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Submission to

Senate Education, Employment and Workplace Relations Committee

Inquiry into the Effects of Climate Change on Training and Employment Needs

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Terms of Reference

The Senate Standing Committee on Education, Employment and Workplace Relations is inquiring into the capacity of universities and other research and training institutions to meet current and future demand for climate change professionals and possible measures to assist understanding of climate change in the Asia-Pacific region, including provision of training and skills assistance

Southern Cross University

Southern Cross University is a dynamic research oriented university located on the north and mid-north coast of NSW. The University has a strong focus on regional engagement and has developed excellent links with industry, professionals, and local, state and Federal government departments in the region and throughout Australia due to its capacity as a major provider of distance education. The University has also developed a strong international presence teaching programs in collaboration with research universities and educational organisations throughout the Asia Pacific region and more broadly throughout the world. Southern Cross University is a participant in the global university-networked environment and seeks to become a global leader in innovative and applied education, especially in the area of climate change. Preparing our students for employment opportunities and with capabilities to meet the challenges posed by the Twenty-First Century global economy is one of our key learning and teaching objectives. Within this context Southern Cross University has identified preparing and educating climate change professionals as a very high priority and has commenced developing courses and units of study that are discussed below.

Future Demand for Climate Change Professionals

At Southern Cross University the Graduate College of Management, the Faculty of Business and Law and the School of Environmental Science and Management have sought funding to develop Australia's first Graduate Diploma in Carbon Management (GDCM) under the Diversity and Structural Adjustment Fund of the Department of Education, Employment and Workplace Relations.

The proposal outlined the development of postgraduate qualifications, in carbon management (including carbon accounting, trading and sequestration), articulated with Masters degrees and professional development units, to address student and employer demand to implement the proposed emissions trading scheme and also to manage carbon sustainably.

The introduction of an Emissions Trading Scheme in Australia by 2010, following the Garnaut Review and Recommendations, and the Government's Green Paper will create an increasing demand from students to obtain qualifications in carbon management and also from employers for employees who can measure, manage and trade in carbon outputs of an organisation.

The objective is to design, develop and implement postgraduate qualifications in Carbon Management that meets both student and employer demand and provides employability skills for graduates in an emerging carbon neutral economy.

The new qualifications will enable students to articulate from the new Graduate Diploma in Carbon Management (GDCM) into a new degree of Master of Carbon Management (MCM). Alternatively, students will be able to articulate into other Masters programs, including Business Administration, Environmental Science or Forest Management degrees currently offered by Southern Cross University.

Southern Cross University is exceptionally well-qualified to develop these courses, given its existing expertise in Commerce, Management and Forestry. Southern Cross University has the largest Forestry program in Australia, and its programs are highly regarded by the forestry sector. SCU Forestry is a participant in the CRC-Forestry, and maintains close links with forestry and emissions trading agencies. This study program directly addresses a call by the National Forestry Education Summit (Canberra, 20 May 2008) for such courses.

The GDCM will comprise eight units of study as follows:

- Regulation and management of carbon;
- Carbon accounting systems and practice;
- Audit and verification of carbon;
- Trading and valuation of carbon credits;
- The carbon cycle and sequestration of carbon;
- Biofuels and their carbon footprint;
- Integrating carbon sequestration with other environmental services;
- Extension and advisory services.

The MCM will involve an additional four units of study including a unit in Research Methodology and a three unit supervised research project in carbon management.

Specific learning outcomes include students being able to:

- Identify, classify and measure carbon emissions in an organisational setting;
- Prepare and analyse carbon management plans and emissions reports;
- Evaluate business risks and strategic opportunities in a carbon neutral economy;
- Advise on a range of current and emerging carbon management issues, including audit systems;

- Understand valuation of carbon credits and trading of carbon credits on financial markets;
- Advise rural landholders on how to maximize carbon sequestration within existing land uses.

The program of study will be developed in collaboration with industry partners from groups such as Catchment Management Authorities, Aboriginal Lands Councils, National Association of Forest Industries, Institute of Foresters of Australia, National Farmers Federation, CPA Australia, National Institute of Accountants, Institute of Chartered Accountants, Financial Services Institute of Australia. Employer organisations across the region served by SCU will be invited to participate in the project.

The curriculum will be designed so that it provides students with practical employability skills, ensures related work-integrated learning, and will be accessible to part-time students already in the workplace. Particular attention will be devoted to carbon management in rural industries and landscapes, and to carbon sequestration in conjunction with the provision of other environmental services.

Measures to Assist Understanding of Climate Change in the Asia-Pacific Region

The above programs being developed by Southern Cross University will in the future be made available throughout the Asia Pacific region via distance education and through collaboration with partner institutions in various countries such as Malaysia, Singapore, Hong Kong, Vietnam, China and Indonesia. Our capability to assist in educating and training climate change professionals will ensure that countries within the Asia Pacific region have the capability to address climate change at the organisational and enterprise level in addition to that of government policy making and regulation.

Training and Skills Assistance

The Australian Government has a great opportunity to support Southern Cross University's initiative and also to provide funding and other technical assistance to universities throughout Australia in the following ways:

- Establishing frameworks for curriculum development, innovation and peer review for programs recognised as educating climate change professionals.
- Developing frameworks for accreditation and certification of degrees, diplomas and other awards at a national level for the graduates of programs leading to certification as a climate change professional.
- Supporting national and international recruitment strategies for academic staff so as to position Australia as a global leader in the education, training and recruitment of climate change professionals.
- Supporting networks of employer and industry groups with universities and other training and educational organisations so as to link industry expertise with student learning and development through an application of Work-Integrated-Learning in the educational standards for climate change professionals.
- Providing additional financial support for students who seek careers as climate change professionals by providing a higher level of Commonwealth Support for student places for those enrolled in programs leading to careers as climate change professionals. For example, this support may be equivalent to that for science students as compared to the level of Commonwealth support for students studying general business or law degree programs.

We look forward to the Committee consideration of our submission and would welcome the opportunity to make a further oral submission to the Committee if this is requested.