“What is the nature and extent of environmental disclosures by listed companies on the Irish Stock Exchange within the Food and Drinks Sector?”

Roslyn Kelly

Word Count 15,430

This dissertation is submitted in partial fulfilment of the requirements for the Degree of MA in Accounting, Letterkenny Institute of Technology

Disclaimer 1

I hereby certify that this material, which I now submit in Partial fulfilment of the requirements of the Degree of Masters in Accounting is entirely my own work and has not been obtained from the work of any other, except any work that has been cited and acknowledged within the text of my work.

Signed ....

Disclaimer 2

I agree that this thesis may be used by Letterkenny Institute of Technology for teaching purposes on future Master Programmes.

Signed ....

Abstract

In April 2008, Terence O'Rourke, Managing Partner of KPMG in Ireland spoke at a presentation on Accounting for Sustainability to the Annual Conference of the Institute of Chartered Accountants in Ireland (ICAI) and said that,

> "The phrase 'Accounting for Sustainability', is slowly but surely starting to enter the lexicon of business. The environmental impact of business has been widely recognised for decades; however it's only in the recent past that any attempt has been made to measure the real social and environmental cost of the continued depletion of scarce resources such as oil and water."
>
> ICAI (2008)

Environmental reporting is primarily concerned with companies reporting on the impact it operations have on the environment and how the company is reducing this impact.

This research found that the nature of environmental disclosures of listed companies on the Irish Stock Exchange (ISE) within the Food and Drinks Sector are not as comprehensive as those of other Sectors of the ISE. Furthermore, this research found that the extent of their environmental disclosures goes no further than environmental mission statements, small amounts of quantitative data, and listed accreditations and certificates companies had received with regard to their environmental practices. Despite the number of companies within this Sector disclosing environmental information within their Annual Reports increasing over the past eight years, the quality of information disclosed has not greatly improved.

Additionally, this dissertation investigated the perceptions of senior management of the ISE listed companies within the Food and Drinks Sector with regard to environmental reporting. The researcher made recommendations as to how companies and the Government can increase and improve the level of environmental reporting, both within the Food and Drinks Sector and in other Sectors of the ISE. The researcher in light of the findings, also made suggestions for further areas of research.

Acknowledgements

I would like to thank my supervisor Sinead Gallagher, Letterkenny Institute of Technology for her help, support, encouragement and guidance.

I would like to thank my lecturers at Letterkenny Institute of Technology for their warm welcome, help and support throughout the academic year. It made the time I spent in Letterkenny Institute of Technology most enjoyable.

I would like to thank the staff of the Library within Letterkenny Institute of Technology for all their help and support throughout the research process.

I would also like to thank the individuals who participated in my research, for taking the time to reply to my phone calls and e-mails and for participating in the interviews.

I would like to thank Siobhan, who proof read my thesis. Your time and help was greatly appreciated.

Finally I would like to thank Kevin, for all his support and encouragement throughout the academic year and whilst I was completing this dissertation.

Abbreviations

ACCA- Association of Chartered Certified Accountants

AccountAbility- The Institute of Ethical and Social Accountability

Carbon Dioxide- CO_2

BITC- Business in the Community

CEO- Chief Executive Officer

CER- Corporate Environmental Reporting

CFO- Chief Financial Officer

CIMA- Chartered Institute of Management Accountants

CPA- Certified Public Accountants

CSD- Corporate Social Disclosure

CSR- Corporate Social Responsibility

EMS- Environmental Management System

EPA- Environmental Protection Agency

EU- European Union

FEE- Federation of European Accountants

GRI- Global Reporting Initiative

IBEC- Irish Business and Employers Confederation

ICAI- Institute of Chartered Accountants in Ireland

IPCC- Integrated Pollution Prevention and Control

ISE- Irish Stock Exchange

IIEA- Irish Institute of European Affairs

NER- New Economic Regulations

NGO- Non-Governmental Organisation

NRE- Nouvelles Regulations Economiques

OFR- Operating and Financial Review

PLC- Publically Listed Company

Abbreviations

PWC- PriceWaterhouseCooper

SEI- Sustainable Energy Ireland

SEI-LIEN- Sustainable Energy Ireland-The Large Industry Energy Network

TBL- Triple Bottom Line

UK- United Kingdom

UNEP- United Nations Environment Programme

WEEE- Waste Electrical and Electronic Equipment

Table of Contents

Chapter

Page No.

1.0 Introduction

1.1 Introduction

The purpose of this dissertation is to provide a valuable insight into the nature and extent of environmental disclosures by listed companies on the ISE within the Food and Drinks Sector.

This dissertation is presented in five chapters. The first chapter provides a background into the effect that companies activities can have on the environment. It also identifies some aspects of the action the European Union (EU) and the Irish Government are taking in their recognition of the importance of environmental protection. The rationale for the research and the justifications for the research are also presented in this chapter. The second chapter presents the literature review. This is the secondary research conducted by the researcher. The third chapter discusses the research methodology available to the researcher and identifies the methodologies chosen and the methods of data collection for the primary and secondary research. The fourth chapter provides an analysis of the research methods used by the researcher and presents the findings of the study. The fifth chapter of the study presents the conclusions of the findings, recommendations and areas of further research.

1.2 Background

A study conducted by Meadows et al. (1972) entitled 'The Limits to Growth', cited by Gray (2006), gave rise to the conclusion that in the early 21st Century, the planet would face a considerable resource limitation. Further analyses by Meadows et al. (1992) entitled 'Beyond the Limits' and 'Limits to Growth: The 30 Year Update' Meadows et al. (2004), cited by Gray (2006), came to the same conclusions as the initial study. These analyses span thirty-two years and explain the possible effects that companies and society can have on the environment by consuming resources and increasing levels of pollution. Thorne et al. (2008) highlight that the use of the planet's resources has led to an increase in society's standard of living; however, there has been an adverse effect on the environment. Examples of these environmental costs are endangerment of plants and animals, scarcity of water in some parts of the planet and the increased pollution levels in cities.

The effects that the operations of an organisation can have on the environment are clear when a number of disasters are highlighted. Dixon et al. (2005) draw attention to the Union Carbide's 1984 leak of poisonous methyl isocyanate gas from its pesticide plant in Bhopal, India. The result of this leak led to 200,000 injuries and over 4,000 deaths. In addition to Bhopal, Dixon et al. (2005) and O'Donovan (2002) also highlight the case in 1989 of the Exxon Valdez oil tanker running aground. This occurred in Prince William Sound, which is situated on the west coast of Alaska. This eleven million gallon spill of crude oil had devastating effects on the marina flora and fauna. Drever et al. (2007) draw attention to the 1986 disaster at the Chernobyl Nuclear Power Plant in the Ukraine. This nuclear meltdown had an adverse effect on the residents of Chernobyl, with the World Health Organisation (2006) stating that approximately 5,000 cases of Thyroid Cancer can be linked to the radiation from the meltdown. The environment has also been effected, for example, radioactive materials still exist in forests, agricultural land and in undisturbed urban areas that have been unoccupied since the meltdown (Green Facts, 2006).

Society's awareness of protecting the environment has also grown with membership of Greenpeace and Friends of the Earth increasing tenfold between 1981 and 1993 (Walmsley and Bond, 2003). It is this increased societal awareness that has led to a greater demand for accountability and transparency, with regard to how companies operations are affecting the environment (Fortes, 2002).

In addition, Fortes (2002) discusses the World Commission on Environment and Development Report 'Our Common Future' 1987, also known as the Brundtland Report, which highlights the need for sustainable development, in order to reduce the impact that companies and society can have on the environment.

The EU has also recognised the importance of protecting the environment. Delbard (2008) reports that the EU's Environmental Policy was launched with the introduction of its first environmental action plan in 1972. As of 2008 the policy contains more than 300 directives, decisions and regulations, some of which according to Delbard (2008) are relate to the operations of businesses. For instance the Waste Electrical and Electronic Equipment (WEEE) Directive 2008, requires producers to collect and dispose of electrical and electronic equipment in an environmentally friendly manner (Department of the Environment, Heritage and Local Government, 2008).

In addition to the EU recognising the importance of environmental conservation, Ireland has also taken action, which may be as a result of Ireland's rapid industrial growth and use of energy increased in the 1990's, which has led to increases in the use of natural resources and pollution levels (O'Dwyer, 2001). Ireland has targets to meet concerning reducing the level of Carbon Dioxide (CO2) emissions produced in the country, which were agreed upon signing the Kyoto Protocol. The Irish Government has recognised the need to address the impact that the economy is having on the environment. In 2008, the Minister for the Environment, Heritage and Local Government John Gormley delivered the first Carbon Budget in the history of the State. This Carbon Budget addressed the need for Ireland to reduce its emissions on a yearly basis. It placed the challenge of tackling climate change into Government policy and aimed to increase the public's awareness of climate change (Department of the Environment, Heritage and Local Government, 2008).

1.3 Rationale for the Research

The researcher's main motivation for this study is the lack of research into current practices of environmental reporting in Ireland. O'Dwyer (2001) based his research on the state of environmental reporting within Irish listed companies and state sponsored bodies. Research was also carried out on the annual reports of the top fifty publically listed companies in Ireland from 1991-1995 by O'Dwyer and Gray (1998), cited by O'Dwyer (2002), which highlighted that there was no extensive environmental reporting undertaken by those companies. O'Dwyer (2003) based his study on CER in all Irish PLCs. In addition, studies have been carried out regarding corporate social reporting within financial institutions in Ireland (Douglas et al., 2005). All companies' operations have some level of impact on the environment (Adams et al. 1995, cited by O'Dwyer, 1999). The Food and Drinks Sector is a less obvious choice for research on environmental disclosures as the companies included in this Sector are not consider to be 'dirty' companies unlike for example companies included in the mining sector (Olokesusi and Ogbu, 1995).

1.4 Justification for the Research

The researcher's reasoning for looking at the area of environmental reporting can be justified, as it will be of interest to the following:

1.4.1 Accounting Bodies

The ICAI, ACCA and Certified Public Accountants (CPA) will have an interest in this area. These bodies will comment on any accounting standard that may be created in the future as regards environmental disclosures during the exposure draft stage. By assessing the nature and extent of environmental disclosures of publically listed companies (PLCs) listed on the ISE in the Food and Drinks Sector in Ireland, these accounting bodies will be able to pass on information to their members about an area that is currently not governed by legislation or accounting standards in Ireland. This information will be of relevance to those members as it is important for accountants to be kept informed of developments in their industry.

1.4.2 The Big Four Accountancy Firms

The Big Four accountancy firms comprise of PricewaterhouseCoopers (PWC), KPMG, Deloitte and Touche, and Ernst and Young. Accountancy Ireland (2008) addressed the issue of a 'Green Agenda' of companies in Ireland. Partners wrote four of the six articles addressing this area from each of the Big Four. Therefore, the results of the proposed thesis may add to their existing knowledge of the area of environmental reporting.

1.4.3 Listed companies in Ireland who currently include an Environmental Report in their annual report

This research will be of interest to these companies, as the results will show the nature and extent to which listed companies in the Food and Drinks Sector report environmental information and the attitudes of senior management personnel within the Sector to the area of environmental reporting.

1.4.4 Future Accounting Students

The research will be of benefit to future accounting students as it will provide information on environment reporting, an area which they may not already be familiar with. Evidence of this is that previous research in Ireland at a Masters level on the area of environmental reporting is virtually non-existent.

2.0 Literature Review

2.1 Corporate Social Responsibility and Corporate Social Disclosure

The EU Commission's Green Paper on CSR published in 2001 defines CSR as,

> "a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis" (EU Commission, (2001) cited by Delbard, 2008:398).

Chambers Ireland (2009) state that CSR involves a company consulting and interacting with stakeholders in a manner that goes beyond an entity's legal and financial obligations. Engaging in CSR, allows companies to integrate social and environmental concerns into their everyday business operations. In contrast, Clarkson (2005), cited by Zambon and Bello (2005) states that there is no definition of CSR. O'Dwyer (1999) has refined the environmental and social issues addressed by CSR into three reporting categories, the first is human resources, the second the environment and the third is community involvement.

Companies that engage in CSR can disclose their activities through Corporate Social Disclosure (CSD). The definitions of CSD identified by the literature are in contrast to O'Dwyer's (1999) opinion that CSR is the reporting by a company on its human resources, community involvement and impact on the environment. Douglas et al. (2004) identify CSD as the process by which the company communicates its social responsibility to its various stakeholders, thereby including only two of the reporting categories identified by O'Dwyer (1999). Manasseh (2004) identifies only one of O'Dwyer's (1999) reporting categories by defining CSD as a voluntary process of a company giving information in relation to its activities that are related to the community. In addition, Gray et al. (1987), cited by Douglas et al. (2004) defines corporate social reporting as the process whereby a company communicates the environmental and social impacts it has, to its stakeholders.

The next section will further explain environmental reporting, which O'Dwyer (2002) identifies as a subset of CSD.

2.2 Environmental Reporting

The Federation of European Accountants (FEE) (2000) defines the objective of environmental reporting as the act of companies presenting information to their stakeholders, concerning its performance and its impact on the environment. Azzone et al. (1997) state that environmental reports can be presented as a simple statement or as a detailed report on the environmental practice, performance and future direction of the company. Nielsen and Thomsen (2007) describe environmental reporting as strategic activity, that can be used by companies to communicate its position and activities with regard to the environment, to all stakeholders. However, O'Dwyer (1999) provides a more detailed interpretation of environmental disclosure as the provision of information on various aspects such as environmental policies, audits, expenditures, impacts, processes, the impact company's products can have on the environment and details on their sustainable operations.

Following on from environmental and social reporting, is the concept of sustainability reporting (Association of Chartered Certified Accountants (ACCA), 2001).

2.3 Sustainability Reporting

Owen (2003) evaluates sustainability reporting as the process of integrating of economic factors as well as environmental and social issues into one report and to identify the stakeholders that should be directly involved in the reporting process. The Sustainability Reporting Program (2004), an organisation based in Canada, state that a sustainability report differs from an environmental report because it presents a complete picture of an entity's activities and provides a balanced view of trade-offs and benefits among environmental, social and economic impacts. It is the integration of economic factors into the reporting equation, which differentiates sustainability reporting from CSD.

However, for the purposes of this study the focus will remain on environmental reporting. Now that the concept of environmental reporting has been established, the next section proceeds with an explanation of what can be contained in such reports and where environmental disclosures can be found.

2.4 Environmental Reports: Contents and Location

The literature identifies information that should be included in environmental reports. Van Staden and Hooks (2007), explain that for environmental reports to be of a high quality, the company should inform readers about their strategies, contributions and progress in relation to the company's performance and impact. The ACCA (2001) state that an ideal environmental report will contain the following:

- A profile of the organisation, including its size in terms of turnover, number of employees, the markets it serves and the impact that its operations have on the environment.
- An environmental policy statement, this is a commitment to society that the company will pursue its targets and will report on how the company intends to manage and measure its success with regard to those targets.
- The disclosure of a full set of targets, which include control of emissions and waste and the use of natural resources in a responsible manner.
- Reporting the actual performance of the company in relation to the targets that have been set. The company should report the success or failure to meet targets. The company can also report on prosecutions and financial data regarding environmental costs.

In addition there are a number of voluntary reporting initiatives that have been developed, for instance the Global Reporting Initiative (GRI) which aims to provide companies with a framework of reporting guidelines, which they can follow (Dixon et al., 2005). These voluntary reporting initiatives are discussed in more detail later in this chapter. KPMG carried out three surveys on environmental reporting, in both an international and United Kingdom (UK) context (KPMG 1996; 1997; 1999, cited by Dixon et al., 2005). Dixon et al. (2005) have condensed the findings of these surveys and the elements that are to be included in environmental reports are shown in Appendix I. Although the literature does identify what information may be included, in reality this may not be the case. O'Dwyer (1999) criticises some of the environmental reports that were analysed in his research of Corporate Social Reporting in fifty of the largest companies (based on market capitalisation) listed on the ISE from 1991 to 1995. The research found that companies communicated their environmental policies and information regarding wastes and products. Additionally, companies made commitments to the shareholders with regard to the environment however; these were not followed up in subsequent years. His study also found that reports included minimal amounts of information of a quantitative or qualitative nature.

The literature identifies a number of locations where companies publish their environmental disclosures. O'Dwyer (2001) highlights areas within the annual report, for example the Operating and Financial Review (OFR) section, the statements by the Chairman or Chief Executive Officer (CEO) and in the Directors Report. Haddock (2005) conducted her study by analysing the environmental information disclosed by companies on their websites; therefore, these companies were using the internet as a medium of communicating their environmental to their stakeholders. Elliott and Elliott (2007) outlines that in industries such as oil and gas, forestry and pharmaceuticals, which may be categorised as high risk, are increasingly producing stand-alone environmental reports. O'Dwyer et al. (2005) established through their research that disclosure within the annual report should not be the only medium used and that there was a call from Irish Non-Governmental Organisations (NGOs) for stand-alone environmental reports to be published together with disclosures in the annual report.

The United Nations Environment Programme (UNEP) Technical Report on Company Environment Reporting (1994), cited by Azzone et al. (1997) and O'Dwyer (2001), identifies five varieties of reports that companies can produce. Azzone et al. (1997) summarises the five varieties as follows:

1. Newsletters, short statements presented in the annual report and green glossies.
2. A once-off environmental report, which may be linked to their first environmental policy statement.
3. Annual reporting linked to the company's environmental management system.
4. Full performance data report on an annual basis.
5. Triple Bottom Line (TBL) reporting, this encompasses social, environmental and economic aspects of the company's performance, i.e. Sustainable Development Reporting.

Azzone et al. (1997) through their research identified eight stakeholder groups, to who companies report environmental information. They established what information each group wanted and the format in which the information should be reported. The problem, which arose, was that each group wanted a different format. Therefore, two types of reports were outlined:

1. Generic reports targeted to all stakeholder groups.
2. Specialised reports i.e. progressive reports, functional reports and explanatory reports. These reports are targeted at specific groups of stakeholders.

A summary of each target group and the environmental information they require is produced in Appendix II.

The researcher now established the reasons why companies engage in environmental reporting.

2.5 Why disclose Environmental Information?

The literature provides a number of explanations as to why companies are motivated to disclose environmental information. The following section of this paper presents some of these findings.

Wilmshurst and Frost (2000) conducted a survey based on the opinions of Chief Financial Officers (CFOs) of Australian companies, regarding their motivations for disclosing environmental information. Those motivations are listed as follows:

- Awareness and concern of consumers, suppliers, financial institutions, environmental lobby groups and the community.
- Shareholders and investors right to information.
- The company may be legally obliged to report.
- Management not disclosing information may lead to government intervention.
- Competitor’s response to environmental concerns.
- To meet due diligence requirements.
- To provide a true and fair view of company operations.

A study conducted by Coopers and Lybrand Consultants (1997), cited by O’Donovan (2002) found that corporate managers believed the following were the benefits to companies as a result of reporting environmental information:

- To enhance the reputation of the company.
- To secure endorsements.
- To align management values with social values.
- To demonstrate strong management principles and social responsibilities.
- To prevent attacks from pressure groups.

A number of additional benefits are suggested by the ACCA (2001), which are as follows:

- It can increase the competitive advantage a company can have over its competitors by demonstrating its transparency and openness on environmental matters.
- Companies may gain access to more preferred suppliers, who share the same high environmental values as the reporting entity.
- A company by being more transparent and open regarding its operations may improve employee morale.

On the other hand, Haddock (2005) suggests that companies report on environmental issues as part of a defensive strategy, in order to counteract negative publicity. However, the author states that even a defensive reporting strategy may improve the company's risk management, help them avoid financial penalties and maintain or improve relations with stakeholders. Fortes (2002) maintains that even though engaging in environmental reporting can increase the costs to a company, reporting allows the linking of environmental and financial data so that environmental costs can be assessed and also areas where costs savings can occur are identified. Zambon and Bello (2005) argue that providing environmental reports for stakeholders may not necessarily be enough to increase company profit, however by improving the quality of these reports it may help this process. In addition to these benefits and reasons of reporting environmental information, the literature develops four theories to try to explain the motivations as to why companies disclose corporate social information. The first theory is legitimacy theory (Gutherie and Parker, 1989; Mathews, 1993; Patten, 1992; Sutton, 1993, cited by O'Donovan, 2002). The second theory is stakeholder theory, identified by Clarkson, (1995), Mitchell et al., (1997) and Roberts, (1992), cited by O'Donovan (2002). The third is accountability theory (Gray et al., 1995). Finally, the fourth theory is political economy theory (Buhr, 1998; Gutherie and Parker, 1990, cited by O'Donovan, 2002).

The following section deals with legitimacy theory and stakeholder theory in the context of environmental reporting.

2.6 Legitimacy Theory and Stakeholder Theory

Companies who operate on a local or global scale are said to have responsibilities and rights with regard to the environment and society (Corporate Citizenship, 2008). O'Donovan (2002) states that these responsibilities give rise to a contract between organisations and society. As a result of this social contract, it is suggested that organisations will seek to legitimise their actions and justify their existence in order to get approval from society (Deegan and Rankin, 1996). Failure to legitimise their existence may result in the revocation of their social contract and pose a threat to the security of their long-term existence (Williamson and Lynch-Wood, 2008).

Lindbolm (1994), cited by Gray et al. (1995) suggests that companies can follow four strategies when seeking legitimacy regarding their actions. Gray et al. (1995) applied these strategies to a study of UK companies' environmental disclosure from 1979 to 1991 as follows:

- The company reports environmental information in order to educate its stakeholders.
- The company reports environmental information in order to change the perceptions held by the stakeholders of the company, without the entity having to change its behaviour.
- The company reports environment information to try to deflect attention away from negative impacts that the company has had on the environment and report on positive issues.
- The company reports environmental information to try to change misleading perceptions that stakeholders have of how the company should be operating to the benefit of the environment.

Haddock (2005) highlights that companies need to legitimise their environmental performance in order to counter any negative publicity, which may arise. O'Dwyer (2002) identified that some of the Irish PLCs included in his study, disclosed environmental information in reaction to pressure from the media and other groups, which posed a threat to their legitimacy. O'Donovan's (2002) research based on interviews with six senior managers from three Australian companies, revealed support for legitimacy theory as a reason for those companies to include environmental information within the annual report. While the evidence from the literature would suggest that companies use the disclosure of environmental information to legitimise their actions, a survey of CFOs of Australian companies conducted by Wilmshurst and Frost (2000) concluded that there was limited support for legitimacy theory being a motivator for companies to disclose environmental information. In addition, O'Dwyer's (2002) research on managerial perceptions of CSD concluded that many Irish companies avoid engaging in CSD because of a sceptical attitude held by Irish society towards companies' environmental disclosures thereby concluding that CSD was not supported by legitimacy theory.

Companies that are not motivated by legitimacy theory to disclose environmental information in their annual report may be motivated by stakeholder theory. Stakeholder theory is based on the concept that companies must gain the approval and support of its stakeholders for it to continue to operate (Ullmann, 1985; Roberts, 1992, cited by Gray et al., 1995). Thorne et al. (2008) identify a company's stakeholders as follows; shareholders, consumers, suppliers, employees, media, environmental groups, community, government, trade unions and interest groups. In addition, lenders and internal managers are also included in the stakeholder group by the ACCA (2001). The ACCA (2001) also reports that companies should firstly identify their main stakeholders, then to ensure that the information that is reported meets their requirements, the company creates a continuing discourse with them. They indicate that this must be done before the publishing of a company's first environmental report.

Deegan and Rankin (1996) maintain that if the environmental information provided to stakeholders is of relevance to them, this can lead to those users of accounts being supportive or not of the company. This support can take the form of investment in the company, customers buying the company's products and the company's ability to attract employees. O'Dwyer et al. (2005) focused their study on less powerful stakeholders in Ireland i.e. NGOs, their perspectives on CSD and what information they require. Their study highlighted the concept of using 'social partnership' to develop CSD in Ireland, by incorporating all stakeholders in the process. Azzone et al. (1997) highlight that a failure by companies to identify the target audience as a recurring problem. They state that knowing who your stakeholders are and the information they want is crucial. However, their study does not include the media and the public as part of the target audience, stating that for these groups a company's environmental report is not a suitable medium for communicating environmental information.

2.7 Reasons not to Report and Barriers to Reporting

The literature also identifies reasons why companies choose not to report environmental information, together with the barriers that exist to reporting such information. SustainAbility (an independent strategy consultancy group) and UNEP (1998) conducted a study of more than fifty Fortune 500 companies that both produce and do not produce corporate environmental reports. The research concluded the following as the reasons behind why companies chose not to produce an environmental report:

- It is an expensive activity.
- Disclosing environmental information could lead to deterioration of the company's reputation.
- Some companies do not believe that reporting can create advantages.
- Management do not have any interest in reporting.
- The company may not have the resources required to enable it to collect data and produce reports.

Although that study identifies that the cost of producing an environmental report and the belief that disclosing environmental information cannot bring advantages to the company, as barriers to reporting, Fortes (2002) maintains that environmental reporting can highlight areas where costs savings for the company can occur. In addition, Zambon and Bello (2005), claim that improving the quality of environmental disclosures may help increase the company's profit. In addition to these authors, Gray (2000), cited by O'Dwyer (2003), states that a company can report environmental data in a relatively easy and cost-free manner by summarising it within the annual report. O'Dwyer (2003) found that even though the information provided using this reporting approach was not especially insightful, it still highlighted the company's environmental issues, in an easy and cost-free manner.

This study also identifies those companies believe that disclosing environmental information could lead to the deterioration of the reputation of the company. This is in contrast to the findings of Deegan and Rankin (1996). The authors analysed the environmental disclosures within the annual reports of Australian companies from 1990 to 1993. They concluded that the majority of companies chose not to publish details of environmental prosecutions within their annual report, even though this information was already available to the public. It was therefore concluded that not reporting this information might have impaired the credibility of other environmental information, if such information had been provided in the reports.

In addition, Dixon et al. (2005) establish some barriers that prevent companies from reporting environmental information. These include,

- It may be expensive to engage in environmental reporting, again this is in contrast to the opinions of Fortes (2002); Zambon and Bello (2005); Gray (2000), cited by O'Dwyer (2003).
- The company may not have the resources (financial, human, technical) to engage in environmental reporting.
- The public's limited demand for environmental information, as a result of their low environmental awareness.
- Companies need time to change their operations and products to meet the challenge of environmental awareness. This in contrast to the EU's Environmental Policy which has been in existence since 1972 and in 2008 the policy contains more than 300 directives, decisions and regulations, some of which according to Delbard (2008) are related to the operations of businesses, for instance the WEEE Directive. This would suggest that companies have been changing their operations and products for the past number of years.
- Companies avoid reporting environmental information as they do not want to attract public attention, which made lead to damaging the company's corporate image and reputation.
- The fact that for the majority of companies reporting is on a voluntary basis.

- There is no one clear set of reporting guidelines, which companies can adhere to.

Dixon et al. (2005) have highlighted that the public have low environment awareness. This is supported by a study on Irish consumer's attitudes to corporate responsibility and corporate image conducted by Business in the Community (BITC) (2006). This study revealed that approximately sixty percent of the respondents could not give an example of an organisation that has a positive impact on the environment. However, the literature would suggest that the public is aware of environmental issues and the impact that companies operations can have on the environment, as can be seen from the examples of high profile environmental disasters as outlined in Chapter One. Kelly and Moles (2000), cited by O'Dwyer (2003) state that CER practices tend to ignore the general populations i.e. the Irish population, growing awareness of environmental issues.

Following on from this the next section of this chapter considers voluntary and mandatory environmental reporting.

2.8 Mandatory and Voluntary Environmental Reporting

National governments in countries around the world have introduced legislation regarding environmental reporting for companies. Within Europe, Denmark, Sweden, Finland, Belgium, Netherlands and Germany have introduced mandatory environmental reporting, for certain companies (Delbard, 2008). In addition, in France it is compulsory for all PLCs listed on the French stock exchange to report environmental information within their annual report (Delbard, 2008). However, this information does not need to be certified and no sanctions for non-compliance mentioned within the legislation. It is also compulsory for some Australian companies to report environmental information in the annual report (Frost, 2007). There are penalties for non-compliance, unlike the French case. For a comprehensive list of what is required by the legislation in Denmark, Netherlands, Norway and France, please refer to Appendix III.

In the UK, the Companies Act 1985, Regulations 2005 saw the introduction of legislation, which stated that quoted companies, must report environmental information within an OFR in their annual report. Nevertheless, the legislation was withdrawn in November 2005, seven months after its introduction, by the then Chancellor Gordon Brown, stating that the legislation was placing an additional cost on companies (Williamson and Lynch-Wood, 2008). The repeal of the legislation was in contrast to the results of a survey carried out between 4 October and 10 November 2005 entitled 'Chartered Institute of Management Accountants (CIMA) OFR Business Readiness Survey' (CIMA, 2009). This was a survey of two hundred senior finance directors in UK listed companies and concluded that over eighty per cent of listed companies were reasonably or fully prepared to produce a mandatory OFR.

In Ireland, there is no legislation that requires companies to report environmental information within their Annual Report, however O'Dwyer's (2002) study on managerial perception of CSD, concludes that for CSD to evolve in Ireland there may be a need to introduce legislation. The introduction of legislation could lead to an increase in CSD reporting and improve the quality of the information disclosed.

In the absence of mandatory reporting the literature has identified a number of voluntary reporting initiatives that have been developed to allow companies follow reporting guidelines, when they are engaging in environmental reporting. One such example is the GRI's G3 Guidelines (Raar, 2002). These guidelines give companies a common framework that allows them to report social, environment and economic performance i.e. sustainability reporting (GRI, 2007). Dixon et al. (2005) interprets these guidelines as a method aimed at standardised disclosure. Another initiative is the British Standard BS7750, which provides guidelines on voluntary reporting by companies and also takes into consideration environmental management systems (EMS) implemented by companies (Dixon et al., 2005). In addition, the International Organization for Standardizations' ISO 14000 Series outlines guidelines for communication with various stakeholders concerning a company's EMS, environment policy, performance and impacts (International Organization for Standardization, 2009). The Institute of Ethical and Social Accountability (AccountAbility) have devised the AA1000 Series, to aid companies in becoming more accountable and can be used in conjunction with other initiatives, for instance G3 Guidelines (AccountAbility, 2007).

Organisations have also set up awards, which are presented to companies, in acknowledgement of the degree and quality of their environmental reporting, for example the ACCA awards for sustainability reporting and the Irish Business and Employers Confederation (IBEC) environmental best practice awards (O'Dwyer, 2001). The Chambers Ireland President's Awards for CSR also acknowledge companies for best practice in all aspects of CSR including environmental practices (Chambers Ireland, 2009).

2.9 Conclusion

From the literature, the researcher identified that environmental reporting is the process of the company communicating the various environmental impacts that its operations are having on the environment and any actions been taken by the company to reduce this impact. Environmental disclosures can include information on the organisation's environmental policy, disclosures in relation to targets that have been set, the company's environmental audit and the EMS of the company. The literature also identified the location of environmental disclosures- within an Annual Report, on company websites or in stand-alone environmental reports. Subsequently, the researcher identified a number of motivating factors for companies to disclose environmental information, for example, to enhance the reputation or the image of the company, to gain competitive advantage and to avoid the possible introduction of mandatory environmental reporting.

The researcher also further explored two of the main motivating theories, legitimacy theory and stakeholder theory. Legitimacy theory may exist when the company reports environmental information in order to legitimise its operations. Stakeholder theory may exist if the company discloses environmental information in order to gain approval from its stakeholders, upon which the organisation's survival depends. The research also established that the cost of environmental reporting, the need for additional resources, for example, employees, to produce environmental information and a lack of clear reporting guidelines as the reasons why companies choose not to disclose environmental information. Finally, the literature identified countries for instance Norway and France, where environmental reporting is mandatory for companies. It also identifies the disclosure requirements of mandatory reporting and the various voluntary reporting guidelines for example, GRI G3 guidelines, which currently exist in relation to environmental reporting.

The following chapter discusses the research methodology and data collection methods that were available and used by the researcher.

3.0 Research Methodology

3.1 Introduction

This chapter identifies, describes and justifies the research methodology adopted to achieve the aim and objectives of the study. This will include the research process, data collection methods, data analysis method used by the researcher and the limitations the researcher encountered during the research process.

Research is defined as being something, which is undertaken by people in a methodical way so that they can increase their knowledge (Saunders et al. 2007). Whereas Collis and Hussey (2003 p.55) state that

> "Methodology refers to the overall approach to the research process, from the theoretical underpinning to the collection and analysis of the data."

Therefore, it can be seen from the literature that research is an investigation carried out to solve a problem and the overall process of carrying out this investigation is methodology.

3.2 Research Question and Research Objectives

The research question that the researcher proposes to answer in this thesis is as follows:

> "What is the nature and extent of environmental disclosures by listed companies on the ISE within the Food and Drinks Sector?"

The researcher has refined this research question into the following research objectives:

- What is environmental reporting?
  The literature identifies various definitions of environmental reporting and what concepts environmental reporting is linked to.
- What legislation or reporting guidelines currently exist?
  The literature identifies countries that have introduced mandatory environmental requirements and the different voluntary initiatives that currently exist. This objective seeks to explore what legislation or voluntary

initiatives companies within the Food and Drinks Sector in Ireland follow, if they in fact follow any, when reporting environmental information.

- What environmental information are the listed companies on the ISE within the Food and Drinks Sector currently reporting?
  Through this objective, the researcher will identify what information the listed companies within this Sector are currently reporting within their latest Annual Reports and on their websites.
- What are the current environmental reporting practices of the listed companies on the ISE within the Food and Drinks Sector?
  This objective seeks to establish what environmental reporting means to the senior management of the listed companies, the influences on their environmental reporting. It also seeks to establish if the companies look to other sources of environmental reports for comparisons.
- What are the perceptions of senior management personnel of listed companies listed on the ISE within the Food and Drinks Sector regarding environmental reporting?
  Through this objective, the researcher will attempt to establish the perceptions of senior management personnel of the listed companies towards environmental reporting. This research will follow on O'Dwyer's (2002) study on the perceptions of twenty-nine senior managers of twenty-seven Irish public limited companies of CSD.
- Investigate the reasons why the listed companies do or do not report environmental information in their annual reports, on their websites or by using any other medium to communicate this information.
  This objective seeks to establish the reasons as to why the companies disclose environmental information. The research may also establish whether or not environmental reporting in the Food and Drinks Sector can be linked to legitimacy theory and/or stakeholder theory.
- Identify future developments in relation to environmental reporting within the Food and Drinks Sector and in other Sectors of the ISE in general.
  This objective seeks to establish the future of environmental reporting in Ireland based on the findings of the interviews conducted with two of the five listed companies within the Sector and a Senior Corporate Responsibility Consultant.

3.3 Research Philosophy

The research paradigm is the general approach to the research that is being undertaken. The term paradigm refers to,

> "...the process of scientific practice based on people's philosophies and assumptions about the world and the nature of knowledge;... about how research should be conducted." (Collis and Hussey, 2003, p.46)

The Saunders et al. (2007) identify two main research paradigms, positivism and interpretivism. Positivism this is deductive based research meaning that the researcher starts out with a conclusion/theory and the research conducted is about testing this theory. Interpretivism is research, which is explorative in nature, meaning that the research would be focusing on gaining an in-depth understanding of people, organisations and behaviours.

3.3.1 Positivism

If the research philosophy reflects the principles of positivism, then the researcher should adopt the philosophical stance of the natural scientist (Saunders et al., 2007). Weber (2004) suggests that positivists believe the researcher and reality are separate. This author also states that positivists use questionnaires and experiments to collect large volumes of data. The data is collected is only reliable if it can be replicated by the researcher and other researchers.

The literature also provides criticism of positivism. Collis and Hussey (2003) state that it is impossible to treat people separate from their social contexts and that researchers are not objective as they are part of what they observe. They also suggest that capturing complex phenomena in a single measure can be misleading, for example, is it possible for the researcher to assign a numerical value to a person's intelligence?

3.3.2 Interpretivism

Weber (2004) states that interpretivists believe that reality and the researcher are inseparable. Interpretivism assumes that the world is continually changing (Hussey and Hussey, 1997) and rather than measuring facts, it focuses on meanings (Saunders et al., 2007). Interpretivists use interviews and case studies to collect data (Weber, 2004). Saunders et al. (2007) suggest some criticisms of interpretivism. They state that the data collection methods used can be time consuming. Analysis of results may be difficult due to the qualitative nature of the data and patterns may not appear in the results. In addition, observer bias may occur during the course of analysis.

3.3.3 Research Paradigm Adopted

The research paradigm the researcher chose to use is interpretivism. This can be justified because the researcher wished to gain an in-depth understanding of the perceptions of senior management of listed companies listed on the ISE within the Food and Drinks Sector regarding environmental reporting. In addition, the researcher wished to investigate the reasons why those companies do or do not report environmental information in their annual reports, on their websites or by using any other medium to communicate this information. In order to achieve these research objectives, the researcher carried out semi-structured interviews, which are interpretative in nature.

Other reasons as to why the researcher chose to use interpretivism include the adoption of this research paradigm by other researchers. This was discovered when the researcher was reading material, which formed part of the secondary data collection method for the literature review. Interpretivism was also chosen by the researcher as it is flexible and allows many different answers to be given, a vital component of interviews. Even though the literature has identified the findings of interpretivist’s research as being open to bias, the researcher overcame this by recording one of the interviews.

The researcher chose not to use positivism, for example, by using questionnaires. The researcher decided that questionnaires were too structured and would not provide in-depth and interesting findings.

3.4 Research Approach

The literature identifies two research approaches that can be adopted. These are inductive and deductive. Trochim (2008) describes the deductive approach as the process whereby the researcher starts with a theory or idea and this is then narrowed down into a hypotheses. The hypothesis is then tested through the researcher collecting observations and these observations allow the researcher to test the hypothesis, i.e. confirm the original theory or idea. Trochim (2003) describes the inductive approach as being the opposite of the deductive approach. The inductive approach is where the researcher starts with observations and develops patterns from these observations. Then a hypothesis is investigated and the researcher then draws conclusions from the findings. The researcher adopted an inductive approach for this dissertation, working from the responses of the interviewees and made general observations.

3.5 Research Focus

Saunders et al. (2007) classify research into three different categories, which are, exploratory, descriptive and explanatory research. Robson (2002) describes exploratory research as research, which provides the researcher with an insight as to what is happening, provides clarity on a topic and allows the research to see something from a new or clear point of view. Explanatory research is described as providing an explanation as to why relationships exist between two variables (Saunders et al., 2007). Descriptive research is used to “portray an accurate profile of persons, events or situations” (Robson 2002, p.59).

3.6 Research Focus Adopted

The nature of this research is descriptive and exploratory. This research is exploratory as the researcher’s objective was to establish the perceptions of senior management of companies listed on the ISE, within the Food and Drinks Sector and the perceptions of a Senior Corporate Responsibility Consultant, with regard to environmental disclosures and possible future developments with regard to these disclosures. This research is also descriptive in nature as the researcher established the nature of current environmental disclosures, current legislation or guidelines that exist and the motivations as to why companies do or do not disclose environmental information.

3.7 Data Collection

The two different categories of data collection methods are primary and secondary. There are various types of primary data collection methods such as, questionnaires, case studies, focus groups, surveys and interviews. Saunders et al. (2007) state that the data collection method or methods selected for use by the researcher should allow the researcher to answer the research question and the research objectives. The primary data collection method the researcher chose for this research was interviews and questionnaires. Secondary data collection involves the researcher studying the literature on the researched topic. The following sections discuss the different data collection methods in more detail.

3.7.1 Secondary Research

The researcher examined academic journals and articles, books, accounting magazines, websites and any other literature, which was relevant to this research. The researcher also examined the websites and annual reports of the companies included in the research. The researcher used these secondary data sources to answer two of the research objectives. These objectives where establishing what is environmental reporting and what legislation and guidelines exist with regard to companies reporting environmental legislation.

3.7.2 Case Studies

Colorado State University (2009) state that,

> "...the case study looks intensely at an individual or small participant pool, drawing conclusions only about that participant or group and only in that specific context."

The researcher did not use this data collection method, as it was not appropriate for answering the research question.

3.7.3 Focus Groups

Focus Groups are described as an informal gathering of people in order to gain their opinions on the topic being researched (EMMUS, 1999). The researcher did not choose this data collection method as it was decided that it would be difficult to get members of senior management of PLC's together, given their locations and busy schedules.

3.7.4 Questionnaires

Questionnaires are referred to as,

> "...a general term to include all techniques of data collection in which each person is asked to respond to the same set of questions in a predetermined order."

(DeVaus, 2002, cited by Saunders et al., 2007, p.354)

There are various types of questionnaires that researchers can use, for example, postal, online, telephone questionnaires and structured interviews.

Sociology Central (nd) identify the strengths and weaknesses of using questionnaires as a method of data collection. These are:

Strengths

- The ability to contact large numbers of people, in a quick and easy manner.
- Questionnaires are standardised. Every respondent is asked the same set of questions.
- Response rates can be higher when compared to the response rate of other data collection methods. This can be as a result of the researcher not being present when the respondent is answering the questions or because questionnaires are not time consuming.

Weaknesses

- Questionnaires make it difficult for the researcher to ask complex or in-depth questions.
- The researcher can never be certain who completed the questionnaire.
- Difficulties can arise for the researcher when he or she has to selected sample sizes.

The researcher decided not to use questionnaires as a method of data collection for this study, because the population of companies included in the research was five. This number was deemed too small for questionnaires to be the most effective method of collecting data. In addition, the researcher wanted to ask in depth questions and questionnaires are not appropriate for this type of questioning.

3.7.5 Interviews

An interview is a purposeful discussion between two or more people (Kahn and Cannell 1957, cited by Saunders et al., 2007). There are different of types of interviews that exist. These are structured, semi-structured and unstructured. Interviews can be conducted face-to-face, over the telephone or by using of the internet.

Bryman and Bell (2007) describe a semi-structured interview as one whereby the interviewer will ask questions that have been prepared and the interviewee can respond freely to these. The interviewer may also follow up on any relevant points from the interviewee's response. The questions asked may also vary from interviewee to interviewee, but will have similar wording and revolve around the same theme. It is for these reasons that the researcher decided that semi-structured interviews were the best method to use. The researcher used two different types of semi-structured interviews. These were face-to-face and internet interviews.

3.7.5.1 Face-to-Face Interviews

The face-to-face interview that was conducted consisted of the researcher meeting the Carbon and Sustainability Manager of one of the listed companies on a one-to-basis. The covering letter and the interview questions can be found in Appendix IV and Appendix V. The interview lasted approximately one hour and was audio recorded. The recording of interviews is discussed in more detail in the following section.

Opdenakker (2006) describes a number of advantages and disadvantages to face-to-face interviews. These are as follows:

Advantages

- Face-to-face interviews are a form of synchronous communication, meaning they take place in real time. This allows the questions to be answered by the interviewee without a significant time delay.
- This type of interview allows the interviewer to read the body language of the interviewee.
- It is an easier method of interviewing when compared to telephone and e-mail methods.

Disadvantages

- The interviewer or the interviewee may become distracted during the interview.
- Face-to-face interviews can add expense to the interviewer, for example, travel costs.
- There could possibly be a delay for the interviewer in getting to the location of the interview.

3.7.5.2 Audio Recording Interviews

Saunders et al. (2007) suggest that interviews should be audio-recorded whilst being conducted. This helps reduced bias and allows reliable data to be produced when the researcher is carrying out the analysis. On the other hand, Opdenakker (2006) suggests that there can be a risk of the interviewer not taking notes during the interview and the audio recording device malfunctioning. The researcher therefore audio-recorded the interview and took notes during the process. The researcher obtained permission to record the interview from the interviewee, prior to the interview. Following the interview, the researcher produced a transcript of the interview and the interviewee was paraphrased or quoted in the text of the following chapter. A copy of the transcript was sent to the interviewee for approval.

3.7.5.3 Internet Interviews

An internet interview can include the use of e-mail, chat rooms and internet forums (Saunders et al., 2007). The researcher chose to use e-mail interviews when interviewing a member of senior management of one of the listed companies and a

Senior Corporate Responsibility Consultant of a business group. The interview questions can be found in Appendix VI. E-mail interviews are a form of asynchronous communication (Opdenakker, 2006). This means that they do not take place in real time; rather they take place offline (Saunders et al., 2007).

Opdenakker (2006) describes a number of advantages and disadvantages to e-mail interviews. These are as follows:

Advantages

- The interviewee can answer the questions in his or her own time.
- It is not necessary for the interviewer to take notes.
- It is not necessary for the interview to transcribe the interview.

Disadvantages

- The interviewer cannot read the body language of the interviewees.
- The interviewer may have to wait days maybe weeks for a response.
- The interviewee has time to think about the answer he or she is going to give. This may affect the quality of the data collected.

3.8 Ethical Considerations

The researcher conducted all primary research with strict confidentiality and professional integrity. With regard to the interviews, a confidentiality statement giving the respondents full anonymity was given in the e-mails requesting the interviews and a verbal permission was given before one of the interviews commenced, to allow the interview to be audio-recorded.

3.9 Limitations of the Research

Limitations of the research that could not be overcome included the following:

- Three of the companies included in the research were unwilling to participate. This resulted in a sample population of 40 per cent.
- Many members of the business groups and the accountancy bodies either were unwillingly to participate in the research or did not acknowledge the researcher’s phone calls and e-mails.

- The researcher had limited financial resources, which meant that interviews had to be conducted over the telephone. This meant that the researcher could not read the body language of the interviewee, which can be a valuable source of information.
- The researcher had only one academic year to complete the research; therefore, a study of all the PLCs on the ISE was not achievable.
- In order to limit the researcher's bias with regard to analysing the interview findings, the interviews were audio-recorded. However, this is only a limitation and does not completely eliminate bias.

3.10 Conclusion

The research for this dissertation involved the adoption of the research paradigm of interpretivism. The research can be classified as both descriptive and exploratory in nature and an inductive approach was implemented. The research involved three interviews, two with managers of the PLCs from the Food and Drinks Sector and a Senior Corporate Responsibility Consultant of a business group. The results of the research are discussed in detail in the following chapter.

4.0 Findings and Analysis

4.1 Introduction

In this chapter, the researcher analyses the results of the research methods conducted. The secondary research reviewed by the researcher included an examination of the environmental disclosures included in the most recent Annual Reports of the listed companies included in this study and their environmental disclosures presented on their websites. The interviews that were conducted with senior management personnel of the PLCs were then reviewed. The interview questions were broken down into three parts, to answer the objectives of the study. These objectives were to establish managements' perceptions of environmental reporting, to establish the reasons why those companies do or do not report environmental information, and to identify future developments with regard to environmental reporting both within the Food and Drinks Sector and in other sectors of the ISE in general. The interview conducted with the Senior Corporate Responsibility Consultant of a business group was also reviewed, in order to ascertain their views on the future developments with regard to the Food and Drinks Sector and in other sectors of the ISE in general.

4.2 Analysis of Environmental Disclosures within the Annual Reports and the Websites of the Listed Companies

In order to establish what environmental information the listed companies include in the study are currently reporting, the researcher examined their latest Annual Reports and the disclosures on their websites. The main findings in relation to the environmental disclosures within the Annual Reports are presented in Appendix VII.

All but one of the companies presented environmental disclosures within their Annual Reports. These disclosures were included within the CSR sections of the reports. O'Dwyer (2001) highlighted the OFR section, statements by the Chairman or CEO and in the Directors Report as areas within the annual report, where environmental disclosures could be found. In the seven years that have passed since Professor O'Dwyer's study, environmental disclosures, for the majority of companies within the Food and Drinks Sector, are included in a CSR section of the annual report. Perhaps this highlights the growing importance of CSR and environmental reporting.

The disclosures ranged from environmental mission statements to small amounts of quantitative data, for example, amounts that had been recycled. Some companies referred to accreditations and certificates they had received with regard to their environmental practices. The disclosures also referred to targets that had been set with regard to the reduction of carbon emissions, wastewater and recycling. However, none of the companies reported the quantitative data regarding these targets and whether or not theses targets had been met.

In his study of Irish PLC's CER O'Dwyer (2003) found that forty-four per cent of ISE companies within the Food and Drinks Sector disclosed environmental information within their Annual Report. Although this research has shown that eighty per cent of ISE companies within this Sector currently disclose environmental information within their Annual Reports, the quality of these disclosures appears to be relatively poor. The disclosures can be said to be relatively poor when compared to what Van Staden and Hooks (2007) and the ACCA (2001) believe to be ideal and high quality reports. There appears to be an absence of quantitative data with regard to targets and the companies' actual performance in relation to their environmental impacts.

In relation to the environmental disclosures on the websites of the listed companies, some had included more or less information or identical information to what can be found in the Annual Reports. This supports the research conducted by Haddock (2005) which showed companies were using the internet as a medium of communicating their environmental information to their stakeholders.

Although the ISE companies within the Food and Drinks Sector are including environmental disclosures within their Annual Reports and on their websites, none of the companies produce stand-alone environmental reports. This is in comparison to the findings of Elliott and Elliott (2007), who state that in industries such as oil and gas, forestry and pharmaceuticals, which may be categorised as high risk, these are increasingly producing stand-alone environmental reports. In addition, O'Dwyer et al. (2005) established that there was a call from Irish NGOs for stand-alone environmental reports to be published together with disclosures in the Annual Report.

4.3 Current Environmental Reporting within the Listed Companies

The researcher asked the companies who has responsibility for environmental reporting within their organisation. Company A stated that although they have a Carbon and Sustainability Manager, that person does not have full responsibility for environmental reporting. The Carbon and Sustainability Manager's function is to answer questionnaires that are deemed suitable and to ensure that all the requirements for permits and licenses are met. Ultimately, it would be the responsibility of a Corporate Director to stand over any of the information given out by the company. Company B stated that senior management had responsibility for this activity.

Interestingly, although companies have environmental departments, it would appear that they do not have responsibility for the environmental disclosures included in their Annual Reports and on their websites, as it remains a function for senior management.

The interviewees were then asked what environmental reporting means to them. Company A stated that environmental reporting for them is concerned with reporting on their permits and licenses. The interviewee also stated,

> "We would have a lot going on in addition to our actual license requirements but we don't actually put it out there in the public domain, because we feel it's kind of the right thing to do, not to get PR from it."

Company B responded with a direct quote taken from the Environmental Section of their website. It would appear from this that the meaning of environmental reporting to this company is reporting what the company is committed to, for example, managing the company's impact on the environment through recycling, conserving energy and raw materials etc..

These responses coincide with the view held by Dixon et al. (2005) that companies avoid reporting environmental information as they do not want to attract public attention. They also support O'Dwyer (1999) criticism of some of the environmental reports included in his study, as he found that reports included minimal amounts of information of a quantitative or qualitative nature.

The researcher then asked the interviewees, did they believe that the current detail of their environmental disclosures addresses the information needs of your stakeholders based on O’Dwyer’s (1999) detailed interpretation of environmental disclosures. Company A stated that they do not believe the environmental information they provide in their Annual Report does not meet the needs of their stakeholders. The interviewee added

> “...speaking on behalf of the environmental team we’re often very disappointed by the lack of –input-if you like that we have into the Annual Report and the reason that we get back from Head Office is that- particularly the website that’s its more for shareholders and a financial interest, as opposed to a (company) wide interest...”

Again, Company B responded with a quote taken directly from the Environmental Section of their website. They did not comment on whether or not they believed that their environmental disclosures meet the needs of their stakeholders.

Based on Company A’s response and the research carried out by the researcher, it would appear that companies do not meet the needs of their stakeholders based on O’Dwyer’s (1999) detailed interpretation of environmental disclosures. That interpretation highlights that environmental disclosures can include the provision of information on various aspects such as environmental policies, audits, expenditures, impacts, processes, the impact company’s products can have on the environment and details on their sustainable operations.

The interviewees were asked would their companies continue to publish environmental information within their Annual Report and on their website and the reasons for their decision. Both interviewees said that they would continue to do this. Company B declined to give reasons for their response. On the other hand, Company A stated that they would continue to disclose environmental information because the concept of environmental reporting is continuously evolving. The interviewee also stated that as well as the concept of environmental reporting evolving so too is the role of the interviewee, within the company, having had the title of Environmental Coordinator, which has developed into Carbon and Sustainability Manager. The interviewee also stated that the company are actively seeking another person to share in this role.

The evolution that has been described by the interviewee of both environmental reporting and the role of Environmental Managers in companies is supported by ACCA (2001), who state that following from environmental and social reporting, is the concept of sustainability.

The interviewees were then asked if their companies use any other medium in addition to the Annual Report and website for disclosing environmental information. They identified internal newsletters and internal and external presentations as other media of communication. However, the interviewee from Company A stated that they would not feature the Annual Report and company website as a medium for their reporting. The company are active members and participate in reporting environmental information for Sustainable Energy Ireland (SEI)- Large Industry Energy Network (LIEN), BITC, IBEC's Environmental Policy Committee and Energy Policy Committee, Irish Institute of European Affairs (IIEA) and the Climate Change Working Group Committee.

With regard to the environmental disclosures, companies make available to their stakeholders, it would appear that they fall into the newsletters, short statements presented in the annual report and green glossies variety of reports, as identified by Azzone et al. (1997).

The interviewees were asked if the stakeholders of their companies are involved in the development of their organisation's environmental reporting or are it at the sole discretion of senior management. Company A's interviewee stated that the shareholders are essentially their stakeholders and they do not actively participate in the reporting process. Therefore, it is a function solely for the environmental, energy and carbon teams. Company B's interviewee stated "stakeholders' views are always taken on board".

The practices of these companies is in contrast to the suggestion by the ACCA (2001) that companies should identify their main stakeholders, then to ensure that the information that is reported meets their requirements, the company creates a continuing discourse with them.

The interviewees were then asked if they would look to other companies in their Sector, on an Irish or international basis to see what information they were reporting.

Company B's interviewee stated that they use a "mixture of internal benchmarks, targets and peer comparisons". Company A's interviewee stated that they have "given up" at looking at what other companies in Ireland are reporting and prefer to look towards companies within the same Sector in Denmark, New Zealand and the United States.

It is interesting to note that Denmark is one of the countries where environmental reporting is mandatory for certain companies and because of this Company A may look to these companies as they have more comprehensive environment reports than their peer companies in Ireland, where environmental reporting is voluntary. The fact that Company A have "given up" looking at what environmental information companies in Ireland report supports what O'Dwyer's research, based his study on CER in all Irish PLCs, concluded,

> "CER in Ireland has a long way to go before it can be deemed a comprehensive, credible, reliable and widely practiced activity among listed companies" (O'Dwyer, 2003 p.98).

To conclude the interviewees were also asked if they could identify any other influences with regard to the environmental reporting undertaken by their company. The interviewee from Company A listed the cost of reporting, the legislation that exists and that is being introduced in the future and the information needs of their suppliers and customers, as influences of their environmental reporting. Company B's interviewee stated that goodwill, stakeholders and environmental legislation or regulations are influences on their environmental reporting.

Legislation seems to play a major role in companies reporting requirements. However, in the context of environmental reporting in Ireland this legislation refers to reports that are legally required by organisations such as the Environmental Protection Agency (EPA) and not the environmental information within their Annual Report or other mediums available to the public.

4.4 Management's Perceptions of Environmental Reporting

The next objective was to establish management's perceptions of environmental reporting.

The researcher began by asking the interviewees if they felt their companies reported environmental information based on the theory of legitimacy. Both interviewees responded yes, with the interviewee from Company A adding that, although some things within their organisation maybe socially unacceptable, "...but those things that we can control we ensure that they are socially acceptable...."

This is in contrast to Wilmshurst and Frost (2000) and O'Dwyer's (2002) research, which concluded that environmental reporting, was not supported by legitimacy theory. As these studies were conducted nine and seven years ago respectively, the findings of this study may show a change in the perception of senior management towards companies using the disclosure of environmental information to legitimise their actions.

The researcher then asked the interviewees if they felt that their companies were reporting environmental information based on the motivational theory of stakeholder theory. The responses for this question were very different. Whilst Company B stated that they did report environmental information based on stakeholder theory, Company A stated they did not. The reason they did not is even though they do rely on the support and approval of the stakeholders, they would not constantly report on all the right things that the company does. The support and approval of other organisations, for example, the EPA, is much more important as they can actually shut a company down within twenty-four hours.

The ACCA (2001); Deegan and Rankin (1996) and Azzone et al. (1997) all highlight the importance for companies of identifying and reporting relevant information to their stakeholders to gain their support. However, it would appear that some companies, even though they recognise the importance of their stakeholders, would not report environmental information solely for the purposes of gaining their approval and support.

When asked if there were any other motivators for reporting environmental information, one interviewee felt that market leadership, being the best and being the first company within their Sector to have, for example, ISO and IS393 Irish Energy Management System accreditations, were important motivators.

The interviewees were then asked if they agreed with the fact that, according to prior research, many senior managers in listed companies believe that, company stakeholders, especially in the Irish context, may regard environmental reporting cynically. Company B did not state whether they agreed or not. On the other hand, the interviewee with Company A completely agreed that environmental reporting is regarded cynically within the Irish context. The interviewee stated that,

> **“**Especially in the Irish context, it’s still perceived as a bit airy fairy kind of you know. Whereas in other countries it’s taken much more seriously... a lot of stakeholders and financial houses wouldn’t necessarily invest in a company unless it ticked kind of the right environmental boxes. But in the Irish context I don’t think they take that into consideration.”

This interviewee’s opinion supports O’Dwyer’s (2002) research on managerial perceptions of CSD, which concluded that many Irish companies avoid engaging in CSD because of a sceptical attitude held by Irish society towards companies’ environmental disclosures.

The interviewees were then asked to rate the quality of their environmental reporting. Company A said ‘average’, whilst Company B said ‘good’. The researcher compared the 2008 Annual Report and company website environmental of Company A and Company B. Company B’s website and Annual Report included identical disclosures relating to how the company will achieve it environmental goals. It did not give any information regarding quantitative data, environmental systems it implements, ISO or any accreditations that it may or may not have received. Company A’s website and Annual Report both give environmental information regarding their operations in Ireland and abroad. Both mediums also include information regarding accreditations and certifications it has received. There is also quantitative data include in the information provided. Therefore, the researcher found it interesting that Company A who rated their environmental reporting as ‘average’ has more content in its disclosures than Company B, who rated their reporting as ‘good’.

The interviewees were then asked if they felt whether their companies environmental reporting was better or worse than that of their competitors, within the Sector. Company B’s interviewee did not answer the question. However, Company A’s interviewee stated they felt their reporting was “better, much better.” This statement was supported by the research the researcher carried out with regard to the disclosures of Company A and the some of the disclosures of the other four companies within the Sector.

SustainAbility and UNEP (1998) conducted a study of more than fifty Fortune 500 companies that both produce and do not produce corporate environmental reports and produced a list of barriers to explain why companies do not disclose environmental information. The researcher asked the interviewees to rate these barriers, in order of relevance. The results are presented in Appendix VIII.

Both companies rated the cost of producing of producing reports, the lack of resources available for reporting and reporting environmental information may lead to the deterioration of the company's reputation as barriers to environmental reporting that are most relevant to them. Dixon et al. (2005) also support these barriers to reporting. One of the interviewee also stated that in order to produce environmental reports, a company might need to employ consultants, which are expensive. These finding could be supported by the downturn in the Irish economy. As this may contribute to the companies having less financial and human resources to enable them to produce environmental information.

Both companies stated that management not having an interest in reporting and that reporting cannot create advantages as being the least relevant barriers to producing environmental reporting. The fact that the companies are producing environmental information on a voluntary and mandatory basis and that there are specific environmental departments within companies, supports these barriers being rated least relevant to producing environmental reports.

When asked if there were any other barriers to reporting environmental information that the interviewees could identify, one interviewee stated that the reporting schedules of the company is another barrier. Throughout the financial year, companies may have to produce legally required reports, for example, EPA reports and they have to produce information for the Annual Report. The deadlines for these reports often clash and one of the interviewees stated, "it's just impossible" to produce them all. For this reason, the production of mandatory reports has the priority over the production of voluntary environmental information, which is presented in the Annual Reports and company websites.

The interviewees were then asked if there is pressure on companies on the Food and Drinks Sector to produce environmental reports and to identify the sources of such pressure. The interviewees responded that there is pressure from the EPA, “pressure from stakeholders who want companies to be responsible and goodwill from companies who want to be responsible.” The Consultant was also asked if they were aware of any pressure on this Sector to produce environmental information. The interviewee stated that,

> “Business, and by that I mean, large companies in Ireland, have actually taken the lead...since the year 2000 approximately, and the pressure that exists in the Food & Drinks Sector is coming from companies in that sector who are producing sustainability and corporate responsibility reports.”

The interviewee also stated that one of the companies within the population of this study is an example of a company within this Sector, which is leading the way.

The fact that there is pressure on this Sector to produce environmental information supports Schaltegger and Burritt (2000) theory that the emergence of environmental accounting- which includes producing environmental information, has arisen because of such pressure from stakeholders. Perhaps the continuance of this pressure on companies has resulted in the increase of the number of companies who report environmental information.

4.5 Future of Environmental Reporting in Ireland

The next objective was to establish the opinions of the senior managers and the opinion of the Senior Corporate Responsibility Consultant with regard to the future of environmental reporting in Ireland, both in the Food and Drinks Sector and in other Sectors in general.

Previous studies, for example, O’Dwyer (2003) found that there was an absence of substantial environmental reporting within the Food and Drinks Sector. The interviewees were asked why they believe that this is so. Company A’s response suggested that the absence of substantial environmental reporting is “because it’s not perceived as being important.” They suggested that there are other factors within their company that are more important to adding value to the company than providing environmental information, which is only “seen as a necessity to maintain your license to keep in operation." However, the interviewee also stated that, this was changing within their company and as far as they were aware, their company was one in its Sector who has moved environmental reporting into a strategy function.

The Consultant stated that if there is a lack of environmental reporting this is a result of,

> "...the government to date, has not exhorted companies to voluntarily report their key impacts or suggested they being in legislation if the voluntary approach doesn't work. The government needs to become more vocal on the subject and that will do a lot to encourage companies to come forward with their information."

It would therefore appear that the absence of substantial environmental reporting within the Food and Drinks Sector is a result of the lack of pressure from the government and a lack of pressure from within the companies themselves. These findings support a barrier to environmental reporting established by Dixon et al. (2005) is that companies may be reporting environmental information on a voluntary basis. This may be one reason as to why there should be an introduction of mandatory environmental reporting in Ireland.

The literature has identified a number of voluntary reporting initiatives that companies can use for reporting environmental information, for example, ISO14001 Series, the GRI's G3 guidelines, AA1000 Series. The interviewees were then asked if they were aware of these voluntary reporting initiatives. All the interviewees said that their organisations were aware of such guidelines.

The interviewees were then asked if their companies followed these or other guidelines for their environmental reporting. Company B declined to respond, however, Company A stated that they do follow reporting guidelines but not in relation to their environmental disclosures included on the website and within their Annual Report. The interviewee also stated that ISO14064, which is a greenhouse gas environmental standard, is a new project that they are undertaking. Therefore, the company would follow guidelines for their environmental information, but would not necessarily put all this information out into the public domain. The interviewee also stated that their company would not consider following guidelines for their environmental disclosures within the Annual Report and on their website in the future, as they believe their company simply has not the time available to do so.

The Consultant stated that their organisation, "work with our client companies to disclose their information according to these (and other) guidelines." They also stated that their organisation would also encourage their clients to use guidelines, when they are reporting environmental information.

It would appear that some companies only adhere to these guidelines for internal environmental reporting and for environmental reports that are required by other organisations, of which the company reporting is a member.

Delbard (2008) identified that within Europe, Denmark, Sweden, Finland, Belgium, Netherlands and Germany have introduced mandatory environmental reporting, for certain companies. The interviewees were asked if the introduction of mandatory environmental reporting in Ireland would increase in environmental reporting and improve the quality of the information disclosed.

Company A's interviewee stated that it would not, as companies within the Food and Drinks Sector already provide enough information in their EPA reports. The interviewee also felt that companies are also afraid that the production of negative environmental information, for example, if an emissions target cannot be met, because a company does not have the technology available, then this could cause the deterioration of the company's reputation. Company B's interviewee felt that a mixture of mandatory reporting and goodwill could lead to an increase in environmental reporting and improve the quality of the information disclosed.

The Corporate Responsibility Consultant stated that the introduction of legislation would obviously lead to an increase in environmental reporting. However, they also stated that,

> "The quality of the information being disclosed isn't dependent on legislation, that would come from competition between companies seeking to outdo one another."

Two of the interviewee's opinions support the claim by O'Dwyer's (2002) that for CSD to evolve in Ireland there may be a need to introduce legislation. The two interviewees from the companies however are of different opinions as to whether the introduction of legislation would lead to an increase in environmental information, or not. Therefore if the government were to decide to introduced legislation, there potentially could be problems with companies disagreeing with this and the Irish government may have to repealed, as was the case in the UK, as discussed by Williamson and Lynch-Wood (2008).

The interviewees were then asked to identify if there were any regulations that they were aware of, that may be introduced in the future, relevant to the Food and Drinks Sector.

Two of the interviewees identified legislation and regulations in relation to the area of carbon emission disclosure. One of the interviewees specifically referred to the possible introduction of a Green Tax, which is what Denmark introduced. RTE news reported that the second highest contributor to Ireland's Carbon Dioxide (CO2) emissions is agriculture (RTE, 2007). With the introduction of a Green Tax, farmers or companies may have to produce reports in order to show what their emissions are the sources of their raw materials, for example, cows.

To conclude the interviewees were asked their opinion if the concept of ‘social partnership’ could be used to develop environmental reporting. O’Dwyer et al. (2005) through their research state that one way of developing CSD in Ireland was through this concept.

One interviewee stated that the use of social partnership would be difficult, because of their experiences with NGOs. They also stated that working in conjunction with government departments to develop environmental reporting as difficult. The reason for this being that these type of stakeholders, particularly NGOs, can sometimes expect information to be readily available when they request it from companies. What they do not realise is that a company’s priorities are to remain in business, protect jobs and remain profitable. The interviewee also stated that it may be harder for smaller companies, those with low profit margins, to allocate resources into producing fancy environmental reports and any profit that is made will be more likely reinvested into the company.

The Consultant stated that there has been a shift in Ireland from looking just at environmental reporting to currently looking at sustainability reporting. If social partnership were to be used to develop this, then

> "That would involve, by necessity, consultation and engagement with the all the companies stakeholders, to determine what information is most relevant to them and how frequently they would like to be able to access it."

The strained relationship between NGOs and companies, which was highlighted by one of the interviewees, is supported by O'Dwyer et al. (2005) research into the perceptions of NGOs with regard to CSD in Ireland. They found that feelings of animosity existed between NGO's and several companies.

4.6 Conclusion

This chapter analysed and presented the findings of the interviews conducted by the researcher. These findings have both confirmed and disagreed with the findings of previous studies. The conclusions drawn and recommendations made, as a result of the findings of this research are presented in Chapter Five.

5.0 Findings and Recommendations

5.1 Introduction

In this chapter, the main findings of the research are summarised and conclusions are drawn. The researcher also makes recommendations and suggestions for areas o further research, which are based on the findings of this study.

5.2 Overview of Main Findings

The conclusions of the research are broken down under the headings of each of the research objectives. The research objectives were met through the primary and secondary research methods carried out by the researcher. These methods were reading the literature, analysing the disclosures of the companies and reading the literature.

5.2.1 What is environmental reporting?

The literature identified that there are many different opinions as to what constitutes environmental reporting. Azzone et al. (1997) state that environmental reports can be presented as a simple statement, as is the case with the environmental disclosures of the companies included in this study. Alternatively, environmental reports can be presented as a detailed report on the environmental practice, performance and future direction of the company. O'Dwyer (1999) provides a more detailed interpretation of environmental disclosure as the provision of information on various aspects such as environmental policies, audits, expenditures, impacts, processes, the impact company's products can have on the environment and details on their sustainable operations. From this research, it would appear that the environmental disclosures presented in the Annual Reports and on the websites of the companies included in this study, have a long way to go before they include the criteria as suggested by O'Dwyer (1999).

5.2.2 What legislation or reporting guidelines currently exist?

The literature identified a number of countries that have introduced legislation regarding environmental reporting for companies. Delbard (2008) states that within Europe, Denmark, Sweden, Finland, Belgium, Netherlands and Germany have introduced mandatory environmental reporting for certain companies. In addition, in

France it is compulsory for all PLCs listed on the French stock exchange to report environmental information within their annual report. In addition, it is also compulsory for some Australian companies to report environmental information in the annual report (Frost, 2007). In Ireland, there is no legislation that requires companies to report environmental information. This researcher did discover however, that companies do have to produce environmental reports for the EPA.

O'Dwyer's (2002) study concluded that for CSD to evolve in Ireland there might be a need to introduce legislation. The introduction of legislation could lead to an increase in CSD reporting and improve the quality of the information disclosed.

The literature has identified a number of voluntary reporting initiatives that have been developed to allow companies follow reporting guidelines, when they are engaging in environmental reporting. One such example is the GRI's G3 Guidelines (Raar, 2002). In addition, the International Organization for Standardizations' ISO 14000 Series outlines guidelines for communication with various stakeholders concerning a company's EMS, environment policy, performance and impacts (International Organization for Standardization, 2009). The AccountAbility have devised the AA1000 Series, to aid companies in becoming more accountable and can be used in conjunction with other initiatives, for instance G3 Guidelines (AccountAbility, 2007).

5.2.3 What environmental information are the listed companies on the ISE within the Food and Drinks Sector currently reporting?

The secondary research conducted revealed that the environmental disclosures of the listed companies were included in the CSR sections of the Annual Reports. There has been a movement from disclosing environmental information within the OFR, the statements by the Chairman or CEO and in the Directors Report areas within the annual report, to disclosing the information within a separate CSR section.

The research showed that the environmental disclosures included environmental mission statements, small amounts of quantitative data, and listed accreditations and certificates companies had received with regard to their environmental practices. This study found an increase of thirty-six per cent in the number of ISE listed companies in the Food and Drinks Sector reporting environmental information within their Annual Report. This is in comparison to O'Dwyer's (2003) study, which found that forty-four per cent of these companies disclosed environmental information within their annual report.

Despite the increase in the number of companies reporting environmental information, the disclosures are not of high quality, when compared to what Van Staden and Hooks (2007) and the ACCA (2001) believe to be ideal and high quality reports. The same can be said of the disclosures that were included on the companies' websites.

5.2.4 What are the current environmental reporting practices of the listed companies on the ISE within the Food and Drinks Sector?

The researcher found that although companies have environmental departments, it would appear that they do not have responsibility for the environmental disclosures included in their Annual Reports and on their websites, as it remains a function for senior management.

Dixon et al. (2005) view that companies avoid reporting environmental information as they do not want to attract public attention was supported as the one of the interviewees stated they do not report all of their environmental information to the public.

When compared to O'Dwyer's (1999) detailed interpretation of environmental disclosures, one of the managers stated they were often disappointed with their company's disclosures in their Annual Report and on their website.

Both companies in the study stated they would continue to publish environmental information within their Annual Reports and on their website. One reasons for this is the continuing evolution of environmental reporting. This evolution has been acknowledged by the ACCA (2001), who state that following from environmental and social reporting, is the concept of sustainability.

It was also established that, companies make environmental information available to their stakeholders, through newsletters, short statements presented in the annual report and green glossies variety of reports, as identified by Azzone et al. (1997).

The ACCA (2001) suggest that companies should identify their main stakeholders and then to ensure that the information that is reported meets their requirements, the company creates a continuing discourse with them. Despite this, the stakeholders of companies within the Food and Drinks Sector do not actively participate in the reporting process.

The companies also use benchmarks, targets and other companies within their Sector as comparisons when they are producing their environmental disclosures. However, one company did say they had ‘given up’ looking at the Irish Food and Drinks Sector. This supports O’Dwyer’s claim that

> “CER in Ireland has a long way to go before it can be deemed a comprehensive, credible, reliable and widely practiced activity among listed companies” (O’Dwyer, 2003 p.98).

Other influences on the environmental reporting of companies in the study identified included the cost of reporting, the legislation that exists, the information needs of suppliers and customers and goodwill.

5.2.5 What are the perceptions of senior management personnel of the listed companies listed with regard to environmental reporting?

The research found that companies reported environmental information based on the theory of legitimacy. This is in contrast to the research of Wilmshurst and Frost (2000) and O’Dwyer’s, (2002) that concluded environmental reporting was not supported by legitimacy theory.

The ACCA (2001); Deegan and Rankin (1996) and Azzone et al. (1997) all highlight the importance for companies of identifying and reporting relevant information to their stakeholders to gain their support. Despite this, one of the companies in the study did not report environmental information based on the motivational theory of stakeholder theory.

O’Dwyer’s (2002) research on managerial perceptions of CSD concluded that many Irish companies avoid engaging in CSD because of a sceptical attitude held by Irish society towards companies’ environmental disclosures. One of the managers in this study supported this finding. They felt that environmental reporting is taken more seriously in other European countries when compared to Ireland.

Both companies in the study rated the cost of producing of producing reports, the lack of resources available for reporting and reporting environmental information may lead to the deterioration of the company's reputation as barriers to environmental reporting that are most relevant to them. Both companies also stated that management not having an interest in reporting and that reporting cannot create advantages as being the least relevant barriers to producing environmental reporting. Another barrier that was identified was the reporting schedules of the company.

The research found that pressure from the EPA, from stakeholders and from the companies themselves within the Food and Drinks Sector were the reasons why companies produced environmental reports. This finding supports Schaltegger and Burritt (2000) theory that the emergence of environmental accounting-, which includes producing environmental information, has arisen because of such pressure from stakeholders. In addition, this pressure on companies may have contributed to the fact that, there has been an increase of thirty-six per cent, in the number of companies who report environmental information, since research carried out by Professor O'Dwyer in 2003.

5.2.6 Identify future developments in relation to environmental reporting within the Food and Drinks Sector and in other sectors of the ISE in general.

O'Dwyer (2003) found that there was an absence of substantial environmental reporting within this Sector. The interviewees stated that this absence might be due to the lack of legislation and also the perception that environmental reporting is not important.

The literature has identified a number of voluntary reporting initiatives that companies can use for reporting environmental information, for example, ISO14001 Series, the GRI's G3 guidelines, AA1000 Series. Despite the interviewees awareness of these voluntary guidelines they do use them for their environmental disclosures included on the website and within their Annual Report. From the findings of the research, it would appear that some companies only adhere to these guidelines for internal environmental reporting and for environmental reports that are required by other organisations, of which the company reporting is a member.

When the interviewees were asked if the introduction of mandatory environmental reporting in Ireland would increase in environmental reporting and improve the quality of the information disclosed, there were mixed responses. One of the interviewees within this study stated that it would not lead to an increase in environmental reporting and whilst the other two interviewees believed that, it would. Two of the interviewee's opinions support the claim by O'Dwyer's (2002) that for CSD to evolve in Ireland there may be a need to introduce legislation.

The research found other legislation or regulations that may be introduced in the future. These are legislation and regulations in relation to the area of carbon emission disclosure. One of the interviewees specifically referred to the possible introduction of a Green Tax, which is what Denmark introduced.

O'Dwyer et al. (2005) through their research state that one way of developing CSD in Ireland was through the concept of 'social partnership. However, the strained relationship between NGOs and companies, highlighted by O'Dwyer et al. (2005) following their research into the perceptions of NGOs with regard to CSD in Ireland, still exists. One interviewee stated that the use of social partnership would be difficult, because of their experiences with NGOs.

5.3 Recommendations

The researcher recommends that the management of the companies included in the study should make available the necessary resources required to produce more substantial environmental information, within their Annual Report and on their website.

The researcher recommends the management of the companies included in the study should use the voluntary reporting guidelines for their disclosures within the Annual Report. This would enable shareholders and all other stakeholders to gain a clear understanding of the environmental measures those companies are taking. In addition, it would enable greater comparability between companies.

Another recommendation is that the companies should incorporate all of their stakeholders into the environmental reporting process, which may enable them to provide environmental information that meets the needs of all stakeholders.

5.4 Areas of Further Research

Further research could be undertaken in relation to the environmental disclosures of private companies within the Food and Drinks Sector. Some private companies within this Sector publish Environmental and Sustainability Reports and comparisons could be drawn between what environmental information the listed companies and the private companies publish.

From the research carried out for this study it would appear that the level of environmental reporting for ISE listed companies within Food and Drinks Sector has increased. An area of further study that could be undertaken would be to investigate if this increase has occurred in other Sectors of the ISE.

This research has highlighted that cost is a barrier to companies producing environmental information. Further research could be undertaken to establish how much it would cost companies to produce more substantial environmental information within their Annual reports, given that they already report large volumes of environmental data to the EPA.

Finally, this study showed that there are different opinions of senior management within the listed companies of the Food and Drinks Sector with regard to mandatory environmental reporting. Further research could be undertaken to establish if ISE listed companies in all Sectors would be in favour of the introduction of mandatory environmental reporting.

6.0 References

ACCA (2001) ‘An Introduction to Environmental Reporting’ [online] (cited 28 February 2009) Available from <URL:http://www.accaglobal.com/publicinterest/activities/library/sustainability/reporting_pub>

AccountAbility (2007) [online] (cited on 21 March 2009) Available from <URL:http://www.accountability21.net/default.aspx?id=42>

Accountancy Ireland (2008) ‘Green Agenda’, Vol. 40, No. 6, 34-46.

Azzone, G., Brophy, M., Noci, G., Welford, R. and Young, W. (1997) ‘A Stakeholder’s View of Environmental Reporting’, *Long Range Planning*, Vol. 30, No.5, 699-709.

Business in the Community (2006) [online] (cited 21 March 2009) Available from <URL:http://www.bitc.ie/news/story.html?id=27>

Bryman, A. and Bell, E. (2007) *Business Research Methods* (2 edn), Oxford University Press, London.

Chambers Ireland (2009) [online] (cited 27 March 2009) Available from <URL:http://www.chambers.ie/index.php?id=243>

Chambers Ireland (2009) [online] (cited 21 March 2009) Available from <URL:http://www.chambers.ie/index.php?id=375>

CIMA (2009) ‘OFR future hangs in balance as CIMA survey reveals most firms are ready’ [online] (cited 29 March 2009) Available from <URL:http://www.cimaglobal.com/cps/rde/xchg/SID-0AE7C4D1-7169B92C/live/root.xsl/12379_12490.htm>

Collis, J. and Hussey, R. (2003) *Business Research* Macmillan, Basingstoke.

Colorado State University (2009) ‘Case Study: Introduction and Definition’, [online] (cited 26 June 2009) Available from <URL:http://writing.colostate.edu/guides/research/casestudy/pop2a.cfm>

Corporate Citizenship [online] (cited 29 March 2009) Available from <URL:http://www.corporate-citizenship.com/>

Delbard, O. (2008) ‘CSR legislation in France and the European regulatory paradox: an analysis of EU CSR policy and sustainability reporting practice’, *Corporate Governance*, Vol. 8, No. 4, 397-405.

Deegan, C. and Rankin, M. (1996) ‘Do Australian companies report environmental news objectively? An analysis of environmental disclosures by firms prosecuted successfully by the Environmental Protection Authority’, *Accounting, Auditing and Accountability Journal*, Vol. 9 No. 2, 50-67.

Department of Environment, Heritage and Local Government (2008) ‘Waste Electrical and Electronic Equipment’, [online] (cited 20 March 2009) Available from <URL:http://www.environ.ie/en/Environment/Waste/WEEE/#d.en.5343>

Department of Environment, Heritage and local Government (2008) ‘Minister Gormley delivers State’s first carbon budget’, [online] (cited 20 March 2009) Available from <URL:http://www.environ.ie/en/Environment/News/MainBody,16215,en.htm>

Dixon, R., Mousa, G. A. and Woodhead, A. (2005) ‘The Role of Environmental Initiatives in
Encouraging Companies to Engage in Environmental Reporting’, *European Management Journal*, Vol. 23, No. 6, 702-716.

Douglas, A., Doris, J. and Johnson, B. (2004) ‘Corporate social reporting in Irish financial institutions’, *The TQM Magazine*, Vol. 16, No. 6, 387-395.

Drever, M., McGowan, S. and Stanton, P. (2007) *Contemporary Issues in Accounting*, John Wiley & Sons, Queensland.

Elliott, B. and Elliott, J. (2007) *Financial Accounting and Reporting* (12edn), Prentice Hall, London.

EMMUS, (2009) 'What is a method, and when can it be used?' [online] (cited 26 June 2009) Available from <URL: http://www.ucc.ie/hfrg/emmus/methods/focus.html>

Emtairah, T. (2002) 'Corporate Environmental Reporting Review of Policy Action in Europe' [online] (cited 21 March 2009) Available from <URL:http://www.enviroreporting.com/others/cer_europe.pdf>

Europa, (2008) 'Integrated pollution prevention and control: IPPC Directive' [online] (cited 02 April 2009) Available from <URL:http://europa.eu/scadplus/leg/en/lvb/l28045.htm>

Fortes, H. (2002) 'The Need For Environmental Reporting by Companies', GMI, Winter, 77-92.

Frost, G. R. (2007) 'The Introduction of Mandatory Environmental Reporting Guidelines: Australian Evidence', *Abacus*, Vol. 43, No. 2, 190-216.

Gray, R., Kouhy, R., and Lavers, S. (1995) 'Corporate social and environmental reporting: a review of the literature and a longitudinal study of UK disclosure', Accounting, Auditing & Accountability Journal, Vol. 8, No. 2, 47-77.

Gray, R. (2006) 'Social, environmental and sustainability reporting and organisational value creation? Whose Value? Whose creation?', *Accounting, Auditing & Accountability Journal,* Vol. 19, No. 6, 793-819.

Green Facts (2006) 'Scientific Facts on the Chernobyl Nuclear Accident' [online] (cited 14 March 2009) Available from <URL:http://www.greenfacts.org/en/chernobyl/index.htm>

GRI (2007) ‘G3 Guidelines’ [online] (cited 21 March 2009) Available from <URL:http://www.globalreporting.org/ReportingFramework/G3Guidelines/>

Haddock, J. (2005) ‘Consumer influence on internet-based corporate communication of environmental activities; the UK food sector’, *British Food Journal*, Vol. 107, No. 10, 792-805.

Hoffmann, E. (2003) ‘Environmental Reporting and Sustainability Reporting in Europe’ [online] (cited 31 March 2009) Available from <URL:http://www.iges.or.jp/en/phase2/be/pdf/report7.pdf>

Hussey, J. and Hussey, R. (1997) *Business Research: A Practical Guide for Undergraduate and Postgraduate Students*, Palgrave Macmillan, Hampshire.

IAWS Group Plc (2007) *Annual Report 2007*, Dublin, Ireland: IAWS Group plc.

ICAI [online] (cited 27 November 2008) Available from <URL:http://www.icai.ie/en/General/News-and-Events/news/2008/53724/53840/>

International Organization for Standardization (2009) ‘ISO 14000 essentials’ [online] (cited 21 march 2009) Available from <URL:http://www.iso.org/iso/iso_14000_essentials>

ISE [online] (cited 30 March 2009) Available from <URL:http://www.ise.ie>

Jørgensen, T. H. and Holgaard, J. E. (2004) *Environmental Reporting Experiences in Denmark*, Working Paper 6, Aalborg University Denmark

Manasseh, S. (2004) *Study on the level of Corporate Social Disclosure practices in Malaysia*, Masters Thesis, Universiti Sains Malaysia

Nielsen, A.E., and Thomsen, C. (2007) ‘Reporting CSR- what and how to say it?’, *Corporate Communications: An International Journal*, Vol. 12, No. 1, 25-40

O’Donovan, G. (2002) ‘Environmental disclosures in the annual report: Extending the applicability and predictive power of legitimacy theory’, *Accounting, Auditing and Accountability Journal*, Vol. 15, No. 3, 344-371.

O’Dwyer, B. (1999), *Corporate Social reporting in the Republic of Ireland: An analysis from 1991-1995* (Research paper 35). Dublin: Dublin City University Business School.

O'Dwyer, B. (2001), *The State of Corporate Environmental Reporting in Ireland* (Research report 69). London: ACCA.

O'Dwyer, B. (2002) 'Managerial perceptions of corporate social disclosure: An Irish study', *Accounting, Auditing and Accountability Journal,* Vol. 15, No. 3, 406-436.

O'Dwyer, B. (2003) 'The Ponderous Evolution of Corporate Environmental Reporting in Ireland. Recent Evidence form Publically Listed Companies', *Corporate Social Responsibility and Environmental Management*, 10, 91-100.

O'Dwyer, B., Unerman, J. and Bradley, J. (2005) 'Perceptions on the emergence and future development of corporate social disclosure in Ireland', *Accounting, Auditing and Accountability Journal*, Vol. 18, No. 1, 14-43.

Olokesusi, F. and Ogbu, O. M. (1995) *Technology Policy and Practice in Africa*, [online] (cited 02 April 2009) Available from <URL:http://www.idrc.ca/en/ev-30814-201-1-DO_TOPIC.htm>

Opdenakker, R. (2006) 'Advantages and Disadvantages of Four Interview Techniques in Qualitative Research' [online] (cited 26 June 2009) Available from <URL:http://www.qualitative-research.net/index.php/fqs/article/viewArticle/175/391>

Owen, D. L. (2003) *Recent developments in European social and environmental reporting and auditing practice- A critical evaluation and tentative prognosis* (Research paper 3). Nottingham: International Centre for Corporate Social Responsibility.

Raar, J. (2002), 'Environmental initiatives: towards triple-bottom line reporting', *Corporate Communications: An International Journal*, Vol. 7, No. 3, 169-183.

Robson, C. (2002) Real World Research (2 edn), Blackwell, London.

RTE, (2007) 'Innovation to cut animals' methane emissions' [online] (cited 29 June 2009) Available from <URL: http://www.rte.ie/business/2007/0723/farming.html>

Saunders, M., Lewis, P. and Thornhill, A. (2007) *Research Methods for Business Students* (4 edn), Pearson, Essex.

Schaltegger, S. and Burritt, R. (2000) *Contemporary environmental accounting: issues, concepts and practice*, GreenLeaf, Sheffield.

Sekaran, U. (2003) *Research Methods for Business: A Skill Building Approach* (4 edn), Wiley, New York.

Sociology Central (nd) 'Sociology Research Skills' [online] (cited 27 June 2009) Available from <URL:www.sociology.org.uk/methodq.pdf>

SustainAbility and UNEP (1998) 'The Non-Reporting Report' [online] (cited 22 March 2009) Available from <URL:http://www.sustainability.com/downloads_public/insight_reports/non_reporting.pdf>

The European Working Party of the European Federation of Accountants (FEE) (2000) 'Towards a Generally Accepted Framework For Environmental Reporting' [online] (cited 21 March 2009) Available from <URL: http://www.fee.be/search/default_view.asp?content_ref=284>

The Sustainability Reporting Program (2004) [online] (cited 27 March 2009) Available from <URL:http://www.sustreport.org/business/report/intro_lg.html>

Thompson, P and Cowton, C. J. (2006) 'Bringing the environment into bank lending: implications for environmental reporting', *The British Accounting Review*, 36, 197-218.

Thorne, D. M., Ferrell, O. C. and Ferrell, L. (2008) *Business and Society A Strategic Approach to Social Responsibility* (3rd edn), Houghton Mifflin, Boston.

Trochim, W. M. K. (2008) 'Deductive and Inductive Thinking', [online] (cited 3 June 2009) Available from <URL: http://www.socialresearchmethods.net/kb/dedind.php>

Van Staden, C. J. And Hooks, J. (2007) 'A comprehensive comparison of corporate environmental reporting and responsiveness', The British Accounting Review, 39, 197-210.

Walmsley, J. D. and Bond, A. (2003) 'An Assessment of The Role of Environmental Reporting in Supporting Share Values in FTSE100 Companies', *Journal of Environmental Assessment Policy and Management*, Vol. 5, No. 2, 149-182.

Weber, R. (2004) ‘The Rhetoric of Positivism versus Interpretivism: A Personal View’ [online] (cited 25 June 2007) Available from <URL:www.misq.org/archivist/vol/no28/issue1/EdCommentsV28N1.pdf>

Williamson, D. And Lynch-Wood, G. (2008), ‘Social and environmental reporting inUK company law and the issue of legitimacy’, *Corporate Governance,* Vol. 8, No. 2, 128-140.

Wilmshurst, T.D. and Frost, G.R. (2000) ‘Corporate environmental reporting: A test of legitimacy theory’, *Accounting, Auditing & Accountability Journal*, Vol. 13, No. 1, 10-26.

World Health Organisation (2006) ‘Health effects of the Chernobyl accident: An Overview’ [online] (cited 14 March 2009) Available from <URL:http://www.who.int/mediacentre/factsheets/fs303/en/index.html>

Zambon, S. and Del Bello, A (2005) ‘Towards a stakeholder responsible approach: the constructive role of reporting’, *Corporate Governance*, Vol. 5, No. 2, 130-141.

7.0 Appendix I

Requirements for Environmental Reports

1. A description of the company's activities
    - ❖ the impact of environmental issues on land, air, water, natural resource, and non-renewable resources.

2. Environmental policy and management commitment, such as:-
    - ❖ legislative compliance
    - ❖ employee involvement
    - ❖ natural resource conservation
    - ❖ health and safety
    - ❖ environment protection

3. Plans and targets, such as:-
    - ❖ company commitment
    - ❖ continually improving environmental performance
    - ❖ reducing the level of pollution(air emissions, water, energy and effluent discharges)

4. A description of the EMS
    - ❖ how the company achieves its objectives
    - ❖ how the company provides information to meet its stakeholders' requirements
    - ❖ what are the company capabilities (e.g. technology, programs, training and procedures)
    - ❖ the mechanisms for continuous improvement
    - ❖ details of the methodology, i.e., ways, processes and procedures, which control the process of producing information

5. Quantitative data on environmental performance can be categorised into:-
    (a) non-financial data, such as:-
    - ❖ waste disposal
    - ❖ emissions into air, land and water
    - ❖ accidents and incidents
    - ❖ energy consumption

    (b) financial data, such as:-
    - ❖ environmental expenditures and costs
    - ❖ environmental provisions for liabilities and risks
    - ❖ estimation of environmental contingencies
    - ❖ capitalisation of costs
    - ❖ remediation costs

    (c) environmental indicators
    - ❖ description of the types of environmental indicators and description of the reasons for – their use

    (d) Description of the methodology and ways used for collecting data and information in the report

6. Environmental audits

(details of environmental audits undertaken, such as, the type of audit, the purpose, scope and procedures of auditing)

7. Environmental improvements achieved, such as:-
   - ❖ reducing the level of pollution (air-water-land)
   - ❖ repairing environmental damages

8. Negative impacts, such as:-
   - ❖ fines and penalties
   - ❖ information about poor performance
   - ❖ prosecutions and accidents
   - ❖ breaches of regulatory requirements
   - ❖ details of corrective actions

9. Independent verification (third party)
   independent opinion about many issues, such as:-
   - ❖ the fairness of the statements in the environmental report
   - ❖ compliance with policies and procedures
   - ❖ the effectiveness of the environmental management systems
   - ❖ the methodology, scope, procedures and process, which relate to environmental audits and collecting evidence of auditing
   - ❖ description of the scope of responsibility
   - ❖ the qualifications of a third party

10. Other information, such as:
    - ❖ an opportunity to cover other useful information about environmental issues

(Dixon et al. 2005 p. 710)

8.0 Appendix II

Stakeholder target groups and the environmental information they require

Stakeholder or Target Groups Identified

- Employees
- Academia
- Business
- Financial Community
- Local Community
- NGOs
- Regulators and Policy Makers
- Trade and Industry

Type of Environmental Report: Generic Report

This report would address the following issues that are common to all stakeholders

- Environmental management standards
- Current environmental policy of company
- Emissions and impacts
- Performance trends
- Environmental expenditure
- Regulatory compliance
- Risk assessment
- Future strategies or programmes

Type of Environmental Report: Specialised Report

1. Progressive Report: this report would address areas such as accountability, transparency, sustainability, environmental management system of the company, green technologies, life cycle assessment of products, data quality and verification.

   Target Audience:
   - Academics
   - NGOs
   - Local Communities

2. Functional Report: this report would address areas such as environmental action plans of the company, current implementation of plans, what are the costs, risks and liabilities associated with these plans.

Target Audience:

- ❖ Regulators and Policy Makers
- ❖ Financial Community
- ❖ Business

3. Explanatory Report: this report would address areas such as employees concerns regarding compliance with regulations, participation and accountability, training and health and safety regulations.

   Target Audience:

   - ❖ Employees

Azzone et al. (1997)

9.0 Appendix III

Legislation in Denmark

Name: The Green Accounts

Legislation: Act No. 403 The Environmental Protection Act Section 35 and Statutory Order 975

Date: 14 June 1995 and 13 December 1995 respectively

Scope: Companies with a need for a legal environmental approval, and with more than 20 employees and all Integrated Pollution Prevention and Control (IPPC) companies. IPPC companies are those companies that have industrial and agricultural activities with a high pollution potential to have an environmental permit in order to continue with these activities. This IPPC concept is derived from the EU Directive 2008/1/EC**,** entitled IPCC (Europa, 2008).

Penalties for non-compliance: Yes, in the form of fines.

Reporting requirements:

- **Introductory Statements:** Company name, sector, supervisory authority, main activities, significant side activities, licensed aspects, environmental authority, short description of significant resources and environmental parameters.

- **Management Report:** Explanation of significant deviation from last year's accounts, explanation of choice of environmental data, information about employee involvement, health and safety related to pollutants in the production processes, information on external auditing (this can be both mandatory and voluntary).

- **Environmental Data:** Energy, Water and Raw Material consumption, information about pollutants (to air, water and soil) including data on contents of products and information about noise, dust and odours.

(Emtairah, 2002 p. 27)

The Act was amended in 2002 and these are further requirements as a result of this legislation:

- Information about developments in the environmental situation of the company in the latest five financial years.
- Information about waste generation and management of the company.
- Future-oriented information about environmental policy and objectives of the enterprise, and information on concrete results achieved, including the fields of energy, transport and waste.
- Information about staff involvement in environmental activities.

- Information about environmental requirements for suppliers.
- Information about corrective action on non-compliance with conditions of approvals, and prevention of recurrence.
- Information about essential complaints.
- Summary of self-assessment at the company.
- The information must be well arranged and designed for the non-professional reader.
- The supervisory authority must make a statement on the accounts.

(Jørgensen and Holgaard, 2004 p. 13)

Legislation in the Netherlands

Name: Environmental Reporting

Legislation: The Environmental Management Act Title 12.1 ‘Environmental Reporting’ and the Environmental Reporting Decree

Date: 10 April 1997 and 1 January 1999 respectively

Scope: The Environmental Reporting Decree states that companies who are said to have a serious adverse effect on the environment have to produce environmental reports.

Penalties for non-compliance: Yes, in the form of fines.

Reporting requirements: Two reports- 1. Government Report and 2. Public Report

- ❖ Government Report: Address the areas of air emissions, substances released within water, disposal of waste, recycling, noise and odour pollution, measures to prevent accidents, which may affect the environment, environmental care system of the company and environmental licences.

(Hoffmann, 2003)

- ❖ Public Report: Addresses the following areas:
- Nature of the company’s processes and activities.
- Any adverse effects the company has had on the environment including quantitative data.
- Measures taken by the company (technical, administrative, organisational) to protect the environment.
- Any changes that have occurred compared to the previous year’s report.
- Developments that are expected to occur in the forthcoming reporting year.
- (Emtairah, 2002 p. 30)

Legislation in France

Legislation: Nouvelles Regulations Economiques (NRE) (New Economic Regulations – NER) and Decree No. 221 (reporting within the annual report).

Date: 1 January 2002 and 20 February 2002 respectively.

Scope: All publically listed companies on the French stock market.

Penalties for non-compliance: No

Reporting requirements:

- Water, raw material and energy consumption, energy efficiency measures, the use of renewable energies, emissions.
- Measures that limit the company's impact on the environment.
- Details of any environmental evaluation and certification.
- Compliance with environmental regulation and legislation.
- Details of internal environment management services.
- Provisions to reduce environmental risk.
- Compensation payments awarded relating to environmental issues, action taken to redress the damage.

(Delbard, 2008; Hoffmann, 2002)

Legislation in Norway

Name: Environmental Information in the Director's Statement, within the annual report.

Legislation: The Norwegian Accounting Act, Section-Director's Report.

Date: 1 January 1999

Scope: All companies regulated under the Norwegian Accounting Act are required to comply (all companies in Norway, no exception).

Penalties for non-compliance: No

Reporting requirements:

- **Management Report**
  - Information shall be given about circumstances of the activities, hereunder its raw material and products, which may lead to significant impacts on the environment.
  - Information shall be given about which environmental impacts the different conditions of the enterprise contribute, and what initiatives are implemented or are planned to prevent or reduce these impacts.
  - It should be possible to understand from the account the ambitions and targets the enterprise has set, and what environmental limitations are expected from authorities, customers and suppliers.

- **Environmental Data**
  - Type and amount of energy and raw material consumed
  - Type and amount of pollution emitted, noise levels, dust and vibrations
  - Type and amount of waste generated or belonging to the enterprise, i.e. deposited residues, open or closed deposits, sediments in rivers, lakes or the sea etc.
  - Risk of accidents
  - Environmental load stemming from transport.

- **Product Related**

  For enterprises manufacturing material/products, the following aspects are central/ of importance:

  a) type and amount of toxic chemicals in the products
  b) type and amount of waste expected at end of life
  c) environmental load from the use of the products, hereunder necessary use of other products as gasoline for cars

(Emtairah, 2002 p. 32)

10.0 Appendix IV

Cover E-mail for Interviews

Dear xxxx,

My name is Roslyn Kelly and I am currently completing my Master of Arts in Accounting at Letterkenny Institute of Technology, Co. Donegal. As part of my course I am completing a dissertation entitled "The nature and extent of environmental disclosures by listed companies on the Irish Stock Exchange within the Food and Drinks Sector".

I would like to enquire if there is someone within your company who would be able to participate in an interview for my research.

All information gathered during the interview will solely be for the purposes of my dissertation and the results will be presented with anonymity, with each company represented as a, b, c, etc., so as to respect the confidentiality of the participants.

I cannot express how much your participation would be appreciated and I am aware that participating in a student's interview is not on your list of priorities, but I would be very grateful for your time.

Thank you for taking the time to read this email and I look forward to hearing from you.

Regards,

Roslyn Kelly

11.0 Appendix V

Copy of Interview Questions for the Listed Companies

Environmental disclosure can be defined as, the provision of information on various aspects such as environmental policies, audits, expenditures, impacts, processes, the impact company's products can have on the environment and details on their sustainable operations O'Dwyer (1999).

Current Environmental Reporting within the company

Q1. Within your company**,** who has the responsibility, if anyone, for the development and monitoring of environmental reporting?

Q2. Professor Brendan O'Dwyer (1999) provides a detailed interpretation of environmental disclosure as outlined above.

What in your opinion does environmental reporting mean to your organisation?

Q3. I have read your company's Annual Report for 2008 and the environmental disclosures on your company's website. Therefore, I am aware that your company environmental disclosures address the fact that your company is familiar with ISO 14001, IS393, the IPPC directive and is implementing recycling initiatives and wastewater and energy management initiatives.

Again highlighting Professor O'Dwyer's interpretation of environmental disclosure as outlined above, do you believe that the current detail of your environmental disclosures addresses the information needs of your stakeholders?

Q4. Do you think that your company will continue to include environmental disclosures within your Annual Report and on your website and why?

Q5. Does your company currently engage in environmental reporting through any other medium apart from the Annual Report and the company website, for example a separate Environmental Report, newsletters, emails etc.?

Q6. Are the stakeholders involved in the development of your organisations environmental reporting or is this a function solely at the discretion of the ...(refer to answer from question one)?

Q7. Would your company look to other companies in the sector to identify the type of reporting being undertaken, on an Irish or international basis?

Q8. What do you feel are the other influences on the environmental reporting undertaken by your company?

Managements Perceptions of Environmental Reporting

Q9. Legitimacy Theory has been highlighted in the literature as an example of a motivator for environmental disclosures.

"Legitimacy Theory is based on the idea that in order to continue operations successfully a company must act within the bounds of what society identifies as socially acceptable" (O'Donovan 2002).

Do you feel your company reports environmental information based on the motivation theory of Legitimacy?

Q10. Stakeholder Theory has been highlighted by the literature as another example of a motivator for environmental disclosure.

Stakeholder theory is based on the concept that companies must gain the approval and support of its stakeholders for it to continue to operate.

Do you feel your company reports environmental information based on Stakeholder Theory?

Q11. If your company does not disclose environmental information based on the above two theories, why do you believe your company engages in environmental reporting?

Q12. Prior research suggests that many senior managers in listed companies believe that environmental reporting may be regarded cynically by company stakeholders, especially in the Irish context.

Would you agree with this?

Q13. It has also been suggested that as a consequence of the cynical attitude of stakeholders, disclosures are of a poor quality.

How would you rate your company's quality of reporting and do you think this is better or worse than other companies in your Sector?

Rating Scale for own company's environmental reporting (Circle)

Poor Weak Average Good Excellent

Q14. The literature has identified possible barriers to environmental reporting such as:

- It is an expensive activity.
- Disclosing environmental information could lead to deterioration of the company's reputation i.e. through negative disclosures.
- Some companies do not believe that reporting can create advantages.
- Management do not have any interest in reporting.
- The company may not have the resources required to enable it to collect data and produce reports.

Could you rate these barriers, on a scale of 1-5. 1being the most relevant and 5 being the least relevant.

In your opinion, are there any other barriers to environmental reporting?

Q15. In your opinion, is there currently pressure on the Food and Drinks Sector to produce environmental information and if so from whom?

Future of Environmental Reporting in Ireland

Q16. Previous studies in Ireland provide evidence of an absence of substantial environmental reporting amongst PLCs in the Food and Drinks Sector.

Why do you believe there is such an absence of environmental reporting in your sector?

Q17. There are a number of voluntary reporting initiatives that have been developed to allow companies follow reporting guidelines, when they are engaging in environmental reporting. Examples of these are the GRI's G3 Guidelines.

Is your company aware of such guidelines?

Does your company follow guidelines at present and if yes which ones?

If not, would your company consider following them in the future?

Q18. Within Europe, several countries including Denmark, France, and Germany have introduced mandatory environmental reporting, for certain companies.

Do you think the introduction of mandatory environmental reporting in Ireland would lead to an increase in environmental reporting and improve the quality of the information disclosed.

Q19. Are there any other regulations regarding environmental reporting, which are likely to be introduced, specific to your sector?

Q20. Environmental Reporting is an element of CSD.

O'Dwyer et al. (2005) focused their study on less powerful stakeholders in Ireland i.e. Non-Government Organisations, their perspectives on CSD and what information they require. Their study highlighted the possibility of using the concept of 'social partnership' to develop CSD in Ireland, by incorporating all stakeholders in the process.

Do you think it is possible to use the concept of social partnership to develop environmental reporting in Ireland and if so, in what way?

12.0 Appendix VI

Copy of questions for the Senior Corporate Responsibility Manager.

Future of Environmental Reporting in Ireland

Environmental disclosure can be defined as, the provision of information on various aspects such as environmental policies, audits, expenditures, impacts, processes, the impact company's products can have on the environment and details on their sustainable operations O'Dwyer (1999).

Q1. In your opinion, how important is Environmental Reporting to companies, particularly to companies within the Food and Drinks Sector?

Q2. In your opinion, is there currently pressure on the Food and Drinks Sector to produce environmental information and if so from whom?

Q3. Previous studies in Ireland provide evidence of an absence of substantial environmental reporting amongst PLCs in the Food and Drinks Sector.

Why do you believe there is such an absence of environmental reporting in this sector?

Q4. There are a number of voluntary reporting initiatives that have been developed to allow companies follow reporting guidelines, when they are engaging in environmental reporting. Examples of these are the GRI's G3 Guidelines.

Is your organisation aware of such guidelines?

Would your organisation encourage the use of such regulations by companies when they are disclosing environmental information?

Q5. Within Europe, several countries including Denmark, France, and Germany have introduced mandatory environmental reporting, for certain companies.

Do you think the introduction of mandatory environmental reporting in Ireland would lead to an increase in environmental reporting and improve the quality of the information disclosed.

Q6. Are there any other regulations regarding environmental reporting, which are likely to be introduced, specific to this sector?

Q7. Environmental Reporting is an element of CSD.

O'Dwyer et al. (2005) focused their study on less powerful stakeholders in Ireland i.e. Non-Government Organisations, their perspectives on CSD and what information they require. Their study highlighted the possibility of using the concept of 'social partnership' to develop CSD in Ireland, by incorporating all stakeholders in the process.

Do you think it is possible to use the concept of social partnership to develop environmental reporting in Ireland and if so, in what way?

13.0 Appendix VII

Food and Drinks Industry listed companies current environmental reporting within their Annual Reports

Company	Annual Report	Disclosure
Company A	Year End 2008	CSR-Environmental Section
Company B	Year End 2008	CSR -Environmental Section
Company C	*N/A	*N/A
Company D	Year End 2008	CSR-Environmental Section
Company E	Year End 2008	CSR-Environment Section

*This company was established following the merger of two other companies, therefore the company's first annual report has yet to be published. One of the merging companies was previously listed on the ISE, and their final Annual Report did not include a CSR Section. There was a reference to CSR (a one line statement) included within the Director's Report.

14.0 Appendix VIII

Q14. The literature has identified possible barriers to environmental reporting such as:

- It is an expensive activity.
- Disclosing environmental information could lead to deterioration of the company's reputation i.e. through negative disclosures.
- Some companies do not believe that reporting can create advantages.
- Management do not have any interest in reporting.
- The company may not have the resources required to enable it to collect data and produce reports.

Could you rate these barriers, on a scale of 1-5. 1being the most relevant and 5 being the least relevant.

Company A's Responses

1. The company may not have the resources required to enable it to collect data and produce reports.
2. It is an expensive activity.
3. Disclosing environmental information could lead to deterioration of the company's reputation i.e. through negative disclosures.
4. Some companies do not believe that reporting can create advantages.
5. Management do not have any interest in reporting.

Company B's Responses

1. It is an expensive activity.
2. Disclosing environmental information could lead to deterioration of the company's reputation i.e. through negative disclosures.
3. The company may not have the resources required to enable it to collect data and produce reports.
4. Some companies do not believe that reporting can create advantages.
5. Management do not have any interest in reporting.