

# Jobs in the Environment Sector

# Submission to the Standing Committee on Environment & Heritage Prepared by GreenChip Pty Ltd, 5 September 2003

## Preface

Forecasting 'Environment jobs' is a difficult concept to tackle. This view may be supported by the fact that the Standing Committee on Environment and Heritage has received only a limited number of submissions for this inquiry. We believe that the difficulty is related to forecasting Environment jobs against an uncertain future scenario. At the Federal level the Government is being criticised by many groups about its environmental commitment. However, it is also apparent that public opinion is waning with respect to a strong commitment to environmental protection.

Future scenarios will be affected by a number of factors including the:

- Leadership that is shown at the Federal and State levels to highlight how important it is to address environmental degradation. In many ways this leadership will determine the level of green consumerism in the community, which in turn will determine the level of pressure that is applied to businesses, which in turn will drive Environment jobs. Irrespective of one's political alignment our Government leaders need to agree on values that put the long-term security of our planet as a priority area for action.
- The affect of recent amendments to legislation such as the Financial Services Reform Act and the various State frameworks that support a mix of regulatory and voluntary programs. Time will tell whether large companies will take the lead and drive proactive changes through their organisation and those in their supply chain to realise the international opportunities associated with the environment.
- The strengthening of environmental regulations in Asia, which will see fantastic export opportunities for professional services.

This submission has been based on a scenario that includes business-as-usual conditions over the next five years. This scenario includes an apparent decreasing level of commitment to the environment at Federal level compared to economic growth, a population that increasingly sees little reason to reduce its consumption patterns and a business community that hesitates to realise the opportunities that are available to those that go green. We have not considered the potential growth of Environment jobs in Australia to service overseas clients although these are considered to be significant.

GreenChip Pty Ltd commenced operations in Melbourne in 2001. The company provides environmental advice to businesses on a range of areas including greenhouse strategies, waste avoidance and industrial ecology.

This submission has been made following discussions with Mr Bruce Billson MP on 4 September 2003.

**C**GreenChip

# Introduction

As presented in the Media Release, Environment jobs include people (services) who measure, prevent, limit, minimise or correct environmental damage. This submission is focused primarily on the people that provide professional services to businesses. We have not considered the jobs associated with environmental technologies or products.

We have looked at a number of Environment jobs in the services sector including those involved in:

- 1. Correcting environmental damage
- 2. Environmental Engineering
- 3. Compliance and risk management services, including measuring environmental indicators
- 4. Preventing damage
- 5. Educating & mobilising the mainstream workforce

We have addressed each of these areas and provided some thoughts that we believe should be considered in forecasting future opportunities for Environment jobs. We recognise that some of the opinions included in this submission may be more applicable to the States than the Federal Parliament. However, the role of leadership is considered to be important at Federal level to encourage consumers and businesses to consider changes that are required at State and Local levels.

As presented in this submission, we believe that the growth of Environmental jobs in the services sector will be low in some areas, high in some areas and negative in others. This is based on our current views of public opinion and our experience in the environmental consulting field over the past 15 years.

#### 1. Correcting Environmental Damage

Over the past 30 years, the environmental industry has boomed due, in many respects, to the demand from organisations needing to correct or measure environmental degradation. However, over the past five years in Melbourne and Sydney the work for contaminated site consultants has plateaued or possibly decreased given that many service stations and industrial sites have been remediated and systems have been implemented to minimise the future occurrence of spills and leaks. This is good news for the environment but it obviously negatively impacts the number of Environment jobs.

Other examples of 'correcting' environmental damage include tree planting to address salinity and loss of biodiversity, and Clean Up Australia day where we chip in to clear our waterways and parks and gardens. These programs require the assistance of an increasing number of volunteers. This is an unfortunate situation given that there are not enough volunteers to go around and therefore the result is usually sub-optimal. In addition, not only are there limited funds available to pay for people to complete these projects, there is less money available to encourage people to prevent the problems in the first place. Environmental volunteers are another example of people 'correcting' environmental damage but who make no positive contribution to the official Environmental jobs figures.



#### **Opinion**:

We need to ensure non-environmental policies prevent environmental damage so that the environmental "correction" industry decreases over time. This would include policies on land clearing, biodiversity and climate change.

## 2. Environmental Engineering

Environmental engineering covers a range of areas such as wastewater treatment, air pollution control, waste management and energy generation. In many cases environmental engineering involves the design and construction of infrastructure for either the prevention or minimisation of pollution.

Environmental engineering will become more important over time as resources such as water, metals and fuel become scarcer. Expansion of the renewable energy market will produce a large number of Environment jobs with many of these resulting from the redefinition of current roles such as "farmer" to "biomass fuel producer". It is likely that environmental engineering jobs will expand to bring various new initiatives to fruition including:

- Reuse of treated water from sewage treatment facilities
- Sequestration of carbon dioxide
- Recovery of metals from industrial sludges
- Recovery of energy from organic wastes
- Energy generation using geothermal, wave and solar sources.

## **Opinion**:

To ensure that these types of initiatives can be commercialised without undue delay, reviews should be undertaken of the alternatives (eg. landfill, emissions to air, fossil fuel derived power) and how these alternatives are currently being subsidised by the Governments. To accelerate green projects and generate Environment jobs, the Governments should be considering all externalities when estimating the costs and valuing the public benefit associated with such subsidies.

### 3. Compliance & Risk Management

Environmental consultants are often seen as costing businesses money with minimal direct return. This often means that an investment will usually only be made when there is a need for compliance work or risk management. These services include compliance and due diligence audits, monitoring, works approvals and contingency planning. This is a mature service offering, which will continue to expand in line with economic development. This service area is also likely to expand as a result of increased pressures on corporations to manage and report on their non-financial risks. These services would therefore be categorized as being focused on minimising environmental harm to minimise financial cost and/or meet regulatory requirements.

#### **Opinion**:

It is likely that this part of the service sector will grow gradually in line with advancements in corporate governance. An increase in Environment jobs should be expected in the medium term as a result of the Financial Services



Reform Act and other legislation that is being introduced by State Governments. This growth is expected to involve both internal advisers being appointed to companies as well as more responsibilities being outsourced to consultancies offering environmental services.

## 4. Preventing Damage

A relatively small number of people are currently employed in the services sector to specifically prevent or minimise environmental damage and this is the area that we consider has the greatest potential for growth. We estimate that there would be less than 100 people in Australia providing these services, which include:

- Cleaner production
- Eco-efficiency and life-cycle assessment
- Environmental management systems development
- Green purchasing policy/system development.

For example, the number of people providing cleaner production services in Melbourne would be less than 20. Most of the large environmental consulting companies do not actually provide this service although such a service will appear in their brochures as a result of projects completed 5-10 years ago when more Government grants were available.

However, there are other people providing services in total quality management, business management and supply chain management that are achieving cleaner production successes given that when it comes to resource efficiency, environmental protection is generally linked closely to economic improvements.

In our experience in the field of cleaner production and eco-efficiency, we have found that more success is gained by offering a service that is presented as 'business advice' rather than 'environmental advice'. On the flip side, more environmental improvements would be achieved if business and quality managers were educated in the fundamentals of resource efficiency rather than just product efficiency. Therefore, whilst Environmental jobs in this area may not increase, it is likely that the service offering will increase.

**Opinion**:

The number of Environment jobs in the area of cleaner production may continue to decline because professionals in this area are likely to present themselves as business advisers. However, government grants at State level are likely to provide stronger support for industry programs in the future, which may lead to a stronger demand for cleaner production services.

Services in the areas of life cycle assessment and green purchasing will increase as corporations become more conscious of the risks associated with their products. Environmental management systems (eg. ISO14001) have primarily been developed for the improved management of an organisation's activities (eg manufactuting plant). In the future we will see environmental management systems being developed for a company's products to provide better information on the product's in-use and end-of-life environmental impacts.

**Opinion**:

Jobs in the lifecycle assessment area are likely to be created in the academic institutions given the need to maintain rigorous databases with minimal



funding. Australian professionals still rely on lifecycle data that has been imported from Europe, which makes it difficult to be conclusive about the results of studies. Federal funding should be put into developing and maintaining a publicly available environmental effects database so that lifecycle assessments can more readily be completed. A significant number of Environment jobs would be associated with this database. Expansion of this area will be slowed by the fact that most companies currently do not want their products to be assessed against their competitors on the basis of environmental performance.

Opinion:

The recently launched 'Environmental Choice' eco-label in Australia (<u>www.aela.org.au</u>) will lead to new Environment jobs as businesses with green products seek to secure market differentiation. Government policies should promote this new initiative to expand the uptake of this labelling and provide a commercial advantage for greenchip companies.

Minimal Environmental jobs were created when Ford Australia asked all of its suppliers to develop and implement an environmental management system in 2000. Whilst there were hundreds of companies involved, Ford assisted the supply chain with manuals and other guidance. Some training was conducted in systems development and some consultancies won some work. It is likely that only a small number of companies subsequently employed a person to manage this system although some of the medium sized companies now having someone working at least part time to maintain the system.

**Opinion**:

Whilst the Ford example did not show a major increase in the number of Environmental jobs, many people within the supply chain would have had a responsibility for environmental management included in their position description. Over time it is expected that more medium and large sized companies will employ people to take on such responsibility for the management of systems and environmental risks. This increase will be accelerated by the decision of corporations such as Ford and Telstra to require their supply chain to improve their management of environmental aspects.

#### 5. Mobilising the Mainstream Workforce

There are many people employed in our economy that have the opportunity to make a significant contribution to minimising environmental impacts, including purchasing managers, financiers, developers, designers, retailers and farmers. Environment job opportunities would abound if governments agreed that these people could make a real difference to the environment and the economy and efforts were then made to mobilize them. This would lead to more jobs in the areas of training, systems development and environmental reporting.

All of these people that hold non-environmental positions are beyond the scope of this inquiry and therefore Environment jobs would be limited to those people responsible for up-skilling these people so that they are capable of reducing the environmental impacts as part of their day-to-day operations. This is considered to be the best way to prevent, limit and minimise environmental damage but without subsidies, compelling case studies and inspiring

5



leadership from the highest ranks, such programs are likely to have a low impact on the Environment jobs figures.

Another approach to encouraging businesses to modify their current practices is to have advisers available for free consultations on a full time basis. In the past two years EcoRecycle Victoria has implemented a new program that involves the appointment of five Industry Advisers to cover all of Victoria. This type of program provides an excellent way for businesses to access environmental advice without financial outlay. Effective and experienced advisers should be able to convince businesses of the benefits of improved resource efficiency and environmental protection. Whilst the advisers may not necessarily be available to provide ongoing support, businesses may be more convinced about seeking professional advice that can assist in providing positive economic and environmental outcomes.

Opinion: Environmental degradation will only be slowed when decision makers in the workplace and the home are educated and encouraged to take more positive actions. Government should encourage all workers to take some responsibility for their surrounding environment just as they are ask them to take responsibility for their personal safety and the safety of those around them.

## Conclusions

This submission has considered some of the factors associated with the expansion of the professional environmental services industry in Australia.

The opinions presented here relevant to Government policies can be summarised as follows:

- Government policies should be aimed at reducing the number of people involved professionally and voluntarily in environmental 'correction' industries/programs
- To enhance the expansion of the environmental engineering profession, the Government should review the subsidies currently provided to those competing technologies and infrastructure that do not support sustainable development. This should include a review of the 'external' costs associated with these old technologies in recalculating the net public benefit.
- Federal funding should be put into developing and maintaining a publicly available environmental effects database so that Australian institutions can more readily complete lifecycle assessments.
- Government policies should promote the new 'Environmental Choice' eco-labelling program in Australia to expand the uptake of the label and provide a commercial advantage for proactive companies.
- Government should encourage all workers to take some responsibility for their surrounding environment just as they are asked to take responsibility for their personal safety and the safety of those around them.

Other factors such as changing business practices due to community pressures will also lead to increases in the number of Environment jobs in the professional services industry.

6



Whilst not being a comprehensive, nor rigorous review of the environmental professional services industry it is hoped that this submission will provide a few ideas that can be considered by the Committee in developing policies that support the environment - Environment jobs will naturally follow.

Respectfully submitted GreenChip Pty Ltd

Anthony Peyton Director Secretary: And Aar RECEIVED 14 OCT 2002 HOUSE OF REPRESENTATIVES STANDING COMMITTEE ON ENVIRONMENT AND HERITAGE

 $\sim 7$  . The second sec

Contact details

- T: 03) 9326 4722
- F: 03) 9329 6818
- E: greenchip@bigpond.com