

# ENVIRONMENTAL MANAGEMENT IN NORTHERN IRELAND BUSINESS: THE GREEN INITIATIVE

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## Introduction

Environmental considerations are rapidly emerging as a very important issue for business and management in the 90s (Klassen, 1993; Hutchinson and Chaston, 1994; Green Economy Working Group Report, 1994). Legal and public pressure in Europe on the attainment of good environmental practice is mounting. A significant proportion of this pressure has been directed at business which is often identified as the major source of pollution. In addition, the 1991 British Social Attitudes report (Jowel, 1991) indicates that consumer buying patterns are changing with environmental considerations permeating society more widely. Consequently, organisations are having to respond to the demands of the modern, environmentally aware consumer by developing products/services which, for example, use less packaging, cause less pollution and/or reduce energy consumption.

Government has played a significant role in putting pressure on companies through environmental legislation. For example, environmental considerations have been built into the legislative framework for many years, with legislation covering air and water pollution, public health and safety, as well as more recent measures to control the use of products, processes and wastes which may harm the environment. The United Kingdom Environmental Protection Act (EPA) which builds on previous measures, is a key piece of environmental legislation which has drawn together and overhauled the regulatory structures and requirements of environmental protection in the UK. Much of the content of the EPA has been motivated by the activities of the European Union and will better enable the framework of UK pollution control to meet the demands of European environmental policy. It should be noted that within Northern Ireland, the EPA does not come into force for at least another year.

Until relatively recently, the environment debate in organisations has largely been one of rhetoric rather than action. Business Advice Guides for environmental improvement provided the first guidelines for business environmental improvement (Davis, 1991 and Ralston and Church, 1991). These were swiftly followed by more formalised environmental management systems, such as BS7750. This British Standard provides a generic model that assists organisations in establishing, developing and maintaining their own environmental management system.

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In recent years, a number of authors have conducted surveys dealing with environmental management issues. For example, Polonksky et al (1992) investigated environmental commitment in large firms within the Australian context. In the United Kingdom, there have been a number of regional studies dealing with the difficulties that SMEs have experienced in developing and implementing environmental policies (Hutchinson and Chaston, 1994; Patton et al, 1994; Welford, 1994). With regard to Northern Ireland only one study was found which dealt with the existing and potential employment opportunities created by environmentally based activities (Green Economy Working Group Report, 1994).

The study reported in this article concentrates on the management perception of the environmental threats and opportunities arising, both currently and in the future for businesses in Northern Ireland. It is anticipated that the findings from this survey should be of interest to strategic planners in the public and private sector, as well as environmental groups, industry trade associations and management consultants who are involved in designing and implementing environmental policy. The objectives of the survey were to establish:

- The level of awareness, analysed by size and sector, regarding current and impending environmental legislation/management systems and their implications to the organisation in terms of affecting the strategic and operational planning process.
- To identify the main factors influencing environmental policy within an organisation.
- The extent to which organisations are trying to address environmental issues, through for example, introducing environmental standards and investing in staff development/new technology.

## **Methodology**

A postal questionnaire was sent to over 400 organisations during the period March to May 1994, and a response rate of almost 50% was achieved. Such a high rate of response to a postal questionnaire would appear to reflect the interest and topicality of the subject matter at management level. The survey covered a broad spectrum of organisations in Northern Ireland, with the majority of companies (49%) coming from the manufacturing sector. For presentation purposes, the service and public sectors were combined under the heading non-manufacturing (51%).

The organisations contacted fell into roughly equal numbers in each size category as defined in the European Commission report on enterprise policy in Europe, (1994). Selection was based on those organisations which had a high public profile or who were known to be forward looking as evidenced by their positive response to previous University of Ulster research and teaching programmes.

In terms of organisation size, the SME sector was well represented, with

companies of less than 500 employees covering 82% of the respondents. However, even though organisations of more than 500 employees provide a low number of respondents (18%), in terms of overall employment they represented 52% of the total workforce, compared to 40% in the medium-sized sector and only 8% for firms with less than 100 employees. This would appear to reflect the findings of Bryson (1991) who identified similar employee compositions amongst the Northern Ireland organisations in his research.

## Results

### *Importance of Environmental Issues*

When asked to rank the importance of environmental issues, a large proportion of respondents viewed them as important, more so by manufacturing (59%) than non-manufacturing (48%). Looking into the future, inside the next three years, most respondents feel that environmental issues assume growing importance both in manufacturing (83%) and non-manufacturing (62%). However, it is still noteworthy that 17% of manufacturing and 38% of non-manufacturing organisations do not appear to be taking into account environmental issues.

Analysis of responses by size of organisation, as shown in Table 1, indicates that smaller companies are more likely to regard environmental issues as unimportant both currently and in the future. Hutchinson and Chaston (1994) suggest that this could be due to a number of reasons. For example, small companies may find it too expensive to address these issues compared to their larger counterparts. Another reason may be that larger organisations are more concerned about the adverse reaction of consumers and customers to unfavourable publicity. However, more significantly, they suggest that ultimately, the environment is a strategic issue that requires proactive planning to deal with it. The larger the organisation the more likely it will have management structures in place allowing for proactive environmental management to take place more easily. Smaller firms often work on an ad hoc basis with little or no long term corporate objectives. This reactive management structure is therefore not conducive to effective strategic environmental management.

**Table 1: Importance of Environmental Issues by Organisation Size**

No of Employees	<i>Not important/ Not at all important</i>	
	Current	Future (<3 Years)
<25	47	28
25–100	25	16
100–500	18	8
>500	8	6

### *Significance of Environmental Pressures*

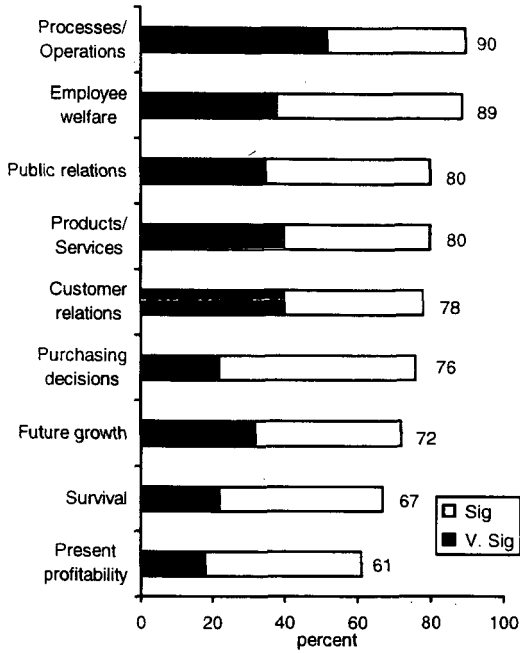
Respondents to the questionnaire were asked to rate the significance of a number of environmental pressures on their organisations. The results for the manufacturing sector, displayed in Figure 1, indicate that many companies are internally focused with processes/operations and employee welfare obtaining the highest responses. One explanation for this is that environmental legislation in Northern Ireland, up to now, has concentrated on Health and Safety aspects in the workplace. This view is supported by the fact that when asked to assess how environmental management is perceived, 85% of respondents regarded it as Health and Safety related.

Not surprisingly, as shown in Figure 2, most non-manufacturing organisations place greatest emphasis on the external factors of public relations and customer relations. Processes/Operations and products/services in non-manufacturing organisations are not seen as being under as much environmental pressure as is the case in manufacturing firms. This may also be reflected in the fact that manufacturing companies are more concerned about environmental pressures affecting present profitability and survival than their counterparts in the non-manufacturing sectors.

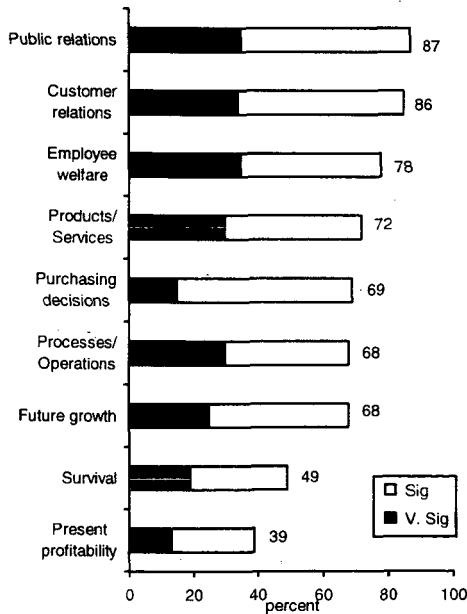
Two reasons may be identified as to why the manufacturing sector places more emphasis on profitability and survival than in non-manufacturing. Firstly, manufacturing companies are generally at a more advanced stage in terms of their knowledge of the impact of environmental factors on their business. Also, it may be that non-manufacturing business activities do not have the same detrimental impact on the environment as manufacturing companies and consequently they perceive very little impact on profitability and survival as a consequence of implementing environmental policies. It should be noted that this is a general comment and that some non-manufacturing organisations, such as the transportation sector, can have a very harmful effect on the environment.

It is interesting to note that while purchasing decisions in both manufacturing and non-manufacturing are influenced to a significant degree by environmental pressures, those who rated it as very significant represented a small minority. The introduction of BS7750 may act as a catalyst in encouraging firms to consider the environment when making purchasing decisions, since organisations (particularly in the public sector) may make it a requirement that suppliers obtain BS7750 certification to be placed on an approved vendor list.

**Figure 1: Significance of Environmental Pressures — Manufacturing**



**Figure 2: Significance of Environmental Pressures — Non-Manufacturing**



### *Important Influences on Environmental Policy*

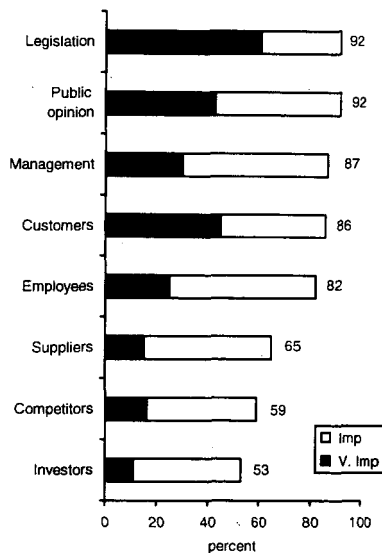
Respondents were asked to rank the importance of 8 factors in influencing environmental policy within the organisation. As shown in Figure 3, legislation and public opinion were rated as the most significant influences, with over 90% of respondents regarding them important or very important, closely followed by management and customers respectively.

The amount of environmental legislation currently in force, and planned is substantial (Wilkes, 1992). The EU currently has 150 legislative proposals relating to a large number of environmental issues, including environmental auditing, carbon/energy tax and packaging waste. This has important implications for all enterprises since, for example, it may mean employing additional specialist personnel, or obtaining assistance from trade associations, government bodies and universities.

The relatively low response rate for competitor influence (59%) is surprising, given the fact that customers have such an important role (86%) in determining environmental policy. This may reflect a lack of strategic awareness amongst organisations regarding the potential benefits of effective environmental management practices.

The influence of investors was perceived to be of least significance. However, it remains to be seen if this attitude changes significantly in the future as environmental mis-management increasingly impacts on the "bottom line". Polonsky et al (1992) highlighted this issue as a major area of consideration for organisations, as investors may show their concern with a particular company's environmental strategy by redirecting investments.

**Figure 3: Important Influences on Environmental Policy**



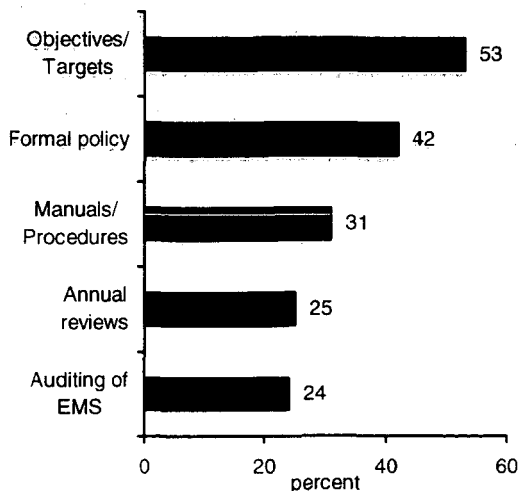
### *The Application of Environmental Management Systems (EMS)*

An EMS is an effective starting point for any organisation which is serious about its environmental responsibilities. There are four key components to an EMS:

- The environment review which examines the impact of an organisation's activities on the environment.
- An environmental policy which includes the objectives and targets which the organisation has identified as requiring improvement.
- System procedures and documentation which set out in detail how the organisation is going to meet the objectives highlighted in the policy statement.
- An environmental audit which should compare the organisation's actual environmental performance against basic standards set by legislation on a regular basis.

With regard to the introduction of an EMS, as illustrated in Figure 4, 53% of respondents claimed to have set objectives/targets, with only 42% having adopted a formal policy for environmental management. The relatively higher level of awareness of manufacturing organisations with environmental matters appears to be confirmed by the fact that they were at a more advanced stage of EMS implementation than the other sectors. Similarly, larger organisations had progressed further in this respect than smaller firms.

**Figure 4: EMS Aspects Currently Operational**



### *Awareness and Implications of BS7750*

BS7750, the British Standards Institution's standard on EMSs, was launched in 1994. In many respects the standard provided a management tool increasingly demanded by a range of stakeholders from consumers to shareholders. Compliance with the standard is centred on the ability of management to meet its own stated objectives. Central to the system is the recognition of the need for regular auditing and a continuous cycle of improvement which in itself will lead to a redefinition of the environmental policy and objectives.

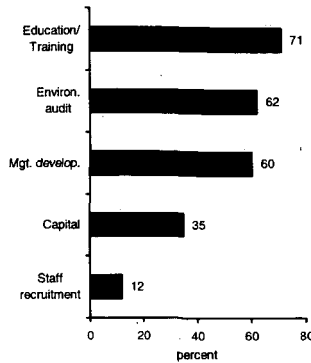
General awareness of BS7750 was high with nearly 66% of respondents answering in the affirmative. However, with regard to its contents, the depth of knowledge varied considerably, with only 28% being familiar or very familiar with its requirements. A significant proportion (48%) indicated that they were not familiar with the standard. As one might expect, the manufacturing and public sectors showed the highest level of knowledge concerning BS7750.

Despite the lack of detailed awareness of BS7750, 40% of respondents felt that registration could be important or very important for their organisation. The biggest proportion (29%) were unsure or undecided and this pattern was reflected across all sectors and sizes of organisation.

The degree of uncertainty with BS7750 appears to be highlighted by the fact that even though 40% of respondents regarded registration for BS7750 as important, only 19% had definite intentions of becoming registered. A sizeable proportion, 42%, were still unsure of their intentions. There was no discernible variation in response based on organisation size. However, a larger proportion of manufacturing firms were applying for BS7750 compared to the non-manufacturing sector.

### *Investment*

Figure 5 illustrates the main investment priorities for organisations. Interestingly, the main investment to meet the environmental "threat" was anticipated as being education and training of employees, rather than investment in equipment. Very few organisations considered recruitment of specialist staff as necessary. In general, investment of all kinds was more likely in larger organisations, the exception being staff recruitment. One of the main differences between sectors was that manufacturing firms were nearly three times more likely to invest in capital equipment compared to the non-manufacturing sector.

**Figure 5: Investment Priorities for Organisations**

## Conclusions and Implications

The survey reported in this article provides one of the most thorough and up-to-date examinations of management perceptions and awareness, regarding environmental issues, in Northern Ireland business. The 200 companies who responded to the survey represented a cross-section of employers, both in terms of size (i.e. number of employees) and sector (wide range of manufacturing, service and public sector organisations).

The results show a high level of awareness of the growing importance of environmental issues and the need for effective management systems, particularly in the larger organisations (over 100 employees) and the manufacturing sector. This would appear to confirm the findings of Hutchinson and Chaston (1994). For example, larger organisations have more time and money as well as strategic management structures in place to address these issues compared to their smaller counterparts. On the other hand, it could be due to a fear of adverse publicity that would more likely concern a larger organisation.

One key aim of the environmental challenge must therefore be to assist SMEs in dealing with environmental issues. Even though it may be argued that their individual influence on the environment may be small, taken together they have a significant impact. It must be appreciated that many small enterprises do not have the technical expertise which most large organisations will possess internally to assist in the development of environmental management systems. In addition, the majority of small businesses will not have the financial resources to buy-in environmental consultants.

Thus, a clear way forward revolves around cooperation and networking. This may entail creating stronger links between small firms and between firms and institutions. For example, a useful and often unexploited link might be between small enterprises and local universities or between firms and public bodies. The survey which was conducted indicated that only a small proportion of companies, 14%, had even considered using

the resources of a university to assist them in developing and implementing effective environmental practices. In addition, trade associations could provide assistance to SMEs with disseminating the vast amount of environmental legislation and to determine which sections are relevant to their individual members.

Government also has a role to play in providing assistance to firms who are attempting to be proactive with regard to environmental issues. The Green Economy Working Group Report (1994) suggested a number of areas which would benefit from Government support and these included:

- Placing a legal obligation on companies to report annually on their environmental performance.
- Providing financial support towards achieving BS7750.
- The provision of environmental management training
- Funding for environmentally related product development.
- Setting up an effective industrial environmental advisory centre for Northern Ireland to provide information on legislation and business opportunities.

With regard to environmental pressures, non-manufacturing organisations are more concerned with the externally focused factors of public relations and customer relations. Manufacturing companies, on the other hand, place most emphasis on Health and Safety issues within the workplace. It is interesting to compare this finding with a UK regional survey conducted by Welford (1994). In his survey, legislative pressures as a result of the EPA resulted in many companies considering clean technology when considering new investment decisions. However, the EPA does not come into force in Northern Ireland for at least another year. Hence, this would seem to suggest the importance of legislation in changing an organisation's focus on the definition of environmental responsibility. In addition, legislation appears to help in accelerating the process of implementing cleaner technologies.

Although nearly 2/3 of those responding were aware of the BS7750 environmental management system standard, less than 1/3 claimed any real knowledge of what it entailed. In addition, only 19% of respondents indicated a definite intention to register for BS7750, even though 40% felt that registration could be important for their organisation. The importance attached to education, training and management development by the respondents, would seem to indicate a desire to better understand the implications of the impending legislation and standards before deciding on the appropriate action to take.

In the next few years organisations are going to come under increasing pressure not only through legislation and standards but from external stakeholders as well. The relationship between a company and its customers is obviously very important. The range of characteristics that underlay the purchasing decision are an important consideration for any organisation. Increasingly, environmental factors are being accepted as one such characteristic by consumers. It is anticipated that companies which can validate and communicate the environmental performance of their products will

enhance their competitive position. Government also has a role to play in seeking to increase the purchasing leverage of the green consumer by providing the additional information a customer needs to make an informed choice in relation to the environmental performance of a product/service. The introduction of the EU eco-labelling scheme in 1993 is an example of this.

Increasingly, the pressure to improve environmental performance may emanate from trading partners rather than the ultimate consumer. Companies may begin to apply vendor and customer selection criteria which set certain standards of environmental performance and buy their resources from or sell their product/services to organisations which meet these environmental standards. It is likely that in the future companies will have to monitor their environmental performance through the application of environmental management systems, such as BS7750, and that this will also be written into contracts between the customer and supplier.

Pressures from investors and insurers may also increase in the future (Polonksky et al, 1992 and Teets et al, 1994). Already, there has been the introduction of ethical investment schemes which reflects the desire of many investors only to provide financial support to companies which behave in an environmentally responsible manner. There are a number of important business reasons why investors may prefer to support companies which indicate their readiness to embrace good environmental practices. The structure of legal liability for environmental damage assumes that the party responsible may be fined and required to not only bear the restorative costs, but also to compensate the affected parties for any associated losses. Consequently, companies which are responsible for a significant environmental incident may suffer financial losses, which may be translated into lower profit margins and dividends.

In addition, investment institutions that lend to organisations generally secure the loans on the basis of the physical assets of the company and often on the land upon which any investment takes place. If the company should cease to be viable, the commercial lenders assume ownership of those physical assets which are then sold to cover any outstanding debts. However, if the assets of the company are contaminated, then their value is significantly reduced. In some circumstances, the lenders may actually inherit environmental liabilities generated by the liquidated company. Investment institutions may therefore become increasingly reluctant to lend money to organisations which may develop any environmental liabilities or to secure loans on any physical asset which may have become contaminated. Consequently, in the longer term commercial lenders may require companies to adopt a high level of environmental performance, in order to minimise the environmental risk on the loan. Organisations which do not adopt such practices may find it increasingly difficult and expensive to attract and retain investment and insurance for their operations.

Organisations have always been faced with a wide range of competitive market conditions which threaten their survival. In many cases, being required to improve environmental performance may be perceived to add to this threat. However, it is

becoming clear that the demands placed on business to improve its environmental practices will continue to grow. It is anticipated that organisations which respond to this challenge will see themselves gaining a competitive edge over competitors which fail in this respect. Hence, not only is it ethical for a company to improve its environmental performance, but it may also be sound business practice. Such changes can not be expected to take place overnight, but hopefully a gradual and continuous effort to improve environmental practices will see Northern Ireland businesses accept the challenge to become more environmentally responsible.

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