

# The Australian Environment Industry

**A framework for domestic and export market development**

**and a**

**Feasibility study for an Australia Inc. Showcase**

Commissioned by:  
Environment Australia  
and the Department of Industry Science and Resources

Prepared by:  
The Environment Management Industry Association of Australia (EMIAA)

## *PREFACE*

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The environment industry has the potential to create one of the biggest opportunities for enterprise and technical innovation that the world has ever seen. It will generate profits, trade, employment and technological advances in both rural and urban settings, as well as protect the environment.

The environment goods and services industry consists of activities which produce goods and services to measure, prevent, limit, minimise or correct environmental damage to water, air and soil, as well as problems related to waste, noise and eco-systems. This includes both end-of-pipe equipment and cleaner technologies, products and services that reduce environmental risk and minimise pollution and resource use. (OECD, 1996).

Many see this industry, the *business of the environment*, and moves to sustainable development, as having the potential to create a new industrial revolution by enabling mainstream industry to build international business which is increasingly linked to triple bottom line (economic, social and environmental) performance. To achieve ecologically sustainable development, Australian industry must have access to leading environmental technology industries - the environment industry is therefore perceived to be the 'ace card' facilitating the environmental performance improvements that will be necessary to achieve sustainability.

Countries, such as France, Germany, the Netherlands and Canada have already developed collaborative government-industry strategies to position their national interests. These strategies have been successful and their environment industries are able to take advantage of new market opportunities as they arise. Australia is well-placed to do likewise, but our future success is predicated on there being an over-arching market development strategy and a suite of market development tools.

The Australian environment industry has much of the requisite breadth, depth and innovation to interest the global marketplace. But to date the industry's growth has been limited by the small scope and scale of the domestic market. And scope and innovation alone are not enough - the world has to be made aware of Australia's skills and technologies if we are to establish our true market share. Notwithstanding our constraints, the industry has managed to achieve \$8.6 billion in domestic sales, and acknowledged benchmarks in technologies, systems and services.

The purpose of this paper has been to look at the industry and then put forward a select number of recommendations to take the industry forward. These recommendations have been synthesised from ideas received from industry players, and the final document is the joint effort of a number of industry associations and organisations. It is anticipated that this study will lay some of the groundwork for the Environment Industry Action Agenda and will support the Government's stated intent of integrating the principles of sustainable development across all Government Agencies.

## ***EXECUTIVE SUMMARY***

### **VISION - *TO DEVELOP THE FULL COMMERCIAL POTENTIAL OF THE AUSTRALIAN ENVIRONMENT INDUSTRY IN DOMESTIC AND EXPORT MARKETS***

The Environment Management Industry Association of Australia has collaborated with a number of industry groups to prepare and present an analysis of the environment industry, its prospects in domestic and export markets, and initiatives that can bring those prospects to fruition.

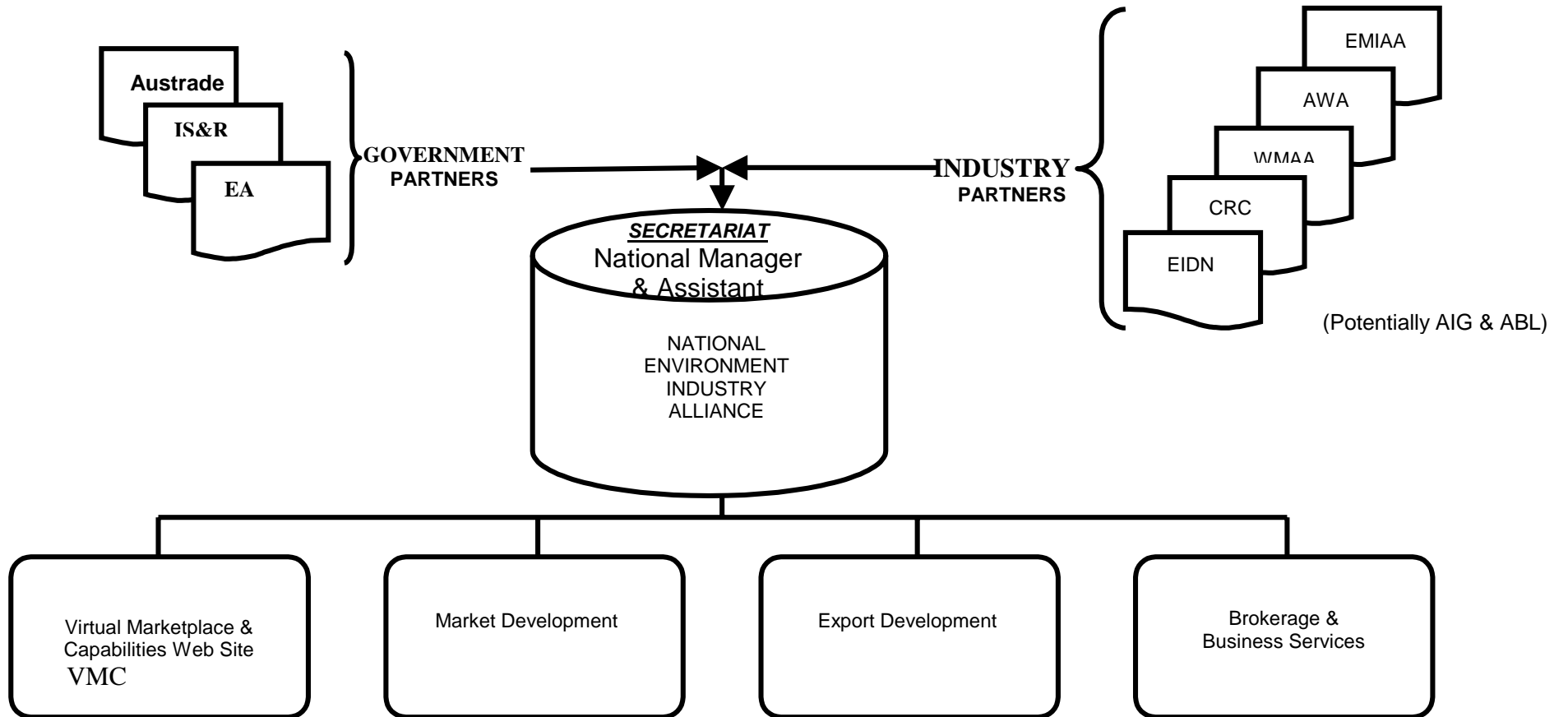
This study precedes development of the Action Agenda for the environment industry by Industry Science & Resources, Environment Australia, and the industry itself. It therefore can play a useful role in highlighting strategic issues that can be addressed to improve industry competitiveness.

The central themes underlying all recommendations brought forward in this report are greater integration of the industry, greater collaboration between industry and government and an overarching market development strategy. In all, six strategic agenda areas are highlighted:

- unify the industry laterally
- promote the industry through an Australia Inc. showcase and other marketing initiatives
- engender innovation & capability diffusion
- integrate the industry vertically
- develop the SMEs of the industry
- build industry-government collaboration

Central to the preparation for, and delivery of, outcomes from these recommendations is the establishment and of a National Environment Industry Alliance. It is proposed that this body be a joint Government-industry alliance resourced and funded by both and directed in its activities by the partners from both sectors.

# A GOVERNMENT – INDUSTRY PARTNERSHIP FORGING A NATIONAL ENVIRONMENT INDUSTRY ALLIANCE



It is proposed that this Alliance work to develop the Australian environment industry and focus market attention on the opportunities available through eco-efficiency and cleaner production, inter alia. The Alliance would act as a focal point for associations and organisations who play a key role in the environment industry. It would enable the various sectors to have a voice in agreeing the industry's direction, how best to address issues, and how to develop strategies. It is recommended that a Chair, independent of each of the member bodies, be appointed.

In order to implement the strategies proposed in this study the creation of a *national environment industry secretariat* is proposed. This operational body would be the focal point for the industry's development activities and would be directed by the Alliance members. It is anticipated that some of the strategies would be carried out by the Secretariat, with others, or elements of others, being allocated to the body (industry association, organisation, or Government Department) most capable of ensuring their successful carriage.

Embedded in this report is the proposal that this Secretariat be housed within the EMIAA - the peak environment industry body which has acted as the 'champion' for the industry over the past decade and whose sole mandate is to develop the environment industry. It is considered by the environment industry that this championship role will be critical to the successful implementation and meaningful outcomes of many of the recommended strategies. However, as other bodies also have expressed an interest to domicile this organisation, two other scenarios have been put forward.

The three options for implementation of a National Environment Industry Alliance Secretariat are set out below.

#### **OPTION 1. Run by the EMIAA**

- This option is supported by EMIAA (National Council and membership), Waste Management Association of Australia, Australian Water Association, CRC for Waste Management and Pollution Control and Environment Industry Development Network
- This option is supported for the following reasons:
  - EMIAA is the peak environment industry organisation in Australia
  - The recommendation is very strongly supported the Association's membership who wish the EMIAA to expand its domestic marketing, commercialisation, and export development work
  - The EMIAA is the only national Australian organisation to span all areas of the environment industry;
  - The Association has no conflicting areas of interest, it is therefore able to devote all its resources to promoting the growth of the environment industry; the vision for the Alliance is already EMIAA's mandate - *"to develop the full commercial potential of the Australian environment industry"*;
  - The Association has already developed a National Secretariat based in Canberra and is in the process of expanding this to provide Secretariats in other States;
  - The EMIAA has initiated the work to bring other associations together to ensure a national face for the industry;
  - The EMIAA has the core and sole focus of developing the environment industry - in delivery of solutions, development of trade and export liaison
- Concerns - The Australian Industry Group have expressed some concerns which are attached in Appendix 29.

**OPTION 2.** Run by Environment Australia as an amalgamation with the Industries Focus Unit

- Supported by Australian Industry Group
- The reasons for this support are attached in Appendix 29.
- Concerns
  - Government has commissioned this report and strongly advocates the amalgamation of the industry and for industry to take the lead in creating and implementing strategies to drive the industry forward
  - Government has agreed to recommendations in the Mortimer Report and under the COAG reforms, that wherever possible work be outsourced to the private sector; that while Government support is necessary for this industry in its emerging phase, Government should not be asked to 'run' one sector of industry
  - Members of the Environment Industry are best able to determine, through the Environment Industry Alliance what it is willing to pay for its services and how best to work with the resources of the Industries Focus Unit

**OPTION 3.** Put to open tender by national industry associations such as EMIAA, AIG, ABL, ACCI or the BCA

- Supported by the Australian Industry Group
- The reasons for this support are attached in Appendix 29.
- Concerns
  - The associations and organisations whose core business/membership is in the environment industry express the united concern that national associations with cross sectoral membership may conflict with the interests of the environment industry's growth and policy statements. There is the risk that management of the secretariat by an organisation whose core activities are *not* solely environment industry related might provide instances of conflicts of interest on policy development in areas such as greenhouse, biodiversity or dryland salinity, as well as in areas of commercial development within the environment industry
  - that such a move would remove the environment industry's potential to act as the honest broker between those with environmental challenges, those with the solutions, and Government at all levels. Furthermore the environment industry is concerned that having established collaboration and cohesiveness, such a move would serve to drive the industry apart again

It is proposed that the National Environment Industry Alliance will span the breadth of the environment industry and involve only industry organisations/national organisations committed to developing and projecting a competitive environment industry into domestic and export markets.

The recommendations presented build on prior work completed by ISR and EA, and the Alliance will reinforce the work of EMIAA and the CRC for Waste Management & Pollution Control in the EIDN program. In addition, the thrust of the recommendations and the Alliance build on the successful Enviro 2000 trade fair and conference promoted by AWA, WMAA and CASANZ.

In the six strategic agenda areas, some 21 core recommendations are put forward for consideration and action by the Government-industry partners. The recommendations involve the following commitments:

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<b>Strategic Agenda Area</b>	<b>Timeframe</b>
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Unify the industry laterally	4 years
Integrate the industry vertically	4 years
Promote the Australia Inc. Showcase	6 years
Develop the SMEs of the industry	4 years
Engender Innovation & capability diffusion	4 years
Build industry-government collaboration	4 years
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Total Industry & Government Commitments	4 to 6 years
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Costs have not been attached to these recommended initiatives, however, it should be noted that each strategy will require financial and in-kind support from Government and industry, and that the National Secretariat itself will need resourcing in order to implement some of the strategies. The vast majority of this resourcing is envisioned as support for specific strategies.

While there are some differences of opinion at detail level of recommendations these tend to be minor and all members of the Steering Committee are broadly supportive of the six strategic agenda areas highlighted in the report. Where written comment has been supplied these different points of view have been included in the appendices to this study.

The study has engaged a broad cross section of the environment industry - individual companies, acknowledged industry experts, State Government Department representatives, national organisations and national industry associations. This is the first time in Australia that an opportunity, at national level, has been presented for the industry to discuss its visions, its areas of commonality and the mechanisms to take strategies through to implementation for the benefit of the whole industry.

The creation of the National Environment Industry Alliance is important to the industry's future, but equally important at this stage of the industry's development, is Government's continued support to overcome the historical fragmentation of the industry. This entails proactive support for the *environment industry* in its national and international development, and the support must continue well into the implementation phase to ensure that processes that could re-fragment the industry do not evolve.

Through the resourcing of this structured industry based initiative, Government and industry will create and leave in-place a sustainable legacy and a significant supporting framework for on-going industry and export development.

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Glossary of acronyms

## ***PART ONE - SETTING THE SCENE***

### ***1. THIS DOCUMENT***

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The assignment to complete this document has been multi-faceted and involved coverage of a wide range of issues. In developing recommendations and presenting arguments for change, it is not acceptable to omit many of the issues covered, the suite of which provides a rich background and basis for the recommendations reached.

Recognising reader interest in focusing on the key issues relating to industry development and export growth, the document has been structured to target the key outcome issues. At the same time, it is recognised that many readers will wish to review and appreciate the background and environment within which the industry operates. To accommodate these broader interests, sections with detailed argument along with appendices are included.

Part 1 of the report starts with the ***Executive Summary***, which sets the agenda for action and the remainder of the report. A brief ***Introduction*** follows to introduce the reader to the scope of work required by the clients.

To provide a contextual environment for the environment industry and the recommended courses of action, a brief ***Snapshot of the Australian Industry*** is presented along with ***Opportunities to be Grasped***.

The ***Strategic Recommendations*** are then presented as a set of initiatives that need to be pursued if the opportunities are to be captured. This brings to an end the first part of the report and succinctly brings together a focused agenda for change, leadership and intervention.

Part 2 of the report deals with the ***Analysis of Recommendations***, developing the case for each and presenting cost estimates for their implementation. The report is concluded with a series of ***Appendices*** that present detailed background material substantiating many of the conclusions and recommendations reached.

### ***2. INTRODUCTION***

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The starting premise for this study was that the environment is a business opportunity not a cost, and that improved marketing coupled with presentation of integrated environment industry goods, services and technologies into commercial supply chains, will provide strong business opportunities.<sup>1</sup>

This study was commissioned by Environment Australia and the Department of Industry, Science & Resources, to investigate measures capable of capitalising on existing opportunities, and of developing new capacities in order to overcome current weaknesses or capability gaps.

This study has addressed the terms of reference of the commissioning contract from Environment Australia and DISR, which were:

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<sup>1</sup> There are significant opportunities for businesses that adapt to sustainable development. Achieving sustainability involves business embracing the concept of eco-efficiency - providing goods and services more efficiently while reducing resource consumption and environmental impacts. This can be done by reducing the material and consumption intensity of goods and services, maximising recycling and renewable resource use, reducing pollution and increasing product durability and service intensity (excerpt from the Commonwealth's Environmental Expenditure 2000-01).

- *Identify, analyse and prioritise the major market development impediments for the environment industry in Australia and overseas.*
- *Identify and analyse those environment industry sectors most likely to deliver strong business growth.*
- *Describe and analyse existing Commonwealth, State and industry market developments and promotion mechanisms (with particular emphasis on the gaps).*
- *Outline strategies on how the mechanisms identified and existing environment industry events can be better-coordinated and strategic alliances developed to build a well-resourced Australian Inc. approach to market development and promotion*
- *Should one of the mechanisms for developing better coordinated market development and promotion of the environment industry be the development of a biennial tradeshow and conference then:*
  - (i) *assess the financial viability of the event;*
  - (ii) *develop a business case for industry (and if necessary, Government) support;*
  - (iii) *ensure that the business case is reviewed by an independent organisation; and*
  - (iv) *if Government funding is required, identify the conditions that will determine when funding support is now longer required.*

The scope of the study, the resources allocated, and the support available, has precluded in-depth analysis or market research to quantify many of the claims made by industry. Some of the analyses and documentation of aspects required in the Scope of Work have been addressed in the body of the report, whilst others have been relegated to appendices to improve the readability and usability of the report.

Estimates of costs and benefits have been developed from Australian experiences and knowledge of some overseas examples. In particular, knowledge of the Canadian Government's support for their environment industry over the past decade, and the evident successes they have achieved in environmental performance and market competitiveness, has provided some basis for the levels of resourcing suggested.

This study aims to provide a basis for the industry analysis that will form an essential input to the Environment Industry Action Agenda being developed jointly by the Department of Industry Science & Resources and Environment Australia. In the process, it aims to highlight mechanisms via which the domestic market for the Australian environment industry can be strengthened and become the essential platform to launch a competitive export industry.

### **3. A SNAPSHOT OF THE AUSTRALIAN INDUSTRY**

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The environment industry is unlike most other business sectors. It has evolved from two fronts – from activities to redress the current and historical negative impacts of human activity on the environment, and from activities to put in place fundamental design processes that will deliver improvements for our future. This has resulted in a breadth and complexity to the industry that often defies simple structural definition of what constitutes the environment industry.

The industry is deemed to comprise suppliers of goods, services, technologies, systems, infrastructure, financing, research and development, and education and training. Its activities encompass:

- water and wastewater management
- river system and coastal zone management
- land management and rehabilitation
- air quality monitoring and control
- energy efficiency and renewable energy
- waste minimisation, resource recycling, waste treatment, waste disposal
- cleaner production technologies
- monitoring and instrumentation
- environmental research, analysis and technology development

At present the annual turnover of organisations within the above generic classes in Australia is estimated at between \$8 billion and \$11 billion (ABS data is considered open to interpretation). The global market for environmental goods and services is estimated to be in the order of \$800 billion (this is the figure researched by the Globe Foundation of Canada, differing from the OECD figure of some \$480 billion. However, as the PMSEIC Report, June 1999, referred to a potential \$700 billion market for goods and services to curb greenhouse emissions, we believe the larger figure of \$800 billion is more representative).

The demand for environmental goods and services in Australia is considered to be reasonably well satisfied by domestic and international participants, as evidenced by our relatively well presented urban environments. But our non-urban environmental deficiencies point to an underlying incapacity to grapple with the full socio-economic dimensions of environment management for complex systems, and bode poorly for our international recognition as good environment managers. This can be overcome in part by Government Departments and Agencies involving the environment industry directly in policy setting and regional planning - from the earliest conceptual stages through to implementation.

Estimates of the number of industry participants range from 1500 to 3000, with over 80% classified as small to medium enterprises (SMEs). Individually, SMEs have insufficient financial or human resources to develop and support a national initiative of industry development and market development. Many have a predominant preference to work alone so the industry lacks a collective inner focus. The industry is devoid of an over-arching development and marketing strategy, and this further limits its ability to demonstrate capacity and capitalise on our vibrant SME resources.

Development of a broad understanding of the long term economic needs for a healthy environment will be a major factor in the strengthening of the domestic market and consolidation of international competitiveness. The Government's work to promote ecologically sustainable development is therefore an important consideration for the future growth of the industry.

The environment industry is relatively young, fragmented, and has not developed the support mechanisms that other, more established industries have built up over many decades. This fragmentation occurs through failures such as:

- State governments competing independently for export positions
- Australian companies not naturally tending towards consortia development
- Management practices, purchasing policies and environmental standards varying across jurisdictions

- Governments agencies at all levels failing to integrate efforts that facilitate good environmental and business outcomes
- Australia not having uniformly adopted international standards
- Conferences and trade exhibitions traditionally being sub-sector focused
- Public and private R&D agencies not collaborating effectively

The fragmentation is exacerbated by the number of industry associations that represent various portions of the industry – each with their own agenda and objectives. Furthermore, the relatively small market base of industry companies in Australia means that associations are inappropriately competing for members and industry coverage.

The industry faces remnants of an historical distrust within parts of mainstream industry, which perceives the business of the environment as a strategic ploy to make life difficult and unreasonably costly. While some sectors - such as mining and food production - have adopted environmental science, goods, services and systems, this is seen as being on a company by company basis and is not systemic across the supply chain. This denies the environment industry the many benefits from the 'pull through effect' from industry implementation of Australian environmental best practice.

The potential for growth in the Australian environment industry is underpinned by strong national and international evidence of:

- increasing demand for environmental solutions
- increasing levels of legislation and enforcement
- emerging voluntary codes and reporting practices by mainstream industry
- an increasingly impatient public seeking social and environmental equity, and
- developing nations seeking the positive side of progress without the negative environmental impacts

The international marketplace for environment industry goods and services is fiercely competitive, and export success is contingent upon demonstration of a strong capability in domestic markets. In many regards, Government and business within Australia are not supportive of innovative 'home grown' technologies, and thus not building the requisite capacity for export success.

## ***4. OPPORTUNITIES TO BE GRASPED***

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### **4.1 An Integrated Presentation**

Leadership will be the single most important factor in developing and promoting the capacity and capabilities of the Australian environment industry. That leadership must stem from the industry itself and be strongly supported by government. To be accepted in the market as an integrated supplier, the industry must establish an integrated entity for the development and promotion of the industry.

Thus the prime opportunity to be grasped is that of forming an alliance among industry players and between industry and government partners who have a strong and vested interest in developing and promoting the capacity and capabilities of the industry. Such an alliance should aim to address the issues of fragmentation; developing and implementing integrated targeted marketing; and seek out opportunities for consortia building and alliances between partners.

## 4.2 Awareness of Integrated Capacity

To be a recognised force in the marketplace, the environment industry needs to better demonstrate its capacity and capabilities. Research and documentation are needed:

- *to describe the industry* – the number of players, their classifications, and employment levels
- *to quantify the industry* – domestic and export turnover, plant and equipment investment, current skills, education and training, and general contribution to national wealth
- *to qualify the industry* – validate claims of benefits from integrated environmental management, performance improvements and gains in eco-efficiency
- *to project the industry* – the investment strategies, future planning scenarios, and capacity to rise to the market challenges.

Target sectors for awareness raising and information dissemination are customers, the finance sector and the community.

**The customers** – as the primary buyers of environmental goods and services, this stakeholder group must be aware of the capacity of the environment industry if it is expected to make informed purchasing choices. Fundamental in the information supplied to customers must be the whole of life value associated with the environmental goods and services. Consistently, purchasing decisions are made on the basis of price, and insufficient attention is paid to whole of life value. Both the customers and the suppliers need to be appraised of the efficacy of best value selling and purchasing, in other words they need to understand that the incorporation of sustainability practices as a business decision *makes good business sense*.

**The finance industry** – this sector is poorly informed concerning the actual environment performance of companies. The sector significantly influences investment strategies in companies and should be aware of the ramifications of good and bad environmental performance. Information and awareness relating to actual and potential situations is essential to enable relative investment decisions to be made and relative rankings of investment options to be tested. Both the environment industry and the finance industry must collaborate in the development and dissemination of appropriate information that will permit informed decision making in future investments.

**The community** – levels of awareness across the community reflect a broad-based lack of understanding of the critical nature of environmental problems. There is a lack of comprehension of the degree to which daily lifestyle choices have negative environmental effects. There is a poor understanding of the capacity of the community to influence environmental outcomes through responsible purchasing practices. The complexity of environmental problems and the network of interconnections must be condensed and described so that responsible decisions can be made on the basis of sound and non-trivial information.

## 4.3 Progressive Procurement Practices

The “*greening of government*” is a target of government itself. This will include value-based procurement, through decisions that accurately reflect ESD considerations. Moving government purchasing, at all levels of government, towards green purchasing principals is likely to be one of the most significant steps in the development and promotion of an internationally competitive environment industry. Industry is looking for a collaborative, and whole of government approach.

Such a shift could increase the outsourcing of infrastructure projects, reduce the level of Government agency competition with the private sector, build the capacity of the industry, and enhance the profile of the industry in the eyes of private sector and international purchasers.

Included with this shift is a change of approach by industry towards the provision of solution packages for governments' needs. This can be achieved through consortia marketing, whilst at the same time niche technologies are marketed directly into the consortia. The shift requires action on the part of both industry and governments.

#### **4.4 Showcasing an Integrated Industry**

Demonstrating our integrated environment management capacity to markets is best achieved through one focal event, as part of an over-arching marketing campaign that is supported by the whole environment industry. This would be effective in focusing energy and resources to achieve the best impact. Such an event could be either annual or biennial, and typically include both trade exhibition and conference elements.

Industry associations and governments have a major role to play in such industry wide showcasing events. The combined objectives of such events include:

- trade development
- profile development
- purchaser awareness development
- industry development
- professional-personal development

As a package, trade exhibitions, with conferences, workshops and training opportunities, simultaneously build and project the capacity and capability of the industry.

A number of countries have highly successful international showcases for their environment industry, such as Canada - Globe, France - Pollutec, Germany - Hanover, Entsorga, IFAT, and various events within the USA. Those events that draw significant numbers of decision makers, policy setters, senior procurement officials and members of the environment industry are offering both technical and commercial environment intelligence and linkages.

With the emergence of Enviro 2000 on the Australian calendar this year, we are poised to do likewise, provided we build trade development and business development onto the existing frameworks.

#### **4.5 Demonstrating Integrated Capabilities**

Hard, physical evidence of successful applications is a proven means of demonstrating capabilities to impending purchasers. For exports, successful demonstrations in domestic markets are an essential signal that products deliver satisfactory solutions for home market purchasers.

There are numerous sites within Australia that could be better used for such purposes. There are also opportunities to be captured in new sites that emerge with time. A key to capturing sites for demonstrating capability is to also capture the interest and desire of the purchaser to permit their site, and operational data, to be made available to other potential purchasers.

Purpose built demonstration sites, such as the Homebush Bay Olympic site, and the Australian Technology Park, are unique, and represent an opportunity onto which further capabilities can be

built over time. Other opportunities exist in major residential developments in some of our capital cities – if only we look to package the embodied innovation for others to see.

#### **4.6 An Integrated Internet Profile**

The Internet is now well established as a research and marketing tool. It needs to be employed to advantage by the environment industry.

The fragmentation in other aspects of the industry is equally evident in efforts to promote aspects of the industry through the Internet. Further duplication should be avoided by creating a portal that would connect inquirers to the information they need. The portal would signpost other information sources and act as a window for initiating trade – the makings of a virtual marketplace.

## **5. STRATEGIC RECOMMENDATIONS**

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Six key areas have been identified for strategic intervention, leadership and action. Within each, a number of specific recommendations are made. There are strong linkages between the recommendations and they are designed to work synergistically to help achieve the overall vision.

The recommendations underpin the need to strengthen the domestic market and to develop the export market. Each is explored in the study and several have in-depth analyses attached in appendices. Through these recommendations it is anticipated that we can begin to bring this emerging industry onto a par with international competition.

The recommendations represent preferred mechanisms that industry believe to be the most workable and these recommendations are commended to the Government and industry for resourcing and pursuing over the next four years.

The six strategic agenda items are:

- Unify the industry laterally
- Integrate the industry vertically
- Market the industry, including promotion of the Australia Inc. Showcase
- Develop the SMEs of the industry
- Engender innovation and capability diffusion
- Build industry-Government collaboration

The recommendations associated with each of the six strategic agenda items are briefly discussed below. In Part 2 of this document the individual recommendations are analysed, discussed and cost estimates presented for their implementation.

### **5.1 Unify the Industry Laterally**

The breadth of the industry is well documented, providing the industry with both a challenge and an opportunity. Through lateral unification it is possible to combine resources and efforts to promote the industry and present a cohesive thrust into the export markets. Specific recommendations that will lead to, and leverage off, greater lateral unification of the environment industry are:

- **Create a National Environment Industry Alliance** – stimulate the formation of an alliance of professional and industry associations and organisations that are active in the environment industry.
- **Establish an Alliance Secretariat** – fund and resource the establishment of a secretariat to service the Alliance and act as a focal point of contact for the environment industry.
- **Implement a National Marketing Strategy** – industry (through the Alliance) and Government collaborate to develop and implement a national marketing strategy which builds a solid domestic base. This would include a Virtual Marketplace and Capability Portal, and an awareness raising and promotional campaign.
- **Prepare an Export Development Program** – work across the breadth of the Alliance to establish and project internationally a unified Australian brand and Team Australia approach via a comprehensive export development program.

## 5.2 Integrate the Industry Vertically

The market place is demanding integrated solutions. The Australian environment industry embodies each of the elements needed for such solutions. Through vertical integration it is possible to combine resources and efforts to deliver packaged solutions into both domestic and export markets. Specific recommendations that will lead to, and leverage off, greater vertical integration of the environment industry are:

- **Identify Market Beacons** – undertake extensive market research to identify the market sectors that will provide a 'pull through' effect, integrating and building the environment industry in the process (pull through industries are seen as those which in the course of their own business practices offer commercial opportunities to the environment industry)
- **Engage the Finance Sector** – commit resources to establish strong working relationships with the finance sector in its dual roles of participating in the marketing of packaged environment solutions, and as the analyst of corporate risk and efficacy in corporate investment strategies.
- **Establish a Brokerage Service** – build an industry-brokering vehicle that is cognizant of market needs, aware of industry capabilities and able to integrate the supply chain of expertise needed to deliver total, packaged solutions.
- **Know and Show Capabilities** – undertake industry analysis to fully comprehend the capacities and capabilities of industry players up and down the environment value chain, establishing the linkages and interdependencies that will better integrate the industry.

## 5.3 Promote the Australia Inc. Showcase

The Enviro 2000 event in Sydney during April of 2000 clearly demonstrated the capacity for sectors of the environment industry to collaborate and present a significant showcase of industry capability to the market. This existing platform represents a significant opportunity to build showcasing capacity for both domestic and export markets, at the same time as building the industry. Specific recommendations that will develop an Australia Inc. Showcase for the environment industry are:

- **Boost the Enviro initiative** – build on the biennial Enviro event to project a comprehensive Australian Showcase of capabilities to domestic and international markets, at the same time reinforcing and building the capacity of the industry itself.
- **Build Business into Enviro** – commit resources to extend the existing Enviro program to incorporate the 'business of the environment', an export marketing component, and to bring overseas delegations to the event.

## 5.4 Develop the SMEs of the Industry

Small to medium enterprises constitute 80% of the companies in the industry, they house a significant proportion of the emerging technologies and are a nursery for innovation and growth. Clearly defined support programs are needed to nurture SMEs and bring their capabilities to fruition. Specific recommendations that will lead to, and leverage off, the SMEs of the environment industry are:

- **Develop an SME support program** – establish an industry capability that can assist SMEs to become more market ready through building business, marketing and sales skills.
- **Facilitate access to finance** – establish a financial support system for small companies that will increase access to R&D support.
- **Develop consortia capacity** - establish networking support infrastructure that builds the linkages for SMEs into larger organisations and facilitates the formation of consortia.

## 5.5 Engender Innovation and Capability Diffusion

Dissemination of information, technology and knowledge is widely accepted as a productive mechanism for creating and fostering competitiveness. Specific recommendations that will lead to, and leverage off, greater innovation and knowledge diffusion in the environment industry are:

- **Increase the R&D Tax Concession** – targeted concessions for environment industry related innovation can overcome financial hurdles that presently do not hamper many sectors dealing with virgin and/or non-renewable resources.
- **Increase Venture Capital into the Sector** – removal or diminution of Government constraints on some sectors of the finance community will lift restrictions on the flexibility with which those institutions invest in SMEs and start-up businesses. Creation of equity and venture capital funds.
- **Build Linkages with R&D Groups** – SMEs regularly lack linkages to public and private sector research capabilities. Networks and programs of facilitation can increase the linkages and increase the level of knowledge sharing with industry.
- **Improve Tender Process** – establish a taskforce of industry and Government players to develop mechanisms which overcome the blockages created by many current Government tender specifications and standards (as per recommendations in the Mortimer Report)

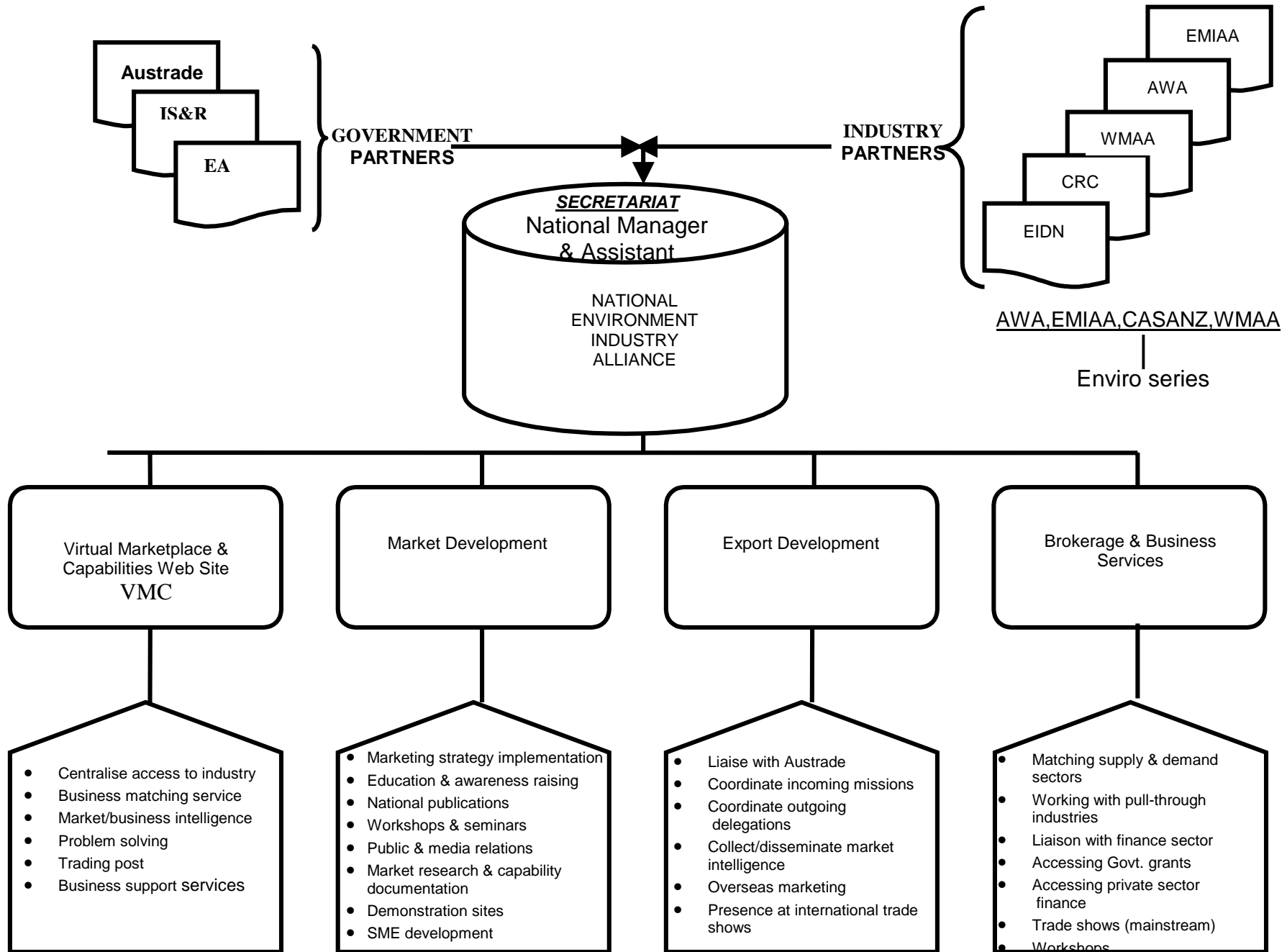
## 5.6 Build Industry-Government Collaboration

The relationship between the industry and Government is strengthening through a range of initiatives from both sectors. To facilitate development within the environment industry specific recommendations that can leverage off greater collaboration between Government and industry are:

- **Implement Greening of Government** – increase the level of Government action in the procurement of 'green' goods and services to support the claims of Governments and to demonstrate leadership in the thrust for sustainability.
- **Involve Industry in Regulatory Reform** – engage industry in the development and implementation of voluntary agreements, remove legislative barriers and restructure subsidies and pricing mechanisms to support sustainability.
- **Identify Industry Contribution** - undertaking research to quantify the benefit-cost relationship of the environment industry's activities.

- ***Establish Market Incentives*** – establish market incentive programs, targeting mainstream industry, which provide rewards/returns for improving environmental performance.

# A GOVERNMENT – INDUSTRY PARTNERSHIP FORGING A NATIONAL ENVIRONMENT INDUSTRY ALLIANCE



**5.7 Initial recommendations to strengthen the domestic and export marketplaces for the Australian environment industry (details on these recommendations appear in the body of this report)**

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**Unify the industry laterally**

Supported by EMIAA, AWA, WMAA, CRC, EIDN.

AIG and ABL support in principle but expressed reservations on specific recommendations and detail

<b>Proposal</b>	<b>Industry</b>	<b>Government</b>
Environment Industry Alliance	Collaboration of key associations and organisations to develop the environment industry.	Works in partnership with the Alliance
National Secretariat	Invited associations and organisations act as advisory board. Industry to supply office space, equipment, and the technical support base	EA and DISR on advisory board. Fund executive salary and senior assistant, each for four years

**Marketing**

Supported by EMIAA, AWA, WMAA, CRC, EIDN.

AIG and ABL support in principle but expressed reservations on specific recommendations and detail

Implement a national marketing strategy	Designed by the Alliance & implemented by the National Secretariat. Individual associations continue their own marketing work. Companies pay fee for service. Associations/companies provide specialist staff time and services	Funds marketing/publicity executive; capability/capacity research and documentation/publishing; marketing materials (including creative work, printing/production, dissemination)
Awareness raising & education/publicity and PR campaign	Undertaken by the National Secretariat in conjunction with the Environment Education Council (EEC), individual associations and government departments. Industry contributes in kind services (corporate PR and media support, expert spokespersons)	Funds media and PR consultancy services. Departments and the EEC develop programmes jointly with industry

Virtual marketplace and capability website	Run by National Secretariat, hyperlink to existing sites (industry, government, academia & other). A national portal, search engine, problem solving and business matching service with international outreach	Start up funding and support for four years, financial and in kind. Hyperlink EnviroLink and other relevant sites
Publications/multi-media (national sourcebook)	Largely industry underwritten	Some baseline support in first year
Awards/Hall of Fame	Industry agrees to build on and support the Banksia Awards	Government integrates PM's Awards into Banksia Awards, Ministers present. Government staff time, additional publicity support
Hi level business for a	National Secretariat works with Business Leaders Forum and other high level business groups. Industry provides some sponsorship and participates in fora	Sponsorship and participation of Ministers
Eco-efficiency challenge	Creation by Alliance and implementation by National Secretariat or by Government. Industry contributes sponsorship and participation	Creation and oversight
Environmental medals	Creation by EMIAA and implementation by National Secretariat. All associations welcome to run programmes	Some sponsorship and strong publicity support

### Export Development

Supported by EMIAA, AWA, WMAA, CRC, EIDN.

AIG and ABL support in principle but expressed reservations on specific recommendations and detail

Export development	Alliance draws up strategy in tandem with Government. National Secretariat implements umbrella strategy; industry associations continue existing programmes but feed intelligence to Secretariat. Some programmes outsourced to most relevant association/company	Austrade, EA, DISR help develop overall strategy. Provide funding for Senior Manager in Secretariat, provide funding for programmes which would not otherwise be realised and for initial project development
Austrade specialist	In kind support given by	Full time senior staff person

	National Secretariat, industry associations and major companies	appointed with exclusive mandate on the environment industry
Overseas marketing and advertising (some specifically related to Enviro)	Coordinated by National Secretariat. Industry contributes preparation of materials, time, research, some travel	Financial and in kind support
Overseas trade shows x 6 p.a. (to include information development and dissemination)	Coordinated by National Secretariat. Industry contributes staff time, travel and accommodation	Financial support and Austrade staff costs
Outgoing missions/facility visits	Coordinated by National Secretariat. Govt Departments/agencies, industry associations and States continue current activity but feed intelligence to Secretariat and agree to work as Australia Inc. Current levels of support and activity to be augmented under a cohesive marketing strategy	Austrade/EA/DISR staff costs. Government delegation travel & accommodation costs
Incoming delegations (Enviro and general)	As above	Government underwrites incoming delegations for the Enviro Series
Market intelligence research (Austrade) & industry dissemination	Information gathered and disseminated by National Secretariat	Austrade provide regular intelligence reports to National Secretariat
Training workshops domestic	Coordinated by National Secretariat and Government, implemented by industry associations	Austrade, EA and DISR work with National Secretariat and specific associations

**Integrate industry vertically**

Supported by EMIAA, AWA, WMAA, CRC, EIDN.

AIG and ABL support in principle but expressed reservations on specific recommendations and detail

Know and show capabilities. Research into industry capacity and capabilities; case study development	Coordinated by National Secretariat and Government, work undertaken by appointed consultants/associations	Joint coordination role. Government uses data in awareness raising campaign and sustainability drive
Identify market beacons	National Secretariat works with Alliance members and other industry sectors to identify mainstream industry needs and future 'pull through' potential for the environment industry	Government assists with support for the high level fora and by opening doors
Brokerage and business matching service	Operated by the National Secretariat. Industry funds through fee for service/commissions	Door-opening, contracting specialist consultants in start up phase
Engaging the finance sector	National Secretariat works with finance sector associations, companies and institutions	Government gives support at Departmental and Ministerial levels for initiatives. National programmes developed in tandem with environment industry, finance and insurance sectors
Demonstration sites	Industry associations and companies put forward proposals for competitive assessment by Alliance. National Secretariat has coordination role	Government creates a fund to support better use of extant sites and creation of new sites, plus integration of innovation
Attending trade shows	National Secretariat prepares recommendations, provides staff, oversees design of booth and preparation of materials	Government provides some funding support for materials, booth, travel and accommodation
Consortia development	National Secretariat works through industry associations to encourage their memberships to form market effective consortia; provides market intelligence on opportunities in domestic and export markets	Government provides market research and intelligence and funding for an SME programme
Clusters/incubation parks	National Secretariat works with industry/professional	Government provides research assistance and seed funding

	associations, research bodies, local authorities and State Governments to identify and capitalise on opportunities	for SMEs
Technical workshops and networking seminars	National Secretariat maintains overall calendar and information database. Individual associations undertake the work with their memberships	Government contributes staff expertise and time and some seed funding
Expert consultative panels	National Secretariat compiles and maintains database of experts and assists with convening panels	Government undertakes to make better use of environment industry expertise in high level and technical fora
Research foundation (to be researched)	TBR	TBR

### **Promote the Australian Showcase (Enviro Series)**

Supported by all members of the Steering Committee

Enviro Series	Existing secretariat through the AWA is maintained. AWA, WMAA, CASANZ, EMIAA are partners. Industry undertakes to add export development and business of the environment themes to trade show and conference. Industry maintains and develops its current level of support (financial and participation).	Government undertakes to provide the additional financial and in kind support necessary to develop Enviro into the Australia Inc Showcase, and make it competitive with other countries showcases. Also agrees to provide sponsorship; support to attract high level (including Ministerial) fora; delegates; trade show exhibits; PR and media support; marketing expertise; funding for incoming delegations from selected countries
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### **SME development**

Supported by EMIAA, AWA, WMAA, CRC, EIDN.

AIG and ABL support in principle but expressed reservations on specific recommendations and detail

SME support programme: (grant funds)	Alliance works with Government and finance sector. National Secretariat assists Government with implementation of the programme. Suggestions include marketing and business development, grant and private sector funding access, etc	Government provides funding and implementation of the programme
Facilitate access to private sector finance	National Secretariat develops as part of its brokerage service. Programme either Government funded or NS takes commissions from companies assisted	Government opens doors, requirement for programme funding to be investigated
Accessing Government funds	National secretariat assists by developing a better industry knowledge of support programmes	Government outplacement into National Secretariat for one year. Government better markets and promotes its grant funds and other support mechanisms. Buzlink to be strengthened.
Training programmes	National Secretariat and industry associations work up and jointly implement programmes	Government provides expert staff and funding
Attending Enviro	National Secretariat and Government assess competitive applications in tandem with States	Staff time and programme funding
Industry association membership support	Relevant associations put forward proposals to Government. SMEs participate on a matching funds basis	Government funds half of membership for SMEs for a maximum of 2 years

### Engender innovation and capability diffusion

Supported by EMIAA, AWA, WMAA, CRC, EIDN.

AIG and ABL support in principle but expressed reservations on specific recommendations and detail

Increase R&D tax concession and provide commercialization assistance	Industry provides matching funds	Tax concessions for sustainability R&D increased to 200% with specific support mechanisms developed for operational trialing and early stage commercialisation
Increase venture capital into the sector	National Secretariat and Alliance create and implement a marketing programme aimed at VC companies. Preparation of case studies.	Government assists by repeating the benefits of sustainability and the need for eco-efficiency. Government investigate the benefits of tax concessions or other financial incentive programmes for investment in sustainability
Build linkages with R&D groups	National Secretariat acts as liaison between industry and Government - providing expert personnel to R&D bodies; assisting companies with grievances to present their case to Government; promoting the environment industry to R&D bodies	Government undertakes a review of <ul style="list-style-type: none"> <li>• environment industry input to R&amp;D bodies</li> <li>• integration of environment industry into national R&amp;D programmes</li> <li>• levels of funding and support reaching this industry</li> </ul>
Improve tender process	National Secretariat provides industry base for complaints to be presented to Government; works with all levels of Government and Standards Australia to ensure tenders reflect availability of innovation (outcome not process focus). ISO/QAS undertake better promotion.	Government undertakes to fast track COAG and NCC recommendations and to work with States and local authorities and Federal Agencies to eliminate public sector competition with the private sector. Better promotional support for quality systems.
Innovation fund for environment industry	National Secretariat undertakes a coordination role. Industry provides matching funds	Government creates and implements an R&D/innovation take-up fund specifically for the environment industry: sustainability development
Mandated efficiency rates (by outcome not process)	National Secretariat undertakes an advisory role	Rebates for suppliers and end users to be investigated

	and engages industry experts	
Technology verification	National Secretariat liaise with CRC, EIDN, industry associations and Government to research different models	Government commits to ongoing research in this area

### **Build Industry and Government Collaboration**

Supported by EMIAA, AWA, WMAA, CRC, EIDN.

AIG and ABL support in principle but expressed reservations on specific recommendations and detail

Implement greening of Government	Alliance through the National Secretariat prepares ongoing recommendations and provides expert personnel to advise Government	Government undertakes a whole-of-Government approach to sustainability in practice
Green procurement	National Secretariat provides industry capacity and capabilities directly to purchasing bodies and also through the Virtual Marketplace and Capability Website	Government undertakes to purchase and contract on best value not perceived initial lowest cost
Involve industry in regulatory reform; removing legislative barriers Providing certainty of regulatory climate	Companies and Alliance members, through the National Secretariat (and individually if desired), advise Government on regulatory reform, impediments and processes to overcome them. Industry provides expert personnel to advise Government	Government undertakes a complete review of legislation to ensure sustainability outcomes and to provide surety on regulatory climate. Engages environment industry in policy development
Identify Industry contribution	National Secretariat with associations and mainstream industry sectors research and present benefit-cost relationship of environment industry activities	EA and DISR work with Cabinet, PM's Office, Treasury, Finance, Health, AFFA and other Government Departments/Agencies to demonstrate potential benefits to the national economy and wellbeing
Establish market incentives	Alliance works with Government to establish market incentive programmes for mainstream industry for improving environmental performance	Government establishes and promotes incentive programmes (provides substantive community benefits as well as direct environment industry benefits through mainstream industry increasing its drive for sustainability)
Replacing unsustainable	Industry undertakes research	Government undertakes to

subsidies/pricing mechanisms	into subsidies considered not in keeping with sustainability. National Secretariat prepares paper for Government action. Industry recommends replacement not removal of subsidies.	review all existing subsidies and where sustainability is negatively affected to consider ways to replace subsidies with minimum economic impact and maximum environmental improvement
Encouraging market mechanisms	National Secretariat to work closely with other business sectors to develop metrics and to research and showcase benefits that leverage and reward performance.	Government to support metrics that will enable clear identification of processes and benefits to mainstream industry

TBR - To be researched

## ***PART 2 - ANALYSIS OF RECOMMENDATIONS***

### ***6. Unify the industry laterally***

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A quantum leap forward has been taken in the process of preparing this report. Industry collaboration has resulted in the proposal to create the Australian National Environment Industry Alliance. The objective of the Alliance is to support the *vision*.

A core group of associations and organisations have recognised that the fragmented history of the industry needs to be overcome otherwise market development and access will be increasingly impaired. It is in the interests of all environment industry players - associations, organisations, companies and all levels of Government, to have a 'single desk' point of contact which can respond rapidly to market inquiries and which can deliver an over-arching marketing strategy, act as a clearing house, and offer a business matching service for the industry. It is therefore proposed to create a central secretariat that would be administered by the EMIAA with a management board of industry and Government (as shown in the attached schematic).

Because the Australian environment has developed in a fragmented fashion there is limited validated documentation on technologies, systems, services and operational management. Building a clear and verifiable picture of the capacity and capabilities of the industry also requires the collaborative effort of the various sectors of the industry and the three levels of Government. One of the roles of the national secretariat will be to coordinate research, documentation and diffusion of information.

While this process is in the creative development stages, its implementation needs to be speeded up if Australia is to take full advantage of market opportunities. Our credibility overseas is at issue while we are unable to provide more than anecdotal evidence of much of the industry's prowess and while States and industry associations are visibly competing with one another.

As previously identified, the environment industry is actively represented by a range of national and sector specific industry associations which collectively provide an extensive range of services to companies in the industry. As the marketplace looks for a closer collaboration among associations, there is the need to understand that associations have to protect their 'turf' and the interests of the members they serve. They are unlikely therefore, to agree to any steps which restrict their activities or limit their autonomy. There has also been concern expressed that new recommendations made by the environment industry may take funds/support away from existing programmes. The strategy outlined in this document has been developed to try to overcome these issues and to provide a basis for going forward which is equitable to the core players. However, there may be elements of this study which cannot accommodate all the needs of all the parties, the individual members of the Steering Committee have therefore been asked to indicate which recommendations they endorse and which they do not and their reasons.

There is however agreement that there is a need for a collaborative industry development strategy on the six key recommendations mentioned above and detailed below.

## **6.1 Australian National Environment Industry Alliance**

Draft mission statement (for amendment/agreement):

*"The objective of the Environment Industry Alliance is to develop the full commercial potential of the environment industry in domestic and export markets. Each participant commits to collaborative and collegiate support for the industry."*

Draft heads of agreement (for amendment/agreement):

*Participating associations and organisations agree to promote the Australian environment industry as one entity and to support one recognised dedicated agency operating a centralised environment industry secretariat.*

Members of the Environment Industry Alliance will be drawn initially from the:

- Sectoral, professional and industry associations whose membership's core business is improving environmental outcomes
- Industry and business associations with cross sectoral memberships and a representative role in the environment industry
- Special interest industry/business/research groups and organisations active in the environment industry

## **6.2 Dedicated national secretariat**

A first step of the Alliance will be to form a national industry secretariat. This will be a dedicated agency to promote all facets of the Australian environment industry.

As the organisation which spans the entire environment industry, the EMIAA is proposing to be this centralised agency and to undertake in collaboration with Government and other associations:

- The creation and implementation of an over-arching marketing strategy for the environmental industry
- The export development strategy implementation
- Development and implementation of the business matching/brokerage service
- The industry component of an awareness raising and education programme
- Creation, development and oversight of the Virtual Marketplace and Capability Website
- Intelligence gathering and dissemination
- Networking services, newsletter provision, industry forums, workshops and seminars
- Government lobbying, advisory service to Government, representation of niche sector associations to Government

The EMIAA is already known as the peak environment industry body and actively represents all sectors of the environment industry. Its core business and sole focus is developing the Australian environment industry. This is a role which its constituency wishes it to develop.

EMIAA is currently canvassing its members on a proposed change of name to Environment Business Australia. This is the name that has been selected by the Association to better reflect its future role nationally and internationally.

EMIAA emphasises that this recommendation of a national secretariat does not preclude other associations developing/maintaining their own analogous roles. Indeed, member associations need a level of 'ownership' of the industry secretariat and this is demonstrated in the schematic.

Without significant staffing (which is not being proposed) the secretariat will need the advice and support of associations in the industry. It is envisaged that associations will provide:

- Senior executive support for a board of management - gratis
- Sectoral information and contacts - gratis

- Project management services on a fee-for-service basis
- Assistance to EMIAA for office equipment for additional staff required
- Advice regarding disbursement of industry and Government funds - some of which will flow through to the Associations directly for project development

A critical element of the national secretariat's role will be to work with and assist associations such as the Australian Water Association (AWA) and the Waste Management Association of Australia (WMAA), while encouraging their independence and autonomy. AWA and WMAA do not have major industry and export development positioning strategies or capabilities, and it is logical for the core environment industries to pool resources to maximise market penetration for their members.

There would be an emphasis on mechanisms to assist companies to work together in consortia (market mechanisms and the development of a greater number of full scale operational demonstration sites and clusters around technology incubation parks are explored later in this study).

**Recommendations:**

- Formation of the Australian National Environment Industry Alliance by industry and Government
- Creation of a national secretariat, EMIAA will provide the office space, administration support, lobbying and advisory services; participating associations/organisations are asked to contribute office equipment and to undertake specific sector research and advice as required; the Commonwealth Government is requested to provide the salary for four years for a senior manager and secretary.

### **6.3 Marketing strategy**

One of the Australian environment industry's biggest weakness is its current lack of cohesive and structured marketing. While many aspects of this can be overcome by the industry players working together, some strategies will require the broader support of both industry and Government.

To develop an over-arching strategy requires the industry being aware that marketing, not engineering, is the key driver to commercialisation, and demonstrating the potential benefits to be gained from a collective approach including consortia and cluster development.

In order to market the industry to better advantage, it is important to have the capacity and capabilities well documented, and a major research programme is required in this area.

With several notable exceptions the industry has yet to develop a 'customer-first' approach and has a focus on 'sales pitches'. This is an internal barrier to success.

A number of synergistic strategies have been developed to promote the Australian environment industry 'brand', the core elements are:

- Virtual marketplace and Capability Website (appendix D)
- Education and awareness raising (appendix C)
- Enviro Series of Australian environment industry showcases

Each of these three elements is developed in its own section of this study and each is designed to support the other main recommendations that have emerged from the study.

Supporting recommendations in order of priority are:

- A series of multi-media publications

- Banksia Awards, and the integration of the Prime Minister's Awards, creation of a Hall of Fame (other industry/business awards)
- Focused seminars and workshops
- Attendance at mainstream industry trade shows and conferences
- Technical papers (dissemination/promotion)
- Eco-efficiency challenge
- The Olympics Showcase at the Business Club Australia
- The environmental medals and certification e-commerce programme
- High level business fora

Some of the above are investigated in other sections and act only in a supporting role for the overall marketing strategy.

**Recommendations:**

- That a collaborative Government/industry effort create an over-arching marketing campaign to strategically build on existing industry and Government strengths; to ensure that new initiatives such as the Education Council respond to the needs of the environment industry; to overcome the marketing/education and promotional gaps and to capitalise on opportunities as they arise. It is recommended that a marketing and publicity specialist be appointed to the national secretariat; that capability research be undertaken and documented in user-friendly case study format (design, implementation and analysis by expert consultants); that marketing materials be prepared (brochures, videos, CD roms) (including creative work and print/production and dissemination). Industry will contribute through fees for service/sponsorship and by providing expert and support staff time.
- Government support by promoting the industry through existing mechanisms is also sought, this will involve staff time in relevant Departments and Agencies.
- Industry will feed intelligence and case studies to Government public relations and Press officers, and speechwriters; and will commit expert time from marketing and PR personnel (NA)

Marketing is the single biggest priority of the industry as it underpins many other initiatives outlined in the recommendations below. Government support will allow for the collective development of the marketing framework and strategies. It is foreseen that this funding can be reduced after two years and phased out after four years.

The perceived benefits are that the industry will present a 'Team Australia' face and the multiple areas of expertise will be made known to target markets.

#### **6.4 Virtual marketplace and capability website (VMC)**

A core element of the marketing strategy is the Virtual Marketplace and Capability Website and dedicated industry portal. This would represent all sectors of the environment industry and act as:

- A centralised and focal access point to the industry
- A brokerage service
- A problem solving 'tool'
- A source of market intelligence

This marketing, showcasing and business development site would be the support mechanism to the national industry secretariat and would be designed to complement the biennial Enviro Series, by promoting the documented capacity of the industry on a permanent basis.

The VMC must be meaningful, timely, and easy to use and above all must go beyond being a mere listing agency. There are an increasing number of portals that can be used to link to the VMC, but it is recommended that the industry have its own portal which it can control and aggressively promote. Constant updating of services and data will be critical the VMC's success.

There are already a number of organisations with sites pertaining to the environment industry and others wishing to create new sites. This proposal suggests that there should be a central site which serves the whole industry and builds on existing sites such as EnviroNet and EIDN's APEC site which could be hyperlinked and provide part of the overall service. Environment industry alliance members could also have their sites (and those of their member companies) as core components of the VMC.

The following is an indicative list of the types of research that are proposed. The information would feed into the Virtual Marketplace and Capability website and be used proactively by the industry:

- Australian resources – especially water, energy, forestry and agricultural land use
- Who's doing what and where
- Who's who - the contact points and decision makers
- Information on employment opportunities and career development
- Education and training course and links to industry
- In-depth market analysis (domestic and export by sector and country)
- What companies are spending on environmental goods and services
- Where companies foresee future expenditure
- Access to support mechanisms and funding options such as Government grants, venture capital, infrastructure funding
- Government services
- Company capabilities and backgrounds (leading to whole of sector capabilities)
- Benchmark performance case studies
- Projects underway
- Forthcoming tenders
- Large-project financing models
- Pro forma tenders and contracts
- Environmental accounting, environmental reporting, benchmarking
- Environmental economics - natural capitalism, etc.
- Financial market developments, sustainability index, eco-screens
- Technologies, systems, infrastructure, goods and services, innovation
- R&D - projects underway, projects looking for partners, grant accessibility
- Environmental issues - sustainability, eco-efficiency,
- New market trends and drivers
- Leading international authorities
- Environment industry sector promotion
- Information on mainstream industry sectors
- Conference papers and articles
- Calendar of events
- Voluntary codes of practice
- Environmental accounting
- Risk management
- Eco-efficiency and cleaner development mechanisms

This is an indicative list only but shows the types of information that would make doing business easier and faster. The research would also look at what other sectors are doing (industry, academia, Government) and how maximum synergies can be developed.

Potential participants would include companies, universities, research agencies, CRCs, CSIRO divisions, local authorities, industry/professional associations, government departments and agencies, utilities, banks, analysts, ratings agencies, financial services and insurance companies, environment industry players, etc.

A detailed explanation of the Virtual Marketplace and Capability Website can be found in Appendix B, a flow chart is also attached which shows how these potential participants will interact and their primary areas of interest (Appendix 6)

**Recommendation:**

- That Government assists industry to pool all environment industry knowledge and marketing capacity in one central Internet portal. Government is requested to underwrite the set-up costs (software, hardware, design of site, preparing industry data in user-friendly format) and the first three years of operation.
- Industry will help to offset these costs by providing data, market intelligence and some updating of the VMC. In addition as the site becomes established commissioned data will be provided on a fee-for-service basis; sponsorship and advertising funds will also be sought from industry. Industry's contribution is likely to be low initially but to rise significantly in subsequent years as the portal demonstrates value. At year 4 it is anticipated that industry contribution would be matching Government's.

This is a priority recommendation as the current proliferation of sites is adding to the fragmentation of the industry and the demand side of the market wants one site to access for information.

Benefits are perceived as being:

- A one-stop-shop for the industry increasing 'hits' and levels of business done
- Ease of access to the industry for overseas inquiries
- Creation of a competitive marketing tool with vast outreach potential
- Ease of linkages with other business sectors
- Facility to update and disseminate information
- Improving business R&D linkages
- Reducing duplication

## **6.5 *Education and awareness raising, media and public relations***

There is a significant lack of knowledge in Australia about the domestic environment industry and its potential to overcome environmental challenges in a way that adds value to the economy and to our quality of life. Customers, or rather potential customers, have yet to recognise the benefits of integrating environment industry goods and services early in the planning process rather than at end of pipe or remediation stages.

A number of factors have arisen requiring Australia to aggressively publicise the environment industry, key amongst these is the increasing need for environmental protection due to population growth, societal impacts and our unpreparedness to deal with 'backlash'; also the supply side of the market is now sufficiently mature to warrant a campaign which supports it against other countries' successful promotions.

An intensive campaign would inform and influence the media (business, trade, technical, general), Federal and State Government across the spectrum of portfolios, mainstream industry sectors, academia, local authorities and the community. The key messages are the need for sustainability, and the proven expertise of the Australian environment industry.

The industry could take better advantage of our potential 'marketer ambassadors' to pass on the message of Australian environment industry capabilities - students who have studied in Australia returning overseas, or Government officials who have developed outstanding overseas contacts and levels of expertise.

#### **How can this broad message to an even broader audience be achieved?**

- By consistent and credible messaging - a constant drip as opposed to a deluge of information. A collaborative effort of industry and Government over a minimum of two years
- Media relations (financial, business, industry sector, Government, general interest, trade and technical publications)
- Internet information outlets
- Industry's own Internet portal - the proposed VMC
- Industry association newsletters and meetings
- Government and business lobbying
- Industry to industry fora

#### **Local authorities**

A campaign aimed at local authorities would inform them of the benefits of innovation and of amalgamation at systems and infrastructure levels. This sector of Government is still highly conservative, wary of untried technologies, fearful of loss of control and (in regional areas particularly) concerned about perceived job losses and increased costs.

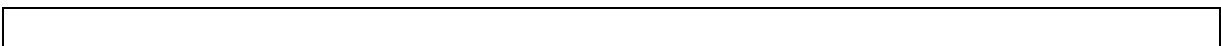
#### **Finance sector**

Another area to target will be the broader financial sector; while some institutions are embracing sustainability, traditional economic rationalists have not yet taken to concepts such as natural capitalism or eco-efficiency and the benefits that the environment industry can bring to the economy. Recent developments in this sector show great promise through mechanisms such as eco-screened pension funds and sustainability indices (see appendices 14A and 14B for detail). The environment industry should keep this sector abreast of developments and benefits.

#### **Community**

The growing importance attached to consumption patterns is likely to shape the future market demand and the performance of companies of all sizes. Employees, shareholders, investors, bankers, customers, neighbours, and society overall, will use their growing knowledge base and sophistication to ensure that governments and business protect the environment and 'natural capital'; provide workplaces that meet occupational health and safety demands; eliminate the pollution that affects health; and reduce emissions that add to global warming or ozone depletion, etc. Society needs the information and motivation that an awareness raising campaign will offer because people want to be empowered to make new decisions and there is a growing trend of consumers supporting those companies they see looking after their environment, their health, and their future. Changing consumption patterns is therefore seen as a way to help increase the integration of the environment industry with Australian business.

The levels of messaging are diverse ranging from local community improvements, to better health, to better economic performance of the country through a more robust and sustainable environment.



Recommendations:

- That industry and Government jointly develop and implement a media and public relations awareness raising and education campaign undertaken by recognised expert professionals - a six month intensive campaign and an 18 month follow up campaign is recommended. A grant (over four years) is sought from Government. Industry would support this by providing experts for interview and case studies, as well as undertaking speaking roles at conferences and seminars, and by instructing their own PR agencies to dovetail with the programme where appropriate this campaign will need to dovetail with other key industry sectors, across all States and throughout the targeted overseas markets)
- That the newly formed Education Council work with the EMIAA and other industry associations to create relevant messaging

**Publications and multi-media**

At present there is much duplication of effort within the industry and a number of competing directories/source books, etc., are produced (none of which provide the complete picture of the industry). Subject to the agreement, and support, of the Australian National Environment Industry Alliance members, one annual publication - an overall sourcebook - is proposed.

Each of the sectoral associations would provide input to their own sections which could also be published as stand alone material (e.g. AWA's Water Directory; the SEDA/SEIA Energy Allies Directory).

Economies of scale would be achieved and resultant publications would have broader outreach and increased meaning to the readers/users. This information would also be offered on-line as part of the virtual marketplace and capability website. It is proposed to run this venture on a partnership basis with participating associations.

Recommendation:

- Industry collaborate on a national sourcebook, some seed-funding from Government for year one is requested

**Awards**

Banksia have achieved the industry's highest profile national awards. It is recommended that the Prime Minister's Awards be incorporated into these Awards ensuring one national focus point for the environment industry and the demand side of the market. A 'Hall of Fame' is to be investigated (recipients of the honour becoming environment industry/sustainability ambassadors).

Recommendation:

- Industry supports one major national award, Government is requested to amalgamate the PM's Awards and to provide publicity support (plus staff time.)

**Workshops and seminars**

One of the initial tasks of a whole-of-industry marketing campaign will be to help educate the environment industry by raising awareness of the industry's technical capacity, market opportunities, and business development potential.

Recommendation:

- Industry will increase its networking, professional business development workshops, across the spectrum of the environment industry. Government is asked to support this by providing expert speakers and by promoting events regionally (cost is mainly staff time and has not been quantified).

**Other initiatives**

An eco-efficiency challenge (similar to the AGO's Greenhouse Challenge) and an environmental medals and certification programme have been proposed. An appendix on the medals programme has been included but the programme is not costed in this study as it is currently under offer to a private consortium.

**6.6 Export Development programme**

Because of the limited domestic market base, developing the export market for the Australian environment industry is critical, the Australian industry's success is predicated by the need to access large, demanding markets which require (and are prepared to pay for) change, quality and adaptive management. However, the industry needs a strong home market to be able to compete internationally. "Show us where a technology is working in Australia" is the constant demand from potential overseas purchasers. The industry needs to demonstrate capacity with an aggressive marketing programme that brings Australian capabilities to the fore and keeps them in decision makers' minds with consistent and meaningful follow up.

Enabling companies to work together in consortia is also important if Australia is to enhance its potential to take on whole projects or project segments.

There is an underestimation of the pull-through effect of industries such as mining. For example, according to the Minerals Council \$1.6 billion of Australian mining exports is environmental services. The environment industry's capacity to work more closely with other industry sectors is considered important to its future development.

A Team Australia approach is necessary to overcome international confusion when faced with Western Australia versus Victoria (indicative example only). This will best be achieved with States, Associations, Commonwealth Government and companies agreeing to combine their efforts under one overarching umbrella defining Australia as one of the key countries to do environment business.

The basis for an export development strategy is outlined in Appendix A.

Recommendations:

- The national secretariat, through the EMIAA, will provide the office space for a senior export development manager and provide market intelligence and liaison support; the Commonwealth Government is requested to provide funding for this export development manager
- Austrade is requested to provide a permanent member of staff at their Sydney head office who will be dedicated to the environment industry and will undertake to train staff at overseas posts. Industry will provide back-up with data, facility trips for incoming delegations and Austrade staff, updates on technologies and systems, and meeting with Austrade staff overseas.
- Austrade, Environment Australia and DISR are requested to collaborate more closely and to facilitate an increasing number of overseas visits by Australian environment industry missions, setting up high level meetings and facility visits.
- Austrade is requested to work with the industry to identify key personnel for delegations to visit Enviro 2002, 2004, 2006. It is recommended that six delegations of ten people each should be invited (details under Enviro section), and that for the first two events the Commonwealth Government undertake to absorb the travel and accommodation costs. Industry will assist in developing facility visits and training programmes and technical workshops around Australia (timed to support the Enviro series where possible)
- Austrade is requested to provide an ongoing intelligence report on markets identified as key targets and to update the industry on new developments in other markets likely to be of interest; industry undertakes to disseminate this information and to provide follow-up with relevant companies. The costs of this programme have not been quantified
- A marketing programme in conjunction with DISR, Environment Australia and Austrade will need to be developed and industry input to this will be significant; to implement this marketing programme a marketing and public relations executive is needed (this is costed in the marketing section)
- Presence at international trade shows and conferences is necessary and Austrade is requested to feature the environment industry prominently in all relevant overseas events that they participate in. In addition industry will provide experts to speak at conferences and attend trade shows; The Commonwealth Government is requested to cover costs of travel, accommodation, transportation, access fees, trade show booth creation and generic literature (six trade show/conferences per annum). Industry will encourage Australian companies to exhibit alongside and will assist with organising missions.
- The industry mission to China and Hong Kong led by the Minister for the Environment in May 2000 was successful and industry would welcome more high level delegations of this kind. The cost to Government would be in staff time and organisation; industry will assist with organisation and industry delegate support (three missions of 20 delegates)
- Domestic workshops to inform the industry about opportunities, markets, and export readiness, to be jointly run between industry and Government (EA, DISR, Austrade), industry will cover expert staff time and assistance with preparation, Government is requested to fund venue hire, publicity material, catering

## **7. *Integrate the industry vertically***

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As previously mentioned, the environment industry needs to strengthen its domestic market base in order to have successful export development. Improving procurement practices in all levels of Government is dealt with in a separate chapter, in this section the study focusses on strategies to better integrate with mainstream industry and to access the domestic commercial supply chain.

The 'beacon' or major pull-through industries have been identified as health, resources, food and agribusiness, construction and development and transportation. These sectors are heavily reliant on environmental science, R&D, and innovative technologies, systems, infrastructure and service. The major facilitating sector is finance, closely followed by insurance.

The current market climate in Australia does not proactively encourage innovation flow into the commercial supply chain. The environment industry needs to create the competitive business case for greater take-up of goods and services which help improve business eco-efficiency. Developing awareness and keen understanding of the environment industry with supply chain experts is therefore vital.

**7.1 Know and show capabilities**

The major problem to be overcome is the relative anonymity of the Australian environment industry, and mainstream industry's lack of awareness that environmental efficiencies equate with economic efficiencies. Demonstrating the capacity and capabilities of the environment industry is therefore critical and this entails thorough research and documentation to support what are currently seen as anecdotal claims. The research recommendations are modest in this document, however, industry **strongly recommends that under the Action Agenda there is investigation of a research foundation of equivalent stature to Canada's Asia Pacific Foundation.**

- Recommendations:
- That a market research programme be undertaken to quantify the capacity and capability of the industry - Government is asked to fund the research component; and the ensuing preparation of user-friendly format of case studies - (directory/website). Industry will support this level of Government input by providing staff time to facilitate research and possibly offsetting publishing costs with paid entries/sponsorship (to be investigated).
  - A national survey is required to ascertain the turnover of the industry, number of jobs, contribution to GDP, etc., it is recommended that each State undertake a survey in collaboration with the industry, EA and DISR (Queensland is in the planning stages of such a survey)
  - This level of detailed research will be designed to work in tandem with the work that DISR is currently undertaking with the Australian Bureau of Statistics (ABS)

Changing investment and purchasing practices and mobilising the business community's power of acquisition and investment is fundamental to the future success of the environment industry. Therefore the industry should place a strategic emphasis on educating the finance/insurance sectors (Banks, rating agencies, pension funds, analysts, shareholder groups, and the insurance sector) to make them more aware of their exposure to risk and the solutions that are available.

Awareness is increasing within mainstream industry that *good environmental performance can be a business opportunity as opposed to a cost* - international competitiveness and the increasing demand for adherence to quality standards underscore this message. However, to achieve ecologically sustainable development, Australian industry must have access to leading environmental technology and management methods and there needs to be significant advancement of the acceptance of this premise before Australia will see substantial integration of environment industry goods and services.

- Recommendation:
- Under marketing the finance sector be treated as a priority
  - Greater importance be given to promoting standards and voluntary methods

## **7.2 Business matching/brokerage service**

Already touched upon as one of the services of the national secretariat, a supply/demand market brokerage service will play an important role in matching the environment industry and mainstream industry. An additional market service will be matching private sector funding with industry need and helping companies (especially SMEs) access Government grants. The Virtual Marketplace and Capability Website will have an integral role as will the proactive support of industry experts whose support will be important to the overall venture.

### **Recommendations:**

- Industry run a business matching service through the national secretariat; this service will rely heavily on timely intelligence and a thorough knowledge of supply and demand markets, contracting expert consultants from other industry sectors on an ad hoc basis is therefore advised for the first two years. Industry's support will be sought in the form of service fees
- Additional support is sought from Government by the regular dissemination of national and international information to industry (for example USIS sends out five or six weekly reports on activities, trends, Ministerial statements, national reports, etc., a similar 'whole-of-Government' service in Australia would keep the industry better informed).

## **7.3 Physical demonstration sites**

The importance of being able to show technologies and systems rigorously trialed in full operational scale is rated as an important aspect for the industry's development. In addition to making better use of extant sites, a number of models have been proposed and it is considered that community/regional needs, new financing mechanisms and Government support, will enable a number to be developed (Appendix E gives an outline of several possibilities).

Purchasers and investors want to see integrated working technologies and systems. As mentioned in the export development section, this is particularly important in the case of overseas buyers who expect Australia to have already invested resources into something that is being marketed to them. One of the problems is that the Australian market is small and many worthwhile initiatives fail to get a run or go offshore because of a lack of local support.

## **7.4 Supporting pull-through industries**

In addition to delivering the message that eco-efficiency improves a company's bottom-line performance, the opportunity exists to develop mutually supportive programs (marketing, public relations, international project pitches) with mainstream industry; this would help to promote those companies driving sustainability and using environmental goods and services to do so.

Initial suggestions are to work closely with the mining industry, currently suffering the backlash from Esmeralda and Ok Tedi (and the World Energy Day address by the Deputy Secretary of UNEP reinforced the message that internationally perceptions of Australian mining are poor). The adoption of environmental science and the implementation of cutting edge technologies and systems is probably at its best in the mining sector but the positive side of the story is failing to reach the market.

The food sector is also suggested for similar attention and support from the environment industry. The Supermarket to Asia has made good inroads to regional markets and relies on the clean green image of Australia. Current debate over gene modification requires the food industry to reinforce its

healthy image and the environment industry considers that it can assist, and achieve leverage at the same time.

**Recommendation:**

- That the environment industry develop special working groups of interested and relevant companies to work with sectoral professional and industry associations and companies. Government support is requested from Environment Australia and DISR to develop a parallel support programme with other departments and agencies (e.g. AFFA) and also to engage the public and media relations department of other Departments and Agencies to promote Australian strengths in environmental business. This recommendation is largely a staff time cost and has not been allocated a figure.

### **7.5 Environment industry presence at mainstream industry sector trade shows and conferences**

To support integration into mainstream industry commercial supply chains, participation in major trade fairs and conferences convened by other industry sectors is recommended. At the same time the Enviro Series and the Virtual Marketplace and Capability Website will be promoted. The benefits will be a much higher visibility for, and understanding of the environment industry.

Proposed actions include:

- A dedicated environment industry trade booth with interchangeable panels providing messages that are relevant to the target audience
- Industry specific literature - leaflets/brochures and sourcebook/directory
- Environment industry representatives presenting papers at the conference component

**Recommendation:**

- Industry will provide conference speakers and personnel to staff the exhibits, and will write the brochures (the 2000 directory/sourcebook has been prepared); industry will also heavily promote this level of participation. Government is asked to provide funding for the design and construction of the trade booth; design and printing of the leaflets; and transportation costs, as well as the travel and accommodation costs for Secretariat personnel. Attendance at a minimum of six and a maximum of ten major events each year is anticipated. Industry will contribute expert staff time.

### **7.6 Workshops**

The environment industry's need to reach the broader marketplace entails engaging a number of different levels within companies. Tailored workshops that deal with a specific focus of the industry are proposed, examples are supply chain integration - benefits to the end user (financial and procurement managers); environment industry health benefits - occupational health and safety managers. These would be balanced with sectoral workshops appealing to a broader range of company management, for example the environment industry and food production, or environment industry and mining.

Recommendation:

- that two sectors be selected each year and that four workshops be held with each sector in suitable regional locations, venue hire, travel, accommodation, catering - Government is asked to support this initiative financially. Industry will support this initiative by providing expert personnel and company/technology information
- In addition industry will invite mainstream industry (as relevant) to their own networking and business development functions funded by industry

### 7.7 Accreditation and testing

Following the initial success of finance sector screening mechanisms, the environment industry is of the belief that this could in turn lead to mainstream industry's support for a national accreditation programme for companies, perhaps an eco-efficiency challenge (similar in concept to the AGO's Greenhouse Challenge).

Recommendation:

Investigate the feasibility of a national eco-efficiency challenge

The accreditation process could also be used by the environment industry to ensure that its own companies are meeting the high standards of eco-efficiency benchmarking. This in turn would add weight to the environment industry's argument that there is a need for a nationally recognised system to test and verify claims about environmental technologies. While the Environment Technology Verification (ETV) process is still being studied, an alternative suggestion is for NATA/AGAL laboratories to form a national testing authority in tandem with the environment industry associations. Another option would be to extend the work that Monash University is doing on the sustainability index into a broader accreditation/testing programme. The need is for a nationally (and eventually internationally) recognised stamp of authority, which ensures mainstream industry that a technology/system/service lives up to its claims. (Appendix 17 outlines the ETV process, other suggestions require further investigation).

Recommendation:

- That a broader suite of national technology testing programmes and a national accreditation process be investigated jointly by industry and Government

## **8. *Promoting the Enviro Trade Exhibition and Conference***

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The first in the Enviro Series has been acknowledged as a success by industry and by Government. Industry is committed to taking the event forward and planning is underway for 2002, 2004 and 2006. Government is being asked for support for this series to ensure that the event is built into an Australia Inc. biennial showcase of international stature capable of competing on a level playing field with Government subsidised events in other countries that are attracting the high level decision makers, procurement officials and international Ministerial fora.

### **Exhibitions and Delegations**

Trade exhibitions are a useful adjunct to trade promotion efforts because they keep the market players up to date with new technologies, goods and services, as well as fostering networking among participants. A successful trade exhibition takes on some of the attributes of an old-fashioned market, in that buyers, sellers and competitors are there together, doing business and improving their knowledge, all factors that contribute to an effective market in economic terms. A major trade fair/conference can add value to export development by providing a focal point for incoming delegations.

### **Exhibition success factors**

The success of a trade exhibition depends upon its achieving a critical mass of exhibitors and visitors, after which it takes on a life of its own and can grow organically through the value it delivers to all participants. Initial success requires wide industry support, so that a good cross-section of organisations is on display. It then needs good promotional support and publicity to ensure an adequate visitor base. Finally, government support in the areas of incoming delegations and high level, preferably ministerial, meetings is invaluable.

Generally, an exhibition in conjunction with a high quality conference ensures that the number and calibre of a baseline of visitors is guaranteed from the conference delegates. Above the baseline, pure exhibition visitors then become a bonus and add value for exhibitors. A well designed and patronised exhibition also adds value for conference delegates, since it improves their experience and contact base, and adds a commercial edge to what can otherwise be a largely technical experience.

### **Recent Australian experience with environment exhibitions**

Environment industry exhibitions in Australia have had a mixed success up till 2000, since several small events struggled for exhibitors and visitors. A collaboration between the then Australian Water & Wastewater Association and the Waste Management Association of Australia, the biennial Ozwater-Oz waste exhibition and allied conferences was the only viable, ongoing event, addressing the water and waste sectors rather than environment.

In 2000, the two associations collaborated with the Clean Air Society of Australia and New Zealand to stage the first Enviro event, called Enviro 2000, which was associated with four conferences. The collaborative effort, coupled with vigorous marketing and some sponsorship support from Environment Australia and the Australian Greenhouse Office together with industry sponsorship from companies such as Collex and Thiess Environmental Services (N.B. industry sponsorship surpassed Government support) enabled the event to achieve success.

The nexus of this successful conference-exhibition combination now creates opportunities for associated trade activities: business matching; incoming trade delegations; training session, related meetings and facility visits, to name a few. The fact that Australia is an attractive tourist destination is a final factor to tip the balance in favour of strong international support.

### **8.1 The future for Enviro events**

There is considerable scope now to build upon the success of Enviro 2000 and to ensure that Enviro 2002 becomes the second in a very significant series of events. Since Enviro 2000, EMIAA has joined the previous partner group of three, so four associations will be involved at the core of Enviro 2002 and participation by major industry associations such as AIG and ABL could be regarded as likely.

Up to now, the fundamental level of support for Enviro and its predecessors has been almost entirely the industry itself. Significant firms such as Collex, Thiess Environmental Services, Orica Watercare, Rocla Pipeline Products, ACTEW, Australian Water Technologies all participated as exhibitors and/or sponsors. Enviro 2000 was attended by about 3,000 visitors (including 1,220 delegates to the associated conferences) and had a total of 187 exhibitors.

For 2002, Enviro will operate in conjunction with the International Water Association World Water Congress, in the Melbourne Convention Centre. This event will, itself, attract at least 1,500 delegates, including 700 or more from overseas. The trade exhibitions for Enviro and IWA will be combined to create a very strong event. Enviro 2002 should be able to attract 1,000 delegates, so the combined delegate count will be 2,500. Trade visitors and exhibitors should take the total head count to around 5,000 or more, making it far the most significant event for the environment industry to be held in Australia.

The trade exhibition in 2002 will occupy all the available space in the Exhibition Centre in Melbourne, some 300 booths. Apart from all the Australian exhibits, combined booths will be encouraged from countries, creating a truly international flavour for the event and showcasing Australian expertise alongside all the competition.

Subsequent Enviro events will alternate between Sydney and Melbourne, booked far enough in advance to ensure no constraints on booth numbers and embracing the full spectrum of industry associations. A strong showing in 2002 will cement the reputation of the event and guarantee the necessary industry profile to ensure its continued growth for the future.

### **8.2 Export component - trade delegation coordination**

A perennial problem in achieving a coordinated approach to promoting Australian environmental expertise is the fragmented way in which incoming missions and delegations are managed. There is generally a low level of coordination, so groups can overlap one another, miss key contacts or sites, or have inappropriate amounts of time allocated to areas that are not of specific interest.

Aligning missions with significant events, such as Enviro, is always useful because it increases exposure and networking opportunities by an order of magnitude. Timing cannot always be controlled, however, so a realistic aim is to achieve optimal results even when groups visit Australia without tying in with any event. The export development section of this study details the need for a clearing house for incoming groups, and the national industry secretariat run by the EMIAA to facilitate environment business promotion generally, would provide the stakeholder networking mechanism to maximise value to incoming delegations and to industry exhibitors at the trade show. However, a whole-of-government approach is essential too, since much of the initiative and control of incoming missions resides with government.

### **8.3 Business plan for Enviro**

Enviro 2000 turned over a gross \$2 million, supported effectively by industry and underwritten by the partner associations. Commonwealth Government support in direct funds amounted to \$30,000 sponsorship by the Australian Greenhouse Office for the Greenhouse Conference and \$25,000 in sponsorship by Environment Australia for the opening ceremony of the conferences.

Enviro 2002 is currently being planned by the partner associations. For the IWA event, the partners are AWA and IWA. For Enviro 2002, the partners are AWA, WMAA, CASANZ and EMIAA. The exhibition is still being negotiated, but will be managed by AWA on behalf of the combined stakeholders, with an equity and risk position enunciated well before the event. The target turnover for the whole event is of the order of \$3.7 million, involving significant risk for the industry associations involved. In view of past successes, the level of risk is not unacceptable, but tangible government support will assist in reducing risk levels and ensuring viability and growth.

Although the partner associations will be investing their resources and energy to deliver the best possible result, there are many ways in which the Commonwealth Government can add value. It is safe to assume that Enviro 2002 will proceed and will be at least moderately successful based on its current industry ownership. This business plan is thus intended to develop the event for 2002 and for 2004 and 2006, to ensure a step change in size, profile and the impact of the events on Australia's environment business activity. The Enviro industry partners will also be working closely with host State and other State and Territory Governments and with local authorities.

The specific areas for Government support to ensure the desired growth are enunciated below, with recommended expenditures. Total costs have been estimated and are shown in bold, but the amounts to be spent on the event, or allocated to the organisers, are shown in parentheses after the grand totals. It should be noted that as with all the recommendations in this study there is considerable overlap between strategies, therefore elements may be noted in this section but costed under another section (delegations for example appear in the export development section).

#### **Recommendations - Enviro 2002 and onwards**

- Direct sponsorship by the Commonwealth Government departments of both Enviro 2002 and the IWA World Water Congress. The sponsorship 'packages' will include wide exposure of the Government, space for a major exhibition booth (sufficient to promote Department and agencies and Australian environment technology and achievements generally) and some delegate registrations. This sponsorship would include display material, printing, staff time, travel, accommodation and sundries.
- Government delegates to attend conferences should total approximately 50 from stakeholder departments/agencies and a broader representation of Commonwealth Government.
- Event specific public relations and media support in the form of a grant to retain a suitably experienced and effective firm of PR/media consultants for a period of six months leading up to, through, and immediately after the event.
- Marketing, promotion, public relations and advertising. Allow for a combination of marketing activities in target countries (Australia and overseas). The majority of this work has been costed as part of the overall marketing strategy as the work involved is inseparable from the broader marketing of the industry. The best combination of proposed work will need to be assigned by a steering committee of the stakeholders.
- Incoming delegations will add considerable value for all Enviro participants and the number of potential delegations and individuals is obviously very elastic. A realistic proposal for 2002 would be for a total of six delegations of 10 people in each, e.g. Indonesia, Thailand, Malaysia, The Philippines, India and China.
- Other activities, such as a web portal and business matching, which will enhance the value and outcomes of the Enviro event, are listed elsewhere.
- Industry and Government convene a review panel to ensure that Enviro uses Government funding and additional industry support to deliver on the desired outcomes and maintain a dynamic growth function for the environment industry

It is proposed that support be provided for the next three Enviro events, ie 2002, 2004 and 2006. On that basis, it would be reasonable to allow for an escalation rate of 4% pa and a ramping down of the advertising, marketing, media and PR components.

## **Table 2 – Commonwealth Support for Enviro Events**

The likely revenue to be earned for Australia by the Enviro events is difficult to estimate, since no hard figures are available at this stage. The two revenue streams to be earned are business written as a result of the exhibition and convention/tourism income associated with delegates and trade visitors. Business written is often an indirect connection, since contacts at the exhibition or satellite activities may lead to orders months or years away.

A cost-benefit analysis of the proposed expenditure is doubly problematic since, apart from the indirect link between the events and actual orders, the marginal improvement in outcomes achieved by the investment has to be estimated too. To pick just two sectors in Australia as a starting point: recent ABS statistics (release 8/1/2000) suggest that local government spent \$965 million on wastewater treatment and \$881 million on waste management in 1998/1999. International markets are potentially much larger, so the aggregate of \$1.86 billion could become \$6 billion if neighbouring countries in the region are reached. If just 0.5% of the expenditure is impacted by a given Enviro event, that amounts to \$300 million. If the trade results of Enviro are enhanced by 30% as a consequence of Commonwealth support, that could equate to \$90 million. The cost-benefit over three events could thus be a ratio of \$270 million to \$3 million, or 90:1. Clearly, the figures are extremely loose, but equally clearly, the scope for leverage is large.

Looked at from a much more hard-nosed angle, if 300 companies each invest an average of \$20,000 in taking part in an exhibition, they must each expect to earn at least that as a result, ie \$6 million. If Commonwealth support improves the yield by 30%, yielding a marginal improvement of \$1.8 million, then a Commonwealth investment of \$1.1 million has a cost-benefit ratio of  $1.8/1.1 = 1.64$ . Apart from yielding returns for exhibitors, the support funds also improve the partner associations' ability to serve their members, since they earn some revenue from mounting the events. There is thus extra, indirect support for the environment industry, which should enhance its ability to do business in future.

From the tourism angle, conference delegates are known to be the highest spenders among visitors, injecting \$600 or more per day into the local economy. If the Commonwealth support enables each Enviro event to attract 200 extra international delegates outside of incoming missions, that would amount to a total of \$600,000 per event (based on an average stay of 5 days), ie nearly 60% of support funds reporting to the host city and surrounds. That places the most conservative of the cost-benefit analyses in a better light, taking net cost-benefit ratio up to over 2:1.

As an indication of potential returns the figures quoted by Globe Canada are some \$460 million dollars of business done in the six months following the 1998 event and \$12 million in revenue to the City of Vancouver from the 1998 events. While these figures relate to a well-established international event, it is believed that Enviro can achieve similar returns within the next six years. Additional information on developing the Enviro business plan is attached in the appendices.

## **9. *SME development***

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SMEs (small-to-medium enterprises having an annual turnover in the range of \$1m to \$10m and employing less than 20 people) reportedly make up the majority of the Australian environment industry. Precise numbers have not been recently researched but are estimated to be between 2,500 and 3,000.

Environment industry SMEs are at a double disadvantage. As small companies many lack business and marketing skills, and spend their limited resources (financial and manpower) developing their technologies or services, rather than focussing on market requirements. As players in an emerging industry they do not have access to established support mechanisms that other industry sectors have built up over several decades.

A third element is that until recently, goods and services which improved environmental performance were - rather like insurance - seen as grudge purchases.

Environment industry companies surveyed during this study were generally unaware of Government support schemes to help SMEs. Some were felt to be inapplicable, such as the Export Management Development Grants, as up front financial and time costs are prohibitive to the smaller players.

SMEs require assistance primarily in:

- R&D and its commercialisation
- Gaining access to domestic and export markets
- Honing their marketing and presentation skills
- Accessing financing

Government assistance programmes are aimed at more established companies who have longer track records and higher turnover. The consensus of opinion was that for companies with a \$1 to \$5 million turnover there is no support system available.

The AusIndustry programmes have mixed reports of success - generally those companies with management with a stronger business background achieve more from these programmes; while those from a more technical background are missing out on the benefits. However, the understanding of the industry, its challenges and opportunities, by the assigned project officers apparently varies greatly and this could be contributing to the frustration levels in some SMEs.

Accessing private sector financing is equally as challenging for SMEs who have neither the business skills nor the necessary contacts. As part of the business matching service proposed above, the industry would offer a formal brokerage service - either subsidised by Government on a matching basis or on a fee-for-service basis.

Another element limiting SMEs success in accessing financing is their fear of losing their intellectual property or having it misused for short term gain that offers little long term benefit. The AGO's REEF seems to be overcoming these problems. The concept of pre-qualified venture capitalists who have developed a track record working with the industry is also reassuring to SMEs, especially where management advice and resources are also available. A joint industry/Government initiative to develop stronger working linkages with venture capitalists is therefore recommended.

Some of the costs of reaching the market effectively could be reduced with a national support service system that goes beyond the Export Access programme. For example, preparing company/technology literature and marketing material is time consuming and expensive, a nationally subsidised service (writing, design, printing) could cut costs considerably and provide companies with professional material.

The Virtual Marketplace and Capability Website (VMC) which is discussed earlier in this study could offer pro forma plans for marketing, sales, business planning, media relations, investment attraction and IPOs - prepared specifically for SMEs in this sector. In addition the VMC could make available contact lists (media, procurement officers, environmental managers of major companies, etc.).

The creation of consortia would be at its most beneficial in assisting SMEs to pool their resources in identifying projects where 'solutions packages' are required, and in jointly preparing bids and implementing contracts. Consortia development will assist SMEs gain access to markets they would otherwise be shut out of. Larger companies looking for innovative technologies and services may be able to provide mentoring and facilitation within the consortia concept.

Incubator technology parks also assist SMEs by providing the back up services which individually they cannot afford (business equipment, R&D, marketing, project access), these parks also prepare companies to work collaboratively with improved sales results.

Many of the smaller companies perceive industry and professional associations to be outside their scope, not understanding the benefits of networking, intelligence flows and business leads which emanate from working with like-minded professionals. The environment industry associations (themselves under-resourced) estimate that at present they cater for only half of the SMEs involved in the sector. The associations have the problem of needing to understand and assist non-member companies in order to better develop the overall marketplace, but have a first responsibility to their members whom in turn they need for their own financial survival.

**Recommendations:**

Many of the existing structures would offer a better service to SMEs if the following recommendations were put in place:

- A major grant scheme, developed specifically for the environment industry during its 'emergence' phase, on a competitive and matching fund basis. Companies could reapply for a second year's grant only if successful in achieving year one milestones. The grant scheme would encompass the following:
  - Support for the creation of consortia
  - Support for incubator parks
  - Support for website development
  - One year grant to SMEs to cover 50% of membership to professional/industry association
  - First year's participation in Enviro supported on a 30:30:30 basis - trade show booth paid for by Commonwealth Government: relevant State Government: participating company
- Industry would help to support this by preparing the background material for planning and making it available on the VMC. Industry associations will assist by working with SMEs to prepare them for grant-readiness and assisting Government with the selection process and follow-through. Industry will also market the programme and signal consortia opportunities as they arise. Under the export development programme industry associations and major companies would be able to represent a number of smaller companies unable to afford overseas travel on a 'prospecting' basis.
- Training programmes on business planning, marketing, sales skills, to be run for two years and funded by Government,(3 seminars run in 7 cities), industry will support with case studies, and expert speakers
- Development of an access to financing brokerage service to be investigated
- Industry and Government jointly engage venture capitalists and other finance opportunities

- To help access Government funding Government support is requested for the outplacement of an expert in grant proposals to the national secretariat for a period of one year
- AusIndustry project officers to be fully briefed by the industry and to attend industry workshops, conferences and trade shows

The benefits would be that smaller companies become more effective in the marketplace helping to strengthen the domestic market and grow the potential export market. This growth in the industry would lead to increased tax revenue from the sector and increasing employment. This programme could conceivably have most benefit in the regions where the support base for this sector is minimal.

## ***10. Engender Innovation and Capability Diffusion***

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A long term perspective on R&D will be a strategic investment in the future. The environment industry should be positioning itself where there is the maximum potential for return. To do this Government support is necessary.

Innovation is the cornerstone of the environment industry, yet the innovation process of taking R&D through the commercialisation stages is one of the most significant weaknesses - of both the environment industry, and of Government support mechanisms for the industry.

The level of innovation in Australia is considered high, both internally and in the niche overseas areas where Australia has already made progress. However, funding and support mechanisms are failing to match corporate ingenuity, and marketing skills do not match R&D output. This results in companies reporting technologies failing to reach the market, or alternatively, being taken overseas for development (e.g. to Singapore) where tax concessions are more favourable. If this trend persists Australia will lose both academic and industry experts as well as revenue.

The critical gap is in the proof of concept stage and proof of application stages - getting R&D into the operational trialing and pre-commercialisation stages where they become attractive to venture capitalists. An awareness raising campaign directed at the finance and insurance sectors would influence the decision makers behind the decision makers.

The use and influence of Government procurement is mentioned above. The refocus of Government spend and action to support sustainability, may show short term cost increases but the greater uptake of innovation has the potential to offer significant savings over the longer term. These range from increased efficiency, natural capital protection, health improvements, and improved corporate bottom line, to an improved national bottom line. While it is difficult to assign a precise dollar figure to cost benefits, industrial ecologists, researchers and authors such as Herman Daly, Amory Lovins and Paul Hawken indicate they could be in the billions of dollars range, and that these benefits significantly outweigh the costs.

It is the view of the environment industry that national research and development programmes should be focused on finding more sustainable ways for society to conduct its day-to-day business. As alluded to earlier in this paper, the environment industry has an integral role to play in urban and regional planning. The industry's expertise is poorly represented on, and needs to be incorporated into the decision making of bodies such as CSIRO, Land and Water Resources Research Development Corporation, Grants Research and Development Corporation, Bureau of Rural Sciences, Murray Darling Basin Commission and the Australian Heritage Trust Fund. These bodies contain mainly the researchers and the users - rarely the implementers or members of the environment industry. The implementers are the link between the 'could do' and the 'can do'.

There is a strong belief within the environment industry that R&D agencies are missing opportunities to drive sustainability and innovation at planning, development and implementation stages, that targets are not set high enough, and that many of the existing programmes do not allow for private sector input. For example tenders for the Heritage Trust Fund are worded to favour community groups or Government agencies when the necessary expertise and experience resides within industry. However the funding structure does not encourage such participation with few concessions for industry inputs or assistance. Yet these inputs could make the difference between success and failure.

In this area Government support is requested to ensure that Government funds allocated to the environment go through a more rigorous competitive process. Maximum benefit to society must be achieved, and national competition guidelines followed. At present Government agencies are allocated work in preference to the private sector and the industry believes that this stifles true competition, denies industry cash flow, and does not foster collaboration or innovation. In addition to the issues relating to the outsourcing of infrastructure development, the environment industry believes that the industry will not grow through innovation and export until there is a significant shift to the outsourcing of other areas including R&D. There is an industry case that the public capitalisation of the environment management resources should be primarily into industry not Government agencies.

Both Government and industry procurement need to encourage greater innovation flow into the commercial supply chain. The challenge in Australia is to overcome our national desire to continually *research the problems* we face, and to find ways *to implement the solutions* that the environment industry provides and has already rigorously researched from both scientific and commercial perspectives.

In addition there is the need to accommodate and support the long timelines associated with technological developments, planning and capital investment cycles. The environment industry needs to create the competitive business case for greater uptake of eco-efficiency. To achieve this Government policy requires economic instruments to drive eco-efficiency - whether in terms of incentives for sustainability or – longer term, penalties for eco-inefficiency.

The impediments the industry faces, include insufficient support for R&D, inadequate resources for commercialising innovative measures, an engineering conservatism, Government's reluctance to endorse innovation, and most significantly, a national economic approach which favours a 'quick fix' of lowest cost over highest value. Initial low cost is replacing value considerations - eradication of problems, reduction of externality costs and value-adding in terms of health, jobs, trade and environmental integrity.

The Hilmer report focused on reform of Government and industry to provide for competition and use of resources. However no provision was made for encouragement of R&D and preservation of the R&D role that Government had undertaken previously. There were no or few incentives to promote, conserve R&D in the package. The combination of changes in Government tax concessions, and other changes left both R&D and innovation application in a vacuum.

Changing investment and purchasing practices by mobilising the business community's and all levels of Governments' power of acquisition and investment is critical to the future success of the environment industry. R&D and the resultant innovation in technologies and systems are crucial to the health of this industry and to the long term economic future of Australia.

There are no provisions at present for R&D to be part of resource or resource development costs. In the past there have been R&D levies as part of coal and some primary crops. They are regarded as economically inefficient by some economists. On the other hand the lack of provision for resource restoration or improved resource use through R&D puts us in the position we are in today - lacking resources to ensure sustainable development through R&D.

As an example, institutional blockages hinder bulk grid purchase of renewable energy. An energy industry expert has indicated that the 2% renewable target would be surpassed if Government would advocate/permit bulk purchase of green energy. The increased demand would drive R&D into renewable energy and increased efficiencies with the potential to create more exportable technologies and to save money. To achieve this would require a whole-of-Government approach to effect major change in those bodies locked into process that is outdated and cumbersome.

Other tender issues that greatly concern the industry are that guidelines are process, rather than outcome specific, meaning that many new technologies are unable to comply. The problem finds its root

- in Australian Standards which are also still prescriptive (although industry does recognise the attempts to overcome this) and stifle competition
- in the conservative procurement practices especially at local and State Government levels

To do this will require business valuing the service tools that measure input and output performances - risk assessment and management, corporate environment performance reporting, lifecycle analysis, environmental accounting, inter alia. The ISO series - and specifically ISO 14004 which directly supports the environment industry and the forthcoming ISO 20000 - are tools that Government and big business could use more proactively. This will require greater levels of education and awareness than are prevalent currently. The environment industry's role will be one of collating information and presenting case studies on continuous improvement while mainstream industry will be encouraged to provide greater feedback.

While international venture capital into this sector is reported to have decreased over recent years, Australia is seeing a wave of interest from smaller VC companies such as Venture-Bank who are actively exploiting opportunities within the environment industry. The AGO's Renewable Energy Equity Fund (REEF) will be a catalyst for the energy sector of the industry and a similar fund is recommended for the balance of the environment industry.

To encourage take up of innovation at local council level the industry recommends municipal bonds. A key feature in many US infrastructure developments, bonds would assist in developing stronger public/private sector alliances, with the potential to increase outsourcing, improving efficiency levels, reducing environmental impact and providing solid financial return to investors. A tax concession or rebate component from the Commonwealth could assist in fast-tracking back-logged infrastructure projects.

Likewise a national lease-financing programme would enable smaller companies (or franchisees of major chains) to invest in eco-efficiency retrofits or upgrades and to track their monthly expenditures against their monthly savings. While this would be an industry and finance sector initiative, support from Government in raising awareness would add value, while a rebate programme - similar to the diesel rebate - would add significantly to the speed of up-take and hence the speed of technology diffusion.

The recommendations earlier in the study for demonstration sites would be enhanced by filmed, or computer simulated portrayals of innovative technology in use (available on a business to business basis and via the Virtual Marketplace and Capability Website).

Countries which grow strongly continue to do so through active support for innovation. Innovation provides the basis to increase international competitiveness. It helps companies to enter new markets and to retain old ones.

ABS data for the 1998-1999 financial year reveals a continuing slide in business expenditure on research and development (BERD). This is a poor result, which shows a reversal of the progress achieved during the early and mid-1990s.

Australia currently ranks 17<sup>th</sup> among OECD countries in terms of BERD. There is now a significant gap between Australia and some of those countries just above us on this ranking. Canada, for example, is ranked 14<sup>th</sup> but BERD accounts for more than 1% of GDP. Sweden, Korea, Japan and the United States lead the field all with BERD of more than 2% of GDP. The table below shows comparative OECD country rankings for BERD.

**OECD Ranking of Business Expenditure on R&D (BERD)**

Rank	Country	%BERD/GDP	
1	Sweden	2.88	
2	Korea	2.10	
3	Japan	2.10	
4	United States	2.08	
5	Finland	1.98	
6	Switzerland	1.94	
7	Germany	1.57	
8	France	1.37	
9	United Kingdom	1.22	
10	Denmark	1.19	
11	Netherlands	1.15	
12	Belgium	1.07	
13	Ireland	1.05	
14	Canada	1.03	
15	Norway	0.95	
16	Austria	0.83	
<b>17</b>	<b>AUSTRALIA</b>	<b>0.67</b>	
18	Italy		0.56
19	Spain		0.43
20	New Zealand		0.32

Table 3 - comparative OECD country rankings (BERD)

The reduction in the R&D tax concession from 150% to 125% is a major contributing factor in the decline in BERD. The incentive value of the R&D tax concession has declined from a peak post-tax benefit of 24.5 cents in the dollar, in 1987-88 to just 8.5 cents currently. The incentive value of the concession will be further reduced to just 7.5 cents in the dollar when the company tax rate falls to 30% on 1 July 2001.

Industry recommends that the R&D tax concession be restored to a minimum of 150%, and that the Federal Government give consideration to raising the R&D tax concession to 200% in line with our Asian competitors.

If this tax concession is not acceptable in this form, the direct allocation of the equivalent amount of funds from either resources or industry levies should be provided on a competitive basis.

### **Technology verification**

The absence of a national process for the independent peer review of technologies means that unsubstantiated claims can foul the marketplace for genuinely beneficial goods and services which may appear too radical or too advanced for their time. The problem may be compounded with Internet marketing. The Australian industry has voiced strong support for a national programme endorsed by both industry and Government. The more recent a technology, the greater the need for its claims to be verifiable and then supported. Any accreditation, verification or standards programme should reflect performance in outcome terms, not prescriptive terms which tend to 'lock in' specific technologies and do not facilitate the innovation process.

### **Showcasing**

One of the key success factors for the AXcess car was the marketability of the product, another example is the Solar Sailor Ferry. These technologies can be transported to the potential market and demonstrated in their operational background. Showcasing a niche technology for an infrastructure development however, is rarely something that can be taken to an overseas market. Computer simulation, overseas demonstration sites, or bringing delegations into Australia become the options and the ability to showcase total solution packages will add value to each component part.

#### Recommendations:

- Creation of an environment industry innovation fund with matching funds to be supplied by applicants
- A national sustainability R&D programme focusing on long term value. To have an advisory panel of environment industry, mainstream industry environmental managers, sectoral experts and researchers, financiers, and Government representatives. If Government convenes the programme industry will support with expert advice (no costing has been attributed pending investigation)
- R&D tax concessions to be higher for eco-efficiency/sustainability technology research and commercialisation - perhaps by offering the equivalent of an additional 50% to this sector to assist with market development. Industry is looking for a 200% tax concession and tax rebates for commercialisation (suppliers and users)
- Mandated efficiency rates (by outcome not process) backed by a sliding scale of financing/tax concessions for new projects to match or surpass environmental benchmarks. This could also apply to major projects undertaking retrofits to become more efficient
- Government tenders to be outsourced wherever the private sector can undertake the work; tenders to be performance and outcome focused
- Australian industry associations should be represented on Government bodies (e.g. Australian Research Council that determine the national allocation of public R&D funds to public agencies) to ensure environment industry expertise input at the highest level
- National competition guidelines to apply to all Government tenders and contracts (research, development and implementation)
- Investigate a national programme to support municipal bonds and lease financing through tax concessions or rebates
- Further investigation of a technology verification programme
- Public R&D agencies, e.g. CSIRO, should direct a portion (say 40%) of their existing Treasury funds to joint R&D and commercial innovation projects with Australian SMEs
- Public R&D agencies should fully implement the national competition policy and bid for external funds on a fair and equitable basis
- The Government guidelines (for publicly funded R&D agencies and universities) that related to the formation of limited companies should require such companies to be limited to commercial activities that are not mature in industry, require a significant SME participation as a means of raising industry capability, and be restricted to a commercial time horizon

- Government and mainstream industry support for ISO 14004 and ISO 20000 through an awareness raising campaign and tender specifications where feasible

## **11. Building Industry and Government Collaboration**

The Australian environment industry is innovative and has a suite of benchmark technologies and services which are globally competitive. The industry overall, however, is lagging behind countries where a concerted government/industry alliance has reinforced the technological base. To compete in the global marketplace Australian industry needs similar levels of support, the potential rewards are huge in profile, trade, and employment terms. Without increased levels of support Australian companies will be relegated to being bit-part players on the world stage.

As alluded to earlier, while the recommended levels of support in this study are high compared to historical support for the industry, they are conservative compared to those of some other countries. The study earlier cited France, Germany, Canada, Sweden and the Netherlands as examples to emulate. Canada has recently revised its national budget to reinforce the need for innovation and to arrest a perceived 'brain drain' - a matter which has received much media attention in Australia recently. The Canadian budget has very recently provided for increased allocations for their environment business sector. And British Columbia has prepared additional incentives.<sup>2</sup>

Support from Government is required in many forms, only one of which is financial. The ability to open doors at the highest level and to provide Department and Agency staff support at project level, are acknowledged as highly important.

One of the key elements which industry overall, not just the environment industry, seeks is certainty in the regulatory climate and that incentives for business to commit to long term investment be developed. The need for greater emphasis on joint initiatives regarding voluntary codes of ethics and codes of conduct should be investigated as an issue that affects both the environment industry and mainstream industry.

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<sup>2</sup> British Columbia provides \$4 million to green technology fund. The Government of British Columbia has put in up to \$4 million to promote the environmental technology industry in British Columbia. The green economy development fund, administered by the B.C. Information, Science and Technology Agency, will get \$3-million to fund green technology demonstration projects that are between the research and development stage and commercialization. The government is also setting up a \$1-million green venture capital program that will be managed by the ministry of small business, tourism and culture. Investors in participating venture capital corporations will receive a 30% provincial tax credit. The ministry estimates the tax credits will generate up to \$3.3 million of private equity in the first year of operation. B.C. Premier Ujjal Dosanjh told the B.C. chapter of the Canadian Environment Industry Association (BC CEIA) that these programs are designed to speed up the pace of innovation in our society by encouraging investments in B.C.'s \$1.5-billion environmental sector. Projects submitted to the green economy development fund must demonstrate new or innovative products or processes that result in environmental and economic benefits to B.C. A minimum of 50% of project funding must come from sources other than the province, and 33% of equity must be private. Businesses eligible for the green venture capital program must employ 75 or fewer people, pay at least 75% of the business' wages and salaries to employees who live in B.C., and are developing environmental technologies in B.C.

### **11.1 Strategic Policy Development**

The policy directions set by government have a critical impact on industry's viability and contribution to economic and employment growth. Government policy development processes should be informed by industry environmental expertise in the form of expert advisory groups.

For example, Australia's response to greenhouse is a whole-of-government issue which has significant economic and trade implications. A number of mainstream industry bodies say that the continuing high level of policy uncertainty in relation to the baselines for reduction in greenhouse gas emissions and the rules underpinning the Kyoto Protocol are adversely impacting on business investment in Australia. They have been arguing the need for the development of a principled, comprehensive greenhouse policy framework, incorporating a number of elements.

The environment industry recognises and supports the majority of these recommendations but believes that a 'no disadvantage' principle covering all sectors of industry is not possible in a world which is in transition towards sustainable ways of doing business, it is inevitable that some sectors will find emissions reductions more difficult to achieve. The environment industry's recommendation is therefore that Government look to find new advantages from innovation either applied to traditional industry or resulting in new industries which are commercially competitive and will benefit the broader community, the economy and the environment. For example BP Amoco now sees its business future in energy services, not in petroleum.

The environment industry believes that jobs, trade opportunities and other economic benefits will flow from energy efficiency, renewable energy sources, pollution and emissions reduction, sustainable agriculture, and the increase of eco-efficiency which will help position mainstream industry companies to become more competitive.

The environment industry also believes that there are market benefits to be obtained from early leadership in emissions trading, and that Australia should not necessarily wait for USA ratification (it is noted that a number of major corporations in the USA - some of the world's biggest and most influential companies - have joined the Pew Centre and are poised to take advantage a new era of business emanating from emissions reductions and sustainability). On the issue of sinks, the environment industry believes that Australia should take every possible opportunity to have a variety of sinks included in the Treaty and that fast growth rotation forests should be included for multiple cuts.

### **11.2 Government Procurement**

Government procurement policy is one of the most important drivers of technology based industrial development in Australia. The potential benefits accruing to industry as a result of winning Government contracts include: job creation, enhanced competitiveness and higher levels of domestic sales and exports. Other benefits which can extend far beyond the initial contract include the development of new technology, new products and new skills.

It is therefore vital that Federal and State Government procurement policy be directed at enhancing access by the Australian private sector to the Government business market and supporting the development of a strong, internationally competitive and export focused industry. In achieving this objective, strengthening the domestic market for the Australian environment industry is likely to assist with import substitution initiatives and this is considered a significant element in all levels of Government purchasing.

In order to promote increased adoption of, and commitment to, the principles of sustainable development across government portfolios, it is further recommended that a requirement for environmental assessment be incorporated into government purchasing guidelines in addition to

value for money considerations. This is already the case in the aid portfolio, with AusAID's project assessment processes requiring assessments of environmental sustainability to be undertaken.

In addition, in order to ensure that Government procurement processes do not act as a barrier to technological innovation, Governments should ensure a commitment to a broader use of performance based tender specifications. This would ensure that Australian industry is not precluded from offering alternative solutions in addressing the needs of government purchasing proposals by either the detailed nature of specifications or unnecessary mandatory requirements. To support this there is the need to ensure that Australian Standards are outcome focused and are updated in a more timely manner.

It is also considered that Governments should play a role of the 'client of excellence' with increased devolution of technical service provision from the public to the private sector and fast tracking of the out-sourcing of projects to private/public sector alliances.

### **11.3 Market mechanisms and measurement tools**

Environmental regulation has been devoid of market based mechanisms (usually paying for outcomes), and has relied on a heavy handed regulatory regime. New measures proposed (e.g. carbon trading) are some distance away and their implementation will need some support and effective communication and extension.

Other mechanisms that were initially cold-shouldered by the business community - corporate environmental reporting and benchmarking, for example - are now finding corporate champions, although their acceptance and use are by no means common practice especially in mid-size and smaller firms. However, the recent initiative of eco-efficiency benchmarking that will engage industry associations and their members is likely to have a significant impact on companies. The outplacement of Public Environmental Reporting Extension Officers in ACCI, BCA and AIGroup will also help to educate a wide range of companies on the process and potential benefits of environmental reporting.

One of the most significant means to leverage performance in mainstream industry has recently been brought to the Australian market, this is the eco-screened funds and sustainability index which take a best of sector approach in measuring corporate environmental and economic performance, risk and attractiveness to investors. At the time of writing this report only one major financial institution has brought this service to market although others are reported likely to follow suit.

The eco-screened funds will give added weight to environmentally benchmarked developments. Companies providing goods, services and systems that are rated best of sector will receive the 'green tick' from screening agencies and it is anticipated that a robust system(s) will lead to analysts' and investors' support.

Industry is supportive of the usage of market mechanisms and would encourage greater research into implementation of economic measures. Environment Australia is commended for setting up a Financial Service division of the Industry Focus Unit to work with the environment industry and the financial services sector.

#### **Recommendation :**

- Commission pilot trials with industry in selected sectors and financial institutions/banks such as Westpac and research bodies such as Monash University

- Over the longer term industry recommends that Government policy include eco-screens being applied to all Commonwealth Government funds invested or paid out
- Development of case studies of screened companies providing environmental and economic performance demonstrating equal, or superior, benefits over the mid to long term.
- Environment industry undertake to work closely with other industry associations on eco-efficiency benchmarking

#### **11.4 Overcoming disparity across States**

Another significant issue for Australia's environment industry is the disparity in environmental legislation across the States and Territories, the multiplicity of legislation and the differences between States in legislative procedure and enforcement is seen as a significant barrier to growth by the environment industry. Industry supports the development of a nationally consistent environmental regulation regime. It is recommended that the recently announced Action Agenda for the environmental management industry investigates and identifies existing regulatory barriers in Australia and recommends options for their removal.

Disparity makes best practice and the adoption of cutting edge technologies difficult and makes an already small marketplace even smaller for the environment industry. Industry believes that parity across States would provide an equal playing field for all and would encourage development of the environment industry.

#### **National Environment Protection Council**

The work on addressing the issue of parity through the NEPC is noted, however industry recommends that simpler processes to offer improved access to the NEPC should be developed with industry codes of practice and expertise being incorporated as working bases for NEPMs. In addition, industry experts should have the opportunity to be present during discussion of proposals which emanate from industry; industry also believes that greater use should be made of expert panels of industry practitioners.

#### **Government and industry association cooperation**

Cooperation between Government and industry associations in promoting awareness within mainstream industry that good environmental performance makes good business sense should be encouraged and expanded. Environment Australia's initiative of entering into eco-efficiency agreements with industry associations is therefore strongly supported.

Further, industry associations have an important role to play in promoting the uptake of ISO 14001, supporting adoption of the forthcoming ISO 20000 as a national and international standard for the environment industry and in the development and promotion of voluntary codes of practice.

Greater use could be made of industry associations in preparing new guidelines/draft legislation. Industry would also welcome a whole-of-Government approach in assessing the potential to incorporate ESD principles into the workings of Government at all levels. This would include the reallocation of subsidies and the revising of pricing mechanisms which support unsustainable activities.

#### **Australian Aid Program**

Australia's aid program provides excellent opportunities for the promotion of Australia's environment industry expertise.

The fundamental objective of the Australian aid program is the reduction in poverty in recipient nations. Priority sectors for Australia's aid program include:

- health

- education
- infrastructure
- rural development
- governance

Environmental sustainability cuts across all these sectors.

Promoting sustainable development is the essence of Australia's aid program and it requires the integration of economic, environmental and social considerations in the delivery of the development cooperation program.

AusAID's environmental policy promotes a broad range of environmental activities in areas such as water supply and sanitation, natural resource management, biodiversity conservation, cleaner energy and strengthening environmental institutions. It also ensures that its other activities are designed to promote sustainable development through mitigating, when appropriate, possible adverse impacts on the environment.<sup>3</sup>

The needs of developing countries must be the driving factor in the aid program. However, a careful consideration of Australia's sectoral capacity should also be factored into the provision of Australian aid. Through the implementation of projects benefiting recipient countries, the aid program provides a means for showcasing Australian goods and services, often leading to follow-on sales on a commercial basis and provides a valuable avenue by which Australian industry gains international exposure and develops an export orientation.

Australia's membership of multilateral development banks (MDBs) enables Australian participation in environment management projects which are of a size beyond the scope of the Australian aid program. However, to date, Australia has had only modest success in participating in MDB programs. It is considered that the Federal Government should place more emphasis on the co-financing of projects with the MDBs in order to promote closer links with recipient nations and also to develop Australian industry's knowledge and experience of MDB requirements and procedures.

By co-financing high priority programs under the auspices of the MDBs, the Government is able to make use of the resources of the World Bank and the Asian Development Bank while at the same time keeping the funding on a direct government-to-government basis. Such projects have national visibility in the recipient economy and provide for direct contact between donor and recipient. Further, by assisting in the rapid development of Australian industry's knowledge of MDB procedures and in the building up of valuable contacts and reputation in countries where MDBs have ongoing projects, co-financing enables Australian industry to better identify and take up MDB projects.

### **Other Government Departments and Agencies**

While there is evidenced support for the environment industry from sections of the Departments of Environment Australia, and Industry, Science and Resources, and from the Australian Greenhouse Office, support from Austrade is more historical than current, - the industry clearly needs to re-establish strong working links with Austrade and also with AusAid. A stronger whole-of-Government collaboration with the industry is also needed if the country is to benefit from the levels of innovation and expertise.

A specific area of concern within the industry, particularly at the smaller end is that Government Agencies are not following the requirements of the National Competition Policy (NCP) and the Trade

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<sup>3</sup> Environmental Assessment Guidelines for Australia's Aid Program October 1996 p5

Practices Act - the Murray Darling Basin Commission (MDBC) is a case that has been singled out by a highly innovative Canberra-based company.

There is the additional concern that agencies do not attempt to serve all stakeholders preferring to deal directly with an industry 'client' (e.g. farmers), rather than using the additional skills of the environment industry which would help to build industry capability while adding value to other sectors and increasing the export development opportunities.

It is not within the scope of this study to engage other Government Departments but it is recommended that EA and DISR jointly liaise with the Department of Health, Aboriginal and Torres Strait Islanders Commission (ATSIC), Treasury, Finance and the Department of Agriculture, Fisheries, Forests Australia (AFFA), in order that these key Departments and Agencies join in a national collaborative support for the environment industry. Recent reports from the Worldwatch Institute relating to 40% of global ill-health being caused by environmental backlash, the high costs to the national economy of externalities such as dryland salinity or pollution, point to the need for national solutions which can then be exported to help other countries

## ***12. Conclusions***

There are a multitude of actions that would benefit the environment industry's ability to be more competitive. Chief among these is the need for national recognition - throughout all levels of Government, all sectors of business and the community, that sustainability is the key to Australia's economic future.

While it is anticipated that the more specific recommendations in this study will form the basis for the work of the Action Agenda and will undergo rigorous scrutiny and analysis, it cannot be emphasised too strongly that a number of initiatives need to proceed immediately - these include the formalisation of the Australian National Environment Industry Alliance; the formation of the National Secretariat contracted to the EMIAA; export development; marketing strategy; and virtual marketplace and capability website, as well as the additional support for the Enviro Showcase.

The environment industry has traditionally been seen as an end of process solution to clean up where things have gone wrong. The true role of the environment industry is to be an integral part of rural, regional and urban planning and to increase efficiencies and decrease negative impacts.

For the environment industry to be successful requires a higher profile of the industry and a much better understanding of the capacity and capabilities of the industry to improve a range of outcomes be they health, quality of life, environmental or economic. This requires improved research, demonstration and marketing of the benefits to be obtained from the industry and from individual companies and specific technologies, services or systems.

The recommendations in this study encompass the initial research, documentation, marketing, showcasing and integration opportunities that industry and Government can collaboratively develop to strengthen the domestic market and build a stronger export programme for the industry.

The specific action recommendations have been balanced between Government and industry support and include both financial and in-kind assistance.

It is clear that other countries have successfully developed highly competitive environment industries and that immediate action is required if Australia is to have more than niche expertise competitiveness in the global arena. While significant in the Australian context, the funding and support levels indicated are conservative in comparison with other countries' efforts.

The benefits are seen as multiple - increased jobs in the sector, improved rural and regional environmental outcomes that in turn benefit other industry sectors such as agriculture, improved health, more efficient cities, a more globally competitive environment industry and the opportunities for other industry sectors to become more competitive through their actions on sustainability.

The recommendations amount to a request to Government for a financial commitment with additional Government staff time to support and drive initiatives. The input levels from industry would be similar in financial and in kind terms similar. Much of the proposed industry funding is already being spent but in a dispersed manner which is not benefiting the overall industry. It is anticipated that an over-arching programme of events and strategies, coordinated through a national secretariat, would add value to the industry, to environment industry associations, and to individual companies.

The strategy and actions are commended to Government for implementation through the Environment Industry Action Agenda.

### ***Acknowledgments***

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