

Relationships between sustainable development and corporate environmental behaviour: An empirical analysis of companies in South Yorkshire, the UK. (PhD research project)

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Abstract

Based on the theory of ecological modernization, this study investigates to what extent companies' conceptualisation of sustainable development reflects the expectations of members in society such as the market, the state and the civil society. Then, this study also investigates to what extent companies' conceptualisation of sustainable development is practically translated into their corporate environmental activities, and what organisations have learnt from their experiences of these environmental actions, including the implications of their societal roles. Eleven individual semi-structured interviews each with representatives from the state and the civil society, 123 questionnaires and 21 follow-up semi-structured interviews from companies located in South Yorkshire, the UK, were collected in 2009 and 2010. The results indicate that companies strongly wish to make a positive environmental and social impact through their business activities. In fact, increasing numbers of companies have seen greater management commitment in environmental actions. At the same time, findings also strongly indicate that those companies recognise the benefits of incorporating environmental concerns into their business activities, in terms of efficiency gains as well as consumer perception. However, contrary to these encouraging early results, a prolonged recession makes it difficult for companies to spare extra financial and human resources as well as time for environmental projects. This suggests that possible intervention from both the government and civil society is required to encourage voluntary environmental activities as well as to review legislative and mandatory requirements which meet societal needs.

Keywords

Sustainable development, theory of ecological modernization, barriers, the market, the state, the civil society

Introduction

The seriousness of the dilemma in society that success in terms of economic growth results in detrimental implications for the natural environment, has drawn increasing attention to the concept of sustainable development. The idea of sustainable development is widespread, in particular, since the publication of the Brundtland report (1987). Sustainable development essentially needs a balance between environmental, economic and social considerations in society (Etkins 2000). Sustainable development also needs the contribution of all members of society, which can be classified as the market, the state, and the civil society (Tulder and Zwart, 2006).

The introduction of the idea of sustainable development has changed the business environment in which companies operate. Society expects companies to contribute to economic growth which takes into account the implications for the natural environment and the overall quality of life. In addition, as a member of society, a company is increasingly

expected to be accountable for their behaviour not only to shareholders but also to stakeholders (Gray 2002). At the same time, contributing to achievements in sustainable development is one way of ensuring that the expectations of stakeholders are met. As a result, contributing to sustainable development is also beneficial to a company, as it ultimately contributes to a company's long-term survival.

The rationale of corporate contribution to sustainable development is apparent. However, looking at the business community, there are differences on how and to what extent companies integrate sustainable development with various areas of corporate management. In particular, as companies in the UK operate in a capitalist economy, in which their purpose is to maximise profits, some companies seem to struggle with incorporating the ideas of sustainable development into their business strategies and practices. In addition, it is not well-researched how and to what extent companies reflect expectations from other members of society, such as the state and civil society, for them to contribute to sustainable development in their corporate management.

In order to address these important but little understood areas, the objectives of this research are as follows:

1. To investigate to what extent companies' conceptualisation of sustainable development reflects the expectations of members in society such as the market, the state, and civil society.
2. To investigate to what extent companies' conceptualisation of sustainable development is practically translated into their corporate activities.
3. To determine what organisations have learnt from their experiences of these environmental actions, including the implications of their societal roles.

To note, this research focuses on companies' environmental behaviour as one way of companies' contribution to sustainable development.

A review of the literature

Introductory section

The purpose of this section is to review discussions of what needs to be taken into account in order to achieve sustainable development, as well as discussions of how it should be achieved. According to Lamberton (2005), it is widely recognised that achievement of sustainable development is an appropriate goal for society. In particular, interests in sustainable development in society have risen significantly since the landmark definition of sustainable development, the Brundtland definition (1987). The report defines sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (p. 43). However, the Brundtland definition of the sustainable development has been so widely used in various situations and contexts that the concept of it has become vague and complicated (Evans and Jones 2008; Reid 1995). Different parties emphasise different aspects of sustainable development as defined by the Brundtland report. These differences can be seen largely on the basis of how their interpretation of sustainable development suits their organisational objectives. For instance, some emphasise on good quality human welfare whereas others emphasise on higher rates of economic growth (Hukkinen, 1999; O'Riordan, 1976; Parris and Kates, 2003). The ways in which sustainable development is conceptualised by different organisations has resulted in applications of it a wide range of activities (Dryzek, 1997). For example, some look at increasing technological efficiency while others look at the preservation of the natural environment to contribute to the achievement of sustainable development.

Goals of sustainable development

There is no consensus in society regarding what sustainable development means. However, goals of sustainable development can be classified as three core strands: ecological, economic and social goals (Parris and Kates, 2003). Ecological goals refer to maintaining the earth, including preserving biodiversity and ecosystems (ibid). Economic goals refer to maintaining a high level of national wealth, productive sectors and companies, and high consumption rates (ibid). Finally, social goals refer to community issues such as a peace, democracy and human rights (Muehlebach, 2001). Some have concluded that it is significant to achieve the entire three core strands if sustainable development is to be realised (see, for example, Prescott-Allen, 2001). In contrast, others emphasise particular aspects of sustainable development. Thus, the pursuit of such different goals shows the disagreement within society about what it should be achieving in terms of sustainable development.

Contributors of sustainable development

Sustainable development aims at achieving a synthesis of ecological, economic and social goals. In order to achieve this, co-operation from all related parties is critical because society as a whole needs to move towards sustainability. The related parties can be classified as the market, the state and the civil society (Tulder and Zwart, 2006). These three parties are different spheres which function at different levels in society and these three spheres influence the activities of each other. Tulder and Zwart (2006) continue to state that each of the three groups have their own ideology, rationality and position in society. The market plays a role in “create[ing] value and welfare” through economic activities, changing natural resources to outputs and offering outputs to society (Tulder and Zwart 2006, p.8). The state plays a role in structuring society by legislation. The civil society plays a role in structuring society in other areas of political and business activity. It is therefore important to consider what and to what extent companies receive influence from other groups in society because it suggests what companies perceive to be normative beliefs and actions.

Means of achieving sustainable development

As there are many interpretations of what sustainable development really means, there are many different views of how goals of sustainable development should be achieved by different organizations. As a company’s interpretation of sustainable development is socially constructed by receiving influence from the market, the state, and the civil society, which makes up the business environment within which it operates (Tulder and Zwart, 2006), it is important to see the continuum of thoughts to research what companies believe about sustainable development and how they contribute to achieving it.

These different ideas of the means of achieving sustainable development can be convergent to three main streams: ‘very light green’, ‘light green’ and ‘deep green’ models (Haughton, 1999). Table 1 shows the characteristics of each model. This spectrum shows the development of the theory of ecological modernization, the core theme of which is “to analyse how contemporary industrialised societies deal with environmental crisis” (Mol and Sonnenfeld 2000, p.5). This classification also has been used by other researchers (see, for example, Stubbs and Cocklin, 2008).

Firstly, the main idea of the very light green model is the belief that the continuation of the current free market system will solve environmental challenges. Those who believe this model regard technological advancement, which ultimately solves the environmental challenges the society today face, happens as a course of normal organisational behavior. They believe this happens because organisations try to satisfy their self-interests or try to be legitimate in societies (Bansal and Roth, 2000). According to Bansal and Roth (2000, p.726),

legitimacy refers to “the desire of a firm to improve the appropriateness of its actions within an established set of regulations, norms, values and beliefs”. Thus, the contribution to sustainable development from those who support the very light green model is to conduct business activities as usual on the basis of the market economy. It suggests that the typical reaction of such companies is to comply with regulations and societal norms to satisfy minimum requirement in societies.

Similarly, those who support the light green model follow the market system. They, however, try to accommodate their activities by gaining more efficiency. This not only reduces the risks of the environmental challenges such as pollution, but also ultimately results in better profitability. In a similar vein to the very light green model, the proponents of the light green model also expect that technological advancement alleviate environmental difficulties. Thus, typical reactions from the proponents of the light green model are designing environmentally friendly products and/or services, using fewer materials, energy saving, logistics planning and reducing emissions. Companies often see these activities as beneficial for marketing purposes, i.e. to attract environmentally conscious consumers. As such activities contribute to boost profitability as a consequence; the company’s competitiveness is improved (Bansal and Roth, 2000). In addition to stimuli from within these organizations, those who support the light green model also believe that some degree of state intervention is necessary to achieve sustainable development.

In contrast, those who support the deep green model believe that socio-economic system and values must change to be more environmentally friendly. They have the strong belief that the current level of resource consumption to support the free market system cannot sustain future generations (Meadows *et al.*, 1992). According to them, the natural environment is to be respected as it is (Hill and Thompson, 2006). Thus, they believe that a local capacity-driven economy is more appropriate rather than relying on either future technological advancement or mass production and consumption on a global level. One motivating factor related to the proponents of the deep green model is altruism. Henderson and Malani (2009, p.572) states that altruism is a concept that suggests that “people feel good when others’ lives are improved”. Thus, employees volunteering in the community would be an example of the typical reaction of the proponents of the deep green model.

Table 1: Main features of means of achieving stainable development based on very light green, light green and deep green models (Haughton 1999 p.1893).

	Very light green	Light green	Deep green
Main trade orientation	Global, market driven	Market-led economic development	Local capacity-driven
Economic growth	Go for it	Accommodate it	Selective growth based on environmental desirability
Value system	Market supremacy	Anthropocentric	Ecocentric
Regulation	Market regulation	State regulation	Self-regulation
Nature	Conquer nature	Control, measure and manage nature	Work-with/integrate nature
Technology	High technology	Environmentally efficient technology	Low-appropriate technology

This section introduced the goals, contributors and means of achieving sustainable development. The next section will present the methodology of this research.

Methodology

The empirical parts of the study is carried out in 2009 and 2010 using mixed methods to redress limitations in each method and triangulate the data (Johnson and Onwuegbuzie 2004). The sample population of this study consists of three groups: the market, the state, and the civil society.

For the market group, the questionnaire survey and the semi-structured follow-up interviews were carried out. The electronic version of the questionnaire was developed to investigate the research objectives. The questionnaire used five-point Likert scales. The sample is 1511, consisting of 1119 members of the Sheffield Chamber of Commerce, as well as 392 corporate members of the South Yorkshire Green Business Club. Both organisations were chosen in order to randomly and effectively reach companies ranging from small and medium enterprises to large companies as well as different types of businesses in South Yorkshire, the UK. Before sending the electronic questionnaire to the members of both organisations, screening of the sample population was made in order to make sure that they are located in the South Yorkshire in the UK. The questionnaire also employed the snow balling sampling technique, asking the original respondents to pass it to other companies in South Yorkshire who might be interested in take part in this research. This method was employed in order to maximise the chance of collecting more number of questionnaire responses (Saunders *et al*, 2006). In total, 123 questionnaires were returned. The sample consists of 36% of the manufacturing and construction sector, as well as 64% of the service sector.

Following this, the 21 follow-up interviews were undertaken in order to investigate their questionnaire responses in more detail. The questionnaire originally included a question asking the respondents if they would be interested in having a follow-up interview for this research. This resulted in having 21 questionnaire respondents who showed interest in the follow-up interview and later all were contacted. All the interviews were conducted face-to-face, besides one telephone interview and another interviewee who answered the interview questions by letter due to their busy schedule. Semi-structured questions were employed to help analyse the data in a standardised way as well as allowing some degree of freedom for the interviewees to talk their opinions freely (*ibid*).

For the state group, purposive sampling method was used to identify the interview participants. Councillors from the Liberal Democratic, the Labour and the Green Party which mainly make up the Sheffield City Council were contacted. In addition, the Alliance for Green Socialism was also contacted. Besides the political parties, representatives from state funded organisations, such as the Sheffield City Council, the Yorkshire Forward and the Environment Agency. In total, there were 11 interviews from 7 organisations. In some cases, multiple interviews have been undertaken in order to increase reliability and validity of the interview data (Easterby-Smith *et al.*, 2002).

Similar to the interviews to the state group, semi-structured questions were employed and interviews were conducted face-to-face for the investigation into the civil society group. There were 11 interviews from 10 organisations. Again, the purposive sampling method was used to identify the interview participants. All the organisations were selected on the basis of their strong connection to South Yorkshire. Some organisations are closely related to the environment, such as the BTCV and the Wildlife Trust, while others are more community-oriented such as Access Space and Sheffield Lets.

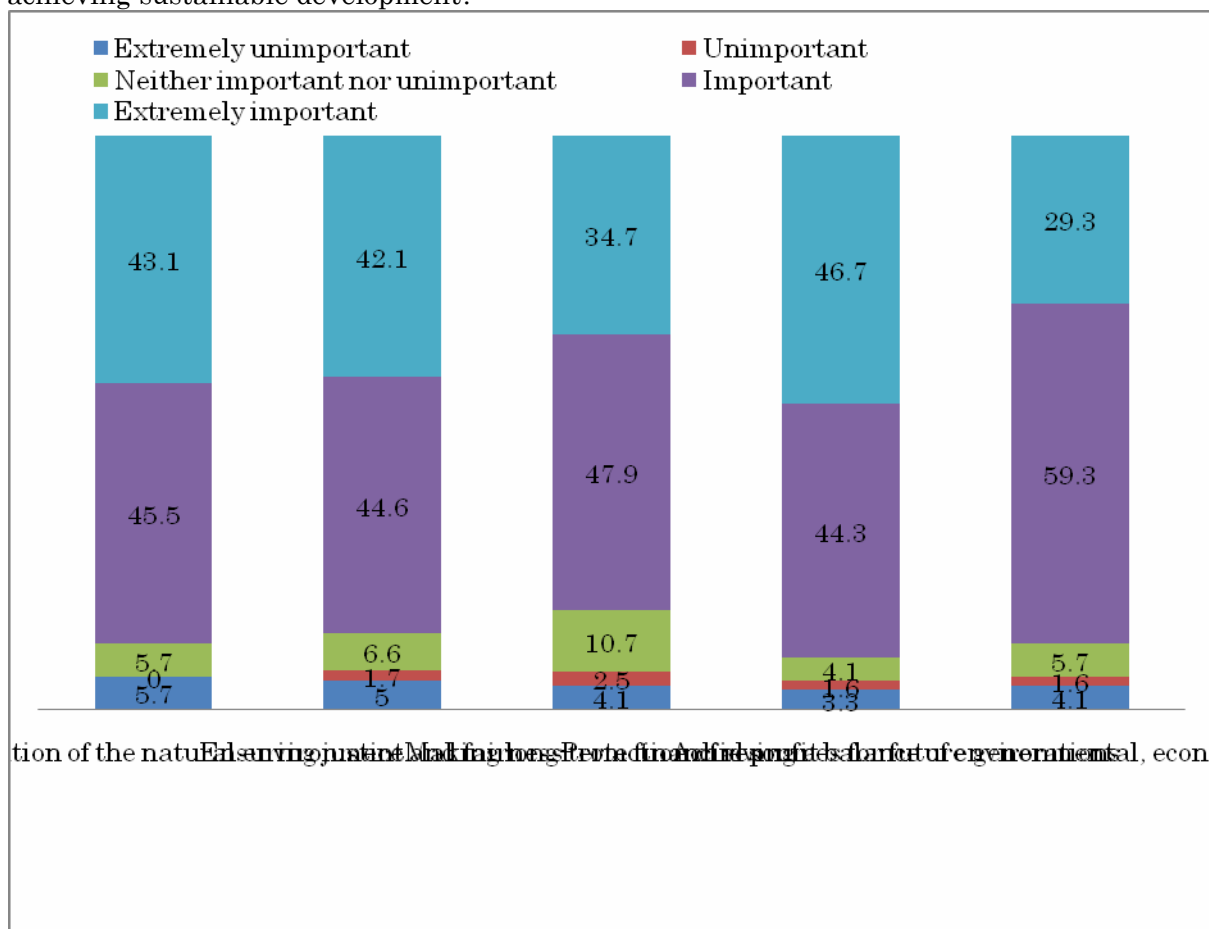
All the interviews were recorded with the consent of the interviewees and were transcribed later. Analysis of the data was done using computer programs, with SPSS16 for the quantitative data and NVivo8 for the qualitative data. All the interviewees were given identification number for confidentiality.

Results

Companies' conceptualisation of sustainable development and relationships to expectations of the market, the state, and the civil society.

The questionnaire results suggest that most of the companies have a balanced view on what is important in achieving in sustainable development, in terms of all components of environmental, economic and social goals of sustainable development as suggested by Parris and Kates (2003). In addition, the companies believe that achieving a balance of environmental, economic and social goals is important. Also, the questionnaire results suggest that the companies are particularly interested in keeping resources for future generations. Interestingly, the results show that making long-term financial profits scores the lowest rates in achieving sustainable development, as opposed to the fact that primary role of the companies are often considered as profit maximisation.

Chart 1. To what extent does your company consider importance or unimportance of achieving sustainable development?



(Total 100%)

However, the majority of the companies interviewed emphasised that making a profit was the most important aspect of their understanding of sustainable development, as opposed to the survey results showing that most companies recognise the importance of achieving each aspect of sustainable development in terms of environmental, economic and social goals, as well as a striking a balance between those three goals. The interviewees mentioned that making a profit had to be prioritised in order to keep their businesses going. The contrast in results between the interviews and the questionnaires may be due to the fact that the companies try to portray themselves as responsible companies in the questionnaire.

Table 2. Exemplary quotation related to companies' conceptualisation of sustainable development.

Company	Exemplary quotation
C-M-2	I mean obviously there is, business is run ultimately to get financial gain.

Note: C-M-2 refers to Company-Manufacturing-No.2.

Most of the state and the civil society interviewees also believe that companies are more cost/profit conscious, and looking for a win-win situation between environmental and economic sense. In contrast, the interpretation of the sustainable development by the state group and the civil society tend to be of a wider range, for example, often including consideration for the third world economy. Some of the state and the civil society interviewees have an understanding of the companies' dilemma that their primary responsibility is to make a profit.

Table 3. Exemplary quotation related to the interpretation of conceptualisation of sustainable development by the state (S) and the civil society (CS) group.

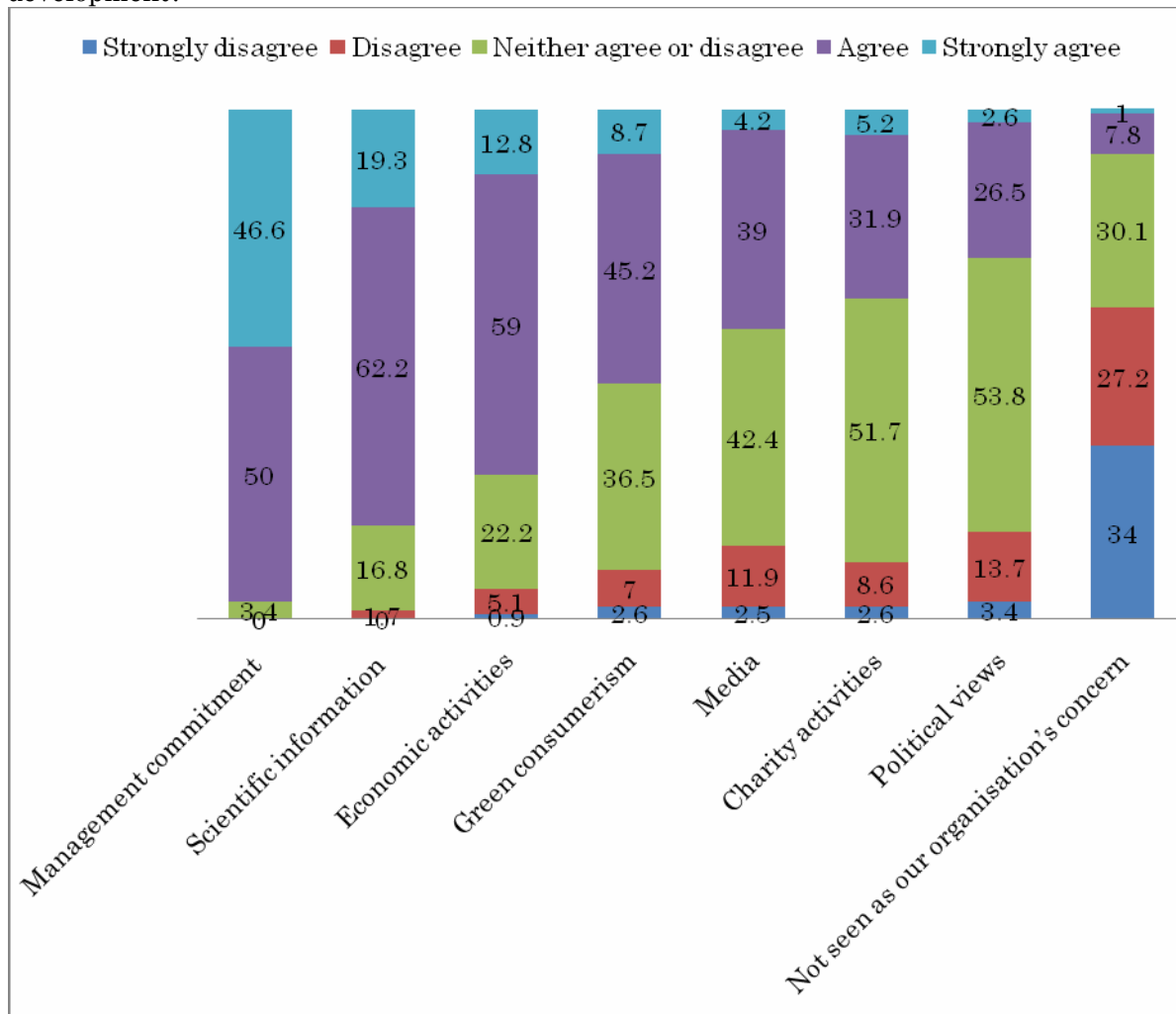
	Exemplary quotation
S-3-1	I think companies are looking at sustainable in terms of being able to make profits years.
S-7	(Sustainable development includes) social dimension, economical dimension and environmental dimension, sort of overlapping upside down with inter-generation and intra-generation.
CS-7	I think it (sustainable development) means specifically enabling underdeveloped, less developed countries to increase their level of industrial and economic development. But without doing it in such a way that causes damage to the environment.

Note: S-3-1 refers to State-No.3-1. S-7 refers to State-No.7. CS-7 refers to Civil Society-No.7

Chart 2 shows to what extent the sample companies receive influences on their interpretation of sustainable development. The survey results show that managers' commitment, scientific information and market situation are stronger influences compared to charity and political activities. The interviews with the civil society groups revealed that there was not a strong link between the business community and charity organisations as it was found that they tend not to provide practical solutions that companies can refer to regarding the environmental challenges.

Chart 2: To what extent does your company agree or disagree regarding what influences your company's interpretation of sustainable

development?

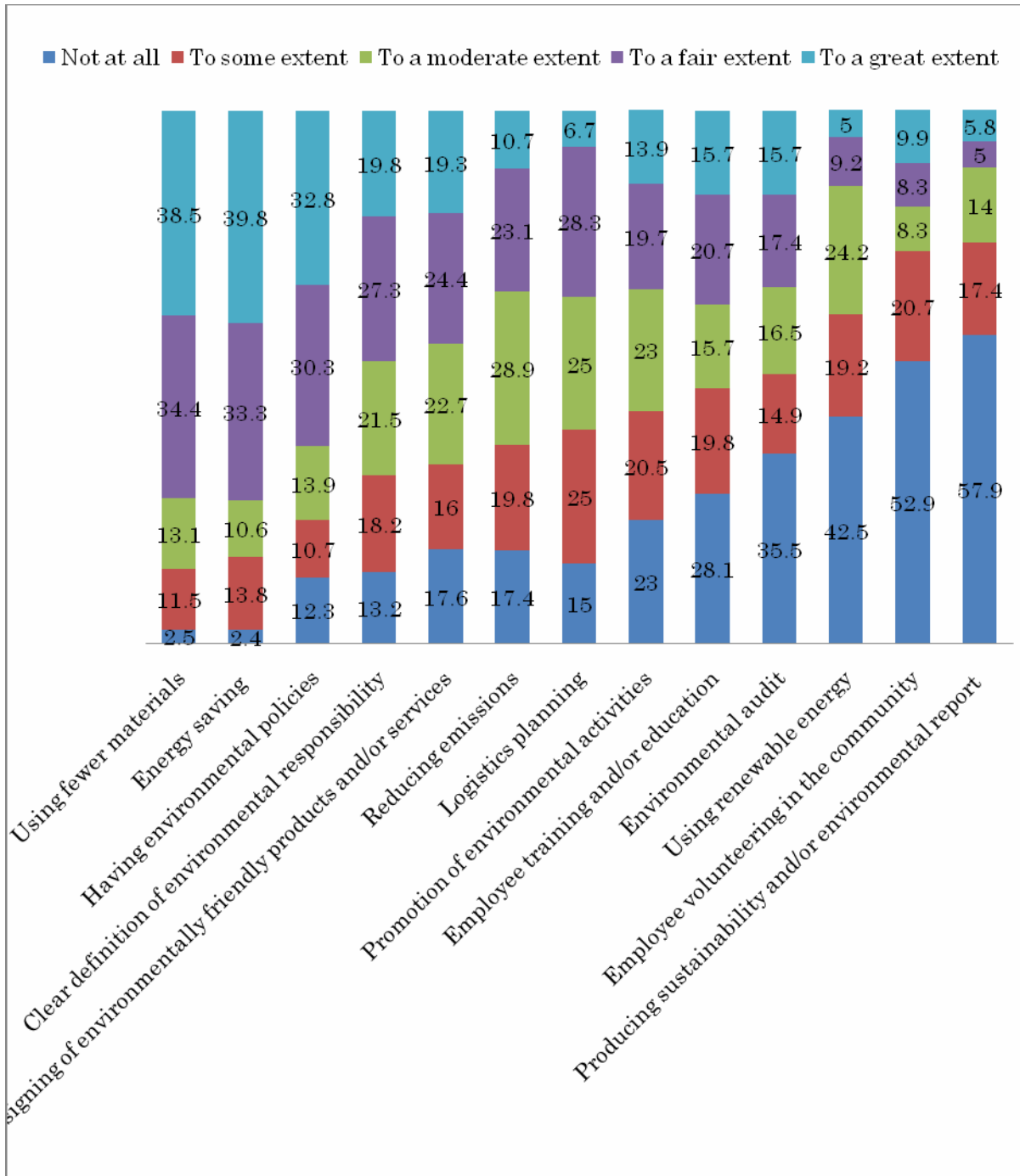


(Total 100%)

Relationships between companies' conceptualisation of sustainable development and their corporate activities.

Chart 3 shows to what extent the sample companies engage in environmental activities in their organisations.

Chart 3: What environmental activities do companies currently adopt?



(Total 100%)

Companies are widely engaged in activities that help them maximise their profits, such as “using fewer materials” as well as “energy saving”. On the other hand, companies tend not to do activities that do not bring direct financial gains, such as “employee volunteering in the community” and “producing sustainability and/or environmental report”. This corresponds to their interpretation of sustainable development from the follow-up interviews that profit maximisation tend to be prioritised.

Table 3: Exemplary quotation related to corporate environmental activities.

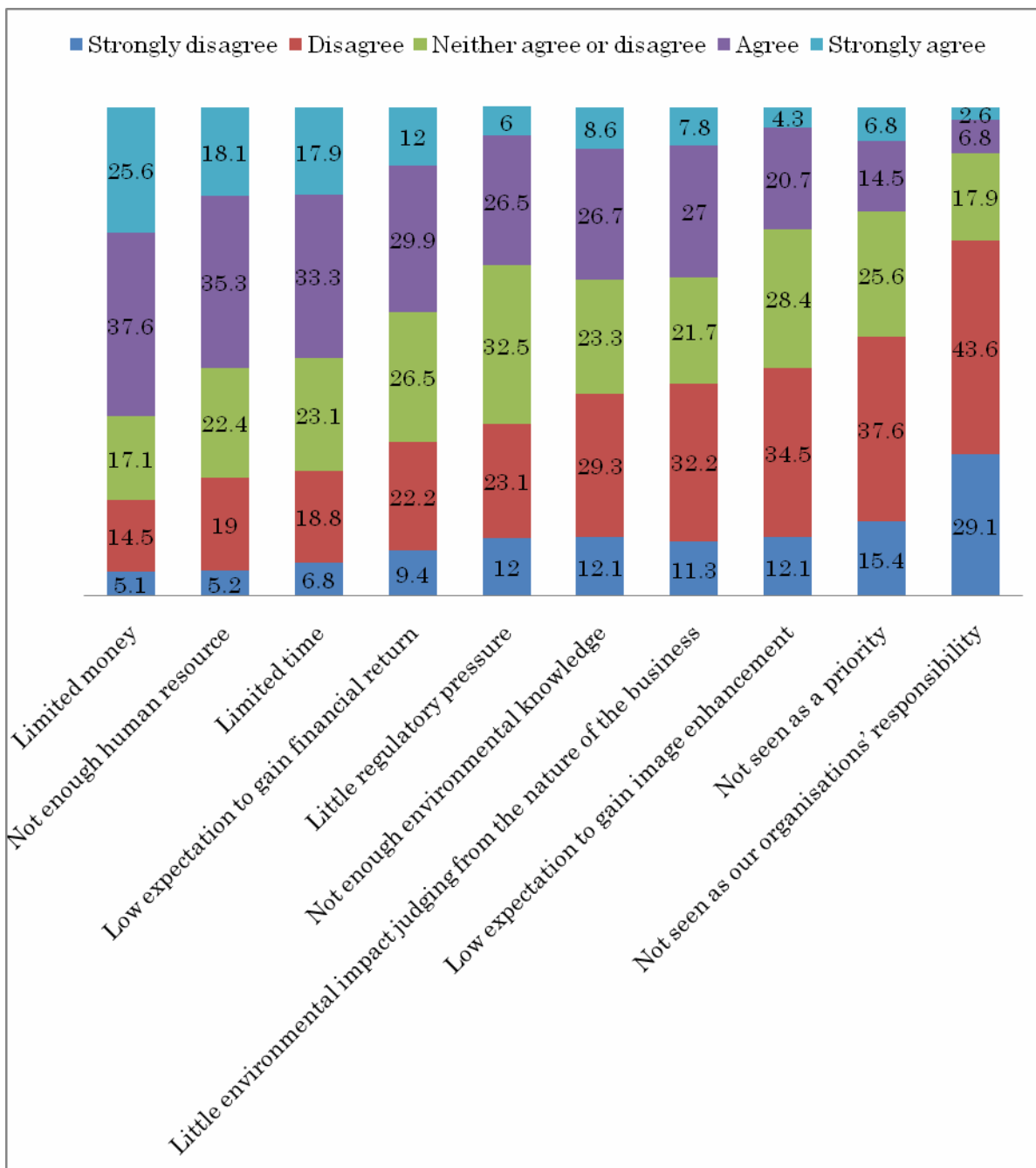
Company	Exemplary quotation
C-M-1	We use less resources, and from the start of the products and the end of the

products, and then when the products finished, making sure that it is recyclable.

Note: C-M-1 refers to Company-Manufacturing –No.1.

Chart 4 presents to what extent the companies agree or disagree regarding what prevents their companies from engaging in environmental activities. “Limited money” was found to be the most difficult issue for the sample companies to engage in environmental activities, particularly at the time of the recession. Following this, “not enough human” resources and “limited time” were perceived as strong barriers. However, these two reasons are often seen as mere excuses by some of the corporate interviewees whose companies were greatly involved in environmental activities as well as the majority of the interviewees of the state and the civil society. Lastly, it is encouraging to find that the majority of the sample companies regard that they have some stake in the environmental challenges.

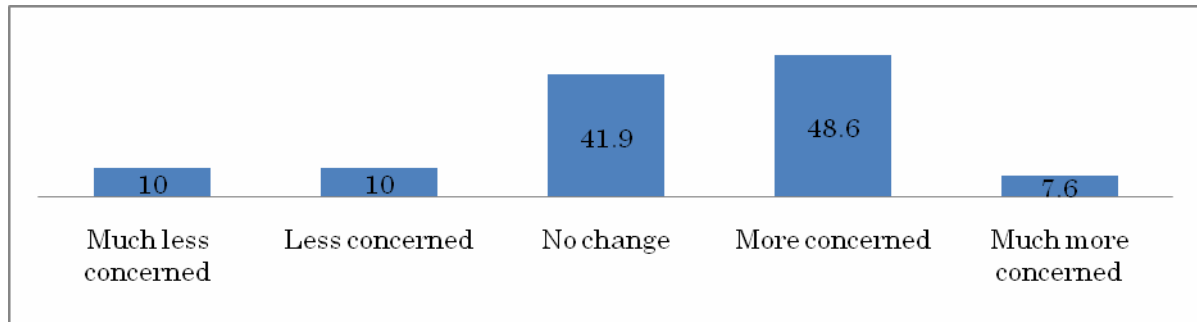
Chart 4: To what extent does your company agree or disagree regarding what prevents your companies from engaging in environmental activities?



(Total 100%)

Reflection of companies' environmental actions, including the implications of their societal roles.

Chart 5: How and to what extent, current corporate environmental activities have changed companies' interests in sustainable development?



(Total 100%)

The questionnaire results suggest that companies' current environmental activities, interest level stay as they are or make them more interested in it. The majority of the corporate interviewees state that they wish to make a positive environmental and social change through their business activities.

The next section will discuss research findings and conclude this paper.

Discussion and Conclusion

The survey results show that companies recognised the importance of the all the environmental, economic and social goals if sustainable development is to be achieved, as suggested by Paris and Kates (2003). It is encouraging to see that most of the companies wish to contribute to society as they believe that sustainable development is an important issue. However, the majority of the follow-up interviewees emphasised that even though they believe all the three aspects of sustainable development were important, economic issues tended to be prioritised, in particular, under the current tough economic situation.

Their attitude towards sustainable development was also apparent from their current corporate environmental activities. The environmental activities that are currently carried out by companies tend to be the ones that make environmental and economic sense. It is clear that companies do not want to do activities that may damage their bottom lines, indicating that they follow the light green model as suggested by Haughton (1999). The survey results back up this, showing that the companies do recognise the benefits of incorporating environmental concerns into their business activities, in terms of bottom line figures (i.e. using fewer materials, energy saving) and in consumer perception (i.e. employees volunteering in the community, producing sustainability and/or environmental reports). The companies' interests in the protection of resources for future generations were the highest among the list of choices in the questionnaire. This shows their high interests in efforts in using less energy, as it contributes to their profitability. Also, supporting activities of the aforementioned activities are widely implemented, such as having environmental policies and a clear definition of environmental responsibility.

The empirical study also revealed that difficulties in the voluntarily engagement of companies in strategies which are potentially beneficial to the preservation of the natural environment and, ultimately, the improvement of human welfare.

To overcome this, companies' efforts to engage in more environmentally friendly activities should be encouraged via co-operation among the market, state and the civil society. Currently, the majority of the interviewees in the civil society mentioned that they prefer to work within the civil society realm and do not have communication routes between themselves and the business community. They think companies are not doing enough but members of the civil society fail to suggest what practical activities companies can do. Similarly, a link between the market and the state is not well established either. Even though the public sector provides support and information, companies still have difficulties in accessing financial support and finding environmental information from governmental sources.

More stakeholder engagement and more interaction thus should be encouraged. The market, the state and the civil society should be encouraged to think about other groups' contexts/situations, for example, putting oneself in someone else's shoes. Through such interaction, team building among the market, state and the civil society would be established. Discussion about sustainable development in a wider perspectives as well as sharing experiences should naturally come out through such interaction. The state and the civil society groups have huge potential to help companies think about wider perspectives of sustainable development, such as consideration for the third world's environment and economies.

Also, the state and the civil society can be a provider of the eco information. Scientific information was found to be the second strongest influence in the survey. Some corporate interviewees mentioned that scientific information is objective, thus being the most persuasive argument for adopting sustainability-related practices. Some corporate interviewees also mentioned that the government should provide accurate information and show a clear objective to achieve sustainable society. Some corporate interviewees also mentioned that they would be more interested if they receive local information about the environmental deterioration.

Changing mindsets is a key to nourish culture based on a balanced view of sustainable development. Regarding influencers of sustainable development, management commitment was found to be the strongest influencer. The corporate interviewees mentioned that the top management has control in a company so that employees simply follow the management's decision. Some of them have already started to see their senior management being involved in this area.

This cultural shift would also be more encouraged by green consumerism. The survey data did not show that the green consumerism is the strongest influencer. However, some interview participants from follow-up companies pointed out that consumers' attitude change their business practices. They continued to state that they provide two types of similar products/services to match demand of the price-conscious consumers and green consumers. By doing so, the companies maximise their chance of selling their products/services. Some corporate interviewees also pointed out that they would like to sell more eco-friendly products/services, but they cannot do it because there is not much demand for eco-friendly products/services. This supports the view that if we want to change companies to be more environmentally friendly, consumer attitude needs to be changed.

In conclusion, it is encouraging to see that many companies have started to think about the consequences of their business activities to the environment and society. They also wish to contribute to society. More interaction among the government, business, and the civil society would help this process move faster.

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