

Environmental education of New Zealand business: needs and responses

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Executive summary

This research project was undertaken for the Ministry for the Environment to identify first, the information that New Zealand businesses needed on environmental issues and, second, how those information needs might be met.

The Ministry was interested in seeing New Zealand businesses develop a pro-environmental stance and wanted to identify ways of encouraging the adoption of activities (such as producing an environmental policy or working towards a cradle-to-grave approach) as well as identifying opportunities and constraints surrounding these activities.

The research focused on the New Zealand manufacturing sector because it is a large industrial sector with a widespread impact on the environment. Two groups within this sector were identified: a group of Auckland-based businesses that tended to be large and had international connections (either through sister or parent companies), and a group of generally smaller, Christchurch-based companies that tended to be owner-operated.

Interviews were undertaken to elicit information on (i) business perceptions of environmental impacts, (ii) organisational and process changes made in response to environmental concerns, (iii) attitudes towards environmental regulation and (iv) the sources through which environmental information is received. The results of the interviews were presented at two small focus groups, one in Auckland and one in Christchurch, comprised of individuals who had been interviewed and interested others. The purpose of the focus groups was to develop strategies that the Ministry for the Environment might adopt or encourage amongst other groups to improve the level of understanding amongst businesses about environmental issues. Discussion in the focus groups concentrated on the types of environmental information businesses needed, preferences for obtaining this information and the type of systems (roles, responsibilities and infrastructure) required to deliver this information.

In considering the results it appears that businesses (based on this small survey of the manufacturing sector) are likely to fall into one of two categories when their environmental responsiveness is considered:

- (i) larger businesses with ready access to overseas parent companies who have already committed resources to investigating the implications of environmental issues for their activities.

This commitment may involve the appointment of an environmental manager to the company, the completion of environmental audits, moves towards adopting cleaner technology, the adoption of waste minimisation and/or energy reduction strategies, as well as exploring the potential to market "greener products".

- (ii) smaller owner-operated companies with less opportunity for accessing information about environmental strategies

These companies perceive themselves to be conforming to environmental regulations, but their proactive responses to the environmental challenge are rare.

While the process of interviewing encouraged discussion and enquiry about environmental issues, it is clear that many business people need to better understand the scope of the environmental problem and how the business sector is involved. An aid to this understanding would be the development of a taxonomy of terminology surrounding pro-environmental approaches so that "common ground" for discussion is ensured. Information is also required on how to start reviewing business activities from the perspective of environmental performance, including how to develop an environmental policy and carry out environmental audits.

This could be problematic in the sense that information, if it is portrayed as environmentally-oriented, may be ignored by business people who do not perceive the environment as an issue (or perceive it only in terms of statutory obligations). Alternatively, this information may be channelled to a narrow sector of staff and bypass the key personnel involved in shaping company behaviour. Similarly, the Ministry will be engaged in an "uphill" struggle as long as the business sector perceives that a pro-environmental approach costs money. Both attitudes (i.e. that the environment is not an issue for us, or that there are environmental costs) may be addressed effectively if information is linked to specific business needs such as energy reduction, waste minimisation, and recycling, which create some of the major financial benefits of a pro-environmental approach to business.

However, businesses gave a clear message that the adoption of a pro-environmental response requires that the government provide the appropriate environment for this change to occur. At present, there is the belief that a pro-environmental approach can threaten business survival as long as the New Zealand market is open to cheap, environmentally unfriendly products from overseas. The over-riding concern regarding regulation was that it restore equity, whether this be the monitoring of compliance of both large and small businesses, the active participation of business in the setting of standards or the protection of the New Zealand market through the introduction of tariffs. The TELARC Environment Choice Logo was seen as a standard that could aid New Zealand business if the scheme was to be more extensively developed and if it were augmented by Ministry-facilitated education campaigns aimed at increasing public understanding of the logo and the merits of "green products" in general.

Larger manufacturing businesses are particularly concerned that environmental responsibility is shared, not only by smaller businesses but also by other industrial sectors, including the financial sector. In this context, it was seen to be important for the Ministry to establish a sector-by-sector discussion of the ecological context of industrial operations. This would be facilitated by working in partnership with

industry to develop an effective intersectoral liaison group that could co-ordinate information flow and overcome the more parochial attitudes that could develop in independent business service groups and councils. While this networking might serve the upper echelons of industry, it is anticipated that the environmental response of smaller businesses might be triggered by a continuation of the interview process developed in this research. Similarly, a "green" extension of the interfirm-comparison service (developed at Waikato University) would provide a system of feedback that allows individual businesses to compare their performance with those of their colleagues and create thereby an incentive to improve their own performance.

The overall thrust of the findings is that, for learning and change to occur, there needs to be an effective partnership between government and industry, with both taking responsibility for the move towards sustainable development.

Recommendations

For environmental management

That the Ministry for the Environment facilitates the development of educational programmes focused on the nature and extent of environmental issues as they relate to all aspects of New Zealand business so that managers and directors can assess, in an informed way, whether they have a need to acknowledge these issues.

That the Ministry for the Environment considers the merits of continuing a series of on-going interviews with various business sectors in New Zealand (along the lines developed in this research) to focus the attention of business people on opportunities that exist for them to adopt a pro-environmental stance.

That the Ministry for the Environment produces a series of preliminary brochures outlining the first steps to be taken in developing corporate environmental responsibility. These brochures will provide:

- (i) definitions of common terms like "cradle-to-grave" and "clean technology",**
- (ii) information on the costs and benefits of taking a pro-environmental approach so that the links between financial gain and environmental quality are clearly established,**
- (iii) encouragement to make one director (or manager in smaller businesses) responsible for the business' pro-environmental activities,**
- (iv) information on the development of an environmental policy to ensure that environmental decision making is linked to industrial development,**

- (v) **in liaison with business service groups, information on environmental audits and a list of key professionals who may be contacted for advice on environmental auditing/assessment, and**
- (vi) **information (in the form of case studies) on specific need-related issues that businesses can immediately identify as cost-saving measures e.g. waste minimisation, resource recycling and energy reduction.**

For environmental regulation

- (i) **the Ministry for the Environment ensures that equity is achieved in the development, implementation and monitoring of standards through the effective participation of the business community (trade groups and service groups) in a partnership with regulatory agencies.**
- (ii) **the Ministry for the Environment ensures the adoption of high environmental performance standards and strongly recommends to government that these be backed by economic incentives.**
- (iii) **the Ministry for the Environment recommend to government that in its utilization of economic instruments that a proactive rather than reactive approach be adopted (i.e. that cleaner production be facilitated rather than waste reduction - essentially a cradle-to-grave approach).**
- (iv) **the Ministry for the Environment facilitates the immediate development and revision of the TELARC Environment Choice Logo (ECL) to maximise its ability to reward environmental responses by the business community.**

That the Ministry for the Environment, in this process:

- (i) **ensures that the development of the ECL is adequately funded,**
- (ii) **encourages the expression of environmentally-responsible consumer behaviour by providing the public with information about the nature of "green products" and the impact that consumer pressure can have on the development of such products,**
- (iii) **ensures that the development of the ECL is linked to the application of economic instruments,**
- (iv) **ensures that achieving ECL status be linked with an environmental audit or assessment or that the ECL status be issued for a finite period, and**
- (v) **ensures that the provision of an ECL links to both proactive and reactive programs, e.g. waste minimisation programmes as well as recycling efforts.**

For communication and networking

That the Ministry for the Environment promotes a sharing of environmental responsibility by facilitating a dialogue between all industrial sectors (including associations and councils), government and non-government organisations and in this context establish a sector-by-sector discussion of the ecological context of industrial operations.

That the Ministry for the Environment works in partnership with industry to develop an effective inter-sectoral liaison group and, where possible, build on those avenues of communication already in existence.

That the Ministry for the Environment explores the potential to extend the inter-firm comparison service currently underway at the Management Development Centre, University of Waikato, to promote environmental responsibility within smaller businesses.

1 Introduction

The emergence of pervasive environmental problems, such as global warming and ozone depletion, creates a new type of challenge for companies. Previously, problems such as these appeared to be linked only to specific highly sensitive industries such as chemicals and oil, but now every sector is affected. The call for sustainable development requires that the cumulative impacts of businesses at national and regional level also be scrutinised. The catch cry of “think globally, act locally” is drawing fresh attention to the effects of business on environmental quality even at the smaller end of the spectrum.

In particular, it would seem that companies should benefit¹ from an explicitly environmental stance to:

- (i) take advantage of the fast growing markets for ecologically harmonious products,
- (ii) avoid the costs of environmental liability, and
- (iii) take advantage of substantial cost-saving opportunities.

Many firms have recognised that caring for the environment is good business and is not just a matter of public relations. They recognise that energy efficiency, waste reduction, and pollution prevention can increase profits.

However, a recent article in the Economist² has suggested that there are no more than 100-200 companies worldwide that have made environmental performance one of their top concerns. Many others appear to pay lip service to the environment or have jumped on the band wagon by taking out glossy advertisements alleging their environmental performance. This tokenism may also be inevitable in New Zealand and places the Ministry for the Environment under increasing pressure to work in consultation with the business community to ensure that their environmental gains are substantive³.

¹ Winter, B. *Business and the environment: a handbook of industrial ecology*. European Commission. Discussed in Business International Ltd, 1990. *Managing the environment: the greening of European business*. London. 89p.

² The Economist, 1990. A survey of industry and the environment. September 8, 1990. *Vol. 316, No. 7676*. p.6 in article: ‘Save a pound and save the planet’.

³ Feedback on an earlier draft version of this publication from one manufacturing representative indicated that the Economist article could be debated in that since September 1990, the business sector has taken steps to deal with environmental issues more seriously.

A recent IUCN/UNEP/WWF document⁴ points out that businesses must make the ethic for living sustainably an integral part of their corporate goal, taking care that their practices, processes and products conserve energy and resources and have a minimum impact on ecosystems. Many of New Zealand's industries that are based on natural resources, like minerals, timber, fibre, and foodstuffs, or depend on environmental quality as tourism does, have a special responsibility towards environmental quality. For the IUCN/UNEP/WWF partnership, this means:

- (i) adopting **practices** that build concern for the environment into the whole apparatus of industry, business and commerce, from planning to the realisation of products. These practices need to avoid damage and monitor impacts, and require consultation with the community,
- (ii) introducing **processes** that minimise use of raw materials and energy, reduce waste and prevent pollution, and
- (iii) making **products** that are "environmentally friendly", with minimum impact on people and the environment.

Responsibility for ensuring that businesses adopt practices, processes and products that are environmentally benign is divided amongst:

- (i) government (as regulators and managers of economic policy),
- (ii) environmental experts (as the people who know most about the carrying capacity of the environment),
- (iii) industry itself (as the principal source of technological knowledge), and
- (iv) customers, as consumers of the end products.

The role of the Ministry in this process is set out in the Environment Act 1990, viz. s.(31)e

"To provide and disseminate information and services to promote environmental policies, including environmental education..."

The Ministry's concern is to develop this role and maximise the efficiency of its service to various sectors of the community. In particular, it is now concerned with how the delivery of environmental education (EE) might best help the New Zealand business sector to anticipate environmental developments and turn environmental performance into one of competitive advantage.

⁴ IUCN/UNEP/WWF, 1991. *Caring for the earth: a strategy for sustainable living*. Gland, Switzerland. October 1991. p.96.

The research reported here was part of a programme that will enable the Ministry for the Environment to facilitate the development and delivery of educational programmes and strategies designed to meet the needs of the business sector.

Our research objective was to:

- (i) identify the EE needs of the business sector of New Zealand, and in this process,
- (ii) suggest how those needs should be met.

2 Approach

One of our first concerns was to identify what was meant by EE. For environmentalists, education for the environment is the process that provides individuals and the community with:

- (i) an understanding of the complexity of our environment, and
- (ii) the values and practical skills to develop ecologically-sustainable lifestyles and environmental wellbeing.

But could this definition be applied to the business world?

As Elkington and Burke point out "Excellent companies are committed to people; their employees, their customers and those who are affected, in one way or another, by their operations. The difficulty they face in the environmental field, however, is in identifying everyone who is likely to be affected by their operations ... such companies also now recognise that their operations may have implications for people who they may never meet, either because they are geographically remote, or in some cases, because they are not yet born."⁵

It is clear from the remarks of Elkington and Burke that change is occurring - an awareness of the wider consequences of business activities is evident. The impact of production is being recognised, events are being interlinked, complexity is better understood and the greater environment valued. But to what extent is this change in thinking and action evident amongst New Zealand business? To what extent do they perceive themselves to be environmentally educated? And do their notions of environmental concern and needs for education correspond to the Ministry's expectations? Both groups needed to be consulted to assess the situation.

As a consequence, the qualitative methodology chosen for this research involved the integration of participation methods and a sequential refining of the research focus.

Three stages were involved:

- Stage I Liaise with the Ministry to assess the problem of EE from its perspective,
- Stage II Liaise with representatives of the business sector to assess the problem of EE from their perspective, and

⁵ Elkington, J. and Burke, T. 1989. *The green capitalists*. Victor Gollancz Ltd, London. p.228

Stage III Present a synthesis of the results from Stages I and II to workshop “focus groups” of business sector and Ministry for the Environment representatives to establish strategies to meet the EE needs of the business sector.

The three stages provide for the technique of triangulation (an attempt to investigate a phenomenon by approaching it from more than one route). The advantage of this approach is that dependence on the validity of any one information source is avoided.

3 Environmental education from the Ministry's perspective

The first stage, the liaison between the authors and the Ministry, occurred in October 1991. Four staff members from the Ministry were involved in the relatively informal discussion about their perspective on education for the environment. The points of discussion centred on the clarification of the Ministry's concept of EE, its notion of the "business sector", its role in EE and its notion of "sector need" for education about the environment. To some extent, the discussion was of a "brain-storming" nature, in that the authors were involved in an information-seeking process and needed to determine the boundaries of the study, while the staff from the Ministry admitted that they were still grappling with some of the issues. The results of this meeting, of direct relevance to the study as it was finally implemented, are discussed below.

While the traditional approach to EE has largely concerned itself with the change of values and an understanding of the wider implications of business activity, the Ministry was concerned that we look for behavioural change:

- (i) in particular, those actions to be taken or the practical skills that could be adopted that would enable businesses to develop a pro-environmental stance
- (ii) ways in which the Ministry for the Environment could influence and promote these actions or practical skills.

With this emphasis, it was expected that a change in values would occur if an appropriate change in behaviour could be stimulated. But what behaviours were important, how were we to assess whether a business was "needy" and what behaviours would businesses exhibit if they were becoming environmentally sensitive, and/or coping with the environmental challenge?

In discussion with staff from the Ministry, it became evident that the following pro-environmental actions by business could indicate an acknowledgement of environmental issues and the recognition of a business' impact on environmental quality:

- (i) formulation of an environmental policy by businesses,
- (ii) some form of assessment of effects (inventory of activities and their relationship to the environment) taking into account design, purchase, process, products, distribution, etc.,

- (iii) the adoption of a cradle-to-grave approach⁶ i.e. businesses would be starting to show a proactive rather than just a reactive response to environmental concerns,
- (iv) the adoption of clean technology⁷,
- (v) the adoption of organisational leadership to provide for (i) to (iv), and
- (vi) all the above would support the "Clean Green Image" for New Zealand.

In terms of the IUCN/UNEP/WWF framework, it became clear that the Ministry for the Environment's priority was to concentrate on behaviours that reflected a concern for the environment. An absence of such behaviour or practices would suggest that businesses had a "need" for education with respect to the environment whilst their presence would reveal the extent to which principles of **environmental management** were influencing processes and products.

⁶ For the purpose of this research the authors define a cradle to grave approach in a way that is philosophically consistent with that adopted by the Ministry for the Environment. It is one that involves the business in tracking the impacts on the environment of all the materials used during processes in which it is involved. Such an approach involves scrutinising the processes and products used by suppliers of materials. It also requires that the business consider the impact of any waste generated and the impact of the final products on the environment including mechanisms for their safe disposal or re-use.

⁷ For the purposes of this research clean technology is defined in a way that is consistent with the philosophy adopted by the Ministry. It is technology that, on a relative scale, produces outcomes that have a less detrimental effect on environmental quality than technology for which it could be substituted.

4 Methodological issues

4.1 A focus on manufacturing

To fully appreciate the EE needs of the New Zealand business sector, it was important to assess first to what extent companies were aware of and responding to environmental concerns. In-depth interviews were carried out with a total of 20 representatives from the manufacturing sector and from its associated service groups.

The decision to focus on manufacturing was made because:

- (i) as the largest industrial sector, it provided a reasonably wide and representative set of businesses for study (in terms of influence, impact on the environment, training and service to industry, etc.), and
- (ii) it was anticipated that, by concentrating efforts on one "pilot" sector, a clearer picture would emerge than if the same efforts were spread across all sectors. Similarly, it was anticipated that this information could be generalised and therefore be of value to other sectors.

"The New Zealand Business Who's Who" was used to identify companies that would cover all areas of manufacturing. In this identification process, two groups became apparent: (i) a group of Auckland-based companies that were generally large and had international connections (either through sister or parent-companies) and (ii) a group of Christchurch-based companies that were generally smaller and owner-operated. There were anomalies in that some Christchurch-based companies employed large numbers of employees (400-600 staff).

For the purposes of preparing this publication we refer to the "larger" and the "smaller" businesses. However, comments made throughout this publication are often preceded by qualifiers such as "many" or "most". The reader is reminded that it is incorrect to assume that all companies classified as small (and, by implication, primarily Christchurch-based) exhibited similar responses to environmental issues. (The companies selected for interviewing are listed in Appendix 1.)

4.2 The interviews

A questionnaire (adapted from a survey carried out by Business International on companies in Europe) was used as a guide for the interviews (Appendix 2). The survey questions used were directly related to changes IUCN/UNEP/WWF outline as exemplary of businesses that had adopted the ethic of sustainable development.

This covered practices, processes and products and thereby also included the major concerns of the Ministry. Within this framework questions covered:

- (i) business perception of environmental impacts (to assess the awareness of environmental issues),
- (ii) organisational and process changes made in response to environmental concerns (to consider the level of response to environmental issues),
- (iii) attitudes to environmental regulation, and
- (iv) sources of environmental information (see Appendix 2 for sample questions).

Points (i) and (ii) were intended to indicate the level to which change had occurred and "environmental management" had been adopted.

Point (iii) concerned attitudes towards environmental regulation because these attitudes would reveal the nature of the context in which pro-environmental learning and change may occur. Unless the regulatory framework, or context, is conducive to change there will be little learning and limited change.

Finally, point (iv) was intended to reveal the communication channels that are presently used and that need to be developed for the effective sharing of environmental information.

4.3 The interview process

Interviewees varied markedly in their experience of environmental issues. Larger companies were concerned about presenting a well-informed and coherent approach to the environment. On the other hand, smaller companies were open about their lack of knowledge on environmental issues and, during the interview, often sought advice about the options that were available to them.

As a result, the personal judgement of the interviewers became critical in making decisions with respect to what questions could or could not be asked if the interviewees were not to be compromised. The same question could be conceived as underestimating the expertise and experience of a knowledgeable interviewee while overestimating the expertise of others. Both cases could have been perceived as "put-downs".

Conversely, the technical sophistication of the responses received to some questions would, in a different setting, have been more appropriately dealt with by environmental auditors. The process of asking questions about a company's environmental performance focused attention and thinking on the areas that an auditor would examine. The researchers had no basis for judging the technical merit of interviewees' statements, nor was this part of their brief. It was, therefore, important for the researchers to concentrate on assessing the more general needs

of the manufacturing sector in relation to environmental information rather than to scrutinise technical aspects of their operation.

4.4 The "focus" of the groups

The results of the interviews were provided as feedback to "focus groups", the members of which were individuals from the business sector who had indicated (during their interviews) that they were interested in developing a working relationship with the Ministry in this area by participating in the refining of strategies. The task of the "focus groups" was to recommend strategies to be taken by both businesses and the Ministry in response to the level of understanding displayed by businesses about environmental management. While members of a group were free to comment on any aspect of the results reported to them as feedback from the interview phase, discussion was guided (focused) by three questions:

- (i) What are the priority areas for business regarding types of environmental information (or What types of information do businesses require with what priority)?
- (ii) What types of communication channels need to be established to disseminate the information? and
- (iii) What role does regulation (either self-regulation by business or through government intervention) play and what responsibilities emerge in education for the environment?

Two two-hour focus groups were held, one in Christchurch, to represent the generally smaller businesses and one in Auckland, to represent the generally larger businesses.

4.5 The focus group process

The authors developed two concerns about the role of the focus groups that deserve mention at this point because they influenced the manner in which results and recommendations were generated.

The first concern was that it was difficult to recruit members of smaller businesses to the Christchurch focus group. Because these organisations were small, they were unable to commit the necessary time to participate. This meant that this focus group, comprising seven members, included representatives of the service groups supporting the manufacturing sector as well as representatives of the Ministry and the regional council rather than representatives of small businesses.

The Auckland focus group drew far more interest from business representatives, but their commitments still meant that there were several cancellations only a few hours before the group was to convene. The result was a focus group of five members, with three representing businesses.

While both groups were smaller than originally intended, discussion was reasonably spirited, particularly as some members were already acquainted with one another.

The second concern related to the use of the "focus" questions. While these were intended to help determine business priorities for information about the environment and strategies for delivering information, they were very clearly meeting "our" needs as representatives of the Ministry in this process. On the other hand, the groups had their own "needs" and their energy frequently focused on aspects of the research that had not been anticipated. Whenever the authors attempted to redirect discussion to the "focus" questions the energy of the group dissipated so discussions were left to follow the energy of the group. As a consequence, the results presented are a more accurate picture of the real business needs rather than those expected by the authors (and possibly the Ministry).

We have paraphrased the comments volunteered during the focus groups and have italicised these after a ■ where they appear in this publication.

4.6 Setting the scene for the results

The results of Stage I set the scene in providing, in conjunction with the Ministry, a framework for assessing the needs of business for EE. Stages II and III are reported together in Sections 5, 6 and 7 because the information received from the "focus groups" was influenced by feedback presented by the authors from the interviews carried out in Stage II.

The implications for intervention and recommendations have therefore been developed from suggestions made by those interviewed and those involved in the focus groups (including those interviewed from service groups associated with the manufacturing sector) or they have been induced by the research team as logical extensions of issues raised in the interviews.

5 Environmental management

5.1 Perceptions of environmental impact

From interviews

There appears to be considerable variability in the interpretation that businesses give to the nature of the environment and, consequently, to the nature of environmental issues that are relevant to the manufacturing industry.

When asked to participate in the research project, some business people did not see their company as having any environmental impact nor did they feel the impact of environmental concerns. It is difficult to establish the extent of the response to environmental issues on this basis because interviews established that companies acknowledging a weak or unrecognised relationship to environmental issues may:

- (i) already be active in a pro-environmental way but may not explicitly recognise or define this activity as “environmental”, or
- (ii) be associated with activities causing environmental degradation but be unaware of the problem.

The process of trying to identify potential interviewees was also instructive of the perception of environmental issues and impacts within businesses. Our intention was to speak with someone in a management position with responsibility for environmental issues, but some companies did not have a clearly defined individual in that role. Our requests to speak with such a person were interpreted differently by different companies. For some of the larger companies, responsibility for environmental issues was with the recently acquired environmental manager (a development that has occurred primarily in the last two years). Three companies approached during this study had a director at board level taking responsibility for environmental concerns while for many of the smaller businesses there was no particular person responsible for environmental issues.

Most representatives interviewed perceive environmental issues as being important for their businesses. However, several reported that they had already been considered and had been integrated into the policy of the company (as part, for instance, of the health and safety procedures). To this extent, the importance given to environmental issues can be implicit rather than explicit.

Most businesses had been affected by a general rise in environmental awareness and it is probable that their level of awareness (as distinct from concern) will increase steadily. In particular, several of the larger companies demonstrated an awareness of and response to environmental issues as a result of the pressure felt by their

off-shore parent companies in Europe and the USA where consumer pressure and stringent environmental regulation demand an appropriate corporate response to environmental issues.

Focus group comments

Comments centred on the fact that, while an increased awareness may be evident, the "environment" is still being conceived too narrowly by the business community.

- *The environment is often perceived of as an issue if the company's doing something wrong. It's only perceived as a negative or bad thing. They don't relate to environmental issues unless they are bad things. Waste and energy reduction and recycling can't be environmental issues because they're not bad things. We need to use these as incentives/starters to focusing on environmental issues.*
- *It's not just a matter of believing you don't have an environmental problem or issue if you are complying with regulations.*
- *The environment needs to be brought into the corporate planning cycle/process and not just seen as a compliance issue.*
- *The environment should be an important aspect of how companies view the world because ultimately bigger environmental issues do shape their business. We need to explain how the environment could affect opportunities. The environment should be part of the homework done when companies reflect on their marketing.*

5.2 Environmental policy

From interviews

All the larger businesses interviewed had a company environmental policy, but some were implicit and integrated into other parts of company policy (such as health and safety) while others had explicit (and published) policies expressing an environmental stance. For small companies, however, there was no indication of the adoption of an environmental policy statement.

Focus group comments

Is an environmental policy really so important? There was a real concern expressed that policy "statements" could be more of a facade having little association with actual practice.

- *What does it mean to have an environmental policy? How does it affect people? Words without action are an absolute nonsense. You see too much of it.*
- *Policy is a word that we have created in the last two years? What is it?*

The point was made that there appeared to be little understanding in the business community that adopting a policy should affect a strategy (or strategies) for action.

- *The benefits from an environmental policy need to be made obvious - many are just words unless there is some commitment. A public environmental policy is not necessarily the "be all and end all". It depends on how it is subsequently used. It's not just a front - it needs to go to all employees otherwise it's just "warm words".*
- *... it needs internal and external accountability ... it's a public responsibility statement.*

5.3 Environmental audits

From interviews

Environmental audits have been undertaken by most larger businesses over the last one to five years although, again, this is an implicit rather than an explicit strategy for some businesses. Most large businesses have also consulted with outside experts to establish the most environmentally-preferable ways of running their businesses. Several of the companies mentioned that the audits they had undertaken were performed by an overseas agency (because New Zealand was not perceived as always being able to provide the necessary skills), particularly when that company had a parent or sibling company overseas.

Concern was also expressed about the number and variety of professional groups who indicated that they have expertise in the area of environmental auditing. Their quality was perceived to be variable and it was difficult to know who should best be approached. Some managers mentioned that they needed extensive auditing skills themselves so that they could make an appropriate decision about which auditors to hire.

Small businesses tended not to be involved in such developments and, at a general level, the environment was not accorded any special treatment. Although representatives of most small businesses interviewed did not know what an environmental audit was, the representative of one of the more experienced and large companies indicated, in contrast, that his company was frequently being contacted by smaller businesses wanting information about (i) running an environmental audit and (ii) appropriate responses to other environmental issues.

Focus group comments

While most agreed that companies needed to be aware of the importance of environmental auditing, there were several concerns voiced about the (i) increasingly broad definition of environmental audits and the problem this creates if legislation making audits compulsory is adopted, and (ii) how guidelines on environmental auditing can be established and environmental auditors recommended to business.

(i) The broad definition of environmental audits

The general feeling was that "... the concept of an environmental audit is too broad."

The fact that the information obtained in the in-depth interviews suggests that many businesses have not heard of the term "environmental audit" or have heard about them but have not undergone an environmental audit, does not mean that they are not assessing the impact of their company in an environmentally-relevant way. The focus groups pointed out that there may well be more experience in the business community than we are accessing. Again, terminology is the problem (it can be exclusive). Businesses may not have heard of **environmental** audits, but may still be doing energy audits and carrying out "risk" audits for new projects. Both are reasonably well established in the business community and have environmental relevance.

- *It is too difficult to think of an environmental audit as a unitary task which is one of the reasons why it should not be legislated ... better to think of energy audit or waste management assessment, etc.*
- *Environmental audits should not be legislated - it is good enough to have required standards and guidelines.*
- *There is a problem of what an environmental audit implies - doesn't have to be all negative.*
- *The term "audit" is off-putting because of its financial connotations. Leads to anxiety complexes. What about "environmental facilitation"? The concept of compulsory environmental audits is daunting. They will seem costly processes and will result in consultants with a "licence to exploit", they are a "cheque book for consultants".*

(ii) Recommended guidelines for auditing

Companies may be aware of the importance of environmental auditing but not know where to start.

- *Some big companies need to know about which people are good auditors as well as little companies. There are different bents to auditors and they are not always good. You need a team and it depends on the individual expertise of its members. You need to assemble skills.*
- *The Ministry for the Environment can't be seen to be pushing particular environmental auditors. Industry groups should push their own needs and work out the best service for them and their members. People who are using audits should get together and talk about what they want. Industry groups could advise/assemble the mix of skills needed.*
- *A list of credited auditors is not very useful because it's not specific enough.*

Others thought that on-site managers should be able to assess their own needs and then do an audit if necessary, or at least co-ordinate the process internally. However, this brought disagreement:

- *...most people don't see the real problems, don't notice what has to be done. They are too familiar with the process to know what needs to change, they need to see it through new eyes. It takes training to see the need.*

5.4 Actions adopted

From interviews

Many aspects of business (especially manufacturing, product development and marketing) are affected by environmental considerations. However, it is not clear whether businesses are affected most by the general rise in environmental awareness or by the advent of the Resource Management Act 1991 (RMA). It appears though that the high public profile companies (those that, for instance, deal with food and beverages) are probably most strongly affected by consumer pressures.

Key environmental issues for companies lie in the areas of (i) producing less waste or re-using waste (particularly waste water), (ii) reducing the energy-intensive nature of production and (iii) moving towards more environmentally-acceptable products.

All companies reported that they were taking steps to minimise waste, to recycle materials and to reduce energy, but not many companies recognise these actions as being defined "programmes". In particular, many small companies have invested considerable time and money in exploring viable ways of reducing waste or recycling, though these are frequently unco-ordinated activities motivated by cost-savings rather than by environmental issues. To this extent, any contact small businesses have with environmental experts is usually a reflection of well-defined needs in these areas (e.g. enquiries about energy reduction).

To what extent are these actions part of an overall cradle-to-grave policy? Five companies indicated that they were working on such a policy but only one company said that they had implemented the policy. Comments included:

- *We acknowledge this but we still have a lot of work and training to be done to go right back down to purchasing ...*
- *I would need to say a hazy "yes". If we discard something we have to know where it goes, how, etc. and our bulk materials are produced by (international firm in the USA) and we know they are environmentally monitored but actual policy? No, I can't really say that.*

While many businesses reported some form of strategy in managing environmental problems, the sophistication of the strategy varies considerably. They used terms like "environmental audit" and a "cradle-to-grave" policy but there is a marked variation in what this means to businesses.

5.5 Implications for intervention

It is apparent that many businesses have not yet recognised the implications of environmental issues for their activities. The opportunity for business people to consider their corporate strategies from an environmental perspective is yet to be realised by many New Zealand businesses. For that opportunity to become practice and to be a precursor to the adoption of some form of environmental management system within an organisation business people need to better understand what is involved.

The process of posing questions to interviewees encouraged learning during the interviews. Continuing these interviews, particularly within smaller business communities, may be a useful vehicle for educating business people in the future.

However, targeting EE programmes could be difficult if the company narrowly defines "environment concerns" because, in using that narrow definition, companies may well believe that their current activities are either environmentally appropriate or environmentally unrelated and, in both cases, they will not perceive the need for further information.

Conversely, if the environmental aspects of an education programme are presented in a narrowly or strictly defined way, programmes may be channelled to a narrow sector of staff and the key actors in re-shaping company behaviour will not be addressed.

There is a need for clear guidelines on how to start reviewing business activities from an environmental performance perspective.

In particular, information is required on (i) terminology, (ii) costs and benefits of taking a pro-environmental approach, (iii) company environmental policies and (iv) environmental audits.

- (i) Much of the terminology surrounding environmental issues and the options facing business are poorly understood. Even if interviewees claimed to be familiar with terms it was not clear whether or not they were using the same definition as the interviewer. Terms such as "cradle-to-grave", "clean technology" etc. need to be defined and communicated to business people.
- (ii) Costs and benefits ... The Ministry for the Environment will be engaged in an "up-hill" struggle as long as the business sector perception (or the reality) is that a pro-environmental approach costs money. It is vital that the Ministry for the Environment collates information about both New Zealand and overseas businesses that could be disseminated through regional bodies. Information must establish the links between financial gain and improved environmental quality.

(iii) Environmental policy ... The activity involved in producing a policy in a publicly-available document will be a useful vehicle for focusing company interest on pro-environmental industrial practices. Companies should be encouraged to:

- develop and publish a corporate environmental policy, adopted by the company's board of directors, and
- make a member of the company's board (preferably the Chief Executive Officer) responsible for environmental policy.

Companies will need information about (and particularly examples describing) the essential ingredients of such a policy, including how to integrate environmental decision making with corporate policy and link environmental with industrial development.

(iv) Environmental audits ... The business community is motivated to learn about appropriate environmental responses and environmental assessment and auditing procedures but information is difficult to gather and expensive to extract from professionals with varying degrees of expertise, especially when individuals do not know how to formulate and articulate their needs. While it is important for businesses to receive information on key contacts that can help them address environmental auditing and assessment issues, it is also important for the Ministry to provide information on key contacts impartially in liaison with business service groups.

However, it is recognised that the promotion of "environmental policies" and "environmental audits" brings with it difficulties in that both terms are conceptually broad, could be considered a "bit of a catch-all" and might alienate small businesses. Under these circumstances, it is important for the Ministry for the Environment to consider promoting a parallel "small wins" approach which would require a "break down" and a prioritizing of the environmental response. Within the business community, motivation is high for change in the areas of minimising waste, recycling waste (including the upgrade of used products) and reducing energy consumption. These involve some of the major financial benefits of a pro-environmental approach to business. Some clear guidelines (using case studies) that will enable companies to establish programs in these three areas will have likely appeal to the business community and will be of particular use to small businesses.

The common perception that the environment belongs with the set of concerns termed "safety and health" could also provide a vehicle for education packages. Although safety and health concerns have focused on the welfare of the individual, it may not be difficult to extend those perceptions to include the wider environment.

5.6 Recommendations for environmental management

That the Ministry for the Environment facilitates the development of educational programmes focused on the nature and extent of environmental issues as they relate to all aspects of New Zealand business so that managers and directors can assess, in an informed way, whether they have a need to acknowledge these issues.

That the Ministry for the Environment considers the merits of continuing a series of on-going interviews with various business sectors in New Zealand (along the lines developed in this research) to focus the attention of business people on opportunities that exist for them to adopt a pro-environmental stance.

That the Ministry for the Environment produces a series of preliminary brochures outlining the first steps to be taken in developing corporate environmental responsibility. These brochures will provide:

- (i) definitions of common terms like “cradle-to-grave” and “clean technology”,**
- (ii) information on the costs and benefits of taking a pro-environmental approach so that the links between financial gain and environmental quality are clearly established,**
- (iii) encouragement to make one director (or manager in smaller businesses) responsible for the business’ pro-environmental activities,**
- (iv) information on the development of an environmental policy to ensure that environmental decision making is linked to industrial development,**
- (v) in liaison with business service groups, information on environmental audits and a list of key professionals who may be contacted for advice on environmental auditing/assessment, and**
- (vi) information (in the form of case studies) on specific need-related issues that businesses can immediately identify as cost-saving measures e.g. waste minimisation, resource recycling and energy reduction.**

6 Perceptions of environmental regulation

In Section 5 we discussed the more-factual information that appears to be required for businesses to develop a pro-environmental stance. In this section, the conditions, or environment, pertinent to accepting and incorporating this information into business development are considered.

On the whole, industry seems to favour self-regulation and having a choice about the changes they make, but the environmental record of many industries needs to improve before public confidence is assured. However, the clear message coming through from business representatives is that the capacity for voluntary, self-regulatory measures is limited unless they are backed by uniform regulatory standards and appropriate economic incentives.

6.1 Standards

The RMA gives the Ministry for the Environment the responsibility to develop national policy statements and issue (through regulation) national environmental standards (about energy efficiency, materials and water efficiency of practices, processes and products). Regional authorities are obliged to draw up regional policy statements and plans that are consistent with these national guidelines⁸.

From interviews

Several companies reported that they go beyond the legal requirements for environmental protection set by regulatory authorities. Reasons for this included (i) encouragement by off-shore parent companies or national service bodies (e.g. New Zealand Chemical Industry Council) to adopt international standards and (ii) a long-term investment in technology (motivated by eventual cost-savings) that enabled the achievement of environmental targets with ease.

However, from the responses of the interviewees, it appears that few of them are aware of the potential and actual benefits of environmental regulation, other than broad "public good" gains such as reducing pollution. Increased costs were perceived to be the main problem posed by environmental regulation, although the sheer inconvenience of meeting some regulations was seen as unnecessarily "picky" by some smaller businesses.

The impact of the RMA on company performance is unclear. Those companies involved in seeking consents are aware of the need to understand the Act and to comply with it, although it requires careful study. There was a clearly expressed interest in learning more about environmental standards that will be required under the new Act, as many companies want advance warning of these standards so that

⁸ Ministry for the Environment, 1991. Directions for better waste management in New Zealand: a discussion paper. December 1991. p.9.

they can plan their long-term investment. Several requests were made for clear interpretations of the Act and the opportunity to work with the agencies responsible for setting these standards.

Focus group comments

The issue of regulation (whether government or self-regulation) was by far the most important aspect of the focus group discussions. For instance, they felt that it was not acceptable to expect larger businesses rigorously to uphold environmental standards while small businesses could evade monitoring.

- *We need to enforce the standards that are already in existence.*
- *They become yet another tier of competitors akin to the importers ... they are unconstrained.*

The feeling was that city councils set the standards for most small businesses in urban areas.

- *As long as they (the small businesses) have their storm water permit they are happy. They have less of an environmental perspective and little idea that this is part of an environmental concern.*

There was also concern that Government should co-ordinate the development of environmental standards and ensure that they are flexible.

- *Changes to how we need to deal with water, or solid waste or air pollution, need to occur together or there will be just a general move to use air if water standards are stricter, etc. How this is dealt with depends on the regulatory authority at the time.*
- *Imposing barriers like the reduction of raw materials by a certain percentage, x%, across the board, might not take into account that over the last y years a company has already cut back on raw materials and now will find it hard to trim further whereas companies that have to date done little can achieve the standards/barriers with ease. There needs to be some flexibility in the system to overcome this type of concern.*

Participants in the focus groups, like the interviewees before them, requested a clear interpretation of the Act and the opportunity to participate in setting environmental standards.

Regarding the documents produced by working groups that contain proposals for environmental standards (e.g. on water quality):

- *Companies can't respond. The documents are written at too high a level. They can't comment, too esoteric, doesn't come down to the impact on business. They need to be interpreted for business. They need to explain what the standards mean when it comes down to what is allowed to come out of the end of the pipe, and the costs that are involved.*
- *The standards debate needs to be translated in these documents. Guidelines explaining them are needed. They need to explain the technology available and the costs involved.*
- *Without this they will be poor standards because they have been devoid of comment and companies have no idea of what it means for them.*

The focus groups also believed that the move of business to self-regulation would be aided by involving trade groups in the development of standards.

- *Trade groups have a role to play. They can be self-regulatory and can set standards on an industry sector basis. The Chemical Industry Council is a good example. It's working on a code of practice and it would be good to encourage other trade groups to set compliance requirements on its members, e.g. the grocery retailers association, the pulp and paper manufacturers association.*

Certainly, input to the process of standards identification and notification would provide an opportunity for education as well as building communication networks between regulatory authorities and their constituencies.

6.2 Regulation v. economic instruments

Economic instruments (which include taxes, polluter pays charges or levies and tradeable permits) are an attempt to create a market for environmental concerns, either to replace or work alongside regulations (or standards) to achieve the desired environmental outcomes⁹. While it was agreed (in both interviews and focus groups) that there is a need to adopt environmental performance standards it was also agreed that these had to be backed by economic incentives. It is the lack of the right mix of such instruments and environmental regulation that is perceived as one of the primary problems faced by business in becoming environmentally sustainable.

⁹ Broad, H. 1991. Tunes from an economic instrument. *Terranova*. April 1991. pp.19-22.

From interviews

There was a clear concern in the business community about the costs involved in becoming environmentally friendly. Companies indicated that to have good environmental outcomes it was necessary for the Government to adopt appropriate economic signals by:

- (i) limiting the importation of cheap competing products that are not environmentally friendly, and/or
- (ii) levying charges on products that require special considerations before they can be used or disposed of in an environmentally desirable way.

Focus group comments

In common with many interviewees from the larger firms, the perception from both focus groups was that the right economic signals do not exist. The right conditions for pro-environmental change are not generated. The incentives are missing.

- *Do regulate but ensure that there is a level playing field. This means regulation interspersed with economic instruments. These have to be tied back to finance and lending institutions as well as the manufacturing sector and the public at large.*
- *The wrong signals are coming through. Productivity or "profit" is judged on throughput. There are rewards for consuming a lot of resources, energy, etc. There is no incentive to cut back.*
- *With our tradeability overseas ... we need an economic advantage to counter transport costs. It is said that we have an advantage with cheap energy resources, but that is considered a fallacy by others as we are not yet paying the true cost of our energy.*

6.3 Problems associated with economic instruments

There were also specific concerns mentioned by one focus group about those economic instruments that may already be used, for instance, the Polluter Pays charges:

- (i) Should pollution be dealt with at source or should polluters pay a levy? This was seen to be particularly a problem for small businesses who may discharge pollutants and not have the money to invest in technology to deal with them at source.
- *To expect them to do this would mean the certain demise of a number of small businesses. It would be easier for them to pay a fine and for the fines to be used by the regional council to set up its own central system to deal with the pollution of many small companies.*

However, some thought this already problematic in that,

- *... some rivers are already running at capacity pollution levels.*
- (ii) How best can a system of charges be implemented? Under the Water and Soil Conservation Act there was the possibility of adopting a sliding scale of charges administered on water rights, so that a levy could be charged depending on the amount of pollutants discharged and the level of sensitivity of the receiving water body. This opportunity was often used to send a signal to polluters about the impact of their activities. During the Resource Management Law Reform there was much discussion of the potential of economic instruments to play an important role in environmental management but in the RMA the possibility of implementing an economic instrument that would involve levying charges as a disincentive to pollute is absent; that facility has not emerged in the Act.
- *Now under the Resource Management Act you can't do this. It can only be levied for the consequent work involved in association with the pollution - they could be charged for the labour involved in taking water tests, the expense of tests etc. but not the extent of the pollution or a consequence of the pollution's impact on the environment.*

The possibility of tradeable permits was also brought up:

- *The government could also introduce tradeable rights to pollute, e.g. thermal energy users in the States ... if an individual company is using less or polluting less can sell off their rights to another company.*

While there was considerable discussion on the implications of using economic signals to evoke environmentally benign behaviour there was also caution indicated. The theme of the discussion had centred on charges, levies and the like, but as some individuals pointed out, members of the focus group were becoming trapped into focusing on **reactive** behaviour rather than focusing on mechanisms for encouraging a **proactive** business response to the environmental challenge.

6.4 New Zealand's "Green Image" and the Environmental Choice Logo

From interviews

In the context of regulation, there was interest shown by companies in the adoption of the TELARC Environmental Choice Logo (ECL) as an incentive for companies to start thinking about self-regulation. It was thought that the ability to use the logo nationally and internationally could be a positive step for the marketing of New Zealand products overseas. But again, there were drawbacks in that:

- (i) the process of achieving the right to use the label seems too protracted to some companies, and

- (ii) for the ECL to become more widely used, the Government would need to adopt an educational role by heightening public awareness of the label and the basis upon which it is awarded as well as the concept of green products generally.

Focus group comments

The focus groups were far more vocal about the implementation and use of the ECL. While in agreement with interviewees that those ministries who want to see the scheme promoted should invest in advertising to inform the public, there was concern that:

- (i) the development of the ECL label is slow:
- *It (the design of the ECL system) has proved to be a much more difficult job than envisaged, so to extend the categories (three at present) to a wider range of products quickly, is going to be difficult.*
- (ii) present criteria for application are not extensively green enough:
- *Currently the Environmental Choice scheme is geared along specific lines - not green lines. For example, you can substitute 40% of a product with recycled material and apply for the scheme but if you minimise the raw materials used in the first place you can't apply! There is no reward, or incentive for minimisation. Criteria for green labelling don't lead to the right signals ... you need to take an holistic approach.*
 - *Environmental audits also need to be tied in with the Environmental Choice Logo or there needs to be a time limit to the use of the Logo otherwise people will feel, after they have received their Logo, that they have done their bit for the environment and stop there.*
- (iii) ECL development has to be linked to economic instruments:
- *It will take a lot of time and money to explain the merits of buying one or another product. Industry has some real concerns about that. What is the actual advantage of having a green environmental policy ... it's no help if importers get rich. There's no point in having a clean green business that goes bust.*
 - *The labelling of foreign products is not necessary in New Zealand. In fact it is one of the few "developed" countries in which it is not required which makes the "Buy New Zealand" campaign very difficult. New Zealanders cannot make the appropriate decisions if this is not a requirement.*

There was also debate on the need to produce steps along the way to a TELARC label that could provide an incentive for companies to start producing a green product. One possibility was that demonstrated effort in the production of an environmental policy statement could be seen as an intermediate step along the way to fulfil TELARC accreditation. However, a similar system has been implemented by the international ISO 9000 series reported to be a failure in that the early steps to accreditation are soon seen as "less valuable".

6.5 Implications for intervention

Business representatives gave the clear message that if they are going to adopt a pro-environmental stance then the Government needs to provide the right conditions. The perception exists that education about the environment will fall short while change costs too much. It may be that in the long term a lack of consideration of environmental issues is to the detriment of New Zealand business yet business people currently perceive that taking account of environmental issues in decision making threatens business survival.

The over-riding concern in many of the comments and suggestions is the need for equity, whether this be in monitoring "across the board" for compliance amongst small and large businesses, the involvement of business in the development of standards, or the need to protect the New Zealand market from cheap, non-environmentally friendly products either through the introduction of tariffs or the promotion of an environmentally aware public. The ECL is seen as a standard that could help New Zealand businesses if it is extensively developed, if more proactive accreditation criteria are included and if the public is well informed of the meaning of the ECL. Flexible and fair standards are essential but must be backed up by appropriate economic instruments. Crafting those economic instruments requires the involvement of businesses who are concerned that the instruments are proactive rather than reactive.

6.6 Recommendations for environmental regulation

That the Ministry for the Environment ensures that equity is achieved in the development, implementation and monitoring of standards through the effective participation of the business community (trade groups and service groups) in a partnership with regulatory agencies.

That the Ministry for the Environment ensures the adoption of high environmental performance standards and strongly recommends to government that these be backed by economic incentives.

That the Ministry for the Environment recommend to government that in its utilization of economic instruments that a proactive rather than reactive approach be adopted (i.e. that cleaner production be facilitated rather than waste reduction - essentially a cradle-to-grave approach).

That the Ministry for the Environment facilitates the immediate development and revision of the TELARC ECL to maximise its ability to reward environmental responses by the business community.

That the Ministry for the Environment, in this process:

- (i) ensures that the development of the ECL is adequately funded,**
- (ii) encourages the expression of environmentally-responsible consumer behaviour by providing the public with information about the nature of “green products” and the impact that consumer pressure can have on the development of such products,**
- (iii) ensures that the development of the ECL is linked to the application of economic instruments,**
- (iv) ensures that achieving ECL status be linked with an environmental audit or assessment or that the ECL status be issued for a finite period, and**
- (v) ensures that the provision of an ECL links to both proactive and reactive programs, e.g. waste minimisation programmes as well as recycling efforts.**

7 Communication and networking

In the previous sections we dealt with the information and regulatory conditions required for business to develop an appropriate environmental response. In this section we consider existing channels of communication and those that need to be developed so that:

- (i) information can be disseminated (delivered), and so that,
- (ii) there is a strong business participation in this process.

There are two ways of viewing communication channels: one is to look at established or possible structures and the second is to consider established or possible processes. In dealing with problems there is a tendency for institutions to set up further structures rather than give time and finance to enhancing already established processes. New structures, though, still have the problem of **delivery** or dissemination of knowledge. While questions asked in the interviews were not specifically addressing either structures or processes, the points raised in both the interviews and the focus groups cover both aspects.

7.1 The process of networking

From interviews

There is a significant gulf between the ability of large and small companies in New Zealand to access environmental information.

In larger companies, information on corporate environmental performance is often gained daily from off-shore parent or sibling companies. Responsibility for monitoring environmental and associated issues is also accorded to particular people (such as the environmental manager) in these companies.

By contrast, small companies find information about the environment in a generally more passive way, often through trade-related magazines and the general media. Information about the environment is expected to percolate to management by **word of mouth** or via more indirect organisational networks such as monthly production meetings or the Health and Safety Committee.

Focus group comments

In the area of communication and networking the major focus for the groups were the questions of "How can we (the Ministry for the Environment) get environmental information across to businesses?" and "What type of communication channels need to be established?"

The groups were quick to point out the reason why large companies are doing more communicating and networking: they are dealing with a high risk situation in that if any part of their business is seen to be “environmentally damaging” the resulting media attention could mean that their whole operation is placed “at risk”.

Again, the underlying concern was one of equity. Concerns were that larger businesses were under pressure and closer public and government scrutiny - a pressure evaded by smaller businesses and the service sectors because of their individually smaller impact. It was important, they implied, for environmental responsibility to be shared. There was (i) a need to network more effectively with small businesses and (ii) a need to work with other business sectors.

(i) The need to network more effectively with small businesses
The general feeling in the focus groups was that “receiving things through the mail does not work”. To have “people on the ground” who made one-to-one contact with small businesses was seen to be important. In this context the visits by regional council/regulatory staff to small companies around the Manakau for their water quality issues was thought useful.

- *We need people with enough clout to visit companies and to get people interested. Inspectors used to give business people access to interpreted information.*

But who could be the people on the ground to replace the inspectors?

The trade groups and councils seemed to be the most appropriate source of information, but there was the lack of resources to consider and the fact that:

- *... some of the poor performers (companies with poor environmental records) don't belong to these associations.*

The personal touch seemed the most important avenue to explore.

One large company reported frequently giving advice when contacted by smaller firms needing to know how to deal with environmental issues. The idea was therefore floated that larger companies could foster smaller businesses in developing their environmental response. But this met with a resoundingly negative response:

- *Big companies won't foster little companies because they're competitors.*
- *We have to comply with restraints that little companies don't. Why should we be in the public eye ... and turn around and subsidise little companies?*

In all of the above suggestions there is an element of a "top-down" approach; there are some who are "experts" and "others" who need to be educated. But, as the IUCN/UNEP/WWF document points out: it is necessary for us to promote an environmental response through a two-way dialogue.¹⁰ In a sustainable society there is no audience, no target. People need to contribute as well as receive ideas and information. It follows that the greater participation we can bring about, the greater the change induced. Education through verbal persuasion and modelling (through case studies) is change-generating but combined with participation in a well thought out program may produce a very effective environmental response. In liaison with the trade councils etc. the task for the Ministry for the Environment becomes the facilitation of business participation in all things environmental. One possibility is to develop work done by the Management Development Centre at Waikato University (see Box 1).

¹⁰ IUCN/UNEP/WWF, 1991. *Caring for the earth: a strategy for sustainable living*. Gland, Switzerland. October 1991. p.54.

Box 1 An approach to reaching small businesses

During focus group discussion the possibility was raised that the Ministry for the Environment could facilitate the development of an inter-firm comparison. The Management Development Centre (MDC) at Waikato University provides such a service to client groups. Self-organised groups have approached the MDC to survey constituent members. Each member voluntarily responds to a series of questions designed to track the costs associated with their various business activities. Questions are also intended to elicit a measure of the effectiveness of the member in economic terms. The results are fed back to members in a manner that allows individuals to compare their performance with that of their colleagues creating an incentive is created to improve performance. There is also the opportunity to learn from the top-scoring individuals (possibly by organising an exchange of management personnel between branches). Those top-scoring individuals may also be approached to share the reasons for their success with those performing lower down the grading system. Case studies focusing on the reasons for success could be readily communicated to other companies. This would provide locally adapted and relevant information on successful examples of good environmental management. Community-based workshops could also be established that incorporate the personnel in the top-scoring outlets in communicating their management practices to others. Such an approach may overcome the resistance we encountered to discussing environmental responses with academics from a university setting.

The system appears to be most successful where the constituent members are not in direct competition e.g. where they are branches or outlets of one company or where they are geographically dispersed. It is possible that the series of questions posed to clients that currently focus on economic efficiency could be extended through discussion with the coordinating client to encompass indicators of environmental performance (pers. comm., Marylyn Hills, Survey co-ordinator, Management Development Centre, Waikato University). Questions might include an indication of energy used, waste materials generated, raw materials used etc.

Trade groups and associations could play a role in identifying potential groups for which inter-firm comparisons may be carried out.

(ii) A need to work with other business sectors

There was concern that institutions such as banks and finance houses are often the limiting step in investment in and adoption of new technology. Their understanding of the need for a long-term commitment to environmental quality despite short-term expenditure is critical yet the criteria applied by banks and finance houses during their deliberations appear to stifle investment in environmental innovation. Indications overseas are that the potential for these institutions to "inherit" liability for environmental damage created by debtors is serving as a stimulus to learning about environmental impacts and risk as they relate to business activities. The potential needs of individuals in the financial sector for information about environmental issues and their implications for businesses appear to be unmet.

Further, who communicates with the shareholders (essentially the public) to get them on side since they are the other "investor" in environmental quality?

- *Bankers and shareholders need to be talked to. We need to convince them, educate them. Shareholders aren't in a position to take a long-term perspective. We need a commitment to a loss in dividends if it means an improvement in environmental performance by the company. Otherwise you end up with a loss of confidence and the company sinks.*
- *The financial group have had a complete holiday in all of this. Investment groups, lending institutions and insurance groups have made no contribution to the costs ...*
- *There are bottom lines ... (money-making requirements). We need some of this information (about the importance of the environment and the investment involved) out there too. We need an educated and more supportive public.*

But who **should** communicate with the shareholders? What channels **should** be used?

- *The companies? That's difficult other than trying to educate their own shareholders. But shareholders will still get nervous in a drop in dividend. Some of the more active industry groups could be targeted. We need to go to the sector groups to get the message to bank managers ... pressure bank managers so that they know what the customer is talking about.*

7.2 The need for an industrial liaison group

In promoting dialogue between such a number of groups the question arises as to whether a liaison group needs to be established. While this was not a topic covered by the authors initially, there was reference to this possibility in the interviews.

From interviews and focus groups

In larger businesses, service networks (such as the New Zealand Chemical Council and the Plastics Environmental Advisory Council) are integral to the diffusion of environmental information. The question was raised though as to whether the environmental response of New Zealand businesses could be hindered by conflicting advice from trade associations and councils.

The Cleaner Production Foundation (CPF), being established at the Centre for Advanced Engineering at Canterbury University, was seen as an important initiative that may meet some industry needs for information. It will be funded partly by industry and partly by the government with a primary role to establish a data base and enable the transfer of technology to business and other interested groups about cost savings associated with energy reduction and waste minimisation amongst other things.

Interest was further expressed in establishing a liaison group to operate at the interface between industry and the Government and act as an umbrella for the trade councils and for the service groups, etc. It is expected that there would be problems with how such a group could be funded but it is anticipated that the group would need to be given the resources and responsibility to make decisions about environmental strategies and the minimum standards to be adhered to under the RMA.

There is no doubt that such a liaison or umbrella group could be useful in the development of a partnership between industry and government, not only in providing an integrated approach to sector-by-sector discussion but also in contributing to:

- (i) the best regulatory framework for new business developments that are consistent with adopting a pro-environmental stance,
- (ii) the most appropriate way to promote public understanding of new regulations and economic instruments like taxes and charges, and
- (iii) the appropriate environmental audit procedures for business and information to be released to the public.

Such a group could also facilitate information from the CPF or similar organisations.

However, while there has been interest in establishing an overall umbrella group, this has the problem of any new **structure**.

- (i) How would it gain commitment and credibility from small trade organisations?
- (ii) How would common interests be established?
- (iii) How would a mandate be established? and
- (iv) How would government gain confidence in the umbrella group's ability?

The problem may well be that if its role is to be highly specified, it could probably become bureaucratic while, if it were left to be more flexible, it could become redundant. Under these circumstances it would seem important for the Ministry for the Environment, in liaison with industry, to establish to what extent (i) sufficient opportunities already exist for various sectors of industry to have direct dialogue with the Government and (ii) whether these may be harnessed to establish an effective inter-sectoral liaison group.

7.3 Implications for intervention

Larger companies are distributing information on environmental matters through their effective networking ability. However, they are clearly indicating that this is a result of their being in a "high-risk" situation, where corporate actions are under the continued scrutiny of the media and government. They are naturally concerned that environmental responsibility is shared, not only by smaller businesses but also by other industrial sectors. But for responsibility to be shared, businesses have to be environmentally aware and information shared.

"Word-of-mouth" is one of the main processes by which business people are influenced, but who should be the "people on the ground" to do the communicating? In Section 5 we mentioned that even continuing the interviews carried out in this research process could act as a catalyst for further learning by businesses. However, a process that involves "word-of-mouth" information as well as the active participation of business people could be even more effective. In this context, the inter-firm comparison project run by the Management Development Centre at Waikato University shows the most potential for involving business people in a pro-environmental approach.

While this approach might be particularly useful at working at a "grass roots" level for small businesses, at an inter-sectoral level an over-riding body was needed to co-ordinate information flow and delivery e.g. in the dissemination of information from the CPF being established at the University of Canterbury. It is anticipated that such a structure would overcome future parochial "pro-environmental" attitudes of each of the independent business service groups and councils and would need to be developed by the Ministry for the Environment in co-ordination with the business community.

7.4 Recommendations for communication and networking

That the Ministry for the Environment promotes a sharing of environmental responsibility by facilitating a dialogue between all industrial sectors (including associations and councils), government and non-government organisations and in this context establish a sector-by-sector discussion of the ecological context of industrial operations.

That the Ministry for the Environment works in partnership with industry to develop an effective inter-sectoral liaison group and, where possible, build on those avenues of communication already in existence.

That the Ministry for the Environment explores the potential to extend the inter-firm comparison service currently underway at the Management Development Centre at Waikato University to promote environmental responsibility within smaller businesses.

8 Final considerations

8.1 The sector approach

The approach adopted in this study was to concentrate on one business sector, that of manufacturing. This choice was made partly because, as the largest sector, it provided a reasonably wide and representative set of businesses to study, and partly so that a clearer picture would emerge of one sector that in turn could be generalised and therefore of value to other sectors.

Much of the information in this publication fulfils the authors' expectations in that the results can be generalised to other sectors. Some of the environmental managers and service group representatives had experience with several other industrial sectors and discussion in the focus groups was frequently generalised across sectors. There was the clear message that other sectors need to be involved. It can be expected that:

- (i) the same environmental management information will be required across the sectors,
- (ii) similar attitudes toward regulation may be found,
- (iii) the recommended inter-firm comparison scheme could be applied to many sectors, and
- (iv) the development of an industrial liaison group will be pertinent to all sectors.

The authors are aware, however, that the issues covered in both the interviews and focus groups are just a beginning. An in-depth discussion of sustainable development with New Zealand business on what the concept can mean to them is still to come.

The authors strongly endorse the recommendation that communication channels be established for sector-by-sector discussion of the ecological context of industrial development within each sector. As a recent Australian Conservation Foundation (ACF) document¹¹ points out, there are advantages and disadvantages to this approach. The main disadvantage is that a sectoral focus is not a satisfactory context within which to examine environmental issues such as the maintenance of ecological systems and biodiversity (the issues of conservation) because these issues are inter-sectoral. It is important that these issues form the basis of discussion of sectoral issues.

¹¹ Hare, W.L. (Ed.) 1991. Ecologically sustainable development: assessment of the ecologically sustainable development Working Group Report. Prepared by ACF, WWF and the Australian Ecologically Sustainable Policy Unit. ACF, Victoria, Australia, p.105.

As ACF stresses, this type of discussion is particularly the case for the manufacturing sector which could have a significant role to play in reducing the resource-depleting characteristics of other sectors of the economy.

At present New Zealand has a resource-driven rather than a manufactured-driven economy where there is a high relative weight of raw material exports compared with those transformed into manufactured goods. If those involved in the manufacturing sector understand its unique role in leading the sustainable use of environmental resources this dominance of raw material exports over the production of manufactured goods could change. For example, solar energy systems could be manufactured in New Zealand as part of a pro-environmental strategy - a "manufacturing solution" to sustainability problems.

8.2 Partnership and change

The recommendations made in the publication fall into three categories.

- (i) The first is that of Environmental Management (Section 5). Here there are clear indications of the type of information needed by businesses to change and respond effectively to environmental issues.
- (ii) The second is that of Environmental Regulation (Section 6) - the environmental context within which change can and will occur. Here there are requests for a more effective partnership between industry and business, with clear recommendations that an appropriate mix of economic instruments and environmental regulation be developed so that businesses might respond effectively to environmental issues.
- (iii) The third is that of Communication and Networking (Section 7) through which information can be delivered. Here recommendations fall into two divisions: recommendations that relate to networking within the upper echelons of industry (sectors and service groups) and government, and recommendations that relate to the provision of information to those working in smaller businesses throughout New Zealand.

The overall thrust of the recommendations is that for learning and change to occur there needs to be an effective partnership between both government and industry with both parties taking responsibility for the move towards sustainable development. Such a partnership follows the strategy recommended in the IUCN/UNEP/WWF document as well as by the Australian Manufacturing Council¹².

¹² Australian Manufacturing Council, 1992. The environmental challenge: best practice environmental management. Australian Manufacturing Council. 49p.

Appendix 1 Manufacturers and service group representatives interviewed and focus group attendees

Interviewees

Fletcher Challenge Ltd, Penrose, Auckland*
Tasman Pulp and Paper Co Ltd, Kawerau (appointment made at request of Auckland office)
Carter Holt Harvey Ltd, Manakau*
Feltex Carpets NZ Ltd, Auckland
McDonalds NZ Ltd, Auckland
FERNZ, Newmarket, Auckland*
Rohm and Haas NZ Ltd, Otahuhu, Auckland
Reckett and Coleman Ltd, Avondale, Auckland
Sanitarium Ltd, Hillsborough, Auckland
Russell McVeagh McKenzie Bartlett, Auckland
Plastics Environmental Advisory Council (PEAC), Papakura, Auckland*

Christchurch Refrigeration and Electrical Ltd, Christchurch
Addington Engineering Ltd, Christchurch
Simsmetal Industries, Christchurch
Bowron and Co. Ltd, Christchurch
Ernst and Young, Christchurch*
Robert Malcolm Ltd, Christchurch
Milburn NZ Ltd, Christchurch
Skellerup Industries Ltd, Christchurch
Lagan Lumber, Christchurch

* Attended focus group sessions

Additional attendees at the focus groups

David Hill, Ministry for the Environment, Auckland

Mike Freeman, Canterbury Regional Council, Christchurch
Helen Lowe, Canterbury Regional Council, Christchurch
John Lumsden, Centre for Advanced Engineering, University of Canterbury
Alisdair Hutchinson, Ministry for the Environment, Christchurch
Bill Beaven, representing the Canterbury Manufacturers' Association, Christchurch

On the theme “Environmental impacts”

- Has your company been affected by a rise in environmental expectations?
- What are the major environmental issues for your company?

On the theme “Managing the environment”

- At what stage is the company’s environmental policy?
- Has the company carried out a review of the environmental impact of its operations (including exposure of its products and processes)?

On the theme “The process and the environment”

- What problems has the company encountered as a result of environmental regulation?
- Does the company have:
 - a waste minimisation program?
 - a material recycling program?
 - an energy reduction program?

On the theme “The product and the environment”

- Have existing and proposed products been redesigned to minimise environmental impact?
- Have you experienced consumer pressure for more environmentally friendly products?

On the theme “Communicating environmental information”

- From what sources do you normally receive environmental information?
- Does the company support a policy of open disclosure of pollution and health information?

What information does the company most need to improve its environmental performance?



