹³ Beyond Grey Pinstripes: Preparing MBAs for Social and Environmental Stewardship World Resources Institute 2003
<http://www.beyondgreypinstripes.org>

²¹⁴ KPMG, (2003) Non-executive Directors' Survey 2002/3 at <http://www.kpmg.co.uk/aci/docs/NEDsurveyUSwebversion.pdf>.

²¹⁵ The Sustainable Enterprise Academy is North America's premier executive education program on sustainable development. The role of capital markets and sustainability is a discussed on a number of occasions in the Academy's flagship four day program

²¹⁶ The Cambridge Program for Industry works with prestigious partners in the delivery of its learning programmes. It draws on the rich expertise and scholarship of the University of Cambridge, and mobilises thought from the best minds and institutions globally. CPI operates beyond the boundaries of any particular department or subject area, allowing it to respond flexibly to its clients' needs. Programmes typically have a strong interdisciplinary component. They focus on 'pre-competitive' business themes and appeal to fast-moving and innovative enterprises. Current topics include sustainable development, intercultural management, social inclusion, health leadership, partnership brokerage and future technology.

4. Recommendations

The following are some key recommendations and conclusions that have come out of this study:

- Very little training needs analysis has been done to identify the specific requirements of mainstream business to be able to advance their sustainability policies and practices. In the absence of this analysis the non-university programs and materials that have been developed have not been effectively tailored and uptake has been inconsistent.
- There has been a lack of communication of the skills business needs to the universities. Consequently recent graduates are not in a position to meet the expectations of business managers to progress sustainability initiatives. Similarly, there is a lack of alignment with sustainability policies and recruiting policies, so employees don't have the necessary skills to effectively implement the company's sustainability strategy. There needs to be a better method developed of communicating the needs of business to the university leaders who are setting curriculum.
- Australian companies do not have access to many best practice tools and techniques to address sustainability that have been developed internationally. There is a need to identify the tools in use and train Australian business in the customisation and use of business sustainability tools.
- There are few programs that take into account the way companies are organised and how decisions can be effected across the big organisations. Programs need to be developed at different levels- senior executive level as well as management level. Focus at the executive level is critical to get engagement and uptake of sustainability programs. However access and time commitments are limited. At the management level there is an increasing need to offer programs to guide managers on the tools and techniques to implement and operationalise sustainability.
- There needs to be developed a compelling business case for undertaking training. A number of private sustainability training initiatives have not received corporate support because of the perceived cost rather than the perceived value of the program.

5. References

"Today Shapes Tomorrow: Environmental Education for a Sustainable Future – A Discussion Paper", Department of Environment & Heritage's Reference Group on Environmental Education, Environment Australia, 1999.

Smith, J " *Developing effective government education programs for business sustainability - a systems approach*", Sustaining Our Communities Conference, Adelaide 2002

Hogarth, R. *"The Boardroom Report- Making Reporting Sustainable"* Vol 2 Issue 7 May 2004

"Beyond Grey Pinstripes: Preparing MBAs for Social and Environmental Stewardship." World Resources Institute the World Resources Institute (Sustainable Enterprise Program) and the Aspen Institute (Business and Society Program) 2003 <http://www.beyondgreypinstripes.org>

"Non-executive Directors' Survey 2002/3". KPMG International 2003
<http://www.kpmg.co.uk/aci/docs/NEDsurveyUSwebversion.pdf> >.

APPENDIX D

PROPOSED OPTIONS FOR STAGE 2

Proposed Options for Stage 2

These options were workshopped at the June 4th meeting held at the Macquarie Graduate School of Management and informed the final recommendation of this report. The following stakeholders were in attendance:

- Australian Graduate School of Management;
- Global Knowledge Ventures;
- Graduate School of Environment;
- Macquarie Graduate School of Management;
- University of Queensland; and
- University of Technology Sydney

Card 1: Fund action research projects in 4-5 Business Schools in Australia.

Monies would be provided to each Business School so that it could plan and undertake an action research project. The action research projects would seek to address sustainability and education *for* sustainability in ways which best meets needs of the School and its students. The projects would involve a minimum of three staff from each Business School and would aim for change outcomes.

The proposed initiative would be supported by a project manager who would support/assist staff from across the Business Schools to undertake the project.

This initiative would borrow ideas and learn from the experience of ACTS which resulted in curriculum change and development of professional skills of students aligned with education *for* sustainability.

Card 2: Developing a Leading Edge Sustainability MBA course

Funds would be provided for research, development and piloting of an Australian Leading Edge MBA course which would be developed in partnership between 4-5 Business Schools. Each Business School would develop a core unit for the course. Existing related and relevant sustainability units could be offered in this course as options for students. The project would be a collaborative effort between Business Schools which would share the development and offering of units for the course. Market research would be undertaken to ascertain whether the course is offered through distance learning or through block mode.

Monies would be available to each Business School to fund the research and development of courses.

A project manager/researcher would be contracted to assist with market research, preparing paperwork associated with getting course approval/accreditation, etc.

Card 3: Developing Resources to Assist with Curriculum and Assessment Change Towards Sustainability

Funds would be provided to research and develop resources/publications with teams of lecturers from across the Business Schools to assist with a) greater inclusion of sustainability themes and b) the reorientation of core courses towards education *for* sustainability. Key core courses offered in most MBA's such as management theory, management of change, human resource management, accounting and economics, etc would be targeted.

Research and writing teams with a minimum of three staff from different Business Schools but with the same specialism would be funded.

Card 4: Learning from International Experience

Funding 'experts' from overseas Business Schools who offer 'Leading Edge' MBA courses to come to Australia to: a) assist with raising the profile, credibility and value of such initiatives to key stakeholders in Australian Business Schools and b) who can offer workshops/assist staff in Business Schools to address sustainability within their specialism.

Card 5: Developing Opportunities for Work Experience in Sustainability

Funding Business Schools so that they develop new optional units or adapt existing work experience units which enable students to gain practical experience in the area of sustainability. A project manager/officer position would also be funded. This person would act in an industry/business liaison capacity, identifying and setting up opportunities for work experience.

APPENDIX E

LIST OF AUSTRALIAN BUSINESS SCHOOLS

Australian Business Schools by State

South Australia

1. Flinders University
2. University of Adelaide – Adelaide Graduate School of Business
3. University South Australia – International Graduate School of Management

Victoria

1. University of Melbourne – Melbourne Business School /Mt Eliza School of Executive Education
2. Swinburne University of Technology – School of Business
3. University of Ballarat – School of Business
4. Victoria University – Faculty of Business
5. LaTrobe University Melbourne – Graduate School of Management
6. Monash University – Faculty of Business Economics
7. Deakin University – Deakin Business School
8. Royal Melbourne Institute of Technology – School of Management

New South Wales

1. Australian Graduate School of Management – University of New South Wales/University of Sydney
2. Macquarie Graduate School of Management – Macquarie University
3. University of Western Sydney - Sydney Graduate School of Management
4. University of Technology Sydney – Graduate School of Business
5. Southern Cross University – Graduate College of Management
6. University of Wollongong – Graduate School of Business & Professional Development
7. Newcastle University – Graduate School of Business
8. Charles Sturt University – Faculty of Commerce

Queensland

1. University Sunshine Coast – Faculty of Business
2. Griffith University – Graduate School of Management
3. Bond University – Faculty of Business
4. University of Queensland – School of Business
5. QUT – Brisbane Graduate School of Management
6. Central Queensland University – Faculty of Business and Law
7. University of Southern Queensland – Faculty of Business
8. James Cook University – School of Business

Western Australia

1. University of Notre Dame – Mendoza College of Business
2. University of Western Australia – Graduate School of Management
3. Edith Cowan University – Faculty of Business and Public Management
4. Murdoch University – Murdoch Business School
5. Curtin University of Technology – Curtin Business School

Tasmania

1. University of Tasmania – School of Management
2. Australian Maritime College – Graduate School of Marine Resource Management

Northern Territory

1. Northern Territory University (Charles Darwin University) – School of Law and Business

Australian Capital Territory

1. Australian National University – National Graduate School of Management
2. Canberra University – School of Business and Government

Australian Business Schools by Criteria (see main report p.7 for definitions)

In-Depth Research Australian Business Schools

1. University of Technology Sydney – Graduate School of Business
2. Macquarie University - Macquarie Graduate School of Management
3. University of New South Wales/University of Sydney - Australian Graduate School of Management
4. University of Melbourne – Melbourne Business School

Good Practice Australian Business Schools

1. Australian Maritime College – Graduate School of Marine Resource Management
2. University South Australia – International Graduate School of Management
3. Royal Melbourne Institute of Technology – School of Management

Acceptable Standard Australian Business Schools

1. Monash University – Faculty of Business Economics
2. Deakin University – Deakin Business School
3. University of Western Sydney - Sydney Graduate School of Management
4. University of Queensland – School of Business
5. Queensland University of Technology – Brisbane Graduate School of Management
6. Central Queensland University – Faculty of Business and Law
7. University of Southern Queensland – Faculty of Business
8. James Cook University – School of Business
9. Murdoch University – Murdoch Business School
10. Curtin University of Technology – Curtin Business School
11. University of Tasmania – School of Management
12. Australian National University – National Graduate School of Management
13. Canberra University – School of Business and Government

Remaining Australian Business Schools

1. Edith Cowan University – Faculty of Business and Public Management
2. Charles Sturt University – Faculty of Commerce
3. University of Western Australia – Graduate School of Management
4. University of Adelaide – Adelaide Graduate School of Business
5. Bond University – Faculty of Business
6. LaTrobe University Melbourne – Graduate School of Management
7. Victoria University – Faculty of Business
8. University of Ballarat – School of Business
9. Newcastle University – Graduate School of Business
10. Griffith University – Graduate School of Management
11. Swinburne University of Technology
12. University of Wollongong – Graduate School of Business & Professional Development
13. Southern Cross University – Graduate College of Management
14. University of Notre Dame – Mendoza College of Business
15. Northern Territory University (Charles Darwin University) – School of Law and Business
16. Flinders University
17. University Sunshine Coast – Faculty of Business

APPENDIX F
LIST OF ATTENDEES AT RECOMMENDATION WORKSHOP

Australian Business Schools by Criteria

On 4th June 2004 a workshop was held at MGSM City Campus in Sydney to reflect on the research results of the study and to identify relevant and realistic recommendations. The following people were represented at the workshop:

- Bob Marks – AGSM
- Suzanne Benn – Graduate School of Business, UTS
- Robin Kramer – MGSM
- Grant Jones - MGSM
- Andrew Griffiths – School of Business, UQ
- Peter Castellias – Global Knowledge Ventures
- Cathy Crawley – Arup Sustainability
- Katharine Adams – Arup Sustainability
- Amanda Keogh – Macquarie University
- Daniella Tilbury – Project Director, Macquarie University

Professor Dexter Dunphy from UTS, and Mark Crosby from MBS were unable to attend the workshop.

