

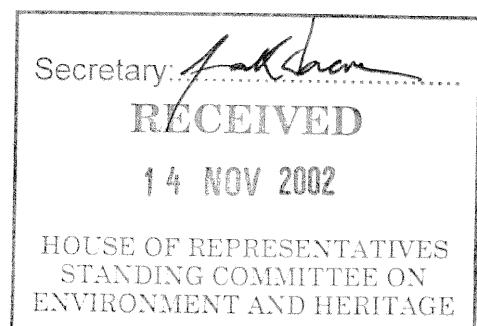
**JOINT SUBMISSION BY THE BARTON GROUP AND THE ENVIRONMENT
INSTITUTE OF AUSTRALIA
TO THE
HOUSE OF REPRESENTATIVES
STANDING COMMITTEE ON ENVIRONMENT AND HERITAGE
Reference : Employment in the environment sector**

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Employment in the Environment Industry

A Joint response of Environment Institute of Australia and the Barton Group

1. The Barton Group and The Environment Institute of Australia

The Barton Group

The Barton Group is the CEO alliance of environment industry leaders charged with responsibility for implementing the tasks assigned to Industry in the Environment Industry Action Agenda. (EIAA) Details of the Barton group can be found on www.Bartongroup.org , and details of the EIAA can be found at www.industry.gov.au/agendas

The basic premise of the Barton group is support for the view that in business, environmental sustainability is about long-term competitiveness. Sustainability must be integrated into business as a basic competitiveness driver and that business practices and processes be adjusted to support this philosophy.

The Barton group is in the first year of implementing the 18 recommended actions of the EIAA.

The Environment Institute of Australia

The Environment Institute of Australia currently assists in providing a benchmark of performance for Australian environmental practitioners. EIA members, whose work activities are related to environmental policy analysis, environmental management, environmental protection, natural resources conservation or environmental education, communication and research, are acknowledged in both Industry and Government. The development of inter-disciplinary capacity building is a core aim of the Institute.

The Institute is a not-for-profit non-political organisation that serves the needs of professionals as specialists and as contributors within the broadest sphere of environment. Within the environment profession, there are numerous functional areas of work as reflected in our membership.

The Environment Institute of Australia (EIA), is the representative organisation specifically formed to meet the needs of the growth area of environmental practitioners from every sector, field and industry - scientists, policy analysts, planners, engineers, educators, environmental economists, architects, lawyers, landscape architects, foresters, geologists, nature-based tourism operators, academics, consultants, and government officers. We have approx. 1800 members in Australia with an underlying growth factor since 2000.

The principal functions of the EIA are to:

- Facilitate interaction amongst environmental professionals
- Promote environmental awareness
- Advance ethical and competent environmental practice.
- Promote professional development upskilling of environmental professionals

2. Environment Industry linkages

The companies involved in the Environment Industry are typified by a small number of large water and waste companies, and a very large number of small and medium sized organisations providing goods services and skills in environment management and monitoring. Many of these companies export services and products particularly to the Asia Pacific region in a market that is rapidly growing.

The conventional definition of the environment industry is firms providing goods and services related to water, waste and air quality and treatment, and goods and services associated with pollution and its remediation.

This narrow focus on traditional service delivery areas has two shortcomings:

1. It excludes emerging and new environmental issue areas (eg. biodiversity, renewable energy and energy efficiency & climate change, coastal ecosystem collapse, salinity), and
2. It focuses attention on delivery functions rather than policy and specification functions

The needs of specific technical environmental education are generally well met by state agencies and by existing institutional arrangements, although the environment sector is a relatively new sector with rapidly changing needs.

It is in this context that the Barton Group and the Environment Institute of Australia seek to submit a joint submission to the Inquiry on employment in the Environment Industry.

3. Environmental Education

Environmental education is identified as a vital component in realising high quality employment opportunities within the environmental sector.

Environmental education has been introduced at all levels throughout Australia over the past 30 years. Whilst much of it is excellent, especially in our schools, it is not always as effective as it might be.

It is widely recognised that the world is experiencing massive and growing environmental problems. Australia is no exception as our current issues associated with drought, water and salinity clearly demonstrate. Environmental education is an essential prerequisite for dealing with the problems effectively.

We need an educated population, which appreciates the environmental consequences of much of our everyday activities, which comprises an environmentally informed electorate, and which understands issues and participates as a community in environmental management.

Environmental education for this general purpose needs to focus on how people interact with their environments.

Additionally, qualified people in a wide range of occupations are needed to deal with environmental problems - in government agencies, as private consultants, in commerce, trade and industry, in various decision-making positions, as technicians and contractors, and as skilled intermediaries between researchers and community groups.

Environmental education therefore needs to start early - as it already does in our primary schools - and progress through secondary, technical and diploma levels to fully professional qualifications in our tertiary education institutions.

There is also a nexus between education and research. It is not always the case that enough is already known about environmental dynamics for problems to be solved simply by providing adequate funds and advisers to land managers or communities. There are fundamental questions for which research is required to provide new knowledge and understanding, and there is always a need to develop new or improved technologies.

The Institute considers that environmental education is an essential component of Australians' education at all levels.

The Institute recognises that 'environmental' problems and issues are not restricted to the biophysical environment but involve all aspects of the surroundings of people, including social, economic, cultural and health aspects. The Institute considers that the focus of environmental education, at progressively increasing levels of sophistication, should be on the numerous ways in which people interact with their environments and the complex implications of those interactions.

The Institute considers that a broad environmental education should provide a good understanding of biophysical environmental process and dynamics *and* a broad range of land use and management practices and processes, human attitudes towards and perceptions of the environment, environmental economics, environmental legislation, environmental ethics and an understanding of political processes.

The Institute strongly supports the preparation of an up to date comprehensive student text for Australian students.

The Institute considers that environmental education in primary and secondary schools can be carried out effectively by teachers with broad qualifications in areas such as the natural sciences, geography and environmental science. But at tertiary level more specialist teaching is required, with the student becoming the synthesiser (with guidance).

The Institute considers that a range of environmental management techniques for professionals need to be taught at diploma or postgraduate levels. These techniques include (but are not restricted to): environmental assessment (including toxicological and bioassay

approaches; physical, chemical and biological monitoring; ecological monitoring and assessment; environmental audits; environmental management systems; environmental quality indicators; state of the environment reporting); land evaluation (including land systems techniques, carrying capacity, landscape aesthetics, land capability assessment and land suitability assessment); environmental impact assessment; risk analysis; cost/benefit analysis; decision making; methods for achieving public participation; environmental law; environmental ethics; environmental and spatial statistics; geographic information systems and remote sensing, and environmental modelling.

However, the Institute notes that such professional courses are fully effective only if the students already have sound environmental educational credentials.

The Institute also supports specifically designed extension courses, for example for Landcare officers, integrated catchment management coordinators, designed to train people to deal with community groups, farmers, local, State and Federal government agency personnel, and professionals in commerce, trade and mining. People skills, as well as environmental expertise, are crucial.

The Institute also recognises that there is a need for courses in particular skills for environmental technicians (for example in pollution abatement) and contractors (for example in techniques for controlling weeds).

The Institute recognises that there is a nexus between research and teaching at the tertiary level and strongly supports the need for a significantly increased research effort in all areas of environmental knowledge.

4. Barton Group Employment Development Opportunities

The principal focus of the Barton group is bringing an appropriate level of environmental awareness and training to the many tens of thousands of professional and technical officers who devise and implement corporate and government environmental policy via planning, works specification, contract and procurement specification and administration, by procurement oversight, and similar functions. These officers establish the terms of engagement at 'the front line' of environment management. The Environment Industry is the functional service provider to carry out the specified works and activities.

Specifically the Barton Group has identified the following employment development opportunities:

Knowledge of the environment - Create institutions to foster an environment knowledge culture and exploit emerging broadband and digital database accessibility to disseminate (via spatial datasets) relevant information for informed management decisions.

Metrics & Analysis – Foster business analysis that incorporates environmental data into routine business & management planning. Skills and a plan are needed here for the generating the necessary analysis, and identifying the relationships and associations which management can apply as commercial knowledge. (Triple Bottom Line (TBL) reporting is based on that premise that the supporting analysis be applied in planning and management of government,

and firms (corporates and SME's alike). Considerable training and job development is needed to enable TBL reporting to deliver on its potential management benefits.)

Eco-efficiency - Establish a training framework to support eco-efficiency in public and private sector procurement. Leadership in procurement is flowing from public sector, but skills need to be developed and made available in agencies to ensure an appropriate and disciplined approach to implementation of eco-efficiency. Such a process can be expected to have a flow-on effect to the private sector.

Clusters - Enable small States, regions and sectors to realise 'economies of scale' via clusters and networks. Regional & industry development officers need relevant training on how and when to use clusters, and large business and SME's needs to be educated as to how to engage in, and with a business and technology cluster.

Stewardship - The principle of stewardship is central to the future of sustainable development. We need to develop institutional arrangements for providing skills and understanding of introducing in applying stewardship in all levels of government , business and in institutions.

Business / Environmental Standards - Where environmental issues are 'pre-market' and considered as public goods, applied research is needed to understand the nature of the implicit social contracts which under pin these functions, and to assess the social and economic impacts of other standards. Such research is precursor for economic instruments becoming practical and functional management tools. More needs to be done on the role & nature of stretch targets, voluntary agreements and incentive schemes to create vehicles for stewardship arrangements.

5. EIA Student Initiative

The Environment Institute of Australia recognises the crucial role that it plays in bringing university graduates into employment within the environment sector. In 1999 EIA launched its Mentor Program, an important first step in the development of the Student Initiative.

A key part of the Student Initiative is the establishment of a Student Mentor programme. Utilising the EIA computer databank and a volunteer register the EIA offers all environmental student members an opportunity to be linked to an existing professional practitioner who will have the responsibility of providing ongoing guidance, when requested, to the assigned student.

Given the diversity of practice within the broad area of "environment", students are given the opportunity to be matched as closely as possible to their future career path. So a student of environmental economics will be linked to a practitioner in that field of economics just as an environmental engineer will be similarly linked to an engineer with a relevant practice.

Although opportunities to actually meet face to face are encouraged, meetings are scheduled mostly by telephone and email. Mentors and students are guided through the process with a written document delivering the First, Second and Third contact requirements.

Table 1 Mentoring Programme Eligibility Criteria

Students	Mentors
<ul style="list-style-type: none"> • Student or associate (recent graduate) members of the EIA 	<ul style="list-style-type: none"> • Full or Fellow members of the EIA
<ul style="list-style-type: none"> • currently studying, or have recently graduated from, an environmental course 	<ul style="list-style-type: none"> • have an established work record within the industry
<ul style="list-style-type: none"> • available to commit for the time requirements of the programme ie. to participate in a minimum of one 'contact*' per month for three months 	<ul style="list-style-type: none"> • available to commit for the time requirements of the programme ie. to participate in a minimum of one 'contact*' per month for three months

The mentoring programme initiated by the Environment Institute has to date been incredibly successful in spite of the Institute's limited resources with many emerging professionals benefiting. The Environment Institute of Australia is committed to further developing and growing this important programme.

“One of the most positive legacies any of us can leave is to have assisted those who follow to be better able to face life's challenges and, if possible, help improve the world in which we live. In the professional practice context, this means giving a helping hand to those starting off in their careers.”

Simon Molesworth QC EIA National President, June 1999

6. Certified Environmental Professionals

It is the expectation of the Institute that we will witness a unprecedented increase in the demand for formally certified environmental professionals to be employed to prepare environmental management systems, carry out environmental audits and be responsible for the "sign off" of projects having potential environmental impacts. This expectation is sustained by a growing awareness of sensitivity within the community worldwide, demanding assurances that adverse ramifications, such as environmental harm, can and will be avoided. The recent issues in the accounting profession within the auditing field and the ever growing area of duty-of-care driven litigation with insurance liability consequences, will have the affect that there can be no compromise: employ the right person - competent, knowledgeable, responsible, professional and ethical - or else. This trend to significant increases in employment of environmental professionals is inevitable, if public liability issues are to be reduced to acceptable levels and private confidence (for say, investment purposes) is to be achieved and maintained.

In a recent submission to the *Senate Economic References Committee - Public Liability and Professional Indemnity Insurance* EIA stressed the importance of Certification for Consultants and employees within the context of PI Insurance. The submission stated that "A strong consulting business is a key factor in delivering environmental outcomes. If Australia is going to be a leader not a follower - and we are to press ahead with a window of opportunity for development of Australia's innovative technologies - and provide solutions to many environmental issues, then we need highly experienced practitioners to develop this growth through strong, financially stable, well resourced and educated practitioners".

One of the major ramifications of the growing demand for competent environmental professionals, will be the increasing obligation placed on the shoulders of employers (such as Government) to be assured that prospective employees and contract consultants are in fact competent. This in turn places an obligation squarely before the EIA and equivalent professional institutes around the world, to ensure that its members are capable of being accredited, of having their professional competence, professionalism, indeed their adherence to ethical standards, established.

For the environmental profession to demonstrate appropriate levels of competence of its members, it is desirable to have a series of common yardsticks against which such competence can be measured. The EIA believes that the most appropriate means of achieving this is through a certification scheme which is supported by the profession, by industry, by governments throughout Australia and by the wider community.

Over the past 6 years, various levels of research into the issue of certification or accreditation has been undertaken by the EIA. Countless hours of resources have been put to this project. A journey had to be taken through the initial papers and discussion on Accreditation at several levels. This is a pathway that other countries, especially Canada, have taken also. Canada's journey has taken 5 years of continuous work supported by the Canadian government. In Australia, over 6 years of work has been donated by EIA members resulting in a position where members and some stakeholders are ready to support this process.

It is envisaged that the project, now several years down the track will take 3 years to complete. A budget has been developed by EIA to show resources required. A draft of this budget and request for assistance was presented to Minister Kemp at a recent meeting

Major Conclusions and Recommendations

1. Strong and competitive industry within the environment sector will generate environmental employment opportunities, many of which will generate export income.
2. Whilst the environmental education sector in Australia is strong, there is no room for complacency. Australia must continue to promote excellence, currency and innovation in environmental education.
3. Excellence within the environmental industry sector and environmental education will contribute substantively to sustainable practices within Australia.
4. Providing linkages between educational institutions, emerging environmental professionals and industry will help ensure that emerging environmental professionals are attuned to Australia's environment sector. The EIA and the Barton Group consider that they are well placed to be able to contribute to ensure this outcome and would welcome the support of the Federal Government in initiatives that are currently underway.
5. Certification of environmental professionals is seen as an essential element in the driver towards sound environmental practice. The EIA considers that it is in a strong position to drive and develop an environmental professional certification scheme but it cannot do this alone. It seeks the support of the Federal Government in bringing forward this certification scheme.