

Corporate Responsibility in the UK Construction Industry: A Study of Activities and Reporting

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Abstract

Corporate Responsibility (CR) defines the process of self-regulation, whereby an organisation seeks to measure and improve its performance related to the social, environmental and economic expectations placed upon it by society.

In the past two decades the prominence, and therefore uptake of CR activities and reporting has increased across many sectors. The pace of this change has varied significantly, with many industries quickly becoming aware of its importance and integrating it into their business operations while others have seen CR as lower priority and have been much slower to embrace it. In the UK, while some of the individual components of CR are governed by legislation (e.g. environmental activities and health & safety), others such as social interactions and CR reporting have little or no legislation associated with them. This lack of any clear legislative requirements effectively allows organisations to report on any topics they wish and results in a very varied approach to implementing and reporting upon the subject. While some aspects of CR, such as reporting (Jones, Comfort *et al.* 2006), performance benchmarking (BITC, Graafland *et al* (2003)) and attitudes to CR (Herridge, (2003), Petrovic-Lazarevic, (2008)) have been investigated in isolation, there has been no attempt to provide a holistic view of the industry. This research seeks to do just that by combining a range of data in an effort to build a broad evidence base of the industry's reporting practices, performance and perceptions of the industry with regards to CR.

This thesis presents the findings from a mixed-method review of CR reporting, activities and performance amongst UK construction companies. Mixed methodologies (qualitative and quantitative) were employed in order to interrogate a range of data sources. The methods employed in the empirical chapters of this work include a review of construction CR reports, a benchmarking exercise and a case study of consultancy companies operating in the construction industry.

With regards to reporting, while some longitudinal changes were seen with respect to report size and levels of detail, a number of core or priority topics were identified which were commonly covered by construction companies regardless of which sub-sector they operated in. The benchmarking exercise attempted to compare the CR performance of companies

within three construction sub-sectors (materials suppliers, contractors and consultants) and while some patterns were evident, such as topics where performance was consistently high, no clear trends were seen between the performances of the three sub-sectors reviewed. The case study highlighted a number of difficulties that are faced by consultancy companies and based upon the study, a range of recommendations which could potentially help to address some of them are proposed.

Declaration of Publication

This is a declaration that the research presented in Chapter 4 of this thesis has been published in the ICE Journal of Sustainability (Brown, Parry *et al.* 2010).

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Abbreviations

ACCA	Association of Chartered Certified Accountants
BERR	Business Enterprise and Regulatory Reform
BITC	Business In The Community
BREEAM	BRE Environmental Assessment Method
CDP	Carbon Disclosure Project
CEEQUAL	Civil Engineering Environmental Quality
CIPS	Chartered Institute of Purchasing
CoP	Communication on Progress
CoST	Construction Sector Transparency
CR	Corporate Responsibility
CRESS	Construction and Real Estate Sector Supplement
CRRA	CR Reporting Awards
DEFRA	Department for Environment Food and Rural Affairs
DJSI	Dow Jones Sustainability Index
DTI	Department of Trade and Industry
EITI	Extractive Industries Transparency Initiative
FTSE4GOOD	FTSE Corporate Responsibility Index
GRI	Global Reporting Initiative
H&S	Health and Safety
IIP	Investors In People
KPI	Key Performance Indicator
MMSD	Mining, Minerals and Sustainable Development
MNC	Multi-National Corporation
OFT	Office of Fair Trading
SME	Small to Medium Enterprise
SWMP	Scott Wilson Millennium Project
TDM	Tailored Design Method

UNGC	United Nations Global Compact
WBCSD	World Business Council for Sustainable Development

1. INTRODUCTION AND AIM

In the past decade, Corporate Responsibility (CR) activities and reporting within the UK and throughout the world have, on the whole, been steadily increasing across all industries, from textiles and clothing through to mining and extraction. CR activities and reporting provide organisations with the opportunity to address stakeholder concerns/pressures and to demonstrate that they are operating in a sustainable and ethically responsible manner. However, as many aspects of CR are currently voluntary, with a range of guidance available on the subject, the uptake, quality and effectiveness with which activities are implemented and reports are produced can vary significantly both between, and within sectors.

While construction has been able to offer a wide range of significant benefits to human development, it is also often viewed as an industry which is dangerous, environmentally damaging and one that can impact negatively on communities. These are all impacts which are notable aspects of CR and understanding them more clearly could help the industry to reduce its negative impacts and provide even greater benefits to future development. Murray and Dainty (2008), suggest that both research and industry interest in CR has been growing, but note that their book is the first single volume of text that examines the various facets of this subject with specific reference to the construction industry. This gives an indication of the problem that has been facing the industry – many companies are aware of the importance of the subject but to date limited research has been undertaken and relatively little has been published on the subject.

This research aims to expand upon the relatively limited information which is currently available in the area of CR within the construction industry. This will be achieved using three different methodologies to collect data from a range of sources in order to build a more comprehensive picture of company's activities and performance as well as identifying where potential improvements might be made. More detail on the methodologies employed in this thesis is provided in Chapter 3.

1.1 PROJECT RATIONALE

There is a comprehensive body of academic literature charting the extent to which multi-national corporations (MNC's), in particular, report on ethical, social and environmental issues (Adams 2002). This may be true for industries such as pharmaceuticals (Adams and Kuasirikun 2000), which have received high levels of exposure relating to ethical issues, but it does not yet appear to be the case for the construction industry. There are a limited number of examples of academic literature relating CR topics and the construction industry (for example, Herridge (2003); Mustow (2006); and Petrovic-Lazarevic (2008), Murray and Dainty (2008)) with even fewer that review, compare or analyse the CR activities of construction companies. More common is literature relating to sustainability or sustainable development and the construction industry (for example Myers (2005), Perdan (2000); and Wenblad (2001)) which at times touches upon social and ethical issues but more often concentrates on the environmental aspects of sustainable development.

KPMG (www.KPMG.com) undertakes a triennial International Survey of Corporate Responsibility Reporting, which analyses trends in the reporting practices of the world's largest corporations; covering the top 250 companies of the Fortune 500 (Global 250, G250) and the top 100 companies in 16 countries (National 100, N100). This amounts to over 1,600 companies and provides a global picture of reporting trends. However, only three of the G250 are construction/engineering companies and, of the 1,600 N100 companies surveyed, only 78 were construction or engineering companies. From an economic standpoint, these figures suggest that construction companies are not particularly 'big players' in the global market. However, from a wider perspective the impact which construction activities can have is enormous; for example, whether through the benefits offered by housing and healthcare construction, or the negative environmental impacts which can arise from the production of construction products.

Therefore, construction companies have the opportunity to maximise benefits and minimise the negative impacts of their operations, and it is important that these benefits and impacts are measured and monitored in order that improvements can be made. CR is one way of

doing this, and at present, the limited literature that is available suggests that the construction industry is lagging behind other industries such as pharmaceuticals, finance and food retailing with respect to CR.

The significant scope for impacting a host of different areas coupled with the relatively limited availability of CR information within the industry provides sound justification for the research undertaken in this PhD. A review of the industry will provide some baseline information relating to CR activities, reporting and performance which can be built upon and expanded through future research. The methodologies employed in this research will provide one of the first evidence based reviews of CR within the construction industry.

The research in this thesis has a particular focus upon consultancy companies. The main reasons for this focus are:

- As an employee of the URS Scott Wilson, the researcher has access to all of the company's internal documents and policies
- In addition to the data access, being an employee means that the staff within the company are much more likely to answer questions than if the researcher was to 'cold call' employees from another company
- As a part funder of this research, the thesis could provide URS Scott Wilson with some useful information in return for the investment which has been made in the project

Consultancies provide a wide range of services in the construction industry from pre-planning surveys and consultations to design work, project management and performance monitoring work. Some consultants are able to offer many of these different services, while others specialise in only one or two.

However, their services vary significantly and as a result so to do their clients. Government agencies and departments, large multi-national contractors, and local developers are just some of the clients who at some point during their operations may require the professional services of consultants. Some more detail is provided on the role which consultants fulfil in section 6.1.

URS Scott Wilson Ltd has part-funded this research, and as a complementary part of the research, the study seeks to provide some recommendations which will be relevant to URS Scott Wilson and other consultants operating in the UK construction industry.

Note: The majority of research in this thesis was carried out before Scott Wilson Ltd was acquired by URS Ltd which occurred in late 2010. Therefore, while the thesis refers to the current name of the company (URS Scott Wilson Ltd) the majority of data relating to the company was acquired before the buy out. This means that the recommendations in section 7.5 relate to Scott Wilson's operations but, as has already been mentioned, these should still be of use to the URS Scott Wilson Ltd organisation as well.

1.2 AIMS AND OBJECTIVES

Aims

The primary aim of this project is to review the current state of CR activities and reporting by UK construction companies, in order to better understand which areas of CR are most relevant to the industry and how the CR agenda is influencing the operation of companies within the industry. This understanding will allow the secondary aim of the project to be achieved, which is to develop potential recommendations to help consultancy companies operating in the industry to address their CR issues more effectively.

Objectives

The aims described above will be realised by achieving the following objectives:

1. Review available literature on CR within construction and other industries to provide a background on the subject, along with initial information on how CR is approached by a variety of industries
2. Investigate CR reporting practices of construction companies to identify trends in reporting as well as possible reasons why these trends might be occurring
3. Benchmark construction companies to identify which sub-sectors (materials suppliers, contractors, or consultants) are performing most effectively and why this might be
4. Review consultancy companies in detail to identify and assess their CR activities and highlight where and how potential improvements might be made.

If a review of the construction industry was to concentrate explicitly on a relatively clear cut aspect of operations such as financial performance, then the methods required to undertake a review would be well defined and, in theory a relatively straightforward process. The review might take into account factors such as profit and loss accounts, key performance measures, annual financial reports and shareholder perceptions in relation to financial returns. However, CR, as will be seen in later chapters, is a very different and more elusive topic to define, let alone quantify and measure. There are many, very different areas which come

under the banner of CR, and all of these should be considered in order to gain an objective view of the industry and how effectively it is addressing the topic. The diversity of the topic means that the most suitable way to study it, is to use a variety of methodologies which will allow numerous data sources to be studied. Therefore, this research employs a mixed method approach to ensure that a wide array of information is collected. Section 1.4 outlines the approaches used.

1.3 RESEARCH QUESTIONS

Based upon the literature review presented in Chapter 2 and an expansion of the objectives in section 1.2, seven research questions have emerged which will help to further direct the study and ensure the overall aims are achieved. These fall into three broad areas which are similar to the predominant research topics within this thesis.

- Reporting
- Activities and performance
- Understanding and integration

The research questions along with a brief summary of how they emerged/developed are described below.

1.3.1 Reporting

When first beginning to research the topic of CR, company reports were some of the initial pieces of literature which were encountered. Reporting is currently one of the most prominent ways in which companies convey information to their stakeholders and promote their CR activities. Therefore, it is an area of great interest to this study, as it is a source of information which can help to build a picture of CR within the industry.

With the importance of reporting in mind, the following questions emerged:

RQ 1 - What areas of CR are most commonly reported upon within the industry, and why?

RQ 2 - How do these topics vary throughout the industry and over time, and why might this variation occur?

Identifying commonly reported upon topics may help to give an indication of which areas of operations are the most important to companies in the industry and their stakeholders. Combining this with information on how the reporting of these topics changes over time may give some indication of how CR in the construction industry might develop and evolve in the future. Some more detail is provided on these research questions in section 2.9.1.

1.3.2 Activities and Performance

Having built an initial picture of the industry's attitude towards CR through report reviews, the next step was to look at the actual CR activities and practices that companies were undertaking and how well they were actually performing them. For the purposes of this study, the term activities encompasses both the distinct initiatives which companies undertake (such as employee volunteering), as well as the day to day practices which they implement (such as Health and Safety (H&S) and environmental policies). Having decided to attempt to measure CR performance, questions were raised about what these performance measurements might demonstrate. These questions were:

RQ 3 - What differences and similarities exist in the activities which companies undertake across the industry?

RQ 4 - Do trends exist in the performance of different sub-sectors?

These questions help to break down and give more context to the very broad objective to 'Benchmark construction companies to identify which sub-sectors (materials suppliers, contractors, or consultants) are performing most effectively and why this might be'. By answering these questions it is hoped that potential reasons for any differences will also emerge which will help to complete the objective. Section 2.9.2 provides further detail on these questions and how they relate to the study.

1.3.3 Understanding and Integration

As has been mentioned in section 1.1, there is a particular interest/focus on consultancy companies within this study. Investigating these companies further raised questions relating to both the researcher's employer (URS Scott Wilson), and its peers. In order to develop potential recommendations for URS Scott Wilson an understanding of current practice and understanding of CR within the company was needed. Having obtained this knowledge, a view of how the company's peers were performing, along with the various initiatives they were implementing was seen to be of interest. These thoughts gave rise to the following questions:

RQ 5 - How aware are URS Scott Wilson staff of the issues associated with CR, and what perceptions do they have of the company and the industry with regards to CR?

RQ 6 - How do URS Scott Wilson's benchmark results compare with its industry peers?

RQ 7 - How are other consultancies addressing their own priorities?

In combination, these questions helped to achieve objective 4 and were also the predominant source of information for the consultancy company recommendations which are presented in section 7.5. Section 2.9.3 gives some more information on these questions as they relate to the study.

1.4 THESIS STRUCTURE

This research project employs a number of methodologies in order to achieve the objectives described above. The methods are described in more detail in Chapter 3 and the findings are provided in the relevant chapters of this thesis, but in this section a brief summary of the purpose of each chapter and the research undertaken is provided.

1.4.1 Chapter 2 - Corporate responsibility

Achieves Objective 1: Review available literature on CR within construction and other industries to provide a background on the subject, along with initial information on how CR is approached by a variety of industries

Chapter 2 presents a detailed literature review of CR helping to develop a definition of the topic as well as looking at its evolution of the past 50 years. The chapter then touches upon some of ways in which CR is perceived and addressed by a selection of industries both related and unrelated to construction. Current practices and views with regards to CR in construction are investigated based upon available literature before going on to present the research questions which have arisen during this state of the art review.

1.4.2 Chapter 3 - A Mixed Methodology

The third chapter covers past academic work relevant to the methods used in the thesis and gives an introduction to these methods along with a justification for their selection. New aspects of the methods which have been developed for this study are then described in the relevant empirical chapter.

1.4.3 Chapter 4 - CR Reporting Trends In UK Construction

Achieves Objective 2: Investigate CR reporting practices of construction companies to identify trends in reporting as well as possible reasons why these trends may be occurring

The purpose of this initial review was not only to compare the content of CR reports from different sub-sectors but also to begin to identify the CR topics that are important in the construction industry. Identifying and researching these prominent topics also began to highlight potential drivers for CR reporting by the industry. The review was carried out using a newly developed comparative framework which was developed during the research process. This framework was based upon the Global Reporting Initiative (GRI) (www.globalreporting.org) G3 Key Performance Indicators (KPIs) and nine broader topics related to CR within construction. This framework was then used to carry out two separate reviews of construction company reports over a time period of 3 or 4 years.

The first review of company reports using the comparative framework was undertaken in Spring 2007. A follow up review of reports from the same companies was carried out in Spring 2010. The same methodology was employed for the follow up review. This second review allowed for a temporal comparison to be made of the changes in reporting of individual companies and those of the sector.

The review of reports represents an external picture of construction companies; how they hope to be perceived, which areas of CR they see as most relevant to them and their aspirations in relation to CR. This review was undertaken by an external person (the researcher) using external facing information. In this method, access to information is likely to be restricted to some degree as organisations may only publish information which they are happy to have in the public domain. However, the initial process of building up this information base provided further evidence which could be used to support other findings later in the thesis.

1.4.4 Chapter 5 - Benchmarking of Corporate Responsibility

Achieves Objective 3: Benchmark UK construction companies to identify which sub-sectors are performing most effectively and why this might be.

It was hoped that undertaking a benchmark of the industry's CR efforts would provide a complementary picture to Objective 2. The research carried out for Objective 2 provided an external view of company activities while a benchmarking exercise allows the companies themselves to provide further information on their operations. In theory this should provide a more realistic internal view of the company that might otherwise not be available through corporate literature and websites.

The methodology used in this part of the research is based upon research by a Dutch academic (Graafland, Eijffinger *et al.* 2003) who benchmarked a large number of companies from four different Dutch industry sectors (Finance, Chemical, Construction and Retail). Graafland *et al.*'s method was selected from a number of methodologies (both academic and commercial in nature). The main reasons that Graafland *et al.*'s methodology was chosen are:

- The benchmark is based on responses given by each organisation; and
- Respondents are able to weight various aspects of CR which is then taken into account when calculating the overall score.

The benchmarking exercise 'bridges' the research methods used in Objectives 1 and 3 by, in effect, being both an external and internal review. The questionnaire is completed by an internal member of the organisation but for the purposes of an external review. This will mean the potential for access to company information is greater than it would be in public documents; however the information is still being provided to an external person so some of it may be restricted.

1.4.5 Chapter 6 - Consultancy Sub-Sector Case Study

Achieves Objective 4: Review consultancy companies in detail to identify and assess CR activities in consultancy companies and highlight where and how potential improvements might be made.

The overall purpose of this objective is to investigate how the activities which consultancy companies (in particular URS Scott Wilson) implement vary, as well as how and where it may be possible to make improvements. It was felt the research strategy most suitable to answering the kind of 'how' questions associated with this objective (see section 2.9.3) was the case study approach. Generally, case studies seek to give an in-depth analysis of a contemporary topic using data collected from multiple sources (Creswell 1997). The case study employed in this research used a number of sources to collect data in order to achieve Objective 4. Whereas the previous methods used for Objectives 1 and 3 are semi-quantitative, this objective is entirely qualitative.

Interviews were conducted with URS Scott Wilson staff which provided an internal view of the policies, procedures and activities that construction companies might be implementing. Working for URS Scott Wilson allows the researcher access to internal information sources and staff members which are unlikely to be provided by other companies. This allowed for a more candid view of the company to be obtained and in turn allowed for more relevant recommendations to be developed in line with the secondary aim of the project.

The second data collection method was to review a further selection of consultancy CR reports. This helped to highlight the activities undertaken and policies which other companies have in place to ensure that CR is embedded in their daily operations. Comparing these with URS Scott Wilson's practices has shown areas of operations that could be improved or areas in which the company is already focussing efforts. A comparison of the benchmarking responses from consultants provided a further indication of where CR efforts are being focused by consultants and helps to identify additional areas which URS Scott Wilson may have overlooked or could improve upon.

1.4.6 Chapter 7 - Discussion and Conclusions

A discussion of key themes seen throughout the study is presented here, before going on to provide a summary of the research findings as they relate to the overall project aims and objectives. This chapter also covers future research which may be relevant to the subject and includes the recommendations for consultancy companies that have been developed based upon the research findings.

2. CORPORATE RESPONSIBILITY

This chapter provides background information on CR, its definition, how the topic has evolved and its purpose. As well as a more general view of the topic the chapter will also review the ways in which a number of other sectors practice CR with an interest in how this might relate to the construction industry. Following this a more in-depth analysis is made of the construction industry by reviewing available academic literature and industry guidance. Finally, based upon the findings from the literature review, a number of research questions are drawn out which will help to achieve the aims and objectives discussed in the Chapter 1.

2.1 CHOICE OF TERMINOLOGY

Not only does CR lack a widely accepted definition, but there is a variety of terms used to summarise the topic. For the purposes of this research project CR) is used in place of the more traditional Corporate Social Responsibility (CSR). This is due to the fact that CR does not focus the corporation's responsibility in any one area. By comparison, the inclusion of social in the term CSR could be seen to limit a company's activities to those which have direct social impacts, thus allowing them to ignore other equally important aspects such as environmental responsibilities. By removing 'social', it is proposed that a more all encompassing term is created. Where quotes are used or reference is made to other papers then the terminology from that source is used.

2.2 THE CONSTRUCTION INDUSTRY

The construction industry can be used as an umbrella term to encompass a wide range of business types including construction contractors, materials suppliers, quarrying firms, timber producers and professional engineering and consultancy services. For the purposes of this research, these businesses have been grouped into three larger sub-sectors which make up the construction industry. These sub-sectors are:

- **Contracting companies:** including building and construction contractors, building services contractors, utilities companies.

- **Materials suppliers:** including timber producers, quarrying firms, aggregate recyclers, cement companies, concrete producers.
- **Consultancy companies:** including architects, designers, consultancies working in a range of areas such as waste and resources, environmental practices and civil engineering.

The variation in the size of businesses within the construction industry reflects the variation in CR activities and reporting by the industry. Of the 192,000 UK construction companies recorded in the 2008 Construction Statistics Annual (Office of National Statistics 2008), 93% of them have less than 14 employees, while the 125 firms with over 600 employees accounted for less than 0.1% of all firms, yet were responsible for 25% of all construction output. A small number of very large companies supply the materials to, and undertake the major civil, commercial and residential projects across the UK. These organisations are large enough to benefit from the implementation of major CR initiatives and production of CR reports that provide stakeholders with information on their national and international activities. The smaller firms are likely to be more concerned with the search for work than implementing CR practices which may not have significant impacts upon the bottom line. Due to the greater likelihood of practicing CR and the production of associated literature, it is these larger companies which this thesis focuses on.

2.3 INTRODUCTION TO CORPORATE RESPONSIBILITY

In the past two decades the prominence, and therefore uptake of CR activities and reporting has increased across many sectors. The pace of this change has varied significantly, with many industries quickly becoming aware of its importance and integrating it into their business operations while others have seen CR as lower priority and have been much slower to embrace it. In the UK, while some of the individual components of CR are governed by legislation (e.g. environmental activities and health & safety), others such as social interactions and CR reporting have little or no legislation associated with them. For example, the only legislation relating to non-financial reporting is in the form of the 2006 Companies Act (HM Government 2006). This states that the company accounts must also contain a business review which should “provide a balanced and comprehensive study of the

development and performance of the company including the principal risks". No more detail is given than this which results in a rather vague outline of the information which should be provided. The lack of any clear legislative requirements effectively allows organisations to report on any topics they wish. This vagueness is inherent in many aspects of the CR, even in the definition of the topic itself.

Before being able to undertake any investigation into practices it is first necessary to identify exactly what CR is. Once the concept has been defined it is then possible to investigate how and why CR has developed, and finally with this information, look at some of the possible reasons for the steady increase of CR practices and reporting.

2.3.1 Defining CR

Unfortunately, there is no definitive definition of CR. The term CR encompasses a range of terms including corporate social responsibility, sustainable business and ethical business. All of these terms have a similar meaning and are often used interchangeably. As for a definition, there seem to be almost as many definitions of CR as there are papers written on the topic. This ambiguity coupled with the absence of a single definition of the term often gives rise to confusion over the purpose and effectiveness of CR.

The European Commission's website for Enterprise and Industry (2009) defines CR as "a concept whereby companies integrate social and environmental concerns in the business operations and in their interaction with their stakeholders on a voluntary basis". This is a good definition of CR, highlighting the social and environmental aspects and interactions with stakeholders, as well as clearly identifying that it is a voluntary concept. The main drawback of this definition is that it describes CR as a concept rather than a process. In order for CR to be of any use to a business or any benefit to society and the environment, it should be more than simply a concept. CR should offer some way of implementing the idea, measuring its effectiveness and then improving upon it. To this end any definition should highlight the fact that CR involves some form of implementation, and therefore requires a process or framework to do this effectively.

This process is mentioned by Wenblad (2001) who defines CR as “a framework for all types of issues where a company is regarded as having certain obligations to society at large”. The mention of CR as a framework in this description offers a more rounded view, but still does not fully encapsulate both its purpose and process. For example, “society at large” is a rather vague phrase which can have different meanings to a range of people.

Moon, (2007), offers a more concise definition when stating that “CR is in essence a form of self-regulation to contribute to social (including environmental) welfare”. This definition provides the aim of CR (contributing to social and environmental welfare) as well as indicating it is a process which is carried out through self regulation, rather than simply being an idea or concept. The term self-regulation also demonstrates that the process is voluntary, not government regulated and that the company is undertaking activities which (in many cases) are beyond the requirements of law.

Social welfare/responsibilities are implicitly related to CR, and social responsibility is often closely associated with environmental considerations. Therefore, many of these definitions mention social and/or environmental considerations. However they do not explicitly list economic considerations as an aspect of CR. Economic performance and development are often seen as competing with ethical or societal responsibility (Windsor 2006), but in order for an organisation to be socially responsible, it must continue to operate. Therefore, these two competing principles must be brought into alignment so that ethical philosophies embedded in the business operations can continue to provide benefits to the company's stakeholders.

Although many definitions of CR seem to omit any mention of economics, these two topics are inextricably linked in a number of ways. Social welfare can be improved by a healthy economy which is in turn promoted by productive and economically viable businesses. In many cases, corporations create jobs for people in the communities in which they operate (although this may not always be true), providing employment and financial opportunities which otherwise may not have been present. Companies also have the ability to generate business through their supply chains which can bring further business, employment and economic benefits to their region of operations.

Ultimately, if a company ignores its economic responsibilities, it would not be operating and could not provide economic benefits to its stakeholders, such as jobs to employees, services/products to customers and value to shareholders. This does not mean that the researcher completely agrees with Friedman's viewpoint (Friedman 1962), which states that a business has only one social responsibility, namely "to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud". From a current perspective, this could be seen as a rather simplistic view of business as the societal expectations placed upon corporations have changed significantly over the intervening five decades. However, Friedman's view still holds true to a degree; namely that maintaining a healthy economic state and therefore continuing to operate is an important responsibility held by any company. With increasing unemployment and associated increases in repossessions and bankruptcy, the current financial crisis demonstrates just how much of an impact the economic health of companies can have on society.

By choosing to operate, a business assumes a number of moral (and legal) responsibilities, which generally fall into environmental, social and economic areas. It is often difficult to quantify and measure the exact nature and extent of many of these responsibilities, but legislation and business ethics seek to do just that (Crane and Matten 2007). In theory, legislation clearly distinguishes right from wrong, thereby setting out a number of obligations which companies have when operating. Human rights abuses and environmental protection are examples of these areas. It is in the more grey area of business ethics where the extent of a company's responsibilities is more difficult to satisfactorily identify and it is this realm in which much of CR falls. Hence the difficulty in identifying and defining the idea.

In the business world, ethics is the study of morally appropriate behaviours and decisions, examining what "should be done". Ethics should form the basis of CR, acting as a significant driving force behind it as ethical considerations should in theory be obligatory and be adhered to regardless of the financial implications (Lantos 2001). Although the two are linked in most firms, CSR activities are no guarantee of ethical behaviour. Unfortunately it is possible for a

company to implement beneficial initiatives while also acting in an unethical manner. For example, Enron was a champion of community involvement, but used off-balance-sheet partnerships to cheat investors of their money and eventually ruin the company. Thankfully this type of situation is not the norm and in the majority of cases companies appear to be implementing CR strategies as a result of their ethical obligations.

Carroll (1991) introduced and later refined the widely accepted ‘Four-Part Model of Corporate Responsibility’. In this model, Carroll regards CR as a multi-layered concept which can be differentiated into four inter-related aspects – economic, legal, ethical and philanthropic responsibilities (Crane and Matten 2007). Combining Carroll’s first model with Crane and Matten’s adaptation, Figure 2-1 shows these responsibilities presented as consecutive levels of a pyramid.

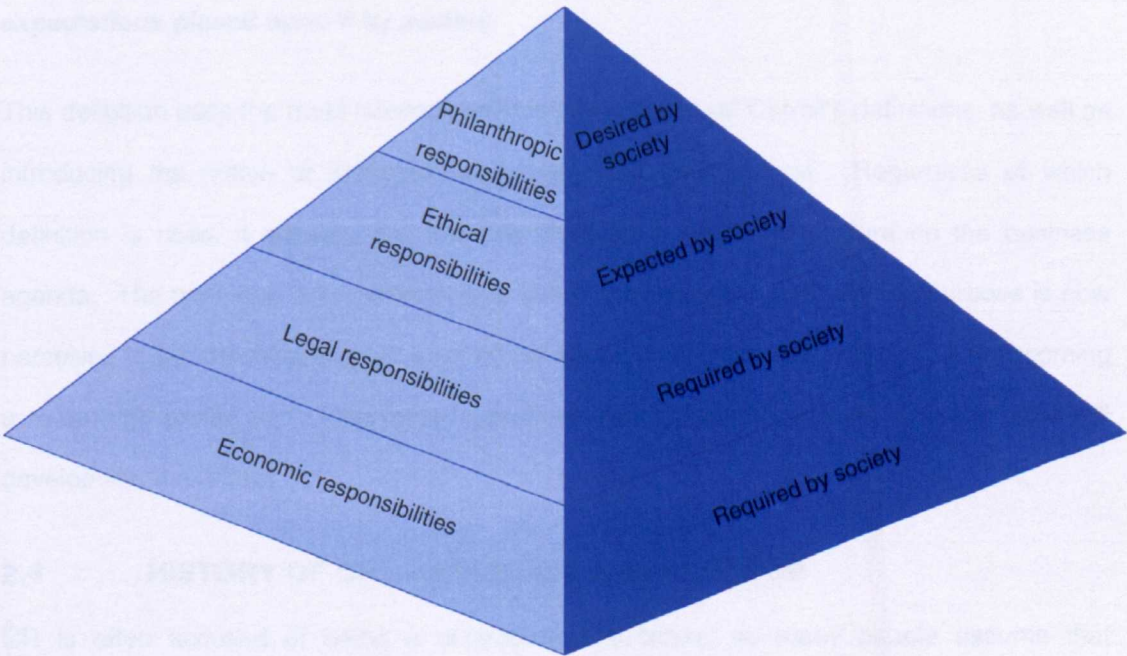


Figure 2-1 The four-part model of corporate responsibility. Adapted from Carroll, (1999) and Crane and Matten (2007).

Businesses demonstrating that they can meet all of these levels are seen as socially responsible. Based upon this model Carroll and Buchholtz (2006) state that; ‘Corporate Responsibility encompasses the economic, legal, ethical and philanthropic expectations placed on organisations by society at a given point in time.’

This definition includes all of the main aspects of CR, except that it does not include the notion of CR as a process, instead describing it as simply a list of expectations by society. These expectations are very important as they underline CR and help to direct and focus it, but the process of carrying out CR activities and reporting upon them should not be overlooked. The idea of these expectations being placed upon a company by society adds an important aspect to the definition as it demonstrates the potential for stakeholders to influence the process.

Based upon this review, it is felt that a combination of Moon and Carroll's definitions provides a well rounded description of CR which states that:

CR defines the process of self-regulation, whereby an organisation seeks to measure and improve its performance related to the social, environmental and economic expectations placed upon it by society.

This definition uses the most relevant aspects from Moon and Carroll's definitions, as well as introducing the notion of improving and measuring performance. Regardless of which definition is used, it appears that CR has become a permanent fixture on the business agenda. The next step is to research how CR has come about and what its purpose is now perceived to be. Investigating the evolution of the topic will help to identify why it is becoming a more high profile part of business operations and could also indicate how the topic will develop into the future.

2.4 HISTORY OF CR – EVOLUTION AND PURPOSE

CR is often accused of being a contradiction in terms, as many people assume that corporations are incapable of social responsibility (Moon 2007), and the act of a corporation undertaking its business activities (with the predominant aim of economic gain) is not conducive to maintaining or promoting social welfare. In order to decide whether or not this is true, it is worth looking at the history behind CR; its origins, development, purpose and ultimately its effectiveness as a tool for the responsible operation of businesses not just in the construction industry, but across all sectors.

2.4.1 Evolution

The publication by Howard R. Bowen of his landmark book *Social Responsibilities of the Businessman* is argued to mark the beginnings of the modern period of literature on CR (Carroll 1999). While Bowen's book, published in 1953, was not the only literature at the time to discuss 'Social Responsibility' he was one of the first to provide a definition, suggesting that: it refers to 'the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society' (Bowen (1953) cited in Kashyap *et al.* (2004)). While this definition is not particularly specific and does not relate to corporations - large corporations had not reached their current prominence at this stage - it provides an indication that the concept of CR (albeit it in an alternative guise) has been developing for the past 60 years. Although a novel concept during the 1950's, the idea of CR has never the less grown and evolved into a very important and pressing issue confronting business today (Kashyap, Mir *et al.* 2004). This demonstrates the truth in Bowen's statement that the largest businesses in operation are vital centres of power and decision making and that the actions of these firms touch the lives of citizens at many points (Carroll 1999).

Each of the past five decades have contributed to the significance and purpose of CR helping to build an internally complex and far reaching subject. Following its 'birth' in the 1950's, literature on the subject began to expand throughout the 1960's as efforts were made to formalise and define the term. Keith Davis became an established authority on CR during this period and is known for setting forth his 'Iron Law of Responsibility' which states that "social responsibilities of businessmen need to be commensurate with their social power" (Carroll 1999). This is an important statement with regards to the extent of a company's social responsibility. By choosing to operate, a business should act in a socially responsible manner, but this responsibility will be limited in some way by the extent of its business operations and influence or, in other words the company's 'circle of influence'. For example, a small to medium enterprise (SME) based in and sourcing predominantly from the UK, does not have as great a circle of influence as a large MNC which operates in, and sources from a

number of countries. Both companies have a duty to operate in a socially responsible way, but the SME is unlikely to have as great a social impact as the MNC. The buying power available to the MNC places it in a more influential position with regards to driving change in (for example) the human rights considerations or environmental practices of its suppliers. The SME can have some indirect impact on these issues by choosing an alternative supplier within its country of origin but this influence is unlikely to be as far reaching or on the same scale as the MNC's.

The expansion of the topic continued into the 1970's as more varied and detailed definitions of the concept began to emerge. The proliferation of CR definitions began to hint at some modern ideas of CR such as stakeholder theory although they were not described in this way at the time. It was in the 1970's that the idea of enlightened self-interest began to emerge. This is the idea that acting to further the interest of others can ultimately realise benefits for oneself. For example, if the surrounding society in which the business operates were to deteriorate, then the company itself would suffer through the loss of its support structure and customer base (Lee 2008). Therefore, undertaking CR activities which may be costly to the company, might actually reap benefits down the line, as a result of maintaining customer confidence and loyalty. It is therefore in a company's interest to ensure that the impacts it can have on its stakeholders are effectively managed in order to maintain their support.

After the increase in definitions of CR in the 1970's, the 1980's brought more research, and the development of alternative themes such as corporate social responsiveness, corporate social performance, business ethics and stakeholder theory (Epstein 1987). Following its introduction and expansion in the preceding decades, CR maintained its presence in the business world, but in many people's eyes, its purpose and usefulness required validation (Jones 1980). Although the debate had been ongoing since the 1960's it seems that the 1980's saw an increase in papers reviewing and re-examining the link between CR and financial performance (Cochran and Wood, (1984); Ullmann, (1985)). As yet neither a positive or negative relationship between the two has been conclusively proven (see Orlitzky

(2007); and Lopez (2007)) with some papers even finding a negative relationship between the two (Margolis and Walsh 2001).

With regards to the definition of CR, the 1990s contributed relatively little, with emphasis beginning to move towards the process and implementation of CR. CR has continued to grow and became a much more established part of the business landscape during this period. As the process is implemented in business operations by an increasing number of organisations, the requirement for validation of CR has begun to be overtaken by an interest in measuring the effectiveness of those companies practicing it (e.g. Adams, (2008), KPMG Surveys). But even if CR is accepted by many businesses, it is useful to understand why this is the case. The following section introduces the basic purpose behind CR. Sections 2.5 and 2.6 then go on to cover how CR can contribute to the wider agenda of sustainable development as well as some of the other reasons why companies might be driven to implement CR practices.

2.4.2 Purpose of CR

There are very varied views on the value and purpose of CR to a company's stakeholders and it is often difficult to distinguish the exact reason why companies are undertaking CR activities. Lantos (2001) proposes the existence of three distinct forms of CR. These are similar to Carroll's CR pyramid in that they offer a layered perspective of CR activities. This in turn gives an indication of how important each tier is to the operation of a business.

Ethical CR describes the essential social responsibility of a company, in the sense that it is morally responsible to any of the stakeholders which its operations affect and must try to prevent or mitigate for any harmful impacts. In theory ethical CR issues are obligatory and should be adhered to regardless of the financial implications to the company, as they are based upon moral standards that overrule self-interest.

Strategic CR is carried out to achieve business goals. By providing benefits to stakeholders outside of the shareholder group it is expected that financial rewards will be realised.

Strategic CR is based on the premise that while being ethically and socially responsible may involve short term sacrifices the process usually results in long term gains.

Altruistic CR was coined by Lantos (2001) to suggest “genuine optional caring, even at possible personal or organisational sacrifice” which ties in with philanthropic responsibilities; the top tier of Carroll’s (1991) pyramid of CR (as discussed in section 2.3.1).

Ethical CR is the base level of responsibility and therefore relates to activities which should be undertaken by the company as a condition of its operation. This relates to the ‘must have’ aspects of CR which encompass topics such as environmental concerns and human rights. Due to their high level of importance, the majority of these aspects are governed by legislation in the UK. However, in other parts of the world these aspects are not always taken notice of by all organisations. The other two forms of CR described by Lantos are generally selected by the organisation. These are undertaken because the organisation has a genuine wish to provide benefits to society or due to the fact that the activities will elicit a positive response from stakeholders.

The three forms described above help to frame CR more accurately by providing further reasoning and depth to the process. The influence of each of these forms of CR will vary between companies depending on the CR drivers (discussed in section 2.5). Unfortunately, it is very difficult to identify the real reasons why companies are undertaking and reporting upon CR activities. After all, it is unlikely that any company will freely admit that the process is being used for the sole reason of increasing profits.

2.5 THE IMPORTANCE OF CR AND ITS DRIVERS

As mentioned in the section 2.4.2 it is difficult to pinpoint the exact reasons why a company is engaging in CR and in all likelihood there will be a wide range of reasons for integrating the process into the operation of the business. While there may be variations in the efforts companies expend, it appears as though the topic is none the less an important one and is here to stay. But why has this relatively new subject become so prominent, and what is causing an ever increasing number of companies to embrace it? These are very difficult

questions to answer and could quite easily form the basis of a separate study. This section will attempt to identify some of the possible reasons and drivers for companies to implement CR practices and reporting.

The globalisation of business markets has exposed many large companies to a much larger number and wider range of stakeholders than was previously possible. Not only is a wider range of stakeholders being encountered, but many of them are becoming more aware of the impacts that companies can have. As a result many stakeholders are keen to influence the operations of these companies in any way that they can. This can encompass a range of responses from 'voting with their feet' by boycotting certain brands (Baby Milk In Action 2010), through to demonstrations and protests (BBC News 2002) and even more aggressive actions such as those demonstrated by Stop Huntingdon Animal Cruelty (BBC News 2009). While the more extreme actions are less common, it does demonstrate the lengths to which individuals or groups will go, in order to demonstrate the failings of a company and attempt to influence its operations. Addressing stakeholder issues can have obvious benefits for a company as, in simple terms; it should maintain confidence in the brand/service that is being provided and therefore retain business.

The forms of CR proposed by Lantos (2001) in section 2.4.2 provide some insight into the high level purpose behind CR. However, there are numerous, much more detailed reasons (or drivers) for undertaking CR activities and reporting upon them. These drivers form the business case for CR, and ultimately help to direct a company's CR activities and shape its reports. Responding to these drivers and reporting upon them can result in a range of benefits, such as increased stakeholder buy-in and improved government relationships which may ultimately provide financial gains. Therefore, it is important that companies identify and address these drivers effectively. Drivers which influence CR activities and reporting can be relevant across all sectors of business; however, certain drivers may influence specific sectors more strongly.

For example, the clothing and apparel industry is a consumer-facing business sector. Publicity relating to poor working conditions within the clothing industry's supply chains has

resulted in CR reports concentrating heavily on supply chain auditing to reassure consumers that the products which they are buying are not produced by child labour, or by workers exposed to poor working conditions. For a construction contractor on the other hand, demonstrating their environmental performance or H&S record to potential clients may be more important than worker conditions in their supply chain and the CR reports could be expected to reflect this accordingly. It is these drivers which will be investigated in this section. In their 2005 and 2008 surveys, KPMG (www.KPMG.com) asked businesses to list the drivers behind their CR reporting. The results from these surveys can be seen in Table 2-1.

Driver	% of companies listing the driver (2005 survey)	% of companies listing the driver (2008 survey)
Ethical considerations	53	68
Economic considerations	74	68
Reputation or brand	27	55
Innovation and learning	53	55
Employee motivation	47	52
Risk management or risk reduction	47	35
Strengthened supplier relationships	13	32
Access to capital or increased shareholder value	39	29
Market position (market share) improvement	21	22
Improved relationships with governmental authorities	9	21
Cost savings	9	17

Table 2-1 Drivers for corporate responsibility reporting as listed by the G250 and N100 companies (across all sectors) in KPMG’s 2005 and 2008 surveys.

These responses show how much the drivers behind CR can vary, but looking more closely, all of the responses given could be said to add value to the company’s operations in some way. Addressing the drivers and reporting upon these activities offers a company a

mechanism to improve itself and its image, which will ultimately benefit the company's operations and profits (assuming that the activities described in the CR report are truthful, otherwise major negative impacts can be experienced). As discussed in section 2.4.2 it is difficult to accurately identify the overarching purpose behind CR, but the majority of the drivers above would appear to fall under the banner of Strategic CR. This could be due to the topics chosen by KPMG, but does also suggest that many companies are interested in CR for the benefits which the process can provide for the company. There are some interesting changes over time with a number of the drivers seeing a notable change in importance/popularity between the two surveys. Reputation and brand in particular has increased significantly from 7th place to 3rd in the space of three years. This, could indicate that companies are beginning to realise just how important CR is to stakeholders and how much of an impact it can potentially have on the company's operations.

Visser (2008) proposes a markedly different range of 10 CR drivers which he suggests have either national (internal) or international (external) origins. The two groups of drivers are listed in Table 2-2 and Table 2-3 below.

National Drivers	Description
Cultural tradition	CSR often draws strongly on deep-rooted indigenous cultural traditions of philanthropy, business ethics and community embeddedness.
Political reform	CSR cannot be divorced from the socio-political policy reform process, which often drives business behaviour towards integrating social and ethical issues.
Socio-economic priorities	CSR is often most directly shaped by the socio-economic environment in which firms operate and the development priorities this creates.
Governance gaps	CSR is often seen as a way to plug the “governance gaps” left by weak, corrupt or under-resourced governments that fail to adequately provide various social services.
Crisis response	CSR responses can be catalysed by economic, social, environmental, health-related or industrial crises.
Market access	CSR may be seen as an enabler for companies in developing countries trying to access markets in the developed world.

Table 2-2 Visser’s CSR Drivers of National Origin Visser (2008)

International Drivers	Description
International standardization	CSR codes, guidelines and standards are a key driver for companies wishing to operate as global players.
Investment incentives	CSR is given an incentive by the trend of socially responsible investment (SRI), where funds are screened on ethical, social and environmental criteria
Stakeholder activism	CSR is encouraged through the activism of stakeholder or pressure groups, often acting to address the perceived failure of the market and government policy.
Supply chain	CSR activities among small and medium-sized companies are boosted by requirements imposed by multinationals on their supply chains.

Table 2-3 Visser's CSR Drivers of International Origin Visser (2008)

On the surface, Visser's drivers appear quite different from those given by KPMG, but while the terms used may vary, there are a number of similarities which can be seen between the lists. For example, the 'Improved relationships with government authorities' from the KPMG survey could come under the 'Political reform' driver given by Visser as they both may involve an aspect of altering company activities in response to political pressures. The 'Crisis response' driver can encompass a number of the KPMG drivers such as 'Risk management', 'Reputation or brand' as well as 'Market position'. Not all of Visser's drivers are directly relevant to the UK construction industry, but some (and particularly the international drivers) may offer an indication of the reasons why companies are engaging in CR.

As with those listed in the KPMG survey, the majority of drivers identified by Visser (both national and international) can also be seen to add value to an organisation's operations in some way. The most obvious exception in the Visser's drivers would be that of 'Cultural tradition' whereby he proposes that companies may be undertaking CR activities as a result of the traditional values possessed by the stakeholders such as employees, or the communities in which the organisation is operating. While tending to the values of these stakeholders may appear to be philanthropic and altruistic there is ultimately likely to be some

benefit to the organisation in the long run. These benefits may be in the form of more content employees or greater acceptance of the organisation in the community that it operates, but in the end, the organisation may well gain from the apparent altruistic action.

In their critical review of CR drivers, Haigh and Jones, (2006) identify four much more generic areas of influence that might promote CR actions within a firm. These areas are:

- Internal and competitive (external) pressures
- External pressures from investors and consumers
- Regulatory pressures
- Pressures from popular mobilisations (such as lobbying groups etc)

The general view of Haigh and Jones is that each of these areas of influence can have some degree of impact on the direction and extent of a company's CR activities, but there is no one single driver which is more significant than another. The paper provides a generally negative view of the CR topic and the contribution that can be made through CR activities and reporting. However, one of the strongest points of the paper is a criticism of the dominant discourse of CSR. The authors suggest that the majority of research seems to focus only on the win-win aspects of CR as opposed to the 'zero-sum' situations where a CR outcome will drain profits or an action to enhance profitability will generate negative press for the organisation. This apparent weakness in the literature is caused by "the inability – or refusal – of mainstream CSR scholars to apply a genuinely critical approach to the study of CSR, the corporation and the overall political economy of capitalism" (Haigh and Jones 2006).

This rather scathing view of CR research does ring true in some respects. For example, the positive aspects of CR activities do appear to receive more research; but this is understandable due to the ongoing debate over whether a clear link exists between CR activities and positive benefits for a company. The financial cost of CR is an aspect that is often not covered in great detail, but that is not to say it is a subject which is completely omitted from CR literature. For example research by Vitaliano and Stella (2006), McWilliams *et al* (2006) and Baron (2001) all discuss the cost-benefit ratios of CR to varying degrees.

The fact that CR costs do not feature prominently in academic CR literature may be due to the difficulty of providing any realistic figures on the wide range of costs that would be applicable to the various types of companies interested in the topic.

The potential for profit-enhancing actions to have a negative impact on a company's image is, and always has been an important aspect of CR research as this is one of the negative impacts that CR activities seek to mitigate against. For example, price-fixing or bid-rigging practices can help to enhance a company's profits by charging more for jobs than might actually be reasonable, but if a company is caught doing this it can have serious repercussions for their image.

While seeming generally negative of the CR research agenda, Haigh and Jones' (2006) paper is useful in that it provides some insight into the broad, top level drivers that can help to direct CR.

A further driver for CR, and potentially one of the many reasons why the topic has become more prominent over recent years, is created by a ripple effect, whereby competitors attempt to keep up with other companies in their industry in order to remain competitive. For instance, due to a range of drivers, one company may decide to make its first foray into the world of CR activities or, if it is an established practitioner, improve its CR performance. Competitors in the industry may see the benefits that this company is obtaining through CR and decide to follow suit. Even if there are no obvious benefits, the competitor may decide that they can ill afford to lag behind their peers as this could be perceived by stakeholders as poor performance.

Bertels and Ploza (2008) found strong evidence that the practices and reputation of other companies influenced managers from other companies within the same industry when developing their own CR strategies. While the influence can arise from both positive and negative CR actions, their research found that the overwhelming motivation came from negative CR of other firms within their industry in an attempt 'not to be tarred with the same brush'. This kind of negative influence has also been proposed by Barnett (2006) who noted

that the bad actions of a single firm can act as a catalyst to destabilise an entire industry and spark an institutional shift. An alternative form of ripple effect can result from direct pressure throughout the supply chain; a large company improving its CR performance may require all of its suppliers to adhere to the same standards, resulting in the suppliers implementing CR practices to retain business. This ripple effect has resulted in CR becoming a much more mainstream and well-established area of business over the past two to three decades.

This section has given an indication of the variety of drivers which can be identified for implementing CR. While a number of generic and very broad drivers have been provided, there are an almost endless number of more detailed drivers which are specific to different industries and even to sub-sectors of industries. As discussed throughout the section, there appears to be one common thread which links all of the drivers. To one degree or another, the drivers associated with CR and the resulting activities which they can initiate have the potential to realise at least some positive benefit for an organisation. This connection brings us back to the concept of enlightened self-interest and strategic CR mentioned in section 2.4.1 and it is likely that this is one of the main underlying drivers for CR. After all, it could be argued that a business spending its profits for the benefit of its stakeholders without expecting any benefit for itself is beginning to operate more like a charity than a 'for profit' business.

This is by no means a suggestion that all companies are implementing CR for the sole and explicit purpose of enhancing their brand and increasing profits, but a recognition that it is likely to be an important underlying consideration for many companies. The underlying ethos of CR is that being in business entails obligations and responsibilities and while some may believe that this ethos is at odds with making a profit, if practiced openly and effectively, CR has the potential to reap both financial benefits for the company, and benefits to its stakeholders.

2.6 CR, SUSTAINABILITY, SUSTAINABLE DEVELOPMENT AND SUSTAINABLE CONSTRUCTION

CR and sustainable development are essentially contested concepts with a wide number of definitions and interpretations (Moon 2007). CR has often been used interchangeably with the term sustainability and at times, sustainable development. For example, the review of 12 recent (2005-2007) construction company CR reports described in Chapter 4, found that naming the report a 'Sustainability' Report, was the second most common title after 'Corporate Responsibility' Report. The reports which were reviewed all served the same purpose; namely to inform stakeholders on the activities which a company had undertaken in contributing to social welfare, environmental improvement and (to a lesser degree) economic benefits. Yet the title of these reports varied a great deal and used terms such as sustainability and CR interchangeably. Even academic papers cannot agree on which terms to use, for example in (Myers 2005) paper, sustainable development, sustainability, corporate social responsibility and sustainable construction are all used with no preference for any one term, nor any indication of their relationship to one another. The methodology used by Myers (2005) is based upon the principle of measuring the amount of CR information which a company publishes and using this as a measurement of the companies' attitudes towards sustainability. While the actual methodology is relatively sound, as it is, in Myers' words 'objective, consistent and repeatable', the thinking behind the methodology, namely using a principle with a wide range of interpretations (CR) to measure a relatively ambiguous concept such as sustainability, would not seem to offer very conclusive results. That being said it does offer a very quick, basic and repeatable method for indicating the importance that companies place upon CR. There is no attempt to describe the relationship between CR and sustainability which makes it difficult to understand how one can be used to measure the other.

The basic concept of sustainability is relatively straight forward; it describes a process or state which can be maintained at a given level indefinitely. However, use of the word with no reference to place it in specific context results in a very ambiguous term with little meaning. Taking the term Sustainability Report as an example, in the context of the report title does it

relate to the economic sustainability of the company, the sustainability of the organisations activities in relation to the environment, the sustainability of a competent work force through training and development, or all of these topics? In many cases it is likely to be all of the above, and it could be argued that it offers an all encompassing term for describing a company's activities. However, in order to have any real meaning the term sustainability should be used in context and related to a process or appear with an adjective. For example, Corporate Sustainability Report gives a better indication of the documents purpose but also introduces yet another phrase into the already cluttered and confused lexicon of CR.

On the surface, CR and sustainable development appear to be markedly different concepts, although in reality, they are linked in a way which at times can make distinguishing them difficult. To add further confusion, the terms are often used very loosely which leads to them becoming even more closely related in many people's eyes. The term sustainable development first came to prominence in 1987 when the World Commission on Environment and Development (the Brundtland Commission) produced a report for the United Nations called 'Our Common Future'. Much like CR, the idea of sustainable development has a range of definitions.

The UK Department for Environment, Food and Rural Affairs (DEFRA) and the Sustainable Development Commission both follow the Brundtland Commission definition which is – development which meets the needs of the present without compromising the ability of future generations to meet their own needs. 'Development' in this definition can relate to any number of aspects of human activity such as economic development, development of new technologies or industrial processes and most commonly the development of the built environment. While DEFRA's definition provides a basic outline of the principle of sustainable development, there are more specific descriptions in use which also help to provide a clearer relationship with CR. Herkert, (1998), and Harris, (2000), both agree with the definition proposed by the Brundtland Commission, but go on to introduce the idea of three goals or objectives which must be realised in order to achieve the definition/aim of sustainable development. These objectives are:

- Social
- Environmental; and
- Economic

in nature, and it is now clear where the confusion and crossover between CR and sustainable development begins to occur. The objectives are the same as the topics which are used in a number of CR definitions as discussed in section 2.3.1.

To help distinguish these two topics the researcher proposes a simple, but clear distinction between CR and sustainable development which also helps to clarify the relationship between the two subjects. **Sustainable development is essentially an aspirational target or aim for business and society, while CR is a process which can be used for monitoring and measuring the activities of an organisation in relation to achieving this target.** Therefore, CR can be used as a tool (alongside other tools such as legislation) to help achieve the goal of sustainable development.

The nature of the construction industry makes it undeniably linked to sustainable development. Therefore, taking into account the relationship proposed above, CR should be an integral part of a construction company's operations. However, as will be seen throughout this research there is significant variation in the efforts related to, and integration of CR by companies in the construction sector.

2.7 CORPORATE RESPONSIBILITY IN OTHER INDUSTRIES

While the focus of this thesis is the construction industry, it is worth briefly investigating the practices and developments which have been occurring within other industries, both related and unrelated. This can help to inform the research of relevant practices or research which may be applicable.

2.7.1 Food Retail Industry

A number of parallels can be drawn between the food retail industry and the construction sector in the UK. Firstly, although the numbers of companies at each level are significantly

higher in the construction industry, both sectors are based on a fairly similar structure. That is; a relatively small number of very large (predominantly multi-national) companies dominate the market. Below these companies sit a larger number of medium sized firms, which may be multi-national, but are often based solely in the UK. Finally, at the lower end of the industry, is a much larger number of small, privately owned companies which service their local area.

The second similarity is in terms of the market share of these companies. In both industries, the small number of large companies account for a disproportionate percentage of business. Large construction companies (those employing over 600 people) only account for 0.1% of all construction industry firms, yet are responsible for over 25% of all construction output in the UK (Jones, Comfort *et al.* 2006). Likewise, the four largest UK food retailers (Tesco, J. Sainsbury, ASDA and Wm Morrisons) possess a 65.3% market share of the food retail industry (Jones, Comfort *et al.* 2005). These four companies each possess a market share greater than 10% clearly identifying them as the largest companies within the industry. Below these come the medium sized companies such as Somerfield, Marks and Spencers, Co-Operative Group, Waitrose, Spar UK and Iceland which between them control 16.9% of the food retail market.

Finally, the last and most relevant similarity is in regards to CR activities and reporting. The extent of reporting in the construction sector varies a great deal (Jones, Comfort *et al.* 2006) and the same can be said for the food retail industry, as Jones *et al's* (2005) paper noted substantial variations in the nature and extent of reporting by the top ten UK food retailers. However, while the companies in both industries produce very varied CR reports it is in the attitude to the CR process where the similarities end.

The underlying theme identified by (Jones, Comfort *et al.* 2005) is that; "while significant variations in reporting exists in the industry, the food retailers ultimately believe that long term economic viability is in the interests of all stakeholders, and that by integrating CR into their businesses, they will be better placed to provide long term growth and financial security for those stakeholders and to maintain or enhance their market position". It is difficult to identify

the exact drivers for the activities undertaken by food retailers, but there has been an increasing trend amongst a number of retailers to publicise their efforts with regards to sustainable/ethical sourcing and CR activities. For example, over the past 15 years, the Co-Operative food retailer has championed Fairtrade food and beverage products, and following a large consumer poll in 2008, has also launched a Food Ethical Policy. This sets out the company's commitment to issues such as human rights, supply chain management and community (The Co-Operative 2010).

Marks and Spencer is another leader in the food industry with relation to responsible and sustainable business operations. The company has a separate website dedicated to its Plan A scheme (Marks and Spencer 2010). This sets out a five year plan aiming to achieve five objectives relating to climate change, waste, sustainable sourcing, human rights and social health. This process involves partnering with other organisations outside the food industry in an effort to raise awareness of, and to achieve the objectives set out by Plan A. This more prominent and established attitude towards CR differs from the construction industry where CR is increasingly seen as an important aspect of business but is not yet seen as being *integral* to business (Jones, Comfort *et al.* 2006).

2.7.2 Financial Industry

The financial industry is arguably one of the most important industries in the world. It is a truly global industry which often intertwines the benefits and problems of different countries together and helps to fund governments, businesses, charities, educational institutions and medical facilities amongst many others. This power to influence such a diverse and important range of operations provides the industry with (in theory) an unparalleled opportunity to influence the practices of businesses across the globe.

The World Business Council for Sustainable Development (WBCSD) sees the financial industry as a leader with respect to sustainability, and the industry itself claims it makes the world a better place to live in (Schmidheiny and Zorraquin 1996). Therefore, socially responsible investing could promote socially and environmentally desirable activities.

However, academics are more sceptical and find that the theoretical arguments as well as the empirical evidence so far is rather poor. Even if academics are not behind the financial industry with respect to CR, the industry, as a whole, is still seeking to improve its social performance through reporting practices and responsible investment.

For example, one area where the financial industry stands out is in respect to sector-wide CR guidance. The Equator Principles (www.equator-principles.com) were developed jointly by the International Finance Corporation (IFC) and a number of international banks. The first draft was produced in 2003, and was updated in 2006. The principles are intended to serve as a common baseline and framework for the implementation by each of its member organisations of its own internal social and environmental policies, procedures and standards related to project financing activities. The principles are most applicable to instances of project financing, whereby a lender looks primarily to the revenues generated by a single project both as the source of repayment and as security for the exposure. By adopting the equator principles, these lenders require their borrowers to demonstrate that all relevant mitigation measures for the social and environmental impacts of the project will be implemented. This encourages socially responsible development and also reduces the risk posed to the lender. Since its establishment in 2003, more than 60 international banks have adopted the Equator Principles, including the majority of the world's leading project lenders

During the interviews with URS Scott Wilson personnel carried out during this research, the Equator Principles were mentioned on a few occasions by respondents. The awareness of these principles and the understanding of potential impacts in a UK construction business suggests that they have become reasonably well established in the financial planning side of large projects. This awareness, together with the simplicity of these principles may mean that they are a useful model on which to base the recommendations for other industries as they are high level principles which allow them to be integrated into the corporate strategies of large organisations.

Socially responsible banking is becoming a well-established notion in the financial services industry. Financial institutions are coming round to the idea that there is more to investing

than just checking the figures (Scholtens 2009). As an example, the Social Investment Forums 2008 report (www.socialinvest.org) states that nearly one out of every nine dollars under professional management in the United States today is involved in socially responsible investing. Some banks have gone to great lengths to demonstrate that they are providing ethical finance. In the UK for example, the Co-Operative have implemented ethical investment policies that contain explicit clauses, mandated by bank customers, which restrict the provision of financial services to certain activities and sectors. The ethical finance section of the company's latest Focus on Social Responsibility report (The Co-Operative 2009) even goes so far as to list the value of the income it has foregone as a result of its ethical stance along with the reasons why the income was turned away. Other areas and KPIs within the report provide a very broad, detailed summary of the company's operations. While not all directly applicable to the construction sector, there are undoubtedly some useful aspects of the report (such as the list of income turned away on ethical/safety/environmental grounds) which could be adopted by construction companies.

2.7.3 Apparel and Footwear Industries

The apparel and footwear industry is a good example of Barnett's (2006) observation of how the poor actions of a small number of firms can produce an institutional shift within an industry. During the mid 1990's high profile sweatshop scandals involving a relatively small number of large companies - most prominently Nike (Greenberg and Knight 2004) - rocked the industry. This resulted in the vast majority of major apparel manufacturers and retailers implementing codes of conduct that set minimum labour conditions for their contractor's factories and many hiring external monitors to assess compliance in factories in the US and around the world (Bartley 2005).

Unfortunately, this change took a long time to emerge, with Nike taking five to six years before it increased the wages of its Asian workforce and allowed independent inspections of its factories. These kinds of changes might have led one to believe that the industry had at least started to change, and while many companies have been trying to improve, recent news stories such as The Independent (2007), The Guardian (2008), BBC News (2009) would

suggest that this is not always the case. This kind of publicity coupled with high profile campaigns from charities such as War on Want (www.waronwant.org) are providing constant pressures on the industry which will ultimately force manufacturers to make improvements. However, as was the case with Nike, this change may be slow to materialise. These initial scandals and the slow turn around for improvements has meant that there is a great deal of scepticism from industry stakeholders and as a result the sector has remained subject to a high level of scrutiny.

The difficulty that arises for companies is that the codes of conduct are seen by some simply as a public relations smokescreen (Klein 2000). This cynicism is an underlying problem for the CR ideology across all sectors and the only way to truly remove it as a barrier is for companies to become completely transparent with regards to their operations. This need for transparency is relevant across all industries, but may be even more important in customer-facing industries where brand image is an extremely important driver for CR.

2.7.4 Extractive Industries

In recent years, concerns about the sustainability and CR of businesses have become an increasingly high profile issue in many countries and industries, none more so than the mining and extraction industry (Jenkins and Yakovleva 2006). In fact Warhurst and Mitchel (2000) go further, suggesting that many of the environmental disasters or human rights incidents that have contributed to the growing public concern about CSR over the last 40 years took place in the mining or petroleum industries. As well as environmental incidents the extractive industries can have severe and far reaching social impacts. Working conditions within factories throughout the apparel industry can impact a significant number of individuals, but the potential for detrimental impacts from the extractive industry is much larger. Some quarries use child labour, can be extremely hazardous, with long hours and very poor pay as well as using environmentally damaging extraction methods (Stonemarket 2007). However, it is not only the individuals working within the industry that can be affected; the scale of some extraction operations can impact upon entire communities in a number of

ways from forced displacement (Downing 2002) (regardless of whether compensation is provided), to pollution and long term contamination incidents.

While the extraction industry can generate a significant amount of value, it also has the potential to take this value away from the country/region in which it is generated. In many developing countries this can mean that the revenue generated from the resource extraction will not stay in the local economy and will not contribute to the development of the region. This is a contentious issue, which has often created tension, political controversy and sometimes armed conflict (Azapagic 2004). Even if the revenue is kept in the local economy there is potential for further issues if the country's governance is weak. Poor governance in the region can lead to corruption, conflict and poverty resulting in very little revenue being distributed. In an effort to prevent this situation from occurring the Extractive Industries Transparency Initiative (EITI) has been set up. The aim of the EITI is to support improved governance in resource-rich countries through the verification and full publication of company payments and government revenues from oil, gas and mining (EITI 2010). Through this increase in transparency it is hoped that some of the negative effects of mining activities in resource rich countries can be mitigated. For example, by providing greater transparency in the countries, a more stable financial climate may be developed which in turn will help to increase investment and development in the country/region.

The mining and minerals sector has already started responding to some of the sustainable development challenges, as demonstrated by the Mining, Minerals and Sustainable Development (MMSD) report "Breaking New Ground" (2002). Over forty companies and organisations contributed to this initiative with the aim of identifying the main challenges and possible strategies for a more sustainable future for the industry. Azapagic's (2004) paper aimed to contribute to previous activities, such as those carried out as part of the MMSD, through the development of a framework for sustainability indicators. It is proposed that this framework could then be used as a tool for performance assessment and improvements.

The framework comprises economic, environmental, social and integrated indicators, which can be used both internally, for identification of 'hot spots' and externally, for sustainability

reporting and stakeholder engagement. In an attempt to help standardise corporate reports and enable cross-comparisons, the framework is compatible with the general indicators proposed by the Global Reporting Initiative (GRI); however, a number of sector-specific indicators have also been developed to reflect the characteristics of the industry (Azapagic 2004). While the term 'sustainability indicators' is used in Azapagic's work, the indicators developed/chosen are tied in with the GRI and are designed to assist companies in monitoring their economic, environmental and social performance. Therefore, it would not be unreasonable to classify them as CR indicators, as their purpose is to help an organisation to 'measure and improve its performance' (see section 2.3.1) in relation to these topics.

Jenkins and Yakovleva (2006) explored trends in the reporting of such impacts and issues in the global mining industry. Looking at the development of the media of social and environmental disclosure in the mining industry and the factors that drive the development of such disclosure, they carried out a temporal analysis of the trends in disclosure using a case study of the world's 10 largest mining companies. They found that whilst there was evidence of increasing sophistication in the development of social and environmental disclosure, there was also considerable variation in the maturity of reporting content and styles of these companies. Jenkins and Yakovleva (2006) conclude that stronger leadership and the co-operation from the top reporting companies is necessary to support the 'laggards' of the industry. This would also appear to be a very relevant suggestion for companies within the construction industry.

2.7.5 Generic CR Initiatives and Guidance

While a number of the industries discussed above have developed specific guidance or principles to help direct CR within them, there are also a number of initiatives and sets of guidance available which are applicable to all industries. The two most well established of these are:

- The United Nations Global Compact (UNGC)
- The GRI

The UNGC is “a strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption”(www.unglobalcompact.org). Companies signing up to the compact commit themselves to the implementing, disclosing and promoting the ten principles of the compact. A number of tools are available from the UNGC to help companies to assess themselves and to implement the principles. One of the highest profile requirements for membership of the UNGC is the annual Communication on Progress (CoP) which is required of all member companies. This is a publicly available document detailing the company's commitment to the compact and the efforts which it has taken to implement the principles within its day-to-day operations. If companies fail to produce this report they are still listed as being members of the UNGC but are classed as non-communicating members.

The GRI is an international, multi-stakeholder organisation which seeks to make the reporting of economic, environmental and social performance as routine and comparable as financial reporting. It is based upon a reporting framework which provides organisations with the necessary information to define report content, boundaries and levels of disclosure. More detail is provided on the GRI in section 3.1.4.

A more recent piece of guidance which was released in November 2010 is the International Organisation for Standardisation (ISO) Standard on Social Responsibility (ISO 26000:2010). This is an International Standard giving guidance on social responsibility and is intended for use by organizations of all types, in both public and private sectors, in developed and developing countries, as well as in economies in transition. It will assist them in their efforts to operate in the socially responsible manner that society increasingly demands (www.iso.org 2010). The key property of the ISO standard is that it contains voluntary guidance, not requirements, and therefore is not for use as a certification standard like ISO 9001:2008 or ISO 14001:2004. The production of this document by an organisation as high profile as the ISO indicates the increasing prominence of this topic and it is hoped that in coming years,

with the backing of an organisation as important as this, the guidance will become more widely used.

These three initiatives offer guidance and strategic policies on the breadth of CR topics and at present are being implemented to varying degrees of success in a variety of industries.

2.7.6 Summary of Other Industries – Lessons Learned

The brief review of other industries above has provided some insight into the drivers, efforts and guidance that can affect a range of CR aspects in other industries. There appears to be a good deal of variation in drivers, attitudes and efforts between industries which is most likely down to the underlying nature of each industry. The food retail industry is customer-facing meaning that company and brand image is very important. Therefore, with an increase in consumers' awareness of environmental and social issues, companies are increasingly mindful of the importance of reporting upon and promoting these facets of their operations (Jones, Comfort *et al.* 2007). Customer perceptions and brand image are also very important for the apparel industry and it would appear that many companies in this industry are attempting to repair or maintain their images due to past indiscretions they have committed individually or due to the perception of the industry as a whole. The most notable similarity between these two industries and the construction sector relates the large supply chains which need to be effectively monitored in order for the companies involved to be sure that their products and services are not having detrimental impacts.

Of the four industries reviewed, the financial industry appears to have the most well established framework/set of guidelines related to CR. They cover the main considerations of large scale projects, are reasonably simple, and have been adopted by a relatively large number of worldwide banks. Finally, the extractive industry, possibly the most closely linked to the construction industry, may also be able to offer some lessons which could be incorporated into the practices of construction companies. In 1998 nine of the largest mining companies came together to form the Global Mining Initiative and, with the help of the WBCSD commissioned the International Institute for Environment and Development to

undertake a study to set out the global challenge of sustainable development facing the sector. The outcome of this study was the MMSD report mentioned in section 2.7.4. While it is a significant process to undertake, and can only provide benefits if companies are willing to participate, a similar study within the construction sector could prove invaluable for the future of sustainable development and CR activities within the industry.

As well as initiatives involving private organisations within the extractive industry the academic research found during the review has also been useful for helping to inform some of the methodology choices within this thesis. While not directly used to develop the comparative framework used in Chapter 4, Azapagic's (2004) work demonstrates that the development of a framework based on the GRI can be useful for planning, reviewing and monitoring sustainability performance. Due to the close association of these two topics, it is reasonable to assume that a similar framework based on the GRI could be used to measure CR related performance and help to inform future CR work/activities for a company. Chapter 4 details the development of a comparative framework for assessing the extent of CR reporting within construction companies. The chapter also provides the findings from a review of 12 company reports using the framework.

Jenkins and Yakovleva's (2006) paper used content analysis to explore and compare the disclosure of social, environmental and ethical policy statements in the reports of the top 10 mining companies. While the paper notes that data are not comparable either within a report, between reports of different years, between reports from different companies, or even within the same sector (Hopkinson 1999); it is possible to explore the trends in the report disclosure. The principle of content analysis and investigating reporting trends are the two main processes used in Chapter 4 to analyse CR reporting in the UK construction industry. Jenkins and Yakovleva's (2006) research used company reports and websites to identify and tally which topics were covered by an organisation and how this changed over time. While there are some differences (such as a higher frequency of report reviews) a similar methodology has been used for construction CR report analysis in Chapter 4. Having looked at how a number of other industries are affected by CR topics and some of the ways in which

they address these issues, the following section will turn its focus on the construction industry to investigate how CR is handled within the sector.

2.8 CR IN THE CONSTRUCTION INDUSTRY

The construction industry tends to be less customer/public facing, with clients of the industry historically being driven more by price than a need to procure buildings produced to socially responsible standards. However, as government initiatives such as the Strategy for Sustainable Construction (HM Government 2008) are implemented, pressure to deliver sustainable development is set to increase and by proxy demonstrating responsible business practices is also likely to become a higher priority.

So far this research has introduced the concept of CR, defined it, identified some of the drivers behind it and begun to investigate the ways in which various industries are tackling the associated issues. It would now be pertinent to focus more closely on the construction industry and begin to explore some of the actual activities which organisations are practicing. This will not only help to narrow the research area but will also begin the process of identifying some of the ways that these practices can be assessed in the coming chapters.

2.8.1 Drivers for CR in Construction

While section 2.5 has alluded to one of the overarching drivers for CR being that of enlightened self-interest, the wide range of specific drivers relevant to individual industries and businesses can still be very useful for developing effective CR strategies and bolstering the business case for implementing various practices. Having highlighted some of these generic drivers it would now be useful to investigate whether specific drivers exist for the construction industry. This will help to build a more comprehensive picture of why CR is becoming relevant to the industry and will be useful when developing the industry recommendations later on in this research.

Construction has had a significant influence on human development, both past and present, and is likely to remain important in the future. Its potential for impact is demonstrated in Price Waterhouse Cooper's (Price Waterhouse Cooper 2010) summary of the industry:

"The construction industry accounts for around one-tenth of the world's Gross Domestic Product, seven percent of employment, half of all resource usage and up to 40 percent of energy consumption. This industry has a profound impact on our daily lives: the buildings we live and work in, the roads and bridges we drive on, the utility distributions systems we use, the railways, airports and harbours we travel and trade from are all products of this vital industry.

The construction industry is also a key indicator and driver of economic activity and wealth creation. But, the industry's future prosperity will depend on its capacity to evolve on business, technological and environmental fronts."

This level of influence and impact is a double edged sword - being able to provide significant benefits to a large number of people but also having the ability to produce detrimental impacts for others. While Price Waterhouse Cooper's summary of the industry seems to have a positive spin to it, a summation on Business and Biodiversity (www.businessandbiodiversity.org) describes it from a more negative viewpoint:

"Globally, the construction industry is arguably one of the most resource-intensive and environmentally damaging industries in the world."

This view could be seen as biased as the website seeks to promote biodiversity which is often at odds with construction and development. However an unbiased (but still negative view) is provided by Construction Scotland (2007) (formerly Scottish Construction Centre) which suggests that:

"A common perception of the construction industry is one in which projects and services are often delivered unsafely, late, over budget and below quality."

These negative views of the industry provide a strong driver for CR activity and reporting within the industry and many drivers for implementation of a CR strategy may stem from this kind of perception. Therefore, in an effort to allay this negative image, activities and reports undertaken/produced by the industry might be expected to emphasise the following topics as shown in Table 2-4;

Topic	Drivers for Reporting on these Topics
H&S record	Reducing accidents
	Legal requirement to report
	Improving safety image to stakeholders and potential employees
Environmental performance and resource efficiency	Increased environmental legislation
	Increased environmental requirements from clients
	Negative environmental image associated with construction activities
	Increase in environmental concerns from public and increase in public consultation
	A greater demand for more resource efficient products and activities
Staff training and development	Increase in efforts to obtain and retain new graduates and skilled workers
	A need to increase the quality of work delivered
Prevention of corrupt practices	Seen by some as being a major problem within the industry
	High profile incidents of corruption are likely to have a major negative impact on a company's image and work stream

Table 2-4: Topics which are likely to be high on construction company CR agendas, together with some potential drivers for reporting on them.

The suggested drivers are not only based upon the negative views/quotes above, but predominantly on a review of UK construction company reports carried out as part of the industry review discussed in Chapter 4. The prominence of each of these is likely to vary by sub-sector, for example, building contractors with a large number of personnel undertaking construction work on site could be expected to highlight their H&S record and staff training. By comparison, cement producers have the potential to produce large impacts on the environment through their activities; therefore, CR reports from these organisations might

concentrate on their environmental performance and initiatives to promote biodiversity near to sites of operation.

Jones *et al* (2006) found “substantial variations in the nature and extent of reporting within the construction industry, and while the companies which they researched recognised the importance of CR and their commitment to integrate it within their businesses, they made relatively limited use of KPIs and general benchmarking exercises”. This suggests that the industry recognises the need to report but may not be aware of how to effectively address the drivers which influence their activities or quantify their impact. The lack of benchmarking could also suggest that the industry is not implementing initiatives which might help to improve its future CR performance.

2.8.2 CR Activities

The CR activities implemented by construction companies vary significantly throughout the industry. While there are a number of practices that can be implemented at no/low cost, many are likely to incur some notable costs to the organisation. As mentioned in section 2.4.1 there is no conclusive evidence to demonstrate either a positive or negative connection between CR performance and financial performance. This means that many companies will also be undecided on whether the expense of CR activities is worth the benefits that can be realised. While acting responsibly should be a moral obligation, in the reality of the business world (especially during the current financial crisis) cost implications are likely to have a significant impact on a company's decisions in relation to CR activities. This potential cost implication tends to mean that it is larger companies that can afford to incorporate CR considerations into their daily operations. This can result in an information bias towards MNCs as the most public, easily accessible data are more common amongst these large firms. While it is not impossible to obtain information from SME's it is likely to be more difficult to obtain accurate information about these organisations if any data can be obtained at all. For this reason, the research in this thesis concentrates on the larger MNCs that operate extensively within the UK construction industry.

The actual ways in which a business can practice CR are as varied and wide-ranging as the products and services that the companies provide. As we have already established, the reasons for which companies implement CR are influenced by a variety of drivers that are often closely tied to the potential impacts that a company can have. Therefore, it is logical that this connection is also true for the actual activities that a company chooses to implement – a company will likely choose those activities which help to mitigate its impacts. Generally speaking the activities will fall into one of the three top level CR aspects – economic, environmental or social. The variety within each of these is enormous but Table 2-5 provides a few very brief examples of the types of activities that construction companies undertake as part of their CR initiatives.

Economic	Environmental	Social
Providing a living/minimum wage to workers	Biodiversity management programmes	Diversity and equality policies
Providing lifelong learning training programmes	Emissions/Effluent monitoring	Setting up or becoming patrons of charities
Promoting local recruitment schemes	Waste minimisation and recycling initiatives	Procedures in place to prevent human rights breaches in supply chain
Implementing policies to prevent corrupt activity	Green energy use and energy efficiency initiatives	Giving members of staff volunteering opportunities
Implementing local supplier policies where applicable		

Table 2-5 Examples of the CR activities undertaken/implemented by construction companies

These examples have come from a wide selection of sources such as company reports, academic papers, the GRI, CR websites etc. Implementation of these practices will take place in a variety of ways. Some may be carried out by the company directly (such as monitoring diversity and equality within the company or providing training opportunities) while others, such as ensuring a living wage is paid throughout the supply chain may require collaboration with suppliers and other organisations in the industry. It follows, that different practices, with their various levels of complexity and collaboration, will have different costs

associated with their implementation. It is these costs which companies must offset against the responsibilities, drivers and benefits in order to make a decision on which activities to implement. The choice of activities and the ways in which they are implemented are important parts of the CR strategy and will therefore be looked at in more detail in each of the following chapters of this thesis.

While some of the aspects listed are specific to the construction industry, many of them are applicable to any industry. More detailed examples of the activities and the associated KPIs are discussed in Chapters 4, 5 and 6 with detailed examples of KPIs forming the basis of the framework used in chapter 4. See Table 4-4 to Table 4-7 for more info. Historically, environmental activities have been more prominent within the construction industry as this has been the most heavily legislated area of operations. With the increase in profile of the wider CR agenda, community and social impacts have become more prominent and are becoming a greater issue for many construction sector companies.

This could be indicated by the steady increase in the number of construction companies which have taken part in the Business in the Community (BITC) CR Index (www.bitc.org.uk) over recent years. The index is a commercial benchmarking exercise based upon a detailed questionnaire covering all aspects of the business's operations. Companies complete the survey and are given a ranking based upon their performance. Unlike a comparison of company reports this allows for a fairer comparison of company efforts and performance as in order to take part, specific questions must be answered by the organisation – the information cannot be selectively supplied as is the case with CR reports. Other benchmarking methods will be discussed in more detail in Chapter 5.

2.8.3 CR Reporting and Guidance

Once a business has chosen which activities are most relevant, and integrated them into business operations, the next stage for many companies is to report upon these practices. The aim of this is to demonstrate to stakeholders that the organisation is acting in a responsible manner and attempting to mitigate against the negative impacts of its operations.

The reporting aspect of CR is in essence the public relations side of the topic. In the same way that companies update shareholders on company financial performance through their financial reports, companies are now taking the opportunity to inform their stakeholders of the performance in relation to the non-financial aspects of the business.

Recent years have witnessed a remarkable growth in the number of companies in industrialised nations across the globe reporting publicly on various aspects of their social and environmental performance (Owen and O'Dwyer 2008). This reporting has been around for sometime but first gained real prominence in the 1970s. Even though Social and Environmental Reports do not yet have definite rules concerning their form, structure and content, they show a tendency towards standardisation and are becoming increasingly similar in structure to Financial Reports. However, fewer similarities are found in the typology and metrics of indicators used for measuring and reporting social and environmental performance (Azzone, Manzini *et al.* 1996).

Generally, regardless of industry, CR reporting remains the domain of larger companies, with SME's in many cases lacking the funding required to produce reports. That is not to say that SME's do not act in a responsible manner, just that the cost of collating information and reporting upon it can be prohibitive to smaller enterprises. If these smaller companies do not have the finances to report what they are doing (as is often the case) then it is likely that any positive CR benefits the company has provided may go unnoticed. Companies of this size are also unlikely to be publicly listed and hence will not have shareholders that must be kept abreast of the company's performance – another reason why the effort and expense of reporting is unjustifiable for many companies of this size. This bias is also true for the construction industry with a relatively small number of very large companies at the top of the market practicing and reporting upon CR while the SMEs are quite conspicuous in their absence. Corporate Register (www.corporateregister.com) hosts the reports from 76 companies within the UK construction and materials sector. For an industry which has approximately 190,000 organisations operating within it, this is not a particularly high number of reports. However, if we compare the number of reports with the companies which have

over 600 people working for them (which in 2009 was 125 (Office of National Statistics 2009)) then the website suggests that over half of these large companies are producing some kind of CR report. This is a very rough and ready comparison, as there are a number of assumptions being made; such as assuming that all of the reports listed come from companies with over 600 employees. However it does give an indication of the small number of companies that are interested in or able to report upon their performance.

The construction industry provides an example of an industry which has generally been slow to take on integrated CR reporting and also contains organisations which produce very varied CR reports (Jones, Comfort *et al.* 2006). Jones *et al.*'s review of CR in the UK construction industry provides a good starting point for this research, as it looked at the number of companies which produced CR reports as well as the most common aspects which are reported upon. A brief comparison on the variations between companies was made which gave an indication of the companies that reported most extensively on CR. The length of reports and whether they were stand alone or integrated into annual reports was also considered and taken into account. While being relatively basic, the methodology employed provides a sound option for a review at this level of detail. The web search still managed to identify a very varied level of reporting within the industry. However, there is the possibility that the entirely internet-based nature of Jones *et al.*'s (2006) study may have omitted the reports of some companies that do not publish their whole CR reports on the internet. This web-based methodology has proved useful for identifying the construction company reports which have been reviewed in Chapter 4.

One reason why reporting within the industry is so varied could be due to the lack of guidance on the subject. While the GRI is a prominent and relatively widely used set of guidance it is not yet the 'industry standard' for reporting. There are a few pieces of guidance relating to CR reporting and practices within the sector but none of them have been fully embraced by the industry. For smaller companies, Sustainability Reporting: A Step-by-Step Approach to Corporate Responsibility for Small and Medium Sized Construction Companies has been produced (Swan and Stewart 2007) which provides an overview of sustainable

development and the CR reporting process. Therefore, it is mainly aimed at helping those who are new to CR to pinpoint important issues, help with stakeholder identification and engagement and to identify the 'next steps' once a report has been produced. It also signposts the user to sources of further information which will be beneficial to producing a CR report. For the purposes of the thesis, this document offers a quick précis to construction sector reporting but, as it is predominantly a 'how to' of reporting it does not give any real detail on the issues which the industry faces with regards to CR or how these can be dealt with. Some reasons for reporting are touched upon, such as the changing attitudes of stakeholders, and risk management, but this is in relatively low detail. This is useful for those smaller companies that are able to report but as mentioned earlier, the main focus of this research is in relation to larger MNCs so this guidance does not cover the wide range of topics required by these larger institutions.

The GRI produces generic guidelines for reporting of CR topics which are used by many companies across a range of sectors. The organisation collates information on the number of companies which are reporting to its guidelines and provides this information in its online Sustainability Disclosure Database. As of December 2011 the database lists 7781 companies from across the globe producing reports using the GRI guidelines. Of these, 413 are listed as being in the construction or construction materials sector, which equates to just over 5% of GRI reporting companies. It should be noted that construction ranks sixth out of 38 sectors when comparing the number of companies reporting to the GRI guidelines.

The GRI has also produced a number of sector specific documents and is in the process of developing a number of others. Amongst those in development is the Construction and Real Estate Sector Supplement (CRESS) (GRI 2010) a draft of which was released in 2010 for public consultation. This supplement essentially amounts to 12 additional KPIs, specific to the industry and a number of comments on the existing KPIs and how they relate to construction. Publication of this new supplement may help construction companies in choosing which topics to report upon and may also have an influence on the practices which companies choose to implement.

While providing reporting guidance which is relevant to the sector, the supplement is essentially a bolt-on to the standard GRI guidance. This is not a criticism; it would be pointless to exclude the original guidelines, as many of them are also relevant to construction, and it makes sense to identify any short comings or omissions of the original in order to provide relevant ways to improve it. The main issue with adding further information is that, though relevant, the additional KPIs and guidance adds a further 40+ pages to an already large (approximately 140 pages) document. A document of this size may provide too much detail for some practitioners, and may be too extensive for a company which is in the initial stages of implementing a CR strategy or taking early steps to report upon. The CRESS was released in mid 2011.

This supplement is a step in the right direction and provides some relevant KPIs for the sector to report upon. However, it is essentially an additional 12 KPIs with additional supporting information and may be a step too far for companies new to reporting – efforts may be better spent addressing the basic information and KPIs covered by the GRI G3 guidelines.

While GRI is seen as one of the most complete sets of guidelines available (Lozano 2006), there are other tools available for assessing and reporting upon CR and sustainability. These include AA1000, ISO14000 and SA8000. Lozano and Huisingh (2011), use these guidelines (in addition to the GRI) to undertake case studies of three companies (from the extractive and metals industries) to highlight the fact that while each of the guidelines can prove useful, they tend to compartmentalise sustainability reporting ultimately detracting from the benefits that reporting can offer. Based on comparisons of the case studies, Lozano and Huisingh propose an additional dimension to reporting. In addition to the often compartmentalised social, economic and environmental information, reports should contain a fourth dimension called the 'inter-linked issues and dimensions. This new dimension could be used to look for inter-connections within and among the CR/sustainability dimensions, thus reducing or avoiding conflicts between/among issues. This addition could help to

promote a more holistic and integrated approach to reporting, ultimately improving corporation's contributions to sustainability.

While not a guidance document, Phua and :Loosemore (2010) acknowledge that the importance that communities have to play in the evolution and implementation of an effective strategy is often overlooked, despite the fact that it is becoming increasingly important and complex. Their book addresses how consultants and contracting firms in the construction and engineering industries integrate corporate social responsibility into business strategy and how this translates into better business performance. In the context of the current global drive towards sustainability, it seeks to provide a guide to effective and meaningful engagement with the community in the boardroom.

2.8.4 Corruption and Transparency

Similarly to the EITI in the extractive industry, the construction industry has recognised a need for greater transparency in its operations. This is likely due in part to the general perception that corrupt or morally dubious practices are widespread within the industry. For example, the CIOBs (2006) report 'Corruption in the Construction Industry' found that 51% of the 1,400 construction practitioners surveyed felt that corruption within the industry was either fairly common or extremely common. 41% of those interviewed had also been offered a bribe at least once. It is these kinds of views which, in 2009 led to the formation of the Construction Sector Transparency (CoST) (www.constructiontransparency.org) initiative which is currently being piloted in seven countries across the globe. This is an international initiative aiming to provide "greater disclosure of information relating to public construction projects (in particular the basis on which the project was commissioned), project evaluation and any significant changes from the original tender document along with the reasons."

The disclosure of this kind of information will undoubtedly be beneficial for the industry as a whole through increased investor confidence and may also be beneficial to the individual companies involved in the public projects. While this initiative and the guidance that it provides can offer a range of benefits it is only one small (but still important) part of the much

wider CR agenda. It is these kinds of initiatives and guidelines that companies should be made aware of when implementing their CR strategies and something that any recommendations should take into account. Unfortunately, the fledgling nature of these guides and initiatives means that it is difficult to see just how successful and helpful they will be to companies in the sector.

Although literature and guidance relating to the construction industry and CR is beginning to expand, it is still relatively unestablished compared to some other industries such as mining and resource extraction, or the financial industry. However, a more commonly occurring theme in relation to construction is that of sustainable development. As section 2.5 has already discussed, there is a close link between CR and sustainable development, and the construction industry has a pivotal role to play in sustainable development. This should by association make CR of high priority within the construction industry but this is not yet always the case. The Department for Business, Enterprise and Regulatory Reform (BERR) (formerly Department of Trade and Industry (DTI)) carried out a Review of Sustainable Construction (DTI 2006) which sought to collate government policy and industry initiatives related to sustainable construction as well as encouraging industry to propose its own targets in order to contribute to sustainable development. Following this review, the government produced the Strategy for Sustainable Construction (HM Government 2008) (a 2009 version has also been produced) which details the aims and methods by which the construction industry can help to achieve sustainable development targets. The production of this document demonstrates the government's goal to improve the performance of the construction industry. The document only alludes to the connection between sustainable development and CR stating that "The Strategy lies alongside a strong business case for the sustainable construction agenda, such as enhancing company image and profile in the market place by addressing issues relating to Corporate and Social Responsibility" (HM Government 2008). Achieving these targets will ultimately require the use of various CR practices to monitor and measure progress towards them. While it currently appears that the industry may be lagging behind others, CR is likely to be an important part of future progress in the construction

industry. As Herridge (2003) suggests; 'tomorrow's industry leaders will be strong, early practitioners of CSR'.

While the prominence of CR seems to be increasing slowly within the construction industry and more research is beginning to appear, there is still a lack of empirical evidence to demonstrate the sector's performance as a whole. This research aims to provide a foundation of evidence relating to construction company CR activities and reporting, on which future research will be able to build. The following chapters present a mixed-mode approach to obtaining CR information and reviewing CR within the sector. No previous research has been identified in any sector which uses this combination of methodologies. The evidence gained from this approach will also be used to produce a range of recommendations for construction companies, highlighting important areas and practices which are important when implementing an effective CR strategy. The industrial funding of this study by a civil engineering consultancy, and the access given by the company for the purposes of the case study, does mean that the recommendations will have slightly more relevance to consultancy organisations. However, this does not mean that they will be irrelevant to other types of construction companies; simply, there will be more emphasis on the ways in which consultants can improve their CR practices and reporting.

The final sections of this chapter will look at the research questions which have come out of the preceding literature review and introduce the methodologies which have been employed to answer these questions.

2.9 RESEARCH QUESTIONS

The literature review indicates that while the perception of the construction industry CR performance is generally seen to be poor, there is actually relatively little academic evidence to support this perception.

While some aspects of CR, such as reporting (Jones, Comfort *et al.* 2006), performance benchmarking (BITC, Graafland *et al.* (2003)) and attitudes to CR (Herridge, (2003), Petrovic-Lazarevic, (2008)) have been investigated in isolation, there has been no attempt to provide a

holistic view of the industry. This research seeks to do just that by combining a range of data in an effort to build a broad evidence base of the industry's reporting practices, performance and perceptions of the industry with regards to CR. The research questions presented in this section closely align with, and will contribute to the achievement of the aims and objectives which have been covered in section 1.2.

The overall aim of the project as set out in section 1.2 is quite broad and, as has already been established, will encompass a wide range of topics. While the objectives provide a breakdown of the different areas required in achieving the overall aim, the research questions have been derived from these objectives as well as information/areas of interest noted during the literature review. These questions relate to some of the significant aspects within CR that were seen during the literature review and are detailed below.

2.9.1 Reporting

Reporting will help to build a picture of the areas which are important within the industry as it is likely that the most commonly reported upon topics are those which companies identify as most relevant to the industry or that companies are under the most pressure from stakeholders to provide information on. The following questions have been identified as a result of the literature review and will be addressed by investigating reporting practices:

RQ 1 - What areas of CR are most commonly reported upon within the industry, and why?

RQ 2 - How do these topics vary throughout the industry and over time, and why might this variation occur?

These are questions which will help to answer Objective 2 (section 1.2) of this study. They are natural questions which immediately began to emerge when initial read throughs of CR reports were made at the beginning of the research process. The answers to some of these questions have been alluded to when discussing the drivers for CR in sections 2.5 and 2.8.1, a detailed review of reporting should help to provide further evidence to answer these questions. Section 3.1 provides an overview of the methodology used to answer these

questions. Chapter 4 then provides the detail on the development of the methodology along with the results and findings from the study.

2.9.2 Activities and Performance

The preceding research questions relate reporting practices so the next step of the study was to look at the actual CR activities that companies were undertaking and how well they were actually performing them. This led to the development of Objective 3 which sought to 'benchmark construction companies to identify which sub-sectors are performing most effectively and why this might be'. Similarly to those outlined in section 2.9.1, the questions which emerged with regards to Objective 3 are comparative in nature and ask the following:

RQ 3 - What differences and similarities exist in the activities which companies undertake across the industry?

RQ 4 - Do trends exist in the performance of different sub-sectors?

By answering these questions, it is hoped that potential reasons for any differences will also emerge, which will help to complete the objective. While reports can provide an indication of the activities which companies are undertaking, it is not possible to make a fair comparison between individual companies using only this public information. The general variation in reporting discussed throughout the literature review, along with the fact that companies may choose to omit certain information or may not even be in a position to produce reports means that an alternative method needs to be employed. A benchmarking exercise was seen to offer a suitable method for obtaining this information and answering these questions. Section 3.2 introduces this methodology and the reasoning behind its selection before Chapter 5 gives the details of how the exercise was undertaken and presents the results.

2.9.3 Understanding and Integration .

The research questions outlined in the two preceding sections have been comparative in nature, looking at information from individual companies across the industry in order to identify trends or rank the companies against one another. In order to obtain the final pieces of information which will allow the primary and secondary research aim to be achieved some

more focused questions have been raised with specific reference to the consultancy sub-sector and a company operating within it (URS Scott Wilson):

RQ 5 - How aware are URS Scott Wilson staff of the issues associated with CR, and what perceptions do they have of the company and the industry with regards to CR?

RQ 6 - How do Wilson's benchmark results compare with its industry peers?

RQ 7 - How are other consultancies addressing their own issues?

These are not questions that were directly identified during the literature review, more questions that relate to the operational and commercial side of CR. They relate to the performance of individual companies which will ultimately contribute to the overall performance of the industry. The question relating to staff awareness is potentially beneficial to URS Scott Wilson and to the academic side of the study as it provides further insight into awareness of, and attitudes towards CR amongst industry practitioners.

The commercial aspect of this part of this research is an important one for the industrial sponsors of this study as it focuses on URS Scott Wilson's activities and may help to identify potential improvements for the future operation of the company. The most suitable method of answering these questions was seen to be a case study of the consultancy sub-sector. This uses a variety of information sources to help build a picture of the internal understanding, awareness and integration of CR activities within URS Scott Wilson as well as the activities that other companies are undertaking. A summary of this method is given in section 3.3 while the findings from this research are discussed in Chapter 6.

2.10 CHAPTER SUMMARY

The literature review has helped to indicate how complex the topic of CR can be, as well as providing some examples of the variety of ways in which other industries are approaching the topic. The available literature suggests that while CR awareness and performance amongst construction companies may be growing there is still room for improvement. The differences in available guidance and the voluntary nature of many aspects of the topic mean that these improvements may be sporadic and varied. The review process indicates that academic

research in relation to CR and construction is relatively limited. The research process in this chapter has led to the formulation of a number of research questions related to the aims and objectives which were presented in section 1.2. The following chapter discusses the methods that will be used to answer these questions.

3. A MIXED METHODOLOGY

With such a wide ranging topic as CR and the variety of research questions that have been discussed, no one methodology has been identified which can address the overall aims effectively. Therefore, as section 2.9 has already indicated, the most appropriate course of action would be to use a combination of methodologies to obtain the relevant information and achieve the aims of the thesis. The basic description of a mixed methodology is one which has comparisons between quantitative and qualitative data. Unfortunately, research based on a mixed methodology has often not been regarded as equal in status to that based on a single methodology. This is despite the progress made over recent times and the view that it does allow science to explain significant amounts of a particular observed phenomenon (Creswell 2009). This negative view of mixed methods may come down to the tendency to link quantitative methods with natural science and positivist research, and qualitative methods with social science and interpretive research.

Positivist and interpretive approaches have often been seen as incompatible paradigms (Moon and Moon 2004) which have been the subject of much debate (Mingers 2003). To counter this problem Howe (1988) developed the pragmatist approach which put forward the idea that “no incompatibility between quantitative and qualitative methods exists at either level of practice and there is no good reason for researchers to fear forging ahead with ‘what works’”. Mingers (2003) (amongst others, see Yu, (2005) and Jones, (2004)) advocated mixed method research on the grounds that both the target of his research and the research process were complex and multi-dimensional, requiring a range of different approaches. It is this open minded approach of allowing research methods to be driven by research questions (Onwuegbuzie 2006) along with the multi-dimensional nature of CR that has led to a mixed method approach to be taken in this thesis. While the short discussion above is, in the words of Jones, (2004), “only a limited engagement with a problem that warrants a full investigation in relation to the study of networked learning”, it is thought to be enough justification for the purposes of this research. The mixed vs. mono method could be debated further; however, it

is ultimately felt that a mixed method approach can provide a more holistic view of this complex, multi-dimensional topic.

The following sections detail the mixed method carried out using the multi-level model of triangulation design, as described by Cresswell and Clark (2007). Triangulation as relates to research, is the concept that collecting data on the same topic from multiple sources should converge to provide a convincing and accurate conclusion for the research. Cresswell and Clark, (2007) detail a number of triangulation processes, with the multi-level model being most appropriate for this study as it allows for different types of information to be collected at different times with varying levels of detail. Each of the following sections introduces the methodologies used in this research along with some of the reasoning behind their selection. The information provided in this chapter relates to the aspects of the methodology which were available before this research was carried out and which some of the methodologies are based upon. Any new aspects of the methodology which were developed as part of the research process are covered in the relevant chapter.

3.1 COMPARATIVE FRAMEWORK – REPORT REVIEW

The first method will be used to answer the 'what', 'how' and 'why' research questions relating to the reporting aspect of CR listed in section 2.9.1. The reporting topic is used to encompass various forms of information such as printed or electronic reports, websites, chapters in annual reports and press releases. This information is the most direct method by which companies let their stakeholders know what they are doing in relation to CR. Reviewing this information and assessing companies on the information which they provide to stakeholders, was seen as a useful way to gauge the efforts to which companies go, and the extent to which they report upon their CR activities.

Therefore, in an effort to produce a more straightforward method of analysing the reports which would produce repeatable, comparable results, a new framework was developed. It was based upon the GRI and the waves of CR which are introduced in section 3.1.2 and is used for the content analysis of KPIs (from the GRI) which appear in each report but

importantly allows the connection of each one of these KPIs to a broader topic, or wave of CR allowing for a broader, and simpler comparison to be made.

The framework allows the topics disclosed in the reports to be identified and recorded helping to build up a picture of how extensively each company reports upon its activities and the different topics which are most significant to each organisation. While it is likely that only the more positive information is reported upon by companies in order to paint them in a more beneficial light, this public information is still invaluable for investigating the activities of the industry. The data captured from this methodology is more 'high level' and broad, and for this reason will not be used to produce a ranking of the companies, although it is possible to use it for this purpose for example, KPMG CR Reviews (www.KPMG.com). Instead it will be used to identify the areas which are important to the industry as a whole and the sub-sectors within in it. The following section outlines relevant literature and methods which led to the development of the framework used in this method.

3.1.1 Comparative Methodologies

Company CR reports provide a source from which to draw data that will help to answer the questions posed in section 2.9.1. In order to answer the questions as accurately and fairly as possible, it is important that a suitable methodology is used. At the time of starting this research there were few established processes or methods available for carrying out a review of this kind. Some of those available are discussed in the following paragraphs.

CRRA

The CR Reporting Awards (CRRA) managed by corporateregister.com is an award scheme which allows website users to vote for company reports in nine different categories such as:

- Best report,
- Best SME report; and
- Openness and Honesty

The reports which can be voted for come from a range of industries and from across the globe. In each of the nine categories a winner and two runners up are chosen by the voters. While this award scheme is becoming more established and the process is impartial, the public voting method used would not suit this research and the guidance provided to help with comparing reports is very basic. An interesting point to note from the 2010 awards was that of the 27 winners, none were from construction companies, providing a further indication that this industry is lagging behind other sectors. Companies from a wide range of industries were represented such as utilities, finance, extraction, automotive, entertainment, telecommunications and food, but not construction .

ACCA

An alternative method is that employed by The Association of Chartered Certified Accountants (ACCA) UK awards. The scoring for these awards is carried out by a panel of experts chosen by ACCA. The experts are asked to assess the reports based upon a range of criteria in three key areas:

- Completeness
- Credibility; and
- Communication

While a number of indicators are provided in each of these areas against which the report can be assessed, the process is qualitative and relies on the chosen expert's opinions and experience of the CR topic. Each of the key areas listed above contributes a certain percentage to the overall scoring of the report but there is no guidance on how much the individual indicators contributes to each of the key topics – this is left to the reviewer's discretion. This process could potentially bring in a certain amount of bias on the part of the reviewer and did not appear to align with the aim of this chapter.

Jenkins and Yakovleva (2006) carried out a review of mining sector companies using content analysis of social, environmental and ethical policy statements in the company's CR reports. As well as disclosures, Jenkins and Yakovleva also looked for adherence to the GRI and

levels of external assurance of the data. Their work provides a repeatable method of reviewing reports but for the purposes of the research in this project, there are still some potential issues with the method. Firstly, the main focus of their work was a temporal analysis of reporting in the sector and the methodology was therefore geared towards this aim. This is of interest to the research in this chapter, but it is not the main focus of the study. Secondly, a more detailed review of the individual topics and data that relates to them might be useful in identifying some of the reasons or drivers behind why the topics may be important. Therefore, although some aspects of the methodology are relevant it was still not seen to be suitable for the purposes of this study.

A number of comparative processes have been highlighted above, but as discussed, there are some issues associated with these which make them unsuitable for use in this research. It was for these reasons that a new comparative framework was developed in order to produce a straightforward and easily repeatable method for reviewing reports. In order to arrive at this methodology, the new framework combines two different levels of detail to allow a comparison to be made. Firstly the waves of CR (introduced in the following section 3.1.2) are expanded into 'mini-waves'. These will help to build up a general overview of the topics which are important to companies in the construction industry. The presence or absence of these more general topics in the reports will more easily allow for a broad comparison to be made between reports. In order to accurately and consistently identify the appearance of these mini-waves in reports, a more detailed method of picking out information is required. This is where the high level of detail provided by the GRI indicators proves to be very useful. The relationship between the waves of CR and the GRI indicators will be covered in Chapter 4. Essentially, the GRI indicators are used to identify information which is then associated with the more general waves. This association is made through the use of more specific 'mini-waves' (developed during the research) to allow for an easy comparison to be made between the reports. The detailed development process of these mini-waves is covered in section 4.1.2.

The initial review of the reports was carried out in early 2007 on the most up to date reports which were available. This meant that the majority of reports were those covering the financial year of 2005-2006. A second review of the same company reports was undertaken three years later. This allowed a temporal comparison to be made between the changes in CR practices and areas which appear to be important to the companies in the sector. The findings and conclusions drawn from the report review are covered in sections 4.5, 4.7 and 4.8.

3.1.2 Introducing Waves of CR

Moon (2003), discusses the emergence of CR waves. These are broad concepts framed by the wider topic of CR whose emergence, Moon suggests, have provided a significant re-formulation of the subject. Whereas CR was conventionally, particularly in the American model, regarded as being about *community involvement*, two new waves of CR have developed in recent decades (Moon 2003). The first of these is the necessity to communicate that business outputs are provided within environmentally and socially acceptable limits, which has given rise to the CR wave of socially responsible products and services. Originally, this wave was chiefly concerned with environmental performance and health and safety, although it can be expanded to include newer topics as will be discussed in section 4.1.2. The second new wave relates to socially responsible employee relations, describing the company's engagement with employees, which is becoming increasingly important for the sustainable operation of business. This wave can relate to a range of issues, from a company's commitment to human rights and labour standards through to the successfulness of employee engagement on company strategies and values.

The wave of community involvement indicates that a business should make some consideration to the society in which it operates but the term 'involvement' seems to simultaneously suggest that this consideration is over and above mainstream business activities. The emergence of the two new waves emphasises that the organisation is responsible for its activities and that this responsibility stretches to a wider social setting as opposed to the more localised community. In essence the waves offer an alternative and

overarching viewpoint from which to consider the CR topic. They give an indication of the complexity inherent to CR and go beyond the relatively simple definitions discussed in section 2.3.1 by breaking the subject down into very different and more specific topics. The benefits and limitations of dividing the subject in this way are discussed further in section 4.1.2.

3.1.3 Waves of CR Expanded

As discussed in section 3.1.2, CR waves offer an alternative mechanism of dividing the CR lexicon. Although one of the waves (community involvement) listed by Moon, (2002) is seen to be more established than the others, the use of the term waves to categorise each of the topics is seen as a contemporary way of defining CR activities, and so for the purposes of this thesis are considered to be the contemporary waves of CR.

These waves offer one way of sub-dividing and analysing CR. As suggested by Chambers *et al*, (2003) “analysis of CR through these general waves can give a general comparative and dynamic sense of the ways in which companies direct their CR resources and energies”. However, the contemporary waves are quite broad, making analysis relatively simple, but not necessarily very detailed. To provide a more in-depth comparison of CR activities, it is necessary to develop more specific sub-divisions within each of the three contemporary waves. The development of these sub-divisions or ‘mini-waves’ is covered in detail in section 4.1.2. It is these ‘mini-waves’ used in conjunction with a number of GRI KPIs (see following section) that form the basis of the method used to undertake the report review.

3.1.4 The GRI KPIs

The GRI offers the KPI which form the other main part of the method for comparing reports in Chapter 4. The GRI is an international, multi-stakeholder organisation which seeks to make the reporting of economic, environmental and social performance as routine and comparable as financial reporting. It is based upon a reporting framework which provides organisations with the necessary information to define report content, boundaries and levels of disclosure. The GRI also provides an extensive set of KPIs. These have been used in conjunction with

the mini-waves to produce a comparative framework which will allow construction sector CR reports to be compared. This process will help to identify trends in the CR reporting of the construction sector and will also help to identify some of the main drivers behind these trends.

One of the main aspects of the GRI reporting framework is the G3 Guidelines (2006). These provide a 'how to' for the GRI, and it is this part of the framework that gives details of the KPIs. The KPIs are a range of core and additional pieces of information which should be included in a company's report. They are broken down into six topics covering indicators of economic, environmental, human rights, labour, product responsibility and societal performance. Each of these topics contains between eight and thirty performance indicators. These KPIs are very specific covering such aspects as; *total volume and number of specific spills* (EN24), or *rates of injury, occupational diseases, lost days, and absenteeism, and total number of work related fatalities by region* (LA7). This research uses the GRI KPIs because they provide a set of relevant, readily accessible KPIs which can be directly linked to the CR waves and mini-waves. Based upon the use of GRI KPIs, the comparative framework developed during this research does not seek to provide a measure of the quality of construction sector CR reports, it aims to look at the extent and detail which is covered by them.

3.1.5 Benefits of the Report Review

Although the literature review gave a predominantly academic background to the topic, the report review provided the first indications of how real companies in the construction industry were addressing CR issues. The technique developed was simple and easily repeatable, which allowed the longitudinal comparison to be made. Chapter 4 presents the detail on the development of the framework, the results from both reviews along with the discussions and conclusions from this part of the project.

3.2 BENCHMARKING EXERCISE – COMPANY SURVEY

For the second part of this investigation, the research will focus on individual companies to investigate differences in their operations and the areas which are most significant to them, but this time the information will be obtained directly from the companies themselves as opposed to through publicly available sources. The objective of this part of the study is to compare the performance of companies with their peers in order to identify variations across the industry and see which sub-sectors are performing more effectively in which areas. This process of comparison is known as benchmarking and has traditionally been used for testing and improving quality management systems in the manufacturing industry (Rothman 1992). Within the past decade the principle has started to be applied to sustainability/environmental (e.g. Weber, (2005), Krut and Munis, (1998)) and CR performance (Graafland *et al* (2004b)). A number of these academics (as well as commercial organisations) have developed a range of methods for benchmarking sustainability/CR, some of which involve questionnaires or interviews while others only use publicly available information. Each of the methods have their strengths and weaknesses which are discussed below.

3.2.1 Can Benchmarking Work for CR?

As Chapter 4 will demonstrate, company reporting practices can vary a great deal which can prove to be a barrier to stakeholders wishing to make comparisons between the performances of different organisations. This variation in CR activities and reporting upon them is demonstrated by many sectors, with the construction industry being no exception (see Chapter 4 and Brown, Parry & Moon, (2010)). The literature review in Chapter 2 indicated that many industries seem to understand the potential benefits of CR, but guidance, and therefore a consistent approach to implementing the process, has been slow to develop. Acting in a socially responsible manner not only offers the benefit of being seen as 'doing the right thing' in the eyes of the stakeholders, but it can also help organisations to monitor their progress towards sustainable development goals. However, while these benefits can be realised by implementing an effective CR strategy, it is often difficult for organisations to identify just how effective their CR strategies are, or how they can be improved.

While implementing a new initiative or developing an innovative manufacturing process may produce a range of positive results for an organisation, it is difficult to accurately measure the scale of these benefits without being able to compare them to something similar. This is where the exercise of benchmarking can prove to be useful. Xerox, who have been seen as a pioneer in the area, define benchmarking as “the continuous process of measuring products, services and practices against the toughest competitors or those recognised as industry leaders” (Rothman 1992). Fisher *et al.* (1995) suggested that historically, the construction industry has been slow to embrace benchmarking of any kind - a literature search undertaken as part of their research found no cross-references to “construction industry” and “benchmarking” between 1989 -1993. By comparison the practice is described as being well established within the manufacturing industry as part of the quality management process (Fisher, Miertschin *et al.* 1995).

The exercise may have been most commonly used by manufacturing companies as a method of measuring and improving their quality management processes, but it has since been adapted and applied to a wide range of business operations. More recent work (Costa, Formoso *et al.* 2006), and initiatives managed by organisations such as Constructing Excellence, suggest that recording of KPIs and benchmarking of construction activities is becoming more common in the construction industry. However at present this tends to be in relation to operational data such as costs and timescales rather than CR information.

In a similar way to the comparative framework methodology (section 3.1.1), a number of comparative or scoring studies have been undertaken which use a numerical method to measure the comprehensiveness of CR reports rather than the quality of the company's performance (Morhardt 2001). Morhardt reviewed the effectiveness of three methodologies (Davis-Walling and Batterman, (1997); UNEP/SustainAbility, (1997); and Deloitte Touche Tohmatsu, (1999) (unable to access)) and concluded that while a comparison of reports can be used to judge the environmental performance of companies, there are a number of issues relating to the use of this method and these systems in particular. One of the main problems, which may be common to all comparative/benchmarking methods, is the lack of company

comparability. That is; the large companies most likely to produce reports operate across so many different sectors or deliver such a mix of products and services within the same sector that their environmental impacts are difficult to directly compare. While it may be true that making an accurate and meaningful cross-sector comparison is likely to be difficult, comparisons within the same sector are likely to produce much more useful benchmarks even if there are some variations between the companies' products and services.

While Morhardt's (2001) review was not actually a benchmarking exercise (it was a comparison of three scoring systems) his research does highlight a number of issues which are relevant to benchmarking and should be taken into consideration when developing a method suitable for this project. As well as the difficulty of comparability mentioned above (which can be reduced by restricting the benchmark to one sector) the two other important considerations are as follows. Firstly, the Davis-Walling and Batterman (1997) method used a general list of topics to score the reports against, most of which would logically be included in a company's environmental report. However, there were a number of topics which were characteristic of specific types of operations. Including and scoring against these topics could put certain companies at a disadvantage (or advantage) based upon their area of activity. For example, in the context of construction, scoring company reports on whether they provide information about the provision of social housing would provide 1 point for house building companies whereas civil engineering organisations would forfeit the point. Secondly, Morhardt noted that the UNEP/SustainAbility and Deloitte Touche Tohmatsu methods did not provide explicit criteria for scoring the topics, but provided a list of indicators that must be converted to a numerical score. This ambiguity introduces a high degree of subjectivity into the process which could potentially result in significant variations in scoring.

The issues identified above are important considerations that should be taken into account when developing/adapting a benchmarking questionnaire. The following section looks in more details at the issues inherent to benchmarking.

3.2.2 Problems of Benchmarking

Before looking at some of the available methods of benchmarking CR, it would be useful to investigate some of the potential problems associated with these methods. With a relatively small amount of academic research available on the effectiveness of benchmarking CR, it is useful to look more closely at potential issues that may be involved with the process and ways in which the impact of these might be reduced. The repeated use of many of the methods discussed in section 3.2.3 suggest that the process can be effectively applied to CR but there are some issues that must be taken into account, a selection of which are discussed below.

Simplicity

The simplicity of benchmarking provides a real benefit to stakeholders as it is possible to assess the performance of a company by simply looking at one score (or a small selection of scores). Whereas in the past stakeholders would have had to gather a large amount of information or try to compare very different reports with one another. The problem that can occur as a result of this simplicity is that in order to arrive at the benchmark score, choices and assumptions must often be made by the researchers which may have an effect on the overall result. These can range from the choice of questions in a questionnaire, to deciding whether the benchmark should take into account information which is not available in the public domain. Stakeholders should be aware that the scores can depend on a number of assumptions and it is therefore important that the methodology used is clearly defined.

Intentions

In general, the benchmarking process does not deal with intentions, however, intentions are an important aspect when evaluating moral actions. Graafland *et al* (2004b) state that “a good intention implies that a company should be intrinsically motivated to foster social and ecological values”. This suggests that if a company has good intentions in relation to CR, then it is promoting responsible business and/or acting in a responsible manner - as the company feels that it has a moral obligation to do so. While it is more likely that a company

demonstrating good intentions will be doing so due to a moral obligation it would be dangerous to assume that all companies demonstrating good intentions are doing so as a result of intrinsic motivations. There is a very real possibility that companies demonstrating good intentions are only doing so in order to increase profits in which case they are extrinsically interested in operating responsibly. While the driver for these intentions will likely be difficult to pinpoint, the actions which companies intend to undertake may give an indication of the drivers behind their actions.

Control of the Company

The benchmarking method holds a company responsible for all of its actions or inactions. While this may seem right in theory, there are likely to be situations where a company does not have full control over the effects of its actions. Therefore, is it morally right to hold a company fully responsible for actions which are outside of its control? In theory this problem could be addressed by reducing the negative scores assigned to a company for a given activity. However, it would be a relatively subjective process and be very difficult to accurately determine the level of control that a company is able to exercise over its various activities. For the purposes of this benchmarking, the companies are assumed to have full control over their actions.

Monism

Expressing the quality of CR performance as a single number is monistic in nature. This implies that all actions related to CR can be measured on a single scale, and that good and bad are weighed symmetrically – one bad deed is offset by a good one, therefore the quantity of actions count rather than the quality. In reality this is not true, and it would be sensible to assume that not all actions can be measured on the same scale. For example, the safety of human lives should carry a greater importance than the financial gain of organisations. This issue can be reduced by assigning weights to the various topics being measured. This should allow for the relative importance of different subjects to be accounted for.

This is a short summary of some of the advantages and disadvantages of benchmarking which could be considered when choosing/developing any benchmarking method. The following section outlines some of CR benchmarking methodologies that have been used in recent years.

3.2.3 Benchmarking Methods

A small number of methods exist which can be used to benchmark CR and some of its components. This section reviews these methods to identify which is most suitable for use in this study.

The benchmarking process allows companies to gain a better idea of how they are performing in relation to their industry peers or other companies operating in similar sectors. There are currently a number of organisations (Business in the Community, FTSE4Good, Dow Jones Sustainability Index) that carry out commercial CR benchmarking across the globe. Companies pay to complete detailed questionnaires and must agree to receiving audits of their operations in order to be informed of their performance and ranked against other companies in their sector. Participating in these benchmarking exercises provides the company with an externally verified review of company performance which allows stakeholders to more easily assess the company compared to its industry peers. From a commercial aspect this can be a very valuable aspect of benchmarking both to the company and its stakeholders.

However, within academic literature there are relatively few examples of benchmarking or ranking studies in relation to CR reporting and activities. Of the examples (which are discussed in the following pages) none have looked exclusively at the construction industry or its sub-sectors. This section discusses some of the most notable ranking and benchmarking methods which have been employed to specifically measure aspects of CR.

Krut and Munis Methodology

Krut and Munis (1998) acknowledge the fact that due to the voluntary nature and resulting lack of standard approach, it is quite difficult to make a comparative evaluation of CR reports and hence activities. To this end, Krut and Munis sought to develop a benchmarking tool to help assess corporate policies and reports, as this would have “value for corporate practitioners or potential practitioners, for regulators and for members of the public”. The tool is based upon 19 criteria, which are scored qualitatively, as it was felt that a numeric evaluation would encourage readers to create averages and rankings which would be inappropriate. The categories used by Krut and Munis may not have equivalent values so comparing a firm’s performance between categories could result in unfair conclusions being drawn.

The methodology was based on a review of company reports against 19 criteria identified by the writers. These 19 criteria were subdivided into 4 different areas:

- Environmentally sound products, processes and services
- Integration of sustainable development and economic growth
- Reducing risks and hazards to human health and the ecosystem
- Community/stakeholder participation in sustainable development

Reports were assessed against each of the criteria using a qualitative scale to assess the company’s performance:

a No comment on this area

b Issue identified/raised for consideration benchmark

c Issue being addressed

d Full commitment to this issue

e Commitment exceeds normal efforts

While this approach removes some of the problems associated with the quantitative analysis of CR, it does make it more difficult to be able to draw clear conclusions from the results. The other drawback of their qualitative method, is that Krut and Munis do not explicitly sum up and weight the scores from the various categories into one overall index. While it could be argued that a summary score over-simplifies the process, it is important that the final benchmarking outcome provides an easily accessible and clear comparison between companies' activities.

The method is based entirely on the information from publicly available policies or published by companies in their environmental/CR reports. The authors acknowledge that this does not necessarily evaluate what the firm is actually doing, but more what the firm is committed to doing, or is planning to do. While this method has obvious limitations (for example, information reported in the documents may be slightly exaggerated or inconsistent) it does offer a quick and consistent approach to comparing reports. The authors also believe that information which companies report publicly, is a commitment that the organisation will have to meet at some point – even if they were not undertaking the activity at the time of producing the report, the fact that the commitment is presented in a public document means that the organisation will (in theory) have to undertake/implement at some point in the future.

Krut and Munis' research centres on a small number of sectors, as they acknowledge that comparison of companies within a sector is more meaningful than making comparisons between sectors. The research in this thesis is focused on the construction industry - meaning that the proposed benchmarking exercise should be able to provide a useful comparison between such companies.

Kelly, Graves and Waddock - Business Ethics and KLD Methodology

Developed in 2000, Kelly *et al*'s methodology (www.business-ethics.com) was produced for Business Ethics magazines' '100 Best Corporate Citizens'. Kelly *et al* used various indicators which reflect the triple bottom line in order to develop a benchmark of companies' activities. Economic data was taken from a three year average of total shareholder returns while

ecological and social data was obtained from KLD Research and Analytics. This aspect of the benchmark consists of seven categories ranging from Employee Relations to Product Quality and Safety. The data for six of these categories were taken from information gathered by KLD for their annual research for the SOCRATES database (www.kld.com). This is an online research database which reports KLD's assessment of companies' environmental, social and governance performance.

KLD's research method uses a list of topics (which each have strengths and concerns) to which a numerical score can be assigned based upon a company's performance. The scoring for each of these topics ranges from -2 (major concern) through 0 to +2 (major strength). Totalling the scores from the strengths and weaknesses in each topic provides a net performance score for that topic. An average of the scores from each of the seven topics is then taken to give an overall benchmark score.

While the quantitative method employed here allows for more clear conclusions to be drawn from the benchmark, there are a number of issues associated with the process. Firstly, the scoring of the concerns and strengths are treated symmetrically - a major concern is completely cancelled out by a major strength whereas in reality, the concern may actually carry more impact than the strength and should not be entirely negated by it. This obviously works both ways, in that very significant strengths of a company may be made redundant by the identification of a major concern that does not carry as much impact as the strength. The other potential problem with Kelly *et al*'s method is that it does not weight any of the topics when calculating the overall benchmarking score. Different individuals and organisations, and even whole sectors will place a different importance on some topics over others. For example, a construction company may place a higher importance on H&S aspects of operations whereas a retail company may feel that responsible sourcing is more relevant and hence should carry more weight when calculating a benchmark score.

The Business Ethics '100 Best Corporate Citizens' is still in use in the US today although the process is now managed by The Corporate Responsibility Officer (CRO) (www.thecro.com). As the Business Ethics and CRO websites state 'the 100 Best Corporate Citizens is regarded

as the third most influential corporate ranking behind fortune magazine's 'Most Admired Companies' and '100 Best Companies to Work For' published by PRWeek'. This would suggest that Kelly's methodology is an effective and widely accepted benchmarking process.

A notable improvement over Krut and Munis' methodology is that KLD not only collect performance data from publicly available sources, but also engage with companies to obtain information on their activities. This may provide the opportunity to inflate their activities slightly, as information provided in an interview does not necessarily offer as firm a commitment as information that is committed to print. However, the fact that information is taken from a variety of sources should, in theory, provide a more robust source of data. With the transfer from Business Ethics magazine to CRO, this methodology has now altered slightly, in that KLD no longer provide data for the ranking process, with the new organisation only using data which is publicly available. The research method has now been expanded to take into account eight topics instead of the previous seven and IW Financial are now the providers of all the information used in the ranking. The IW Financial methodology only draws data from publicly available information although the organisations being benchmarked do have the opportunity to review the benchmark and indicate other sources of information which may have been overlooked.

Graafland *et al* Methodology

Graafland *et al* have produced a number of papers relating to the benchmark methodology which they developed in 2002 (Graafland, Eijffinger *et al.* 2003). This methodology was developed as a result of Graafland *et al* reviewing a range of benchmarking/comparative studies carried out by a number of other academics. Two of the methodologies reviewed were those developed by Krut and Munis and Kelly *et al* so, in theory, the short comings discussed in relation to these methods should have been addressed in Graafland *et al*'s methodology.

In contrast to the methods discussed above, Graafland *et al*'s methodology uses a questionnaire which is completed by the companies themselves. In order to prevent

exaggerations affecting the benchmark the results from the questionnaires were verified against publicly available data. Surprisingly, it was found that the results provided in response to the questionnaire, in many cases provided a poorer reflection of the organisation's activities/performance than the publicly available documents. This could be interpreted as the reports providing a more exaggerated picture of the company's operations or may be due to the fact that the individual responsible for completing the questionnaire was unaware of all of the details relating to the company's activity.

Graafland focussed on four sectors, the response rates from which are summarised in Table 3-1 below.

	Construction	Retail	Chemical	Financial	Total
Number of questionnaires sent to companies	123	125	73	57	378
Response	24	11	15	8	58
Response rate	19.5%	8.8%	20.5%	14.0%	15.3
Average number of employees of companies that responded	2273	555	11573	11817	4998

Table 3-1 Summary of Graafland *et al*'s (2002) response rates by sector

To keep the questionnaire at a reasonable length it was necessary for Graafland *et al* to restrict the questions, and to an extent the coverage of topics within the questionnaire; but the aim remained to effectively cover the main components of CR. Even so, Graafland *et al* suggest that this selectivity could imply that the benchmark may be biased and concedes that it is only a selected random test. While this may seem a detrimental comment to the methodology, in reality it is likely that this is a problem which is common to all benchmarking methods; at some point in any benchmarking method, decisions will have to be made on the topics that are covered, the questions that are included or the content that is reviewed.

In order to obtain the overall score, each topic in the questionnaire was weighted which was in turn used to adjust the results from the questions. This weighting of topics is an important aspect of Graafland *et al*'s method as various topics will be more important to some organisations than others. It is therefore important that weighting is taken into account, but a difficulty arises as to what weightings should be given and who should decide upon them. Graafland *et al* solved this problem by asking the companies themselves to rate the importance of the various categories in the questionnaire. A number of Non Governmental Organisations (NGO's) were also asked to rate the categories to provide a more rounded view on their relative importance. In general, the weights provided by companies and NGO's correlated very closely with one another. In order to test the robustness of the weightings assigned to each topic, the study calculated four different benchmarks based upon the weighting given by:

- each individual company,
- the sectoral average,
- the NGO weighting and
- the averages of all weightings provided.

The research found that the weightings provided by the various respondents were reasonably robust and resulted in similar benchmarking scores, regardless of which weighting was used. There was some more variation in benchmarks calculated from the individual weighting which could reflect companies raising the importance of areas which they are performing well in.

Business In The Community - Corporate Responsibility Index

First launched in 2003 as a follow on to the Business in the Environment index, this methodology is one of a number of commercial benchmarking methods. Some of these are national (e.g. BITC) while others can be international in scope (e.g. FTSE4Good or the DJSI (Dow Jones Sustainability Index)). For a fee, these various benchmarking or ranking methods offer the service of making an impartial comparison between the efforts and performance of companies. While the CR Index is relatively small (350 companies have

taken part in the exercise over the past seven years) the participation is growing every year with approximately 100 companies expected to participate in 2010 (www.bitc.org.uk). The benchmark is based upon an online survey which participating companies complete. Guidance on completing the survey is provided through notes and workshops which the organisation delivers. Submitted surveys are then analysed by BITC and if deemed necessary, site visits are made to the participating organisations in order to confirm responses provided in the survey.

BITC do not provide any detailed information on the methodology used in this benchmarking process. This is understandable due to the commercial nature of the Index; however, this does reduce the transparency of the process which makes it difficult to make a comparison with other academic methods of benchmarking. Commercial benchmarking methods are mentioned in this discussion for purposes of completeness. Unfortunately, due to the minimal amount of detail available and the commercial nature of the methodologies it would be difficult to use them for this exercise.

3.2.4 Choice of Benchmarking Method

While benchmarking does have a number of potential issues associated with it, it can still offer a useful method for comparing aspects of CR between companies. A selection of available benchmarking methods have been discussed in section 3.2.3, along with their suitability for use in this research. There are benefits and drawbacks associated with all of the methodologies discussed as well as a number of issues associated with the actual process of benchmarking. In an ideal world all of the strengths from each of the methods could be combined and developed into a new methodology to provide a highly robust benchmark.

However, in the timeframe available for this research it was not feasible to develop an entirely new method, so the decision was made to base the exercise on an existing method. Small changes would be acceptable (and in some cases required), but by ensuring the method was as close to the original as possible the process would not require testing before being used.

A novel benchmarking methodology would require a significant amount of pre-testing and development prior to being used and would also carry less credibility than one which has already been used and received peer review. The question then, is which of the methodologies should be used? Table 3-2 provides a summary of the strengths and weaknesses of each benchmarking method.

Benchmark Methodology	Strengths	Weaknesses
Krut and Munis	<ul style="list-style-type: none"> • Short and succinct process • Allows for larger sample sizes to be assessed 	<ul style="list-style-type: none"> • All information taken from company reports • No method for cross checking results • Qualitative nature can make quick comparison of results difficult
Kelly <i>et al</i>	<ul style="list-style-type: none"> • Provides an overall score of the company's performance • Uses both public information and data direct from the companies 	<ul style="list-style-type: none"> • Strengths/weaknesses systems could result in some CR aspects being cancelled out by those of lower significance • No weightings are used
Graafland <i>et al</i>	<ul style="list-style-type: none"> • Uses information provided by each company • Weights questionnaire topics (provided by each company) 	<ul style="list-style-type: none"> • Relies on participant response rates • Relatively long questionnaire compared to some other methods
BITC	<ul style="list-style-type: none"> • Established and accepted method • Uses detailed information provided by each company 	<ul style="list-style-type: none"> • Limited information available on the methodology • Very large questionnaire

Table 3-2 A summary of the strengths and weaknesses of each benchmarking method

Based upon the various strengths and weaknesses of each method it was decided that Graafland *et al*'s methodology would be used to carry out the benchmarking exercise in this research project.

3.2.5 Survey Format

Having made the decision to use Graafland *et al*'s method, it is worth considering the format of the survey. While Graafland *et al* used hard copies there are a number of survey delivery formats available and these will be investigated in the following paragraphs. A high response rate to the survey is desirable as it will provide a larger data set from which to draw comparisons and offer a better insight into the activities of the large construction companies. To achieve a high response rate, the method used to distribute the questionnaire and the way

in which the questionnaire can be completed must be carefully considered. This chapter reviews a selection of academic literature which has tested various formats and survey delivery methods.

Research by Shih and Fan (2009) suggested that electronic surveys (e-mailed or web based) would have a lower response rate than paper copies posted to participants. This difference may be due to the fact that the level of electronic 'spam' which people receive has resulted in a much lower tolerance for any unsolicited electronic correspondence, resulting in the email containing the questionnaire, or the link to, it being ignored or deleted.

Shih and Fan's (2009) work highlights the fact that although "numerous studies have been conducted to compare email and mail surveys modes in terms of their response rates, the findings have been inconsistent." Shih and Fan went on to undertake a meta-analysis of these comparative studies from the last 10 years and found that "email survey modes generally had a considerably lower response rate (about 20% lower on average) than mail survey mode. Their research identifies an average response rate of 53% for paper surveys and 33% for electronic ones. However it should be noted that this was for an average sample size of 1519. The minimum sample size reviewed in their study was 43 and yielded a response rate of just 11% for paper surveys and 5% for electronic. This smaller sample size response rate ties in with the number of surveys distributed and received by Graafland Eijffinger *et al* (2003) and is also similar to the sample size of this study.

Mehta and Sivadas, (1995), conducted research to compare response rates of mail and electronic surveys using the internet. Their sample set was divided into five segments in order to test the effect various methods of surveying had. The segments were:

1. Mail surveys with no pre-notification, no incentives to respond and no reminders
2. Mail surveys with pre-notification, incentives to respond and reminders
3. Email surveys sent domestically with conditions corresponding to 1
4. Email surveys sent domestically with conditions corresponding to 2
5. An international group of emails with conditions equivalent to 4

Mehta and Sivadas (1995) found that the response rates for group 2 were the highest of all groups, with an 83% response rate. In a correlation with Shih and Fan's research the electronic surveys were found to offer around a 20% lower response rate than the printed versions. With the use of incentives and reminders, it is understandable that the method used for group 2 would yield the greatest response. Therefore, it is a technique which would be useful to employ for the purposes of this benchmarking exercise. While there was no discussion of the sample sizes of this study, the high response rates indicate that it may offer an effective method of encouraging responses.

Dillman (2008) provides a good deal of guidance on implementation methods in his book *The Tailored Design Method (TDM)*. Of particular interest was the information relating to booklet design and the circulation of the survey which Dillman suggests should be undertaken as follows.

The survey population is sent a questionnaire booklet containing up to 12 pages. The booklet has an illustrated front cover and a specified instruction format and also incorporates a method of identifying respondents in order to remove them from the follow up process. The guidance even suggests that the covering letter accompanying the questionnaire must be signed in blue ink to demonstrate that it is not simply a print out. Follow-up proceeds one week after the initial distribution, when a reminder postcard is sent. Three weeks and seven weeks after the initial distribution, non-respondents are sent a duplicate questionnaire package. This process of pre-notification and follow up in order to increase response rates is similar to that identified by Mehta and Sivadas, (1995).

Hoddinott and Bass (1986) used the TDM (detailed in the first edition of Dillman's book (1978)) to test his 80% response rate claim amongst a sample of 185 family doctors who are allegedly notorious for low survey response rates (Burt and Woodwell Unknown Year). Hoddinott and Bass achieved a return rate of 92.8% using Dillman's methodology. While one test of the methodology by no means equates to a guarantee, the high response rate amongst a sample known for low response rates suggests that Dillman's methods can help to increase the response rate of questionnaires. For this reason, the process of pre-notification

and follow up was employed in this research. It may have been possible to increase response rates further by also including an electronic circulation of the survey. However, it became apparent (see section 5.1.4) that obtaining e-mail addresses for CR managers within large companies was very difficult, which made this delivery method unsuitable.

3.2.6 Benefits of the Benchmark Method

Although there are some issues associated with the process (see section 3.2.2), the process also offers a number of benefits to the research project which are summarised in this section.

The survey generated further information about the CR topics most relevant to the industry which can be used to strengthen the data obtained from the report review. Perhaps more importantly, the detailed nature of the questionnaire allowed for very specific data about company activities to be captured. Another notable benefit of the benchmarking methodology over the report comparison is that the questions and areas of interest are pre-defined. This allows for a more direct comparison to be made as well as more meaningful and clear conclusions to be drawn.

In this stage, the type of data gathered changed from that obtained during the report comparison process. Whereas the report review was completed using public sources of information, the data in the benchmarking exercise comes direct from the companies themselves (or an individual within it) and, in theory, should provide a more internal view of the company and its operations. Whereas a company communication, such as a CR report might only convey information selected by the company, the benchmark questionnaire asked for specific questions on topics which were deemed relevant to the CR agenda. Assuming, of course, that the respondents did not lie in an effort to improve their company's score, then the answers should provide the desired internal view of the business.

While the questionnaire offers the benefit of this internal viewpoint, completion by one individual within an organisation may also have some potential drawbacks. For example, as well as the potential for dishonesty mentioned above, the respondent may not actually know all of the details of a company's CR programme due to the organisation's size and

complexity. This may result in questions being answered incorrectly which in turn could influence the results of the benchmarking. The only way to get around this issue is to check the responses against the company's published report in an effort to identify discrepancies. However, if discrepancies are found, it will likely be very difficult to definitively locate the correct information.

Chapter 5 provides the detail on the development of Graafland *et al's* questionnaire along with the results and analysis of the benchmarking exercise.

3.3 CASE STUDY - CONSULTANCY SUB-SECTOR

The final part of the study seeks to focus more closely on a particular sub-sector and in particular on one individual company within the sub-sector to investigate how well CR is understood by the organisation's management and how effectively CR activities are integrated into the company's operations. As URS Scott Wilson is part funding this research part of the case study, there will be a focus on the company in an effort to highlight potential improvements that could be made. While aiming to be beneficial to the company, the opportunity of studying an organisation 'from the inside' presents some significant advantages in relation to the academic research. As an employee of the company, free access will be available to the staff as well as documentation on company policies and practices which might otherwise be difficult to obtain as an external researcher.

3.3.1 What is a Case Study and is it Applicable to This Research?

Yin, (1994) describes a case study as:

An empirical enquiry that:

- Investigates a contemporary phenomenon within its real-life context, especially when
- The boundaries between the phenomenon and context are not clearly evident.

Anderson, (1993) describes the case study as being concerned with how and why things happen, allowing for the investigation of the contextual realities and the differences between what was planned and what actually occurred. Case studies are most often suited to 'how' or

'why' style research questions (Yin 1994). Given the aim and objectives of this chapter, a case study would seem to be a suitable methodology to use in order to produce the desired information relating to consultancy company activities.

Case studies can draw upon six sources of evidence, each requiring slightly different methodological procedures as well as having varying strengths and weaknesses associated with them. These six sources are as follows:

- Documentation
- Archival records
- Interviews and surveys
- Direct Observation
- Participant Observations
- Physical artefacts

While it is possible for a case study to use a single evidence source it is generally accepted that the use of multiple sources of data gives rise to a more effective study (Yin 1994). In fact, one of the major strengths of a case study is that the opportunity exists to use many different, but often complementary sources of evidence. Due to the complex nature of the system being studied (CR within a consultancy companies) multiple sources will be used to gather evidence. The predominant source of evidence will be interviews with URS Scott Wilson staff, as this is likely to provide a good insight into CR within the company. In conjunction with this, the case study will also take into account documentary evidence in the form of URS Scott Wilson policies and procedures, as well as CR reports from other consultancy companies for comparison. The final source of information used will be the results of the benchmarking exercise in Chapter 5.

These different sources of information allow for the convergence of a number of lines of inquiry. This is also known as triangulation and is the idea that (assuming they are accurate) collecting data on the same topic from multiple sources should converge to provide a convincing and accurate conclusion for the research. This principle is being used in the

overall delivery of this thesis, as well as during the research in Chapter 6. By comparing information on company activities from a variety of sources, a more accurate picture of CR activities within a consultancy company can be obtained. As has already been stated, the two predominant sources of evidence to be used are interviews/surveys and documentation. These sources and the associated data collection methods are described below in more detail.

Interviews

When identifying potential CR issues within a company, employees' awareness and perception of the topic are likely to offer a useful source of information. While questionnaires could have been used, interviews were seen as a more flexible and effective method for collecting detailed information on staff awareness and perception of CR. As an employee of URS Scott Wilson, it was expected that members of staff would be more willing to take part in the interviews, as they would not be providing information to a third party.

Interviews offer the researcher the chance to actively participate in the data gathering process which in turn presents the opportunity to ask alternative questions, expand upon responses and even omit questions which may not be relevant. While this can have some implications for repeatability, it does mean that detailed and relevant information can be obtained from respondents. There are a number of different types of interviews used in the social sciences. Some have little to no structure and may be very conversational in nature; questions may be asked by the interviewer, but the flow of the topics is likely to be directed by the interviewee, based upon their knowledge and recollection of a topic. This method allows for a wide range of detailed information to be obtained and allows the researcher to request further information upon a specific topic. The interview can end up capturing information which was not the original aim of the research which might be relevant to the work. While it is beneficial being able to collect additional information in an unrestricted manner, there are also limitations to this type of interview. For example, this method can be very time consuming (to undertake and analyse), the unrestricted variations and changing

direction of the topics may mean that it is difficult to accurately repeat, and very large amounts of data can be produced as a result of this method.

At the opposite end of the scale is a much more structured interview with pre-determined questions. These questions can either have set or open-ended responses. A structured interview is essentially a questionnaire administered by the researcher. While questions may be expanded upon by the interviewer to help the interviewee's understanding, only the pre-determined questions are asked. This method allows the interviews to be easily repeated and allows for a more straightforward comparison to be made between the results.

The main limitation of this method is that while the interviewer can select the questions, they will still be limited to those that are chosen and additional information/topics cannot be requested/explored.

To overcome the limitations discussed above, it is possible to use a combination of the two interview types to produce a semi-structured interview. Semi-structured, or focused interviews, as described by Merton, (1990) are a method of qualitative study in which the respondent is interviewed for a relatively short period of time. The questions used are generally open-ended in nature and carried out in a conversational manner, but unlike unstructured interviews, they cover a set of pre-defined topics or questions derived from the case study protocol.

This method reduces some of the limitations mentioned above as the researcher has the flexibility of an open ended interview and can ask additional questions or expand upon responses while still having a pre-set structure on which to focus the interview. The preset structure ensures that the interviews are framed within the same topic and that deviation is possible but reduced. Any deviation will be brought back on topic by the predetermined, follow up questions. While this combines some of the benefits from each technique, there are still some drawbacks associated with this method. For example, as with the unstructured method, the ability to influence the topic of conversation can make it difficult to exactly repeat the semi-structured interview.

Due to the combination of benefits which the method can offer, it was decided that a semi-structured interview would provide the most suitable methodology for interviewing URS Scott Wilson staff. The most notable benefits include:

- Pre-set questions/topics ensure that the relevant 'core' areas are covered
- Limiting the number of questions/topics to be covered allows for a reasonable degree of control over the length of the interviews
- The discursive nature of the technique allows for additional information to be collected as is needed

The questions and topics which will be covered in the interviews will be developed in line with Objective 4 (Section 1.2). Section 6.3 covers the question/topic choice along with the other operational aspects of the interview process.

Survey data

In addition to the interviews, the results from the benchmarking surveys will also be briefly reviewed in order to help assess CR activities and performance within URS Scott Wilson and other consultants. A comparison of the Chapter 5 results, and to a lesser extent, the individual questions may help to indicate areas where the consultancy sub-sector may be performing well and those areas where improvements might be made. No further surveys were undertaken – the results from the individual consultancy companies were simply compared.

Documentation

The information obtained from the staff interviews gives an insight into how the individual's within URS Scott Wilson perceive the company to be performing and how well they understand the different areas of CR. A further method of investigating the integration of CR within the company will be through the use of internal and external documentation. Data such as internal policies relating to aspects of CR (e.g. H&S or employee benefits) will give an indication of the different policies and initiatives which URS Scott Wilson is currently

employing. This information can be obtained from various sources, such as printed handouts and the company's intranet site.

A further source of documentation which may be useful for the case study are the CR reports produced by other consultancy companies. While three of these were looked at in the report review, comparisons were being made between sub-sectors, not within them. Having interviewed staff and looked at the company's CR policies, reports from other consultants may give an indication of activities that URS Scott Wilson may not be considering as part of its CR approach. The document sources used, and the findings from the work, are covered in further detail in section 6.6.

3.3.2 Analysis of Qualitative Interview Data

Unlike the data which was collected for the other empirical chapters of this thesis, the data being collected in Chapter 6 are entirely qualitative and will need to be analysed in a different way to the quantitative/semi-quantitative data obtained so far.

With unstructured and semi-structured interview data, the starting point of analysis begins with the coding of the data. This is the process whereby units of the text are analysed and labelled based upon the topics of themes which they relate to. These labels can be created using the exact words from participants, made up by the researcher or based upon an existing concept or term within the social/human sciences. This process of assigning labels or categories to the text is known as coding. It is essentially a process of defining what the data are about. Codes are tags or labels for assigning units of meaning to the descriptive or inferential information compiled during a study (Miles and Huberman 1994).

Quantitative coding applies preconceived codes (all planned before the researcher even collects data) to the data, similar to the process used in Chapters 4 and 5. However, in qualitative coding, the codes are often created as the data are studied and pieces of information begin to emerge. As the number of codes increases they can then begin to be grouped into themes, as the specific pieces of data begin to present more general sets of information. This coding process is the core feature of qualitative data analysis, as it allows

grouping of evidence and labelling of ideas so that they reflect increasingly broader perspectives which can then be compared and contrasted with one another (Creswell and Clark 2007). This process is sometimes known as thematic coding. It is this type of coding which will be used to analyse the transcripts from the URS Scott Wilson staff interviews as it will allow similarities and differences in the views of employees to be identified. Understanding the general themes within these views, as well as reviewing company policies and other consultancy reports will help to highlight where CR issues may lie, as well as possibly beginning to identify ways in which issues might be addressed.

3.3.3 Considerations of the Case Study Method – Strengths and Weaknesses

A frequent criticism of the coding method is that it seeks to transform qualitative data into quantitative data, thereby draining the data of its variety, richness, and individual character. Analysts respond to this criticism by thoroughly exposing their definitions of codes and linking those codes soundly to the underlying data, therein bringing back some of the richness that might be absent from a mere list of codes. The codes used in this review process along with the interview notes are presented in Appendix B. The notes from the interviews shown in Appendix B also demonstrate how the coding has been applied to the responses. These data are discussed in detail in section 6.4.1.

3.4 CHAPTER SUMMARY

This chapter has provided a background of the methods which were relevant and suitable for the research in this thesis. The mixed method approach which was used during this research will serve to triangulate data from the variety of sources which were interrogated in order to achieve the aims and objectives set out in section 1.2. In order to be applicable for the research in the following chapters, some of the methods employed have required alteration or in the case of the report review an entirely new approach was developed. These new aspects of the methods are described in each of the relevant chapters.

4. CR REPORTING TRENDS IN UK CONSTRUCTION

Corporateregister.com states that CR reporting has become an established element of business communication by the world's leading companies, with over 2,500 CR reports being published during 2007 (www.corporateregister.com). Reporting is a direct method by which companies can reach their stakeholders and inform them of their efforts in relation to CR. This chapter will interrogate this data source in an effort to identify trends which might exist within it.

Research objective for this chapter

2. Investigate CR reporting practices of construction companies to identify trends in reporting as well as possible reasons why these trends might be occurring

Chapter goals

By answering the following questions the above objective can be achieved:

RQ 1 - What areas are most commonly reported upon by the industry and why?

RQ 2 - How do these topics vary throughout the industry and over time, and why might this variation occur?

To answer these questions and achieve the objective, content analysis (Bryman 2008) of publicly available company reports and CR website information was employed. The background to this approach is covered in section 3.1. This analysis of CR reports was carried out twice over the course of this research project. The first review in 2006 involved the development of a comparison framework (see section 4.2) and an initial comparison of companies CR reporting habits and trends in the 2006/7 reporting year. A second review was then undertaken in 2010 of the same companies (where possible) to provide a longitudinal comparison of reporting.

The first of these reviews began to build a picture of the construction sector's priorities with regards to CR, and provide an indication of how these priorities might vary between different

sub-sectors of the industry. The second review then gave an indication of if and how these priorities have changed over time. These findings provide the first pieces of data which will be built on in the following chapters when further investigating activities and assessing performance.

While the level of detail covered by reports is not necessarily a direct indication of how well the company is performing with regards to CR, there was expected to be a connection between these two aspects. Companies undertaking effective CR practices are likely to report more extensively on their operations as a way of ensuring stakeholders are aware of their efforts. It is hoped that the data collected during the research in Chapters 4, 5 and 6 will shed more light on whether this proposition is correct for the construction industry.

4.1 A REVIEW OF UK CONSTRUCTION INDUSTRY CR REPORTS

As described in section 3.1.1, at the time of undertaking the initial report review, there were few established methods available to carry out a comparison of reports and none were seen to be suitable for this research. As a result, a new framework was developed to allow for repeatable comparisons to be made of company CR reports. This framework uses Moon's (2003) CR waves in conjunction with more detailed KPIs developed by the GRI, to allow for detailed content analysis to be made of the reports. This chapter details the process of developing the framework and the results from both reviews. The findings from this research provide some potential answers to the questions posed at the beginning of this chapter.

4.1.1 Expanding CR Waves

Section 3.1.2 discusses how CR waves offer an alternative mechanism of dividing the CR lexicon with section 3.1.3 discussing how expanding these waves could provide a more useful and in-depth method of comparing CR activities. The following section details how the three waves of CR listed by Moon (2002 and 2003), (*community involvement, socially responsible products and services and socially responsible employee relationships*) are expanded upon. These additional sub-divisions will help when making comparisons and identifying areas of CR important to construction companies.

4.1.2 Identification and Development of Mini-Waves

In order to expand upon the contemporary CR waves, an initial review of 16 CR reports was undertaken. The purpose of this initial review was to identify and record the most prominent topics (i.e. those which were used as chapter titles or took up significant space in the report) within construction related CR reports. To give a broader view to this process, reports from mining and extractive companies were also included, as these industries may face similar drivers to those impacting the construction industry. The review also included reports from sector level organisations. The reports used for this initial review are listed in Table 4-1.

Sector level reports or reporting principles	Companies	Sub_Sector
The British Cement Association (2006)	Alfred McAlpine (2006)	Contractor
The Quarry Products Association (2005) Update	Anglo-American (2006)	Materials supplier
The Timber Trade Federation (2004)	Arup (2006)	Consultant
	Corus (Corus 2006)	Materials supplier
	British Petroleum (2006)	Materials supplier
	George Wimpey (2006)	Contractor
	Lafarge (2006)	Materials supplier
	Shell (2005)	Materials supplier
	Skanska (2006)	Consultant
	Tarmac (2006)	Materials supplier
	Titan (2006)	Materials supplier
	White Young Green (2006)	Consultant
	WS Atkins (2007)	Consultant

Table 4-1 The list of company reports used to identify and develop the mini-waves

Similar topics which were identified during this process were grouped together. This grouping process identified a number of subjects which are more general than the individual topics and headings seen in the reports, but more detailed than the three contemporary

waves. Therefore, the groupings of specific subjects identified during the initial review are sub-divisions of the contemporary waves. For this reason they are described as 'mini-waves'. These mini-waves provide an association between the wide variety of very specific topics identified during the initial review of construction related CR reports, and the very broad overarching contemporary waves described by Moon, (2003). Table 4-2 lists the mini-waves, the contemporary waves under which the mini-waves fall, and the related topics identified (during the initial 16 report review) which contribute to each mini-wave.

CR wave	Mini-wave	Topics contributing to mini-wave (identified during the initial review of 16 company reports)
Community Involvement	Community	Engagement
		Education
		Collaboration
Socially responsible products and services	Ethics	Corruption
		Codes of conduct
		Whistleblowing schemes
	H&S	Training
		Performance/Safety record
	Environmental performance	Performance
		Principles
		Codes of practice
		Incident reporting
	Environmental activities/issues*	Climate change
		Rehabilitation
		Promotion of biodiversity
	Carbon*	Emissions
		Footprinting
		Trading
		Strategy
	Energy and resources*	Energy efficiency
		Energy consumption
		Energy alternatives
		Waste
	Supply chain*	Management
		Supplier relationships
		Ethical and environmental standards
Socially responsible employee relationships	Workforce	Training
		Competence
		Development
		Diversity

Table 4-2: Contemporary CR waves as described by Moon (2002), with the relevant mini-waves and their associated topics.

* Signifies a new mini-wave as described in section 4.1.3.

These mini-waves offer a level of detail for the purposes of comparing and contrasting CR reports as they easily group together the wide range of detailed topics which are found in the reports.

4.1.3 ‘Original’ and ‘New’ Mini-Waves and their Relevance to the Construction Industry

As the prominence of global issues alters, so too will the mini-waves which make up the contemporary CR waves. For example, ten years ago, one of the most prominent mini-waves relating to *socially responsible products and services* was environmental performance. In more recent years this information is still included in CR reports, but there has been a noticeable shift towards the wider sustainability agenda and the inclusion of other new mini-waves such as resource use and supply chain relationships. This shift is noted in KPMG’s report (2005) which states “a dramatic change has been in the type of CR reporting which has changed from purely environmental reporting up until 1999 to sustainability (social, environmental and economic) reporting which has now become mainstream among G250 companies (68% reporting) and fast becoming so among N100 companies (48% reporting)”.

Therefore, it could be suggested that as the pressures on company activities vary, newer more current mini-waves will be added to the original ones, shifting the emphasis of CR activities and reporting and providing a current picture of the main CR drivers for a given sector. As with the drivers which bring these new mini-waves to the fore, their presence and prominence will be dependent upon sector. During the initial review of the 16 construction CR reports, nine mini-waves were identified in total. Of these nine, five were classed as original mini-waves due to their similarity with the traditional aspects of CR such as environmental performance, community involvement and employee welfare. The four new mini-waves relate to aspects of business operations which have come into prominence more recently such as carbon and supply chain management. These new mini-waves are denoted by a * in Table 4-2.

It can be seen that all of the new mini-waves fall under the contemporary CR wave of *socially responsible products and services*. This could be due to a number of factors. Firstly, both *community involvement* and *socially responsible employee relations* are well established, specific waves which may have relatively little scope for expansion. These two contemporary CR waves will always relate to engaging and improving relationships with the community and workforce. Conversely, providing a product or service is a more dynamic process, which is likely to alter as technologies and trends develop and change. The other reason for all of the new mini-waves appearing within *socially responsible products and services* could simply be that this is a subject which is easiest to address and hence moving more quickly than the other two waves.

Having identified the mini-waves associated with the contemporary waves, the individual more specific codes for the content analysis need to be identified and linked to the mini-waves. These detailed codes will be taken from the GRI KPIs (introduced in section 3.1) as set out in the G3 Guidelines. They are too numerous to list here, but the relevant KPIs can be seen in Table 4-4 to Table 4-7. Using the GRI KPIs in conjunction with the mini-waves of CR allows the association of very detailed information (the KPIs) with more general themes (the mini-waves and contemporary waves) in order to compare the CR reports. This connection means that the most prolifically reported upon KPIs in the CR reports should be a realistic method of identifying the more general topics and themes. This in turn could help to give an indication of the most significant drivers behind CR reporting in the construction industry.

4.2 DEVELOPING THE COMPARATIVE FRAMEWORK

The KPIs and the mini-waves both offer a technique for comparing companies' CR reports, but they both have drawbacks. The KPIs provide a very specific method for the identification of CR activities presented in the reports, but by themselves do not provide an accurate picture of the wider CR agenda. Conversely, if the mini-waves were used exclusively to compare the reports, their broad nature would allow a great deal of subjectivity to be introduced to the process which could result in an inaccurate comparison being made.

Therefore, in order to develop an effective comparative framework it is necessary to combine the two mechanisms by relating the KPIs to the mini-waves. This will give a two-tier approach to the analysis; that is, the detailed KPIs will help pick out specific subjects within the reports, while the mini-waves linked to these KPIs will provide a broader, higher level comparison of the reports.

In order to link the KPIs and mini-waves together, the full list of KPIs was reviewed and the mini-waves they were most closely linked to were identified. Some KPIs are relevant to more than one mini-wave so they appear a number of times in the framework. The framework, does not cover the GRI's strategy and profile disclosures or the management approach. These aspects of the GRI are used to set the overall context of a CR report and outline the approach that an organisation takes in order to address various topics. Many of these disclosures cannot be meaningfully related to the mini-waves, so are unlikely to benefit the comparative framework.

The results of identifying the mini-waves for each KPI are given in Table 4-4 to Table 4-7. These tables also provide a tally of the number of occurrences of each KPI in the reports, by sub-sector, which allows for a basic comparison on the extent of reporting between these sub-sectors.

4.3 REVIEW METHODOLOGY

The CR reports from the 12 organisations listed in Table 4-3 were reviewed and compared using the framework described above. A record was made of the GRI KPIs which were used in each report. Although the reports may not have used the exact wording of the GRI KPI or explicitly referred to the GRI, it was possible to associate the reported information to a relevant GRI KPI. As mentioned in section 4.2, the GRI KPIs were linked to the mini-waves, helping to build up a picture of the topics most commonly occurring within the construction sector CR reports, and reported in Table 4-4 to Table 4-7. In order to define the limits of the review, KPIs were only recorded if the relevant information appeared within the report being reviewed. For example, a number of reports referenced the company's annual financial reports or websites which contained further information relating to specific topics, but this

information was not classed as part of the CR report so it was not classed as having addressed the relevant KPIs. The review of the CR reports using the framework was initially undertaken by the researcher. The researcher's supervisors then undertook an independent verification process to ensure that the information recorded as relevant to the KPIs during the initial review was appropriate.

Material Suppliers	Contractors	Consultants and Engineers
Corus (2006) ^{GRI Self declared}	Alfred McAlpine (2006)	White Young Green (2006)*
Lafarge (2006) ^{GRI 3rd party assured *}	Balfour Beatty (2006) *	WS Atkins (2007) *
Tarmac (2006) *	George Wimpey (2006)	Scott Wilson (2006) *
Titan (2006) *	Network Rail (2006) *	Arup (2006) *

Table 4-3 Companies' CR reports reviewed in 2007

GRI - indicates a report which has been produced un accordance with GRI KPIs
 * - indicates a company which was used in the second (2010) review

The findings from the review are described in section 4.5.

4.4 CR REPORTING RESULTS 2006

Table 4-4 Results from the report review for the community involvement wave

Wave		GRI KPI's	Number of occurrences of KPI in CR reports, by sub-sector			
Contemporary	Mini-waves		Material Suppliers	Contractors	Consultants	Total
Community Involvement	Community	EC1 - Economic value generated and distributed, including revenues, operating costs, employee compensation and other community investments	1	3	2	6
		EC6 - Policy, practices and proportion of spending on locally based suppliers at significant locations of operations		1		1
		EC7 - Procedures for local hiring and proportion of senior management hired from local community at significant locations of operation	1	2		3
		EC8 - Development and impact of infrastructure investments and services provided primarily for the public benefit through commercial, in-kind, or pro bono engagement	2	3	3	8
		EC9 - Understanding and describing significant economic impacts, including the extent of impacts	2	2	2	6
		HR9 - Total number of incidents of violence involving rights of indigenous people and actions taken				
		LA8 - Education, training, counselling, prevention, and risk control programs in place to assist workforce members, their families, or community members regarding serious diseases	3			3
		SO1 - Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting	2	2	2	6
		SO5 - Public policy positions and participation in public policy development and lobbying	1			1
		SO6 - Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country				
		Total	12	13	9	

Table 4-5 Results from the report review for the original mini-waves within socially responsible production processes

Wave		GRI KPI's	Number of occurrences of KPI in CR report, by sub-sector			
Contemporary	Mini-waves		Material Suppliers	Contractors	Consultants	Total
Socially responsible production processes	H&S	LA6 - Percentage of total workforce represented in formal joint management-worker H&S committees that help monitor and advise on occupational H&S programs				
		LA7 - Rates of injury, occupational diseases, lost days and absenteeism, and number of work related fatalities	4	4	3	11
		LA8 - Education, training, counselling, prevention, and risk control programs in place to assist workforce members, their families, or community members regarding serious diseases	3	1		4
		LA9 - Health and safety topics covered in formal agreements with trade unions		1		1
		LA10 - Average hours of training per year per employee by employee category	2	2		4
		PR1 - Life cycle stages in which H & S impacts of products and services are assessed for improvement, and % of significant products and services categories subject to such procedures	1	1		2
		PR2 - Total number of incidents of non-compliance with regulations and voluntary codes concerning H &S impacts of products and services during their life cycle, by type of outcomes		2	1	3
		Total	10	11	4	
		SO2 - % and total number of business units analysed for risks related to corruption				
	Ethics	SO3 - % of employees trained in organisation's anti-corruption policies and procedures		1		1
		SO4 - Actions taken in response to incidents of corruption		1	2	3
		SO7 - Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes				
		SO8 - Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	1			1
		PR4 - Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling, by outcomes				
		PR6 - Programs or adherence to laws, standards and voluntary codes related to marketing communications, including advertising, promotion and sponsorship				
		PR7 - Total number of incidents of non compliance with regulations and voluntary codes concerning marketing communications including advertising, promotion and sponsorship				
		PR8 - Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data				
		PR9 - Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	1			1
		Total	2	2	2	
	Environmental performance	EN12 - Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	4	1		5
		EN14 - Strategies, current actions, and future plans for managing impacts on biodiversity				
		EN15 - Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	3	3	2	8
		EN19 - Emissions of ozone depleting substances by weight				
		EN20 - NOx, SOx, and other significant air emissions by type and weight	3			3
		EN21 - Total water discharge by quality and destination	1			1
		EN23 - Total number and volume of significant spills		2		2
		EN25 - Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organisation's discharges of water and runoff				
		EN26 - Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	3	3	2	8
		EN28 - Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	1	1	1	3
		EN29 - Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations, and transporting members of the workforce				
	Total		15	10	5	

Table 4-6 Results from the report review for the new mini-waves within socially responsible production processes.

CR waves		GRI KPI's	Number of occurrences of KPI in CR report, by sub-sector				
Contemporary	Mini-waves		Material Suppliers	Contractors	Consultants	Total	
Socially responsible production processes	Environmental activities	EC2 - Financial implications and other risks and opportunities for the organisation's activities due to climate change	1			1	
		EN11 - Location and size of land owned, leased managed in or adjacent to protected areas and areas of high biodiversity value outside protected areas					
		EN12 - Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	4			4	
		EN13 - Habitats protected or restored	2	1		3	
		EN30 - Total environmental protection expenditures and investments by type	1			1	
			8	1	0		
		Total					
		Carbon	EN16 - Total direct and indirect greenhouse gas emissions by weight	4	2	2	8
			EN17 - Other relevant indirect greenhouse gas emissions by weight	1			1
			EN18 - Initiatives to reduce greenhouse gas emissions and reductions achieved	1		1	2
	Total		6	2	3		
	Energy and resources	EN1 - Materials used by weight or volume	2			2	
		EN2 - Materials used that are recycled input materials	3	2		5	
		EN3 - Direct energy consumption by primary energy source	4	1	2	7	
		EN4 - Indirect energy consumption by primary source	1		1	1	
		EN5 - Energy saved due to conservation and efficiency improvements	2	1		3	
		EN6 - Initiatives to provide energy efficient or renewable energy based products	1	3	1	4	
		EN7 - Initiatives to reduce indirect energy consumption		1	1	2	
		EN8 - Total water withdrawal by source	2			2	
		EN9 - Water sources significantly affected by withdrawal					
		EN10 - % and total vol of water recycled and reused	1			1	
		EN22 - Total weight of waste by type and disposal method	2	2		4	
		EN24 - Total weight of hazardous waste - transported, imported, exported or treated	1	1		2	
		EN27 - % of products sold and their packaging materials that are reclaimed by category	1			1	
		Total		20	11	4	
	Supply chain	HR1 - % and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening					
		HR2 - % of significant suppliers and contractors that have undergone screening on human rights and actions taken	2	1	1	4	
		PR3 - Type of product and service information required by procedures, and percentage of significant products and services subject to such information	1			1	
		PR5 - Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	1	3	2	6	
		Total		4	4	3	

Table 4-7 Results from the report review for the socially responsible employee relations wave.

CR waves		GRI KPI's	Number of occurrences of KPI in CR report by sub-sector			
Contemporary	Mini- waves		Material Suppliers	Contractors	Consultants	Total
Socially Responsible Employee Relations	Workforce	LA1 - Total workforce by employment type, employment contract and region	3			3
		LA2 - Total number and rate of employees turnover by age group, gender, and region		2		2
		LA3 - Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations		1	1	2
		LA4 - Percentage of employees covered by collective bargaining agreements	1	1		2
		LA5 - Minimum notice periods regarding significant operational changes, including whether it is specified in collective agreements				
		LA6 - Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs				
		LA8 - Education, training, counselling, prevention, and risk control programs in place to assist workforce members, their families, or community members regarding serious diseases	3			3
		LA10 - Average hours of training per year per employee by employee category	2	2		4
		LA11 - Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	2	4	2	8
		LA12 - % of employees receiving regular performance and career development reviews			1	1
		LA13 - Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity	1			1
		LA14 - Ratio of basic salary of men and women by employee category	1	1		2
		HR3 - Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the % of employees trained		1		1
		HR4 - Total number of incidents of discrimination and actions taken	1		1	2
		HR5 - Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk and actions taken to support these rights	1		1	2
		HR6 - Operations identified as having significant risk for incidents of child labour, and measures taken to contribute to the elimination of child labour			1	1
		HR7 - Operations identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of forced or compulsory labour			1	1
		EC 3 - Coverage of the organisations defined benefit plan obligations		2		2
		EC 5 - Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operations	1			1
		Total	16	14	8	

4.5 ANALYSIS OF RESULTS FROM 2006 REVIEW

As stated previously, the number of KPIs which were reported on in the CR reports allowed the most prominent mini-waves to be identified which, in turn, may provide an indication of the more significant drivers behind CR reporting in the construction industry. The number of reports which addressed at least one KPI from each mini-wave was also thought to be of relevance as this can be used as a simple method of identifying which mini-waves were more commonly reported upon. Based upon the number of occurrences of at least one KPI from a mini-wave, Table 4-8 gives an indication of the most prominent mini-waves from the 12 reports. These were:

- Health and safety
- Community
- Energy and resources
- Workforce; and
- Environmental performance

Wave	Mini-wave	No reports with at least one KPI from mini-wave (out of 12 reports)
Community involvement	Community	11
Socially responsible production Processes	Health and safety	11
	Ethics	5
	Environmental performance	9
	Environmental activities	5
	Carbon	8
	Energy and resources	11
	Supply chain	7
Socially responsible employee relations	Workforce	11

Table 4-8 Number of 2007 CR reports which reported upon at least one KPI from a given mini-wave.

A more detailed comparison of the results is presented in the next section.

4.5.1 Comparison by Mini-Wave

Community

Of the possible ten KPIs which related to this mini-wave, three or more companies reported on six of them. EC8, *Development and impact of infrastructure investments and services provided primarily for the public benefit through commercial, in-kind, or pro bono engagement*, was reported on by eight companies, suggesting that reporting on the provision of community benefits is recognised as being important across the construction industry. Raising the profile of this kind of work should, in theory, improve stakeholders' perceptions of the company; hence, it is understandable that this KPI has a relatively high occurrence. Three other KPIs from this mini-wave were reported upon by six companies indicating that this mini-wave is of a relatively high importance from a reporting perspective. Table 4-4 indicates that contractors reported most extensively on community-related KPIs which may be as a result of the disruption that is often caused as a result of construction work. Providing community benefits (whether through voluntary schemes or planning conditions) may be a way in which contractors attempt to compensate for these disruptions.

Health and Safety

This was expected to be a very high priority in relation to companies reporting activities. Four KPIs were reported on by more than three companies. Eleven companies provided data relating to LA7: *Rates of injury, occupational diseases, lost days and absenteeism, and number of work related fatalities*, indicating that this is a priority issue for the sector as a whole. That being said, the other three KPIs which were most extensively reported in the mini-wave were only covered by three or four companies. This suggests that while many companies report on the straight forward H & S performance, other KPIs which carry less weight in terms of the impact they might give to a report, are often overlooked or seen as less useful in delivering the company's CR message. For example, LA6: *Percentage of total workforce represented in formal joint management-worker H & S committees that help monitor and advise on occupational H & S programs*, was not covered by any of the reports. This could be due to the fact that the committees responsible for these programmes may be

very small in relation to the overall size of the workforce. Having a very small percentage of employees involved in this process could reflect negatively on the company.

H & S was most widely reported upon by materials suppliers, and contractors (10+ occurrences in each sub-sector). Consultants did not report very widely on this mini-wave, with only four instances of companies reporting a KPI within this set. This could be due to the fact that consultants undertake relatively little site work; consequently occurrences of incidents may be lower and/or less severe so the sub-sector does not see it as such a high priority topic to report upon.

Ethics

Of all the mini-waves, ethics was the least well addressed in the reports. Of the 10 KPIs available, only SO4: *Actions taken in response to incidents of corruption*, was covered by more than one company. Corruption within the construction industry is a complex and sensitive issue. It is generally assumed that it occurs, but the form and scale of corruption is by its nature difficult to establish. A survey undertaken by the CIOB stated that "The high response rate for this survey suggests that this is an issue of great concern to those working in the industry" (Chartered Institute of Building 2006). Therefore, it is surprising that this mini-wave was not addressed more extensively. That is not to say that the topic did not appear in any of the reports, simply that it did not appear in enough detail to be considered to fulfil the relevant KPIs.

Environmental Performance

This was one of the better reported mini-waves. Of a possible 11 KPIs, seven were covered by company reports. Of the seven which appeared, two (EN14: *Strategies, current actions, and future plans for managing impacts on biodiversity* and EN26: *Initiatives to mitigate environmental impacts of products and services and extent of mitigation*) were reported on by eight companies. These two KPIs relate to strategies, actions and mitigation initiatives for environmental activities and, given the level of legislation which these topics benefit from, it is not surprising that a large percentage of the companies list information relating to these KPIs. Due to the prominence of these issues and the fact that most companies are likely to already

be undertaking these types of activities, it was surprising that not all of the companies addressed these KPIs in their reports. Three other KPIs were also addressed by three or more companies.

Of the three types of companies reviewed, the environmental performance mini-wave appeared most often in the reports of materials suppliers. Contractors came second, with consultants third. This ranking appears reasonable, as it seems to run in order of the potential for direct environmental impact for these three types of companies. Extraction and production of construction materials is energy intensive, directly depletes natural resources and involves some degree of processing. By contrast, mainly office-based consultancy is likely to have significantly lower potential for directly damaging the environment, so this mini-wave may be slightly less significant in terms of their reporting activities.

Environmental Activities/Issues

Although environment-related, this mini-wave was covered relatively poorly by the CR reports. Four of the five KPIs relating to this mini-wave were found in the CR reports, but the number of occurrences was relatively low. KPIs from this mini-wave were most likely to occur in CR reports from materials suppliers. The reason for this KPI being covered extensively by materials suppliers is likely to be very similar to that of the environmental performance mini-wave as well as issues such as licence to operate.

Carbon

While this mini-wave does not have a large number of KPIs relating to it, it was relatively prominent within the construction industry CR reports. EN16: *Total direct and indirect greenhouse gas emissions by weight*, was covered by eight CR reports which indicates it is a significant topic for reporting. However, having reported these figures, only two companies saw fit to provide details on the company's efforts to reduce these outputs. This may be as a result of many companies realising the importance of disclosing greenhouse gas emissions (due to an increase in shareholder awareness of environmental issues), but not currently having the systems in place to reduce them.

Energy and Resources

This was another of the well reported upon mini-waves. 11 of the reports addressed at least one KPI from this mini-wave and of the 13 KPIs, three or more companies reported on five of them with three of these being reported on by more than five companies. This mini-wave seems to be significant for materials suppliers, with KPIs from the mini-wave being used by suppliers on 21 occasions. This is understandable due to the nature of their business, as the monitoring of energy use and resources is important to the continuation of their operations.

Supply Chain

As with the carbon mini-wave there are a limited number of KPIs which relate to the supply chain, which may have resulted in this mini-wave being under represented during the review. That being said, two of the four mini-waves were covered by four or more companies suggesting that this is an important topic for the construction industry. The spread of sub-sectors reporting on this mini-wave was fairly even and may reflect a growing awareness of the impacts which a well managed supply chain can have upon a company's operations.

Workforce

Considering its importance to a company, highlighting the benefits provided to the workforce was expected to be an important objective in a CR report. The review of the reports would suggest otherwise. While 11 companies reported on at least one KPI from this mini-wave, only four of a potential 19 KPIs were reported on by more than three companies. However, one of the KPIs: *LA11 Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings* was covered in eight reports suggesting that training of the workforce is an important topic within CR reporting. This all provides a rather mixed view of the importance of workforce issues. The low number of KPIs being reported upon could be due to the fact that many of the KPIs relating to this mini-wave are very specific and may be only partly covered in the CR reports, thus resulting in the prominence of this mini-wave being diminished.

4.5.2 Discussion of 2006 Results

The review has revealed significant variation in the variety of topics covered and level of detailed provided in reports across the sector. This variation in the extent and detail of some topics could be due to a number of reasons. For example, as mentioned above, companies may not be monitoring certain aspects of their activities in enough detail to be able to address some of GRI KPIs. Another reason, could relate to poor performance in a given area of operations. Deegan & Rankin's (1996) paper confirmed that "Australian companies will only provide environmental information which is favourable to their image". This may be true for other aspects of CR such as ethical and community issues. While a number of the GRI KPIs relate to disclosing information on legal action and fines against the company, (as with the rest of the KPIs) the voluntary nature of reporting allows for these KPIs to be omitted if they reflect badly on the company.

As expected, H&S and Environmental Performance both emerge as significant mini-waves within the construction industry reports. Some of the KPIs relating to these mini-waves occurred with a consistently high frequency across all three sub-sectors and each mini-wave also had a relatively high number of related KPIs which were addressed by the reports. There is no doubt as to the prominence of these mini-waves; they are important to the activities of most companies regardless of sector, and are likely to remain so in the future. Being such a heavily legislated aspect of operations this is likely to be the biggest driver for both of these mini-waves, although an increase in environmental activities and supply chain monitoring may also be driving increases in the reporting of these topics. Also, as can be seen in Table 2-1, the KPMG study revealed that risk management or risk reduction is an important driver across all sectors. This is especially true for environmental performance and H&S activities within the construction industry.

Carbon as well as Energy and Resources are two other significant mini-waves within the industry, judging by the number of KPIs from each which were covered in the CR reports. Both of these mini-waves contain KPIs which have the third highest rate of occurrence within the reports. The prominence of these mini-waves may be a reflection of increasing awareness of the potential issues related to climate change, environmental sustainability and

energy security. Energy and resource use will also have a direct impact on operating costs which may be another pressing driver for the prominence of this mini-wave. With regards to Carbon, legislation might also develop into an important driver with the introduction of emissions targets and attempts at trading/off-set schemes. The increase in the public's environmental concerns over the past few years may have also offered a driver with regards to Carbon, either through employee input or through the pressure of customer/client perceptions.

Community and Supply Chains emerged as the other notable mini-waves during the review. Over half of KPIs from the Community mini-wave were covered in more than three of the company CR reports. This suggests that community related activities are an important consideration for many companies. This could be due to a wide range of drivers, one of the most important of these is likely to be that of reputation and perception. Poor perception of the company by the communities in which it operates could cause a number of problems. Firstly, a bad reputation may increase the likelihood of opposition to the company's operation or its expansion into other regions. A bad perception may also reduce the number of community members who are willing to work for the company, resulting in workforce issues. With regards to construction companies, poor performance in community engagement may result in clients wishing to distance themselves from the company through fear of also obtaining a poor image. Construction projects often involve extensive public consultation, so in raising peoples' awareness of a company's community activities, CR reports could influence public or planning authority opinion of the company before these consultations occur.

Many company reports mentioned the issue of supply chain management and expressed a desire to address it in their operations. However, it would appear to be a newly emerging topic with relatively little detail on how CR issues can actually be addressed throughout the supply chain. Risk management and risk reduction may be strong drivers for this increase in supply chain management considerations. For example, involvement with companies which perform poorly with regards to H & S, the environment and ethics can potentially cause a range of negative impacts for an organisation. This might include loss of business, damage

to reputation and in some cases the risk of litigation. For this reason companies may attempt to manage the risk they are exposed to, by reducing their exposure to, and association with these underperforming companies.

Although the majority of companies reported on one or more of the KPIs from this mini-wave, in terms of the overall number of KPIs which could have been covered it was very under-represented in the reports. This may be due to the fact that many of the KPIs which make up this mini-wave are very specific and were not covered in their entirety by the reports. This meant that many of the reports did have large sections dedicated to the benefits and opportunities available to their employees but did not provide the information required by the KPIs. This is a drawback of the GRI KPI methodology and future versions of the framework could be developed to address this problem.

While ethical issues such as corruption and bribery are generally seen to be less of a problem in the UK, international construction projects (especially in the developing world) can often come up against such issues. As the majority of the companies reviewed operate internationally, it was surprising that the ethics mini-wave was so under-represented. The topic was mentioned in a number of the reports, but very briefly with very limited information/figures with which to address the KPIs.

This research suggests that the extent and level of detail covered by the CR reports can vary significantly across the industry. On the whole, materials suppliers seem to be addressing more of the GRI KPIs in their reports. However, this is influenced by the fact that one supplier (Corus) produces a report which is very targeted towards the KPIs. Consultant organisations seem to be performing less well with regards to reporting the KPIs, but again there is a possible explanation for this, for example, Scott Wilson's report is actually a Communication on Progress (CoP) for the UNGC (www.unglobalcompact.org) and is tailored to address the requirements of this type of report, so it does not have the flexibility with regards to choosing the topics which it covers. Therefore, many of the standard topics which other CR reports address are not dealt with in the Scott Wilson CoP which may detract from the overall scores received by consultancies during the review.

It is clear from the review that firstly, CR reporting is an area that the construction industry is aware of and trying to tackle. Secondly, there seems to be a common thread of CR mini-waves which the industry wishes to address. These may not be unique to the construction industry, but identifying and raising awareness of their importance may be beneficial to the industry, in terms of working towards a coherent CR approach.

4.6 2010 CR REPORT REVIEW

The 2006 report review provided a broad indication of the industry's attitudes towards CR as well as highlighting some of the areas which appear to be of importance to companies and sub-sectors within the industry. This review also provided the basis from which the other research areas and methodologies in the project began to develop. A review of the same 12 company reports would allow any temporal changes in reporting to be identified amongst the companies and industry sub-sectors. The same methodology was employed for the second review which was undertaken in early 2010.

Although the same methodology was used for the second review there were a few minor changes which had occurred over the period between reviews. Three of the companies chosen for the initial review have since been merged with larger ones, so in some cases the original companies no longer exist. Corus has been acquired by Tata Steel, Alfred McAlpine has been purchased by Carillion and George Wimpey was acquired by Taylor Woodrow to form Taylor Wimpey Plc and later Vinci. Where this has occurred, the new parent company's report was reviewed instead. While this has potential to affect the comparison, it was not seen to be of a significant enough impact to warrant choosing entirely new companies to include in the comparison which would have made the longitudinal analysis ineffective. The company reports which were used in the second review are shown in Table 4-9.

Material Suppliers	Contractors	Consultants and Engineers
Tata Steel Group (2009)	Carillion (2008)	White Young Green (2009)
Lafarge (2008) GRI 3rd Party assured	Balfour Beatty (2008) GRI self declared	WS Atkins (2009)
Tarmac (2008) GRI self declared	Taylor Wimpey (2008)	Scott Wilson (2009)
Titan (2008) GRI 3rd Party assured	Network Rail (2009)	Arup (2009)

Table 4-9 Company reports used in the 2010 review

The findings from the second review are shown in Table 4-10 to Table 4-13 and discussed in section 4.7.

Table 4-10 Comparative framework results for the community involvement wave

CSR Waves		Global Reporting Initiative - KPI's	Number of occurrences of KPI in CR report by sub-sector			
Traditional	Mini-Waves		Material Suppliers	Contractors	Consultants	Totals
Community Involvement	Community	EC1 - Economic value generated and distributed, including revenues, operating costs, employee compensation and other community investments.	4	2	1	7
		EC6 - Policy, practices and proportion of spending on locally based suppliers at significant locations of operations	2			2
		EC7 - Procedures for local hiring and proportion of senior management hired from local community at significant locations of operation	2	1		3
		HR9 - Total number of incidents of violence involving rights of indigenous people and actions taken.				
		LA8 - Education, training, counselling, prevention, and risk control programs in place to assist workforce members, their families, or community members regarding serious diseases	1	2		3
		EC8 - Development and impact of infrastructure investments and services provided primarily for public benefit through commercial and, in kind or pro bono engagement.	2	3		5
		LA11 - Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	1	3		4
		SO1 - Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.	2	3		5
		SO5 - Public policy positions and participation in public policy development and lobbying	2			2
		SO6 - Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country				
Total			16	14	1	31

Table 4-11 Comparative Framework results for the old mini-waves within socially responsible production processes.

CSR Waves		Global Reporting Initiative - KPI's		Number of occurrences of KPI in CR report by sub-sector			
Contemporary	Mini-Waves			Material Suppliers	Contractors	Consultants	Totals
Socially Responsible Production Processes	Health and Safety	LA6 - Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs			1		1
		LA7 - Rates of injury, occupational diseases, lost days and absenteeism, and number of work related fatalities by region		4	4	4	
		LA8 - Education, training, counselling, prevention, and risk control programs in place to assist workforce members, their families, or community members regarding serious diseases		2	3		5
		LA9 - Health and safety topics covered in formal agreements with trade unions					
		LA10 - Average hours of training per year per employee by employee category		2	1		3
		PR1 - Life cycle stages in which H & S impacts of products and services are assessed for improvement, and % of significant products and services categories subject to such procedures		3	2		5
		PR2 - Total number of incidents of non-compliance with regulations and voluntary codes concerning H & S impacts of products and services during their life cycle, by type of outcomes		1	2		3
		Total		12	13	4	29
		SO2 - % and total number of business units analysed for risks related to corruption		2		1	3
		SO3 - % of employees trained in organisation's anti-corruption policies and procedures		1	1		2
	Ethics	SO4 - Actions taken in response to incidents of corruption		1	1		2
		SO7 - Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes		1	1		2
		SO8 - Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations		2	1		3
		PR4 - Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling, by outcomes		1		1	2
		PR6 - Programs or adherence to laws , standards and voluntary codes related to marketing communications, including advertising, promotion and sponsorship		2			2
		PR7 - Total number of incidents f non compliance with regulations and voluntary codes concerning marketing communications including advertising, promotion and sponsorship		1	1		2
		PR8 - Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data		1			1
		PR9 - Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services		2	1		3
		Total		14	6	2	22
	Environmental Performance	EN12 - Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas		2	3		5
		EN14 - Strategies, current actions, and future plans for managing impacts on biodiversity		3	1		4
		EN15 - Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk					
		EN19 - Emissions of ozone depleting substances by weight		2	1		3
		EN20 - NOx, SOx, and other significant air emissions by type and weight		4			4
		EN21 - Total water discharge by quality and destination		1			1
		EN23 - Total number and volume of significant spills		2	3		5
		EN25 - Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organisation's discharges of water and runoff					
		EN26 - Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation		2	1		3
		EN28 - Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations		4	3	1	7
	Total	EN29 - Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations, and transporting members of the workforce			1		1
				20	13	1	34

Table 4-13 Comparative Framework results for the *socially responsible employee relations wave*

CSR Waves		Global Reporting Initiative - KPI's		Number of occurrences of KPI in CR report by sub-sector			
Contemporary	Mini-Waves			Material Suppliers	Contractors	Consultants	Totals
Socially Responsible Employee Relations	Workforce	LA1 - Total workforce by employment type, employment contract and region		4	1		5
		LA2 - Total number and rate of employees turnover by age group, gender, and region		3	2		5
		LA3 - Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations		1	1		2
		LA4 - Percentage of employees covered by collective bargaining agreements		3	1		4
		LA5 - Minimum notice periods regarding significant operational changes, including whether it is specified in collective agreements		2			2
		LA6 - Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs		1	1		2
		LA8 - Education, training, counselling, prevention, and risk control programs in place to assist workforce members, their families, or community members regarding serious diseases		2	4		6
		LA10 - Average hours of training per year per employee by employee category		3	1		4
		LA11 - Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings		1	3		4
		LA12 - % of employees receiving regular performance and career development reviews		2	2		4
		LA13 - Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity		1	2		3
		LA14 - Ratio of basic salary of men and women by employee category		2			2
		HR3 - Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the % of employees trained		1			1
		HR4 - Total number of incidents of discrimination and actions taken		2			2
		HR5 - Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk and actions taken to support these rights		4		1	5
		HR6 - Operations identified as having significant risk for incidents of child labour, and measures taken to contribute to the elimination of child labour		3		1	4
		HR7 - Operations identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of forced or compulsory labour		3		1	4
		EC 3 - Coverage of the organisations defined benefit plan obligations			1		1
		EC 5 - Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operations		1			1
		Total		39	19	3	61

4.7 ANALYSIS OF RESULTS FROM 2010 REVIEW

As with the previous review, it is proposed that the number of KPIs reported upon in a given mini-wave provides an indication as to the importance or priority of that topic to the companies and to the sector as a whole. The first review of CR reports gave an indication of the extent of reporting and the efforts companies were making in relation to CR activities. The second review will provide the same data to give a current indication of the industry's efforts, but will also allow for a comparison to be made on how reporting has changed over time. Therefore, the first stage is to review the results and identify which are the most prominent mini-waves. While there were five mini-waves which were more prominent in the first review this has expanded slightly to seven in the second review due to a number of mini-waves occurring with the same frequency. The prominent mini-waves were identified based upon the number of reports which addressed at least one KPI from each mini-wave. Table 4-14 provides the full list and the number of occurrences. The seven most prominent were as follows:

- Health and safety
- Carbon
- Energy and resources
- Community
- Environmental performance
- Environmental activities
- Workforce

The priority topics seen in the second review still contain the same five topics which were identified in the first review, as well as expanding slightly to include Carbon and Environmental Performance. The recurrence of five prominent topics from the first review suggests that these are areas of operations which are relevant and therefore important to the industry.

Wave	Mini-wave	No reports with at least one KPI from mini-wave	Change from 2006
Community involvement	Community	9 (11)	↓
Socially responsible production Processes	Health and safety	12 (11)	↑
	Ethics	4 (5)	↓
	Environmental performance	9 (9)	↔
	Environmental activities	9 (5)	↑
	Carbon	11 (8)	↑
	Energy and resources	11 (11)	↔
	Supply chain	7 (7)	↔
Socially responsible employee relations	Workforce	9 (11)	↓

Table 4-14 Number of 2009 CR reports which reported upon at least one KPI from a given mini-wave.

NB. Numbers in brackets indicate scores from 2006 review.

While ethics was expected to be an important topic for reporting upon, it appeared to be of relatively low importance being the least commonly reported upon mini-wave in both the reviews. Conversely, the community mini-wave was not expected to be reported upon regularly, but did in fact feature prominently in both reviews. As mentioned in section 4.5, this comparison using the number of reports which reported upon at least one mini-wave is a very broad method. For this reason, it is also useful to look at each of the mini-waves in a little more detail which will be done in the following section.

4.7.1 Comparison by Mini-Wave

Community

From 10 possible KPIs, six were reported upon by more than three companies which is the same as the first review. Although the same number of KPIs were covered, there has been some change in the KPIs which were addressed. For example while EC8 *Development and*

impact of infrastructure investments and services provided primarily for the public benefit through commercial, in-kind, or pro bono engagement, was the most extensively covered in 2007, EC1 *Economic value generated and distributed, including revenues, operating costs, employee compensation and other community investments*, was more widely reported upon in the 2010. This could in part be due the world financial climate and the company's efforts to clearly demonstrate how much financial aid it is providing even in the midst of troubling economic times.

Other areas of change between the 2007 and 2010 reviews occur when looking at the extent to which the other KPIs in the mini-wave are covered. The 2007 review had three other KPIs which were reported upon by six companies. In the 2010 review however, the next two most reported upon KPIs (after EC1) were only covered in five company reports which may indicate that this mini-wave has become slightly less important for companies. This slight drop is also indicated by the overall coverage of this mini-wave in company reports; in the 2007 review at least one KPI from the community mini-wave was covered in 11 reports, whereas that number had dropped to nine in the 2010 review. The final change in this mini-wave was in relation to its popularity with the different industry sub-sectors. It was previously reported upon more extensively by the contractors which was thought to be as a result of the disruption their work can have on communities. However, in the latest review, the materials suppliers have reported upon community KPIs more extensively. Materials suppliers also have the potential for significant impacts upon local communities in the area where they extract and process resources, so it is no great surprise that they are covering such topics in more detail.

H&S

As with the first review, H&S was expected to be of very high importance to all companies within the industry and once again the report review suggests that this is the case. LA7: *Rates of injury, occupational diseases, lost days and absenteeism, and number of work related fatalities* was the only KPI covered in all 12 reports. This made H&S the most widely reported mini-wave amongst all of the reports. While the number of KPIs reported upon within the mini-wave did not increase (still six of a possible seven KPIs reported upon) the

number of reports which they appeared in did increase. As with the 2007 review, materials suppliers and contractors reported most extensively on this mini-wave. Having all provided information on headline injury rates (LA7) it is likely that consultants see any more detail than this as excessive due to the fact that in many cases the majority of their work is office based and does not have as many H&S risks associated with it.

Ethics

In a reflection of the 2007 review, ethics was the poorest reported upon mini-wave in the reports. There was a significant increase in the number of occurrences of KPIs related to this mini-wave but it appeared that this increase was mainly down to extensive reporting by three of the companies (two materials suppliers and one contractor). This increase, even though it is only amongst a small number of companies, could signal the beginning of a change in this area. For example, one of the companies that covered this mini-wave well was amongst the 103 firms fined by the Office of Fair Trading (OFT) in 2009 for price fixing (Office of Fair Trading 2009). The increase in ethics related KPI reporting by all three parties could be as a result of this incident. While this may be a driver behind an increase in reporting on this topic, it does still not appear to be a significant one for most of the companies who were reviewed. Ethics was mentioned in many of the reports but not in a great deal of detail.

Environmental Performance

This was a mini-wave which featured regularly in the company reports and while the number of companies which reported upon one of the KPIs within this mini-wave did not change between the review years there was an increase in the number of KPIs which were covered. Of a possible eleven KPIs in this mini-wave 10 instances were found during the 2010 review compared with seven in the 2007 review. Whereas the 2007 review found five KPIs which were reported on by three or more companies, in 2010 this had risen to seven KPIs being reported upon by more than three companies. While these changes have been identified during the review, the increases are relatively small, suggesting that there has been no significant change in attitudes towards this area of operations.

The KPI appeared most regularly in reports from materials suppliers followed by contractors with the number of times that the KPI appeared for these types of company being roughly the same as in the 2006 review. The exception to this is seen with the consultants, where only one instance of an environmental performance KPI was found in any of the four consultancy reports. As discussed in section 4.5.1 this is likely due to the potential level of environmental impact that these different types of company can have – office based consultants will undoubtedly have a smaller impact than companies which extract aggregates or construct roads. As a result the mini-wave may be of lower importance to consultants.

Environmental Activities/Issues

This mini-wave saw the most significant change between the two review years with an almost doubling of the number of reports which covered at least one KPI from it as well as an increase in the overall number of occurrences of these KPIs. With the exception of EN30, all of the KPIs were reported upon by four or more companies compared to 2007 in which only one KPI was reported upon by four companies. It is unclear as to why this change has occurred but it may possibly be due to the fact that the Environmental Performance metrics have become more established and 'second nature' to companies, meaning that they have now begun to report more on the methods by which these metrics are being improved.

Carbon

Carbon saw a notable change between the two reviews. In the 2007 review only eight companies reported on one of the KPIs within this mini-wave compared to eleven in the 2010 review. Considering it is a mini-wave that consists of only three KPIs this would appear to be quite a high reporting rate suggesting that this mini-wave is of significance to the industry. Each of the three KPIs were reported upon by four or more companies which provides further indication of the importance of this mini-wave. The KPI which was included in eleven reports relates to the direct and indirect greenhouse emissions by weight. This could be due to the continued pressure from various directions for companies to reduce their emissions such as government and NGOs, and a greater awareness (and acceptance) of the impact that greenhouse gases can have. As with the 2007 review while the majority of companies

reported upon gas emissions, there is still a relatively few (less than half), who reported upon initiatives they have in place to reduce the emissions.

Energy and Resources

In line with the first review 11 companies reported upon a KPI from this mini-wave making it one of the three most reported upon mini-waves in the framework. Also, in an echo of the first review, five of the KPIs were reported upon by five or more companies suggesting that this is a topic which has significance to the industry. Based upon the number of times that KPIs from this mini-wave are included in reports, it appears to be of greatest significance to materials suppliers. As mentioned during the analysis of the first review this would be understandable due to the resource and energy intensive processes which form the main part of this sub-sector's operations. Any way in which these organisations can demonstrate improved efficiency of expensive energy or dwindling resources is likely to be of interest to their stakeholders and is therefore likely to be widely reported upon by the companies.

Supply Chain

The popularity of the supply chain mini-wave appeared to be consistent between the two reviews. The number of companies reporting upon it remained at seven, and there was minimal change between the total numbers of KPIs reported upon. Even the variation between sub-sectors stayed very similar with materials suppliers covering the topic in a little more detail during the 2010 reporting period. The main change in this mini-wave was in the focus of the KPIs reported upon. In the 2007 review a greater number of companies reported upon HR2 - *% of suppliers and contractors that have undergone screening on human rights and actions taken*. In 2010 reports PR5 - *Practices related to customer satisfaction* was more widely reported upon. This could suggest a more customer focused mentality in an effort to retain business during difficult economic times.

Workforce

Although there was a slight decrease in the number of companies that reported upon one or more KPI from this mini-wave, it remained one of the most popular topics to report upon. In addition to this the number of times which KPIs were reported upon increased significantly.

Eleven of the possible 17 KPIs were reported upon by three or more companies, compared with only four KPIs receiving this level of attention in the 2007 review. The reporting of KPIs from this mini-wave by materials suppliers more than doubled in the second review, possibly indicating that this is an area of increasing importance for these companies. As with a number of the other mini-waves, the consultants' reports covered much fewer of the KPIs than the material suppliers and contractors. Consultant companies sell knowledge and expertise which is held within their workforce, so it is surprising that they did not provide more details of the benefits and support which they offer to their most important asset.

4.7.2 Discussion of 2010 results in the context of the 2006 results

The main purpose of the first review was to identify the prominent topics in relation to CR in the construction industry. The second review, also provides some insight into how reporting in the sector has changed over time. It is particularly interesting at this point in time, as it may also provide some insight into how the global financial crisis has affected CR within the industry.

The summary results from the second survey shown in Table 4-14 indicate a reasonable level of consistency in reporting between the two review dates. The five most prominent mini-waves identified in the first review were still amongst the most prominent mini-waves in the second review. This would indicate that these five mini-waves (H&S, Energy and Resources, Workforce, Community and Environmental Performance) are important topics to the industry and in all likelihood will remain so into the future. The increase in reporting of two new mini-waves (Carbon and Environmental Activities) suggests that outside of the 'core' topics, reporting habits will change over time depending on which areas companies perceive to be important.

Unfortunately, limited academic research has been identified which investigates longitudinal changes in CR reporting, so it is difficult to compare these changes with other research. Research which is available does tie in with the shifting focus found in this research. For example, findings from Gray *et al's* (1995) work suggests that "social disclosure seems to wax and wane in popularity, in the subjects to which it gives attention and in terms of the organizations which provide such disclosure". Jenkins and Yakovleva's (2006) work also

found variations in the types of reports that mining companies produced over time with a general shift from social and environmental information in annual reports to standalone reports covering these topics in greater detail. Along with this change, an increasing sophistication was also noted as companies began to report upon a wider variety of topics. However, their research did not focus as closely on the individual disclosures, or why these changes may be occurring, so the potential causes of these variations cannot be compared against this study. However, the increase in prominent topics covered by the construction company reports indicates that a similar change may be occurring. An increasing sophistication in construction CR may also be demonstrated by the general increase in the number of KPIs which were covered by the 2010 reports. With the exception of one (H&S), every mini-wave in the 2010 review saw an increase in its number of KPIs being reported.

In both reviews H&S was reported upon by the largest number of companies. The basic information on accident rates appeared to be one of the main reasons for the prominence of this mini-wave and was the only KPI which was covered by all twelve companies in both reviews. The safety of workers within the industry continues to receive negative press, as the sector is regularly listed as one of the most dangerous in the UK. In 2009/10 construction accounted for almost 30% of all fatalities occurring at work. Of the top four industries listed as having the highest number of fatalities, construction came out on top with 42 deaths occurring in 2009 (Health and Safety Executive 2009/2010). This is likely to be a very significant driver of why H&S is, and will continue to be, one of the most prominent topics for reporting by the industry.

In the 2010 review, carbon along with energy and resources were the next two most prominent mini-waves. This does show a slight change (in the prominence of Carbon) from the first review but both mini-waves were quite prominent in the 2007 review, suggesting that the findings from the second review are realistic. Carbon emissions and efforts to reduce them have become more and more prominent, not only amongst industry, but also among the general public over the past 5-10 years. This increased awareness could be a driver for companies to ensure that they provide figures in their reports, as they provide clear headline numbers which can be easily understood by readers. The prominence of the energy and

resources mini-wave in both reviews suggests that it is an area which is important to the majority of companies operating within the sector. Due to its close links with environmental impacts and their finite nature, consumption of natural resources is likely to be of great interest to many stakeholders, and the prominence of this mini-wave reflects an effort by companies to demonstrate that they are operating as efficiently as possible. As with carbon, many people are also becoming more aware of green energy and waste minimisation – increased awareness amongst stakeholders may again be helping to drive the prominence of this topic within the sector.

Monitoring and understanding the energy used and resources consumed also makes sound financial sense, as it allows the organisation to measure its operating efficiency, as well as identifying steps to improve it which can result in direct financial benefits. The increase in reporting of this information may be a reflection of the fact that many companies already collate various operational data and see fit to provide it in their reports, as it is likely to be an area in which stakeholders are interested.

The community and workforce mini-waves saw the same slight decrease between the 2007 and 2010 reviews. This may not necessarily represent a decrease in the importance of these mini-waves, but may be as a result of the change in consultancy reporting for the 2010 review. In the 2007 review, these were two areas where consultant companies appeared to be focused. In these mini-waves, consultant companies generally covered a broadly similar number of KPIs as the contractors and materials suppliers. The reports produced by the consultants in the 2010 review were significantly shorter than those in 2007. This can be seen in Table 4-15 below.

Company	Number of pages in report - 2006/7	Number of pages in report - 2008/9
Atkins	28	8
White Young Green	20	7
SW	22*	24
ARUP	25	17
<p>* At the time of the first review Scott Wilson only produced a CoP for the United Nations Global Compact and not a full, stand alone CR report.</p> <p>All of the reports reviewed were obtained as pdfs from the company websites but were also available in hard copy by request.</p>		

Table 4-15 Comparison of length of reports produced by consultant companies in the two review periods.

It is inevitable that reducing the size of report will mean a reduction in its content. The reduction in size of consultant reports may therefore have influenced the prominence of these mini-waves, making them appear less important to the sector than they actually are. If we look at the number of KPIs covered in the community and workforce mini-waves by the contractors and materials suppliers, there has actually been an increase in the period between the two reviews which is at odds with the overall decrease in number of companies reporting upon this mini-wave. It is therefore possible that this is an important topic to the industry, but its prominence has been influenced by the change in reporting practices of the consultants. The change in consultancy reporting might indicate that these mini-waves are less important to consultants than topics such as H&S or Energy and Resources – when the change in report size forces a reduction in the topics that are covered then it would not be unreasonable to assume that the topics which see a drop in coverage are those which are of less importance to the companies. Unfortunately, with the small sample used in this research, it is difficult to be certain about this.

Finally, environmental performance was a mini-wave which, although it does not appear as frequently as others such as H&S, was still common amongst all of the reports in both years of the review. There was a slight increase in the number of KPIs reported upon but in general the prominence of this mini-wave appeared to remain steady. Environmental performance has traditionally been a focus of non-financial reporting (KPMG 2005) which

could be due to the legislation associated with it, or an increase in stakeholder awareness of it. With this in mind, and coupled with the fact that construction industry companies (particularly the materials suppliers) can have significant impacts on the areas in which they operate, environmental performance information is likely to remain an important part of reporting.

Having analysed the results from the reviews the final section of this chapter will go on to draw these results together and make some initial conclusions from the research.

4.8 CHAPTER CONCLUSIONS

As stated at the beginning, the purpose of this chapter was to identify:

RQ 1 – The areas of CR most commonly reported upon within the industry;

RQ 2 – If and how reporting varies across the industry and over time; as well as why these variations might be occurring

The results from the framework reviews have provided some answers to these questions and will allow some tentative conclusions to be drawn from the research. Based upon the results of the review the following mini-waves are proposed as the priority topics for construction companies based upon the frequency with which they are reported upon by the industry. They are listed in order of frequency of occurrence in the two reviews.

- Health and safety
- Energy and resources
- Community
- Workforce
- Carbon
- Environmental performance

Although changes were noted between the two reviews, these variations were generally minimal. Of the nine mini-waves developed, the six listed above seemed to be the most focused on within the reports throughout both review years. This is based upon both the

number of times that the mini-wave was covered by a company as well as the frequency with which KPIs were used.

Having identified the topics most commonly reported upon by the industry, a number of possible drivers were also sought. These have been discussed in detail in the relevant sections of each review but a very brief summary is provided in Table 4-16 below.

Mini-wave	Summary of potential drivers
Health and safety	Highest fatality rates of all sectors in the UK
Energy and resources	High costs of energy, dwindling resources and a desire to demonstrate efficient operations
Community	Construction companies can have significant impacts on the communities in which they operate.
Workforce	The workforce is integral to operation of the company
Carbon	Increased awareness of the impacts of CO ₂ emissions amongst stakeholders
Environmental performance	Well established part of non-financial reporting

Table 4-16 A summary of drivers for the most prominent mini-waves identified during the two reviews

The potential drivers listed in Table 4-16 are based upon findings from the literature review as well as the popularity of particular KPIs in the reports. While possible drivers have been put forward based upon this research, the actual reasons that each company has for reporting upon a topic are likely to vary a great deal and be very difficult to confidently confirm or disprove. However, the approach based upon the KPIs and literature reviews was seen as useful in at least giving an indication of these reasons. Future iterations of this methodology would help to build a more accurate picture of reporting in the industry and may provide more information to indicate some of the reasons behind the reporting focus of construction companies.

The other area of interest in this chapter relates to the variation in reporting across the sector. The research found a noticeable difference between all three of the sub-sectors which were reviewed. On the whole, materials suppliers reported upon the greatest number of KPIs in each mini-wave, suggesting that reports from this sub-sector provided a greater level of detail. This greater number of KPIs was not due to companies reporting on a greater number of KPIs within a few mini-waves but also as a result of a wider range of KPIs being covered from different mini-waves. This suggests that reports from materials suppliers are also more extensive as they cover a greater range of KPIs and therefore mini-waves. Contractors were very close behind materials suppliers with respect to report detail and extent of coverage, while in both reviews consultants produced reports with much less detail and range of topics as far as the GRI KPIs are concerned. This could be due to the level of impact which consulting companies can have. Generally, their work is office-based, and is likely to have less of a direct impact on stakeholders when compared to the influence which the contractors and materials suppliers can have. These two sub-sectors are also more likely to have direct contact with a greater range of stakeholders than the consultants. For this reason the more extensive reporting may be a reflection of the companies attempting to address a wider range of stakeholder concerns.

Although the relatively short term nature of the reviews and small sample size makes it difficult to draw firm conclusions from the reviews, they still provide enough data to highlight the areas that may be of importance to the sector and give an indication of the industry's attitude towards CR. These initial findings will be built upon in the following chapters by undertaking a more focused and internal review of company efforts and performance.

The overall impression based on the research in this chapter is that the extent of reporting, i.e. the topics/areas that reports are covering and the detail which they provide, has increased over the intervening two/three years. The research also indicates that there is a significant variation in reporting within the sector, with materials suppliers and contractors appearing to report in considerably greater detail and more extensively than consultants. This could imply that these types of companies are performing better with regards to CR, but, as stated at the beginning of this chapter, the extent of reporting is not an assessment

method for performance. For this reason, the following chapter will use a benchmark exercise in an attempt to assess the CR performance of construction companies more accurately.

5. BENCHMARKING OF CORPORATE RESPONSIBILITY

The previous chapter has used publicly available information to give an indication of how the construction industry reports upon CR – which areas appear to be more prominent, which sub-sectors are more extensive reporters, as well as discussing some possible reasons behind these variations. This chapter will take a concentrate on company activities, but this time using information obtained directly from individuals within the companies through the use of a questionnaire.

Research objective for this chapter

3. Benchmark construction companies to identify which sub-sectors (materials suppliers, contractors, or consultants) are performing most effectively and why this might be

Chapter goals

As has been described in section 3.2 the data collection in this chapter will be carried out using a benchmarking exercise. This exercise will allow the following goals to be completed which will achieve the overall objective of this chapter:

Test the findings from the report review and identify additional priority topics for the sector,

RQ 3 – Identify differences and similarities in the activities which companies undertake; and

RQ 4 – Identify potential trends in sub-sector performance

Reaching these goals using the benchmarking questionnaire will not only allow for a more direct comparison to be made between companies, but will add to the findings in Chapter 4 to build a more comprehensive picture of the industry's activities and performance with regards to CR. Building this picture will then allow for a comparison to be made with URS Scott Wilson's CR activities in order to identify how well the company performs compared to its peers as well as other sub-sectors of the industry (see Chapter 6).

5.1 BENCHMARKING CORPORATE RESPONSIBILITY

As established in Chapters 2 and 4, CR has become an important theme within business. Increasing pressures from stakeholders has resulted in many organisations taking a higher profile role with regards to their social interactions. A significant problem with this recent drive towards responsible business activities and reporting, is the lack of an integrated and uniform framework on which to base their activities. Large companies often acknowledge the importance of standardisation (for example the GRI guidelines) but, in practice, there are a number of differences in how companies apply these standards (Graafland, Eijffinger *et al.* 2003). These variations make it difficult for stakeholders to easily judge an organisation's contribution to CR. This problem has been highlighted in Chapter 4 – the report review has allowed for a basic comparison between company reports, but it is very unlikely that many stakeholders will go to this effort when comparing companies.

An additional way in which the transparency of a company's CR activities might be assessed is through the process of benchmarking. This process attempts to measure a company's performance (either quantitatively or qualitatively) in relation to their peers in order to provide a more straightforward comparison. The process can be undertaken by an individual company but is more effective for all involved if undertaken by a group of companies or an independent institution. The various types of benchmarking method and their suitability to this study have been covered in section 3.2

5.1.1 Benchmarking UK Construction Companies

While there may be a number of potential issues associated with the technique (see section 3.2.2) it does offer an easily accessible method for stakeholders to make comparisons between companies. It is this comparative aspect which also makes the process useful for the research in this project, as it allows for company performance to be relatively easily assessed and compared. Having reviewed a selection of available methods in section 3.2.3 it was decided that Graafland *et al's* (2003) method was most suitable for use in this research. The main reasons for this selection related to the combination of information being obtained directly from companies, the method's repeatability, and the fact that the method

has already been successfully trialled. The remainder of this chapter looks at how this methodology was implemented and discusses the findings from the exercise.

5.1.2 Developing Graafland *et al*'s Questionnaire

While Graafland *et al*'s (2003) method was decided to be the most suitable, there were a number of aspects of the questionnaire which needed to be altered. This was either due to the fact that the questions were not relevant to the UK, or because it was felt that the questions could be improved/made more relevant.

Firstly, the questionnaire needed to be translated from Dutch to English using online software. This resulted in some interpretational issues, but these were ironed out with the help of a Dutch colleague. A number of the original questions were not valid to the UK - for example, one question related to the Dutch Association for Purchasing Management, which would have very little or no relevance to UK companies. In these instances if a UK-equivalent existed, then the question was altered to reflect this, so in the example given, the question was altered to use the Chartered Institute of Purchasing and Supply (CIPS) instead. If there was no relevant UK context, then the question was removed. Only two questions used in the scoring of the benchmark were removed from the questionnaire. As this is a small number of questions, it is likely to have a significant impact on the benchmark scores. This will allow for some basic comparisons to be made with Graafland *et al*'s (2003) findings.

Graafland *et al* used a number of questions (13 to be precise) to introduce some of the questionnaire sections, with the aim of easing the respondent in o the topic. These questions are not used to calculate the benchmark, as they are more subjective questions relating to the views of the respondent as opposed to actual business activities. While the idea of introducing the respondent to the topic could be useful, it was felt that these questions did not offer any great value to the questionnaire overall. For this reason, they were removed and six new questions were inserted. To allow for a comparison with Graafland *et al*'s results, these six new questions were not used in the calculation of the overall score, but were designed to obtain some extra information on the organisation of the company's CR operations. The results from these questions are discussed in section 5.3.1. As in Graafland

et al's methodology, these questions also serve the purpose of introducing the respondent to the questionnaire and the topics therein.

Dillman (2008), provides a whole range of very detailed guidance on survey methodology from producing questions through to the various implementation methods. As the benchmark exercise is based upon an existing questionnaire the guidance on how to produce and choose questions is not as relevant as some of the other information as the questions used, and responses available are already tied into the benchmark score calculation. Even so, the information on this topic helped to ensure that the small number of new questions and any amendments to the survey were made in a suitable way. Other considerations offered by Dillman (2008) such as booklet format, page size and the layout of the questions were all considered. A booklet format was used and produced in A4 page size. This larger booklet size allowed the text to be easily readable with uncluttered pages leaving ample space for respondents to write answers and provide further notes if desired. A single column format was also chosen for this reason. Bryman (2008) and Creswell (2009), also cover survey methodology and design but not in quite as much detail as Dillman. These textbooks were reviewed for the purposes of trying to identify additional tweaks which could have been made to Graafland's survey, but on the whole the most important points (such as layout and length) had already been addressed.

5.1.3 Questionnaire Structure and Scoring

An introduction to Graafland *et al*'s methodology was provided in section 3.2.3. This section will provide some further information on the basic principles of his questionnaire.

The questionnaire consists of 2 distinct parts - Section One consists of 69 questions (71 in the original version) which are used to measure a company's performance in relation to a range of topics. Section Two contains 13 questions which request information on the importance of a range of subjects covered in Section One of the questionnaire, as well as inquiring about the importance of a number of stakeholders.

The questions fall under six different 'concrete aspects' of CR as defined by Graafland *et al* (2003). A seventh area of the questionnaire relates to the use and organisation of CR

initiatives or 'instruments' as Graafland *et al* describe them. The seven areas of the questionnaire are shown in Table 5-1.

Questionnaire Topic	Examples of areas covered
Employees	Human rights, Dialogue with NGOs, Training, Health and safety
Suppliers	Environmental impacts of products, labour conditions of suppliers
Customers	Safety and quality of product/service, availability of alternative products/services
Society at large	Environmental impacts, support for disabled employees, local community work
Shareholders	Prevention of insider trading
Competitors	Measures to prevent bribery, measures to prevent collusion
Organisation of instruments for CR	Codes of conduct, external audits, CR reports, ethical training

Table 5-1 Questionnaire topics (after Graafland *et al* (2002))

While the names of the topics do not directly match up with the mini-waves used in Chapter 4, the areas which are covered by each of Graafland *et al*'s topics cover a range of CR aspects very similar to those of the mini-waves. This connection will allow for comparisons to be made between the sub-sectors reporting practices and benchmark performances.

Each subject area in the survey has a varying number of questions which relate to activities or initiatives that respondent companies might be undertaking. For example, each question has three possible answers (actual answers vary depending on the question) and each of these answers has a score associated with it:

- 0 – The company does little or performs poorly in relation to the subject in question
- 0.5 – The company makes some effort or performs moderately well in relation to the subject in question
- 1 – The company does a lot or performs very well in relation to the subject in question.

The greater the number of subjects/questions which a company is performing well in relation to, then the higher score for that area of the questionnaire. The results from each of the topics in the report are then used in conjunction with the weightings from Section Two of the questionnaire and the equations shown in section 5.2.2 to calculate the benchmark scores.

A copy of the survey used in this research is provided in Appendix A

5.1.4 Sample Selection and Contact Information

The selection of a questionnaire sample population is an important part of delivering the survey and ensuring that the correct group is targeted. As the selection process in this research was different to that used by Graafland *et al*, this section provides information on the steps taken in selecting the companies that were surveyed.

Petersons and King, (2009) highlight the fact that the responses from their questionnaire were very skewed in the direction of larger companies – businesses with over 200 employees had a higher response rate than SMEs. This is demonstrated further in research by Ferrell and Krugman (1983). While this may have been an issue for other researchers, it is the large construction companies that are of interest to this research project so this may actually be a beneficial phenomenon.

Graafland *et al* (2003) used a Price Waterhouse Coopers publication to select the sample for his benchmark exercise. This publication was unavailable for the UK so instead other online sources had to be used to choose the sample. Contract Journal (www.contractjournal.com) published an annual list (until 2008) of the UK's 100 biggest construction companies by turnover and profits. This was one source used to obtain suitable company names. As has already been discussed in section 3.2.3, BITC also undertake a benchmarking exercise of companies in the UK. Their website was also used to obtain company names that would be suitable to take part in the survey. Finally web searches were also carried out to identify other suitable companies in order to increase the sample size. This technique is known as purposeful sampling as it selects companies based on company size and prior participation in CR benchmarking exercises.

These search methods formed the list of companies for the survey sample. The techniques do produce a biased sample, as it is confined to the large companies that are either performing well within the industry, are already taking an active role in CR or are simply very high profile. The impact of the voluntary nature of the benchmarking exercise should also be taken into account - response bias may well occur as result of companies simply not wishing to take part in the exercise. These issues mean that it is very difficult to obtain a truly representative sample of the industry, and for this reason, the benchmark exercise does not profess to be able to provide this. What the exercise can provide is a snapshot of the activities and performance of a selection of companies in different sub-sectors that wished to take part.

Although a bias may be present, the aim of this project is to study the CR activities of large organisations operating within the construction sector. Therefore, although the sample of companies chosen may not accurately reflect the activities of all companies operating within the industry, it provides the information required to compare the activities of different organisations and highlights possible crossover areas where companies can learn from one another. Used in conjunction with the findings from Chapter 4 this information can still help to give some insight into the CR habitats of companies operating in the sector as well as highlighting some examples of best practice within the industry.

Having identified a list of companies to take part in the benchmark, web searches were used to obtain the addresses of the companies' head offices. In a number of cases a specific contact responsible for CR within the company was identified but for the majority of cases no specific contact could be found. If no specific contact could be located the questionnaires were simply addressed to Head of Corporate Responsibility/Sustainability.

5.1.5 Survey Delivery

Section 3.2.5 discusses the different formats and delivery methods that could be used for the benchmarking exercise. Due to the potential for higher responses rates as well as problems encountered with obtaining e-mail addresses for relevant individuals, it was decided that a hard copy of the questionnaire would be delivered to companies in the post. In conjunction with the hard copy, a pre-notification letter and a follow up postcard were used in accordance

with Dillman's (2008) guidance. The survey was posted in March 2009 with follow up ongoing until May 2009.

To encourage participation further, companies were also offered the incentive of receiving a report summarising their benchmark results. While some companies may already take part in existing commercial benchmarks, the cost of these in terms of time and money is often significant. Therefore, it was hoped that the incentive of receiving feedback on company performance for a relatively small time commitment and no financial costs would be enough to increase the response rate.

Using the sources discussed in section 5.1.4, 131 companies were approached to take part in the survey. These companies were spread across the three main sub-sectors which have already been discussed in previous chapters – materials suppliers, contractors and consultants. A breakdown of the types and average sizes of the companies that received the questionnaire is provided in Table 5-2.

5.2 ANALYSIS OF BENCHMARKING RESULTS

The following section discusses the initial analysis of the responses before section 0 goes on to look at these in more detail.

5.2.1 Response Rate

131 companies were provided with a copy of the questionnaire. Table 5-2 shows the number of companies in each sub-sector which received the questionnaires along with their response rates. A period of 8 weeks was allowed for the responses to be returned. Within this time follow up was also undertaken in an effort to increase response rate. At the end of this period all responses were collated into a spread sheet for analysis.

	Materials Suppliers	Contractors	Consultants	Totals
Number of questionnaires sent	14	100	17	127
Response	2	16	4	22
Response rate	14%	16%	23%	17%

Table 5-2 Response rate from the benchmarking survey showing response levels of each sub-sector

As Table 5-2 shows, the response rate to the survey was relatively low. The total response rate and those of each sub-sector were similar to the overall response which Graafland *et al* received from the exercise carried out in Holland. However, overall the response rate of the UK construction sector is slightly lower than that of the Dutch construction sector (17.3% compared to 19.5%). While the actual number of companies responding varied quite significantly, the variation in the number of companies in each of the sub-sectors has meant that response rates across the sectors are quite similar. Four companies responded to inform the researcher that they did not take part in questionnaires. While the response rates are similar to those obtained by Graafland *et al*, they are significantly lower than the suggested responses that some of the literature pertains to be able to achieve. It is unclear why this variation may occur, but it would appear that Paxson's (1992) observation of low response rates from industrial surveys have been further supported by this exercise.

Table 5-2 shows a clear bias in the number of questionnaires which were sent out. The number of contractors is significantly higher than both the consultants and materials suppliers that were approached during the exercise. The searches undertaken to obtain suitable companies for the benchmark exercise (discussed in section 5.1.4), indicate that this skew is actually reflective of the structure of large companies within the industry. This is further backed up by company lists from Construction News (Construction News (a) 2010) (Construction News b 2010) (which have been identified since carrying out the benchmark) that show there is a much greater number of large contractors (over 100) in the industry, compared to large consultancy companies (43). Accurate figures for the number of materials producers/suppliers within the industry have not been located, but the initial searches indicate

that this section of the industry is dominated by a smaller number of very large suppliers. While the survey distribution may be representative of the industry, the unbalanced structure does mean that the low response rates from the smaller populations of the materials suppliers and the consultants produce results from which it is likely to be difficult to draw clear conclusions.

As well as being able to make some comparisons between sub-sector performance, the benchmark exercise also provides the opportunity to investigate possible variations in performance in relation to company size. Financial turnover was used for this metric, as it may provide a better representation of a company's size and corresponding circle of influence than employee numbers. The turnover of the companies that were sent the survey ranged significantly from £37 million up £9.6 billion. Based upon financial turnover information, Table 5-2 also gives an indication of the response pattern of companies within the sample.

With the exception of the materials suppliers, the responses to the questionnaire appeared to come from companies with a slightly smaller turnover. This is only a simple comparison based on average turnovers, so it is by no means a clear trend. The benchmark scores provide more detail on the size of the companies that responded and although there is slightly higher representation by companies at the lower end of the large company scale this phenomenon is most likely caused by response bias than by these companies being more active and outperforming the large MNC's. The following sections will begin to look at the actual benchmarking process; the calculation of the scores and the results.

5.2.2 Benchmark Weightings and Calculations

In order to arrive at an overall benchmark score for each company, Graafland *et al* (2003) developed a calculation based upon the responses from the questionnaire and the weightings of each topic within it. These weightings were provided by the companies as part of the questionnaire.

The overall benchmark (B) was calculated using the following formula:

$$B = (\text{Sum}(w_i \times b_i) + w_o \times b_o) / (\text{Sum}(w_i) + w_o)$$

Where

w_i – denotes the weight per stakeholder

b_i – is the benchmark per stakeholder

w_o – is the weight for the use of instruments*

b_o – is the benchmark for the use of instruments

b_i is calculated by using the formula:

$$b_i = \text{Sum}(w_j \times b_j) / \text{Sum}(w_j)$$

*Instruments are the term used by Graafland *et al* for various initiatives/activities which are used to manage CR within a company such as codes of conduct, CR reports etc.

Where:

w_j – denotes the weight per aspect of CR used in the questionnaire

b_j – the value of the option filled in by the company

As mentioned in section 5.1.3, as well as obtaining weightings from the respondent construction companies, the weighting section of the questionnaire was sent to a number of construction NGOs. This provided information on how these organisations value the various aspects of CR. As with Graafland *et al*'s work this allowed for four different benchmark results to be calculated. These are described in the following paragraphs.

A score for each company can be calculated using the weightings which that company provided. This allows the company to define the areas which are most relevant to it for the purposes of measuring its CR performance, but the downside of using this weighting is that it could introduce some bias into the results. This is known as the *individual benchmark* score.

The perceptions and preferences of individual companies, even within the same sub-sector, might result in variations which could affect the company's score. For this reason, an average of each sub-sector's weightings might provide a more objective method of calculating the scores. This is known as the *sub-sector benchmark* score. This should help to filter out some of the bias which might arise as companies give more weight to the areas of CR in which they are performing well.

The next benchmark is simply a total average taken from all of the companies who responded to the questionnaire. This is known as the *total average benchmark*. This might not take account of any special aspects relevant to each of the sub-sectors but, as with Graafland *et al*'s research, was used to test the variation of benchmark results based on other weighting results.

The final benchmark was based upon the weightings given by three (of eight who were approached) NGOs who completed the relevant part of the questionnaire. Therefore, this is known as the *NGO benchmark*.

Graafland *et al* used these different benchmark calculations in order to test the robustness of the weighting aspect of the methodology and in order to undertake a similar (though not as in depth) process, the calculation of four different scores was repeated for this research. A comparison of these different benchmarks is made in the following section.

5.2.3 Comparison of Weighting Methods

The range of benchmark scores which were produced based on the various weightings were plotted against the *total average* benchmark to help illustrate possible correlations between the different methods of weighting.

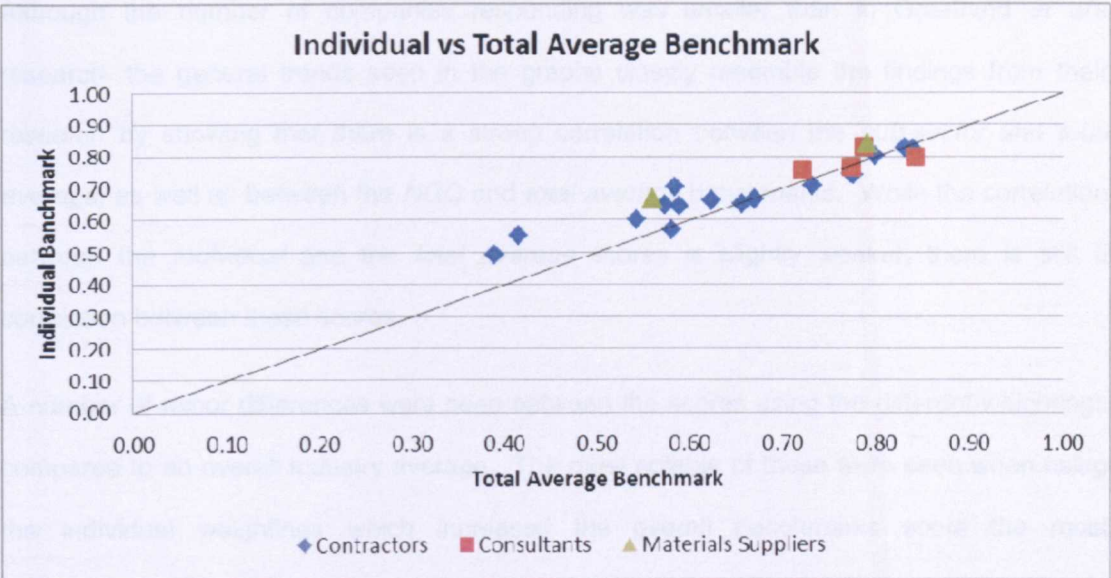


Figure 5-1 Individual benchmark plotted against total average benchmark

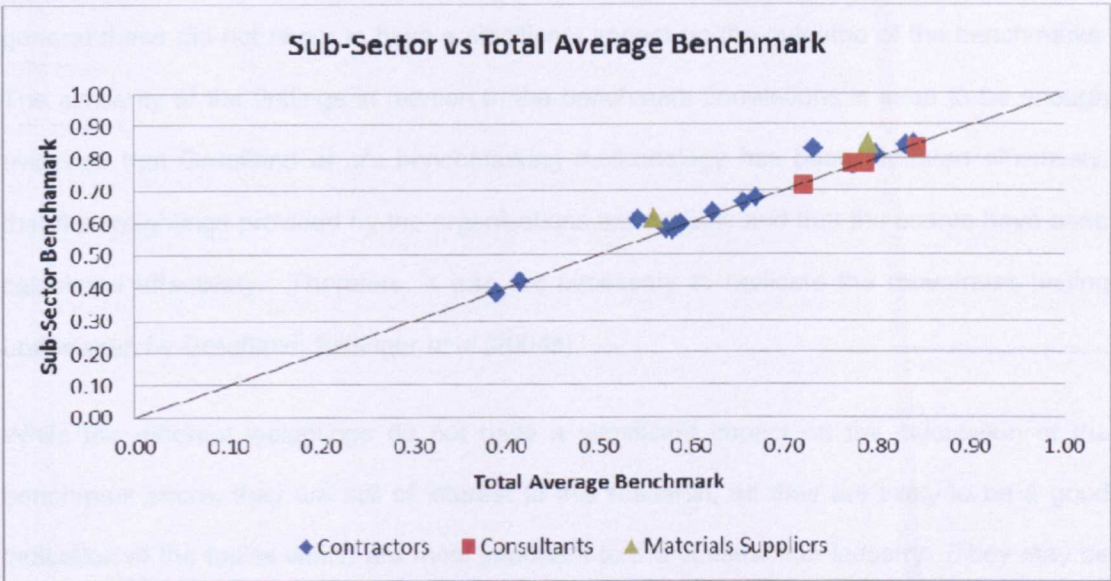


Figure 5-2 Individual benchmark plotted against total average benchmark

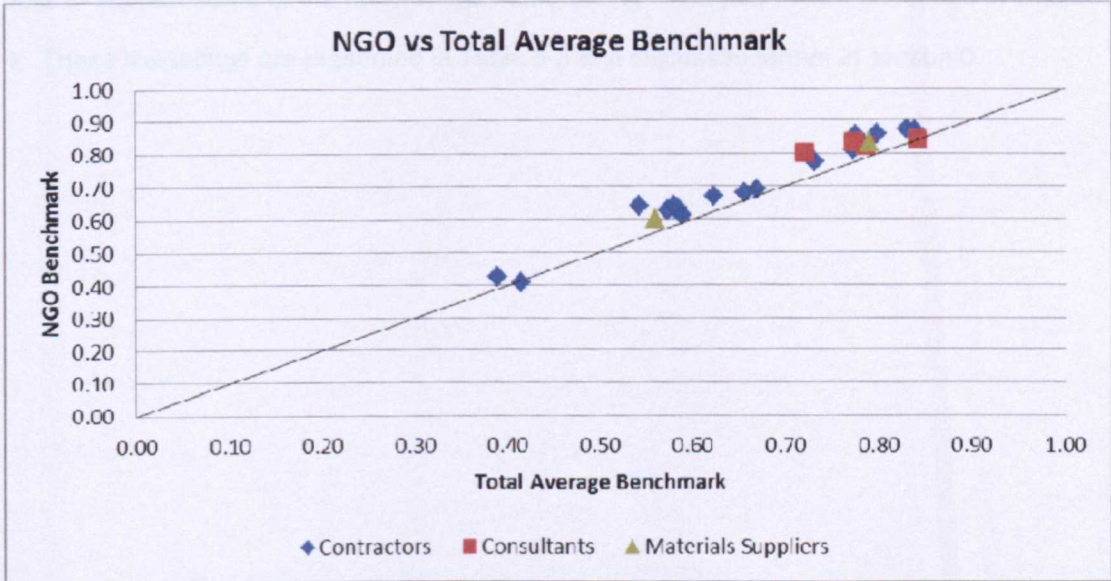


Figure 5-3 NGO benchmark plotted against total average benchmark

Although the number of companies responding was smaller than in Graafland *et al*'s research, the general trends seen in the graphs closely resemble the findings from their research by showing that there is a strong correlation between the *sub-sector* and *total average*, as well as between the *NGO* and *total average* benchmarks. While the correlation between the *individual* and the *total average* scores is slightly weaker, there is still a correlation between these scores.

A number of minor differences were seen between the scores using the different weightings compared to an overall industry average. The most notable of these were seen when using the individual weightings which increased the overall benchmarks score the most significantly. The NGO weights also increased the benchmark scores slightly. However, in general these did not seem to have a significant impact on the outcome of the benchmarks. The similarity of the findings in relation to the benchmark correlations is seen to be enough evidence that Graafland *et al*'s benchmarking methodology has been repeated effectively, that the weightings provided by the organisations are realistic and that the scores have been calculated effectively. Therefore, it was not necessary to replicate the robustness testing undertaken by Graafland, Eijffinger *et al* (2004a).

While the different weightings do not have a significant impact on the calculation of the benchmark score, they are still of interest to this research, as they are likely to be a good indication of the topics which are most important to the construction industry. They may be able to support some of the conclusions made during the report review described in Chapter 4. These weightings are presented in Table 5-3 and discussed further in section 0.

Weighting	Sub-sector	Sub-sector	Sub-sector	NGO	Total
Report topic	Contractors	Consultants	Material Suppliers		Average
Employees	0.84	0.92	0.81	0.67	0.81
Suppliers	0.86	0.72	0.88	0.81	0.82
Customers	0.93	1.00	1.00	0.88	0.95
Society at large	0.58	0.73	0.58	0.33	0.56
Shareholders	0.69	0.63	0.50	0.75	0.64
Competitors	0.86	0.92	0.50	0.92	0.80
Organisation of instruments for CR	0.64	0.82	0.33	0.63	0.61

Table 5-3 Weightings for different survey topics provided by respondents

The weightings suggest some trends in the topics which might be of relevance to construction companies. For example, it would appear that companies' relationships with customers are the most consistently important consideration to all sub-sectors of the industry. This is unsurprising, as overlooking this stakeholder group is likely to cause significant problems for the operation of the company. Employees and suppliers are other areas which appeared to be of significance across the board. Again, these groups are integral to the operation of most companies regardless of sector, so it is not particularly surprising that respondents tended to rate the importance of questions relating to these topics more highly.

Society at large included questions on environmental activities, as well as community involvement which the report review in Chapter 4 indicated to be areas of significance to construction companies. This discrepancy could have a number of causes. While environmental KPIs appeared regularly in the reports this may be due to the fact that it is a high profile topic which has a good deal of legislation associated with it. Therefore, companies report upon it because they see it as a requirement, even though it may not be seen as an area which is integral to their operations. This paints a rather negative view of the industry and the companies within it and, while it is unlikely to be true for all companies

operating in the sector, it may be the case for some. Of course, it is dangerous to infer potential motivations of an entire industry based upon a few questions completed by a relatively small sample of companies. Further, the questionnaires were completed by an individual in the company and may not actually reflect the official view of each organisation. This personal view vs. company view is more likely to be the reason for any differences. Having made a brief comparison of the weightings, the following section presents some analysis of the benchmark results using the sub-sector weights.

5.2.4 Ranking Results

The overall benchmark scores are shown below. The scores here are calculated using the sub-sector weightings as it was felt that these account of any sub-sector specific context of the subject areas in the questionnaire.

Company	Benchmark Score
Materials Supplier 1	0.844
Contractor 1	0.842
Contractor 2	0.837
Consultant 1	0.830
Contractor 3	0.829
Contractor 4	0.808
Consultant 2	0.786
Consultant 3	0.781
Contractor 5	0.777
Contractor 6	0.777
URS Scott Wilson	0.715
Contractor 7	0.677
Contractor 8	0.660
Contractor 9	0.629
Materials Supplier 2	0.613
Contractor 10	0.608
Contractor 11	0.596
Contractor 12	0.589
Contractor 13	0.581
Contractor 14	0.579
Contractor 15	0.418
Contractor 16	0.383

Table 5-4 Benchmarking results using the sub-sector weightings

Sub- Sector	Materials Suppliers	Contractors	Consultants
Response rate	2	16	4
Average benchmark score	0.73	0.66	0.77

Table 5-5 Average benchmark results by sub-sector

One of the first observations of the data in Table 5-4 is that the scores are spread across a reasonably wide range, although the majority are above 0.5. While most respondent companies achieved scores of above 0.5, none of them managed to attain 0.9 or above.

There do not appear to be any clear patterns within the results, but this may be due to the relatively low number of responses - a higher response rate may have yielded some clearer trends. The three consulting companies that took part in the survey appear in the top half of the benchmark scores, which might indicate that on the whole these kinds of companies may be undertaking more effective CR activities than other sub-sectors. Only two materials suppliers responded to the survey, and are of such markedly different operating scales that comparisons between them are likely to be unrealistic.

The results do not seem to suggest any clear correlation between company size and performance, as the larger companies appear to be reasonably well distributed throughout the range of benchmark scores. As can be seen in Figure 5-4, there was no indication that the biggest companies with the greatest amount of resources to invest in CR activities are performing better than the companies with fewer employees and lower turnovers.

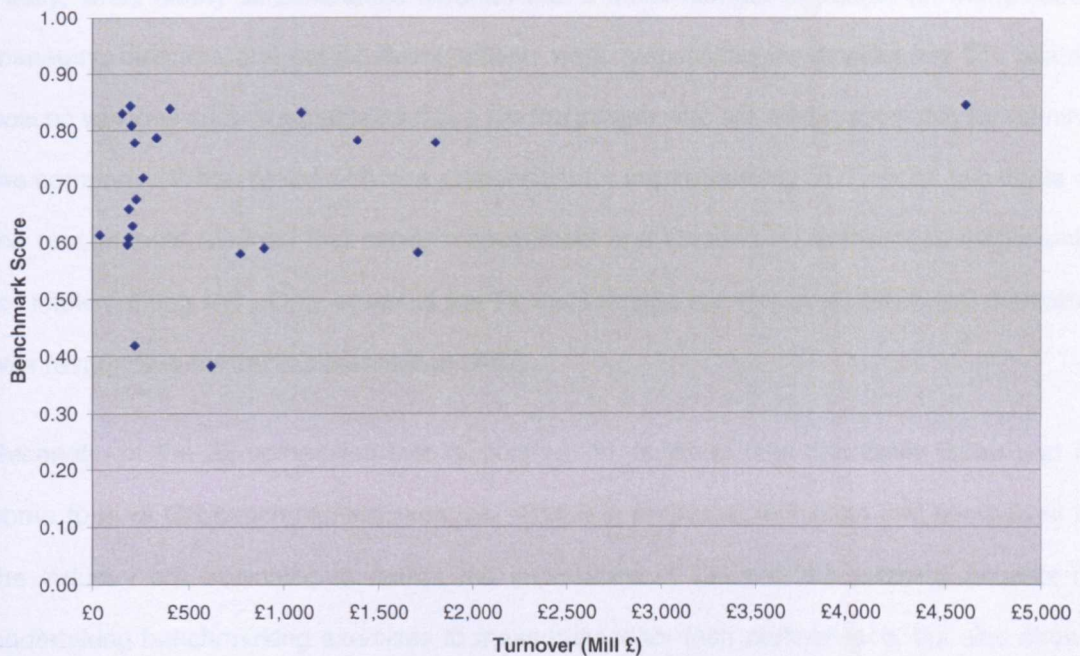


Figure 5-4 Benchmark Scores plotted against company turnover

5.3 RESULTS BY TOPIC AND SUB-SECTOR

This section will now focus on the results of the surveys. The first section of the questionnaire contained questions which did not contribute to the overall benchmark score but still obtained interesting information from the respondents. The remaining questions all contributed to the benchmarks scores.

5.3.1 Non-Scoring Questions

The first eight questions in the questionnaire were not used in the overall benchmark score calculation, but instead were used to introduce the respondent to the survey and the style of questions being used (this is covered in section 5.1.2). These questions covered the topics such as:

- what type of sub-sector the company operated in,
- who was responsible for CR activities and reporting,
- who developed policy and implemented those CR policies; and
- whether they had taken part in a benchmarking exercise before and if so, which type of benchmarking it was

Two interesting findings were seen in the results from this section of the questionnaire. Firstly, while nearly all companies reported that a small number of people (in many cases managing directors and senior management) were responsible for **developing** CR related policies which is understandable as these are the people who are also responsible for running the company. When asked who was responsible for **implementing** CR policies two thirds of the respondents reported that senior management and directors were the ones responsible for implementing CR. Only seven of the 22 respondents felt that everyone in the company was responsible for the implementation of CR.

Secondly, of the 22 companies that responded, 11 of them have previously taken part in some form of CR benchmarking exercise. This is a promising indication that companies in the industry are beginning to realise the importance of CR and the potential benefits of undertaking benchmarking exercises to measure/monitor their performance, but also shows some sampling bias

5.3.2 Scoring Questions

The questionnaire covered seven different topics which will be looked at in each of the following sections (5.3.3. to 5.3.9.). Each section contains a figure and two tables:

- The first table shows the weightings provided by the respondents for a given topic from the questionnaire.
 - This provides an indication of how important\relevant the respondents felt each topic was.
- The figure provides a summary of each sub-sector's performance in relation to that area of the questionnaire
 - This allows for performance in each topic to be assessed at a glance
- The second table gives a detailed breakdown by sub-sector performance, for the individual questions related to each topic within the questionnaire
 - This gives a more in depth look at the areas where construction companies are performing most successfully and those areas which could be improved.

Areas of high performance may indicate that the topic is being focused on due to its relevance to the company's operations, or that it is covered by legislation which forces the company to address the issue.

5.3.3 Employee Relations

Based upon the weights given by respondents (Table 5-6), this was one of the more important areas of operations roughly equal to *supplier relations*, and *responsibility towards competitors*. Consultants gave more weight to this topic than other sub-sectors which ties in with the idea that employees are one of a consultancy's most valuable assets. Keeping employees happy and retaining the workforce is likely to be an important consideration for most businesses so it is unsurprising that this topic received a relatively high weight.

Weighting	Sub-sector	Sub-sector	Sub-sector	NGO	Total
Report topic	Contractors	Consultants	Material Suppliers		Average
Employees	0.84	0.92	0.81	0.67	0.81

Table 5-6 Weights for employee relations given by respondents

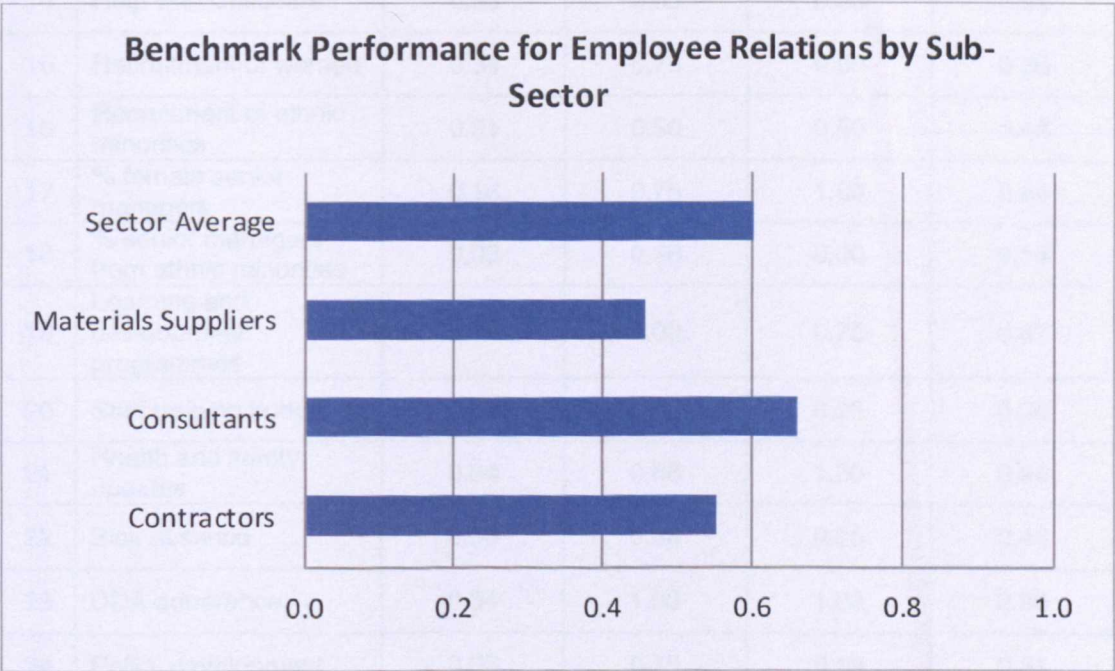


Figure 5-5 Average benchmark scores by sub-sector for the topic of employee relations

Figure 5-5 indicates that on the topic of employee relations, on average, consultants seem to be out performing other sub-sectors. This coupled with the weightings given by this sub-sector begins to indicate that this may be an area of interest and focus for consultants as it could have a noticeable effect on the their operations. However, taking into account the results from the report reviews in Chapter 4, the relationship does not look quite so clear –

consultancies were the worst of the three sub-sectors for reporting upon workforce related KPIs. Table 5-9 presents the responses in a little more detail to see if any other potential patterns/relationships appear.

Question no and topic covered		Contractors	Consultants	Materials Suppliers	Sector Average
9	Treatment of employees	0.63	1.00	0.00	0.54
Adherence to ILO with respects to:					
10	Child/forced labour	1.00	0.75	NA	1
11	Working hours	1.00	0.75	NA	1
12	Freedom of Association	1.00	0.75	NA	1
13	Dialogue with NGOs	0.02	0.13	0.00	0.05
14	Help with Childcare	0.53	0.50	0.50	0.51
15	Recruitment of women	0.34	0.75	0.00	0.36
16	Recruitment of ethnic minorities	0.31	0.50	0.50	0.44
17	% female senior managers	0.16	0.75	1.00	0.64
18	% senior managers from ethnic minorities	0.03	0.38	0.00	0.14
19	Learning and development programmes	0.86	1.00	0.75	0.87
20	Staff training budget	0.36	0.38	0.25	0.33
21	Health and safety updates	0.94	0.88	1.00	0.94
22	Sick absence	0.56	0.38	0.25	0.40
23	DDA adherence	0.94	1.00	1.00	0.98
24	Policy development	0.66	0.75	0.13	0.51
25	Staff work place issues	0.69	0.81	0.75	0.75
26	Examples of these	0.63	0.50	0.50	0.54
27	Work place socialising	0.67	0.50	0.50	0.56
28	Employee satisfaction surveys	0.45	1.00	0.63	0.69

Table 5-7 Performance per question by sub-sector in the employee relations topic

Note: Not all companies operated internationally or completed the questionnaire for their international operations. The boxes shaded grey were not applicable to all respondents. All organisations that these questions were relevant to scored full marks.

Table 5-7 gives an indication of some of the areas in which construction companies are performing well in. Adherence to the Disability Discrimination Act (DDA) and updating staff on H&S issues recorded the highest performance scores from respondents. Both of these are areas which are well legislated, and as discussed in previous chapters/sections (2.8, 4.5.2, 4.7.2) H&S appears to be an area of significant concern/focus for the construction sector. Staff development and addressing workplace issues also appear to be areas where efforts are being concentrated. Developing staff and ensuring that they are well treated may reflect efforts by companies to retain their workforce. While the percentage of women in senior management appears to be relatively high amongst materials supplier and consultants, contractors are not performing as well in this area. Ethnic minorities are even more under represented amongst senior management in all three sub-sectors. In addition to this, very few companies appear to be making efforts to actively recruit either of these groups.

5.3.4 Suppliers

Table 5-8 shows that this topic was given a similar weighting by all sub-sectors. Suppliers and sub contractors are important to all businesses and are of particular note in the construction industry. Materials suppliers and contractors gave the highest weights to this topic, most likely due to the reliance they have on a stable, well-managed supply chain to ensure delivery of the materials they require for processing and construction respectively.

Weighting	Sub-sector	Sub-sector	Sub-sector	NGO	Total
Report topic	Contractors	Consultants	Material Suppliers		Average
Suppliers	0.86	0.72	0.88	0.81	0.82

Table 5-8 Weights for supplier relations given by respondents

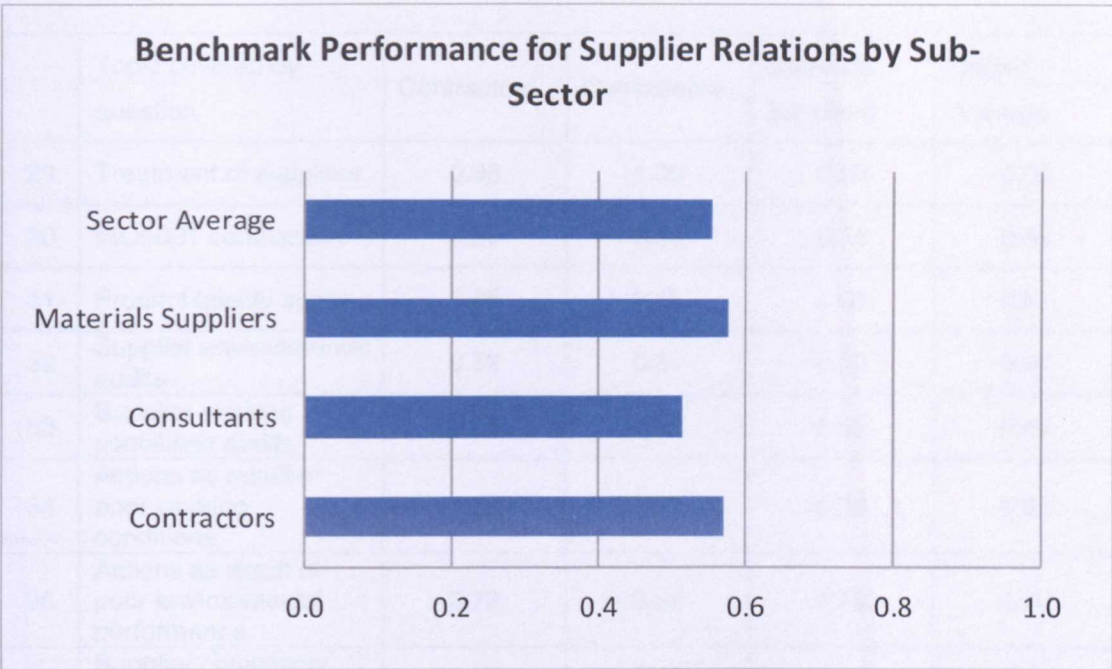


Figure 5-6 Average benchmark scores by sub-sector for the topic of supplier relations

The overall performance of the sub-sectors for the aspect of operations is relatively even as can be seen in Figure 5-6. When compared to the report reviews in chapter 3, there are some correlations – the topic of suppliers was reasonably well covered and quite evenly covered by all sub-sectors in the 2006 report review. This was also the case in the 2010 review with the exception of consultants who reported quite poorly for all subjects. This may provide further evidence that the consultants simply reduced the size of reports, and therefore the extent of coverage, due to financial constraints. Based upon questionnaire data, it appears to be a topic which is relevant to their operations, but may not be a high enough profile area to feature in their condensed CR reports.

	Topic covered by question	Contractors	Consultants	Materials Suppliers	Sector Average
29	Treatment of suppliers	0.38	1.00	0.50	0.63
30	ISO9001 certification	0.33	0.44	0.75	0.51
31	Product quality audits	0.86	0.56	1.00	0.81
32	Supplier environmental audits	0.59	0.31	0.50	0.47
33	Supplier working conditions audits	0.50	0.31	0.50	0.44
34	Actions as result of poor working conditions	0.38	0.25	0.38	0.33
35	Actions as result of poor environmental performance	0.72	0.63	0.75	0.70
36	Supplier complaints procedure	0.81	0.63	0.25	0.56

Table 5-9 Performance per question by sub-sector in the supplier relations topic

Auditing/monitoring the quality of supplier’s products seems to be an area of priority for contractors and materials suppliers but not such an issue for consultants. The quality of the products which are obtained from their suppliers is an important factor for these kinds of organisations as product quality can reflect upon them – either as a result of the material which is produced and sold or as a result of the projects constructed. Questions 32 to 35 related to auditing of suppliers and actions based on these audits. The response to these questions suggests an interesting anomaly. The amount of auditing in relation to supplier environmental performance and working conditions seems to be reasonably uniform for all sub-sectors. However, when it comes to actions taken in response to poor performance in these areas the difference is quite marked. Higher scores were awarded to companies that attempted to resolve supplier issues, rather than simply ending the relationship with them. The results indicate that with regards to environmental issues, companies seem to be willing to work through problems with their suppliers, whereas if poor working conditions are identified amongst their suppliers then more often, companies will cease trading with that supplier. There are a number of possible explanations for this. Firstly, it may simply be that environmental issues are easier and cheaper to resolve than poor working conditions. Therefore when working condition issues are identified it is simpler and more cost effective to simply end the relationship with the supplier. Alternatively it may be that association with

suppliers who have been identified as having poor working conditions in place carries greater potential for harm to company reputation than being associated with suppliers with poor environmental performance. So in this case, the relationship may be ended in order to prevent reputational harm.

5.3.5 Customer Relationships

This was the most highly weighted topic within the questionnaire. There is little variation amongst the sub-sectors of the industry, reflecting the fact that no matter what industry a company operates within, the customers/clients are the most important stakeholder. Businesses need clients to generate profits and to continue to operate. Therefore, retaining customers (particularly during the current economic climate) is undoubtedly a very important focus. The weightings and the results below indicate that this is true for the construction industry.

Weighting	Sub-sector	Sub-sector	Sub-sector	NGO	Total
Report topic	Contractors	Consultants	Material Suppliers		Average
Customers	0.93	1.00	1.00	0.88	0.95

Table 5-10 Weights for supplier relations given by respondents

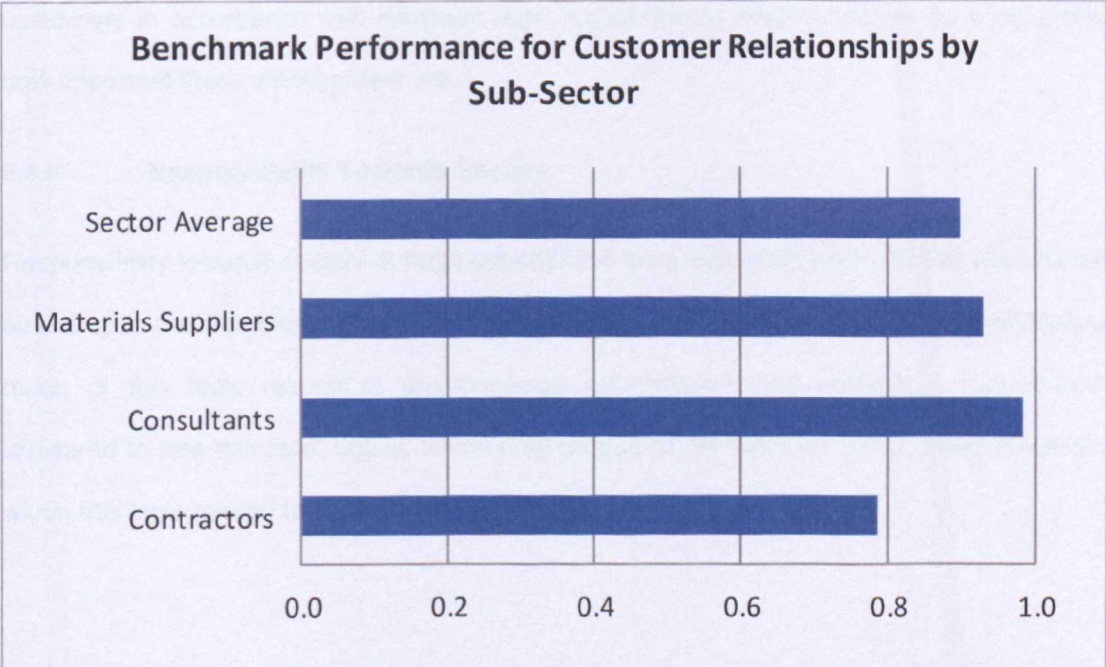


Figure 5-7 Average benchmark scores by sub-sector for the topic of customer relationships

Figure 5-7 shows the high scores that were achieved for this topic by each of the sub-sectors further demonstrating the priority given to this area of operations.

	Topic covered by question	Contractors	Consultants	Materials Suppliers	Sector Average
37	Treatment of customers/clients	0.56	1.00	0.50	0.69
38	Product quality	0.91	1.00	1.00	0.97
39	Provision of environmental info	0.91	1.00	1.00	0.97
40	Customer complaints procedure	0.94	1.00	1.00	0.98
41	Sustainable alternative	0.67	1.00	1.00	0.89
42	Misleading advertising	0.69	1.00	1.00	0.90
43	Customer satisfaction surveys	0.81	0.88	1.00	0.90

Table 5-11 Performance per question, by sub-sector in the customer relationships topic

As would be expected based on Figure 5-7 and Table 5-10, the results from the individual questions for this topic are uniformly high. The only area where scores dropped slightly was in relation to question 37. This related to whether companies treated their customers in accordance with minimum legal requirements, or if they went ‘above and beyond’ these requirements to treat them more favourably. It would appear that many companies only treat customers in accordance with minimum legal requirements, which is surprising considering how important these stakeholders are.

5.3.6 Responsibility Towards Society

Responsibility towards society at large appeared to be a topic with relatively low importance based upon the weightings given. This low importance is quite unexpected considering that much of this topic related to environmental performance and practices. Consultants appeared to rate this most highly, which may be due to the fact that some of the questions within this topic related to staff issues.

Weighting	Sub-sector	Sub-sector	Sub-sector	NGO	Total
Report topic	Contractors	Consultants	Material Suppliers		Average
Society at large	0.58	0.73	0.58	0.33	0.56

Table 5-12 Weights for supplier relations given by respondents

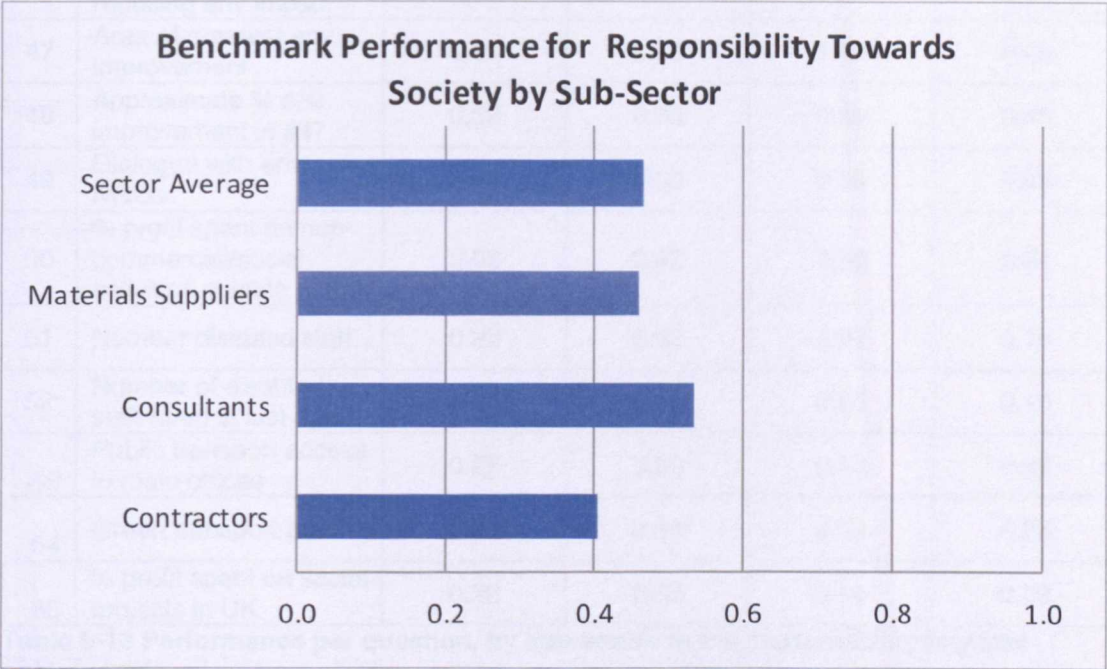


Figure 5-8 Average benchmark scores by sub-sector for the topic of responsibility towards society

The average scores from this section echo the lower weightings given to this topic. The average scores achieved for this topic were amongst the lowest for all topics within the questionnaire. Considering the prominence given to environmental KPIs in the report review in Chapter 4, the average scores achieved in this topic were expected to be higher than those seen. This result may be caused by the layout of the questionnaire. This topic contained questions relating to environmental as well as social activities. As Chapter 4 indicated, social and community activities received less focus than environmental ones which may result in the poorer performance scores for social activities seen in Table 5-13. These lower scores are responsible for bringing down the average of the topic. It may have been more pertinent to split this section of the questionnaire in two – one relating to environmental activities and the other to societal responsibilities. This might have made the comparison with the report review in Chapter 4 more straightforward.

	Topic covered by question	Contractors	Consultants	Materials Suppliers	Average
44	Environmental fines	0.70	1.00	1.00	0.90
45	Employee awareness of environmental standards/issues	0.88	1.00	1.00	0.96
46	Profit spent on reducing env impact	0.28	0.50	0.75	0.51
47	Area of greatest env improvement	0.97	1.00	1.00	0.99
48	Approximate % env improvement in #47	0.59	0.33	0.50	0.48
49	Dialogue with env NGOs	0.41	0.50	0.38	0.43
50	% profit spent on non-commercial/social activities outside of EU	0.02	0.42	0.50	0.31
51	Number disabled staff	0.22	0.33	0.00	0.18
52	Number of disabled staff hired in last 3yrs	0.06	0.33	0.00	0.13
53	Public transport access to main offices	0.27	0.58	0.13	0.32
54	Green transport plan	0.23	0.33	0.13	0.23
55	% profit spent on social projects in UK	0.22	0.33	0.13	0.23

Table 5-13 Performance per question, by sub-sector in the responsibility towards society topic

Environmental activities appear to be areas of high performance indicating that this is an area of importance or particular relevance to the industry. As discussed in Chapter 4, the legislation associated with, and the stakeholder awareness of, environmental issues is likely to be the driving force behind this better performance. The social aspects of this topic seem to be of a lower priority for most sub-sectors. While in many cases, consultants are performing slightly better than the materials suppliers and contractors the scores are still low suggesting that this topic is one where performance by the sector could be improved.

5.3.7 Shareholder Responsibility

Publicly listed companies were scored on the measures they employed to prevent insider trading. Roughly half (10) of the respondent companies were not publicly listed, meaning that this section was not relevant to all companies. Therefore, the results presented below only relate to 11 of the companies surveyed. While not all companies answered the question due to its relevance, all participants provided a weighting for this section; a summary of which is given in Table 5-14. This topic received one of the lowest weightings in the survey, being beaten only by the previous *responsibility towards society* and the *use of instruments* topics.

Weighting	Sub-sector	Sub-sector	Sub-sector	NGO	Total
Report topic	Contractors	Consultants	Material Suppliers		Average
Shareholders	0.69	0.63	0.50	0.75	0.64

Table 5-14 Weights for shareholder relations given by respondents

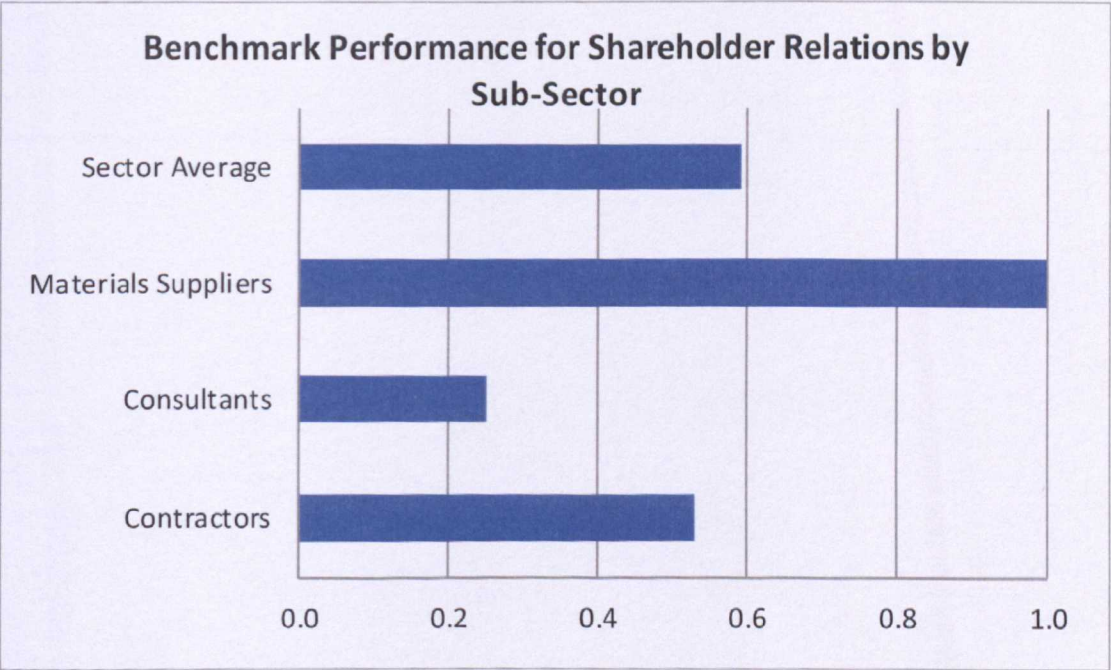


Figure 5-9 Average benchmark scores by sub-sector for the topic of shareholder relations

With a lower number of responses it is difficult to draw any real conclusions from this section. Materials suppliers score highly, but this is due to the fact that the question was only answered by one of the two companies.

	Topic covered by question	Contractors	Consultants	Materials Suppliers	Average
56	Preventing insider trading	0.53	0.25	1.00	0.59

Table 5-15 Performance per question, by sub-sector in the shareholder relations topic

As Table 5-15 shows, the only question used in this section was in relation to preventing insider trading. Half of the contractors that the question was relevant to have implemented some kind of policies/measures to prevent this problem, but this was at the minimal level of effort. In general, the scores seem quite low for this subject suggesting it is not an area of significance to companies in the industry.

5.3.8 Responsibility to Competitors

Table 5-16 shows that responsibility towards competitors was rated as one of the more important aspects of operations by respondents. The materials suppliers awarded it the lowest weight, which may indicate that companies in this sub-sector have less involvement with one another or, possibly, that the respondents in this sub-sector simply do not perceive corruption and collusion to be a major problem in the industry. Alternatively, the weightings given by contractors, consultants and construction NGOs may suggest that anti-competitive behaviour and corruption are areas that of importance to operators in the industry.

Weighting	Sub-sector	Sub-sector	Sub-sector	NGO	Total
Report topic	Contractors	Consultants	Material Suppliers		Average
Competitors	0.86	0.92	0.50	0.92	0.80

Table 5-16 Weights for responsibility to competitors given by respondents

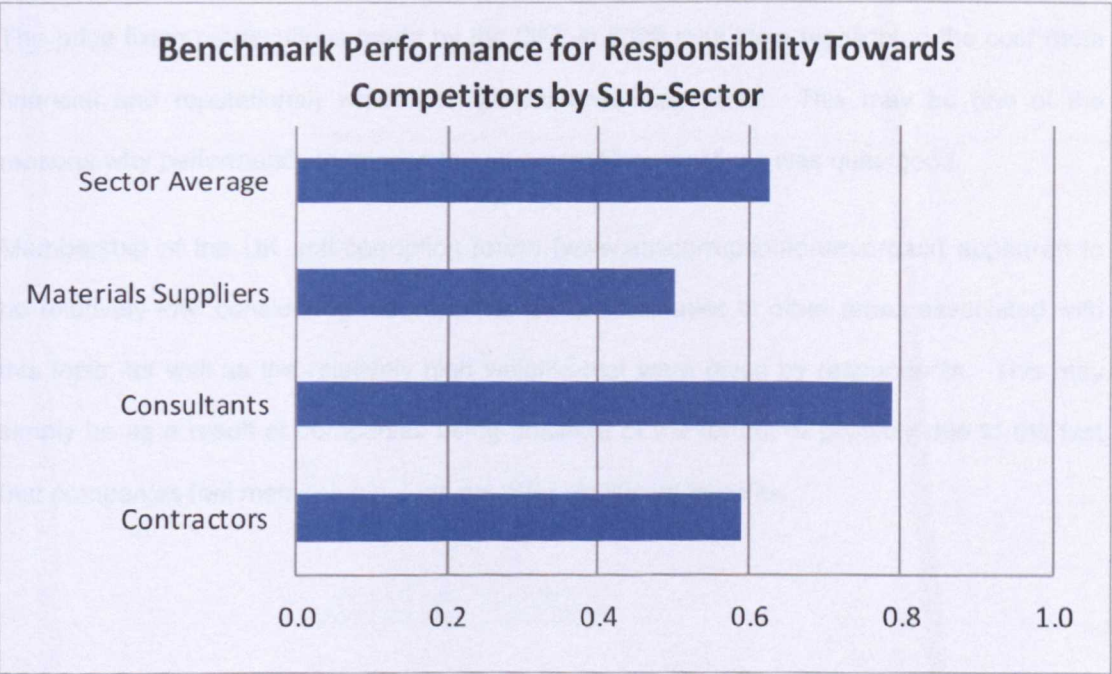


Figure 5-10 Average benchmark scores by sub-sector for the topic of responsibility to competitors

As has been seen with a number of the topics covered so far, the average scores (shown in the graphs) follow a similar pattern to the weightings given by respondents. This is also true for the responsibility to competitors topic. This correlation is understandable, given that if a company perceives certain activities/subjects to be particularly relevant to their operations

then they will likely concentrate on performing well in that activity to achieve any benefits associated with it.

	Topic covered by question	Contractors	Consultants	Materials Suppliers	Average
57	Preventing anti competitive behaviour	0.64	0.69	0.50	0.61
58	Complaints over IP rights	0.66	0.88	0.50	0.68
59	Complaints over anti-competitive involvement	0.75	0.88	0.50	0.71
60	Membership of UK anti –corruption forum	0.06	0.50	0.50	0.35
61	Company explicitly forbids involvement in corrupt activity	0.84	1.00	0.50	0.78

Table 5-17 Performance per question, by sub-sector in the responsibility to competitors topic

The performance of companies in respect of this topic is generally good which might indicate that companies realise the importance of preventing/reducing corruption within the industry. The price fixing prosecutions made by the OFT in 2008 may have highlighted the cost (both financial and reputational) which corrupt practices may have. This may be one of the reasons why performance in relation to anti-competitive practices was quite good.

Membership of the UK anti-corruption forum (www.anticorruptionforum.org.uk) appeared to be relatively low, considering the performance of companies in other areas associated with this topic, as well as the relatively high weights that were given by respondents. This may simply be as a result of companies being unaware of the forum, or possibly due to the fact that companies feel membership does not offer significant benefits.

5.3.9 Use of Instruments

The use of instruments relates to the wide variety of tools that can be employed to monitor, improve and report upon CR related issues within a company’s operations. Respondents did not appear to rate the use of CR instruments very highly, as it was one of the lowest scoring topics with regards to weightings. Consultants gave this topic the highest weight, with the materials suppliers giving one of the lowest weightings seen in any topic. The variation seen in weightings of this topic may be reflective of the wide-ranging attitudes towards CR and its effectiveness as a tool for business improvement.

Weighting	Sub-sector	Sub-sector	Sub-sector	NGO	Total
Report topic	Contractors	Consultants	Material Suppliers		Average
Organisation of instruments for CR	0.64	0.82	0.33	0.63	0.61

Table 5-18 Weights for use of instruments topic given by respondents

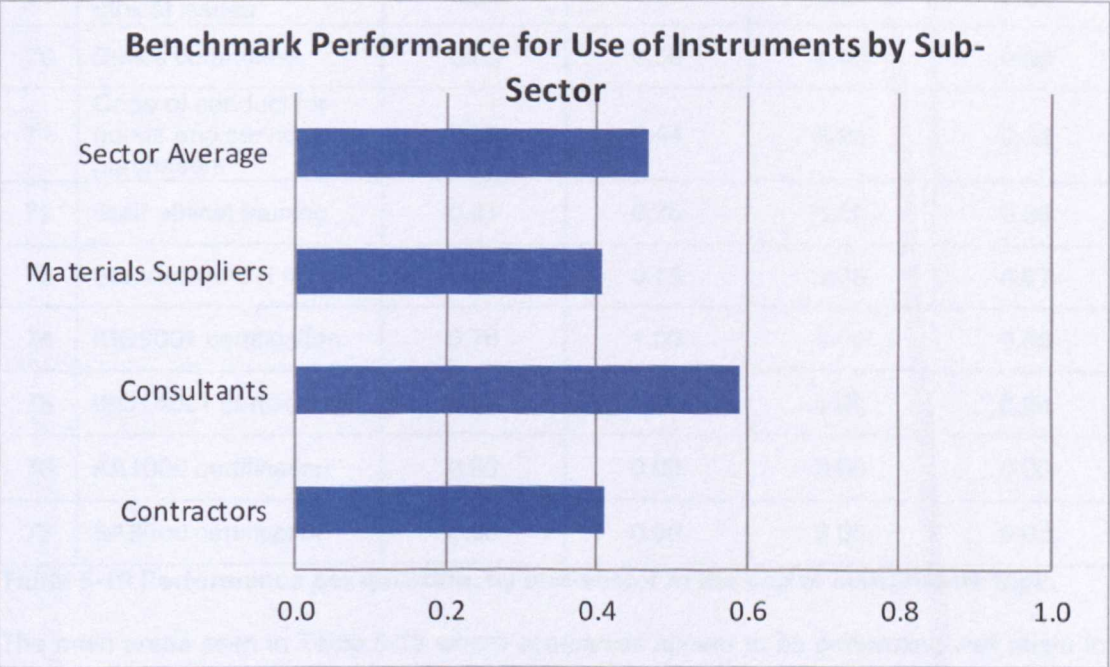


Figure 5-11 Average benchmark scores by sub-sector for the use of instruments topic

Consultants seem to place more importance in the use of instruments and back this up with a better performance than other sub-sectors. While materials suppliers rated the importance/relevance of CR instruments as very low, their performance in this area is not as

low as would be expected, based upon the previous correlations between weightings and scores in each topic area. This could indicate that while the respondents did not necessarily see the benefits of using CR instruments, there may be a view within the company that it is the 'done thing' and at least some CR practices should be implemented.

	Topic covered by question	Contractors	Consultants	Materials Suppliers	Average
62	Strategic vision /mission statement	0.25	0.00	0.00	0.08
63	Internal code of ethics	0.67	1.00	0.75	0.81
64	Public corporate code	0.31	0.50	0.75	0.52
65	Internal audits for compliance with corporate code	0.48	0.88	0.75	0.70
66	Independent audit for compliance with corporate code	0.27	0.63	0.50	0.46
67	Staff handbook	0.81	0.88	0.75	0.81
68	Staff counsellor	0.38	0.63	0.00	0.33
69	Exec board contact for ethical issues	0.59	1.00	0.00	0.53
70	Ethics committee	0.00	0.00	0.00	0.00
71	Code of conduct for goods and services purchasers	0.28	0.44	0.25	0.32
72	Staff ethical training	0.41	0.75	0.00	0.39
73	Standalone CR report	0.52	0.75	0.75	0.67
74	ISO9001 certification	0.78	1.00	1.00	0.93
75	ISO14001 certification	0.81	1.00	1.00	0.94
76	AA1000 certification	0.00	0.00	0.00	0.00
77	SA8000 certification	0.00	0.00	0.00	0.00

Table 5-19 Performance per question, by sub-sector in the use of instruments topic

The main areas seen in Table 5-19 where companies appear to be performing well relate to ISO certification, internal codes of ethics and internal auditing for compliance with corporate codes. ISO accreditation is something that many companies (especially larger ones) seek to attain, as it is often a requirement from many clients and has also been demonstrated to be connected with better financial performance (see Van der Deldt, (1997) and Sharma,

(2005)). An Internal code of ethics seems to be implemented by most companies, which contradicts the results for this topic seen in sections 4.5.1 and 4.7.1. Another result which seems out of place, is the high score achieved by consultants and contractors with regards to the internal auditing for compliance with a corporate code - especially as the results from the previous question indicate that few of these sub-sectors actually have a corporate code. It is uncertain why this discrepancy has occurred, but it may be as a result of respondents misunderstanding the question.

5.3.10 Importance of Different Stakeholders

The final questions in the questionnaire asked the respondents for their view on the relative importance of the different stakeholder groups. This ranged from 1 (unimportant) to 5 (extremely important). As well as giving a rough idea of the importance of each group, the results were also used in the calculations of the overall benchmark scores.

Stakeholder	Contractors	Consultants	MS	NGOs	Average
Employees	4.63	5.00	5.00	5.00	4.91
Customers	4.75	5.00	4.50	4.50	4.69
Shareholders	4.00	4.25	5.00	4.50	4.44
Suppliers	4.19	4.00	5.00	3.50	4.17
Society	3.94	3.50	5.00	3.00	3.86
Competitors	2.81	3.00	4.50	2.50	3.20

Table 5-20 Weights per stakeholder

The weights are of no particular surprise given the results from the different topics which have been analysed so far. Employees and customers come out as the most important stakeholders with all sub-sectors and the NGOs rating this group as either very important or extremely important. Shareholders and suppliers are rated as the next most important groups. This pattern follows the average benchmark scores achieved for each of the relevant topics previously discussed. However, in a slight divergence from this trend, competitors are rated as the lowest in importance of all groups. This could show that it is the ethical/corruption aspect of the questions discussed in 5.3.8 that raised the importance of this topic rather than a company's concern for its peers.

5.4 INTERIM RESULTS SUMMARY

The previous sections have presented a good deal of information, and for this reason, before going on to the discuss them in detail, it would be useful to summarise them. As the overall benchmarking scores did not appear to show any noticeable trends, the most interesting data comes from looking at the separate topics that make up the questionnaire. The differences in the scores for these topics are shown in Figure 5-12. These illustrate the variation in the results seen by topic and sub-sector. Of the limited number of companies surveyed, consultants appear to be performing slightly better than other sub-sectors. The performance of materials suppliers may be slightly poorer due to the very low number of responses from this sub-sector. A number of topics stand out where companies achieved noticeably better performance. These include customer relations, supplier relations and competitors. While not demonstrated clearly by the graph, some topics such as environment and employees were also areas in which companies performed well. These support some of the priority topics which Chapter 3 identified.

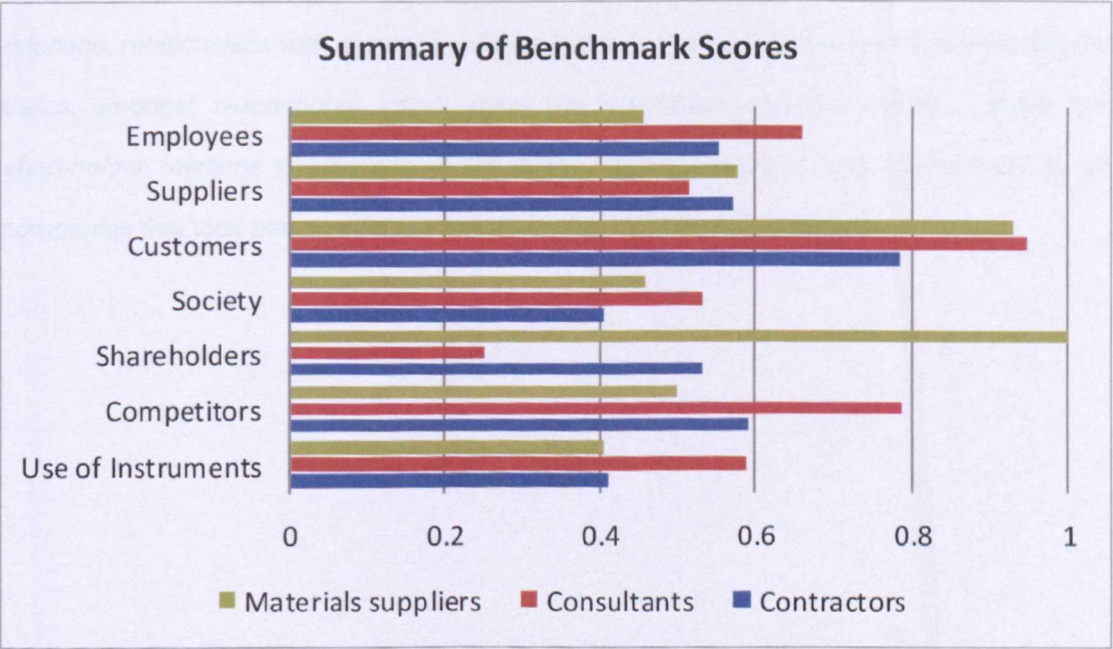


Figure 5-12 Summary of topic benchmark scores by sub-sector

The following section will go on to briefly discuss possible connections and relationships between the data before finally drawing some conclusions based on the findings of Chapters 4 and 5.

5.5 DISCUSSION

Having presented the full results from the benchmarking exercise as well as an interim summary, it is now time to discuss what these results might actual mean for the objective and related questions set out at the beginning of this chapter.

The overall benchmark results seem to indicate that of the companies who responded, there is a range of CR performance between different sub-sectors and in relation to the size of the large companies that took part in the exercise. There does not appear to be a clear correlation between performance and sub-sector or company size. This may in part be due to the smaller sample sizes of the consultants and materials suppliers resulting in lower numbers of responses.

Although it was not possible to draw firm conclusions from the overall benchmark scores, the research provides interesting data in the form of the detailed responses and weightings for the different areas of the questionnaire. Figure 5-13 illustrates the relationship between weightings and scores for each of the questionnaire topics. *Customer relationships*, *supplier relations*, *relationships with competitors* and *employee relations* appear as the highest priority topics amongst respondents based upon the weightings and the scores. While the *shareholder relations* is also one of the higher scoring topics, it was not relevant to all companies that took part so was not counted in the most prominent topics.

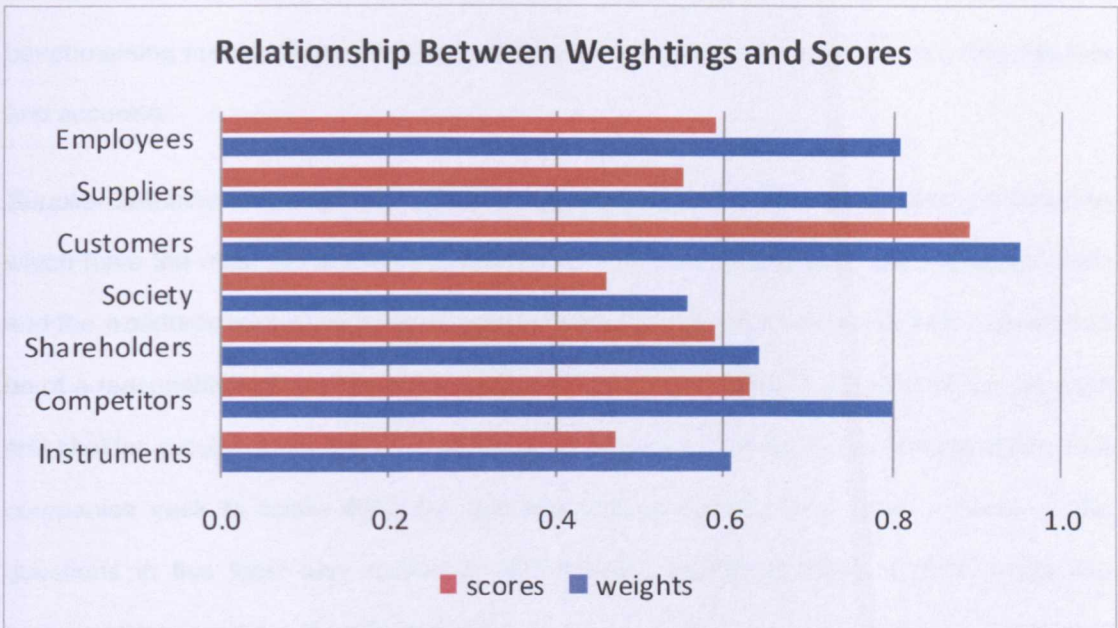


Figure 5-13 Illustration of the relationship between weightings and average benchmark scores by topic

While there are some similarities, these findings suggest a slightly different set of priorities to those identified during the report review carried out in Chapter 4. As discussed in the relevant section, *customer relationships* was given the highest weighting and achieved the highest score, most likely due to the significance of this group of stakeholders to company operations. While there are a few questions related to environmental information and sustainable alternatives, this topic generally focuses on a subject that was not considered in the report review as it was not highlighted as a prominent topic in the initial reports that were reviewed. While it may not seem to be a subject directly relevant to CR, the retention of customers is an important factor for the sustainability of businesses in any industry, and may be an area which should be included in CR reports.

With a focus on ethics and corruption *relationships with competitors* was another area which did not feature prominently in the reports reviewed in Chapter 4. In fact, although there appeared to be an increase between the 2006 and 2009 reports, ethics was still one of the most poorly reported upon topics in the review. This difference could be down to the fact that while companies appear to acknowledge ethical issues such as corruption within the industry and need to be dealt with, they are wary of reporting too extensively upon it, due to its negative connotations. It could also simply be due to the fact that the respondents thought that ethics would be an area in which companies should be making a particular effort and

decided to answer the questions accordingly. This is one of the main drawbacks of the benchmarking methodology – it is very difficult to audit responses to check that they are true and accurate.

Supplier relations and *employee relations* are the two topics from the benchmark exercise which have the most similarities with the report review from Chapter 4. *Employee relations* and the *workforce* mini-wave have obvious similarities with one another and both appeared to be of a reasonably high priority in the benchmark and report review. Employees are clearly a stakeholder group which are of importance to any company so it is understandable that companies seek to retain them by providing various benefits and perks. Some of the questions in this topic also related to H&S/working conditions which were amongst the prominent mini-waves in the report review.

Lastly, the *supplier relations* topic was one which was also given a high weighting and companies appeared to be performing well in. While the *supply chain* mini-wave was poorly covered in reports, the *supplier relations* section of the questionnaire did cover some environmental and working conditions issues which featured as KPIs in some of the more prominent mini-waves of the report review.

While not a standalone topic in the questionnaire, all of the questions relating to environmental performance were given high weights and were the questions where companies achieved some of the highest scores in the exercise. This suggests that the observations in Chapter 4 relating to these mini-waves may be accurate and the difference between the results of the benchmark may be caused by methodological differences rather than inaccuracies. For example, the *energy and resources*, and *carbon* mini-waves were not covered by any of the questions in the benchmark questionnaire. This means that it would have been impossible for this topic to be rated as important by respondents or for them to demonstrate their company's performance in relation to it. This disconnection between the two methods is a limitation which must be considered when making comparisons and drawing conclusions from the research. While there may be some limitations associated with the methods in terms of making comparisons, the differences in topics covered by them also offer benefits by expanding the areas of CR on which information is being collected. For

example, the report review did not collect any information on *customer relationships* or many of the areas covered by the *use of instruments* topic but these are areas which the benchmark has been able to expand upon.

The research in this chapter has not only given an indication of the prominent topics to companies operating in the industry but, in line with the chapter goals, it has also provided an indication of how different sub-sectors are performing in relation to one another. Figure 5-12 combines the results presented in Figure 5-5 to Figure 5-11. It shows that, based on the results from this benchmark exercise, the consultants appear to be performing better in many of the questionnaire topics. This is based upon a small number of respondent companies so is by no means representative of the industry. A larger sample would be needed before more definitive conclusions could be made. Although its accuracy cannot be proven or disproven, the results do not align with the findings from Chapter 4 with regards to sub-sector reporting. The report review indicated that consultants companies were the least effective reporters whom reported upon the lowest number of KPIs. They may actually be undertaking effective and extensive CR activities, but simply not choosing to report upon them or not doing so in a very effective manner.

Materials suppliers and contractors were the sub-sectors that the report review indicated were producing the most detailed reports with the greatest coverage of KPIs. However, in many cases respondent companies from these sub-sectors appear to be achieving lower than average scores. This variation is most likely occurring due to the difference in size of companies that were reviewed in Chapter 4 and those who responded to the benchmark. These differences are demonstrated in Table 5-21 showing that in the case of contractors and materials suppliers there was a significant difference in the size of the companies whose reports were reviewed and those that took part in the benchmark exercise.

	Approximate average turnover of materials suppliers (£m)	Approximate average turnover of contractors (£m)	Approximate average turnover of consultants (£m)
Companies used in report review	5,800	4,100	752
Respondents from benchmarking exercise	2,320	532	560

Table 5-21 Comparison of average turnovers in report review and benchmark respondents by sub-sector

These differences in size of company could explain why the results with regards to sub-sector performance seen in the benchmark do not reflect the findings from the report review in all cases. Although the overall benchmark scores do not clearly show it, this may be an indication that company size can have an influence on the extent of CR activities and performance.

5.5.1 Comparison with Graafland *et al*'s Research

While some small changes were made to Graafland *et al*'s questionnaire it is still possible to make some broad comparisons between this piece of research and the findings they reported in the 2003 and 2004 papers. Firstly, the average weights given by UK and Dutch respondents for each topic in the questionnaire were very similar. This can be seen in Table 5-22 where all of the topics except two, received average weights which diverged by no more than 0.04. This suggests that the topics which are most relevant and of the highest priority to UK companies may be the same for other construction companies even if they are based in other developed countries.

Questionnaire Section	Average UK weights	Average Dutch weights (construction sector)	Difference
Employees	0.81	0.80	0.01
Suppliers	0.82	0.87	0.05
Customers	0.95	0.91	0.04
Society	0.56	0.61	0.05
Shareholders	0.64	0.86	0.22
Competitors	0.80	0.86	0.04
Use of Instruments	0.61	0.52	0.09

Table 5-22 Comparison of weights from UK and Dutch benchmark exercises

The stakeholder weights for the Dutch and UK studies (shown for the UK exercise in Table 5-20) showed exactly the same ranking of importance by the respondents – Employees, Customers, Shareholders, Suppliers, Society and finally Competitors.

Section 5.2.3 has already discussed the similarity to Graafland *et al*'s work with regards to the impact which the weightings have on overall benchmark scores. Figure 5-1 to Figure 5-3 show very similar correlations to those seen in Graafland *et al*'s work, further supporting his finding that the weightings did not have a significant impact on the overall benchmark scores.

The overall benchmark scores for the UK construction and Dutch construction respondents were slightly different, with the UK average being 0.72 and the Dutch average being 0.59. With the changes made to the questionnaire it is difficult to know whether this is due to a performance difference, or as a result of the result of the methodological changes. Table 5-23 shows a comparison of the benchmark scores achieved in each topic for the UK and Dutch benchmark exercises. Once again the scores from the UK and Dutch exercises are quite close and follow a similar pattern with regards to scoring. *Customer relationships* and *relationships with competitors* are seen to be the areas of best performance, with the areas of poorest performance being society at large and the use of instruments.

	Average UK score per topic	Average Dutch score per topic
Employee	0.59	0.61
Suppliers	0.55	0.73
Customer	0.89	0.82
Society	0.46	0.50
Shareholders	0.59	0.67
Competitors	0.63	0.76
Use of Instruments	0.47	0.43

Table 5-23 Comparison of UK and Dutch benchmark scores by questionnaire topic

There appear to be a number of notable similarities between the results of the two studies even though some minor methodological changes have been made. This may suggest that the aspects of CR affecting construction companies are similar even when based in other developed countries.

The final section of this chapter will now conclude with a look at what these findings could mean and how they might relate to the information in Chapters 4 and 6.

5.6 CHAPTER CONCLUSIONS

The goals of this chapter were to:

RQ 2a – Test the findings from the report review and identify additional priority topics for the sector,

RQ 3 – Identify differences and similarities in the activities which companies undertake; and

RQ 4 – Identify any potential trends in sub-sector performance

Due mainly to variations in the response rates from each sub-sector, the overall benchmark results have not been able to provide a clear indication of how CR performance varies across the industry. However, the more detailed results from weightings and individual questions hint at some possible trends both in relation to the similarities with the prominent mini-waves seen in Chapter 4, and with regards to the activities and performance of companies in the sector.

While there were no sections of the questionnaire dedicated to them, all questions relating to H&S and environmental aspects of operations received consistently high scores from all sub-sectors. This further strengthens the findings from Chapter 4 which identified these mini-waves as some of the most prominent within the reports. *Employee relations* was found to be an area of high performance for many of the respondent companies which was also indicated as a high priority area by the prominence of the *workforce* mini-wave in the report review.

Topics not seen in the reports, but which appeared to be important to companies based on their performance and weightings given in the benchmark, included *customer relationships* and *supplier relations*. While a *supply chain* mini-wave was included in the report review, it consisted of only two (quite specific) KPIs which resulted in a low number of occurrences being recorded. This may explain the difference in the findings from the two methodologies. Finally, the benchmark results also indicate that the topic of ethics (covered by *responsibility to competitors* and *shareholder relations*) is actually a higher priority area than the report review might have suggested.

Combining the topics discussed above with the prominent mini-waves seen in Chapter 4 gives the following list of subjects which seem to have a high level of relevance and therefore importance to the UK construction industry:

Topics seen in Chapters 4 and 5	Additional topics identified in Chapter 5
<ul style="list-style-type: none">• Health and safety• Energy and resources• Environmental performance• Carbon• Community• Workforce/employees	<ul style="list-style-type: none">• Customer relationships• Supply chain• Ethics/Corruption

Based on the benchmark results it would appear that consultancies are generally performing favourably compared to other sub-sectors, but this is based on a very small sample of companies so may not be providing a realistic picture of performance. Further exercises would be required in order to obtain a representative sample of company sizes. As with the report review, although the sample is small it is still useful as it provides some empirical evidence for the variation in CR performance in the industry.

The importance of customers and suppliers seems consistently high for all sub-sectors (illustrated in Figure 5-12 and Figure 5-13). *Employee relations* also appear important to the respondents. but the result might suggest that consultants concentrate slightly more effort on this group than other sub-sectors. This is also the case for ethical considerations (covered by *responsibility to competitors*), but neither of these topics was particularly well covered by consultants in their reports.

It is unclear why this discrepancy is occurring, but the following chapter reports the findings from a case study of an engineering consultancy to investigate how well CR is implemented, what the areas of focus appear to be and whether reporting of this information is actually a high priority.

Although varying numbers of companies were reviewed in Chapters 4 and 5 and the response rate for some sub-sectors was low, a possible trend was noted in the results. The materials suppliers and contractors produced extensive reports and achieved reasonable scores in the benchmark exercise. Consultants on the other hand, produced less extensive reports but achieved a higher average score in the benchmarking exercise. The following chapter focuses on consultancy companies in order to highlight their strengths and weaknesses along with possible ways in which these might be improved. In addition the chapter will also attempt to identify why a difference might exist between reporting and performance.

6. CONSULTANCY SUB-SECTOR CASE STUDY

The previous two chapters have relied upon publicly available information or requested data from companies unaffiliated with the researcher. Chapters 4 and 5 investigated the CR areas which are most relevant to the industry and how well companies were performing in relation to CR. The findings from this research were mixed, with Chapter 4 suggesting that consultants are not reporting extensively on CR issues but Chapter 5 indicating that these types of companies are actually practicing a range of CR activities. This chapter presents a case study of consultancy companies operating in the construction industry. The objective of the case study is to:

4. Review consultancy companies in detail to identify and assess their CR activities and highlight where and how potential improvements might be made.

This objective will be achieved by accomplishing the following goals:

RQ 5 – Investigating how aware URS Scott Wilson staff are of the issues associated with CR, and what perceptions they have of the company and the industry with regards to CR.

RQ 6 – Comparing URS Scott Wilson's benchmark results with its industry peers

RQ 7 – Reviewing how other consultants are addressing their own issues

So far this research has investigated three different sub-sectors. In this substantive chapter the focus is turned on only one of these sub-sectors (consultants). Consultancy companies have been chosen for this part of the research for a number of reasons outlined below:

- As an employee of URS Scott Wilson, the researcher has access to all of the company's internal documents and policies
- In addition to data access, being an employee means that the staff within the company are much more likely to answer questions than if the researcher was to 'cold call' employees from another company
- As a part funder of this research this chapter could provide URS Scott Wilson with some useful information in return for the investment which has been made in the project

While the previous chapters have shown differences in CR activities and performance amongst the sub-sectors of the industry, there are also a number of similarities between them. This means that even though the data collected during the case study is specific to

one consultancy company, some of the findings may well be applicable to other companies throughout the sector, regardless of which sub-sector they are operating within. This is not suggesting that the case study will be representative of the industry, rather that it may provide some theories about CR in the industry which may also be applicable to other organisations. This case study may also provide some indications of where to concentrate future research.

6.1 THE ROLE OF CONSULTANTS

The role of consultants and how they fit within the construction industry has briefly discussed in the project rationale (section 1.1), but it would be useful to revisit this before discussing the case study further. Construction consultants provide a variety of specialist professional services to clients operating within the industry. They can be involved at every stage in a project's life-cycle, from the initial pre-planning application and design stages, through construction, monitoring and maintenance planning and even in the refurbishment or demolition of a structure.

Larger consultants are able to offer numerous services within these different stages in order to cover a variety of project types. For example, consultants may provide design services for rail track, pavements, buildings, airports and ports. As part of pre-design and planning, consultation with stakeholders might be undertaken or various ecological and noise pollution surveys might be offered. The sheer variety of services which this sub-sector can offer makes it difficult to clearly define them, but often the services provided by this sub-sector are those which in some way enable construction projects to progress.

Clients of these consultants can vary widely from contractors to government agencies so the consultant sub-sector has potential for influencing a whole spectrum of projects and clients within the industry.

6.2 A CASE STUDY OF CONSULTANCY COMPANIES

Previous chapters have looked at CR activities from two different viewpoints with different levels of detail. In Chapter 4, company CR reports were reviewed to provide an external assessment of the presence or absence of various KPIs to gauge the breadth of topics covered and level of detail provided by the reports. Chapter 5 then undertook a

benchmarking exercise to obtain an internal view of the activities which companies are implementing and how well they are being undertaken.

The company CR reports, reviewed in Chapter 4, are likely to have been produced and presented in a way that represents the company's brand and the image which the directors and board members wish to be promoted. The benchmarking exercise was circulated amongst sustainability/CR managers that will have some involvement with the companies' CR activities. Therefore, the two groups involved in supplying the data used in Chapters 4 and 5 have some involvement and awareness of CR. These are the individuals who drive CR within companies and shape the way in which it is delivered.

However, the extensive nature of CR means that in most cases, all of the staff in the company have at least some involvement in the integration and implementation of the various aspects of CR. For this reason, company staff will provide the predominant source of data for this chapter. Using this source of data should help to provide a more realistic picture of how CR policies are transferred from the boardroom into day to day operations. In conjunction with other consultancy reports, this information should highlight areas which staff feel are being well addressed as well as those that consultancies may be struggling with. This process should help to identify potential areas for improvement within a consultancy company such as URS Scott Wilson. While not necessarily being tailored towards all consultants it may still be beneficial to those wishing to investigate potential improvements.

6.3 INTERVIEWS WITH URS SCOTT WILSON STAFF

As has been established in the preceding sections, one of the main methods of data collection for this chapter will be through the use of semi-structured interviews with URS Scott Wilson staff. The previous chapters have looked at CR reporting and activities of construction companies from a predominantly external viewpoint. The benchmarking exercise was completed by staff members of a number of companies, but there is the possibility that favourable responses may have been given to paint the company in a better light (see Chapter 5). Interviews provide the opportunity to obtain a more in depth internal view point. Working for URS Scott Wilson affords the researcher full access to the

company's internal policies, management systems, intranet site, and staff. This allows for a broad review of the company and its CR activities.

In order to carry out these interviews, it is necessary to develop a number of questions and/or topics on which to base the interviews. While these questions may not be asked in exactly the same way of every interviewee, they will ensure that all of the relevant topics are covered.

6.3.1 Interviewee Selection and Interview Method

The questions/topics used in the interviews will be influenced primarily by the type of information that is being sought, the general outline of which is influenced by the aim and objectives at the beginning of this chapter. However, there are other considerations to be made when compiling a list of interview topics. In this instance, consideration should be given to who will be taking part in the interviews. In qualitative research, individuals are selected who can provide the necessary information on the topics being studied rather than to provide a representative sample of the population. This purposeful sampling technique ensures that the correct information is collected to help inform the study.

It was decided that the staff most suited to provide the required information would be found in the senior to middle management level of the company. In URS Scott Wilson's grade structure this encompassed directors, technical directors and associates. The reason for this selection is as follows;

Senior managers (Directors and Technical Directors) should be able to provide data at the 'business management level' of CR within the company's operations. Their involvement at this level of operations should give them an awareness of the high level policies associated with CR. They may also provide interesting opinions on these policies and how well they should be understood by staff within the company.

Middle managers (associates) tend to be responsible for managing projects and teams of staff. Therefore, this level of staff member was seen to offer 'on the ground' information relating to the running of the company. Due to their involvement in project management, this level of staff member should have had some basic knowledge of CR and how it relates to business operations (such as H&S and environmental considerations). It was also felt that if

this level of staff member was unaware of the implications of CR, then staff below this level would be unlikely to have much knowledge either.

A further benefit of interviewing these higher levels of staff is that they are likely to have more extensive links with employees in other organisations within the industry, which may be more likely to expose them to the CR practices of peers.

Having decided upon who would be interviewed and the topics which would be covered, the final requirement was to decide upon the method of delivery. It could either be carried out through face-to-face interviews, or via the telephone. The logistics involved with arranging and travelling to numerous interviews meant that the sensible option was to undertake telephone interviews. The selection of staff members to take part in the interviews was carried out using URS Scott Wilson's intranet site and simply involved a search of personnel at director, technical director and associate level. Of the 408 members of staff at these levels, 100 were selected from across the range of disciplines in which the company operates and from a variety of geographical locations. This selection of staff from different technical disciplines within the company ensured that a range of perspectives were obtained about the subject. This is known as maximal variation sampling, one of a range of strategies available under the banner of purposeful sampling (Creswell and Clark 2007). These 100 individuals were sent emails explaining the research project and asking if they would be willing to take part in the interviews. Based upon willingness to participate and availability, of the 100 emails which were sent, 20 employees were interviewed. 16 were at the middle management level within the company and four were at senior management level.

6.3.2 Developing the Interview Topics and Questions

The semi-structured nature of the interviews means that it is not a requirement to produce a list of exact questions for the interview process. A list of topics to be covered would provide enough information to prompt the researcher to ask specific questions and/or ensure that certain aspects are covered during the interview process. However, while not a requirement, having a list of questions was expected to offer more flexibility when undertaking the interviews. If the interview was flowing well, they could be used as reminders of the topics to be discussed, or alternatively if needed the questions could be used verbatim. Therefore, a

number of questions needed to be produced which would form the framework of the interview process.

It was important that the interviews did not last too long, as this would discourage people from taking part, as well as take an excessive amount of time to complete a reasonable number. Interviews lasting 15-20 minutes were expected to achieve a reasonable compromise between collecting enough useful information, while not being too long to discourage participation. It was estimated that five topics/questions would be approximately enough to fill the time period while also collecting a useful amount of information for analysis. While a 15-20 minute limit was aimed for, there was expected to be some variation in the length of interviews. Variations would likely occur, depending upon the level of detail provided by respondents, and how the interview progressed and developed. This is a factor that was left to the discretion of the interviewees.

The topics listed below were seen to cover a reasonably broad range of topics which would help to elicit information from URS Scott Wilson staff on various aspects of CR within the company and within the sector. A brief explanation for including the topic is also provided. These questions are also provided in Appendix B. The topics are as follows:

- Understanding of CR
 - What it is
 - Relevance to the construction industry
 - Relevance to different levels of staff

This information helped to identify the awareness of the CR amongst URS Scott Wilson staff and relevant the topic is to the industry. This was seeking to obtain information on awareness at a more general level of the topic - not necessarily directly related to URS Scott Wilson.

- Communication of CR to staff
 - CR information and reporting
 - Sources of further information on topic

As a follow on to the previous topic, this was used to identify how aware employees were of CR activities **within** URS Scott Wilson.

- Collation and reporting of CR related project information
 - Effectiveness of procedures
 - CR related KPIs which could be recorded

Chapter 4 indicated that consultancy companies reported upon much fewer KPIs than other sub-sectors in the industry. This line of questioning was aimed at identifying possible reasons for this.

- Views on URS Scott Wilson's performance in different areas of CR

Having reviewed the company's reporting, and benchmarked them against others in the sector, this allowed for a comparison to be made between these results and the perception of the company by its employees. It could also indicate areas of good and bad performance.

- Other companies in the construction sector that stand out
 - Good or bad performers
 - What makes them stand out?

An extension of the previous topic/question, it was hoped that this topic would contribute to the overall sector view of CR as well as providing a further opportunity for comparison with the results from Chapters 4 and 5.

All of the topics above were expected to be covered in interviews with both senior and middle management as they were seen to be relevant to both groups.

These topics were compiled into a crib sheet which could be used for reference during the interviews. Example questions were produced which covered each of the topics again for the purposes of reference if needed during the interviews. Four test runs were conducted on URS Scott Wilson colleagues using these reference sheets, in order to check that the topics/questions could be covered in the time, could be delivered easily and were clear to understand. Following the pilots, some minor amendments were made to the way that questions were asked, but the topics being covered remained the same. Having trialled the

topics being discussed, the next step was to carry out the interview. Interviewee selection and the number of employees that were interviewed have been covered in section 6.3.1.

The following section details the analysis and findings from the interviews with URS Scott Wilson staff.

6.4 INTERVIEW CODING AND ANALYSIS

The interviews were carried out with URS Scott Wilson staff between late July and early September 2010. After asking the participants for consent, the interviews were recorded for reference purposes. Only two interviewees requested that the conversations were not recorded. Notes were also taken during the course of the interviews, which were expanded upon as much as possible immediately following the interview. In general, the interviews lasted for the projected time of around 15-20 minutes, but there was some variation in this with some as short as 10 minutes and others lasting up to 35 minutes.

The interviews were not transcribed in full, instead detailed notes were made using information taken down during the interviews and, where available the Dictaphone recordings. Key language and terminology used by the respondents was retained in the interview notes as this ensures that the views and perceptions of the respondent are captured for analysis. This process produced accurate summaries of each interview, which were ready for coding. As outlined in section 3.3.2, coding is the process by which qualitative data are grouped together to allow for more general interpretations to be made. As the semi-structured interviews used in this piece of research were based on five main topics (listed in section 6.3.2), the responses (and associated coding) generally related to one of these overarching themes.

The compilation of the different codes within each of these five topics then helped to identify themes which emerged from the data both within and across the main topics laid out in the interview questions/topics. The following section discusses the findings from the analysis of the interview notes.

6.4.1 Interview Analysis

Section 6.3.2 discusses the topics which were used as the basis for the interviews. As described in the previous section the responses to each of the five topics in the interview framework were coded to help compile a more general understanding of the respondent's views. Codes appearing through each of the topics along with the topics themselves were then able to offer more general themes and an overall understanding of CR within URS Scott Wilson. The results from the analysis are first discussed in the context of the interview heading then in the more general sense as they relate to the company and sector.

Understanding of CR

This topic produced the largest range of codes; likely due to the fact that it covered a number of aspects. A general understanding of CR amongst interviewees was demonstrated by the range of responses provided. While no respondents gave a 'text book' answer (a difficult task as discussed in section 2.3.1), most were able to offer a description which covered at least some of the main themes of the topic. Two common codes used in this topic were 'business impacts' and 'beyond standard' which gives an indication of the understanding seen amongst the interviewees. 'Business impacts' seemed to be a general recognition that while the exact nature of the impacts may not have been provided, there was an understanding that the idea of CR was to identify the potential for, extent of and to mitigate against any detrimental impacts that a business might have. The 'beyond standard' coding related to the recognition that in many cases the topic is 'above and beyond' the requirements of current legislation – that is, it is voluntary in nature and was seen as a responsibility of companies rather than a legislative requirement. These two codes can be grouped into the more general theme of 'understanding' and give an indication that generally the understanding of the topics amongst respondents was good. Also related to this theme of understanding was the range of topics that respondents felt were covered by CR. CR was described by some respondents as encompassing a variety of topics such as the environment, sustainability, ethics and energy use. Once again, while these examples did not cover the entire range of subjects under the CR banner, it is an indication that there is some understanding of the topic amongst company staff.

The relevance of CR was also an area of interest, and this was another commonly occurring code which was used during analysis. Relevance was framed within the context of being relevant to the staff within the company, as well as the industry as a whole. The general consensus was that due to the potential impacts that the sector (and company) can have, it is an area which is relevant to all levels of staff within the company and to the sector as a whole. However, some respondents did feel that the subject was more relevant to other areas of the industry, as the level of impact which could be made by a consultancy was less than that of a large contractor for example. Associated with the relevance of the subject to staff, were the responses relating to the level of involvement and responsibility that employees should have for CR. Those who did provide information in this area indicated that while all staff should be aware of the topic and issues related to it, the senior staff are the ones who should be leading the way with regards to CR – setting policies and ensuring that everyone is aware of them. The more junior staff need to keep up to date with these policies, and be aware of how they affect their day-to-day work.

So far, the codes and themes discussed relate to topics which were laid out in the interview framework – the responses were those which were actively sought out. While these responses have provided useful data, codes/themes which were not thought of by the researcher can be just as interesting and useful. This potential to explore further subjects is a benefit provided by the semi-structured interview process. A selection of the more noteworthy themes which emerged during the interviews and the subsequent coding process are discussed in the following paragraphs.

Possibly one of the most important of these for URS Scott Wilson's operations was the reasonably common view that, as this is a relevant topic for the industry, it is one worth raising awareness and promoting the importance of amongst the company's clients. A number of respondents felt that URS Scott Wilson doesn't do enough to influence clients with regards to aspects of CR, whether it be ensuring that stakeholders are involved at the earliest point possible, or showing clients a more sustainable or effective alternative, is available even if it is more expensive. Some issues were raised relating to the cost associated with

providing this extra information which could be a significant hurdle that would have to be overcome.

Interestingly, of the few negative comments that were received, the majority of these were given by the more senior members of staff who were interviewed. For example, one staff member did not agree with the principle of CR, as companies should not be expected to go beyond standard legislative requirements. This respondent felt that many companies use CR as a “marketing ploy” in order to elevate their profile, and that the process was “in most cases entirely self-motivated”. Another senior staff member felt that the potential for URS Scott Wilson to influence projects with regards to aspects of CR, was less than that of suppliers and contractors, so perhaps it was a more relevant topic to these types of companies. The more candid nature of responses from higher level staff may be based on a more pragmatic outlook, and that given their position in the company, they may be more aware of the issues and limitations of certain policies and business approaches. Alternatively, it could be that the senior staff have fewer reservations about giving opinions, whereas middle management (although they were assured that the interviews would be anonymous) might be concerned about airing negative views of the company or its policies, in case it was damaging to their careers. Based upon the number of negative comments given by middle management staff in response to the next part of the interview, the first explanation may be more likely.

In summary, the emerging picture from this part of the interview is that employees at these grades within the company appear to be aware of the basic principles behind CR, and some of the impacts that a business can have. Most respondents feel that it is a relevant aspect of business operations for companies in the construction industry, and that a number of interviewees believe that URS Scott Wilson could do more to promote and raise awareness of its CR activities amongst its clients.

Effective communication of CR to staff

The aim of this topic within the interview was to investigate respondents' views on how well CR information is communicated throughout the company. This information was obtained via a general communication question, as well as inquiring about the respondent's awareness of certain CR information such as the existence of a company CR report.

The most prominent code within this topic related to performance. Without exception, all respondents had a view on the company's communication efforts. The overall impression for this aspect of CR operations within the company is mixed. A common response was that communication efforts by the company were "generally poor" or in one case "not very effective at all". While many interviewees felt that the company could improve its communication efforts, there were almost as many who felt that the company was effective at communicating some aspects of operations, but weaker in others. Respondents stated the company was presenting a "mixed impression of communication" and delivering a "varied effort in relation to communication". Finally, although they were in the minority, there were a number of staff who felt the communication by the company was good, and that no changes needed to be made. Although a range of responses was received, the general impression was that there is definitely room for improvement within URS Scott Wilson's communication efforts with regards to the environmental and social/community aspects of the company's operations.

This idea of improvement was another common code which appeared within the responses. The respondents who felt that the communication efforts of the company were mixed, were more likely to state that they had seen some improvements in communication. These improvements tended to relate to topics such as environmental activities, or more general improvements such as the information available from URS Scott Wilson's intranet site. Regardless of their views on overall communications by the company, there seemed to be a clear feeling amongst staff that communication of the company's involvement in social/community activities (on projects or as standalone initiatives) could be improved. The exception to this was the URS Scott Wilson Millennium Project (SWMP) which respondents seemed to feel was well-publicised amongst the staff and clients.

The SWMP is a high profile charity run by URS Scott Wilson which all interviewees were aware of. Therefore, the efforts by the company with regards to communicating this part of their CR activities are clearly effective. Other aspects of the company's CR appear to be less well-disseminated. Some respondents were aware of URS Scott Wilson's stand alone CR report, but in a number of cases, this was as a result of coming across it during searches for

other information. The same was true of URS Scott Wilson's membership to the UNGC. Awareness of this was mixed; a few employees knew of membership as a result of presentations given by senior members of staff, while others had only heard about it when graduates at recruitment fair made an inquiry about it. This discrepancy in awareness may be indicative of a varied communication strategy within the company, and may be an area which requires harmonising. As was seen from some of the responses to the interviews, CR activities could potentially influence the winning of work by URS Scott Wilson so it is important that staff are aware of, and understand the company's stance on the subject.

Although improving the communication strategy across the company seems like an obvious way to increase awareness amongst staff, it is important that any communication is handled in an effective manner, so that staff are not overloaded by information. The URS Scott Wilson newsletter was highlighted by some as a useful way of receiving information about company activities, and it was suggested that it could offer a useful method of circulating information about CR activities and initiatives throughout the company. Small updates to staff on a regular basis may be a good way of circulating this information without overloading them. As newsletters are designed to do, this will provide a small amount of digestible information that allows the employee to obtain further information if required. This management of data should be an important factor in any future strategies for company communications.

The general impression given by the responses to this part of the interview is that the internal communication strategy of the company could be improved upon. While some changes to company activities have helped staff keep abreast of company information, it may be necessary to develop a more harmonised and targeted approach to the process.

Collation and reporting of CR related information from projects

Collation of data on different aspects of the company's activities could help with the communication of the company's performance to both staff and stakeholders. For this reason the interviews sought to investigate the extent of recording KPIs within the company. The researcher was interested in not only the KPIs that are already recorded by the company, but also in identifying the potential for KPIs that could be recorded for the purposes of reporting.

Very few respondents were involved in projects which have required them to record KPIs for either URS Scott Wilson's or their client's purposes. The most common opportunity for recording KPIs with regards to URS Scott Wilson's operations seems to be in relation to the projects which are being designed to BRE Environmental Assessment Method (BREEAM), or Civil Engineering Environmental Quality (CEEQUAL) accreditation standards. While there is scope for recording this information, URS Scott Wilson's influence and potential for affecting these scores is likely to be limited due to the stage at which the company becomes involved with the project. It could still be worth keeping track of the number of projects which the company is working on that achieve good or excellent standards in these schemes, simply to demonstrate the standard of projects with which URS Scott Wilson has been involved. Beyond these kinds of projects, responses suggest there is a limited amount of opportunity for recording KPIs. Whereas a contractor is able to list the amount of recycled materials that are used in a build, consultants, who are, by and large, office based organisations do not use significant quantities of materials or have major impacts upon their surroundings. That being said, efforts are being made by some of URS Scott Wilson's offices to record, monitor and reduce some of the resources used by the company such as energy, paper and staff travel. While these kinds of impacts are not on the same scale as the resources being used by contractors and materials suppliers, they are nonetheless the main resources being consumed by a consultancy and would be useful to record.

While one interviewee noted that in their experience, there was currently "not a great deal of motivation for the company to record and report KPIs", other respondents reported a number of tenders/clients requesting information relating to aspects of operations such as energy use and environmental policies. One even suggested that, while clients may have asked for this type of information in the past, they now appear to be "scrutinising it more closely and asking for greater levels of detail". While these requests are currently relatively uncommon, it may be the beginning of a new trend for clients to request this information.

Implementing an effective method of capturing data before it becomes a common requirement could place URS Scott Wilson in a beneficial position in the future. If the trend of requesting data does not increase, then the company has simply put an effective monitoring

system in place which may allow it to identify cost savings over time. The interviews suggest that although some offices are implementing processes to record information such as energy use and staff travel, there are once again no standard methods for doing this, and it is undertaken by each of the offices on an ad-hoc basis. As with communications, a company wide strategy to decide upon the type of information to be recorded as well as the level of detail required and the method by which it should be captured could be very useful to the organisation.

The process of data or KPI collection does have some problems associated with it which were highlighted by respondents. Firstly, recording extra information from projects would increase time and therefore costs associated with them. In a market that already places significant pressure on companies to deliver more for less, this cost implication is likely to be a problem for many companies. Coupled with the fact that there appear to be limited opportunities for capturing KPIs from many of URS Scott Wilson's projects, it may be worth concentrating on capturing basic data directly related to the company itself. Energy use, water use and staff travel for example, is relatively basic data, but may be useful to record, not only for tendering purposes, but to help reduce use over time. As the data are quite basic, it should be less complex to record than attempting to capture a wide range of data from the huge variety of projects in which URS Scott Wilson is involved. Travel information, for example, could be requested as part of the weekly timesheets that are currently submitted by staff.

Sticking to the recording of basic KPIs will help to ensure that the information is accurate, as one interviewee stated that "some of this information is unreliable and lacks validity". Basic data should also minimise the amount of input from staff, which was a further concern raised by some respondents, suggesting that "capturing KPIs would require more time and costs".

Overall, the responses to this topic suggest that there is a limited scope for capturing and monitoring CR KPIs within URS Scott Wilson, due to a number of factors, such as the very varied type of work that the company undertakes. While opportunities for recording this type of information may be restricted, it appears to be possible to capture some basic data which some respondents have seen requested by clients.

Views on URS Scott Wilson's CR performance

The purpose of the last two topics in the interview was to obtain an idea of how the respondents thought the industry as a whole was performing. It is also a potential way of identifying areas where the company is performing well and where improvements might be made.

The general consensus from interviewees was that the company was performing reasonably well compared with its peers and the rest of the industry. This view seems to agree with the benchmarking results from Chapter 5, which ranked URS Scott Wilson in the middle of the field amongst the companies that took part. While most staff members interviewed felt that the company was matching its peers in CR performance, there was an acknowledgement from some that the consultancy sector is not known for being a CR leader. A small number of respondents felt that the company CR performance was weak and could be improved, with one response stating that "what limited CR information is available is mainly idle talk with no action behind it". This was one of the more negative views of the company's performance, and while others did believe that the company may not be performing at a high level with respect to CR, the general view was that its performance is acceptable. This was seen to be as a result of the company operating in a sub-sector which is not known for CR performance, and is the "type of service that isn't yet subject to much scrutiny due to the desk-based nature and limited impacts of the work".

In a repeat of discussions from an earlier part of the interview, a common thread emerged from the responses that staff within URS Scott Wilson were particularly aware of the environmental issues relating to the company. However, there was a notable weakness regarding the community involvement and social impacts of URS Scott Wilson's work. This social/community aspect appeared to be one of the areas that the company might be able to improve upon. There was also an acknowledgement from employees, that while some parts of the company are attempting to monitor energy use or CO₂ emissions from staff travel, these efforts seem to be sporadic and don't follow a standard approach throughout the company.

In conclusion, the staff who were interviewed see the company to be performing on a par with its peers, but feel that, as with the communication of CR, the company could benefit from adopting a standard approach to some aspects of the subject.

Performance in the Rest of the Sector

This part of the interview was aimed at obtaining information on how other companies in the sector are perceived by those operating within it. While it is a small sample of people, the views here still give an indication of how the industry is perceived, and how these perceptions relate to the findings from the report review and questionnaire.

The responses to this topic were very varied, with no clear themes emerging from the data. Responses encompassed a wide range of sectors, which is unsurprising given the variety of work that URS Scott Wilson undertakes. This included responses indicating that petroleum companies, the Ministry of Defence and local authorities, as well as contractors and other consultants were all performing well with regards to different aspects of CR. The absence of any views on materials suppliers may be a reflection of the fact that this is not a sub-sector that consultants have a great deal of direct contact with. A small number of contractors were mentioned as performing badly with regards to environmental practices, but these were not companies which had taken part in the benchmark. One respondent provided an interesting suggestion on why this variation may be occurring. They suggested that, due to some aspects of CR currently being voluntary, in many cases the effectiveness of a company in this subject may be heavily based on the views of the people responsible for CR, and the efforts to which they are willing to go. The behavioural nature of the topic can mean that efforts may thrive or die, depending on the views of the decision makers within a company. While this may be true for smaller companies, the influence (positive or negative) of single individuals in larger companies is likely to be reduced, as responsibility and decision making relating to CR is more likely to be made by groups/teams of senior staff, as was seen in the questionnaires (section 5.3.1)

The majority of respondents did not offer any examples of companies that were performing well or badly, which might be indicative of the topic either being a low priority for companies, or that it simply is not an area which registers as very important with practitioners in the

industry. For example, companies may be putting a great deal of effort into promoting their CR policies and activities, but if it is not something that people working in the industry take notice of, then these efforts may go unnoticed. During this time of austerity, employees may be more focused on finding and winning work for their organisation, than on keeping abreast of the CR activities of their peers.

While this final section of the interview did not provide any common trends or themes relating to performance of the industry, it still gave some useful insight into how industry practitioners view the industry in which they work, and how varied these views can be.

6.4.2 Summary of Interview Analysis

A large amount of information has been discussed in the previous section so a short summary of the findings are presented here.

Generally, employees within the company appear to be aware of the basic principles behind CR and some of the impacts that it can have. Most respondents felt that CR is a relevant aspect of business operations for companies in the construction industry. Having stated the relevance of the topic, a number of interviewees believed that URS Scott Wilson could do more to promote and raise awareness of CR amongst its clients.

Overall, it appeared respondents believed that the internal communication strategy of the company could be improved upon. While some changes to company activities have helped staff to ensure that company procedures are followed (e.g. Environmental Management Systems and project gateway forms), the actual process of making staff aware of particular policies and initiatives may benefit from a more targeted approach.

There appears to be limited scope for capturing and monitoring project specific CR KPIs within URS Scott Wilson, due to a number of factors, such as the very varied type of work that the company undertakes. While opportunities for recording this type of information may be restricted, it appears to be possible to capture some basic data which some respondents have seen requested by clients. This difficulty in capturing KPIs may well be the reason for the variations seen in reporting detail and company performance seen in Chapters 4 and 5. This will be discussed further in the final section of this chapter.

While most interviewees felt that the company was performing well overall, a common aspect of operations which was seen as being slightly weaker than the rest was the social and community side of projects and URS Scott Wilson's activities.

In summary the interviews have highlighted four main areas of operations that URS Scott Wilson could benefit from improving. These are:

- Communication of CR information within the company
- Social/community interaction by the company (and the industry as a whole)
- Basic internal data collection (such as monitoring of energy and resources) across the company
- Influencing projects/educating clients with respect to aspects of CR and sustainability

The interviews helped to identify these as possible areas for improvement, but due to their relatively short length and their semi-structured nature, it is likely that there will be other areas where improvements could be made. The results from the benchmarking exercise included three consultancy companies (in addition to URS Scott Wilson). While Chapter 5 made more overarching comparisons between sub-sectors of the industry, a more direct comparison between these consultancy companies might prove useful in identifying additional areas for improvement. The following section will use the consultancy responses from the benchmarking exercise to identify areas of CR where URS Scott Wilson's peers may be performing better.

6.5 CONSULTANCY BENCHMARK REVIEW

As an additional method of assessing URS Scott Wilson's performance and investigating the CR practices of construction consultancy companies, this section will take a closer look at the results from the benchmarking exercise in Chapter 5. As comparisons have been made between sub-sectors, the main focus here will be to compare the benchmarking performance of the individual consultancy companies in order to identify further areas where URS Scott Wilson might be able to improve its CR performance. As a detailed comparison has already been undertaken and only a small number of responses were received from this sub-sector the comparison in this section is quite general.

The targeted nature of the benchmarking questions, and in some cases, the requirement to provide specific data or even estimates means that on the individual question level, the questionnaire is likely to be reasonably unreliable. Therefore, it is not sensible to use the individual questions as potential areas for improvement. For example, while URS Scott Wilson may have scored lower in the question relating to % profit spent on social projects in the UK, the answers to the question are approximate ranges so suggesting that this is an area URS Scott Wilson needs to improve could be inaccurate. Instead the collective themes covered by the questions may offer a better indication of where effort would be best focused.

Table 6-1 shows a summary of the consultants' results from the benchmarking exercise by questionnaire section. As not all of the consultants who took part in the exercise were publicly listed companies, and the section only contained one question, the performance values for shareholder relations have been omitted.

	Consultant 1	Consultant 2	Consultant 3	URS Scott Wilson	Average
Employees	0.64	0.75	0.66	0.62	0.67
Supplier	0.55	0.49	0.49	0.53	0.52
Customer	1.00	1.00	1.00	0.93	0.98
Society	0.59	0.53	0.57	0.39	0.52
Competitors	0.73	0.64	0.93	0.84	0.78
Instruments	0.54	0.61	0.54	0.56	0.56

Table 6-1 Summary of results from consultant’s benchmark responses for each questionnaire section

While the results suggest that in some areas (e.g. employees and customers), URS Scott Wilson may be slightly below average, the deviation in these scores is relatively small. However, where the results show a more notable difference in performance is in relation to the society topic. This results tie in with some of the findings from the URS Scott Wilson interviews suggesting that social/community side of URS Scott Wilson’s work is likely to be an area where improvements could be made. Interestingly, while activities relating to society received the lowest average score for this sub-sector, consultants actually achieved the

highest score in this topic out of the three sub-sectors within the benchmark exercise (section 5.3.6).

The questions in the responsibility towards society section of the questionnaire covered two main topics – environmental activities and social/community (see section 5.3.6 for further information). As was seen in the benchmarking analysis, the majority of companies scored well with regards to the environmental related questions, but less so when it came to the social/community impacts and activities. This trend was also seen with the consultants in this topic, and it was predominantly the social/community questions which brought down the scores for URS Scott Wilson in this section.

While a closer look at the consultancies benchmark results has not highlighted any new issues/areas for improvement beyond those listed in section 0, it has provided some validation to the responses which were given by URS Scott Wilson staff during the interviews. Having established a number of potential areas within URS Scott Wilson where improvements may be possible, the next section will go beyond a single company to take a broader view of CR activities in the consultancy sub-sector. This process will offer some potential methods of addressing the specific issues listed in section 6.4, as well as providing further information on the areas where consultancy companies are concentrating their CR efforts.

6.6 WHAT ARE OTHER CONSULTANTS DOING?

Of the three sub-sectors, consultants provided the least amount of detail in the Chapter 4 report review due to the low number of KPIs that they reported upon. This section will return to the consultants reports for a brief investigation into the CR activities that these companies are undertaking. While the purpose of the report review in Chapter 4 was to assess the extent of reporting and the level of detail covered by company reports, the aim of this review is to identify the activities that consultancies are implementing to address CR issues relevant to their sub-sector. This process has highlighted a selection of initiatives currently being used by the sub-sector which are discussed in this section, as well as being used to help develop some of the recommendations which are discussed in section 7.5. In addition, the process of identifying various initiatives that consultants are implementing, also provides some further

indications of the areas/topics of CR which are relevant to consultants. For example, if numerous companies are seen to be implementing activities in a similar area, then that area of operations may well be an important aspect of operations for the sub-sector.

6.6.1 Review Process

Unlike the detailed content analysis process used in Chapter 4, which reviewed the CR reports to count the appearance of pre-defined KPIs, the method used in this review was more straightforward. The reports were simply reviewed to identify any information regarding notable CR activities and policies or initiatives that each company might be implementing. In this review, it was not the reporting of numbers of KPIs that was of interest, but the actual activities that companies have chosen to implement. In this way the process was much less rigid and 'notable' activities were simply identified, based upon the researcher's interpretation of the activities. It is these activities that can help to identify ways in which URS Scott Wilson (as well as other consultancies) could make improvements to their CR operations.

Ten reports were reviewed in this way including URS Scott Wilson's 2009 CR report. The other nine consisted of a selection of companies found in the top 15 consultancy companies of 2008 (Construction News (b) 2010). While all suitable initiatives were noted, the researcher was particularly interested in activities which might be able to address some of the issues raised during the URS Scott Wilson interviews. The findings from the review are presented in the following section.

6.6.2 Analysis of Consultancy Report Review

The review of consultancy reports identified a very wide range of notable activities which are being practiced by companies in this sub-sector. These are summarised in Figure 6-1 below. During the review, it started to become apparent that the majority of the initiatives which were seen in the reports were falling into common themes. These themes closely align with the priority topics which have been identified during the research. These priority topics consist of the commonly occurring mini-waves seen in Chapter 4, the areas of high performance seen in Chapter 5, as well as some of the topics highlighted as being important by interviewees in the earlier part of this chapter. For the purposes of the following discussion, the

activities/initiatives shown in Figure 6-1 have been grouped into a combination of the priority areas which are relevant.

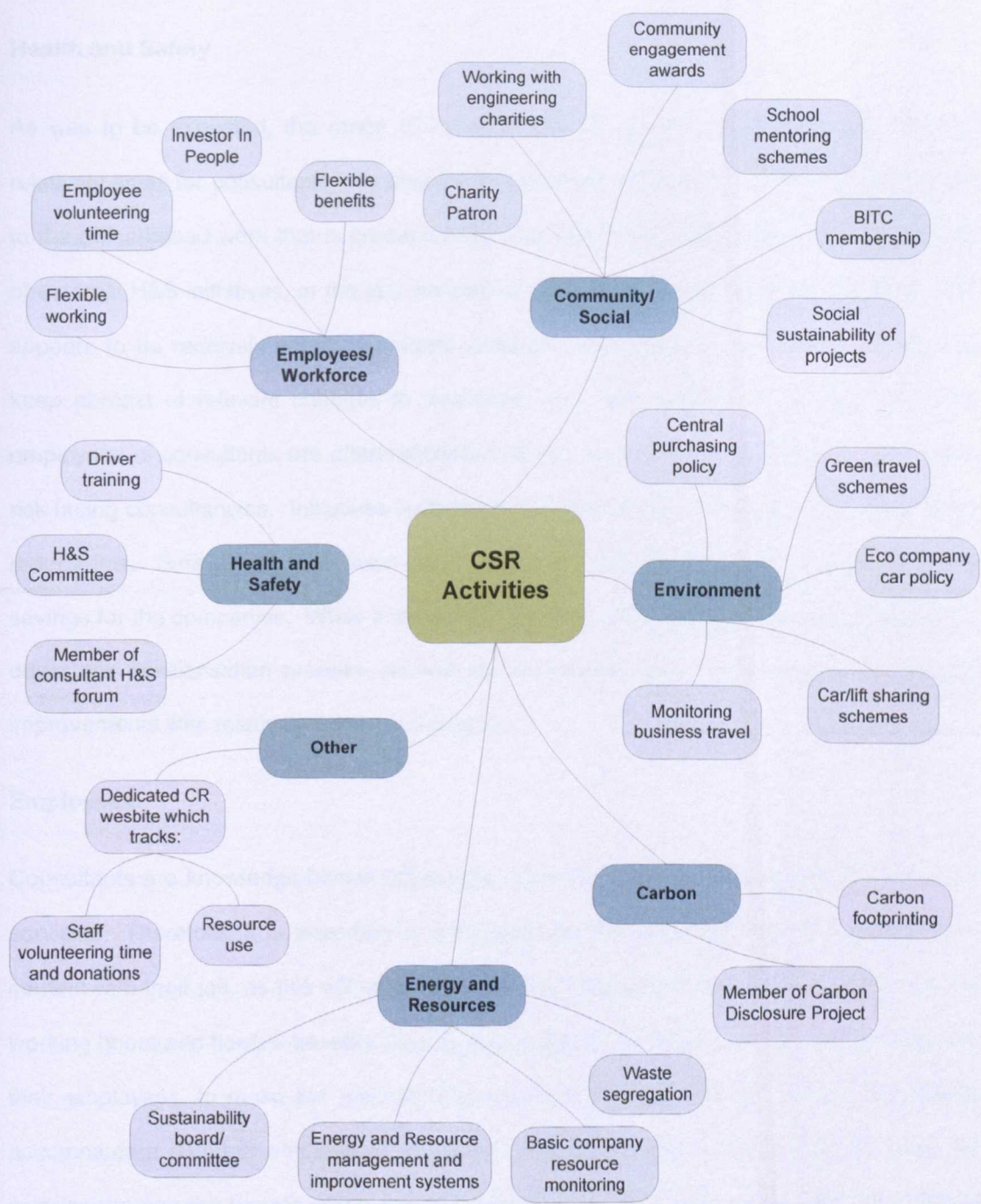


Figure 6-1 Summaries of activities/initiatives implemented by construction consultancy companies

The proceeding paragraphs discuss the findings from the consultancy report review. These findings are discussed with reference to the:

- Findings from the URS Scott Wilson staff interviews

- Implications for URS Scott Wilson's operations and CR activities; and
- Wider implications for the sub-sector

Health and Safety

As was to be expected, the range of activities relating specifically to employee H&S was relatively small for consultants. As previously discussed in Chapter 4, this is most likely due to the office-based work that is predominantly undertaken by consultants. The membership of external H&S initiatives, or the appointment of a committee responsible for managing H&S appears to be relatively common practice amongst consultants. This allows companies to keep abreast of relevant changes to legislation etc. Site visits and meetings mean that employees of consultants are often required to drive. Accidents while driving are a common risk facing consultancies. Initiatives such as driver training and risk assessment tools help to reduce this. Safe driving also links closely with fuel efficiency which can provide potential savings for the companies. While it is not an online tool, URS Scott Wilson does implement a driver risk familiarisation process, as well as risk assessments. Identification for potential improvements was relatively limited in this area.

Employees

Consultants are knowledge-based enterprises which rely entirely on their staff to deliver the services. Therefore, it is important to consultancies that their staff remain interested and content with their job, as this will encourage them to continue delivering good work. Flexible working hours and flexible benefits are one way in which companies can give more control to their employees, to make the work-life balance more effective. Hours can be adjusted to accommodate different employees' situations, and tax or other savings can be made on salaries through the benefit system. URS Scott Wilson currently provides staff with both of these benefits.

Investors In People (IIP) is another initiative which was seen during the review. This is a business improvement tool managed by the UK Commission for Employment and Skills which aims to help organisations develop performance through their people. URS Scott

Wilson is already a certified member of this scheme, as are a number of the other consultants reviewed.

An initiative which was seen in a number of consultant reports, as well as being raised by a number of staff during the interviews, was that of employee volunteering time. A certain amount of time each year is allocated to staff for taking part in voluntary work. This can range from raising money for charities around the world, to participating in community projects such as cleaning/refurbishing local community centres. While there is clearly a cost to the company for staff time that is being donated, it is an activity that can raise awareness of a company, while also giving the staff involved the satisfaction of helping various good causes. While this has been covered under the employee heading, it is also very relevant to the community topic, as it is an activity that can help the local community, as well as raising the profile of an organisation and the work that they do.

Community/Social

Community and the more general 'social aspects' were discussed by a number of individuals in the URS Scott Wilson interviews. Some of the activities in this area which are being implemented by consultancy companies are already being practiced by URS Scott Wilson. Many companies, URS Scott Wilson included, run their own charities with many senior members of staff acting as the patrons to promote the charity and its efforts both internally and externally. The SWMP is an example of one of these charities which aims to help children in developing countries. In addition to company charities, URS Scott Wilson and others are active contributors to other engineering related charities being run across the globe. RedR and Engineers without Borders are examples of these charities which offer engineering help to some of the world's poorest countries, as well as providing disaster relief whenever it is needed. These different kinds of charity work allow consultancies to distribute their knowledge and expertise amongst communities around the world that would otherwise be unable to use it.

Most of the URS Scott Wilson interviewees were aware of the companies overseas charity work and acknowledged the positive changes that it provided. However, on a more local level, the review and interviews suggested that the company did not seem to be as active as

some others. Some companies hosted community engagement awards to encourage staff to raise money for local causes, with the best efforts receiving financial rewards for their chosen cause.

Mentoring and role model schemes in local schools to raise awareness of the construction industry were also being implemented by some companies. This helps to dispel misunderstandings often associated with engineering (Bevins, Brodie *et al.* 2005), and could help to prevent future skill shortages in the industry. Ties with educational institutes vary across URS Scott Wilson offices, and the focus is mainly on raising the profile of the company and graduate recruitment in universities. Therefore, it may be an activity that could be standardised and improved upon throughout the company. It is these kinds of local initiatives which can provide employees with a more direct view of the benefits that their efforts are achieving.

A further dimension of the social/community aspect which was raised during the interviews relates to the company's project work, rather than the charity type work discussed above. As has been established in previous sections, construction companies can have significant impact on the communities in which they operate. Companies can either adopt a 'do minimum' approach to these impacts, or they can take a more active and engaged role to obtain, and take onboard, the views of the communities they are working with and in. This allows the company to ensure that any impacts are addressed to the best of their abilities. Implementing these kinds of active approaches will contribute towards the social sustainability of the work, which consultants (and other sub-sectors) carry out. The review of company reports identified relatively limited information on the methods by which companies ensure that social sustainability is accounted for in projects. Community liaison groups and sustainability tools which account for social impacts, were the extent of detail provided on this topic. This suggests that it is a topic which may not be very well developed or taken into account by many companies.

URS Scott Wilson has taken an active interest in the topic, as evidenced by the undertaking of a questionnaire to elicit staff views and understanding of the company's performance and available expertise in this area. The work concluded that, while social engagement expertise

does exist within some parts of the company, generally the 'soft skills' required for this type of work could be improved throughout URS Scott Wilson. This further suggests that it is a topic that may not be clearly understood by companies in the sub-sector (and possibly the rest of the industry), as well as indicating that it is an area for URS Scott Wilson to concentrate on improving.

A potential way to assist with this topic could be through participation in BITC. The benchmarking process offered by BITC can help organisations to obtain a more structured view of their operations and how this relates to social impacts. Through the use of the BITC methodology, companies could be helped to make changes to their operations with regards to arranging of CR topics including community impacts.

Environment

As was seen in the reviews in Chapter 4, environmental topics within the reports appeared to be well covered and included a relatively wide range of examples of activities and benefits that had been provided by the companies. Although, in general, the environmental impacts of consultancies are relatively small, many companies are still making efforts to minimise them. Business travel and staff commuting seems to be one of the main focus areas. Some companies implement green travel and cycle to work schemes, to encourage the use of alternative forms of transport. Examples of these include offering incentives for cycling or helping with the purchase of bicycles.

Other travel related schemes/initiatives included company car schemes that ensure the most efficient models are included in the selection available to staff – this reduces fuel use and environmental impacts, as well as providing tax benefits. Car and lift sharing schemes appeared to be common amongst the companies reviewed. Some of these were members of national schemes such as www.liftshare.com, while others hosted their own internal share schemes on the company's intranet site.

Finally, the last environmental related activity employed by some consultants is that of a central purchasing strategy, to ensure that all products purchased are recycled, or of low

environmental impact. This central purchasing strategy is a policy that URS Scott Wilson is in the process of implementing.

Carbon

All consultants reviewed were making some effort to monitor and record their carbon emissions. This is mainly through the monitoring of business travel and energy use. As part of this activity, many companies have also signed up to the Carbon Disclosure Project (CDP). This is a not for profit organisation, which promotes the recording and reporting of greenhouse gas emissions, in order to compile the largest database of corporate climate change information in the world. Companies do not receive any direct benefits by reporting through the CDP, but it does encourage companies to calculate/record emissions from their activities. Accreditation to other organisations such as the Carbon Trust was also seen in the reports. Monitoring and reduction of carbon ties in closely with the energy and resources initiatives which are discussed in the following section.

Energy and Resources

While the amount of energy and resources that consultancies require is quite small compared to other sub-sectors, many consultants are still putting procedures in place to monitor and manage their consumption. The URS Scott Wilson interviews indicated that the collection of KPIs from across the company would be difficult, due to the variety of work undertaken by the company. The consultant reports suggest that it is possible to collect the basic data covering the predominant sources of energy and resource use by the company. Smart meters, online recording of energy and water use and remote energy management systems were being used by a variety of companies. In 2010 URS Scott Wilson used smart meters in six of its offices, while others attempt to collect energy data independently. Some offices are on green energy tariffs, while others are not. Again, the systems and processes in place for energy management do not seem to follow a standard method and consumption is not centrally reported, so the recording of this information is patchy. More effort to standardise the process could reduce environmental impacts, as well as achieving cost savings for the company.

Other

The final initiative which was noted during the review relates to all of the topics covered so far. While it was only reported to be used by one company, it was seen as a very useful idea which could help to address some of the CR issues that URS Scott Wilson is facing. This was the use of a dedicated CR website. As well as sharing information on company CR policy and activities, it was also used to display the amount of money and employee time that had been donated to various causes. Resource use was also tracked and reported by each office via the website. While it was not stated whether it was hosted on the company's intranet site, or if it is a public site accessible by everyone (online searches could not locate it), the idea of a central repository for all information related to CR could be useful to companies across all sectors. Many companies may already be using this tool, but simply do not publicise it.

6.7 CHAPTER CONCLUSIONS

As set out at the beginning of this chapter, the goals of the case study were to:

RQ 5 - Investigate how aware URS Scott Wilson staff are of the issues associated with CR, and what perceptions they have of the company and the industry with regards to CR.

RQ 6 - Compare URS Scott Wilson's benchmark results with its industry peers

RQ 7 - Review how other consultancies are addressing their own CR issues

The case study undertaken in this chapter has provided a number of insights into CR within consultancy companies. The interviews with URS Scott Wilson staff have provided information on how staff within a consultancy perceive their organisation, and the sector, to be performing along with some areas of operations where improvements might be made.

The four main areas of interest which were highlighted from the interviews are:

- Communication of CR information within the company
- Social/community interaction by the company (and the industry as a whole)
- Data collection and monitoring of energy and resources across the company
- Influencing projects/educating clients with respect to aspects of CR and sustainability

These offer an indication of some of the issues which may be facing consultancy companies operating within the construction industry. To expand upon this further, the chapter also looked more closely at the responses to the benchmark exercise provided by consultants. While it was hoped that this might indicate additional areas where improvements might be made, no new topics were identified, but the results provided further evidence to suggest that the social/community interaction aspects of URS Scott Wilson's work could benefit from improvement.

The consultancy report review has then expanded upon this by providing examples of ways in which some of the CR issues noted during the interviews might be addressed by companies. The review also offers further evidence to support some of the findings which have been made in earlier chapters. Activities relating to certain topics were more common than others, suggesting that these topics might be seen as very relevant and of a high priority for implementation, as well as reporting by the consultants.

Figure 6-1 shows the activities which were seen during the review. Of the activities shown, the most common are shown in Table 6-2 along with the more general topic which they are associated with.

Activity/Initiative	No Companies Implementing (out of 10)	Associated Topic
Staff volunteering time	6	Employees/Workforce
Carbon foot printing	5	Carbon
Charity patron	5	Community/Social
Work with engineering charities	4	Community/Social
Waste/energy monitoring	4	Environment
Waste/energy reduction initiatives	4	Environment

Table 6-2 Summary of most common CR activities/initiatives in consultancy CR reports

Table 6-2 shows there were a number of common activities found during the report review. These activities are associated with a smaller number of more general topics which relate to the mini-waves discussed in Chapter 4 and the questionnaire topics discussed in Chapter 5.

All of the topics associated with the common activities in the report review are amongst the priority topics which are discussed in Chapter 5. This offers some further evidence to support the findings from the previous chapters, that these topics are of a high priority to both the construction industry as a whole, and the consultancy sub-sector.

The implications of these findings for a consultancy company, along with a selection of potential improvements that could be implemented, are discussed in section 7.6.

This chapter concludes the experimental section of the research. While Chapters 4 to 6 have already drawn a number of conclusions based upon the research which has been undertaken within them, it is now necessary to take a more holistic view of all three chapters. This will allow for discussion of how the results relate to one another, what themes (if any) have emerged throughout the research project and also begin to think about what implication the work may have for future research and the companies that are operating within the industry.

7. DISCUSSION AND CONCLUSIONS

Having obtained a variety of data from various methodologies, the concluding chapter of this thesis seeks to draw these individual threads together to produce a better informed picture of how CR is being practiced within the construction industry. This drawing together of various threads is the process of triangulation which has been mentioned in Chapter 3. The first part of this process is to identify the main themes that have emerged from the research which will help to link the different findings together. These themes will then help to relate the findings from the research to the overall aims of the project.

7.1 DISCUSSION - CHAPTER SPECIFIC RESULTS

This section presents a brief discussion of the findings from each chapter of the research before Section 7.2 goes on to discuss the major themes which have emerged during the course of this research and how the results from each chapter have helped to shape them.

7.1.1 Report Review (Chapter 4)

The purpose of this chapter was to achieve objective 2 in section 1.2; namely to investigate CR reporting practices of construction companies to identify trends in reporting, as well as possible reasons why these trends might be occurring.

The results from the longitudinal report review indicated that that a number of priority topics existed for companies operating in the industry which included:

- Health and safety
- Energy and resources
- Environmental performance
- Carbon
- Community/social
- Workforce/employees

While these topics were common to many of the reports regardless of sub-sector, the research found some other noticeable differences between the sub-sectors which were

reviewed. On the whole, materials suppliers reported upon a wider range of mini-waves and a greater number of KPIs, suggesting that reports from this sub-sector were more extensive and provided a greater level of detail. Contractors were very close behind materials suppliers with respect to report detail and extent of coverage, while in both reviews consultants produced reports with much less detail and a narrower range of GRI topics being covered.

Although longitudinal changes were noted between the two reviews, these variations were generally minimal. Of the nine mini-waves developed, the six listed above seemed to be the most focused upon within the reports throughout both review years.

While there were similarities with reporting throughout the industry, there were also differences noted between the sub-sectors. These differences might be explained by the varying levels of impacts that each sub-sector can have. Consultants generally undertake office-based work, which is likely to have less of a direct impact on stakeholders when compared to contractors and materials suppliers. These two sub-sectors are more likely to have direct contact with a greater range of stakeholders than the consultants. For this reason, the more extensive reporting may be a reflection of the companies attempting to address a wider range of stakeholder concerns.

The overall impression based on the research in Chapter 4, is that there has been some increase in the extent of reporting (i.e. the topics/areas that reports are covering and the detail which they provide) over the two/three years. Six priority topics relating to construction companies have been identified. The study also indicates that there is a significant variation in reporting within the sector, but from the reports reviewed, materials suppliers and contractors appear to report more extensively and in greater detail.

7.1.2 Benchmarking Exercise (Chapter 5)

The objective of this chapter was to undertake a benchmark of construction companies to identify which sub-sectors (materials suppliers, contractors or consultants) are performing most effectively and why this might be.

The findings from this chapter were not quite as clear as those in the report review, due mainly to the varying numbers of responses from each of the sub-sectors. This meant that it

has been difficult to provide a clear and conclusive picture of how CR performance varies across the industry. However, the results hint at some possible trends, both in relation to the similarities with the prominent mini-waves seen in Chapter 4, and with regards to the activities and performance of companies in the sector.

While varying numbers of companies were reviewed in Chapters 4 and 5 and the response rates for some sub-sectors were low, a possible trend was noted in the results. The materials suppliers and contractors appeared to produce extensive reports, and achieved reasonable scores in the benchmark exercise. Consultants on the other hand, produced less extensive reports, but achieved a higher average score in the benchmarking exercise.

Although the response rates to the benchmarking exercise have made it difficult to identify firm conclusions on the performance of companies across the industry, the methodology still allowed for some performance comparisons to be made. The results did show an interesting change from the expected performance of the companies. Based upon their generally low detail and short reports seen in Chapter 4, consultants were expected to be poor performers in the benchmark exercise. However, the results suggest that of the companies that were reviewed; consultants were actually relatively good performers with regards to CR. However, this is based upon a small sample of companies so may not be providing a realistic picture of performance of the industry as a whole. Further work would be required in order to obtain a larger sample containing an even spread of company sizes.

7.1.3 Consultancy Companies Case Study (Chapter 6)

The purpose of the case study was to review consultancy companies in detail to identify and assess their CR activities and highlight where and how potential improvements might be made.

The interviews with URS Scott Wilson staff provided some interesting information on how employees within a consultancy perceive their organisation and the sector to be performing, along with some areas of operations where improvements might be made. The four main areas of interest which were highlighted from the interviews are:

- Communication of CR information within the company

- Social/community interaction by the company (and industry as a whole)
- Data collection and monitoring of energy and resources across the company
- Influencing projects/educating clients with respect to aspects of CR and sustainability

These offer an indication of some of the issues which may be facing consultancy companies operating within the construction industry.

A more in depth review of the benchmark results suggest that in some areas (e.g. employees and customers) URS Scott Wilson may be slightly below average compared to other consultancies. However, the deviation seen in these scores is relatively small. Where the results show a more notable difference in performance, is in relation to the society topic. These results tie in with some of the findings from the URS Scott Wilson interviews, suggesting that social/community side of URS Scott Wilson's work is likely to be an area where improvements could be made.

The review of other consultancies' activities (through additional report reviews) provided further evidence to support some of the findings which have been made in earlier chapters. Activities relating to certain topics were more common than others, suggesting that these topics might be more relevant, and of a high priority for implementation and reporting on by the consultants. The most common activities are shown in Table 6-2 along with the more general topic which they are associated with.

All the topics associated with the common activities in the report review are amongst the priority topics which are discussed in Chapter 5. This offers some further evidence to support the findings from the previous chapters - that these topics are of a high priority to both the construction industry as a whole, and the consultancy sub-sector.

Having discussed the main findings from the individual chapters and methodologies used in the research, the following section will go on to discuss these findings with reference to one another and how they have helped to shape the research themes which have emerged during the study.

7.2 DISCUSSION – RESEARCH THEMES

The different methodologies used in each of the chapters have supplied a range of data, and the mixed-mode nature of the study has also meant that the data are quantitative and qualitative in nature. So far, the findings and conclusions from each chapter have been discussed in relative isolation. While often very different, these sets of data contain common themes which can help to build a picture of CR amongst companies operating in the construction industry. The purpose of this final chapter is to identify connections between the conclusions from each of the experimental chapters and discuss if, and how these findings are supported by each of the methods used.

Throughout the course of this research project, a variety of themes and ideas have emerged. Some are more general, relating to the wider context of the construction industry, while others are quite specific having been identified during the focus on consultancy companies and hence may be more relevant to this sub-sector. The main themes that have emerged during this study are listed below:

- **Priority topics/areas of CR**

This theme relates to CR topics or areas of operations that appear to be of high priority to the construction industry, based upon their prevalence throughout the research and the focus which companies appear to place upon them.

- **Social/Community Activities**

Social/community interactions and impacts of the construction industry appeared to be an important area to the industry, but also one which was very difficult to address.

- **KPI Recording/Data Collection**

This relates to the difficulties associated with data collection for companies (particularly consultants) operating in the industry, for both reporting and monitoring purposes.

These themes have been identified during the preceding chapters, but have generally only been discussed in the context of the findings from each specific chapter. The following sections will look at each of these themes in more detail, using information from the literature

review and the conclusions from Chapters 4 to 6 to justify their presence and consider their potential implications.

7.2.1 Priority Topics

Identifying the areas of CR which are of a high priority to construction companies has been an important aspect of this research. The term 'priority topic' describes aspects of CR which the results from the research indicated might be of high relevance and importance to construction companies. A number of priority topics were established initially during the report review in Chapter 4, which have been expanded upon and supported by the results in Chapters 5 and 6. The variety of data sources used to establish the priority topics means that they are based on different aspects of CR, such as reporting, activities and employee perceptions.

The Chapter 4 report reviews identified six topics which were reported upon extensively by the sector. These topics are:

- Health and Safety
- Energy and Resources
- Environmental performance
- Carbon
- Community/Social
- Workforce/Employees

These priority topics were the most commonly reported upon mini-waves in the 2006 and 2010 report review. They provide an initial indication of the aspects of CR which are the most widely covered, and therefore potentially the most relevant to the construction industry. The longitudinal view showed a significant reduction in the size of reports and the level of detail which they covered, but also demonstrated that these six topics remained the most prominent in both reviews, even though the overall number of KPIs covered fell.

While the priority topics listed above were seen to be of importance to all three sub-sectors of the industry, there were still some notable variations within the results. Most obvious was the

difference seen between the more extensive and detailed reporting of contractors and materials suppliers, compared with the less detailed reports of the consultant companies. The variations seen here, tie in well with the findings from similar work by Jenkins and Yakovleva (2006) and Jones, Comfort *et al* (2006). The reason for this difference is the main topic of discussion in section 7.2.3.

As well as highlighting these topics, Chapter 4 also attempted to postulate on some of the potential drivers behind why these topics were more prominent. Repeated from Chapter 4, Table 7-1 shows a list of potential drivers that were identified during the literature review (Chapter 2).

Topic/Mini-wave	Summary of potential drivers
Health and safety	Highest fatality rates of all sectors in the UK
Energy and resources	High costs of energy, dwindling resources and a desire to demonstrate efficient operations
Environmental performance	Well established part of non-financial reporting
Carbon	Increased awareness of the impacts of CO ₂ emissions amongst stakeholders
Community/Social	Construction companies can have significant impacts on the communities in which they operate.
Workforce/Employees	The workforce is integral to operation of the company

Table 7-1 A summary of drivers for the most prominent mini-waves identified during the two reviews

These are potential drivers, based upon the research and literature review carried out in this project but they are able to offer some explanation as to why these topics, and not others, might be focused on by the industry. With views of the industry such as though put forward by websites such as Construction Scotland (2007) and www.businessandbiodiversity.org it is not suprising that topics such as health and safety are a major focus for the industry. While touched upon in Chapter 6 by some respondents, the methodologies did not explicitly attempt

to identify further drivers, so no substantive evidence was found to back up these suggested drivers.

Although a greater number of responses would have presented stronger evidence, the benchmarking results from Chapter 5 provided additional evidence to support many of the priority topics listed above. For example, companies scored consistently highly in the benchmarking questions which related to H&S, as well as environment. The questionnaire section on employee relations was also found to be an area where companies scored well, which supports the presence of the workforce topic in the list. The research suggests that these three topics are therefore areas of CR that companies aim to report extensively upon, and also achieve relatively good performance in. This combination would indicate that the topics are, indeed, of high priority to the industry. Aspects of the literature review carried out in Chapter 2, such as the drivers for CR and the perception of the industry (section 2.8) also indicate that these topics are likely to be high on the CR agenda for the majority of companies operating in the industry.

The priority topics which the benchmark did not appear to provide additional support to were carbon, energy and resources, and community/social. The absence of the first two topics is easily explained by there being no dedicated sections of the questionnaire and very few questions present which were associated with these topics. This is a shortcoming of the benchmarking methodology, and is a consideration which should be made in any future research in this area.

The results from Chapters 4 and 5 relating to the community/social topic are not quite as clear cut as those described above. The report review indicated that the community mini-wave was covered by a high number of reports suggesting that companies see it as an important aspect of CR. However, the benchmark exercise indicated that it was a topic in which the majority of companies were performing very poorly. This discrepancy could be explained by the fact that it may be difficult to measure and track performance in relation to social impacts. Whereas, reporting a low injury rate is a sign that a company is performing well in relation to H&S, reporting that a company regularly works with charities or donates

large sums of money is not a definite indication that it is performing well, with respect to community and social impacts.

The other possible cause for these discrepancies (which may be relevant to a number of results) is that because the report reviews and benchmarking methodologies were developed independently of one another, the KPIs do not necessarily directly align with the questions and data that is being sought in the benchmarking exercise. This is another shortcoming of the methodology employed in this thesis, but, as the study is more exploratory in nature and seeks to develop a selection of theories rather than definitive explanations, this slight misalignment is seen to be acceptable.

As well as providing some support to the findings from Chapter 4, the benchmarking exercise also identified some additional topics which could potentially be priority areas for construction companies. These were topics in which the majority of companies performed well. These topics were:

- Customer relationships
- Supply chain
- Ethics/Corruption

There is once again a slight issue with additional evidence to support these as priority topics. In the case of customer relations, no mini-waves or KPIs in the report review directly related to this topic, so evidence for its importance is weaker than some of the other topics. The supply chain and ethics/corruption topic suffer from a similar problem to that seen with the community/social topic. In the benchmark, these were subjects where companies performed well, but the report review showed them to be topics in which very few KPIs were addressed by companies. This difference may be once again caused by differences in the methodologies being used. Both the supply chain and ethics/corruption mini-waves within the framework had a small number of KPIs associated with them, and additionally, these KPIs were often very specific. This means that companies may have covered supply chain issues in their reports, but if the topic was not covered in a specific way, then the KPI would not have been recorded.

So far, data for these priority areas has been drawn from Chapters 4 and 5. While Chapter 6 was predominantly focused on consultancies, it does also give further evidence to support some of the priority topics discussed above. As will be discussed in section 7.2.2, the importance of social/community impacts was brought up by a number of interviewees. While the questioning was in relation to URS Scott Wilson's activities, the majority of participants who mentioned it, felt that it was an important aspect of operations for all companies involved with the construction industry. This supports the inclusion of this topic amongst the priority topics for the industry. While it was mentioned in reference to the performance of the wider industry (not URS Scott Wilson), a small number of interviewees mentioned that a number of contractor companies were focusing their efforts upon H&S issues, due to the dangers associated with working in the industry. This was by no means a common response in the interviews, but even the mention of the topic by a few participants provides some limited evidence that the topic is relevant and important to the industry.

Based upon the discussions above, two different groups of priority topics can be presented. Firstly, those topics which can be listed with a high level of confidence (due to the findings from Chapters 3, 4 and 5 supporting one another), and secondly, those which are likely to be a priority, but are not as well supported by evidence. The priority topics which can be listed with a high level of confidence are:

- Environmental performance
- Health and Safety
- Workforce
- Community

Those which are less well supported by evidence are:

- Carbon
- Energy and Resources
- Customer relations
- Supply Chain Management

- Ethics/corruption

So, the above discussion has covered a range of topics which the research suggests should be of high priority to construction companies. Having identified these topics, it would be useful to think about what implications they might have, and how they might be of benefit to companies operating in the industry. As their names might suggest, these topics could help companies when it comes to prioritising their CR activities. For example, if a company is taking its first steps towards implementing some kind of CR strategy, then these priority topics may be the best areas on which to concentrate their initial efforts. Likewise, if money available to spend on CR activities is limited, then these topics are likely to be the more sensible areas in which to consider spending funds. Finally, if a company is already undertaking CR activities and is performing well in one or more of these areas, then it may be beneficial for the company to focus on one of the priority areas in which they are not performing so well. In this way, the company should eventually be able to achieve good performance in all of the priority topics and strengthen its overall CR performance.

7.2.2 Community Impacts

The previous section has already touched upon the fact that information relating to this topic showed some discrepancies throughout the different experimental chapters. This section will attempt to clarify these variations and identify some potential reasons behind them.

Chapter 4 indicated that in both reviews, at least one of the KPIs from the community mini-wave was covered by the majority of reports. In terms of detail, materials suppliers and contractors addressed a significantly higher number of KPIs from this mini-wave, than consultants. This is one of the first notable discrepancies between the sub-sectors seen during the research. There are a number of potential reasons for this difference. Firstly, consultants may have less potential for direct impact upon their local communities when compared with contractors and materials suppliers. This may mean that they see this area as a lower priority and hence fewer report upon it. As will be discussed later in this section, responses from the URS Scott Wilson interviews suggest that this may not be the case, and that employees of a large consultancy (URS Scott Wilson) feel that the organisation does have potential for community impacts and needs to improve its performance in this area.

Alternatively, due to the wide-ranging activities they are involved in, and the types of community impacts they can have, consultants might have difficulty in recording community KPIs to report upon. The interviews hinted at relevant KPIs being difficult to identify and record, which might indicate that this is a more likely reason for the difference. The difficulty of identifying and recording KPIs within consultancies and the implications that this can have is another theme which has been noted during this study. It is discussed in more detail in the following section. Although not covered in much detail by consultants, the topic appeared to be well covered by the other sub-sectors, which helped to raise the priority of this topic within the first report review.

The results from the benchmarking exercise indicate some further variations relating to this topic. Contractors and materials suppliers were seen to provide a relatively high level of detail on social/community aspects of operations in their reports. It was expected that if companies are reporting in detail on a given topic, then the company's performance in that topic might also be expected to be relatively good. However, the actual performance related results from the benchmarking exercise indicate that the companies in all sub-sectors performed poorly in the questions relating to society (see section 5.3.6 for further details). This is another of the notable discrepancies shown by the results. To further complicate matters, the consultants were seen to be reporting in significantly less detail than the other sub-sectors, however, when it came to the benchmarking, this sub-sector was outperforming the others (although the average scores achieved were still some of the lowest of all areas within the questionnaire).

The most likely reason for this variation has already been touched upon in section 7.2.1. While it may be easy for an organisation to report that it is working closely with charities, or is donating significant sums of its profits to charitable causes, this does not necessarily mean that the company is performing well with regards to social and community activities. Reporting that actions are being implemented within a local community, and measuring the impacts of these activities are very different. The questions in the benchmarking exercise relating to social activities are by no means exhaustive, and are not necessarily an accurate method of judging performance, as they are actually relatively limited. However, they do still

offer a basic method of assessing performance, and so can be used to help develop some simple theories on the relationship between performance and reporting.

Although the questionnaire may have limitations associated with it, the consultancy case study undertaken in Chapter 6 provides some further evidence that this sub-sector may be underperforming with respect to community areas. This was demonstrated by many of the interviewees, suggesting that URS Scott Wilson's influence and impacts relating to social/community activities could be improved. Participants were not always clear about exactly which areas could be improved, but a number of responses implied that it was the community interaction and consultation aspect of URS Scott Wilson (and its clients) that they were referring to. Unfortunately, in many cases the researcher failed to ask for further clarification of this topic. The consultancy report review in Chapter 6 also indicated that community/social values are an area that many companies are keen to promote, even if they do not provide any significant information relating to performance. For example, six of the 10 company reports contained information about charity work, ranging from the companies being the patron of their own foundations, or involvement with engineering/construction related charities such as RedR. While this is not community work in the sense of interacting with the local community, it does allow the company to demonstrate that they are taking at least some steps to provide positive social impacts, even if it is not directly related to the projects they are undertaking.

The data collected during the various stages of this research indicates that the social/community side of construction companies' operations is most likely to be an area in which improvements could be made. Findings in the literature review also suggest this to be the case, but while improvements may be possible, identifying them, implementing them and monitoring performance in these areas of operations is likely to be a much more difficult set of tasks. While the observations relating to this theme are applicable to the industry as a whole, the focus and interpretation of the results is now beginning to move towards consultancy companies. This focus will progress in the following section, as one of the most notable issues identified for consultants during the research is discussed further.

7.2.3 KPI Recording and Data Collection

Due to the focus on consultancies and a greater amount of information relating to their activities being collected, this theme is most relevant to this sub-sector. It may be that further research into the other sub-sectors might raise similar issues to those discussed in this section, but due to lack of evidence, this can only be tentatively proposed.

Chapter 4 recorded a notable difference in the reporting by consultancy companies compared to the other sub-sectors in the review. Chapter 5 then indicated that while the sub-sector's reporting was poor, the companies which took part in the benchmarking exercise were actually performing quite well in many areas of CR. As mentioned in section 7.2.2 it was expected that companies who were reporting in greater detail might be doing so because they are actually undertaking their CR activities more effectively. This is based upon the idea that the process of producing more extensive and detailed reports is likely to require effective monitoring and recording of KPIs and other CR activities. Alternatively, it may be because a company is practicing a specific activity particularly well, and so can see a benefit to reporting upon it in detail. These improved processes may well lead to a better understanding of the activities involved with CR and the methods by which they are best implemented, ultimately leading to better CR performance.

This expectation would appear to be inaccurate with respect to the consultancy companies that have been reviewed during this research. The consultants' reports reviewed in Chapter 4 suggested that they produced reports of relatively low detail (in relation to KPIs) yet the companies that took part in the benchmarking appear to be performing well with regards to CR activities and initiatives. While the evidence supporting this observation is not as strong as the methodologies were expected to produce, the data still implies a trend here. The obvious question to ask is why this trend might be occurring? A possible explanation for this observation began to emerge during the consultancy case study. The collection of KPIs and other data relating to company operations was of interest to the researcher, due to the fact that consultants were covering a very limited selection of them, and also as part of an attempt to identify potential KPIs within URS Scott Wilson for the company to report upon. When questioning interviewees on the possibility of KPIs relating to projects which could be

recorded and collated, the predominant feedback was that there were limited project KPIs which could be easily, meaningfully and consistently recorded. Most participants suggested that this issue was due to the variety of jobs URS Scott Wilson is involved in, as well as the different, generally short term stages of projects that the company participates in. For example, recording, comparing and reporting KPIs related to the design phase of a rail track project with KPIs from an environmental scoping survey for a new housing development is likely to be difficult.

This difficulty in recording KPIs may help to explain the very low numbers that were seen in the consultancy reports in Chapter 4. Consultancies may be acting in a responsible manner and implementing their CR activities effectively, but they may simply not be able to demonstrate this with KPIs directly related to their projects. While project specific KPIs may be difficult to identify and record, there should be potential for consultants to record more general operational data. This can relate to various aspects such as the electricity, gas and water use at their offices and the predominant use of materials for their day to day running. While these are likely to be very trivial compared to the energy and resource consumption of the materials suppliers and contractors, it will none the less allow them to monitor use and implement initiatives to reduce consumption of them. Some consultancies are already doing this but there are others (including URS Scott Wilson), who do not appear to be recording and reporting upon basic information such as energy use. Collecting this information is likely to be an initiative which would not only improve the company's CR reports, but also help to reduce overheads and possibly lead to further advances in CR activities. Parts of the recommendations in section 7.5 have discussed these with reference to URS Scott Wilson, and some of the ways in which the difficulty of collecting KPIs might be overcome.

7.3 CONCLUSIONS

Having discussed the findings from each chapter and how they relate to the overall themes which emerged during the research, this section presents a brief summary of the main conclusions.

7.3.1 Reporting

The conclusions presented in this section relate to research questions:

RQ 1 – What areas of CR are most commonly reported upon within the industry, and why?

RQ 2 – How do these topics vary throughout the industry and over time, and why might this variation occur?

- A number of topics were reported upon more regularly and in more detail than others.

These priority topics were:

- Health and Safety
 - Energy and resources
 - Environmental performance
 - Carbon
 - Community/social activities
 - Workforce/employees
- There appears to be notable variations in the extent (range of topics covered) and level of detail of reporting between the different sub-sectors of the construction industry
 - Materials suppliers and contractors produced more detailed reports covering a wider range of CR topics than consultancies. This may be a result of the differences in the level of impact that these types of companies can have.

- While the longitudinal changes in relation to priority topics were limited, there were notable changes in the size of reports and the level of detail between the two review years (2006 and 2010)

7.3.2 Activities and Performance

These conclusions relate to research questions:

RQ 3 – What differences and similarities exist in the activities which companies undertake across the industry?

RQ 4 – Do trends exist in the performance of different sub-sectors?

- As well as reinforcing the importance of the priority topics seen in the report review, the benchmarking exercise highlighted three further topics which may be a priority to companies within the industry. These were:
 - Customer relationships
 - Supply chain
 - Ethics/corruption
- In contrast to the findings from the report review, the benchmarking exercise suggested that consultancies were actually implementing a relatively wide range of CR activities and were performing more favourably than the materials suppliers and contractors, however, these findings were based on a small number of responses from materials suppliers and consultancies.
- One trend that this research might indicate is that although consultancies are not producing reports with very little detail and range of topics, these organisations are actually performing quite well when reviewing the actual CR activities they implement. Contractors and material suppliers appeared to produce very detailed reports but did not perform so well when benchmarked. As already stated, this trend is based on a relatively limited number of responses so would benefit from further research.

7.3.3 Understanding and Integration

The bullet points below help to conclude the findings in relation to research questions

RQ 5, - How aware are URS Scott Wilson staff of the issues associated with CR, and what perceptions do they have of the company and the industry with regards to CR?

RQ 6 – How do URS Scott Wilson's benchmark results compare with industry peers?

RQ 7 – How are other consultancies addressing their own CR issues?

- The consultancy case study highlighted a four main areas where URS Scott Wilson, (but also the consultancy sub-sector as a whole) may benefit from further efforts/developments. These were:
 - Communication of CR within the company
 - Social/community interaction and activities
 - Data collection and monitoring of energy and resources across the company
 - Influencing projects/educating clients with respect to aspects of CR and sustainability
- These were topics which staff felt the company or sub-sector was lagging behind in, and were important to the wider construction industry.
- A closer comparison of URS Scott Wilson's benchmark scores indicated that the company may have been performing below average compared to other consultancies. This was most notable in the employees and customers sections of the benchmark results, which also tied in with some of the responses from the URS Scott Wilson interviews
- A review of a larger selection of consultancy CR reports served to reinforce some of the priority topics identified earlier in the research as well as identifying and developing a range of CR recommendations for URS Scott Wilson (and the consultancy sub-sector). These recommendations are presented in section 7.5

7.4 ACHIEVING THE RESEARCH AIMS AND CONTRIBUTING TO KNOWLEDGE

The previous section has provided conclusions as they relate to the individual research questions set at the start of this thesis. This section looks at the how the overall aims of the research have been met and how in turn, this has contributed to knowledge. The primary aim of the project was:

To review the current state of CR activities and reporting by UK construction companies in order to better understand how well the industry performs with regards to CR, and how the CR agenda is influencing the operation of companies within the industry.

The intention of the research method used in this project was to use a variety of data sources, in order to triangulate the information and achieve the project aims. This has been achieved with the research, providing some interesting and valuable information about the performance of the industry and how CR is being approached.

Although there are limitations associated with the findings, the results from the research have contributed new academic knowledge about how the construction industry (and in particular consultancy companies operating within it) is performing with regards to CR. The confirmation of a number of priority topics for the industry discussed in section 7.2.1 provides some indications on how the industry is being influenced by changes in popularity of different areas within CR. This is discussed in Chapter 2 and partly demonstrated in Chapter 4 by the emergence of new topics or waves within CR. For example, the high profile of climate change has resulted in carbon accounting/management becoming a more important topic for companies to monitor and report upon.

In other ways, the research has also proposed new ideas or theories about how the industry might be affected in the future. For example, the prominence of the social/community impacts was indicated by most of the experimental chapters to be an area that many companies were not addressing very effectively. The responses from the interviews in Chapter 6 indicate that community and social impacts should be an important consideration for the industry. This perception, coupled with poor performance and an increasing awareness of social issues amongst stakeholders, might indicate that this is an area which

will become more important for construction companies in coming years. Twenty to thirty years ago environmental awareness and reporting was confined to a relatively small number of companies, but has since become more mainstream (KPMG 2005). This evolution may also be seen with regards to the community impacts of companies which are, at present, not particularly well addressed.

Finally, the study has also been able to achieve the secondary aim of the project, namely to develop potential recommendations to help consultancy companies operating in the industry to address their CR issues more effectively. A better understanding of the industry and the issues that it faces, in conjunction with the consultancy case study have helped to produce a number of recommendations, which are targeted primarily at URS Scott Wilson, but will also be relevant to the rest of this sub-sector. While the purpose of the recommendations was to benefit the sponsor of this research they also provide further CR evidence and knowledge on consultancy companies that was available prior to this research.

7.5 URS SCOTT WILSON/CONSULTANCY COMPANY RECOMMENDATIONS

The case study undertaken in this chapter produced a host of information relating to URS Scott Wilson's CR activities, as well as those of other consultancies operating in the construction industry. Combining this information with the rest of the data which has been collected during the course of this research has provided some useful information, which has helped to produce a number of recommendations which may be relevant to URS Scott Wilson or other consultants operating in the construction industry. These recommendations relate to four main areas of business operations:

- Communication of CR information within the company
- Social/community interaction by the company
- Data collection and monitoring of energy and resources across the company
- Influencing projects/educating clients with respect to aspects of CR and sustainability

Some of the areas above are similar or closely related to the overall themes which have been identified during the thesis. This is discussed further in section 7.2. The sections below provide more information on why these areas were seen to be significant along with potential methods for addressing them.

Communication of CR information within the company

This was agreed by many respondents to be an area which could be improved upon. There are two main ways that CR information can be provided to staff. It could either be actively distributed to staff via newsletters etc, or it can be passively hosted and available for staff to access as they require it. While active circulation ensures that all employees receive the information, this process runs the risk of 'switching people off' by overloading them with information. Passively hosting the information means that much more information can be available when people require it, but employees may simply not access it.

A mixture of these two strategies could offer a suitable compromise for communication, and aspects of each are already in place within the company. The company's policies and processes relating to CR are currently summarised in an employee handbook called The

Way We Do Business. For its original release, this was produced in hard copy for staff members but changes have inevitably been made to this first version. Therefore, the document is now hosted on the company's intranet portal and offers a central location from which the most up-to-date versions of company policies and processes can be accessed. While some of the main components of CR are covered (such as H&S and environmental management), there are also some aspects which are not covered. These include a variety of topics which could be captured under a CR link on the WWDB page. For example, this page could provide links to information on:

- Energy and resource consumption data (discussed later) making it easily accessible for client/tender inquiries
- Best practice section – providing examples of projects/schemes where clients have been influenced by URS Scott Wilson to more sustainable alternatives, such as more environmentally friendly materials, or reduced community impacts. This could also include examples where URS Scott Wilson have given significant input to projects that have received high BREEAM and CEEQUAL ratings, which would further support the company's commitment to environmental sustainability. Useful for tendering and providing to clients. Individual offices hold this type of info, but it is not centrally accessible. The main issue with this section would be the fact that the project manager themselves would be required to summarise these data. This is extra work for staff who are already likely to be very busy.
- Charity, voluntary and community schemes which are being run by the company or that the company is participating in. This could also link to social sustainability work which is being carried out as part of fee-earning project work.
- A 'What not to do' section, detailing potential pitfalls which employees have experienced. This was suggested by a number of respondents during the interviews. It could cover various areas of operations from H&S bulletins, to project management issues with certain sectors, clients, processes etc. It could be operated in the same way as an online wiki, through user submissions which are controlled by a moderator. It could be kept quite high

level and broad so that staff members responsible are not identifiable and could include near miss reporting for project work.

Important CR information such as significant changes to key company policies, or notable societal activities could be included (or links provided) in the current newsletter. This process will ensure that important information is circulated to staff, while retaining a central repository where more detailed information is always available. For some aspects of the company's operation, this process is already undertaken, but the inclusion of CR/social/community activities and performance information would help to improve the communication process with company staff. It may also be possible for the company to use social media to communicate CR activities with staff members, and some of the suggestions listed above may actually lend themselves to being delivered in this way. A member of staff has recently been appointed to be responsible for the exploitation and development of social media within the company. The aspects of business communications discussed above could form part of this new strategy.

Community interaction by the company

This is an area that both the interviews and the benchmarking suggested URS Scott Wilson could improve upon. With the SWMP and support/involvement with other charities well established, potential improvements to the larger scale philanthropic activities are likely to be minimal. However, on a more local scale, the company might be able to make some changes to its current activities.

Involvement with education institutes across the UK appears to have varied across the company and over time. Some areas of the business provide sponsorship to university students, and in the past, some business divisions have been involved in promoting civil engineering in primary and secondary schools. While university student sponsorship still takes place, the company's involvement with local primary and secondary schools seems to have decreased. This is a practice that could be revived to help raise the industry and company profile amongst UK communities. These kinds of activities may also provide the opportunity to increase community awareness of the various projects the company is undertaking in the area.

In a similar vein, staff volunteering schemes as part of the company's operations could provide benefits to the local community, staff and the company. As has been discussed in section 6.6.2, volunteering schemes in the local community can involve a range of activities which offer a variety of benefits, both outside and within the company. During the current economic climate, it may be difficult to provide staff with the opportunity to take time off to visit schools, or take part in community actions, but the positive benefits of raising the industry's and the company's profile as well as employee morale could be outweighed by this cost.

These types of activities could also assist with the social aspects of fee-earning project work. For example, the processes of establishing contacts and implementing volunteering activities within local communities would provide staff with key skills that could be transferred to stakeholder engagement and other community aspects of project work.

Data collection and monitoring of energy and resources across the company

The interviews indicated that the variety of work carried out by URS Scott Wilson makes it difficult to record company-wide project data. However, more effective monitoring of the basic energy and resource use (e.g. electricity, gas, fuel, water and paper) by the company could have a range of benefits. Working towards reductions in the company's environmental impacts, providing extra information for company CR reporting and identifying cost savings could all be achieved through more effective monitoring. Some efforts have already been made in this direction, such as the installation of smart meters and green energy tariffs, but these efforts seem to vary across the company. The coming period of integration with URS could provide a good opportunity to consolidate these practices, but this will be dependent on URS policies as well.

While only applicable to specific areas of the business (e.g. B&I and Transport), it could be useful to collate the number of highly rated BREEAM or CEEQUAL projects which URS Scott Wilson has helped to deliver. This information could be included in CR reports and could provide further evidence of client influence which can be useful for tender writing.

Influencing projects/educating clients with respect to aspects of CR and sustainability

This was an area which emerged during the interviews and was seen to be a relevant and important part of URS Scott Wilson's work. As a large consultancy operating in a wide range of sectors, influencing clients to make more sustainable choices/decisions should be a part of the company's remit. While respondents saw this as an area which could be focused upon, it is by no means a reflection of activities across the whole of the company; merely the respondents' views. This is not an area of operations that can be addressed in a simple manner, as it is very dependent upon the type of projects, clients and staff members involved. There is also an issue of cost involved, as going 'the extra mile' to demonstrate to a client how more sustainable options or processes can be included, is likely to require extra work, which will need to be funded from somewhere. Furthermore, having made this extra effort there is still the possibility that the client may choose not to implement the alternative option. This idea of influence is something that needs to be made on a case by case basis. The potential for influence, and a decision on whether to attempt to influence the client should be based on the knowledge and experience of the staff members involved. It is likely that no standard practice can be applied to this issue, due to the variety of factors involved. The 'best practice' part of the communication recommendations discussed above could help with this by beginning to build examples of how clients have been influenced. Information on the most economical way of doing this could also be provided.

7.5.1 Summary

These are recommendations predominantly related to the findings from the URS Scott Wilson interviews. Their purpose is to provide URS Scott Wilson with some feedback with respect to areas of CR that might be improved, and the ways in which these improvements could be implemented. While the areas which could be improved have contributed to the academic side of the research in this thesis, the recommendations themselves do not contribute to or tie in with the overall aims and objectives of this research. They may, however, be useful for future research when investigating other sub-sectors of the construction industry in an effort to produce similar recommendations.

7.6 LIMITATIONS OF THE RESEARCH

It has already been acknowledged throughout this thesis that there are a number of limitations associated with it. The main limitations discussed in this section are:

- Differences in companies taking part in Chapters 4 and 5
- Report review and benchmarking methods developed independently of one another
- Focus on MNCs
- UK based
- Bias

Differences in companies taking part in Chapters 4 and 5

While all twelve of the companies reviewed in Chapter 4 were sent questionnaires for the benchmarking exercise, only three of them responded. These were two consultancy companies and one materials supplier. This is likely to have some impact on the conclusions drawn from the comparison of Chapter 4 and 5 results. The patterns seen between these results can be used to provide indications of trends within particular sub-sectors, but the evidence is obviously not as strong as if the 12 companies from Chapter 4 had all taken part in the Chapter 5 benchmark.

Report review and benchmarking methods developed independently of one another

This issue has already been alluded to in section 7.2.1 and relates to some of the discrepancies that were seen during the comparison of the results from Chapters 4 and 5. The fact that the report review was developed before the benchmarking method was chosen or even investigated in any detail, meant that these two methods do not directly align with one another. That is to say, that in many cases the KPIs in the mini-waves which were similar to the benchmark questionnaire topics, do not directly relate to the questions within those topics. At a broader level (as mentioned in section 7.2.1) there are topics within the questionnaire which were not properly covered by the report review methodology and vice versa. These differences between the methodologies again have implications for the

strength of the evidence provided by the results. This is acknowledged in the discussion in section 7.2.1., where the certainty with which priority topics can be presented varies as a result of this limitation.

Bias

As mentioned at relevant points during this thesis, there is a certain amount of bias associated with various aspects of this work. In some cases, attempts have been made to address this, but in the majority of instances it was not actually possible to reduce the bias or may have been a necessary part of the research. For example, only selecting companies that produce CR reports is a form of bias, but was necessary for the report review as companies that didn't produce report were not suitable for the methodology.

Selection and response bias are the most prominent types seen in the research. Selection bias occurred in each of the methodologies employed as companies were selected based on their production of CR reports or the availability of information. While this does limit the research by preventing it from being representative of the whole industry, it was not possible to prevent this bias as the reports and other information were core aspects of the research.

Response bias may have occurred in the benchmarking exercise whereby only companies which thought they well may have responded to the questionnaire. Those who did not take an active interest in CR or who felt had problems in that area of operations may have been less likely to fill in details about their activities. Once again this has potential to limit the results as they may not be representative of all the companies that are undertaking CR, but unfortunately, it was an external factor outside the control of the researcher.

Focus on MNCs

The work is focused on companies that produced CR reports and/or published other CR information. This meant that the majority of companies were MNCs and so the research is limited to providing knowledge and theories on this part of the industry. While some of the findings and recommendations may be applicable to SMEs, they were not produced using data from these types of companies, so the research may not be entirely relevant to them. Although including these SMEs would have given a more effective picture of the whole

industry, for the most part, they do not publish the required information, so they were not suitable for inclusion in the research.

Focus on companies operating in the UK

The research focuses on companies which were UK based, or at least have a large presence in the UK construction market. This presents a limitation by excluding many other construction companies from around the world. While it would have been interesting to include a selection of these companies, a decision was made to focus on only UK companies for the following reasons:

- It limited the number of companies for selection and inclusion to a more manageable size
- Comparisons between the companies are more realistic as they are (on the whole) influenced by the same legislation and market conditions; and
- Information about the companies was more accessible

Although the research does have limitations associated with it, it is generally exploratory in nature, and has sought to develop a selection of ideas and theories, rather than definitive explanations.

7.7 FUTURE RESEARCH

The timeframe available for undertaking a PhD imposes certain restrictions upon what can be feasibly achieved by the research. This section looks at the ways in which additional work could build upon the research in this thesis, to produce stronger evidence, greater insights, or findings that might be of more direct benefit to companies operating in the construction industry.

Develop the benchmarking methodology further

As mentioned in section 7.2.1 and 7.6, the benchmarking questionnaire did not effectively cover a number of the priority topics (carbon, energy and resources and community/social) which were identified during the report review. This made it difficult to make direct comparisons between some areas of Chapters 4 and 5. Aligning the topics of the benchmarking questionnaire, with the mini-waves used in the report review, could help to make the comparison more effective. Adding new topics to the questionnaire, as well as new mini-waves to the comparison framework, would ensure that all topics are covered by both methodologies. Section 7.2.1 also highlights the potential problem of accurately measuring the performance/effectiveness in relation to social impacts. Developing new methods of measuring social impacts, or improving upon existing ones, would be beneficial to any company implementing CR activities regardless of industry. Developments in this area could be incorporated into future iterations of the benchmarking study to help build a more accurate picture of performance.

Increase samples sizes of report reviews and benchmarking exercises

The number of samples used in Chapters 4 and 5 is relatively low and would have benefited from being increased. Having established easily repeatable and comparable methodologies for both of these chapters, future research could replicate the studies, but on larger samples of reports and companies. This would provide a stronger evidence base on which to identify trends within the results, as well as confirming or disproving the theories and conclusions discussed in this thesis.

Repeat the URS Scott Wilson interviews and review on other consultancy companies

Using URS Scott Wilson as one of the main data sources for the consultancy case study produced some interesting data about awareness and perceptions of CR and how it relates to the construction industry. Repeating this part of the case study on other consultants (possibly those companies whose reports were reviewed) would produce further replication of case study data which could be compared with URS Scott Wilson's result and the associated conclusions. This increase in the companies being reviewed may not seek to produce a 'representative sample' of consultants, but would increase the available data from which to draw conclusions and add to the recommendations produced as part of this thesis.

Undertake case studies in other sub-sectors

Due to SW involvement, the focus of the case study in Chapter 6 has been on consultancy companies, and the ways in which they might be able to improve operations with regards to CR. Expanding this research into the other sub-sectors would provide further evidence to the trends which have been indicated during this study. Case studies in these sub-sectors would also allow for further sub-sector specific recommendations to be produced, which may help to improve their CR and sustainability performance.

References

- Adams, C. (2002). "Internal organisational factors influencing corporate social and ethical reporting." Accounting, Auditing and Accountability Journal **15**(2): 223 - 250.
- Adams, C. (2008). "A commentary on: corporate social responsibility reporting and reputation risk management." Accounting, Auditing and Accountability Journal **21**(3): 365 - 370.
- Adams, C. and N. Kuasirikun (2000). "A comparative analysis of corporate reporting on ethical issues by UK and German chemical and pharmaceutical companies." The European Accounting Review **9**(1): 53 - 79.
- Alfred McAlpine (2006). "Corporate Responsibility Report 2006." Retrieved 11/01, 2008, from <http://www.alfredmc Alpineplc.com/cr06/downloads/cr06full.pdf>.
- Anderson, G. and N. Arsenault (1993). Fundamentals of Educational Research. London, Falmer Press.
- Anglo-American (2006). "A Climate of Change: A Report to Society 2006." Retrieved 11/01, 2008, from <http://www.angloamerican.co.uk/static/uploads/Report%20to%20Society%202007.pdf>.
- ARUP (2006). "Annual Report 2006." Retrieved 11/01, 2008, from <http://www.arup.com/assets/download/BD180BBC-F7C4-4686-0EE99BF56CCC16B3.pdf>
- ARUP (2009). "Corporate Report." Retrieved 29/10, 2010, from http://www.arup.com/Publications/Corporate_Report_2009.aspx.
- Azapagic, A. (2004). "Developing a framework for sustainable development indicators for the mining and minerals industry. ." Journal of Cleaner Production **12**(6): 639-662.
- Azzone, G., R. Manzini, *et al.* (1996). Evolutionary trends in environmental reporting. Industry and the environment: practical applications of environmental management approaches in business.. M. H. Ulhøi JP, The Aarhus School of Business: 15 - 28.
- Baby Milk In Action (2010). "The Nestle Boycott." Retrieved 22/9, 2010, from <http://info.babymilkaction.org/nestlefree>
- Balfour Beatty (2006). "Committed to Responsible Management: Corporate Responsibility Report 2006." Retrieved 11/01, 2008, from <http://www.bbrail.com/DynamicContent/Documents/CorporateResponsibility06.pdf>
- Balfour Beatty (2008).
"http://www.balfourbeatty.com/bby/sustainability/archive/cr_summary_full/cr_summary_full.pdf" Retrieved 26/10, 2010, from
http://www.balfourbeatty.com/bby/sustainability/archive/cr_summary_full/cr_summary_full.pdf

Barnett , M. L. (2006). "Finding a working balance between competitive and communal strategies." Journal of Management Studies **43**: 1753 - 1773.

Baron, D. P. (2001). "Private politics, corporate social responsibility, and integrated strategy." Journal of Economics & Management Strategy **10**(1): 7-45.

Bartley, T. (2005). "Corporate accountability and the privatization of labor standards: struggles over codes of conduct in the Apparel Industry." Politics and the Corporation Research in Political Sociology **14**: 311-244.

BBC News (2002). "Gap Hit by Sweatshop Protests." Retrieved 22/9, 2010, from <http://news.bbc.co.uk/1/hi/business/2497957.stm>.

BBC News (2009). "Animal rights campaigners jailed ". Retrieved 22/9, 2010, from <http://news.bbc.co.uk/1/hi/england/7837064.stm>.

BBC News (2009). "Primark linked to UK sweatshops." Retrieved 23/9, 2010, from <http://news.bbc.co.uk/1/hi/uk/7824291.stm>.

Bertels, S. and J. Peloza (2008). "Running just to stand still? Managing CSR Reputation in an Era of Ratcheting Expectations. ." Corporate Reputation Review **11**(1): 56-72.

Bevins, S., M. Brodie, *et al.* (2005). UK Secondary School Pupil's Perception of Science and Engineering.

British Cement Association (2006). "Performance: A Corporate Responsibility Report from the UK Cement Industry 2006." Retrieved 11/01, 2008, from <http://www.cementindustry.co.uk/PDF/Performance%20-%20July%202006.pdf>

British Petroleum (2006). "Sustainability Report 2006." Retrieved 11/01, 2008, from http://www.bp.com/liveassets/bp_internet/globalbp/STAGING/global_assets/downloads/B/bp_sustainability_report_2006.pdf

Brown, J., T. Parry, *et al.* (2010). "'Corporate Responsibility Reporting in UK Construction"
" Proceeding of the Institution of Civil Engineers: Journal of Sustainability **162**(ES4.): 193-205.

Bryman, A. (2008). Social Research Methods. Oxford, Oxford University Press.

Burt, C. and D. Woodwell (Unknown Year). "Physician survey response methods research." ASA Section on Survey Research Methods.

Carillion (2008). "Sustainability Report 2008." Retrieved 26/10, 2010, from http://www.carillionplc.com/sustainability/assets/documents/sustainability_report_2008.pdf.

Carroll, B. A. (1991). "The Pyramid of Corporate Social Responsibility: Toward the Moral Management of Organisational Stakeholders." Business Horizons **34**(34).

Carroll, B. A. (1999). "Corporate Social Responsibility: Evolution of a Definitional Construct." Business and Society **38**(3): 268-295.

Carroll, B. A. and A. K. Bucholtz (2006). Business and Society: Ethics and Stakeholder Management, Thomson.

Chambers, E., W. Chapple, *et al.* (2003). CR in Asia: A seven country study of CR website reporting. ICCSR Research Paper Series

Chartered Institute of Building (2006). Corruption in the UK Construction Industry.

Cochran, P. L. and R. A. Wood (1984). "Corporate social responsibility and financial performance." Academy of Management Journal **27**(1): 42-56.

Construction News (a) (2010). "Construction News - Top 100 Contractors." Retrieved 8/12, 2010, from http://www.cnplus.co.uk/Journals/2/Files/2009/3/1/TOP%20CONTRACTORS_tcm18-1827841.pdf

Construction News (b) (2010). "Construction News - Top 50 Consultants." Retrieved 8/12, 2010, from http://www.cnplus.co.uk/Journals/2/Files/2009/3/1/TOP%20CONSULTANTS_tcm18-1827853.pdf.

Construction News b (2010). "Construction News - Top 50 Consultants." Retrieved 8/12, 2010, from http://www.cnplus.co.uk/Journals/2/Files/2009/3/1/TOP%20CONSULTANTS_tcm18-1827853.pdf.

Construction Scotland (2007). "Scottish Construction Centre KPI Handbook." from http://www.constructionscotland.org.uk/filelibrary/SCC_KPI_Handbook_2007.pdf.

Corus (2006). "Striving to Make a Difference: Corporate Responsibility Report 2006." Retrieved 11/01, 2008, from http://www.corusgroup.com/file_source/StaticFiles/Functions/HSE/2006_CRR.pdf

Costa, D., C. Formoso, *et al.* (2006). "Benchmarking initiatives in the construction industry: lessons learned and improvement opportunities. ." Journal of Management in Engineering **22**(4): 158-167.

Crane, A. and D. Matten (2007). Business Ethics: Managing Corporate Citizenship and Sustainability in the Age of Globalization. New York, Oxford University Press.

Creswell, J., W. (1997). Qualitative Inquiry and Research Design: Choosing Among Five Traditions., Sage Publications.

Creswell, J. W. (2009). Research Design: Qualitative, Quantitative and Mixed Methods Approaches., Sage Publications.

Creswell, J. W. and V. L. P. Clark (2007). Designing and Conducting Mixed Methods Research. California, Sage Publications.

Davis-Walling, P. and S. A. Batterman (1997). "Environmental reporting by the Fortune 50 firms." Environmental Management **21**: 865-875.

Deegan, C. and M. Rankin (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 **9**(2): 50 - 67.

Dillman, D. A. (2008). Internet, Mail and Mixed Mode Surveys: The Tailored Design Method, John Wiley & Sons.

Downing, T. (2002). Avoiding New Poverty: Mining-Induced Displacement and Resettlement. , Minerals and Sustainable Development (MMSD) Project of the International Institute for Environment and Development (IIED).

DTI (2006). Review of Sustainable Construction.

EITI (2010). "Extraction Industry Transparency Initiative." Retrieved 26/11, 2010, from <http://eiti.org/eiti>.

Epstein, E. M. (1987). "The Corporate Social-Policy Process - Beyond Business Ethics, Corporate Social Responsibility, and Corporate Social Responsiveness." California Management Review **29**(3): 99-114.

European Commission Enterprise and Industry (2009). "Corporate Social Responsibility (CSR)." Retrieved 10/10, 2009, from http://ec.europa.eu/enterprise/policies/sustainable-business/corporate-social-responsibility/index_en.htm.

Ferrell, O. C. and D. Krugman (1983). "Response patterns and the importance of the follow-up duplicate questionnaire in a mail survey of advertising managers." European Research(October): 157-163.

Fisher, D., S. Miertschin, *et al.* (1995). "Benchmarking in Construction Industry." Journal of Management in Engineering **11**(1): 50-57.

Friedman, M. (1962). Capitalism and Freedom. Chicago and London, The University of Chicago Press.

George Wimpey Plc (2006). " Building a Sustainable Future: Corporate Social Responsibility Report 2006,." Retrieved 11/01, 2008, from <http://miranda.hemscott.com/ir/wmpy/csr2006/pdf/sections/introduction.pdf>

Graafland, J. J. and S. C. W. Eijffinger (2004a). "Corporate social responsibility of Dutch companies: Benchmarking, transparency and robustness." Economist-Netherlands **152**(3): 403-426.

Graafland, J. J., S. C. W. Eijffinger, *et al.* (2004b). "Benchmarking of Corporate Social Responsibility: Methodological problems and robustness." Journal of Business Ethics **53**(1-2): 137-152.

Graafland, J. J., S. C. W. Eijffinger, *et al.* (2003). Corporate social responsibility of Dutch companies: Benchmarking and Transparency, CMO Report, Tilburg University.

Gray, R., R. Kouhy, *et al.* (1995). ""Corporate social and environmental reporting: a review of the literature and a longitudinal study of UK disclosure"." Accounting, Auditing & Accountability Journal **8**(2): 47 - 77.

Greenberg, J. and G. Knight (2004). "Framing sweatshops: Nike, global production, and the American news media." Communication and Critical/Cultural Studies **1**(2): 151 - 175.

GRI (2010). "Sector Supplements - Construction and Real Estate." 2010, from <http://www.globalreporting.org/ReportingFramework/SectorSupplements/ConstructionandRealEstate/>.

Haigh, M. and M. Jones (2006). "The Drivers of Corporate Social Responsibility: A Critical Review." The Business Review **5**(2).

Harris, J. (2000). Basic Principles of Sustainable Development. Global Development and Environment Institute Tufts University.

Health and Safety Executive (2009/2010). "Fatal Injury Statistics." Retrieved 10/11, 2010, from <http://www.hse.gov.uk/statistics/fatals.htm>.

Herkert, J. R. (1998). "Sustainable development, engineering and multinational corporations: Ethical and public policy implications." Science and Engineering Ethics **4**(3): 333-346.

Herridge, J. (2003). "The Potential Benefits of Corporate Social Responsibility in the Construction Industry: Construction Paper 159." Construction Information Quarterly **5**(3): 12-16.

HM Government (2006). "Companies Act (Amended)." from <http://www.legislation.gov.uk/ukpga/2006/46/contents>.

HM Government (2008). Strategy for Sustainable Construction.

Hoddinott, S. N. and M. J. Bass (1986). "The Diliman Total Design Survey Method: A Sure-Fire way to Get High Survey Return Rates." Canadian Family Physician **32**.

Hopkinson, P., Whitaker, M. (1999). The relationship between company environmental reports and their environmental performance: a study of the UK water industry. . Sustainable measures: evaluation and reporting of environmental and social performance. M. Bennett, James, P. Sheffield, Greenleaf Publishing: 392 - 411.

- Howe, K. R. (1988). "Against the quantitative-qualitative incompatibility thesis (or dogmas die hard)." Educational researcher **17**: p10-16.
- ISO 26000:2010 "Guidance on social responsibility." 106.
- Jenkins, H. and N. Yakovleva (2006). "Corporate social responsibility in the mining industry: Exploring trends in social and environmental disclosure." Journal of Cleaner Production **14**: 271 - 284.
- Jones, C. (2004). Quantitative and Qualitative research: Conflicting Paradigms or Perfect Partners? . Networked Learning 2004: A Research Based Conference on E-Learning in Higher Education and Lifelong Learning: Proceedings of the Fourth International Conference on Networked Learning
- Lancaster, Lancaster University: 106-112.
- Jones, P., D. Comfort, *et al.* (2006). "Corporate social responsibility and the UK construction industry." Journal of Corporate Real Estate **8**(3): 134-150.
- Jones, P., D. Comfort, *et al.* (2007). "Marketing and corporate social responsibility within food stores." British Food Journal **109**(8): 582-593.
- Jones, P., D. Comfort, *et al.* (2005). "Corporate social responsibility: a case study of the UK's leading food retailers." British Food Journal **107**(6): 423-435.
- Jones, T. M. (1980). "Corporate social responsibility revisited, redefined." California Management Review **22**(3): 59-67.
- Kashyap, R., R. Mir, *et al.* (2004). "Corporate Social Responsibility: A Call For Multidisciplinary Inquiry." Journal of Business Ethics Research **2**(7): 51-58.
- Klein, N. (2000). No Logo: Taking Aim at the Brand Bullies New York, Picador.
- KPMG (2005). KPMG International Survey of Corporate Responsibility Reporting: 55.
- Krut, R. and K. Munis (1998). "Sustainable Industrial Development: Benchmarking Environmental Policies and Reports " Greener Management International(21): 88-98.
- Lafarge (2006). "Sustainability Report 2006." Retrieved 11/01, 2008, from http://www.lafarge.com/05032007-publication_sustainable_development-report2006-uk.pdf
- Lafarge (2008). "Sustainability Report 2008." Retrieved 26/10, 2010, from http://www.lafarge.com/04282009-publication_sustainable_development-sustainable_report_08-uk.pdf
- Lantos, G. P. (2001). "The boundaries of corporate strategic corporate social responsibility." Journal of consumer Marketing **18**(7): 595 - 632.

Lee, M. D. P. (2008). "A review of the theories of corporate social responsibility: Its evolutionary path and the road ahead." International Journal of Management Reviews **10**(1): 53-73.

Lopez, M. V., Garcia, A., Rodriguez, L. (2007). "Sustainable development and corporate performance: A study based on the Dow Jones Sustainability Index." Journal of Business Ethics **75**(3): 285-300.

Lozano, R. (2006). "A tool for a graphical assessment of sustainability in universities (GASU)." Journal of Cleaner Production **14** (9): 963.

Lozano, R. and D. Huisingh (2011). "Inter-linking issues and dimensions in sustainability reporting." Journal of Cleaner Production **19**(2-3).

Margolis, J. D. and J. P. Walsh (2001). People and Profits? The Search for a Link Between a Company's Social and Financial Performance.

Marks and Spencer (2010). "Plan A." Retrieved 23/2, 2010, from www.plana.marksandspencer.com.

McWilliams, A., D. S. Siegel, *et al.* (2006). "Corporate Social Responsibility: Strategic Implications." Journal of Management Studies.

Mehta, R. and E. Sivadas (1995). "Comparing response rates and response content in mail versus electronic mail surveys." Journal of the Market Research Society **37**(4): 429-439.

Merton, R. K., M. Fiske, *et al.* (1990). The focused Interview: A Manual of problems and procedures, Simon and Schuster.

Miles, M., B., and A. Huberman, M. (1994). Qualitative Data Analysis An Expanded Sourcebook. Thousand Oaks, Sage Publications.

Mingers, J. (2003). "The Paucity of Multi-Method research: A Review of the Information Systems Literature." Info Systems Journal(13): 233-249.

Moon, J. (2002). 'Corporate Social Responsibility: An Overview' International Directory of Corporate Philanthropy London, Europa Publications: 3 - 14.

Moon, J. (2003). Socializing Business? Government and Opposition Ltd. Oxford, Blackwell Publishing.

Moon, J. (2007). "The Contribution of Corporate Social Responsibility to Sustainable Development." Sustainable Development **15**(5): 296-306.

Moon, J. and S. Moon (2004). "The Case for Mixed Methodology Research: A review of literature and methods. A working paper. ."

Morhardt, J. E. (2001). "Scoring Corporate Environmental Reports for Comprehensiveness: A Comparison of Three Systems " Environmental Management **27**(6): 881-892,.

Murray, M. and A. Dainty (2008). Corporate Social Responsibility in the Construction Industry. London and New York, Taylor and Francis.

Mustow, S. E. (2006). "Procurement of ethical construction products." Proceedings of the Institution of Civil Engineers **159**(ES1): 11-21.

Myers, D. (2005). "A review of construction companies' attitudes to sustainability." Construction Management and Economics **23**: 781 - 785.

Network Rail (2006). "Playing Our Part: Corporate Responsibility Report 2006." Retrieved 11/01, 2008, from <http://www.networkrail.co.uk/browse%20documents/corporate%20responsibility%20report/networkrailcrreport2006.pdf>

Network Rail (2009). "Corporate responsibility Report 2009 – A responsible and sustainable railway." Retrieved 26/10, 2010, from <http://www.networkrail.co.uk/browse%20documents/corporate%20responsibility%20report/networkrailcrreport2009.pdf>

Office of Fair Trading (2009). "Construction firms fined for illegal bid-rigging." 2010, from <http://www.oft.gov.uk/news-and-updates/press/2009/114-09>.

Office of National Statistics (2008). "Construction Statistics Annual ". from http://www.statistics.gov.uk/downloads/theme_commerce/CSA_2008_final.pdf.

Office of National Statistics (2009). "Construction Statistics Annual." from http://www.statistics.gov.uk/downloads/theme_commerce/CSA-2009/Opening-page.pdf.

Onwuegbuzie, A. J., and Leech, N. L. (2006). "Linking Research Questions to Mixed Methods Data Analysis Procedures." The Qualitative Report **11** (3): 474-498.

Orlitzky, M. (2007). Corporate Social Performance and Financial Performance: A Research Synthesis. The Oxford Handbook of Corporate Social Responsibility. A. Crane.

Owen, D. and B. O'Dwyer (2008). Corporate Social Responsibility: The Reporting and Assurance Dimension. The Oxford Handbook of Corporate Social Responsibility. A. Crane, McWilliams, A., Matten, A., Moon, J., Siegel, D. S. Oxford, Oxford University Press.

Paxson, M. C. (1992). "Follow-up mail surveys " Industrial Marketing Management **21**(August): 195-201.

Perdan, S., Azapagic, A (2000). "Sustainable development and industry: ethical indicators." Environmental Protection bulletin(066): 6 - 8.

- Petersons, A. and G. J. King (2009). "Corporate responsibility in Latvia: a benchmark study." Baltic Journal of Management **4**(1): 106 - 118.
- Petrovic-Lazarevic, S. (2008). "The Development of Corporate Social Responsibility in the Australian Construction Industry." Construction Management and Economics **26**(2): 93-101.
- Price Waterhouse Cooper (2010). "Summary of the Construction and Engineering Industry." Retrieved 13/9, 2010, from <http://www.pwc.com/vn/en/industries/engineering-and-construction.jhtml>.
- Quarry Products Association (2005). "2nd Sustainable Development Report: 2005 Update ". Retrieved 11/01, 2008, from <http://www.qpa.org/downloads/SD2005a4.pdf>.
- Rothman, H. (1992). ""You need not be big to benchmark."." Nation's Business **80**(12): 64-65.
- Schmidheiny, S. and F. J. L. Zorraquin (1996). Financing change: The Financial Community, Eco-Efficiency, and Sustainable Development, MIT Press.
- Scholtens, B. (2009). "Corporate social Responsibility in the International banking Industry." Journal of Business Ethics **86**(1): 159-175.
- Scott Wilson Group (2006). "United Nations Global Compact Communication on Progress for the period October 2005 - April 2007 ". Retrieved 23/01, 2008, from http://www.scottwilson.com/pdf/Scott_Wilson_UN_Global_Compact_CoP_2006_7V1.pdf
- Scott Wilson Group (2009). "Scott Wilson Corporate Responsibility Report 2009." from http://crr09.scottwilson.com/media/pdf/CSR_Report.pdf.
- Sharma, D. S. (2005). "The Association Between ISO 9000 Certification and Financial Performance." The International Journal of Accounting **40**: 151-172.
- Shell (2005). "Sustainability Report 2005: Meeting the Energy Challenge." Retrieved 11/01, 2008, from http://www.shell.com/static/envirosoc-en/downloads/sustainability_reports/shell_report_2005.pdf
- Shiha, T. and X. Fan (2009). "Comparing response rates in e-mail and paper surveys: A meta-analysis " Educational Research Review **4**(1): 26-40.
- Skanska (2006). "Sustainability Review 2006." Retrieved 11/01, 2008, from <http://www.skanska.com/upload/About%20Skanska/Sustainability/Reporting/SustainabilityReview2006.pdf>.
- Stonemarket (2007). "Is Indian sandstone morally acceptable?". Retrieved 23/8, 2010, from <http://www.stonemarket.co.uk/pdf/morally-acceptable.pdf>.
- Swan, W. and R. Stewart (2007). Sustainability Reporting: Corporate Social Responsibility for Small and Medium Sized Construction Companies, Centre for Construction Innovation: 41.

Tarmac (2006). "Changing Landscapes: Report to Society 2005/06." Retrieved 11/01, 2008, from <http://www.tarmac.co.uk/DownloadItems/home%20page/report%20to%20society.pdf>

Tarmac (2008). "Tarmac Sustainability Report 2008/2009." Retrieved 26/10, 2010, from http://www.tarmac.co.uk/about_us/about_tarmac/ldoc.ashx?docid=24ffbd48-bc7e-4e30-92f0-a887beb4b4a8&version=-1.

Tata Steel Group (2009). "Group Corporate Citizenship Report 2008/09." Retrieved 26/11, 2010, from <http://www.tatasteel.com/corporate-citizen/pdf/csr-2008-09.pdf>.

Taylor Wimpey Plc (2008). "CR Report 2008." Retrieved 26/10, 2010, from <http://taylorwimpeycsr2008.hemscottir.com/>.

The Co-Operative (2009). "Social Responsibility Report." Retrieved 8/7, 2010, from http://www.co-operative.coop/Corporate/sustainability/2010/downloads/sr2009_Social_Responsibility_Full.pdf.

The Co-Operative (2010). "Co-Operative Food ". Retrieved 6/2, 2010, from www.co-operative.coop/food/ethics/

The Guardian (2008). "Can Fashion Play Fair?". Retrieved 23/9, 2010, from <http://www.guardian.co.uk/lifeandstyle/2008/jul/25/ethicalfashion>

The Independent (2007). "Sweatshops paying workers half what they need to live." Retrieved 23 September, 2010, from <http://www.independent.co.uk/news/uk/this-britain/sweatshops-paying-workers-half-what-they-need-to-live-402306.html>

Timber Trade Federation (2004). "Annual Report 2004." Retrieved 11/01, 2008, from http://www.ttf.co.uk/communications/annual_reports/AnnualReport.pdf

Titan (2006). "2006 Corporate Social Responsibility and Sustainability Report." Retrieved 11/01, 2008, from http://www.titan-cement.com/en/response/pdf/social2006_eng.pdf.

Titan (2008). "CORPORATE SOCIAL RESPONSIBILITY & SUSTAINABILITY REPORT 2008." Retrieved 26/10, 2010, from <http://report2008.titan.gr/en/our-2008-report/>.

Ullmann, A. (1985). "Data in Search of a Theory: A Critical Examination of the Relationship among Social Performance, Social Disclosure, and Economic Performance." Academy of Management Review 10(3): 540-577.

UNEP/SustainAbility. (1997). Engaging stakeholders: The 1997 benchmark survey. . United Nations Environment Program and SustainAbility: 39.

Van der Veldt (1997). "Case Studies of ISO 14001: A New Business Guide For Global Environmental Protection " Environmental Quality Management 7(1): 1-19.

Visser, W. (2008). CSR Drivers: The Forces Shaping Corporate Sustainability and Responsibility. CSR Inspiration Series.

Vitaliano, D. and G. Stella (2006). "The cost of Corporate Social Responsibility: the case of the Community Reinvestment Act." Journal of Productivity Analysis **26**(3): 235-244.

Warhurst, A. and P. Mitchel (2000). "Corporate social responsibility and the case of the Summitville mine. ." Resources Policy **2**(26): 91-102.

Weber, O. (2005). "Sustainability Benchmarking of European Banks and Financial Service Organisations." Corporate Social Responsibility and Environmental Management **12**(2): 73-87.

Wenblad, A. (2001). "Sustainability in the Construction Business - A Case Study." Corporate Environmental Strategy **8**(2): 157-164.

White Young Green Plc (2006). "Corporate Social Responsibility Report 2006." Retrieved 11/01, 2008, from http://www.wyg.com/media/pdf/wyg_csr2006.pdf.

White Young Green Plc (2009). "White Young Green plc Annual Report 2009." Retrieved 26/10, 2010, from http://www.wyg.ie/2investors/pdf/CSR_Report_08_09.pdf.

Windsor, D. (2006). "Corporate social responsibility: Three key approaches." Journal of Management Studies **43**(1): 93-114.

WS Atkins Plc (2007). "2007 Corporate Responsibility Report." Retrieved 11/01, 2008, from http://www.atkinsglobal.com/Images/Atkins%20CR%20Report%202007_tcm12-1596.pdf.

WS Atkins plc (2009).

["http://www.atkinsglobal.com/Images/Atkins%20CR%20Review%202009_tcm12-5451.pdf."](http://www.atkinsglobal.com/Images/Atkins%20CR%20Review%202009_tcm12-5451.pdf)

Retrieved 26/10, 2010, from

http://www.atkinsglobal.com/Images/Atkins%20CR%20Review%202009_tcm12-5451.pdf.

www.anticorruptionforum.org.uk. "The UK Anti Corruption Forum." Retrieved 6/12, 2011, from www.anticorruptionforum.org.uk.

www.bitc.org.uk. "Business In The Community Corporate Index." Retrieved 2/3, 2010, from http://www.bitc.org.uk/cr_index/.

www.business-ethics.com. "Business Ethics 100 Best Corporate Citizens." Retrieved 23/4, 2008, from www.business-ethics.com/BE100_all.

www.businessandbiodiversity.org. "Business and Biodiversity." Retrieved 13/9, 2010, from <http://www.businessandbiodiversity.org/construction.html>.

www.constructiontransparency.org. "CoST - About CoST." Retrieved 4/9, 2011, from <http://www.constructiontransparency.org/AboutCoST/>.

www.contractjournal.com. "Contract Journal." Retrieved 3/8, 2008, from www.contractjournal.com.

www.corporateregister.com. "CSR reporting ". Retrieved 10/1, 2009, from <http://www.corporateregister.com/reports/>.

www.equator-principles.com. "The Equator Principles." Retrieved 12/10, 2010, from <http://www.equator-principles.com>.

www.globalreporting.org. "The Global Reporting Initiative." from <http://www.globalreporting.org/ReportingFramework/ReportingFrameworkOverview/>.

www.iso.org (2010). "Social Responsibility Overview." from [http://www.iso.org/iso/iso_catalogue/management and leadership standards/social responsibility/sr_iso26000_overview.htm](http://www.iso.org/iso/iso_catalogue/management_and_leadership_standards/social_responsibility/sr_iso26000_overview.htm).

www.kld.com. "KLD Global Socrates ". Retrieved 19/2, 2011, from www.kld.com/research/socrates/index.html.

[www.KPMG.com](http://www.kpmg.com). Retrieved 10/8, 2010, from <http://www.kpmg.com/global/en/pages/default.aspx>.

www.socialinvest.org. "Report on Socially Responsible Investing Trends in the United States." Retrieved 14/9, 2010, from <http://www.socialinvest.org/news/releases/pressrelease.cfm?id=108>.

www.thecro.com. "100 Best Corporate Citizens." Retrieved 14/12, 2010, from www.thecro.com/?q=be_100best.

www.unglobalcompact.org. "UN Global Compact - About the Global Compact." Retrieved 10/4, 2008, from <http://www.unglobalcompact.org/AboutTheGC/index.html>.

www.waronwant.org. Retrieved 10/3, 2011, from <http://www.waronwant.org/>.

Yin, R. K. (1994). Case Study Research: Design and Methods. Thousand Oaks, Sage Publications.

Yu, C. H. (2005). Misconceived Relationships Between Logical Positivism and Quantitative Research Annual Meeting of the 2001 American Educational Research Association. Seattle, WA., Research Method Forum.

Appendix A Benchmarking Questionnaire

UK Construction and Engineering Industry:



Corporate Responsibility Benchmarking Exercise

Contact details

In order to ensure that you receive the benchmarking results, please could you provide your contact details below? This information will not be circulated to any other parties.

Name:
Company:
Position:
Email:

Information on the methodology and results

This questionnaire was developed from one which Johan Graafland, a Dutch academic based at Tilberg University, produced in order to carry out a similar benchmarking exercise of four different Dutch business sectors. The report which Johan produced can be found here: <http://www.uvt.nl/cmo/onderzoek/mo/publicatie.pdf>. The formulae in this report will be used to calculate the overall benchmarking score in this exercise.

As mentioned previously, all respondents will be provided with a benchmark score from the exercise giving them an indication of their position within the construction sector and the sub-sector in which they predominantly operate.

Guidance for completing the questionnaire

Tick the box which applies if completing in hard copy) or highlight the relevant response if completing electronically. Where applicable, complete further information on the dotted lines. Please feel free to make further notes relating to your answers as you see fit.

The questionnaire consists of two parts. The first relates to the activities that your **organisation undertakes** with regards to corporate responsibility in the UK while the second relates to **your perceptions** of the various aspects of corporate responsibility. Please ensure that you complete **both sections** as results from all of the questions are required in order to calculate an accurate benchmarking score.

Once completed please return to one of the following addresses:

If completed electronically please send to: evxjb1@nottingham.ac.uk

If completed in hard copy please send to:

James Brown,
Nottingham Transportation Engineering Centre
Pavement Research Building
University of Nottingham,
University Park
Nottingham,
NG7 2RD

Section 1: Review of actual efforts in the field of corporate responsibility

1. Which one of the following best describes the construction sub-sector which your organisation **predominantly** operates within?
 - ☐ Contractors e.g. maintenance contractors, house builders, infrastructure contractors
 - ☐ Materials manufacturer or suppliers e.g. quarrying firms, aggregate recyclers, cement or concrete producers
 - ☐ Consultancy/Professional services e.g. architects/designers, civil engineering consultants, design and build specialists
 - ☐ Other (please provide details).....
.....
2. Approximately how long have you been involved in the corporate responsibility activities of your organisation?
 - ☐ 0 - 3 years
 - ☐ 3 – 5 years
 - ☐ Over 5 years
3. Within your company who is responsible for corporate responsibility **activities**?
 - ☐ A dedicated CR team/person
 - ☐ A number of individuals from across the company
 - ☐ Other.....
4. Within your company who is responsible for corporate responsibility **reporting**?
 - ☐ A dedicated CR team/person
 - ☐ A number of individuals from across the company
 - ☐ Other.....
5. How many people are involved in **developing** CR policies and activities within your company?
.....
6. How many people are involved in **implementing** CR policies and activities within your company?
.....
7. Has your organisation taken part in any corporate responsibility benchmarking exercises in the past?
 - ☐ Yes
 - ☐ No
 - ☐ Unsure
8. If you answered yes to question 7, what type of benchmarking has your company taken part in?
 - ☐ Private benchmarking exercise against other companies in your sector (e.g. using a third party consultant)
 - ☐ Public benchmarking exercise (e.g. Business in the Community)
 - ☐ Internal benchmarking exercise against other companies' publicly available information
 - ☐ Other.....

Employee relations

9. Company employees are treated to (choose one option):

- ☐ The minimum necessary requirements as outlined by law and/or collective labour agreements.
- ☐ The minimum necessary requirements as outlined by law and/or collective labour agreements as well as
.....

If you undertake activities outside of Europe, please answer questions 10-13.

Does your organisation meet the standards set by the International Labour Organisation (see www.ilo.org) with regard to the following:

10. Child labour or forced labour

- ☐ Yes ☐ Mostly ☐ Unfamiliar With ILO Standards

11. Working hours

- ☐ Yes ☐ Mostly ☐ Unfamiliar With ILO Standards

12. Freedom of trade union participation and collective negotiations

- ☐ Yes ☐ Mostly ☐ Unfamiliar With ILO Standards

13. Do you have any direct contact/active dialogue with Non Governmental Organisations which are active in the field of human rights?

- ☐ Never ☐ Occasionally ☐ Frequently

14. Does your organisation contribute towards the cost of child care?

- ☐ Yes ☐ No

Does your organisation employ any policies to actively recruit:

15. Women

- ☐ Yes ☐ No

16. Ethnic minorities

- ☐ Yes ☐ No

17. Approximately what percentage of your organisations senior management (incl. Executive Board) are women?

- ☐ 0-5% ☐ 5-20% ☐ more than 20%

18. Approximately what percentage of your organisations senior management (incl. Executive Board) are from an ethnic minority?

- ☐ 0-2 % ☐ 2-10% ☐ more than 10 %

19. Does your company have a dedicated learning and development programme?

- ☐ No ☐ Yes, Only For Certain Employees ☐ Yes, for all employees

20. Approximately what is the budget for training of staff (as % of total labour costs):

- ☐ less than 2% ☐ between 2 and 5% ☐ more than 5%

21. How often do employees receive information concerning health and safety in the workplace?

- ☐ Never ☐ Occasionally ☐ Frequently

22. Approximately how high was the sick leave (in % of working days) in your venture in 2008?
☐ less than 2% ☐ between 2 and 5% ☐ more than 5%
23. Does your organisation fully comply with the disability discrimination act?
☐ Yes ☐ No ☐ Unaware of requirements
24. If your company has a board, how frequently does it develop / release new policies?
☐ Never ☐ Occasionally ☐ Frequently
25. How much action does your organisation take to remedy workplace issues (such as bullying, sexual harassment etc)
☐ None ☐ Some ☐ A great deal
26. Can you give examples of the measures in question 25?
☐ Yes ☐ No
 1)
 2)
 3)
27. How much effort does your organisation take to promote a sociable working environment?
 (e.g. organising staff parties, sports and social clubs, outings etc.)
☐ None ☐ Some ☐ A great deal
28. Does your organisation undertake employee satisfaction surveys?
☐ Never ☐ Occasionally ☐ Frequently

Responsibility concerning suppliers or subcontractors

29. Suppliers/subcontractors are treated in accordance with (choose one option):
☐ The minimum necessary requirements as outlined by law and/or collective labour agreements.
☐ The minimum necessary requirements as outlined by law and/or collective labour agreements as well as

30. Do you require your suppliers to be ISO9001 certified?
☐ No ☐ Yes ☐ Sometimes
31. How often is the product/service of suppliers / subcontractors audited for quality?
☐ Never ☐ Occasionally ☐ Frequently
32. How often are the products / services of suppliers / subcontractors audited for compliance with environmental regulations?
☐ Never ☐ Occasionally ☐ Frequently
33. How often are the working conditions of suppliers audited for compliance with legal or other requirements prior to starting a business relationship?
☐ Never ☐ Occasionally ☐ Frequently
34. If issues with working conditions are identified during operations, how often do you finish the business relationship with the supplier/subcontractor?
☐ Never ☐ Occasionally ☐ Frequently

35. If breaches of environmental regulations by a supplier/contractor are identified what action would your organisation take?
- ☐ No action; it the suppliers responsibility ☐ Stop dealing with the supplier ☐ Help the supplier to prevent further breaches from occurring.
36. Is there a procedure in place for suppliers to lodge complaints against you?
- ☐ Yes ☐ No

Responsibility towards customers/clients

37. Customers/clients are treated in accordance with (choose one option):
- ☐ The minimum necessary requirements as outlined by law and/or collective labour agreements.
- ☐ The minimum necessary requirements as outlined by law and/or collective labour agreements as well as
38. How much effort does your organisation put into procedures to ensure the quality of your product/services (for example, quality management systems, testing)?
- ☐ None ☐ Some ☐ A great deal
39. If requested by a customer/client can you provide information relating to your organisation's environmental credentials?
- ☐ Yes ☐ No
40. Do you have a set procedure for handling customer/client complaints?
- ☐ Yes ☐ No
41. Do you have a product/service in your range which has been developed as a more sustainable alternative to one of your other products?
- ☐ No ☐ Yes – One Alternative ☐ Yes – Several Alternatives
42. Have you ever been accused of undertaking misleading promotional activities?
- ☐ Frequently (more than once a year) ☐ Occasionally (once a year) ☐ No
43. Does your organisation undertake customer/client satisfaction surveys??
- ☐ No ☐ Occasionally ☐ Frequently

Responsibility towards society (50% complete)

44. How often has your organisation received fines for failure to meet environmental standards?
- ☐ Never ☐ Occasionally ☐ Frequently
45. Approximately how many employees in your company are aware of the environmental issues which the company faces?
- ☐ 0-20% ☐ 20-60% ☐ 60-100%
46. Approximately what percentage of net profit is used to reduce environmental impacts related to the production or use of the product / service provided by the company?
- ☐ 0 - 0.5% ☐ between 0.5 and 3% ☐ more than 3%

47. Over the last 5 years, in which area has your company made the greatest environmental improvements? (choose one option)?
☐ No environmental improvements ☐ Waste
☐ Energy usage ☐ Pollution
48. What was the approximate environmental improvement mentioned in answer to question 47?
☐ 0-5% ☐ between 5 and 25% ☐ more than 25%
49. Do you have direct contact / active dialogue with non governmental organisations and quango's who are active in the field of environmental conservation?
☐ No ☐ Occasionally ☐ Frequently
50. As an approximate % of net profit, how much does the company contribute to social or non-commercial activities outside of Europe?
☐ 0-0.1% ☐ between 0.1 and 2% ☐ more than 2%
51. Approximately how many disabled people are employed by your organisation?
☐ Unknown ☐
52. Approximately how many disabled people have been hired within the last 3 years?
☐ Unknown ☐
53. Are you organisations main offices well served by public transport?
☐ Not well served ☐ Quite well served ☐ Very well served
54. Does your company have a green transport plan?
☐ No ☐ Yes, partly ☐ Yes, comprehensive
55. In the last 3 years approximately how much (including staff time and materials) has been given to social projects within the UK as a percentage of the company's average net profit?
☐ 0 - 0.2% ☐ between 0.2 and 3% ☐ more than 3%

Responsibilities towards shareholders

56. If your company is listed on the stock exchange, have you taken any measures to prevent insider trading?
☐ No ☐ Yes, some ☐ Yes, numerous

Responsibilities towards your competitors

57. Does your company employ any measures to prevent the occurrence of anti-competitive behaviour between you and your competitors?
☐ No ☐ Yes, some ☐ Yes, numerous

How often, in the past three years, has your organisation been faced with complaints about the board:

58. Not respecting the intellectual property rights of your competitors?
☐ Frequently (more than once a year) ☐ Occasionally (once a year) ☐ No
59. Making anti-competitive arrangements with competitors?
☐ Frequently (more than once a year) ☐ Occasionally (once a year) ☐ No

60. Is your organisation a member of the UK Anti Corruption Forum
☐ No ☐ Yes

61. Does your company explicitly state (for example in the company code of conduct) that employees should not partake in any corrupt activity?
- ☐ Yes ☐ No

Organisation of corporate responsibility activities

62. Do you have a written strategic vision / mission statement / policy?
- ☐ Yes ☐ No

What measures of corporate responsibility are currently undertaken within the company or are planned to be implemented in the next 12 months?

63. Internal written code of ethics
☐ None ☐ Planned ☐ In place
64. Publicly available corporate code
☐ None ☐ Planned ☐ In place
65. Internal procedures to check compliance with the corporate code
☐ None ☐ Planned ☐ In place
66. Audit by independent third parties for compliance with the corporate code
☐ None ☐ Planned ☐ In place
67. Staff handbook
☐ None ☐ Planned ☐ In place
68. Staff Counsellor
☐ None ☐ Planned ☐ In place
69. A point of contact on the Executive board for ethical questions/queries?
☐ None ☐ Planned ☐ In place
70. Ethics committee
☐ None ☐ Planned ☐ In place
71. A code of conduct for goods and services purchasers (e.g. Chartered Institute of Purchasing and Supply)
☐ None ☐ Planned ☐ In place
72. Ethical training for staff
☐ None ☐ Planned ☐ In place
73. Publication of a corporate responsibility report
☐ None ☐ Planned ☐ In place
74. To what extent are your activities covered by ISO 9001/9002/9003 certification?
☐ 0-30% ☐ 30-70% ☐ 70-100%
75. To what extent are your activities covered by ISO 14001 certification?
☐ 0-30% ☐ 30-70% ☐ 70-100%
76. To what extent are your activities covered by AA 1000 certification?
☐ 0-30% ☐ 30-70% ☐ 70-100%
77. To what extent are your activities covered by SA 8000 certification?
☐ 0-30% ☐ 30-70% ☐ 70-100%

Section 2: Weighting aspects of corporate responsibility

The following section of the questionnaire asks for your opinion on the importance of the major aspects of corporate responsibility found in Section 1. This will be used to help build a picture of attitudes towards corporate responsibility within the construction industry and is used in the calculation of the benchmark scores.

There are 3 scores to choose from:

- 0 If you do not consider the aspect to be important
- 0.5 If you consider the aspect to be quite important
- 1 If you consider the aspect to be very important

78. Relationship with employees

- | | | | |
|---|----------------------------|------------------------------|----------------------------|
| Observing worldwide human rights | <input type="checkbox"/> 0 | <input type="checkbox"/> 0.5 | <input type="checkbox"/> 1 |
| Undertaking active dialogues with human rights organisations | <input type="checkbox"/> 0 | <input type="checkbox"/> 0.5 | <input type="checkbox"/> 1 |
| Providing equal opportunities to women | <input type="checkbox"/> 0 | <input type="checkbox"/> 0.5 | <input type="checkbox"/> 1 |
| Providing equal opportunities to immigrants/ethnic minorities | <input type="checkbox"/> 0 | <input type="checkbox"/> 0.5 | <input type="checkbox"/> 1 |
| Providing adequate training and development to employees | <input type="checkbox"/> 0 | <input type="checkbox"/> 0.5 | <input type="checkbox"/> 1 |
| The health and safety of employees | <input type="checkbox"/> 0 | <input type="checkbox"/> 0.5 | <input type="checkbox"/> 1 |
| Effective management and engagement of employees | <input type="checkbox"/> 0 | <input type="checkbox"/> 0.5 | <input type="checkbox"/> 1 |
| Promoting a good working attitude of employees | <input type="checkbox"/> 0 | <input type="checkbox"/> 0.5 | <input type="checkbox"/> 1 |
| Providing a pleasant working environment/experience | <input type="checkbox"/> 0 | <input type="checkbox"/> 0.5 | <input type="checkbox"/> 1 |

79. Relationship with suppliers/subcontractors

- | | | | |
|--|----------------------------|------------------------------|----------------------------|
| Health and safety performance of product suppliers | <input type="checkbox"/> 0 | <input type="checkbox"/> 0.5 | <input type="checkbox"/> 1 |
| Impacts on the environment of product suppliers (e.g. the processes used to produce their goods) | <input type="checkbox"/> 0 | <input type="checkbox"/> 0.5 | <input type="checkbox"/> 1 |
| The working conditions of supplier's personnel | <input type="checkbox"/> 0 | <input type="checkbox"/> 0.5 | <input type="checkbox"/> 1 |
| Good working relationship with suppliers | <input type="checkbox"/> 0 | <input type="checkbox"/> 0.5 | <input type="checkbox"/> 1 |

80. Relationship with customers/clients

- | | | | |
|---------------------------------|----------------------------|------------------------------|----------------------------|
| Safety /quality of your product | <input type="checkbox"/> 0 | <input type="checkbox"/> 0.5 | <input type="checkbox"/> 1 |
|---------------------------------|----------------------------|------------------------------|----------------------------|

Good relationship with customers	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1
Offering more sustainable product/services	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1
Providing reliable information on your products/services to consumers	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1

81. Responsibility towards society

Environmental performance	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1
Undertaking active dialogue with environment organisations	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1
Combating third world poverty	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1
Helping people with disabilities back to work	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1
Accessibility of your company using public transport	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1
Support for community projects in the UK	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1

82. Responsibility towards shareholders

Measures to prevent insider trading	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1
-------------------------------------	----------------------------	------------------------------	----------------------------

83. Responsibility towards competitors

Respecting the intellectual property of competitors	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1
Preventing anti-competitive behaviour	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1
Preventing bribes	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1

84. Organisation of corporate responsibility activities

Having an internal ethical code in place	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1
Having a public company code	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1
Having internal procedures to check for compliance with company code	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1
Undertaking third party audits to check compliance with the company code	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1

ISO 9001 certification	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1
ISO 14001 certification	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1
Having a staff handbook	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1
Publishing an annual Corporate Responsibility report	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1
Providing a point of contact on the Executive board for ethical questions/queries	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1
Providing a staff councillor	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1
Ethics committee	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1
A code of conduct for goods and services purchasers (e.g. CIPS)	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1
Providing ethical training for staff	<input type="checkbox"/> 0	<input type="checkbox"/> 0.5	<input type="checkbox"/> 1

In light of your various corporate responsibility activities please rate the importance of the various stakeholders listed below. Use the following scale:

1 = unimportant	2 = quite important	3 = important
4 = very important	5 = extremely important	

85. Employees	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
86. Suppliers/subcontractors	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
87. Customers/consumers	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
88. Society as a whole	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
89. Shareholders	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
90. Competitors	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Appendix B Semi-Structured Interview Questions/Topics

The topics listed below were used as the basis of the interviews with Scott Wilson Staff.

- Understanding of CR
 - What it is
 - Relevance to the construction industry
 - Relevance to different levels of staff

This information helped to identify the awareness of the CR amongst URS Scott Wilson staff and relevant the topic is to the industry. This was seeking to obtain information on awareness at a more general level of the topic - not necessarily directly related to URS Scott Wilson.

- Communication of CR to staff
 - CR information and reporting
 - Sources of further information on topic

As a follow on to the previous topic, this was used to identify how aware employees were of CR activities **within** URS Scott Wilson.

- Collation and reporting of CR related project information
 - Effectiveness of procedures
 - CR related KPIs which could be recorded

Chapter 4 indicated that consultancy companies reported upon much fewer KPIs than other sub-sectors in the industry. This line of questioning was aimed at identifying possible reasons for this.

- Views on URS Scott Wilson's performance in different areas of CR

Having reviewed the company's reporting, and benchmarked them against others in the sector, this allowed for a comparison to be made between these results and the perception of the company by its employees. It could also indicate areas of good and bad performance.

- Other companies construction sector that stand out

- Good or bad performers
- What makes them stand out?

An extension of the previous topic/question, it was hoped that this topic would contribute to the overall sector view of CR as well as providing a further opportunity for comparison with the results from Chapters 4 and 5.

Appendix C Interview Responses and Coding

Interview responses are shown on the left hand side, the right hand column shows the initial codings which were given to the responses. Following this initial coding session, these codes were refined and condensed further to produce much more succinct codes for analysis. This second process was undertaken in hard copy and so is not included in the appendices.

Technical Director 1

1	
<ul style="list-style-type: none"> CR conjures pictures of oil companies and associated env and soc impacts that they have 	<ul style="list-style-type: none"> Business impacts
<ul style="list-style-type: none"> Sees it as doing the right thing in relation to the env and communities that the company operates in 	<ul style="list-style-type: none"> Doing the right thing
<ul style="list-style-type: none"> Has some relevance to construct/engineering but not on same scale as the extractive industries. 	<ul style="list-style-type: none"> Some relevance to construction Not same scale as other industries
<ul style="list-style-type: none"> Con/eng does have significant impacts such as waste production and major infrastructure influencing peoples lives 	<ul style="list-style-type: none"> Significant impacts from con/eng
<ul style="list-style-type: none"> However, for SW work impacts in most cases should be taken into account in the earlier consultation stages of the project (particularly for roads and trackbed) 	<ul style="list-style-type: none"> Impacts considered in earlier stages of projects Potential for SW influence therefore low
<ul style="list-style-type: none"> International operations are more problematic though – more difficult to be sure that people being employed are working safely or employing sub-contractors in a safe way 	<ul style="list-style-type: none"> International operations more difficult to monitor
<ul style="list-style-type: none"> CR is much more relevant to contractors and mat producers because of the level of impact and direct nature of impact that they can have 	<ul style="list-style-type: none"> More relevant topic to supplier and contractors
2	
<ul style="list-style-type: none"> Is aware of UNGC but unaware that SW have produced a CR report. 	<ul style="list-style-type: none"> Unaware of UNGC Knows of CR report
<ul style="list-style-type: none"> CR as a definitive concept is not really promoted within the company and isn't a major consideration in relation to winning projects due to the current economic climate 	<ul style="list-style-type: none"> CR not promoted as distinct topic in SW Not major consideration
<ul style="list-style-type: none"> However, were identical jobs (fees, timeframe, effort etc) out for tender would likely be the job with the better env and soc impact that would be chosen as it would be the right thing to do and would provide better exposure for the company 	<ul style="list-style-type: none"> CR may have influence on wining jobs
<ul style="list-style-type: none"> Clean energy projects are good for the company as they 'tick the right boxes' in terms of impacts and demonstrate the company is looking towards more sustainable areas of work 	
<ul style="list-style-type: none"> Essentially felt that CR is not at the forefront of SW concerns 	<ul style="list-style-type: none"> CR not at forefront of SW concerns
3	
<ul style="list-style-type: none"> Where applicable on HA jobs SW is heavily involved in the consultation process for HA projects to help address queries and concerns that the local communities might have. 	<ul style="list-style-type: none"> SW involved in client consultation Some influence on community concerns in this respect
<ul style="list-style-type: none"> As far as aware SW don't report any env or social metrics for the purposes of monitoring/reporting these topics. 	<ul style="list-style-type: none"> No reporting of KPIs to SW

<ul style="list-style-type: none"> No method of reporting this information as far as respondent is aware. 	<ul style="list-style-type: none">
<ul style="list-style-type: none"> Felt that some of this information is not reliable and is often not believed (e.g. quantities of mat diverted from landfill) 	<ul style="list-style-type: none"> Many CR KPIs seen as unreliable Lack validity
<ul style="list-style-type: none"> As well as reliability of information, should be careful about introducing more and more metrics/KPIs that companies collect and report 	<ul style="list-style-type: none"> Problematic introducing more KPIs and metrics
<ul style="list-style-type: none"> The more tangible and easily recorded resources such as energy use or reductions in business travel may be worth recording 	<ul style="list-style-type: none"> Tangible resources may useful to record NRG, travel
<ul style="list-style-type: none"> Would also be good for companies to increase use of video conferencing and other alternatives to help reduce env impacts 	<ul style="list-style-type: none"> Increased video conferencing etc would be useful
4	
<ul style="list-style-type: none"> Feels that SW essentially does minimum effort in relation to CR activities 	<ul style="list-style-type: none"> Minimum effort by SW in respect of CR
<ul style="list-style-type: none"> Not currently at the forefront of SW concerns 	<ul style="list-style-type: none"> Not major concern
5	
<ul style="list-style-type: none"> Couldn't think of any companies that stand out for good or bad reasons 	<ul style="list-style-type: none"> No outstanding examples

Director 1

1	
<ul style="list-style-type: none"> Activities that companies undertake in the community above and beyond their commercial duties 	<ul style="list-style-type: none"> Activities above the 'standard' ones
<ul style="list-style-type: none"> Does not really agree with the idea of CR as thinks that companies have a duty to work fairly, pay taxes, employ people under fair conditions 	<ul style="list-style-type: none"> Doesn't agree with principle
<ul style="list-style-type: none"> Feels that the rest is a nice to have and in some respects a marketing ploy for the organisation 	<ul style="list-style-type: none"> Nice to have Marketing ploy
<ul style="list-style-type: none"> Good to aspire to, but not really necessary. 	<ul style="list-style-type: none"> Good aspirational idea
<ul style="list-style-type: none"> Companies don't have anything other than their own interests at heart] 	<ul style="list-style-type: none"> Self motivated process
<ul style="list-style-type: none"> In some ways it's a means to an end to help the company operate 	<ul style="list-style-type: none"> Helps the company to operate
<ul style="list-style-type: none"> Shouldn't interfere too much and pretend that we're doing things that we're not 	<ul style="list-style-type: none">
2	
<ul style="list-style-type: none"> The idea of mitigating against impacts (regardless of type) will only work if all staff are aware of the issues and the agenda or viewpoint of the organisation 	<ul style="list-style-type: none"> All staff need to be aware of issues affecting company
<ul style="list-style-type: none"> The people on the ground are the ones that are out there doing the work so need to understand the issues 	<ul style="list-style-type: none"> Particularly staff 'on the ground'
3	
<ul style="list-style-type: none"> If company wants to engage in CR then it has a duty to communicate effectively to the staff 	<ul style="list-style-type: none">
<ul style="list-style-type: none"> CR report hasn't been disseminated very well to staff 	<ul style="list-style-type: none"> CR report not disseminated well
<ul style="list-style-type: none"> SW1 is useful at communicating general information on company, Millennium fund and the various activities of individual offices. 	<ul style="list-style-type: none"> SW1 useful for general dissemination
<ul style="list-style-type: none"> What's not communicated usefully is examples of what not to do – i.e. where project work has gone awry 	<ul style="list-style-type: none"> Awareness of mistakes
4	
<ul style="list-style-type: none"> No involvement whatsoever in CR reporting process 	<ul style="list-style-type: none"> No involvement
<ul style="list-style-type: none"> Newcastle office had an initiative with local authorities to make an effort to employ people on apprenticeships – taking people through on the job training rather than employing graduates and trained personnel 	<ul style="list-style-type: none"> Initiatives to employ non-graduates on apprenticeships Worthwhile way of training staff
<ul style="list-style-type: none"> Partly done because they were cheap but also because the company felt that it was worth doing 	<ul style="list-style-type: none">
5	
<ul style="list-style-type: none"> Think we manage our impacts reasonably well 	<ul style="list-style-type: none"> Reasonably good at managing impacts
<ul style="list-style-type: none"> Not sure that the company attempts to make these mitigation impacts due to environmental reasons – more cost savings than anything 	<ul style="list-style-type: none"> Mainly for cost savings
<ul style="list-style-type: none"> Environmental benefits often result from these cost savings but doesn't feel that this is the sole reason why company does them 	<ul style="list-style-type: none">

<ul style="list-style-type: none"> • Most staff keen to do the right thing for the environment – reasonably good at this aspect of work 	<ul style="list-style-type: none"> • Most staff keen on env • Carries through into work
<ul style="list-style-type: none"> • However, quite a lot of greyness about what actually is the right thing 	<ul style="list-style-type: none"> • What actually is 'right thing to do'
<ul style="list-style-type: none"> • More guidance on the topic would be useful 	<ul style="list-style-type: none"> • Guidance needed
<ul style="list-style-type: none"> • SW better at the environmental stuff than the social side of things 	<ul style="list-style-type: none"> • Env good, social weaker
6	
<ul style="list-style-type: none"> • No one really stands out 	<ul style="list-style-type: none"> • No stand out companies
<ul style="list-style-type: none"> • One or two companies stand out with regards to env practices (no names given) 	<ul style="list-style-type: none"> •
<ul style="list-style-type: none"> • LA seem to be very good with regards to social inclusion and efforts to get people working – however was discussed that this is part of their remit anyway 	<ul style="list-style-type: none"> • LA good at social inclusion • But part of remit
<ul style="list-style-type: none"> • LAs aren't likely to see much benefit from companies demonstrating their efforts for helping people in the other countries – they only likely to be interested in the local efforts being made. 	<ul style="list-style-type: none"> • LAs confined to local areas and not interested in when companies work overseas

Technical Director 2

1	
<ul style="list-style-type: none"> • Global compact, • Ethicalness of the work we do, • Social responsibility • Local and global impacts of the company 	<ul style="list-style-type: none"> • Global compact, • Ethicalness of the work we do, • Social responsibility • Local and global impacts of the company
2	
<ul style="list-style-type: none"> • Responsibility depends on the decision making process • In most cases senior management is more responsible but staff should be aware of the issues relating to this area • If the staff are provided with too much information and required to have too much involvement then the subject could easily become distracting 	<ul style="list-style-type: none"> • Responsibility dependant on grade • Senior – more responsible but awareness needed by everyone • Possibility of subject becoming overwhelming • Mustn't overload staff with info and involvement
3	
<ul style="list-style-type: none"> • Subject is generally communicated to staff well • GC presentation was delivered to everyone within a reasonable timeframe 	<ul style="list-style-type: none"> • Generally communicated to staff well • UNGC presentations
3A	
<ul style="list-style-type: none"> • In terms of capturing Env and Soc data there were no KPIs (beyond normal info requested by Gateway forms) that interviewee was aware of • Respondent felt that this might result form the relatively limited nature of what SW does • Mostly desk based design work with minimal site and no construction/contracting work 	<ul style="list-style-type: none"> • Beyond gateway forms, no KPIS requested by company • Likely due to nature of SW activities • Low levels of energy, materials etc
4	
<ul style="list-style-type: none"> • Respondent had no involvement with the CR report • May have contributed to it indirectly but no direct requests 	<ul style="list-style-type: none"> • No involvement •
5	
<ul style="list-style-type: none"> • SW performs quite well in relation to this topic. • Feels that the company has high integrity and may have passed up work in order to retain this stance 	<ul style="list-style-type: none"> • Performs quite well in CR • High integrity – passed up work to maintain
6	
<ul style="list-style-type: none"> • No specific examples • Would be interested to know how the public sector performs in relation to some CR /ethics metrics • Doesn't feel that public sector is regulated very well with respect to ethical practices • Not suggesting they are corrupt but some practices carried out by public sector wouldn't be tolerated in private market 	<ul style="list-style-type: none"> • No specific examples • How do public sector perform? • Doesn't feel public sector regulated very regarding ethics etc • Not corrupt • But some practices in public sector wouldn't work in private

Director 2

1	
<ul style="list-style-type: none"> • Important to our work and to the industry 	<ul style="list-style-type: none"> •
2	
<ul style="list-style-type: none"> • All staff should be aware of CR and its various aspects 	<ul style="list-style-type: none"> • Relevant to all staff
<ul style="list-style-type: none"> • As a consultancy the company is the staff, so for the company to work responsibly the staff need to be aware of the issues and how they can be addressed 	<ul style="list-style-type: none"> • Staff are the company • Need responsible staff • Need to be aware of the issues
3	
<ul style="list-style-type: none"> • Doesn't feel that the topic is well communicated throughout the company 	<ul style="list-style-type: none"> • Not well communicated throughout company
<ul style="list-style-type: none"> • UNGC began to be promoted to staff but this hasn't really been followed through in the last year. 	<ul style="list-style-type: none"> • Not followed up with UNGC promotion
<ul style="list-style-type: none"> • SW not been very good at recording data for CR/sustainability 	<ul style="list-style-type: none"> • Company not good at recording CR data
<ul style="list-style-type: none"> • Sustainability is now being incorporated into the GDP more clearly – separate sessions instead of mixed in with others 	<ul style="list-style-type: none"> • Inclusion into GDP
<ul style="list-style-type: none"> • Also SW not particularly effective at communicating with external clients on the CR/sustainability activities, efforts and performance 	<ul style="list-style-type: none"> • Communication with clients not particularly good
5	
<ul style="list-style-type: none"> • The company could be doing better in this area 	<ul style="list-style-type: none"> • CR could be improved
<ul style="list-style-type: none"> • E.g. Providing lots of building and architecture design with high BREEAM ratings but few of our offices are very highly rated 	<ul style="list-style-type: none"> • Providing expertise in BREEAM but our offices don't perform well
6	
<ul style="list-style-type: none"> • Atkins and ARUP stand out as companies investing a considerable amount in CR efforts 	<ul style="list-style-type: none"> • Atkins, ARUP good performers
<ul style="list-style-type: none"> • SW involvement in client designs is often not mentioned by the clients at all 	<ul style="list-style-type: none"> • SW often doesn't get credit for design work
<ul style="list-style-type: none"> • E.g. Tesco have been a major client but there is almost no acknowledgment by them that SW have been involved in their infrastructure or building designs.# 	<ul style="list-style-type: none"> •
<ul style="list-style-type: none"> • This is the kind of publicity that the company needs more of 	<ul style="list-style-type: none"> • Need more publicity in this area

Associate 1

1	
<ul style="list-style-type: none"> • Very broad subject and difficult to define 	<ul style="list-style-type: none"> • Diff to define • Covers many aspects
<ul style="list-style-type: none"> • CR is very relevant and important to construction companies 	<ul style="list-style-type: none"> • Relevant to construction companies
<ul style="list-style-type: none"> • If SW gets things wrong it impacts upon the PI of the company and the client's perceptions of the company. 	<ul style="list-style-type: none"> • Poor performance has negative repercussions
2	
<ul style="list-style-type: none"> • Didn't answer actual question 	<ul style="list-style-type: none"> • No clear answer
<ul style="list-style-type: none"> • All highways design is dictated by HA standards so it is possible to do minimum or to provide a strengthened and added value design. 	<ul style="list-style-type: none"> •
<ul style="list-style-type: none"> • Felt that SW does provide opportunity to 'go further' and provide more than minimum standard 	<ul style="list-style-type: none"> • SW does go further for the client where opportunities exist
3	
<ul style="list-style-type: none"> • As part of their Managing Down Costs Toolkit, the HA request certain KPIs in relation to some env aspects but no soc 	<ul style="list-style-type: none"> • Some KPIs recorded for HA toolkit • Mainly env
<ul style="list-style-type: none"> • HA uses this information to benchmark contractors. 	<ul style="list-style-type: none"> • Uses the toolkit to benchmark contractors
<ul style="list-style-type: none"> • The Highways team are beginning to collate best practice information and past performance for the purposes of future bids. Some KPIs may be included in this. 	<ul style="list-style-type: none"> • Collating best practice info for future bids • May include some KPIs
4	
<ul style="list-style-type: none"> • SW performance is pretty weak – felt that what limited CR information is available is idle talk with no action behind it. 	<ul style="list-style-type: none"> • CR performance is generally quite weak • Mainly corporate blurb • No substantive action
5	
<ul style="list-style-type: none"> • Balfour Beatty have stood out on a recent job as a company going above and beyond to look after the welfare of their staff – good example being the zero harm policy that is integral to all of their work. E.g. Rewards offered for reporting potential hazards and near miss 	<ul style="list-style-type: none"> • Balfour stand out as good practitioner • Good H&S policies

Associate 2

1	
<ul style="list-style-type: none"> Understanding our responsibilities with regards to the activities that we carry out – relates to <ul style="list-style-type: none"> Health and Safety Environment Society in general If the topic isn't broken down to explicitly demonstrate how it relates to them there is a danger that won't think it is relevant to them Everyone should play a part so it is relevant to everyone 	<ul style="list-style-type: none"> Responsibilities based on business impacts <ul style="list-style-type: none"> Need to break down topics to make staff aware of diff aspects Relevant to everyone
2	
<ul style="list-style-type: none"> Received copy of the CR report because shareholder Doesn't think that the majority of people in the company would be aware that the CR report exists Is aware of where to obtain information due to experience of bid writing Could track this information down if needed 	<ul style="list-style-type: none"> Communication generally poor Bid writing has shown where to obtain further info
3	
<ul style="list-style-type: none"> Corporate level – Energy, travel data sometimes collected Project level is not consistently recorded across the company as it is dependant on the individual projects Not been collected by SW at any point 	<ul style="list-style-type: none"> Some corporate level data collected Project KPIs rarely recorded Diff due to variety of projects
4	
<ul style="list-style-type: none"> SW stands up well against it's peers Similar processes in place to other organisations/consultancies 	<ul style="list-style-type: none"> Stands up well with its peers Similar processes in place
5	
<ul style="list-style-type: none"> Public sector bodies such as TfL and CrossRail very aware of their responsibilities and potential impacts Often request information on these subjects in order to get onto frameworks 	<ul style="list-style-type: none"> Public sector/government bodies very aware of their responsibilities Are asked about these topics before joining frameworks

Associate 3

1	
• Beyond the bottom line of P&L	• Beyond P&L
• That companies do have responsibilities for the wider community	• Responsibilities to the community
• Has to be relevant to the organisation and the sector that we operate in	• Relevant to the whole organisation and sector
2	
• Not aware of CR report	• Not aware of CR report
• Lots of info about sustainability practices – thinks that it is relatively well communicated	• Sustainability issues communicated quite well
• Also information on H&S topics is passed on quite regularly	• Same for H&S
• Therefore feels that people should get the impression that these topics are important to the business	• Staff should be aware of the importance
• Might be possible to give a bit more information relating to the charities being supported or CR activities in general.	• Community/charity aspects communication could be improved
3	
• Majority of his work is with HA	•
• Some KPIs required by HA but does feel that work getting overly bureaucratic and that too many KPIs are required at the moment.	• Some KPIs required by HA • Generally too many KPIs required • Too much bureaucracy
• Too much time spent recording and not enough time to get on with the job	• Distraction from the job
4	
• Env performance is good – heavily legislation so schemes Respondent involved in are very well managed with regards to env	• Env performance good • Mainly due to legislation
• Newcastle office records the methods of transport used by all staff for getting into work – not sure if it is being done in other offices	• Staff commuting data recorded by Newcastle office
• This is done for all of the staff in the office regardless of whether they have a company car	• All staff regardless of how they commute
5	
• Not aware of any companies that stand out	• No companies stand out

Associate 4

1	<ul style="list-style-type: none">• Part of our work both operationally and also from the perspective that we are providing advice to clients who have their own requirements for CR• Relevant to everyone – procedures and processes set by senior management but people responsible for implementing those policies	<ul style="list-style-type: none">• Operationally part of SW work• Should also be making clients aware of it• Relevant to everyone• Senior staff – set policies• Everyone else – implement them
2	<ul style="list-style-type: none">• Communication could be improved• Aware of CR report but only because a client asked for a copy• Doesn't think that many people will know about it	<ul style="list-style-type: none">• Could be improved• Aware of CR – not through company• Prob not many people know about it
3	<ul style="list-style-type: none">• Not normal for KPIs to be recorded• Some opportunity for monitoring performance through the value engineering process. Only a measurement of improved cash flow not so much the material/waste savings	<ul style="list-style-type: none">• KPIs not recorded• Not requested by clients
4	<ul style="list-style-type: none">• SW is trying - SWMP, recycling schemes and energy reduction strategies.• Likely to be areas that we can improve on but at least we're trying	<ul style="list-style-type: none">• Efforts being made• Could improve but it's a start
5	<ul style="list-style-type: none">• Adanter – Have been in headlines for breeches in their environmental responsibilities.• Accused of bending env rules in order to start a new project which is breaching their own env policies• Anglo American, Rit Tinto, – very good in their	<ul style="list-style-type: none">• One example given for poor performance• Env infraction• Some good practitioners

Associate 5

1	
<ul style="list-style-type: none"> All big organisations have responsibilities in relation to env and communities 	<ul style="list-style-type: none"> All business has extra responsibilities
<ul style="list-style-type: none"> Information relating to this topic and SW efforts all covered in The Way we Do Business (TWWDB) 	<ul style="list-style-type: none"> WWDB provides CR info
<ul style="list-style-type: none"> Listed a range of activities that the company is involved with/undertakes (Sponsorship,, SWMP, fundraising) 	<ul style="list-style-type: none"> Aware of number of activities
<ul style="list-style-type: none"> Interviewee felt that SW is pushing the right buttons in relation to CR activities 	<ul style="list-style-type: none"> SW doing well
2	
<ul style="list-style-type: none"> On the whole felt that communication is reasonable – aware of various schemes and knew where to find more information out about each of them. 	<ul style="list-style-type: none"> Reasonable communication
<ul style="list-style-type: none"> However, respondent did feel that there was some room for improvement but didn't want CR and the various associated policies 'rammed down peoples throats' 	<ul style="list-style-type: none"> Still room for improvement
<ul style="list-style-type: none"> Changes occur to policies and TWWDB etc and it would prob be useful to make staff aware of these but without overloading people with information 	<ul style="list-style-type: none"> Maintain awareness but not overload people
<ul style="list-style-type: none"> Suggested that awareness of CR issues and discussion of how they might be relevant to staff could be discussed during appraisals 	<ul style="list-style-type: none"> Fit in as part of appraisals?
<ul style="list-style-type: none"> The Staff newsletter is used to make staff aware of new jobs and successes within the company could also be used to raise awareness of CR related activities and changes to relevant policies etc. 	<ul style="list-style-type: none"> Newsletters – Inform of CR changes
3	
<ul style="list-style-type: none"> No formal requests or processes for recording information/KPIs relating to projects 	<ul style="list-style-type: none"> No formal requests for project KPIs (int or ext)
<ul style="list-style-type: none"> Request or search for information relating to KPIs as it is needed e.g. If tender required info on energy saving efforts then respondent is able to track down this kind of information 	<ul style="list-style-type: none"> Some tenders request energy use data Normally easy to find

Associate 6

1	<ul style="list-style-type: none"> • Very important to what we do - as engineering impacts upon everybody's lives • Affects people, society and the env • Necessary to identify our impacts and plan to minimise them as much as possible Very wide reaching topic which affects everyone in some way 	<ul style="list-style-type: none"> • Very important to sector • Eng impacts on everything • Awareness of impacts important
2	<ul style="list-style-type: none"> • Generally good communication • When CR report was produced respondent presented to the office and detailed some of the topics covered • UNGC was also communicated quite well. • There is a limit to how much people can assimilate so it is important that only relevant info is delivered • Should be delivered in a way which relates to people's work place and allows people to take something from the communications • Directors should be pushing the responsibilities of individuals and that people shouldn't wait for the company to do something before they take action. • Need to focus on things that make a difference – not necessarily covering the generic issues that people encounter everyday but looking at the exceptions and highlighting the issues with these. • Overall SW does well. 	<ul style="list-style-type: none"> • Generally good communication • Presentation of CR report topics • Same for UNGC • Careful of information overload • Should be related to staff's jobs/work • Demonstrates relevance • Staff should be aware of their responsibilities • Not entirely company's responsibility • Focus on areas that make biggest difference • Overall good communication
3	<ul style="list-style-type: none"> • Potentially some things that could be recorded as part of 3CAP • Tool developed based on the Euro Foundation for Qual Management Systems • Requires each of the companies involved in the partnership to self assess themselves in relation to a range of topics • Highlighted Sustainability as a potential weakness for SW 	<ul style="list-style-type: none"> • Some KPIs for 3CAP • • •
4	<ul style="list-style-type: none"> • Feels that SW performs very well in relation to CR and sustainability topics • Very wide range of skills in the office which allows a range of topics to be tackled. 	<ul style="list-style-type: none"> • SW performing well with regard to CR • Wide selection of skills in company
5	<ul style="list-style-type: none"> • Mouchel – very similar to SW. Performance of company is very dependant on directors • Amey – Reputation as very profit oriented, have good systems in place to record information and performance. Don't seem as good at communicating as SW and most communication seems oriented towards communicating with their clients rather than all of their stakeholders. 	<ul style="list-style-type: none"> • Good example - Consultant • Directors have interest in topic • Bad example – Contractor • Focus on clients rather than stakeholders •

1	
<ul style="list-style-type: none"> Two Main aspects to CR <ul style="list-style-type: none"> Actual impacts that we have from our business – recommending most sustainable option, concerns about corruption Non mandatory positive impacts – SWMP don't need to do it but the company choose to Environmental concerns are still relevant as much of the work undertaken by ports group is in countries or with companies who pay lip service to environmental and social impacts because they are required to by clients and or funding agencies. SW sometimes in the position where they attempt to apply sustainable solutions or environmental measures but they are ignored by clients as they are not required by legislation or funding agents. 	<ul style="list-style-type: none"> Business impacts <ul style="list-style-type: none"> Beyond requirements Used as window dressing by some companies 'above spec' suggestions often ignored by clients
2	
<ul style="list-style-type: none"> Mixed bag AS is aware of CR report etc as a result of looking for the info in relation to jobs and bids. Would expect that staff across the company are less aware of these things as they may not be required in their day to day work Knowledge of other CR topics/events such as the MP are well publicised and would be more high profile and known amongst the staff Membership of UNGC was mentioned by graduate at recruitment day so these topics would appear to be effectively communicated to external stakeholders 	<ul style="list-style-type: none"> Mixed impression of performance Aware of CR report through own searching Some aspect not communicated well MP well publicised Aware of UNGC through own searching
3	
<ul style="list-style-type: none"> No KPIs currently required by clients Many clients and ports/maritime are generally in there infancy in terms of sustainability issues etc Consultancy is therefore slightly ahead of the curve and tries to promote these topics where possible More pressure is coming from financiers and supply chain members which means that these topics are becoming more high profile for port authorities 	<ul style="list-style-type: none"> No KPIs requested by clients or SW Consultants trying to promote sustainability in maritime and ports Supply chain pressure
<ul style="list-style-type: none"> Corruption – is a consideration of work but not a major issue. Working in countries where practices can be seen as corrupt – it is something that SW have to be aware of To the best of respondent's knowledge there have been no instances of our or our local agents involvement with corrupt activities. 	<ul style="list-style-type: none"> Aware of corruption Not major issue for SW
4	

<ul style="list-style-type: none"> • Feels that the setup process within SW is becoming more well understood and effective at taking some of these CR topics into account. 	<ul style="list-style-type: none"> • Job setup process helping CR aspects
<ul style="list-style-type: none"> • Locally – FM attempting to improve CO2 performance – but this is being poorly implemented. 	<ul style="list-style-type: none"> • FM poor at energy and waste management
<ul style="list-style-type: none"> • AC control not very good, 	<ul style="list-style-type: none"> •
<ul style="list-style-type: none"> • Confidential and non-confidential waste paper all being stored for specialist disposal – confidential collection service not as regular as general waste so often both types of paper are put back into the general rubbish for disposal 	<ul style="list-style-type: none"> •
5	
<ul style="list-style-type: none"> • No real awareness of anyone standing out. 	<ul style="list-style-type: none"> • No one stands out in maritime
<ul style="list-style-type: none"> • Commercial banks signing up to Equator Principles is a sign of some organisations attempting to drive some changes or at least making people think about demonstrating some efforts in this area 	<ul style="list-style-type: none"> • Many financiers signed EP • Attempts being made
<ul style="list-style-type: none"> • Top down pressure from major sectors such as oil is also helping to drive change in some aspects of the port and maritime sector. 	<ul style="list-style-type: none"> •

1	
<ul style="list-style-type: none"> • Env Social – outside of the economic responsibilities of the company • Extremely relevant in everything we do • BC unit has potential for greater chance of affecting env and social aspects of projects as they review projects prior to the design stage • Most of the financiers involved in the work Respondent does are signed up to the Equator Principles making the soc and env angle of work quite well understood 	<ul style="list-style-type: none"> • Everything outside of normal business operations • Relevant to everything we do • BC has higher potential for influence • Involved prior to the design stage • Most financiers JG involved with signed EP
2	
<ul style="list-style-type: none"> • To a degree communication is wasted on Respondent. Company information may be well communicated but he is too busy to take much notice of it. • Good links with environmental team so access to this type of information is very good and often involved with the business cases Respondent works on • Social aspects no quite so clear cut 	<ul style="list-style-type: none"> • Too busy to take much notice • Good links with env team in the same office • Social involvement less clear
3	
<ul style="list-style-type: none"> • No real need to record KPIs at business management level • Something that comes into the design stage more often 	<ul style="list-style-type: none"> • No KPIs to record • Done more ins design stage
4	
<ul style="list-style-type: none"> • Doing well • Efforts such as the SWMP don't seem to be carried out by other consultancy companies • Direct access to these kinds of activities raises awareness of social impacts and allows people to give something back 	<ul style="list-style-type: none"> • Doing well in CR • Charities (SWMP) not done by many other consultants • These raise awareness of social impacts
5	
<ul style="list-style-type: none"> • Not really come across any that stick out as particularly bad • Companies operating in overseas countries often get bad press for being involved in bribery but cannot realistically operate in these parts of the world without exposing themselves to these activities • May be necessary to provide a degree of leniency in these situations as companies will likely receive just as bad press if they simply stopped operating in these regions. 	<ul style="list-style-type: none"> • No companies stick out • Exposure to bribery is part and parcel of operating overseas • Bad press for operating in these markets, bad press if they pull out

1	
<ul style="list-style-type: none"> Responsibility past the normal economic activities of the company. Very relevant for big companies in construction as impacts on env and community in every single project we do. 	<ul style="list-style-type: none"> Non business responsibilities Relevant due to impacts business can have
2	
<ul style="list-style-type: none"> Variable effort with regards to communication Has improved in recent years but previously was quite poor Role out of EMS has helped with env side of things very well Social side of things much more sporadic Lots of publicity around the SWMP but don't really hear much more about social and community impacts and interactions Not good at fostering community work – no time off for volunteering as other companies offer Aware of CR report and UNGC but not very much follow up information has been provided on these activities for some time. External communications on CR seem to be reasonably well carried out but internal championing of these topics is fairly weak 	<ul style="list-style-type: none"> Varied effort in communication Some improvement Improved EMS has raised profile of env aspect Social still varied SWMP high profile Other areas less so Community work not so good E.g. No time off for volunteering Aware of CR and UNGC but little follow up info External CR communication reasonably good Internal championing poor
3	
<ul style="list-style-type: none"> Rarely required to record and report KPIs Some main tenders Respondent involved in have often asked for high level policy information on env efforts and performance of company and past Clients are now beginning to scrutinise the information more closely – they often require info on actual measures rather than just policies SW EMS is quite good at capturing the efforts the company takes to reduce the impacts of projects but this is often not used to drive changes within the company 	<ul style="list-style-type: none"> Rarely required to record KPIs In the past some tenders have requested top level policies etc on env Clients beginning to scrutinise info more closely EMS useful for capturing env data Often not used to drive change in company policy
4	
<ul style="list-style-type: none"> Comparable to other large international consultants None are really known for being especially good at CR But where we could improve is in relation to local community interactions. 	<ul style="list-style-type: none"> On par with other large int consultants Not a sub-sector known for being CR leaders Community involvement could be improved
5	
<ul style="list-style-type: none"> Government Agencies (e.g. HA) are good at environmental aspects as are many of the utilities suppliers/contractors Not aware of any particularly bad companies 	<ul style="list-style-type: none"> Government agencies good at env So are many of their suppliers No bad ones stand out

Associate 10

1	
<ul style="list-style-type: none"> Not read any official line on the CR policy of SW How the company does its business in terms of ethics – the clients we work with or the type of projects that we do <ul style="list-style-type: none"> If some any of our work was related to an organisation that was perceived as unsavoury then would expect there to be some mechanism to either bring about change in the situation or to withdraw from the work 	<ul style="list-style-type: none"> Unaware of official policy Business operations
<ul style="list-style-type: none"> Also a responsibility in the way that the org runs its financial affairs and the way that SW invests money in other projects/organisations 	<ul style="list-style-type: none"> Financial affairs
<ul style="list-style-type: none"> Involvement in the community has always been important to ensure that we are operating responsibly in the community 	<ul style="list-style-type: none"> Community Involvement
<ul style="list-style-type: none"> Is something that is relevant to everyone in the company as the organisation is essentially the staff. People need to be aware of their responsibilities and behave themselves with regards to the work they are undertaking 	<ul style="list-style-type: none"> Relevant to everyone People need to be aware of business impacts
<ul style="list-style-type: none"> This is only going to happen if the importance of the subject and the responsibilities involved are cascaded down to all staff 	<ul style="list-style-type: none"> Need to raise awareness
<ul style="list-style-type: none"> SW used to have reputation as being a bit more easy going and less contractually minded as some of their competitors but this may change with the take over. 	<ul style="list-style-type: none">
2	
<ul style="list-style-type: none"> Generally communications on the high level strategies are very poor 	<ul style="list-style-type: none"> Generally poor communication
<ul style="list-style-type: none"> Signs that the process is improving but still not very effective 	<ul style="list-style-type: none"> Some improvement
<ul style="list-style-type: none"> (Not just for SW) Link between high level policies and commitments presented in glossy reports isn't always well connected to the staff and they may often not be aware of their responsibilities or what is required of them 	<ul style="list-style-type: none"> Connection between policies and staff not always good
<ul style="list-style-type: none"> Communication has always been an issue 	<ul style="list-style-type: none"> Communication poor
<ul style="list-style-type: none"> Intranet has helped to improve it slightly but the change of system has occurred just as people have gotten used to Unite. 	<ul style="list-style-type: none"> Some improvement with intranet
3	
<ul style="list-style-type: none"> Often comes across bids that ask whether we are recording KPIs 	<ul style="list-style-type: none"> Sometimes requested in bids
<ul style="list-style-type: none"> Company historically has been quite poor at doing this 	<ul style="list-style-type: none"> SW been quite poor at collecting
<ul style="list-style-type: none"> No centralised way of collecting or measuring these KPIs 	<ul style="list-style-type: none"> No central method/repository
<ul style="list-style-type: none"> Could be due to the fact that the process hasn't really become main stream yet so not as high priority as some other aspects of operations 	<ul style="list-style-type: none"> Not mainstream process yet

<ul style="list-style-type: none"> • People are suggesting that it needs to be done but they aren't practitioners so they're unaware of the time and effort required to capture the information 	<ul style="list-style-type: none"> • Time and cost associated with capturing info
<ul style="list-style-type: none"> • As a design organisation we should be specifying sustainable materials etc but measuring this is another matter 	<ul style="list-style-type: none"> • Should be providing clients with alternatives
<ul style="list-style-type: none"> • Most of our work is a one off which makes recoding KPIs related to them and comparison between them difficult. 	<ul style="list-style-type: none"> • One off nature of work • Diff to record standard KPIs
<ul style="list-style-type: none"> • Improvements can be suggested but then the client can simply turn around and refuse to spend the money on that design and go for a cheaper. Less sustainable option. 	<ul style="list-style-type: none"> • Client might refuse alternative • Waste effort
<ul style="list-style-type: none"> • Commonly we don't offer up too much outside of scope as it costs too much 	<ul style="list-style-type: none"> • Don't tend to go outside scope
4	
<ul style="list-style-type: none"> • SW are well up with the competition 	<ul style="list-style-type: none"> • On par with the competition
<ul style="list-style-type: none"> • Not at the top but more aware than other organisations 	<ul style="list-style-type: none"> • Not at top but more aware than others
5	
<ul style="list-style-type: none"> • Eden project are being very experimental with the construction techniques they are using. 	<ul style="list-style-type: none"> •
<ul style="list-style-type: none"> • Effectiveness of this area comes down to the personalities and the effort that individuals are willing to expend 	<ul style="list-style-type: none"> •
<ul style="list-style-type: none"> • Behavioural subject that can fall flat on it's face based on the people involved in the work 	<ul style="list-style-type: none"> • Behavioural subject • Can thrive or die based on who's in charge

1	
<ul style="list-style-type: none"> • Very broad topic with very varied uptake – from glossy shell reports to ‘on the ground’ examples of CR efforts such as SWMP. 	<ul style="list-style-type: none"> • Very broad
<ul style="list-style-type: none"> • Philanthropic process which is beneficial to both companies and stakeholders 	<ul style="list-style-type: none"> • Beneficial to many
<ul style="list-style-type: none"> • SOP for companies in order to promote themselves but also does help communities or other stakeholders 	<ul style="list-style-type: none"> • Promotional tool
<ul style="list-style-type: none"> • Is very relevant to our industry <ul style="list-style-type: none"> ◦ Environment – almost everything SW does has potential for some impact on the environment 	<ul style="list-style-type: none"> • Relevant <p>Most SW jobs have an impact</p>
<ul style="list-style-type: none"> ◦ Community – At lot of the schemes SW involved in can have impacts on communities – especially true for overseas work. 	
<ul style="list-style-type: none"> • Not taking these things into account can have negative repercussions in the future 	<ul style="list-style-type: none"> • Dangerous to ignore
2	
<ul style="list-style-type: none"> • Not very effectively at all 	<ul style="list-style-type: none"> • Very poor
<ul style="list-style-type: none"> • Communication on merger has been fairly poor – which is a hugely important topic – CR much less important so is unlikely to be communicated effectively 	<ul style="list-style-type: none"> • Communication generally poor
<ul style="list-style-type: none"> • Aware of activities and efforts due to the team he works within and whom he has contact with 	<ul style="list-style-type: none"> • Aware of CR efforts through own job
<ul style="list-style-type: none"> • Rapid expansion of company has caused problems with HR and other departments keeping people aware of changes and improvements etc. 	<ul style="list-style-type: none"> • Expansion made communication difficult
3	
<ul style="list-style-type: none"> • No a great deal of motivation yet for the company to record and report upon KPIs 	<ul style="list-style-type: none"> • No real driver for it
<ul style="list-style-type: none"> • Some tenders ask for track record in particular areas but very few require hard data or even specific examples of efforts that SW is making to improve resource efficiency or energy use. 	<ul style="list-style-type: none"> • Some tenders request info on energy use
<ul style="list-style-type: none"> • SW not really public facing so no direct pressure from public but should eventually expect the pressure to come from elsewhere in supply chain as investors request more transparency on these topics. 	<ul style="list-style-type: none"> • Currently no real drivers • Should expect it in the future
<ul style="list-style-type: none"> • Potential for recording KPIs is relatively limited particularly with regards to SW use of resources – but this is likely due to the fact that the company is not really a great consumer of materials and energy compared to other sector clients 	<ul style="list-style-type: none"> • Limited potential for KPSs • Particularly for resources
4	
<ul style="list-style-type: none"> • SW don't have any real reputation as far as CR goes but again due to the fact that it's not really public facing 	<ul style="list-style-type: none"> • No real reputation for CR • Not public facing
<ul style="list-style-type: none"> • None of our competitors really seem to be stand out as big players in CR either 	<ul style="list-style-type: none"> • No competitors stand out
<ul style="list-style-type: none"> • Our type of service isn't yet subject to much 	<ul style="list-style-type: none"> • Consultancy not subject to major

scrutiny yet – very desk based so impacts are reasonably limited.	scrutiny <ul style="list-style-type: none"> Limited impacts
<ul style="list-style-type: none"> Some bottom up pressure has been occurring – recycling in some offices is proving popular 	<ul style="list-style-type: none"> Some bottom up pressure
<ul style="list-style-type: none"> SW transport policy is currently very weak. Still lots of flying and driving still being done. Could be an area for more clarity and improvement 	<ul style="list-style-type: none"> Poor transport policy
<ul style="list-style-type: none"> CR likely to be important and often discussed at graduate recruitment fairs may be useful for some blurb to be produced for demonstrating what we do in these areas. 	<ul style="list-style-type: none"> Likely to be important in future Relevant to graduates
5	
<ul style="list-style-type: none"> Some small consultants very good with regards to green policies and transport but this mainly due to their size. 	<ul style="list-style-type: none"> Some small consultants very good with green policies

1	
• General business approach	• Approach to business
• Brand identity and what sets us apart from the competition	• Brand awareness
• Social Awareness	• Promotional tool
• Ethical awareness and our approaches	• Social impacts
• Important to be aware of client requirements but be willing enough to point out to clients when things are wrong or dangerous even though they are the ones paying	• Ethics
• Examples of where client has needed to be shown that a pumping station shouldn't be built in a certain way	• Awareness of Client requirements
• Consultants often not good at asking enough questions can result in misunderstanding brief and not delivering the right product	• Highlight issues and possible alternatives
• Better background of client and their requirements can help to deliver projects more effectively with minimal issues	• Consultants should influence clients where possible
• Stakeholders are also an important part of the process and must be kept in the loop and clearly understand what's happening	• Important to deliver right product
• The topic and its subjects are absolutely relevant to what we do.	
2	
• Communication could be better	• Stakeholders should be involved at all stages
• Doesn't often get chance to read all of the updates	• Very relevant to out work
• Newsletters updates are good but would also be useful to hear more about things that have gone adrift to allow people to be aware of issues and potential problems	
• Could be more useful for people to learn from these things	
3	
• BREEAM and CEEQUAL schemes offer the opportunity to record a range of indicators relating to projects but this is likely to involve extra effort	• Communication could be better
• There is performance information there to be captured but in most cases it would require SW to capture that information out of the job profit margins	• Updates good
• It might be possible to record rough and ready indicator from the projects	• Good and bad examples would be useful
	• Can learn more from mistakes
4	
• Generally OK performance	• KPIs available in B&I
• Company has a good attitude towards the subject	• CEEQUAL and BREEAM
○ H&S	• Capturing KPI data would come out of job profit
○ Wellbeing of staff	• Very rough data could be collected
○ Support from other staff	• No use for auditing

5	
<ul style="list-style-type: none"> • SCA – Pavement Making - Swedish org operating in this country – Have been a bit pushy on some projects in relation to the cost and trying to make cut back to save money 	<ul style="list-style-type: none"> •
<ul style="list-style-type: none"> • Some of the small contractors that respondent has been involved with have been quite poor with regards to their env efforts and adhering to them 	<ul style="list-style-type: none"> • Small contractors – poor env performance
<ul style="list-style-type: none"> • Current climate is likely to bring out the worst in companies due to the financial pressures/restrictions in place 	<ul style="list-style-type: none"> • Financial climate makes things difficult • Everyone wants more for less
<ul style="list-style-type: none"> • Crest Nicholls have been quite aware of their impacts 	<ul style="list-style-type: none"> • House builder example of good practice
<ul style="list-style-type: none"> • Carbon reduction is being driven heavily by legislation and it is likely to be the same for this topic – people are unlikely to embrace it fully until they are forced to 	<ul style="list-style-type: none"> • Legislation currently not big enough driver • More legislation – more uptake

Associate 13

<ul style="list-style-type: none"> Ensure that noting undertaken as part of the service we provide would have negative env impacts or create difficulties for stakeholders 	<ul style="list-style-type: none"> Prevent negative business impacts
<ul style="list-style-type: none"> Everyone should be aware and should bring anything relevant to the attention of a senior member of staff who can make a decision on the best course of action 	<ul style="list-style-type: none"> Everyone should be aware of it CR Decisions are senior level
<ul style="list-style-type: none"> Number of areas in our work where we can provide clients with advice on the areas of CR that might present a problem for them in relation to the work that they do 	<ul style="list-style-type: none"> Opportunity to influence clients CR and sustainability
<ul style="list-style-type: none"> This advice could obviously be ignored or they could request for alternatives 	<ul style="list-style-type: none"> Could be ignored by clients
2	
<ul style="list-style-type: none"> Don't think SW fails any worse than other companies but there is more that could be done to improve communication 	<ul style="list-style-type: none"> No worse than other companies Communication could be improved
<ul style="list-style-type: none"> Very difficult to determine what you can or can't do in terms of advice given to clients and also by commercial factors such as cost involved in extra effort to provide advice 	<ul style="list-style-type: none"> Clarification on offering advice could be better Who covers extra cost
3	
<ul style="list-style-type: none"> Required to monitor the BREEAM scores of designs (and components of those scores) 	<ul style="list-style-type: none"> BREEAM monitoring for KPIs
<ul style="list-style-type: none"> Should also advise them of their responsibilities in relation to legislative responsibilities such as CDM 	<ul style="list-style-type: none"> Ensure that clients aware of responsibilities
<ul style="list-style-type: none"> Could take the opportunity to advise them on the alternatives that they could use/do 	<ul style="list-style-type: none"> Opportunity to advise clients on alternatives
<ul style="list-style-type: none"> Can involve more cost but is down to the consultants involved having the experience to know how far to go and what aspects to take into account/take the risk on 	<ul style="list-style-type: none"> Cost involved Decision made by experienced consultants
<ul style="list-style-type: none"> Consultants often accused by developers of not looking at the bigger picture of a project and concentrating too much on their design aspect of it 	<ul style="list-style-type: none"> Consultants accused of not being aware of bigger picture
<ul style="list-style-type: none"> If they are more aware of what's going on with the other disciplines of the design then there is more scope for the project to be harmonised 	<ul style="list-style-type: none"> Harmonising work through increased awareness
4	
<ul style="list-style-type: none"> Not fairing any better or worse than any other company in the sector 	<ul style="list-style-type: none"> On par with other in sector
<ul style="list-style-type: none"> Similar across the whole of British industry – people won't embrace things unless there is a cost saving associated 	<ul style="list-style-type: none"> Similar across the board No uptake unless cost savings provided
5	
<ul style="list-style-type: none"> Developers – 	<ul style="list-style-type: none"> Developers
<ul style="list-style-type: none"> <ul style="list-style-type: none"> Building Partnerships – 	<ul style="list-style-type: none"> <ul style="list-style-type: none">
<ul style="list-style-type: none"> <ul style="list-style-type: none"> Barratts – 	<ul style="list-style-type: none"> <ul style="list-style-type: none">
<ul style="list-style-type: none"> <ul style="list-style-type: none"> Very strong environmental focus and seem keyed up on the community requirements of their operations 	<ul style="list-style-type: none"> <ul style="list-style-type: none"> Strong env focus Good community awareness
<ul style="list-style-type: none"> <ul style="list-style-type: none"> Env side if this could be entirely driven by legislation 	<ul style="list-style-type: none"> <ul style="list-style-type: none"> Env may be due to legislation

Associate 14

1	
<ul style="list-style-type: none"> Satisfying our moral obligations to the wider world. Includes: <ul style="list-style-type: none"> Sustainability Business Conduct Social impact of what we do Incorporates the broadest set of stakeholders 	<ul style="list-style-type: none"> Moral obligations to world Encompasses all impacts and stakeholders
<ul style="list-style-type: none"> Any company has to guard its public image very carefully <ul style="list-style-type: none"> Things which go against CR can potentially have significant impacts on the company's bottom line 	<ul style="list-style-type: none"> Brand/public image protection
<ul style="list-style-type: none"> Everyone should be conscious of it as there are very few individuals that don't have some potential for empowerment and therefore impact on the companies activities 	<ul style="list-style-type: none"> Everyone should be aware of it Opportunity for most SW staff to have some impact on it
<ul style="list-style-type: none"> As level of responsibility increases then the potential for impacts also increases so these more senior people should be more aware of the issues 	<ul style="list-style-type: none"> More senior –need more awareness
<ul style="list-style-type: none"> Even people at relatively lower levels still have the ability to commit certain acts that could have significant impacts upon the company so everyone needs to be aware of the issues 	<ul style="list-style-type: none">
2	
<ul style="list-style-type: none"> Company thinks that they do quite well but doesn't think that the organisation is very good at monitoring its delivery 	<ul style="list-style-type: none"> SW thinks its doing well Poor monitoring of information delivery
<ul style="list-style-type: none"> General perception is that CR is there but in a more tick box way for the purposes of senior management and external interface of company rather than an embedded set of behaviours that are expected of staff It seems assumed that staff will behave in a responsible way 	<ul style="list-style-type: none"> Seen as tick box exercise by many Not fully embedded behaviour
<ul style="list-style-type: none"> WWDB is useful in helping to outline staff responsibilities etc but it seems very widely not read 	<ul style="list-style-type: none"> WWDB useful but not always read
3	
<ul style="list-style-type: none"> BREEAM features in some of respondent's work but aside from this there are no other indicators that are recorded and very little potential for other indicators on a project level to be collated 	<ul style="list-style-type: none"> Some use of BREEAM Not other potential KPIs
<ul style="list-style-type: none"> Energy use and travel relating to the Manchester office has been recorded in the past but not really a consistent approach to it 	<ul style="list-style-type: none"> Energy and travel data for Manchester office No consistent approach
4	
<ul style="list-style-type: none"> Not lagging behind but not leading the pack either. 	<ul style="list-style-type: none"> On a par with peers
<ul style="list-style-type: none"> Generally viewed as being trustworthy and easy to deal with 	<ul style="list-style-type: none"> SW seen as trustworthy

5	
<ul style="list-style-type: none"> • Shell and BP perform well or at least claim to adhere to rigorous standards. 	<ul style="list-style-type: none"> • Petroleum companies seem good
<ul style="list-style-type: none"> • In Nigel's experience do actually deliver on these too 	<ul style="list-style-type: none"> •
<ul style="list-style-type: none"> • Bad – most contractors – competitive environment that they work in can have an impact on their willingness to go that bit further 	<ul style="list-style-type: none"> • Many contractors • Competitive env causes 'do minimum culture)
<ul style="list-style-type: none"> • Laing O'Rourke used to have a very strong environmental stance but since the crunch it seems to have dropped down the priorities a bit 	<ul style="list-style-type: none"> • Some contractors had strong env policies • Decreased in priority lately
<ul style="list-style-type: none"> • Feels that this has been reflected across the breadth of contractors as the crunch has set in. 	<ul style="list-style-type: none"> • Reflective of many contractors
<ul style="list-style-type: none"> • Companies who used to be trying to set themselves apart by showing environmental stewardship etc are now much more focused on price 	<ul style="list-style-type: none"> •
<ul style="list-style-type: none"> • Very externally focused area and how much companies are willing to implement it depends on what they perceive the benefits to be 	<ul style="list-style-type: none"> • CR implementation depends on perceived benefits
<ul style="list-style-type: none"> • Useful for marketing but also likely to be clients who may begin to implement monitoring matrices for the various topics of CR <ul style="list-style-type: none"> ○ If people don't meet requirements then they will not get onto frameworks or win bids. 	<ul style="list-style-type: none"> • May become more important as clients embrace it
<ul style="list-style-type: none"> • Nigel felt that the more intensely scrutinised industries such as nuclear and petro-chemical are likely to be the leaders in this area. 	<ul style="list-style-type: none"> • Heavily scrutinised industries likely to be leaders

1	
<ul style="list-style-type: none"> Involves acting in a responsible manner relating to the impacts that we can have as an organisation. 	<ul style="list-style-type: none"> Acting responsibly Business impacts
<ul style="list-style-type: none"> A company responsibility but this also translates to individual's responsibility as representatives of the company 	<ul style="list-style-type: none"> Relevant to all staff They represent company
<ul style="list-style-type: none"> Therefore it's a topic that is important to everyone throughout the company 	<ul style="list-style-type: none">
2	
<ul style="list-style-type: none"> Communication on certain aspects not very good – not really aware of the CR report or the UNGC membership. 	<ul style="list-style-type: none"> Poor communication Not aware of CR report or UNGC
<ul style="list-style-type: none"> Info in SW1 is useful and makes people aware of the projects we're involved in and their sustainability performance. 	<ul style="list-style-type: none"> Newsletter info good for project updates
<ul style="list-style-type: none"> In relation to looking for this kind of information – it is not always very easy to find 	<ul style="list-style-type: none"> Info not always easy to find
<ul style="list-style-type: none"> Often involves asking other members of staff where to find the information 	<ul style="list-style-type: none"> Other staff helpful in locating it
3	
<ul style="list-style-type: none"> BREEAM and DREEAM (defence version) require lots of KPIs to be recorded. 	<ul style="list-style-type: none"> BREEAM and DREEAM KPIs recorded
<ul style="list-style-type: none"> Takes into account reuse materials, recycling, waste management and even methods of travelling to the building. 	<ul style="list-style-type: none">
<ul style="list-style-type: none"> However, building structures side of design doesn't often have a significant impact on the final score (compared to energy use from lighting etc) 	<ul style="list-style-type: none"> SW part of design (structure) doesn't always have major impact on score
4	
<ul style="list-style-type: none"> Newsletters indicate that we're becoming a more sustainable company. 	<ul style="list-style-type: none"> Newsletters help to communicate
<ul style="list-style-type: none"> Need to make everyone more aware of it though. 	<ul style="list-style-type: none"> Communication could be more effective
<ul style="list-style-type: none"> Tends to often be the more senior people who are aware of and involved in our sustainability drive. 	<ul style="list-style-type: none"> Mostly senior staff involved in sustainability drive
<ul style="list-style-type: none"> People don't realise that they might actually be able to contribute something to the process. 	<ul style="list-style-type: none"> Junior staff don't realise they can contribute to process
5	
<ul style="list-style-type: none"> MOD committed to improving sustainability and performance with regards to environmentally friendly products and materials 	<ul style="list-style-type: none"> MOD seeking to improve sustainability
<ul style="list-style-type: none"> Have set targets of achieving excellent ratings for all new build projects and good for all refurb 	<ul style="list-style-type: none"> Set targets for achieving excellent ratings for new build
<ul style="list-style-type: none"> Is scope for SW to influence client but client also inquires about materials etc that could be used and decisions can be made through a cost benefit analysis of the products/materials 	<ul style="list-style-type: none"> Scope for SW to influence client decisions Promote alternatives
<ul style="list-style-type: none"> Border Construction and Sisk have been very good performer's in respondent's experience <ul style="list-style-type: none"> Good with on-site health and safety Segregation and minimisation of 	<ul style="list-style-type: none"> Contractors listed as good performers <ul style="list-style-type: none">

waste	
<ul style="list-style-type: none"> Feels that most people are becoming aware of the topic and attempting to make improvements. 	<ul style="list-style-type: none"> Awareness of topic increasing Most trying to make improvements

<ul style="list-style-type: none"> Didn't give a definition. Asked for one to be provided but then went on to talk a good deal about the various aspects and how his work involves them 	<ul style="list-style-type: none"> No definition given
Environmental Performance and Sustainability	
<ul style="list-style-type: none"> Projects Respondent works on need to take into account env aspects due to the legislation that is driving this area of the work 	<ul style="list-style-type: none"> Env – legislation driven
<ul style="list-style-type: none"> BREEAM is applied to a number of projects but this doesn't seem to have increased over the years – appears to still be the same number of projects that are being assessed to BREEAM 	<ul style="list-style-type: none"> BREEAM on number of projects Hasn't seemed to increase in frequency
<ul style="list-style-type: none"> Also a drive for energy performance assessment which is requiring projects to be reviewed according to SAP code (related to dwelling energy efficiency) 	<ul style="list-style-type: none"> Energy performance also high priority
2	
<ul style="list-style-type: none"> Very rarely get involved in public consultation as it is something that happens earlier on in the design process 	<ul style="list-style-type: none"> Little involvement in public consultation
<ul style="list-style-type: none"> Some projects that respondent has been involved in however have had aspects of social/community inclusions and involvement. 	<ul style="list-style-type: none"> Some projects require community/social inclusion aspects
<ul style="list-style-type: none"> Current project runs a community day every 6 months or so where the project workers 'get their hands dirty' by undertaking a small scale community project <ul style="list-style-type: none"> This is run by the client (as part of the project) and nothing to do with Scotts. Respondent has attempted to raise awareness of this in Scotts but to no avail. 	<ul style="list-style-type: none"> Some clients run community days Part of project Couldn't raise awareness of this in SW
<ul style="list-style-type: none"> Client (UHL???) produces a newsletter on these activities 	<ul style="list-style-type: none">
<ul style="list-style-type: none"> The client also takes on placement students and graduates to give them a taste of the industry even if there are not full time positions available 	<ul style="list-style-type: none"> Client also takes on placement and graduate students
3	
<ul style="list-style-type: none"> Felt that communication within the company is quite poor and that the amount of information distributed to staff has decreased (with particular reference to SW1 and Exchange) 	<ul style="list-style-type: none"> Communication quite poor Amount of info distributed has decreased
<ul style="list-style-type: none"> Respondent was also unaware of the efforts made around the company to raise our profile in the education sector. Uni and school visits were suggested as good ways to improve staff intake but didn't hear much 	<ul style="list-style-type: none"> Unaware of efforts to raise profile in education School and Uni visits etc