

# **A Comparison of the Environmental Management Practices In Three British Universities**

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Master of Science

**Aston University**  
September 2003

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# Abstract

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This research analyses the incentives and barriers to improved environmental management in three British universities. It did this by studying the sources of influence on key actors within the universities. The three universities studied in this research cover a broad range of sizes, from around 6000 to over 30,000 students. The names of the universities and interviewees were kept anonymous.

The data gathered was qualitative in nature, obtained by the use of semi structured interviews with key decision makers within the universities. The research did not start with a strongly pre-conceived plan; the aim was to explore the field, building up a picture as the research developed.

It was found that environmental improvements had been stimulated at two levels. First, top level management have encouraged actions where there are financial benefits, such as improved energy efficiency. Second, individuals at the 'grass roots' have tried to take steps, generally at a local departmental or building level, to make a difference.

This 'grass roots' action has been more prevalent at one of the universities, because there is a culture in that institution that makes people feel that they are in one of the top universities in the country, and they should be striving to maintain or improve that position.

It was found that there were few pressures downwards from senior management, in terms of active environmental policies, and few pressures upwards from vocal staff or students. There was no evidence found of government policy or funding regimes putting pressure on universities to improve their environmental management.

The most significant barriers to improved environmental management were lack of resources, both time and money, and also organisational structures within the institutions.

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# 1. Introduction

**This Chapter introduces the research question and an explanation of why the particular topic was chosen. It provides some background information on the organisations being studied and the period over which the research took place.**

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## 1.1 Outline of report structure

This report is presented as a 'journey of discovery'. While the area of research is one that is very familiar, the style of research is not. Coming from a positivist, engineering and natural science background, the more post-modern, constructivist view point taken in this research has resulted in a steep learning curve. The process of coming to terms with new methodologies and styles of working has been exciting, and at times slightly nerve wracking.

The first chapter of this report outlines the purpose of the research, i.e. the research question, why it is being tackled and what the research hopes to achieve. It also defines the boundaries of the research.

The second chapter deals with the theories and contexts that underlie the research questions. These are dealt with in two sections. The first being the wider theoretical contexts against which the research is set. The second is a review of the literature specifically relevant to a study of environmental management in the higher education sector.

Chapter three provides details of the methodology and methods of data collection and analysis being proposed. It also presents a discussion of alternative methods that could be used and a justification of why the proposed one was chosen.

The fourth chapter then discusses how the data collection actually progressed, in the light of the original proposal. It considers the difficulties encountered, and how well the theoretical methodologies worked 'in the field'. There is also a brief presentation of the data collected.

The fifth chapter is an in depth analysis and discussion of how the research question is addressed by the data collected, in relation to the theoretical contexts. The discussion is illustrated with extracts from the data collected.

Chapter six provides a conclusion to the research process and its final findings.



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## 1.2 Outline of research question

This project is a study of environmental management practices in three British universities. It looks briefly at the situation in each university and then in more detail at the reasons why the situation is the way it is. The question that I wish to ask in this research is: what are the incentives and barriers to improved environmental management? Following on from this is the question of why there are differences in practices within the three universities. An understanding of this should help guide measures to encourage the institutions to do more.

### 1.2.1 Why study environmental management?

Society as a whole is now generally more aware of the damage being done to the environment by human activity. Issues such as global warming, atmospheric pollution, depletion of finite resources and damage to ecosystems are regularly reported in the media. More recently there has also been increasing concern about globalisation, ethical behaviour and corporate social responsibility. All organisations are consumers of resources and producers of waste, and therefore will unavoidably have an environmental impact. If the impacts on local and global environments are to be tackled these organisations have to be persuaded to minimise the resources they consume and the pollution they cause.

This research was carried out because I have a personal interest in environmental issues. While I acknowledge the importance of legislation in regulating the way organisations work, I feel it is particularly important to understand the way organisations are managed and to seek constructive solutions to reducing their environmental impacts. I am at present studying in a university, so it seemed logical to start with the type of organisation that is 'closest to home', the type of organisation I am part of. Educational institutions are particularly significant because they are not only consumers of resources, but they also have a great influence over the attitudes and actions of future generations. A university such as Aston, which is producing tomorrow's



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managers and decision makers, has the ability to change attitudes by openly acknowledging the issues and setting a positive example themselves.

A university can also have a significant direct impact on the environment. A typical university will have hundreds of employees and thousands of students. For example in 1989/99 Leeds Metropolitan University, put forward by the Higher Education Partnership for Sustainability (HEPS 2003) as an "average university" averaged seven stationery deliveries per week, buying 30 million sheets of paper costing around £200,000. Eighteen million photocopies were made on 140 machines and £80,000 was spent on printer ink and toner cartridges (HEPS 2003). Assuming the paper was on average A4 sized 80gsm then 30 million sheets will be around 150 tonnes of paper. Figures from the WWF (World Wide Fund for Nature) suggest that around 15 trees are required to produce each tonne of virgin paper (WWF 2002). This would mean that if the paper was not from a recycled source the university was consuming over 2000 trees a year in paper.

To sum it up in a single sentence, "Institutions of higher education, where visionary thinking often rubs against the daily demands of institutional life, are uniquely positioned to help invent the greener communities needed for the next century" (Keniry 1999 page ix).

### **1.2.2 Background to the three universities**

For ethical reasons, discussed in chapter 3.4, the three universities being studied will not be named. For the purpose of this report they will be known as Green Fields University, West Side University and City University.

Green Fields University was founded in the late 1800s as a technical college, and was established as a university about 40 years ago. It has around 6,000 students and an annual income of around £50 million. It is situated on a single, compact green campus. The university's academic focus is towards technical, science and business subjects and it does not have arts or humanities courses.



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Green Fields has a top class academic research rating, and prides itself on having “world class teaching” and one of the best student employment rates in the country.

West Side University is the second largest of the three, with approximately 15,000 students and an annual income of around £250 million; it is around 100 years old. It is based on two large spacious green campuses. The University promotes itself as a “well established world class university” and one of the “leading research based universities in the United Kingdom”. It has over thirty areas of research rated at the highest level. The university regards itself as a prestigious organisation and is a member of a number of national and international higher education alliances and networks. One of particular interest is HEPS (Higher Education Partnership for Sustainability).

City University has over 30,000 students; it provides degree and post graduate level courses as well as Higher National Diplomas, single year professional development courses and other part time programmes. There is a particular emphasis on combining academic and vocational work, the University has close links with local and national industry and has a good employment record. City University has the longest history of the three, being founded in the mid 1800s as a Polytechnic Institute and eventually converted to a university in the early 1990s under the provisions of the ‘Further and Higher Education Act’. In the mid 1990s it combined with two other local colleges. It is now based on one main campus site and several other smaller sites and individual buildings around the area. This research has concentrated on the CEI (Centre for Engineering Innovation) site. This is situated in a prestigious new building, which was completed about three years ago, as part of a scheme to redevelop the area around it. The CEI is an independent but wholly owned subsidiary of City University.



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### 1.2.3 Details & boundaries of the research question

The aim of this research is to analyse the incentives and barriers to improved environmental management, and therefore the reasons for differences in practices within three universities. It seeks to understand why one of the three has apparently a significantly more proactive approach than the other two.

The research produces an explanation of the current situation, and as a result an understanding of what actions could be taken to improve environmental management in higher education institutions.

The research does this by studying the sources of influence on key actors within the three universities. It looks at the perceptions of individual members of staff, assessing their attitudes towards environmental issues, and what the pressures are on them in their jobs. The focus of the research was influenced by two very different books, one about management decision making in large multinational companies, the other about the social lives of individuals in an American inner city. Both *Greening the Firm* (2000) by Aseem Prakash and William Whyte's *Street Corner Society* (1943) concentrate on studying the experiences of individuals in order to understand the situation in the local group, be it a company or a section of society.

The research considers the factors that are likely to encourage, or discourage the action of individuals working within the universities, and therefore the actions of the institution as a whole. It aims to put a human perspective to the organisational mass. The research looks at whether there are internal or external pressures. External pressures may include demands from funding sources or competition from other institutions, or perhaps result from government policies or other independent pressure groups. Internal pressure may result from senior management policies or from 'grass roots' student pressure. Alternatively individual members of staff may simply be trying to do their bit, independent of the formal management structure.



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The comparison made between the universities relates levels of environmental management to factors such as the size, resources available and the profile and ambitions of the institutions.

The research uses methods of data gathering that are most suited to obtaining in depth insights into the perceptions, motives and actions of key decision makers within the universities. These are backed up with appropriate documentary evidence.

This research concerns overall policies, and attitudes, towards environmental management. It was however felt useful to have a specific example to illustrate the issues being tackled, when talking to the interviewees. It was decided that paper consumption and disposal would provide the best illustration because, although not necessarily the most significant environmental issue, it was felt to be a good indicator of attitudes to wider environmental issues.

The data gathering was carried out with reference to the following four key concepts:

- Knowledge – i.e. individuals awareness of environmental impacts and the options for reducing them
- Motivation – why do individuals want (or not want) to be greener
- Power – sources of pressure to be (or not to be) greener
- Resource availability – the means available to make environmental improvements

Finally, this research starts with the assumption that taking actions to improve the environment is a positive thing. It is recognised that there may be compromises between improving the quality of the environment and other ambitions such as increasing material wealth. This however is a decision for society as a whole, and not something an individual research project can produce an answer to.

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More fundamentally it is recognised that sometimes actions are falsely claimed to be environmentally beneficial. For example recycling is generally seen to be a good thing, but if materials are transported around the world for recycling then the overall environmental impact may be greater than using virgin materials. For this reason it is important to look at the complete life cycle of the issue to obtain a true picture of the consequences of a decision.

## **1.3 Time frame**

This research project was carried out between May and September 2003. The first interview was conducted on the 21st May, and the final one towards the end of September. The process of writing up the report started in July and was carried on concurrently with the theoretical work and carrying out the interviews. It was felt that this was a relatively short time to complete a piece of work of this scale.



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## 2. Underlying Contexts

**This Chapter contains two sections. The first discusses a number of established theoretical and methodological constructs that will be employed with the aim of illuminating the research question. The second section is a review of the current literature available, relevant to the research topic. This will include more general writing on environmental management and also, where available, literature specifically concerning environmental management in higher education institutions.**

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## 2.1 Theoretical contexts

This research was carried out in the light of current literature and theories. These have been chosen and will be referred to where they provide useful information or help illuminate a particular point. I do not feel it necessary however to wholly embrace any particular theory, nor would I wish to be labelled as a devoted follower of a particular theory. This research is concerned with a practical explanation of the situation being studied.

### 2.1.1 Post-modernism

The theoretical background to this research is more post-modern than strictly positivistic. I will take the point of view that knowledge is contextual (Mason 2002 p62) and seek to understand a “transient” or “emergent” reality (Chia 1995 p579) that is specific to the people and organisation and the context in which they work. This research leans towards a constructivist philosophy, with the reasons for (or against) environmental improvement being based on a subjective and potentially changing reality (Bryman 2001 p18) produced by those involved, based on cultural factors, relationships and knowledge.

The underlying beliefs of the researcher inevitably influence the selection and design of data gathering strategies. The strict positivist will be more likely to use a standardised, repeatable approach because of their beliefs about reliability and validity. The post-modern researcher may prefer, for example, the less structured interview because they believe in the construction of a subjective reality in the interaction between two people. However the most important driving factor in research design should be the initial requirements for the type of data required, rather than overriding theoretical beliefs driving the type of data eventually collected.

This leads on to the more fundamental issue of the researcher’s ontological view and the research subjects’ perceptions of a situation (Mason 2002 p63). If the researcher takes the positivistic view that there is a ‘truth’ that can be discovered



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they then have to make an assessment of how closely the subjects' perceptions relate to that 'truth', and what can be learnt about that 'truth' from the subject. This can of course be done by triangulation, by combining several different sources of data such as interviews, direct observations and documentary evidence. I am however taking a constructivist stance, so an interview, for example, is taken for what it is - the individual's description of their perceptions of a situation. This does not mean that there is not still room for interpretation in the analysis; the interviewee may say things, and say them in particular ways, because of the way the interview was carried out or their feelings towards the researcher. This will be discussed in more depth in chapter 3.

In writing this report I wish to reject the positivist notion that the research can be in some way detached from the researcher carrying it out. This research was carried out using a series of interviews between me, the researcher, and a group of other people. This research is the product of the interaction of a number of individuals. I do not therefore wish to be shy of describing it in terms of what I did, and do not feel it necessary to tell the story anonymously, in the third person as would be expected in a strictly positivistic report.

### **2.1.2 New institutionalism**

New institutionalism is a theory that underlies much current research, particularly that by Aseem Prakash. This theory looks in detail at the role of institutions, from different, often competing, demands on staff, to accepted norms of behaviour within company structures (Prakash 2000 p17). This is a useful point of view for this research as it is "getting inside the organisation" and looking at individuals perceptions and motivations, "unpacking the firm" as Prakash puts it (2000 p7). Using this perspective, even in non-profit-making organisations should allow a deeper understanding of the incentives and demands on individuals, their resulting actions, and therefore the policies and practices within the organisation as a whole. This perspective contrasts with the classical economic view of the firm as a single profit making entity. Prakash goes on to argue that classical economic theories suggest that firms, "policies directly correspond to external stimuli", predicting that "firms would only adopt



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those policies that are either required by law, or that can be demonstrated as being profitable" (Prakash 2000 p134&5). This however can't explain the adoption of certain environmental policies. This research project examines whether the classical economic view is viable or not. It aims to determine whether universities' policies are being shaped by external stimuli such as legislation or funding regimes, or by internal stimuli, i.e. the decisions of management and staff.

In new institutional theory, individuals' actions are analysed with reference to "normative elements" such as "standards of behaviour" or "cultural factors" (Powell & Di Maggio 1991 p8). This is in contrast to "rational choice models" where actors are assumed to be rational decision makers focused on achieving a particular goal. This research considers reasons why environmental action is, or is not, being taken. Some of these reasons may be explained by a rational choice model, but this research recognises that sometimes decisions are made for reasons that are not apparently rational. They may be influenced by "cultural factors" such as beliefs and preconceptions or a lack of awareness. They may also be made for reasons that are perceived to be right but which can't be quantified or objectively 'proved'.

A particular topic of interest to new institutionalism is 'isomorphism', that is the question of why organisations may tend to imitate others and develop similar structures and policies (Haveman 1993). Hypotheses were put forward that organisations will tend to imitate others of a similar size and also those in the sector that are more successful (Haveman 1993 p597-599). This links to the question of why some universities have, and others haven't, chosen to openly promote environmental policies. To publicly promote strong environmental policies may benefit the organisation's image and prospects, but it is also a potentially risky strategy. The market may not be receptive to the idea, or the organisation may publicly fail to live up to its promises. The organisation may choose to minimise the risk by waiting to see if others in the sector make the move first, and what the implications are for them. The executive management for each organisation must decide whether it wishes to be a leader or a follower in the market.



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### 2.1.3 Prakash's Power vs. Persuasion

In *Greening the Firm* (Prakash 2000) the author studies the reasons for companies carrying out environmental improvements that go beyond the legal requirements. It looks particularly at who made the decisions and how they were implemented. This was divided into two categories: either senior managers imposing policies by using their position of power, or by people lower in the organisation convincing others that it was the best course of action by using persuasion (Prakash 2000 p135). This research project will investigate whether environmental actions are being driven by senior management policies, or by grass roots level, staff and student action.

## 2.2 Literature review

The literature for this review was chosen from journals available on-line and, from material within the Aston University library. The inter-library loan service was used, but was somewhat restricted because of the limitations on the time available.

The on-line search was done using the following search facilities:

- Science direct ([www.sciencedirect.com](http://www.sciencedirect.com))
- ProQuest ([www.umi.com/pqdauto](http://www.umi.com/pqdauto))
- Emerald ([www.emerald-library.com](http://www.emerald-library.com))

The library search at the Aston University library was done using the computerised catalogue and also the "Business Periodicals on Disk" CD Rom database. Significant references from known papers and a number of books were also followed up as well as searches of key journals and authors.

The *International Journal of Sustainability in Higher Education* and *Higher Education Policy* were found to be particularly useful journals, and Julian Keniry was a particularly practical author.



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During the search for literature on the research topic, it was noticed that there was a conspicuous lack of academic work done on environmental management within British higher educational establishments. Most of the material available was found to deal with North American and European universities.

### **2.2.1 Historical perspective**

The first paper to be considered here is one written by Tarah Wright in 2002. It gives a broad historical overview of the international declarations that are relevant to environmental management in higher education, and the frameworks within which this research project sits. This paper is mainly a descriptive piece, but also includes extracts from the author's research into the effects that policies and declarations have actually had in real world situations.

The first relevant declarations, on environmental management in higher education, were made in Stockholm (1972) and Tibilisi (1977), both resulting from UNESCO (United Nations) conferences. They recognised the "interdependency between humanity and the environment" and "stated the need for environmental education from grade school to adulthood" (Wright 2002 p106).

Following this, in 1990, came the 'Universities Presidents for a sustainable future conference' and the Talloires Declaration. This was the first statement made by university administrators of a commitment to sustainability in higher education. It stated that, "university heads must provide leadership and support to mobilise internal and external resources so that their institutions respond to this urgent challenge". By the year 2000 it had over 275 signatories (Wright 2002 p107).

One of the most significant recent declarations was 'Agenda 21' which came from the Rio 'Earth Summit' in 1992. This led to HE 21 (higher education for the 21st century) in Britain, which had the objective of "reorientating education towards sustainability, increasing awareness of environmental issues and



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promoting environmental training among educators” (Wright 2002 p107). There have been several other more recent declarations from conferences in Swansea (1993) and Thessaloniki (1997) and the Association of European Universities in 1994.

Wright’s paper then goes on to look at individual universities’ declarations and policies, and notes that while most claim to be committed to improving the sustainability of their physical operations fewer are actively incorporating environmental issues into their educational curriculum. Virtually all the universities studied with environmental policies felt they had a moral obligation to work towards sustainability. (Wright 2002 p115-118). It was interesting to see how this compared with the universities in my research, and how well the moral obligation stands when faced with shortages of resources. Wright does however note that the signing of a declaration or the production of a policy does not necessarily lead to real changes in operational sustainability (Wright 2002 p111).

Wright’s paper is a useful piece of research as it takes a critical look at the practical differences various declarations have made to environmental management in individual universities. It is also useful to this research project as it sets the topic in a historical perspective and gives an insight into the political and public policy outlook.

### **2.2.2 Practical experience**

A particularly interesting paper by Mason et al details the implementation of environmental programs in Massey University in New Zealand. In contrast to the more typical initiation of environmental planning from the top down, these programs were initiated by students and gradually achieved top management support. Mason states “the initial impetus which led to the Massey University zero waste program arose out of student concern over a lack of recycling facilities on the campus. Advocating for the provision of on-campus recycling facilities had been on the student association agenda since the early 1990s”



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(Mason et al 2003 p262). There was additionally, significant support from the local authority in establishing waste management programs. The paper also indicates there was initial difficulty in persuading the university to commit resources to the program. It states "during this time management support for the program was sought. Whilst this was obtained in principle and the availability of practical assistance from facilities management staff indicated, no commitment to the provision of finding support resulted at this time" (Mason et al 2003 p263).

Mason also notes that their experiences were similar to that of many American universities. Julian Keniry in his book *Ecodemia* noted that "successful comprehensive programs had often started from grassroots beginnings, such as a small scale recycling effort or a recycling committee and that no particular order in the developmental process was evident" (Keniry 1995).

The research being carried out for this project is looking for sources of pressure and influence for environmental management and is also seeking to discover which individuals or bodies have instigated the environmental programs that are already in place. It will be interesting to compare the findings with Mason's experience, to see whether 'grass roots' pressure from students or staff has been more or less influential than senior management decision making. The research will also determine if there is any significant support, or indeed pressure, from Government bodies or local authorities on the universities being studied.

### **2.2.3 Good practice**

*Ecodemia* by Julian Keniry is in essence a collection of examples of good environmental practice in higher education institutions in the United States. What is of particular interest is the insights it offers into how some of the schemes were started, and who was instrumental in initiating them. As mentioned before much of the environmental management started as a result of the actions of individuals within the institution, rather than as a result of a



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strategic policy decision by senior management. Keniry's research indicated that often the personal beliefs of staff were a key motivating factor. For example Ken Lyons "as the senior buyer for Rutgers (one of the nation's largest universities) and a committed activist" used his knowledge to help produce pragmatic plans to improve environmental practices (Keniry 1995 p6).

Students can also play an important part in the process. As Keniry puts it, "they can spend the time doing the footwork, making the phone calls, trying to establish the markets out there, and bringing the information back to us. It's a very good marrying of resources" (Keniry 1995 p14) They can also act as volunteers on schemes where it wouldn't be financially viable to employ paid staff.

Keniry said that the examples of positive environmental action documented were "generally decentralised, grassroots efforts, dedicated staff, students and faculty workers with few allocated resources and without much compensation" (Keniry 1995 p187). Keniry also notes that one of the most important factors that lead to small scale schemes being successful in the long term is top level executive support, even if they are not actually initiating the actions.

This research project will determine if, as in Keniry's observations, individuals' motivations play a major part in the environmental actions being taken in the three universities being studied. It will also examine how much support schemes gain from top level executive management.

#### **2.2.4 External institutional influences**

The Higher Education Partnership for Sustainability (HEPS) is a government backed programme which, amongst other things, publishes guidance on sustainable purchasing policies for universities. This guidance includes referenced examples, and facts and figures on the benefits of sustainable purchasing. The section on the business case for sustainable purchasing (HEPS 2002 sheet 1C) puts forward some positive arguments, such as saving



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money by reducing waste, enhancing 'corporate image' to attract students and developing better relationships with suppliers. Building a better corporate image by improving social accountability may be an important factor but it will be interesting to see how significant it is in attracting students. Money may be saved in some cases, but it likely that the 'environmental option' will sometimes prove to be more expensive. The HEPS guidance states that "there is no reason why this extra cost can't be justified on environmental grounds" (HEPS 2002 sheet 1C), but with recent pressures on funding of the university sector it will be part of this research to gauge whether this is realistic.

HEPS is supported by 18 British universities, and has links to their web sites and information on some of their experiences. All these universities have environmental policies and, for example, Liverpool John Moores University coordinates actions with local planners to promote sustainable transport to the campus. Cambridge University is planning an environmental management system based on the ISO14001 standard (HEPS 2002). Many of the universities have extensive practical information and guidance on their web sites. Newcastle upon Tyne for example, publishes quantities of water used, (737,000 tonnes / year - £600,000), energy consumed and details of the implications in terms of carbon dioxide emissions. Most importantly they give information on good practice and encourage people to report problems such as unnecessary heating, water leaks, faulty lighting etc. (Newcastle upon Tyne 2002). This shows the management is actively, and publicly, committed to environmental improvement.

Peter Toyne, a former vice-chancellor of Liverpool John Moores University, said in 1998 that a, "wind of change has brought a darker shade of green to universities" .... but that it was, "sporadic and restricted to newer universities", perhaps only "three dozen of Britain's 117 universities take sustainability seriously" (Hinde 1998 p1).

In 1999 it was reported in the Times Higher Education Supplement that the first annual report of the Sustainable Development Education Panel suggested that "by 2010, universities and further education colleges that do not meet defined



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levels of sustainable development in management and curriculum could have their funding council grants withheld" (Hinde 1999 p1).

This research project is investigating incentives to improve environmental management. To do this it investigates how the threat of changes in funding, an external pressure, has been perceived by university management, and whether it has brought significant changes in thinking among university management.

### **2.2.5 Other experiences**

Two papers were identified, one by Joseph Noeke and a second by Peter Viebah, about the implementation of environmental management systems in two German universities. The positive drivers were identified as: the necessity to reduce waste disposal costs, pressure from students, neighbours and environmental pressure groups, and the desire to present a positive public image (Noeke 2000 p238). The negative factors included: lack of strong hierarchical management structures, lack of legislative pressure, and financial systems that lacked "productivity orientation" and therefore gave little incentive to improve resource efficiency (Viebahn 2002 p3&4). Interestingly Noeke(2000 p237) contradicts Viebahn by saying there are significant legislative pressures to improve environmental management.

In my research into British universities, waste disposal costs, and the desire for a positive image may be significant driving factors. Whether there are also important stakeholder demands, for example from students or pressure groups, remains to be seen. Management and financial structures are clearly critically important to this research and it will be interesting to see how they compare with the two German universities, and the resulting implications. The final factor is that both German universities received significant support, including financial support, from government authorities. This contrasts with the lack of support for British universities, particularly financial, from the government (Tighe 2003).

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## 3. Methodology and Planning

This chapter is written in four sections. The first two explain how it was envisaged the research would be carried out, and the data analysed. The third section is an exploration of the strengths and weaknesses of the methodology, of alternative ways in which the research could have been carried out, and a justification of why the chosen methodology was selected. The final section is a discussion of ethical issues surrounding the research.



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## 3.1 How the research was carried out

The research took the form of a multiple case study as described by Robert Yin. Yin states that case studies are the preferred strategy when “a ‘how’ or ‘why’ question is being asked about a contemporary set of events over which the investigator has little or no control” (Yin 1994 p9). This fits my research; as it is asking ‘why’ the universities are, or are not, taking actions to reduce current environmental impacts. As well as this the researcher will have little influence over university policy or practice over the period of the research.

This study collected qualitative data using semi structured interviews. As Robson puts it, one of the “circumstances in which a qualitative research interview is most appropriate” is “where individual perceptions of processes within a social unit – such as a work group, department or whole organisation are to be studied” (Robson 2002 p271). This would fit the aims of the research; i.e. of studying individual actors’ experiences in the context of working within a university, and hence the factors influencing their decisions and actions.

The semi structured interview has the advantage of allowing the interviewee to freely express their own opinions, and what is most important to them, without being unduly influenced by the researcher’s preconceived ideas. A list of areas for discussion was used, as an aid for the interviewer, to ensure specific areas of interest were not missed altogether.

Of greatest importance is that the interviewees feel free to say what they want and are not being bound by the researcher’s preconceptions, or trying to say what they think the researcher wants to hear. For this reason I recognise the importance of remaining neutral, or even appearing naïve, in not taking a pro or anti environmental stand during the interview.

Using interviews permits the researcher to build up a rapport with the interviewee (Dunne 1995 p7) so that their perceptions can be probed in depth. It is of course recognised that the time and resources available to this study only allowed a relatively short amount of time with each interviewee, between half



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and one hour in a single session. In this type of situation the researcher is likely to be seen as an outsider coming into an organisation. It is however felt that as this is an academic study, within three academic institutions, the researcher should not be regarded as being too remote an outsider. It was envisaged that all the interviewees would be professional employees of the universities. In this situation it was not envisaged that there would be any serious difficulties regarding use of language, or communication, between the researcher and the interviewees.

The interviews were taped to provide an accurate record of what was said. The tape was then transcribed for analysis and discussion as detailed chapters 5 and 6. Some writers claim that as tape recorders are now so widely used interviewees accept them and they don't unduly influence how they speak. "A request to record a conversation should present no difficulty where the purpose of the study is appreciated and where respondents know their conversations will be used in confidence and cited anonymously" (Buchanan et al 1988 p61). I do feel however that a possible concern with using a tape recorder is that the interviewee may feel inhibited by having their opinions recorded, especially if they concern sensitive or controversial subjects. This is echoed by authors such as Susan Dunne, "a few people really do not feel comfortable when talking into a tape recorder" (Dunne 1995 p19) and Martin Bulmer "more attention needs to be given to the presence of a recorder as influencing the course and outcome of an interview" (Bulmer 1988 p154). It was however felt that taping the interviews to provide an accurate record was too important a benefit to abandon. It was felt that the extra information gained, that would be missed if the researcher relied on note taking during the interview, would outweigh what may be lost by inhibiting the interviewee. A partial solution to the problem, that I used, was to conspicuously turn off the tape recorder near the end of the interview and continue the conversation to try to encourage the interviewee to open up further (Bryman 2001 p323). Bulmer confirms this, "sometimes, for example, more interesting material is revealed when the machine is switched off" (Bulmer 1988 p154). In the analysis particular attention will be paid to any signs that the interviewee was in any way inhibited, or not being fully open.



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Notes were taken, both during and after each interview, of any immediate thoughts or personal impressions. These included feelings about whether the interviewee seemed comfortable, whether there may have been reasons why they were expressing things in particular ways, and any issues that seemed to dominate, or were conspicuously avoided.

One of the key questions at this point is: who did I intend to talk to? The 'actors' who were interviewed were the people who have the power to make decisions over policy and practice. They included managers in Planning and Registry, heads of departments, and purchasing officers in Finance and Estates. The universities being approached are all members of a Universities Purchasing Consortium, which negotiates preferential deals with major suppliers. This obviously plays an important role in what is purchased, and from whom. It was hoped that an interview would be carried out with at least one key decision maker in this consortium.

The interview programme did not start with a strongly pre-conceived plan; it was intended to evolve to include different people as individuals were interviewed and the work progresses. The aim was to explore the field, building up a picture as the research developed.

The final point to be addressed is that of reliability and validity. If the researcher takes a constructivist point of view then the concepts of validity and reliability don't have quite the same meaning as they would to a strict positivist. As Jennifer Mason puts it, it becomes important that you show "your data generation and analysis have not only been appropriate to the research questions, but also thorough, careful, honest and accurate (as distinct from true or correct – terms which many qualitative researchers would of course wish to reject)" (Mason 2002 p188). In terms of validity this means being able to demonstrate how you came to your conclusions "through a careful retracing and reconstruction of the route by which you think you reached them" and by being "explicit in the reasoning" (Mason 2002 p194&191). This research aimed to do so. The words of Robert Yin further reinforce this: it should be possible for an independent critic to follow and evaluate the procedures followed. The



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procedures used in this research are completely and clearly documented so as Yin put it an “auditor could repeat the procedures” and verify the results (Yin 1994 p37).

## **3.2 Discussion of methods of data analysis**

Once an interview was completed the tape was transcribed for ease of analysis. The final report is in written form so it was necessary to transcribe any parts of the interviews being quoted. It is however acknowledged that a transcript is only a representation of the interview and it should not be seen as the original data. As Kvale puts it the transcript is an “abstraction, as maps are abstractions from the original landscape from which they are derived” (Kvale 1996 p165). Information such as non-verbal utterances, tone of voice, body language and attitudes of the interviewee is inevitable lost in the process of taping and transcribing a conversation. However the notes taken during and after the interview should help recapture some of this information.

It is also recognised that differences between spoken and written language mean that decisions have to be made during transcriptions. The transcriptions did however aim to record what was said verbatim, as accurately as possible. They included the “umms” and “ers” used as well as notes on, for example, pauses, and laughs, where they occur. Kvale, however noted that the “publication of incoherent and repetitive verbatim interview transcripts may involve an unethical stigmatisation” of the group of people involved (Kvale 1996 p172).

Transcription is a time consuming process: because of limited time and resources the transcripts did “condense and summarise some of the parts that have little relevant information” (Kvale 1996 p170). The interviews were carried out and transcribed by the researcher. This is considered a good thing, as the interviewer is more likely to be able to interpret parts of the tape that may be ambiguous, both as a result of knowledge of the subject and also memory of the interview. In addition to this the researcher will be able to “secure the many



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details relevant to their specific analysis" (Kvale 1996 p169). Unfortunately the time and resources available did not allow the use of a second researcher to recheck the transcription and carry out a second interpretation, for comparison, of the tapes to improve the reliability and validity. For the same reason it was also decided not to ask the interviewees to comment on the researcher's interpretation of the interview.

Once the transcripts had been produced they were analysed and evaluated with reference to the original research question. An emphasis was put on understanding the interviewees' perceptions and versions of events and situations. The research leans towards discourse analysis; the researcher did not wish to be drawn into the minutiae of conversation analysis

The analysis was based on grounded theory with a lesser element of analytic induction. The analysis was carried out in the light of the existing theoretical contexts described in chapter 2, but it was not assumed that this will be able to produce a full picture. The analysis aimed to 'go where the data leads' and this lead to the development of a more grounded theory. It is recognised, however, that it was only able to achieve what was possible within the relatively short time period available.

The research question of why environmental management is or isn't taking place was broken down into a series of sub concepts. This was done in relation to the theoretical contexts in which this research is situated (see chapter 2). The interview transcripts were then thoroughly analysed for comments by the interviewees that relate to these concepts. The transcripts were coded partly in line with the preconceived concepts described, but also with an open mind to codes appearing "in vivo" (Bryman 2001p396) as the analysis progresses. A table was then drawn up summarising the most relevant, salient points made by each interviewee.

The notes taken during and after the interview were used in conjunction with the transcripts to help illuminate why certain things were said and the ways in which they were said. Any particularly strong feelings experienced by the interviewer,



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about interviewees or their attitudes towards the subject, were also taken into account. This allowed as balanced as possible an account of the interviewees views.

The words of the interviewees, where useful to the analysis of the research topic, were then used in the analysis and discussion in Chapter 5. The final analysis included a significant amount of material quoted from the interviews to illustrate the points being made. The research aims to allow the actors to tell their stories with their own words.

A criticism of grounded theory is that it tends to produce theories that are; “substantive in nature, in other words they pertain to specific social phenomenon being researched and not to a broader range of phenomena” (Bryman 2001p396&7). As this research is being carried out from a post-modern point of view, this is not seen as a criticism but an unavoidable fact of life.

### **3.3 Strengths & weaknesses of methodology (and possible alternatives)**

When carrying out the initial planning for this research I had defined goals in mind, particular types of information I wished to uncover. A number of possible research methods were considered. The final method chosen was determined specifically by the type of information needed for the study.

The purpose of this research project is to carry out an in depth analysis of the incentives and barriers to environmental management within the universities being studied. As stated previously, the primary aim is to gain an in depth understanding of why things are the way they are. Semi structured interviews were the chosen method of data gathering because I felt that this was the best way of gaining the in depth understanding desired.



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During the early stages a number of alternatives were considered. For example it would have been possible to use a questionnaire, sent out to selected personnel within the universities. This would have the advantage of being able to reach a much greater number of people, given the time and resource restrictions of this study. It was however felt that as this would not allow any form of discussion with the subjects it would not provide any scope to explore issues of particular interest.

Interviewing is time consuming, it is therefore only possible to survey a relatively small number of individuals (Robson 2002 p273). This is particularly true for a single researcher with limited time and resources. This can lead to questions over the generalisability of the research findings. This shortcoming can't be avoided; the great strength of in-depth qualitative research is the level of understanding of a particular situation that can be gained, rather than the breadth of the overall picture.

Carrying out interviews with subjects allows the building of a relationship with the respondent that would not be possible with less personal methods such as questionnaires. This should mean an increased level of trust and a willingness to discuss more sensitive issues; the interviewer will also be able to reassure the interviewee about confidentiality. This may be important when discussing the pressures and demands imposed by their jobs and other individuals within the organisation, particularly if the interview is being taped.

The counter argument to this is that a questionnaire can be completed with no one else around. It can therefore give a greater sense of anonymity and is therefore better for dealing with sensitive issues (Robson 2002 p237). The respondent may however not be inclined to carry out such deep 'soul searching' when confronted with a questionnaire. There is a tendency for respondents to both questionnaires and interviews to give responses that show them in a good light even if their anonymity is guaranteed. This tendency can be addressed more directly by the researcher in a face to face encounter.



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There may also be a perception that a researcher coming into an organisation from outside will be seen by the workers as implicitly associated with the management. This was thought unlikely to be a serious problem because this is academic research and all the organisations being studied are academic institutions. The researcher is therefore less likely to be seen as an outsider. Again any concerns about this can be dealt with more effectively in a face to face interview.

The negative side to building a relationship with the subject is that the nature of the relationship may affect the way the responses given. Even if the researcher approaches each subject in the same way the relationship will be subtly different in each case. In this project it may be particularly the case, as several of the interviewees were already known to the researcher. For this reason each interview will always be an individual experience and can never be a controlled, repeatable 'experiment' in the positivist sense. There is no easy answer to this except to say that the researcher must be aware of the ways in which they may be influencing the individual subjects. It was felt that the benefits of the richness of data gathered during an interview outweigh the potential difficulties of the influence of the interviewer. (Frey & Oishi 1995 p27).

Semi structured interviews were used as the best compromise between a totally unstructured meeting and a fully scripted interview, which is effectively a face to face questionnaire. A pre planned list of topics to cover means particular topics of interest will not be missed, without tying the interviewee to the researcher's preconceived ideas (Bryman 2001 p323).

A major advantage of the chosen method is that it allows the research to develop and be shaped as it progresses. One of the main factors for consideration is: "who are the main decision makers that I should be talking to?" As a researcher who knows the universities involved I had preconceived ideas of who the main players were likely to be, but after talking at more length to people within the organisation it turned out that other people are having a significant influence. A more fixed, pre planned, positivistic methodology would not have allowed the research to be shaped to take account of this. A



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questionnaire type method carried out on a 'preconceived list of players' may not even have revealed other previously unknown sources of influence.

It may be claimed that the interview is more open to bias than a preset questionnaire because the interviewer will inevitably vary the questions and their responses according to the individual interviewee. Both methodologies however have the potential to bias the results and both rely on the skills of the researcher to avoid that bias. Whether using interviews or questionnaires it is important that the interviewees feel free to say what they want and are not being bound by the researcher's preconceptions, or trying to say what they think the researcher wants to hear. It is also important that the questions are unambiguous and are not biased or tending to lead the respondent in a particular direction.

It may be argued that a quantitative, positivistic methodology such as a questionnaire is more robust because all the respondents are presented with exactly the same situation and it is repeatable. To an extent this is true in that it will give good reliability, but it does not necessarily lead to validity. The validity of the results from any methodology is still however reliant on the researcher's skills in devising effective questions to obtain the information successfully. This is equally true in conducting a face to face interview or producing up a questionnaire.

Two options were considered for selecting the people required for the research. They could either be chosen randomly from a list of staff members, or selected deliberately by the researcher. It was decided that as only a relatively small number of people were going to be interviewed it would be better to select the particular individuals in the positions that were perceived to be of interest. At the start of the research there were a number of people of particular interest, but it was recognised that as the project developed it may lead to other people who were not at first considered. It is however important to take care that the selection is not dominated by any individuals strong views, as this may significantly bias who is interviewed. Individuals were selected because they are "key players" who have particular rolls or access to particular information. It is recognised however that they may not be representative of the university as a



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whole, although it is hoped that it should be possible to see if they are totally at odds with the prevailing culture within the organisation.

A potential barrier to selecting a random sample is that it would require a full list of all the staff in the organisation. This would require the full cooperation of the university management to provide a list, whereas selecting interviewees by contacting individuals and allowing it to 'snowball' does not require the explicit cooperation of the university management. This may however have further ethical implications.

In conclusion, all methodologies have their own positive and negative qualities. No one is better or worse than another; they simply provide a different type of insight into the question being asked. For example a widely distributed questionnaire will give a good indication of the overall situation and will appeal to a more positivistic way of thinking. A smaller number of semi structured interviews will give an in depth insight into the actions and thinking of a number of individuals within the universities.

### **3.4 Ethical issues**

Ethical issues are an important concern for any research directly involving individual people. As Kvale puts it "the personal interaction in the interview affects the interviewee, and the knowledge produced by the interview affects our understanding of the human situation" (Kvale 1996 p109). The ethical issues likely to be involved in this project are summarised and discussed below.

The first, and possibly the most important concern is to address the potential consequences of the research. The research may have implications on three broad levels, for the individuals involved, for the organisations being studied and for the wider world. Kvale quotes the American Psychological Association in saying that research should have a beneficial impact on the "human condition" (Kvale 1996 p109). It was felt important that the knowledge gained from this research project should make a positive contribution towards efforts to improve



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the environmental management in local universities. It was felt that an understanding of the reasons why some universities were doing more than others may help encourage the less proactive ones to see the benefits of improving their performance. At the end of the project a summary of the findings will be sent to all the people involved. These people will all be key actors within the universities, with the potential to contribute towards decision making within the universities.

The research findings may also be of help the individuals involved, in their jobs, and it is not anticipated that to the research will have any significant negative impacts on the individuals. Efforts will be taken to protect individuals by maintaining their anonymity in the final report.

A particular issue concerning anonymity is that it is important to be able to identify the position in the university in which each interview subject worked, so that their views can be properly understood. As a result of this it is not possible to reveal the identities of the universities being studied as this would make individual members of staff identifiable. Ideally, I would have liked to have named the universities involved, but for the above reason the study will have to simply be a comparison of three British universities.

Potential interviewees were contacted by letter or email, in which the nature of the research was outlined. These were then followed up by phone calls, as required. Each interview was started with an explanation of the nature and purpose of the research. An assurance was given that any words quoted would be used anonymously, and permission was asked to tape the conversation to help me "remember what we said" during the interview (see appendix I). The interviewee was asked if they were happy with this, and this was taken as informed consent that they were willing to participate in the research. It was anticipated that all the potential interviewees would be mature individuals working in a professional environment, it was not anticipated that any of the interviewees will be especially vulnerable. If however, at any point an interviewee appeared uncomfortable or unsure about participating, the interview would not have been pursued.



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At all times I aimed to be open and honest about the nature of the research. Although it is recognised that it is, "rarely feasible to provide participants with a totally complete account of what your research is about" (Bryman 2001 p484) as full an explanation as possible was provided. No deliberate deception was used to gather information that may otherwise have been unobtainable.



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## 4. Data collection

**This Chapter is a discussion of how the data collection actually progressed, in the light of the original proposal. It considers the difficulties encountered, and how well the theoretical methodologies worked 'in the field'. There is also a brief presentation of the data collected.**



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## 4.1 Record Keeping

In chapter 3.1 it was stated that reliability and validity would be addressed by being thorough, careful, honest and accurate and by being able to demonstrate how I came to my conclusions “through a careful retracing and reconstruction of the route by which you think you reached them” and by being “explicit in the reasoning” (Mason 2002 p194&191). Throughout the data collection process a log book, or diary, was kept to allow comments and notes on feeling and observations to be recorded. It contained ideas, plans, and actions carried out in relation to collecting and interpreting the data. Information from this was used in the data analysis to help demonstrate how conclusions were reached and show the thought processes involved.

Maintaining a regular and detailed log book required considerable discipline, and proved more difficult than was first thought, and in reality there was the occasional gap in it.

As well as the log book, full records were kept of all letters sent and received, telephone calls and email communications. This was essential for keeping track of who had been contacted, when, and what their response had been. In keeping with the environmental nature of this project records were kept electronically to minimise the use of paper.

## 4.2 The process of choosing interviewees

The aim of this study is to determine the factors that are leading to incentives or barriers to environmental management. The intention was therefore to speak to individuals within the three universities who either were working in areas where environmental improvements were taking place, or who were likely to be able to influence university policy. These types of people were initially thought to include those working in estates and purchasing, environmental managers or coordinators where present, and senior management.



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### 4.2.1 How it actually happened

The initial strategy for gaining access to potential interviewees was to formally approach the universities, in writing, at vice chancellor level. This was felt to be the best plan, as the research would be on solid ethical grounds with top management approval, and there shouldn't be any problem getting access to other members of staff. A letter was produced explaining the intentions of the research and requesting support to carry it out. The first two universities to be approached were Green Fields and West Side. A personal contact recommended that David Hessler, the Pro Vice Chancellor of Green Fields would be the best person to contact. He replied that he was too busy to meet in person, but sent a useful written reply to some of my questions and suggested Ralf Harris in the Estates department as a good person to talk to. The second letter went to the Vice Chancellor of West Side, who then oddly, considering the university has an environmental coordinator, passed it on to the Estates Department. The head of Estates was on holiday and so their deputy then wrote back requesting more information and time to consider the possibility of the research taking place (Dawn Wilson, West Side University). The requested information was provided, but after some time and several telephone calls, still no answer was forthcoming.

At this point it became apparent that it was likely to be more productive to approach potential interviewees directly. Although I would have liked to have had the approval of the senior management, it was still felt to be ethically acceptable, as the nature of the research would be fully explained, nobody would be put under any pressure to participate, and individual anonymity would be preserved.

I therefore set about approaching individual members of staff in the three universities. Names of key members of staff were obtained by using the web sites of the universities, and also through personal contacts that I had in all three universities. As well as this, at the end of each interview the interviewee was asked if they knew of anyone else who it would be interesting to talk to, this yielded some useful names. Those people were not told however that their



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name had been recommended by a particular individual as this may have influenced their attitudes towards the interview.

As the interviews progressed two things became apparent. First it was going to be hard to gain personal access to the most senior people within the universities, i.e. those at pro vice chancellor and vice chancellor level. Second, following comments made in certain interviews it became apparent that students, through the student unions, have more potential to influence university policy and practices than was first thought. The first point proved hard to overcome, the second lead to a slight change of focus, and representatives from the student unions were contacted.

In retrospect it is perhaps reasonable to assume that student unions will have a degree of power to influence university management, but it demonstrates that researchers' preconceptions can easily lead to potentially significant factors being overlooked. The flexible nature of the research design allowed new leads to be followed as the research progressed, that may not have been possible with a predetermined fixed research method.

Another thing that became apparent was that it was going to be necessary to gain a historical perspective, as well as knowledge of the beliefs of the current management, to understand why the university was in the position it was. Again, in retrospect, this may seem a reasonable assumption, but again this lead to a slight change of focus from what was originally envisaged in the research.

The negative side to using a more open ended research method, of choosing interview subjects based on what you are learning as you analyse the interviews, is that you always feel that you need more time to talk to 'just a couple more people' to get a better picture. The relatively short amount of time available for this research did restrict the number of people I was able to interview, but I still feel that important and valuable information was gathered.



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### 4.2.2 List of who I gained information from

**Note:** all institution and individual names have been changed to maintain anonymity. The position given is the individuals' actual position in the institution.

Organisation	Name	Position	Type of contact
<b>Green Fields</b>	David Hessler	Pro Vice Chancellor	Written reply
	Oliver Winston-Cobb	Head of business school	Interview
	Sonya Hill	Deputy purchasing officer	Interview
	Joss Mclean	President of students' union	Interview
	Ralf Harris	Purchasing officer in estates	Telephone conversation
<b>West Side</b>	Damon Grey	Environmental coordinator	Interview
	Alan Hutchinson	Vice president student union	Interview
	Nigel Lawrence	Head of school of public policy	Interview
<b>City</b>	Carlos Radcliff	Chief executive (CEI)	Interview
	Barry Pritchett	Part of environmental teaching / business support team (CEI)	Interview
	Mark Armstrong	Building manager (CEI)	Interview
	Michael Johnston	President student union	Interview
<b>HEPS</b>	Teresa Monk	HEPS Project Coordinator	Telephone conversation
<b>Purchasing consortium</b>	Bernie Grant	Director	Email reply

### 4.3 General reactions of interviewees

The overall reactions of potential interviewees, when approached, were positive. People were generally interested and willing to help. Of the 15 people approached only three declined to be interviewed. The first was the chief purchasing officer at Green Fields University, who was too busy and suggested I spoke to her deputy, Sonya Hill, who agreed to be interviewed and was most helpful.



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The second was the head of the purchasing consortium, Bernie Grant, who said:

*"I think it is quite an interesting (&timely!) issue for you to be investigating, but unfortunately I am not the right person to assist you with this, as the current initiatives are local, not regional"*

He then referred me to Sonya Hill, to whom I had already spoken, and two useful pages on the purchasing consortium web site.

The final person who declined to be interviewed was Ralf Harris head of estates purchasing at Green Fields University, who again said he was too busy. I then contacted the head of estates, but he also declined and forwarded my request to Ralf Harris who then said he may be able to see me some time in the future when he returned from holiday. During my contact with him I did however have a short telephone conversation when I managed to gain some useful information.

Teresa Monk at HEPS said she was not sure it was worth my time travelling to London to meet in person, but was quite happy to be interviewed by telephone. I did not feel that this compromised the interview and it definitely lead to useful information being gained.

During the all interviews I explained the purpose of the research and how I was gathering the data. I explained that any quotes used in the final report would be used anonymously, and that precautions would be taken to conceal the identities of the universities involved. I then asked the interviewees if they were happy to proceed. All the interviewees said they were happy and several of them said they weren't concerned about being named. A couple of interviewees made the point that they were expressing their own opinions and they were not necessarily those of the university as a whole.



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### 4.3.1 Reactions to taping interviews

The discussion in Chapter 3 considered the possible reactions of interviewees to the use of a tape recorder during the interviews. At the start of each interview permission was asked to use the tape recorder. Most of the interviewees were quite happy, and none of them indicated any objection. A couple of the interviewees made joking comments about not enjoying being recorded, but in general during the interviews their words or actions did not indicate that they were particularly conscious of the tape, or that its presence was influencing what they were saying. Only two interviewees, made any reference to the tape recorder during the interview.

The first was Barry Pritchett , when referring to individuals wasting energy he said:

*“now this may be condemning them, (but) this is where that’s got to stay”* (points at tape recorder)

This appeared to be a reference to the actions of individuals’ who he didn’t wish to be identified and that he didn’t want to make a big deal of. There was nothing to suggest that information was being withheld, or that interviewee was changing what was being said because of the tape.

The second was Damon Grey who after making a comment about a senior member of staff, laughs and says:

*“off the record”.*

This was said in a joking manner and there was nothing else in the interview that would indicate that he felt inhibited by the presence of the tape recorder.

At the end of each interview, the tape recorder was conspicuously turned off and the conversation continued as far as reasonably possible. In some cases this yielded extra information, but it was felt that this was simply because the conversation was continuing, rather than because the participant was no longer being recorded. As mentioned above, the people interviewed were, to different



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degrees, interested in the project and open and willing to help. None of the interviewees appeared in any way inhibited or reluctant to talk.

## **4.4 My feelings about the interviews**

My strongest feeling about the interviews is that I grew more confident and fluent, both personally and with the topic, as they progressed. Before this project I was relatively inexperienced at carrying out this type of research interview. I found it particularly noticeable when listening back to the tapes that I was more comfortable after I had carried out the first two or three. This is not to say that the data gathered in first interviews was in some way compromised by my inexperience, but the later ones certainly seemed to flow more comfortably.

The interview schedule, a pre planned list of topics (see appendix I) was invaluable. At no point was it used as a straight list of questions to be asked and often the conversation would naturally flow onto the intended topics without having to ask the specific questions. The list of topics was adapted slightly according to who I was talking to, for example with more specific issues regarding purchasing or building management. The list also evolved slightly through the course of the project. For example when I asked if the interviewee minded being taped, I changed the reason from "so I have a record" to "so I can remember what was said" because I thought it sounded less threatening.

Although the list of topics was not followed precisely in every interview most of the topics were covered in each one, and valuable information was gained from each one. Inevitably when looking back at individual interviews there were questions I wished I had asked or points I wished I had probed more deeply. This is, to some degree, is unavoidable, and the research would certainly have benefited from the opportunity to carry out a series of interviews with each person, over a longer period of time.

The only interview in which I had strong personal feelings was the one with Oliver Winston-Cobb. I found his attitude strange in the modern world of



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business, and the way he expressed of some of his views arrogant and offensive. I was conscious of this at the time and endeavoured not to let it influence my attitude towards the interview.

## **4.5 Problems encountered during the interviews**

The only real practical problem that was encountered was during the interview with Carlos Radcliff. In this interview the tape recorder was accidentally switched to voice activated mode. This meant that during the quiet parts of the conversation the tape was constantly cutting in and out and as a result, significant parts of the interview were lost. When transcribing the tape it was however possible to 'reconstruct' many of the gaps from memory, and with the help of the interview questions list and notes taken. The reconstructed parts were of course marked so as to be distinguishable from the parts actually recorded.

The only other slight problem was background noise during a couple of interviews. The most significant one was during the interview with Mark Armstrong, who took me to the Centre for Engineering Innovation café and also brought along one of his colleagues. The combination of the background noise and two people talking together made transcribing harder than it would otherwise have been.



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## 4.6 Transcription protocol

The tapes of the interview were transcribed according to the following rules:

1. Speech to be transcribed as closely as possible to the spoken words. 'Umms', 'Errrs' etc to be transcribed as closely as possible. Colloquial language to be transcribed as spoken.
2. Interviewers comments will be inserted (in blue) into the transcript, where appropriate, to preserve useful information that would otherwise be lost:  
(pause)  
(long pause)  
(laughs)  
(cut off)  
(interview interrupted) – for reason indicated
3. Spoken words or phrases that are not identifiable on the tape will be indicated by ????
4. Interruptions in interview due to tape recorder's voice activation system cutting in and out show by #.
5. Identity of speaker will be indicated by initials at the start of each section.
6. Leave out the 'yeses' and 'ahs' and 'oks' that the interviewer says in acknowledgement of the interviewees when they are speaking, as they would break up the flow of the conversation and they don't add any information useful to the type of analysis to be carried out.

The interview tapes were transcribed as soon as possible after the interview, usually within a couple of days; all were done within a week. This meant that the interviews were still fresh in my mind during transcription. On several occasions this helped work out what was being said where the tape recording was difficult to follow. Each transcript was then rechecked three or four weeks later with a 'fresh ear' to make sure no serious errors were made. In the event a few minor errors were picked up, but no major ones that would have affected the meanings of the dialogue. As mentioned previously it would have been desirable to have had a second person checking the transcripts, but the lack of time and resources made this impossible.

## 4.7 Data Summary

The following section includes a summary of the environmental management actions being taken at each of the three universities. Following that is a list of the concepts used for coding the interview transcripts and a matrix analysing the content of the interviews.



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A point that should be made here is that there was at no point any indication that any of the universities were not fully compliant with all applicable legislation. The most significant pieces of environmental legislation for these organisations are likely to be those relating to waste disposal. All members of staff interviewed in estates and building management and also in purchasing were aware of waste disposal legislation. As far as could be gauged all three universities appeared to have well thought out and responsible waste disposal practices.

The personal interviews, observations, and time spent at the universities and access to their websites indicated that West Side University was significantly more active in the area of environmental management. There was a greater awareness of the issues among staff, there was more recycling, a greater control of energy and water consumption and they had an official environmental coordinator in place. Some actions have also been initiated at Green Fields and City University. There is some recycling taking place and some work has been carried out to reduce energy use, but there was generally less awareness, and action, than at West Side. The actions taking place are summarised on the following page.



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#### 4.7.1 Summary of environmental measures in place

<b>Green Fields University</b>	
<b>Environmental Policy</b>	No
<b>Environmental manager / coordinator</b>	No
<b>Recycling</b>	Some paper recycling bins in academic buildings. Can, bottle and paper banks on campus for student accommodation.
<b>Energy / Water</b>	Some actions taken but nothing systematic recently
<b>Purchasing</b>	Some environmental options made available, no purchasing policy or guidance on environmental issues, decisions left to individuals in departments.
<b>Other issues</b>	Some use of fair trades products by student union

<b>West Side University</b>	
<b>Environmental Policy</b>	Yes
<b>Environmental manager / coordinator</b>	Yes, part time
<b>Recycling</b>	Significant recycling / recovery of paper, bottles, cans etc, also printer cartridges, obsolete computers. But largely done on a building by building basis, not systematic or well coordinated.
<b>Energy / Water</b>	Recent energy and water use reviews, significant gains made, Combined Heat & Power plant on site, push for purchasing 'green' electricity when required.
<b>Purchasing</b>	Some actions being initiated to track lifecycles of purchased items. Purchasing decisions left to individuals in departments.
<b>Other issues</b>	Strong promoter of fair trades products, looking at stronger management systems to better coordinate action

<b>City University (CEI site)</b>	
<b>Environmental Policy</b>	No
<b>Environmental manager / coordinator</b>	'Semi official' part time
<b>Recycling</b>	Some paper recycling in offices, some printer cartridge recycling
<b>Energy / Water</b>	Considerable efforts taken to reduce energy consumption of a poorly designed building.
<b>Purchasing</b>	No
<b>Other issues</b>	



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#### 4.7.2 Concept definitions for transcript coding

Some of the coding concepts were conceived early on in the research process, while others, most notably that of credibility, evolved during the process of analysing the interview transcripts. The following concepts were used as codes when the final analysis of the transcripts was being carried out. They are listed below with their definitions.

- **Pressure from above** – environmental pressures exerted by people senior in the university management structure to the department in which the interviewee works: i.e. by some one with the power to impose policies on the interviewee.
- **Pressure from below** – environmental pressures exerted by people junior in the university management structure to the department in which the interviewee works: i.e. by some one trying to convince the interviewee that action should be taken.
- **Personal motivation** – the interviewee themselves feels action should be taken as a result of personal beliefs – because it's "the right thing to do".
- **Financial incentives** – environmental actions stimulated because they resulted in financial savings.
- **External pressure** – pressures from sources external to the university, such as legislation, funding restrictions, National Union of Students, or other institutions.
- **University image / credibility** – improved environmental management is, or could be, used to improve the universities overall image with stakeholders. (Or more fundamentally – the university is promoting environmental practices, to other organisations, that they are themselves not adhering to: i.e. embarrassment that others may find out that they're not 'practicing what they preach'.)
- **Research** – environmental improvements driven by academic research
- **Competition between universities** – action is being stimulated by the desire to appear superior to other universities.
- **Cooperation between universities** – action is being stimulated by contact and the sharing of information and good practice between universities.
- **Financial restrictions** – desired environmental action is being restricted due to lack of available money.
- **Time restrictions** – desired environmental action is being restricted due to lack of available staff time.
- **Other restricting factors outside their control**







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## 5. Findings

**This chapter is an in depth analysis and discussion of the data gathered during the research process. The data is discussed in relation to the literature and theoretical concepts discussed in Chapter 2. Ultimately it aims to address the research question posed in Chapter 1. It makes extensive use of quotations, allowing the story to be told in the actors own words.**



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## 5.1 Analysis

The aim of this research is to analyse the incentives and barriers to improved environmental management, and therefore the reasons for differences in practices within three universities. It seeks to understand why West Side has apparently a significantly more proactive approach than the other two. It aims to do this by studying the sources of influence on key actors within the three universities.

The following section considers each of the concepts used for coding the interview transcripts. The order in which they will be addressed is based approximately on the order in which they were defined previously. In reality however, quotes on certain topics flow naturally into others and, a single comment from an interview may relate to several different concepts. In these instances it seemed to make more sense to deal with the concepts together rather than repeat the quotation in several different sections.

In the following section parts written in (blue) indicate researcher's explanatory notes or comments inserted within quotations.

### 5.1.1 External Pressure

One of the main, and most consistent, sources of external pressures was being exerted through the student unions. The unions in all three universities were being influenced by the NUS (National Union of Students). All three university unions use the NUS purchasing consortium to supply their food and drinks. The unions at West Side and City universities had links with People & Planet (see appendix III), a national student environmental organisation.



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Alan Hutchinson, Vice President of the West Side University student union said that the NUS purchasing consortium who:

*"negotiate our deals on the beer we sell in our bars and the food we sell in our shops and things like that and they actually have an ethical and environmental committee that vet the companies that we use"*

Joss Mclean from Green Fields said:

*"Yeh, we've got a coffee shop downstairs where we only use, the coffee's supplied by Nussl (the NUS purchasing consortium) which are fair trade"*

and at City Michael Johnston said:

*"you know we basically go along with NUS advise us to do at the moment"*

The student union at City initiates campaigns within the university in conjunction with NUS's priority campaigns, and have signed up to the NUS 'statement of environmental intent' (appendix II):

*"it's a statement of environmental intent erm done by NUS which is basically encouraging unions from all round the country to you know get involved in various schemes"*

People & Planet are involved in West Side and City University, but not Green Fields. They have exerted significant pressure at West Side, particularly in putting pressure on the university to buy electricity, when they need it, from a 'green supplier'

The only other person who mentioned significant external pressures was Sonya Hill, in purchasing at Green Fields. These were legal pressures in terms of:

*"directives coming in, in terms of disposal of like refrigerators and stuff like that, so there are external pressures as well as our own needs"*

but when asked if she knew of any funding sources being related to sustainability, she replied:

*"I think that that's something the government's looking at, I think, but erm that's not something that's been filtered down so far to us at this level"*



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Carlos Radcliff at the CEI at City University, when asked if he was aware of any government policies that might encourage the university to be more sustainable, said:

*"to be honest, as a university, no"*

and on the same subject Damon Grey at West Side said:

*"it's certainly not happening on a practical level, I don't think"*

West Side University is the only one of the three to be part of HEPS (Higher Education Partnership for Sustainability). This is intended to stimulate increased action within universities; however this doesn't seem to have been the case recently at West Side. Damon Grey, the environmental coordinator said:

*"We're in the HEPS scheme as you probably know, but again I think it's gone a bit quiet so we're trying to pick it up again"*

but he also acknowledged that the scheme was coming to a close at the end of this year. The vice president of the student union, Alan Hutchinson, wasn't even aware of what HEPS was, let alone that West Side was part of it. This is strange as he was the students' environmental representative in the university.

The material above would tend to suggest that there are no really strong external pressures for the universities to improve their environmental management. The national students' union and the student group, People & Planet are taking an interest in environmental issues, which is then working its way into the universities. Out of the three, West Side is the only one where it has, so far, lead to any changes. West Side is also part of HEPS, but at the moment this appears to be having little affect on what is going on within the university.

### **5.1.2 Pressure from above**

Starting with City University, and the CEI, the only person who described any experiences of pressure from above was the president of the student union, Michael Johnson:



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*"erm at the moment, our pro vice chancellor, John Seymour is getting us to recycle pretty much everything, well as much as we can"*

This was backed up later in the interview when asked whether the main university management were generally supportive, he answered:

*Yes I would say very much so*

This is surprising as no one else within City gave any indication that the senior management were trying to promote environmental issues. Barry Pritchett at the Centre for Engineering Innovation, when asked if he was aware of any pressures from the main University management said:

*"No I don't think so, what for instance environmental improvement? No we haven't had anything because I think as a team (environmental science teaching) we would probably know about it first."*

And earlier in the interview:

*"at the moment the mmm there's no push, I don't think downwards or upwards from an environmental improvement point of view. And even beyond that I don't think there is anything going on"*

Mark Armstrong, the CEI building manager who deals with the main City University on waste disposal issues made no mention of any pressures for more recycling. When asked about senior management attitudes towards environmental issues, he went on to say:

*"The chief exec Carlos er Carlos Radcliff, Carlos's very er supportive in any thing we can do to reduce costs"*

In Green Fields University Sonya Hill, the deputy purchasing officer, was asked if initiatives were being driven from within the department, or by having pressures from above. She replied:

*"I think it's a mixture of both it's something that we feel's important."*

She did not offer any examples of pressures from higher in the university, but said:

*"I think it's something that the finance director's quite erm, hot on as well"*



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and:

*it's a bit of a hot topic at the moment within purchasing*

Oliver Winston-Cobb, head of the Green Fields Business School made no mention of any pressures from higher up in the university. The President of the Student Union, Joss Mclean, hinted they had even had some problems, in the past, from the university management when trying to get new recycling facilities installed:

*Erm I know last time there was a bit of erm (pause), well there were a few hurdles that they had to climb erm just to get the stuff onto campus I think, just had to go through a few committees, but this year we were told straight away yeh just contact the relevant erm authorities and then contact relevant member of staff*

Ralf Harris, the estates purchasing officer at Green Fields said that there had been no pressures from senior management or staff to be doing more.

West Side, the only university of the three with an environmental policy statement, there was strange lack of any apparent pressure from senior management. Damon Grey could not say that the Vice Chancellor had shown any particular interest, but that John James, the university registrar:

*"He's erm, he's becoming a bit more, interested I think, but I think he's leaving at the end of this year. One thing he's doing is, we're going to be the first fair trade university, hopefully, so he's been involved with the students in the union, who've set that up, tried to set that up"*

*"I know he's interested perhaps from a er, publicity angle because it looks good er, to prospective students"*

All this suggests that there is no significant pressure from the very top of the universities management structure to improve environmental management. Historically some of the management decisions taken at West Side, such as the decision to install a combined heat and power plant must have been approved by the top management. The general feeling at the moment was that management may be supportive, but are not generally initiating improved environmental management. As Alan Hutchinson in the West Side Student Union put it:



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*"so we're getting quite a lot of support from the university, when it comes to the union, erm environmental management"*

However Nigel Lawrence in the West Side School of Public Policy said he wasn't aware of any policies or pressure coming from the top of the university management:

*"it's not something that in my short period as head of school I've come across any (policy) that says one of the aims of the university is to improve the energy efficiency or whatever across the campus"*

The quote that sums it up came from Mark Armstrong, the CEI building manager:

*"The chief exec, Carlos er Carlos Radcliff, Carlos's very er supportive in any thing we can do to reduce costs but obviously the university, they don't have loads of money, so if we can save money on our energy costs it can be used for other things and you know when your spending 130,000 on electricity, save 10% you know that's 13,000 you can spend on on classes, seminar rooms and other bits and pieces so he's all for it, anything that can be done"*

### 5.1.3 Financial incentives

The final quote in the previous section leads neatly into the issue of financial incentives to improve environmental management. Many of the environmental improvements likely to be considered by the universities are linked to reducing the consumption of resources, such as electricity, gas, water or paper. This may require some short term investment, but is likely to lead to long term financial benefits; this is a powerful driver for taking action. This sometimes makes it difficult to distinguish what actions are being taken for environmental reasons, and what is being done for the financial benefits. Perhaps in the real world it is an impossible goal to try and separate this apparent dichotomy. As Damon Grey at West Side put it, energy and waste disposal were the big issues because:

*"you can save money with them quite easily, you can save money with those sort of schemes er yeh anything that saves money, but there are people out there that are environmentally motivated as well, so they're doing it perhaps for two reasons, the way they can justify what they're doing (is that it) saves money."*



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Financial incentives were mentioned at all three universities, by many of the interviewees, Sonya Hill at Green Fields said:

*"we're doing a waste tender at the moment, and we're looking at not just disposal of the waste but we're looking at a management system as well in terms of them coming up with initiatives that we can, you know, use for recycling purposes, erm, reducing the amount of actual waste that's going to landfill sites etc. because there's a cost element involved in that"*

And again Damon Grey:

*"a lot of these schemes, for example with waste, if you're not sending your waste to landfill you're saving money"*

Carlos Radcliff, the CEI chief executive talked at length about the need to save energy for heating and air conditioning money in their building, backing up the quote by Mark Armstrong, the CEI building manager, in the previous section. Mark Armstrong, and his team, have carried out an energy audit, and done a considerable amount of work on reducing energy consumption. They have been encouraging people to turn off lights and computers when not in use, and fine tuning the air conditioning control systems.

Oliver Winston-Cobb at Green Fields, when looking to the future said:

*"I think the major pressure ecologically is going to be financial, because there's no doubt having to do things more, more economically will, does apply pressure, 'cos you've got to consume less energy"*

### **5.1.4 Pressure from below**

Overall there was very little evidence of pressures from below, that is from people junior to the interviewees. The only place it was encountered was in the Student Unions, where students were expressing concerns about environmental issues. Even here it was generally a few vocal individuals, and not a point of view strongly held by the majority.



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The only strong pressures from below came from students at West Side, their Student Union Vice President, Alan Hutchinson said:

*"One (issue) that's been most prominent this year has been the one of green electricity. That's something that students, really last year put a lot of pressure on erm the executive to, we were mandated to lobby the university and the union to move to green electricity"*

Other comments were much less positive. Michael Johnson the president of the student union at City University said:

*"I think they (students) can be quite apathetic I guess"*

But then qualifies it with:

*"there are also students who are, they're very conscious, very aware of environmental problems and I'm sure they'd be very keen to work with the university, and the union, erm try and sort of make their area a better place, I guess"*

Joss Mclean, in the same position at Green Fields, said:

*"I don't think there's much of an interest, a lot of our students don't really take much interest in those sorts of things erm, not to sure why, maybe it's because we've got a small student body, it's not diverse enough to concentrate on those sorts of issues"*

and:

*"we haven't had any students coming to us asking about setting up any societies involving environmental issues"*

Sonya Hill, purchasing officer, also at Green Fields said that they hadn't had any staff of students raising issues about purchasing 'environmentally friendly' products:

*"we haven't had any particular requests or you know any feed back from end users about environmental purchasing"*

Neither Carlos Radcliff nor Oliver Winston-Cobb, both heads of departments had had any issues raised by staff or students. Nigel Lawrence, head of the West Side School of Public Policy said he wasn't aware that any issues had been raised:

*"but I wouldn't you know that, only if it was a major issue would that get through to me so it doesn't mean that there haven't been some*



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*people that have though well there are some slightly crazy things going on here, but they won't have got so upset about them that it develops any head of steam"*

*"I mean I suspect there are a lot of people around who grumble, or mumble under their breath, and say, you know it seems a bit daft that some of these things don't have a greater priority, but it's not sufficiently important for people to get really vociferous about it"*

Barry Pritchett, at the CEI, where environmental courses are taught has had students looking at environmental issues within the Centre, but none of them has tried to put pressure on the university to initiate improvements.

Ralf Harris, working in estates at Green Fields University, was not aware of there ever having been any issues raised by staff or students.

Damon Grey expressed surprise at the lack of knowledge among students:

*"I would say the majority are not that gemmed up on environmental issues, surprisingly. We do a survey, erm, in the department, before we teach some of the sustainable development on what they know already and erm, its surprising what they don't know"*

but was much more positive about the individual motivation of staff within his department:

*"we've always tried to be a bit more proactive in this department perhaps, we've set up our own erm recycling bin outside with Kappa, basically because we were frustrated because nothing was happening within the university itself so we more or less went ahead on our own and did that"*

When asked who instigated it he went on:

*"it's more from the grass roots I would have said"*

Although there certainly is some interest being expressed at the grass roots level, overall there does not seem to be much significant pressure that is actually leading to actions being taken.



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### 5.1.5 Personal motivation

Among the people interviewed there was a wide range of personal views on environmental management, ranging from serious personal concerns, to a total lack of concern. It must be said however, that virtually all the interviewees said, in one way or another that as a general principle more should be done.

Mark Armstrong, the City University CEI building manager, expressed particularly strong views, relating to personal experiences:

*"I mean I went down to my local dump er I was chucking some cuttings of er plants, trees, grass that sort of thing, filled the car up, went down and as I was chucking the stuff in I was thinking cor Christ in this bin there were settees, chairs, televisions you name it and I think, well that there has probably been this week sort of after lunch, so that massive great container has probably been filled up over the last few hours, and that's going to go into a dump, and it's just, where are you going to put this stuff, you know"*

Other typical comments include:

*"It's something that we feel's important"*

and:

*"In terms of promoting environmental issues, I don't think we do enough to be honest erm we could do a lot more to be fair"*

from Sonya Hill and Joss Mclean respectively, both at Green Fields. Nigel Lawrence at West Side said he felt he was part of a group of staff:

*"who kind of are vaguely aware but it's not er, with no expertise, er and our responsibilities don't seem to invite us to get directly involved with it, so we're probably all guilty of expecting other people to do it, you know"*

and Michael Johnson at the City University student union said:

*"yeh, I'd say it's very important for the university to uphold sort of erm certain standards and to basically to want to get involved and to want to improve the area and improve the university itself and the area it is in"*

The final quotations in this section come from Oliver Winston-Cobb, the head of the business school at Green Fields University. He took a very hard headed



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and strictly financial view of the pros and cons of environmental management. His views are of course his own, and I would not wish to imply that they were held by other members of staff within the business school. His attitude was typified by statements such as:

*"There's an awful lot of bullshit, a lot of emotional environmentalism"*

When asked about improving the business school's environmental performance, he dismissed the suggestion with:

*"We haven't got much control"*

He denied that he had any power over whether the school had, for example, a policy to use recycled paper, which directly contradicted what Sonya Hill in purchasing had said. When asked about raising people's awareness about, for example, energy issues, turning off lights and computers when not in use, he replied:

*"I can't even manage that at home (laughs) my kids at home don't do that"*

He argued that in a free market it was in the best interest of organisations to look after the health and wellbeing of their staff and customers, and illustrated it with the following:

*"you're looking after the people who work for you, so you are looking after your workforce, it's rather like the argument why the Nazis were so stupid in the world war why the hell were they killing the people who were making the V2s, why didn't they keep them healthy (laughs) it was actually a totally uneconomic way to behave, totally irrational to actually starve your workers. And so you do look after your work force and equally you look after your customers but also these people live in that environment"*

Apart from Oliver Winston-Cobb most of the people interviewed had positive attitudes towards environmental management and felt more ought to be done. In reality, however, most of them did not feel strongly enough about it to try to make changes themselves.



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### 5.1.6 University Image & credibility

Many of the interviewees said that having a positive attitude towards environmental management was likely to benefit the universities image. Some however questioned how much practical difference it would make to the success of the university.

Damon Grey, the environmental coordinator at West Side said that a good environmental image would be beneficial for the university, but then questioned what it would mean in reality:

*"That's right yeh, I'm not entirely sure how, I mean does it get students in? Erm I'd be interested to see the figures, you know erm having said the survey we've done, not the largest group of students admittedly, I get the general impression it doesn't influence perhaps a lot"*

and:

*"yeh if it brings extra student in, but it's difficult to gauge whether it does or not,"*

The vice president of the West Side Student Union was very positive about the subject:

*"I think it's really important, I think the university are always er, you know looking for things to make them stand out and erm you know the union always wants to do that as well we always want to be able to say we're one of the best student unions in the country as does the university and so anything like this, you know environmental issues are something that students and young people are becoming more interested in"*

Michael Johnson, from the student union at City University, when asked if he thought it was important to the university's image said:

*"Um yeh definitely"*

Sonya Hill at Green Fields was also particularly positive:

*"I suppose it can be a marketing tool as well, because if you've got a number of universities and you know students are looking to come to a certain, come to a particular university it can set us set us apart from other universities"*



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and:

*"it's looking at at, you know (pause) where is it going to stand us as a university, you've got to look at our key stakeholders as well, you know, students because at the end of the day without students we wouldn't exist so it might not be a cost benefit as such that you're going to see the benefits from having a purchasing officer but it's something that you know could enhance the reputation of the university"*

Barry Pritchett at the CEI was concerned about the Centre's image, but particularly issues of credibility, which he mentioned several time throughout the interview. The Centre has environmental post graduate courses and particularly promotes itself as an expert in environmental management. As such it acts as a consultant to, and partner with, many local companies. He seemed almost embarrassed that the Centre was not 'practicing what it preached' and was worried they might be found out:

*"these are the sorts of things that we need to understand, that if you're promoting quality to companies, then you ought to be a quality minded company. If you're promoting environmental management to companies, environmental performance improvement, waste minimisation, all that sort of stuff, a good advert is if you can quote what you're doing, and show the results of what you're doing"*

and:

*"We are the, you know, Centre for Engineering Innovation, (but we're) not keeping up with technology, we should be enhancing technologies that are go ahead"*

and:

*"we're supposed to be the Centre for Engineering Innovation, and we should be at least running at the current bench marks for all sorts of things whether it's quality, environmental, health and safety, we should have all of those as a matter of course. If you are to be an institution that purports to be improving businesses, it's erm you know, we wouldn't want to (say), do as I say, not as I do, because as soon as they look at what we do they wouldn't get anywhere"*

*"Yeh, (it) could be considered as being that sort of pressure you know, credibility"*



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The head of the Green Fields Business School, Oliver Winston-Cobb, on the other hand, dismissed the idea that being more sustainable could usefully improve the universities image:

*"if you look at what attracts people to go to university"*

*"ours (attractiveness) is based on employability and access, so we've got a fairly clear (image that differentiates us from others)"*

He then dismissed the environmentally friendly image of most organisations that promote it, as simply being a marketing ploy:

*"Beyond Petroleum (BP oil company) as they call themselves now in reality they've put a lot more words in their annual report but whether they're actually are more environmentally friendly than Exxon, which is the other big nasty is actually very questionable because they, because Exxon is actually much more severe, the Americans are much more severe in terms of where they extract oil from than the Europeans"*

Image seems to be regarded as important, sometimes very important, by most the people interviewed. However those who actually discussed it in more depth were unsure how important a factor it was in issues such as attracting students.

### **5.1.7 Competition & cooperation**

Overall, competitive or cooperative factors did not seem to play a significant part in environmental management decision making. A few people did however mention the issues. At Green Fields, Sonya Hill was aware of what other universities were doing in the area of purchasing policy, and mentioned Nottingham and Derby in particular. She said being part of the purchasing consortium definitely led to cooperative behaviour:

*"we meet with other universities within the midlands area, and we discuss erm certain issues and we come up with solutions as well, so we are aware of what, we try and work together 'cos it's easier that way, and you know we can share information"*

Interestingly she also said having a good environmental image would help set the university apart from others, so there is an implied element of competition as well. In the same way Alan Hutchinson, at the West Side Student Union, talked



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about a positive environmental image setting the university apart from other universities. In contrast Michael Johnson at the City student union talked of cooperation between universities:

*"We, er socially we're quite connected with Green Fields um and we get on very well with their union erm and West Side, I know their president reasonably well, but as of yet we haven't really had much contact with them, urm but generally in the area there's connections there um to maybe forge like various schemes that we could maybe all work together on. Um I think there's actually a meeting er which a lot of people from er the region will be sort of joining together to come up with a few ideas"*

Damon Grey at West side talked about the pressures of competition from other universities:

*"I think that you know the University has to be more proactive otherwise it will get left behind"*

but in general there did not seem to be much active cooperation or competition between universities that was leading to actions being taken over environmental issues. Carlos Radcliff, chief executive of the Centre for Engineering Innovation summed up his dealings with other universities:

*"the only thing we share is statistics"*

### **5.1.8 Research**

At West Side some of the academic research project work being carried out may lead to environmental benefits for the university. Damon Grey said:

*"we've got big research on hydrogen, teaching, we've sort of tied it in with the students on that course, erm maybe get, maybe a fuel cell er somewhere on campus would be quite nice, where we could use, not only erm use it for publicity and teaching, but it might actually (generate electricity for the university and) save money in the long run"*

On the other hand Carlos Radcliff said that although the Centre for Engineering Innovation do consultancy work helping companies and other organisation to develop environmental practices it had not lead directly to any improvements at the Centre itself.



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### 5.1.9 Financial & time restrictions

All organisations operate with finite resources which they have to apportion according to their priorities. Many of the interviewees mentioned specific restrictions, while others indicated that resource restrictions were not a decisive factor when it came to environmental management decision making. For the purpose of this section financial and time restrictions will be dealt with together.

Teresa Monk from HEPS said that in her experience lack of staff time was as important a barrier to improved environmental management as financial limitations.

A typical comment regarding lack of staff time came from Mark Armstrong, the CEI building manager:

*"our actual work list is getting longer and longer not shorter so as regards trying to look at environmental issues we can only really look at them very quickly unless there was a really innovative process came along where we could save immediately with minimum (input)"*

Damon Grey at West Side, when talking about one particular project said:

*"it might actually save money in the long run, erm good publicity etc. erm but it's a question of time really (laughs), we've got a lot of ideas, but getting them getting them done"*

and when discussing the possibilities of implementing more sustainable purchasing policies:

*"perhaps one of the biggest barriers is procurement, obviously they're motivated by cost"*

Sonya Hill, in purchasing at Green Fields said:

*"I think there's going to be an issue, about resources, 'cos as you know funding's always an issue and to be able to justify (environmental purchasing policies), erm people are going to want to see a cost benefits erm to justify that position"*



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Joss Mclean, at Green Field student union, said they had looked at the possibility of using public transport for:

*"transporting our clubs around, and we did look into using public transport for a lot of things but the problem is we go to a lot of universities, and especially around the region, out of town ones, so trying to get a train to some of these places is not practical, and it actually works out cheaper if you've got a full coach rather than trying to pile everyone onto a train"*

Ralf Harris, also at Green Fields, said that lack of time and resources meant that they could no longer collect waste paper for recycling on a regular basis and it had now become a 'fill in' job, or be done when someone complained the bins were overflowing, and he said that it was unlikely that any more could be done in the near future. Oliver Winston-Cobb at Green Fields business school, talking about environmental decisions, said:

*"the problem is they cost, they usually end up costing an awful lot more"*

*"the main concern of the university is just managing with the funds they've got and you, you know you really haven't got much room for luxury in the system and the funding level's been going down for the last fifteen years, I mean and it went down this year"*

Nigel Lawrence, talking about the school of public policy at West Side said:

*"as far as this school is concerned, if you said we're able to do things that do improve environmental sensitivity and it hasn't cost the school very much, then people would say that's really good, if you say it hasn't cost them anything they'd say fantastic, if you say it had cost a lot, they'd say, well hang on a minute"*

A particularly interesting observation was that there was almost no mention of financial restrictions at City University's CEI.

### **5.1.10 Other restricting factors**

This section includes all other factors that are barriers to improving environmental management. It particularly includes factors outside the control of the individual or institution.



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A particular issue raised by Nigel Lawrence at West Side was that problems with financial structures within the university were effectively inhibiting environmental improvements. There is no real incentive for an individual school or department to improve its energy efficiency because:

*"the way the university charges schools (for energy) is, it relates to a formula that takes into account floor space, and numbers of staff, those kinds of things, but it doesn't relate directly to things like electricity use so you aren't encouraged (to be more efficient)"*

All three of the universities have devolved budget centres, that is individual departments have control over how their budget is spent. For this reason it is harder for the university to have an overall purchasing policy. Sonya Hill said:

*"It's down to the individual user, we'll give them the option, there'll be the option of environmental paper, environmentally friendly paper, and you know your normal bog standard paper and it'll be up to the end user erm which sort of paper they wanted to purchase, but we'd make sure the option was there for them to choose"*

Damon Grey talked about the organisational structure of the university, and how having autonomous departments inhibits the implementation of wider policies:

*"if you look at it like a business, it's more like separate companies erm and they've all got different cultures, if that's the right word, it's more or less on a building by building basis so in this building there's different departments, different units and that, so it is difficult to organise with that sort of structure"*

*"there's a lot or erm there's a lot of barriers because each department's autonomous so they decide what they like"*

The City University, Centre for Engineering Innovation, has a particular problem in that they are tenants in a building which they don't own, and therefore have limited control over. This compounds an underlying problem that the energy efficiency of the building was severely effected by changes in the building design made to save money during construction. As Carlos Radcliff put it:

*"they were just slashing costs out the building, by lowering the capital cost of the building in effect they raised the running costs and raised the energy usage so that this building now, erm compared to how we were (in the old building) has the electricity bill of about double,*



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*basically because there we could open the windows, here we can't, it's as simple as that"*

and when talking about trying to get improvements made:

*"the issue is one that I'm a tenant of a landlord and it has taken a long struggle to get what we have"*

## **5.2 Discussion**

### **5.2.1 Incentives**

The aim of this research is to analyse the incentives and barriers to improved environmental management. Having spoken to a number of people from each of the universities it was hard to identify any factors that were consistently acting as incentives to make environmental improvements. This can be seen in the matrix in section 4.7.3. The three that were identified as being the most important were financial incentives, university image and the personal motivations of individuals within the institution.

Financial incentives are perhaps the most obvious factor, and it is hard to differentiate between changes that have been stimulated by environmental concerns, and those that were stimulated by a desire to reduce costs. Very often environmental concerns have raised issues such as energy efficiency and waste minimisation, but it has been the financial savings that have lead managers to put plans into place to make improvements. The only environmental improvements that were actively championed by senior management were those which had significant financial benefit. The two most obvious were energy saving measures at City University CEI and the combined heat and power plant at West Side.

The second factor, university image, is much harder to define. Only one of the people interviewed felt that the environmental improvements would not produce a useful benefit to the universities image. The head of the Green Fields business school felt it was unimportant because it was not a factor the attracted



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students. Several other interviewees also said that they could not be sure what difference that an improved image would actually make, but nevertheless felt it was something that the university should be aiming for. Image is a concept that is hard to quantify, and while it is likely that having a positive image will benefit the institution in the long term, it is difficult to relate individual actions taken to measurable improvements in performance. For this reason it is difficult to justify devoting significant resources to measures that may in some loosely defined way benefit the universities image.

Personal motivations are also hard to quantify, but they were a driving factor for many improvements that were being made, particularly in West Side. In this university there was more of a feeling that both individuals, and the university as a whole, could really make a difference, to make themselves stand out. There were therefore more people who were willing to take personal actions in things like putting recycling schemes in place and making them work. This was of course not universal, as Nigel Lawrence indicated. Although he was himself neutral about environmental issues, he said some people in the School of Public Policy had been severely disillusioned by a previous recycling scheme, when it transpired that the paper that people had been separating for recycling was actually in the end going into the general waste bins and being disposed of by land fill or incineration. The personal motivation of individuals can make a significant difference, especially when it is supported by senior management. This was particularly evident in City and West Side, where senior management were more supportive, even if they were not directly initiating environmental improvements.

These findings corroborate Keniry's observations in the United States, that most of the practical environmental initiatives were started at a grass roots level. They may have then been supported by the top management, but they were much less often instigated at the top level.

A factor that was mentioned repeatedly was that environmental policy and practices were not effectively coordinated across an institution. Often actions were being taken in particular departments or buildings, that senior members of



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staff in other parts of the university were completely unaware of. This is indicative of the fact that much of the environmental management taking place results from the actions of individuals within the institution, rather than from a strategic policy decision by senior management. This was true in West Side even though it has a written environmental policy statement and someone in the post of environmental coordinator.

This lack of coordination perhaps also reflects the nature of the organisations. On the one hand my research would corroborate Peter Viebahn's findings (Viebahn 2002 p3&4) that universities lacked strong "hierarchical management structures" which inhibited the implementation of a coordinated policy. On the other hand, in contrast to many companies, academic staff have more autonomy and a perceived ability to make a difference if they are personally motivated and willing to take action.

Overall there were few strong external pressures for the universities to improve their environmental performance. Sonya Hill talked about waste disposal legislation affecting some of the contracts they negotiate. There was no indication at any point that any of the universities were operating outside the legislation. All three universities face the same legislation, as they are all carrying out broadly similar activities, this will not therefore explain differences between them. One external institution that could potentially be putting pressure on West Side, but not on City or Green Fields, is HEPS (Higher Education Partnership for Sustainability). There was not however any evidence from the interviewees at West Side or HEPS that it was playing a significant roll, either at the moment or over recent years. Teresa Monk at HEPS acknowledged that they had been more successful in stimulating environmental improvement in some universities than others. She said that she felt one of the most important factors was whether or not the university had a named individual with responsibility for environmental issues. While West Side is the only one of the three universities have an officially named environmental coordinator, it is only a part time job and the present incumbent had only started quite recently.



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The student organisation People & Planet is involved in both West Side and City University, but not Green Fields. It has certainly had some influence on the student union at West Side, which has in turn put pressure on the university management. At City University, however there was less evidence that it was making a significant difference.

In 1999 it was reported that the Sustainable Development Education Panel, an advisory group connected to the government suggested that "by 2010 universities and further education colleges that do not meet defined levels of sustainable development in management and curriculum could have their funding council grants withheld" (Hinde 1999). Five years on, this research found no evidence that anyone within any of the universities felt that changes in funding structures would act as an incentive to act in a more environmentally friendly, or sustainable way. Only Sonya Hill at Green Fields had heard of such suggestions and she hadn't seen any signs of them being implemented. Carlos Radcliff, at the CEI, said that he was not aware of any government policies that would directly act as an incentive to improve environmental management.

The above findings would indicate that the government doesn't have any active, or effective, policies in place to encourage higher education institutions to improve their environmental performance.

As discussed in the theoretical contexts in Chapter 2, hypotheses have been put forward that organisations will tend to imitate others of a similar size and also those in the sector that are more successful. There was little evidence that this had been occurring within the three universities studied. The interviewees within West Side, the university with the most progressive environmental management practices, seemed to feel that they were part of one of the countries leading universities, and therefore ought to be setting a good example, setting themselves apart from the others. People in the other two universities talked about using good practices to improve their image to give themselves a competitive advantage, but there was no suggestion of them aspiring to be like the leading players in the field. Overall there was not a great awareness of what other universities, either locally or nationally were doing, and there was no real



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evidence for sharing of experiences or good practice. There was no evidence of the senior management within any of the universities using environmental management as part of their strategy for promoting or developing their institution.

To summarise, environmental improvements have been stimulated at two levels. First, top level management have encouraged actions where there are financial benefits, such as improved energy efficiency. Second, individuals at the 'grass roots' have tried to take steps, generally at a local departmental or building level, to make a difference. This 'grass roots' action has been more prevalent at West Side because there is a culture in the institution that makes people feel that they are in one of the top universities in the country, and they should be striving to maintain or improve that position.

### **5.2.2 Inhibiting factors**

The main restrictive factors were found to be lack of time and also financial resources. As mentioned in the previous section, if environmental improvements can lead to a reduction in the use of resources, management are happy to support it. On the other hand, if it is going to require a substantial commitment of resources, for a small or difficult to quantify financial return, senior management are understandably reluctant. The universities 'core business' is to provide education. If something else is taking significant resources away from that it may compromise the core business, and even if individuals believe there may be an ethical obligation to be more sustainable, it is hard to justify on a financial level.

The three universities cover a wide range of sizes from around 6,000 to over 30,000 students. Green Fields has an annual income of around £50 million and around 6000 students, while West side has around 15,000 students and an annual income of around £250 million. Unfortunately accurate figures for City University's income could not be found. It is difficult to make direct comparisons between different universities because their distribution of part time and full time,



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and post graduate and undergraduate students will be different. As well as this the universities are carrying out different levels of research in different specialist areas. Having said that, the annual budget per student at Green Fields is around £8,300, whereas at West Side it is over £16,000. This is a large difference and would suggest that West Side has significantly more money to spend. This research found that every interviewee at both universities thought financial restrictions were a barrier to environmental improvements.

The interviews carried out indicated that lack of time is a significant restriction at West Side, and at City University's Centre for Engineering Innovation where it was found to be more important than lack of finance. This backs up the experiences of Teresa Monk at HEPS. Perhaps unsurprisingly it was the people carrying out the practical actions, such as building and estate managers who were suffering most from a lack of time. At Green Fields time restrictions were an issue, but less so than financial ones. In comparison to the other two there was little mention of financial restrictions at City University's CEI. Although no accurate figures could be found for the levels of income, this may be indicative of the fact the CEI is a new department, in a new building, and as a result has presumably had a significant input of resources. It would be interesting to revisit the CEI in five or ten years time when it has become better established.

The other significant barrier to actions being taken was found to be the organisational structure of the universities. If, for example, a department would be responsible for financing a particular improvement, but would see no direct benefit, they are unlikely to be willing to pay for the improvement.



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## 5.3 Recommendations

One of the secondary aims of this research was to use an understanding of the incentives and barriers to environmental management in universities to provide some recommendations for improving the situation. The following recommendations are provided as general guidance.

1. Where senior management is not actively pursuing environmental improvement policies, they should be supportive of those who wish to take local actions.
2. Universities should have a named individual, at a senior level, with the responsibility and authority to coordinate environmental improvement efforts.
3. More efforts should be made to make everyone within the university more aware of the environmental consequences of their activities, and simple, cost free, actions that can be taken to reduce them (such as turning off lights & computers when not in use or printing double sided).
4. The environmental impacts of purchasing decisions should be recognised and actions taken to reduce them.
5. Cooperation and sharing of good practice between universities should be actively encouraged.
6. Organisational structures that inhibit improvements should be removed.

## 5.4 Limitations of research

The main limitation of this research was the lack of time available. With this kind of research methodology, where the data gathering 'snowballs' and the data already gathered guides where to look next, you become aware that you never really have a full picture. A more positivist, experimental methodology would have a much more definite outcome, a point where you have a final result. A researcher working from a post-modern point of view would never claim to have an absolute description of a situation, but I feel this project has built up a useful picture of the incentives and barriers to improved environmental management within the three universities.



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Another limitation of this research is the lack of a historical perspective. The initial research question was focussed on the current situation, but in reality to get a full picture of where an organisation is, you have to understand how it has got there. I feel this would have helped, particularly at West Side, to understand exactly why certain policies and practices were in place already.

Given more time I would have liked to try to gain better access to the top management in the universities, to get a perspective from the Vice Chancellor level. This would provide a complete cross section of the university from the students to the most senior management. I would also have liked to spent more time investigating environmental management in education from a government policy point of view.

In September 2003, just as this project was coming to a conclusion, the Government Department for Education and Skills produced a document entitled "Sustainable development action plan for Education and Skills" (DfES 2003). This has a number of objectives, but the most relevant one is to "encourage and support all publicly-funded educational establishments to help them operate to the highest environmental standards" (DfES 2003 p14). This would imply that the government are going to take an active part in encouraging universities to improve their environmental management. It would be interesting to study how this policy is implemented and the effect it has on the attitudes and practices of those working within higher education.



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## **6. Conclusions**

**This section concludes the report with a summary of the purpose of the research, the methodology used and data collected, and the final outcomes.**



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The aim of this research was to analyse the incentives and barriers to improved environmental management, and secondly the reasons for differences in practices within three universities. It sought to explain why one of the three was better at implementing environmental management programmes than the other two. It did this by analysing the sources of influence on key actors within the three universities.

I felt it was important to carry out research in the field of environmental management because I have a personal interest in environmental issues, and as I am studying in a university it seemed logical to start with the type of organisation that I am part of. Universities are also particularly important because they have a great influence over the attitudes and actions of future generations of managers and decision makers, as well as being significant consumers of resources.

The universities studied in this research project range in size, from around 6000 to over 30,000 students. To maintain anonymity, the names of the people who agreed to be interviewed and the real names of the universities were not revealed.

The data gathered was qualitative in nature and obtained by the use of semi structured interviews with key decision makers within the universities. Semi structured interviews were felt to be the best option because they minimise the influence of the researcher's preconceived ideas, and allow the interviewee to freely express their own opinions, and what is most important to them. A list of issues for discussion was used, as an aid during the interview, to ensure areas of importance to the research question were not missed altogether. Using interviews permits the researcher to build up a relationship with the interviewee so that their perceptions could be probed in more depth. Unfortunately the time and resources available only allowed a relatively short amount of time with each interviewee.

The interviews were taped to provide an accurate record of what was said. It was felt that the advantages outweighed the disadvantages. It was felt that



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information that could potentially be lost, by inhibiting the interviewee with a tape recorder, would be less significant than what would be missed if the researcher relied on note taking.

The interviewees included personnel in Planning and Registry, heads of departments, officers in Finance and Estates, and representatives from the Student Unions. The research did not start with a strongly pre-conceived plan; it was intended to evolve to include different people as individuals were interviewed and the work progressed. The aim was to explore the field, building up a picture as the research developed.

The initial plan was to attempt to gain access to potential interviewees by formally approaching the universities, in writing, at vice chancellor level. However in reality this was slow and unproductive and it proved difficult to get any positive results. As a result it became apparent that approaching potential interviewees directly was likely to be a more successful strategy. This proved true, and in general people were interested in the research and willing to be interviewed.

After the interviews had been carried out and the tapes transcribed, the process of analysis began. The research question was broken down, with reference to the theoretical contexts in which this research is situated, into a series of sub concepts. The interview transcripts were then coded, highlighting comments by the interviewees that relate to these concepts.

The personal interviews, time spent at the universities and access to their websites indicated that West Side university was significantly more active in the area of environmental management. There was a greater awareness of the issues among staff, there was more recycling, a greater control of energy and water consumption and they had an official environmental coordinator in place. Some actions have also been initiated at Green Fields and City University. There is some recycling taking place and some work has been carried out to reduce energy use, but there was generally less awareness, and action, than at West Side.



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This research found that environmental improvements had been stimulated at two levels. First, senior management had promoted actions which are financially beneficial, such as improved energy efficiency. There were however few instances where this had actually happened. Second, individuals at the 'grass roots' have tried to take steps, generally at a local departmental or building level, to make a difference. This local action has been more widespread at West Side. This was because there was a general attitude in the institution that they were one of the country's leading universities, and as a result they are motivated to maintain or improve that position.

Aseem Prakash's theoretical constructs were useful here. The behaviour of the organisation can be seen more clearly by dividing them into either senior people imposing actions from above or more junior people trying to persuade management that the actions were the right thing to do. In the three universities the environmental improvements that would also save money were instigated by top management. There were people lower in the organisational structure who were trying to make a difference. In contrast to Prakash's findings there was little evidence, with the exception of the Student Union at West Side, that they were trying to persuade others that policies should be more widely adopted throughout the institution.

It was found that there was a lack of coordination of environmental efforts within all three universities. In one way this would tend to confirm Peter Viebahn's findings that the universities lacked strong hierarchical management structures which lead to a lack of systematic organization in implementing policies. On the other hand, the autonomy that staff in universities have is likely to mean that those who are personally motivated are more willing to take actions in their local area.

Another incentive to have a more proactive environmental management policy was the positive effect it was perceived it would have on the university's image. It was however acknowledged that this was hard to quantify; several



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interviewees said it would help attract students, but were not sure how significant a factor it was in reality.

It was found that there were few strong external pressures from institutions such as government policy or pressure groups. Again it was recognised that while senior management had initiated one or two improvements, they were generally not putting any pressure on people within the organisation to do more, and although there were some 'grass roots' actions, people lower in the organisations were not vocal in trying to encourage top management to implement more proactive policies. This confirms Keniry's observations in the United States. He found that although senior management may be supportive of practical environmental initiatives, improvements are generally instigated by people further down the organisation.

There was little evidence of sharing of good practice among universities, and no evidence of any of the universities trying to imitate others that were perceived to be successful. It was not found that the senior management within any of the universities were using environmental management as part of their strategy for promoting or developing their institution. This would tend to contradict Heather Haveman and suggest that there was not a tendency towards isomorphism in the field of environmental management in these universities.

One barrier to improved environmental management, in all three universities, was found to be lack of staff time. In contrast, lack of financial resources was mentioned by everybody in Green Fields and West Side but hardly at all in the Centre for Engineering Innovation at City University. There was only indirect evidence to explain this, but one explanation was that it was because the CEI was a new department, in a prominent new building, and was therefore currently relatively well funded.

The other significant barrier was found to be the organisational structure of the universities. Individual departments controlled their own budgets and would therefore be responsible for financing improvements in their area. In many



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cases though, the advantage would be to the university as a whole and the department would see little direct benefit.

The main limitation to this research project, encountered during the research, was the lack of time available. When carrying out the type data gathering used, you always feel that you would like to be able to gather a little more data to try to better understand a particular issue. You become very aware that you never really have the full picture.

Having said this, I feel this project has built up a useful picture of the incentives and barriers to improved environmental management within the three universities. Many useful lessons have been learned, both relating to environmental management in universities and also to the research process itself. As I said at the beginning it really has been a journey of discovery.



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## 7. References

- Bryman, Alan (2001)** *Social Research Methods* Oxford University Press Oxford England
- Buchanan et al (1988)** *Getting in, getting on, getting out, and getting back* (appears in: *Doing Research in Organizations* – edited by Alan Bryman) Routledge London England
- Bulmer, Martin (1988)** *Some Reflections upon Research in Organizations* (appears in: *Doing Research in Organizations* – edited by Alan Bryman) Routledge London England
- Chia, Robert (1995)** *From Modern to Postmodern Organizational Analysis* Organizational Studies 1995 Vol 16/4
- DfES (2003)** (British Government Department for Education and Skills) *Sustainable development action plan for Education and Skills* <http://www.dfes.gov.uk/sd/>
- Dunne, Susan (1995)** *Interviewing Techniques for writers and researchers* A&C Black (publishers) London England
- Frey, James H. & Oishi, Sabine Mertens (1995)** *How to Conduct Interviews by Telephone and in Person* Sage Publications London England
- Haveman, Heather A. (1993)** *Follow the Leader: Mimetic isomorphism and entry into new markets* Administrative Science Quarterly Vol 38 (1993) Winter
- Hinde, Julia (1998)** *A brave new green world* Times Higher Education Supplement 12th June 1998
- HEPS (Higher Education Partnership for Sustainability) (2003)** *Purchasing for Sustainability* [www.heps.org.uk](http://www.heps.org.uk)
- Keniry J. (1995)** *Ecodemia: Campus Environmental Stewardship at the Turn of the 21st Century* National Wildlife Federation Washington USA
- Kvale, Steiner. (1996)** *Interviews - an introduction to qualitative research interviewing* Sage Publications London England
- Leeds Metropolitan University (2003)** [www.lmu.ac.uk](http://www.lmu.ac.uk)
- Liverpool John Moore's University (2003)** [www.livjm.ac.uk](http://www.livjm.ac.uk)
- Mason I.G et al (2003)** *Implementation of a zero waste program at a university campus* Resources, Conservation and Recycling No38 (2003)



- 
- Mason, Jennifer (2002)** *Qualitative Researching* Sage Publications London England
- Newcastle upon Tyne University (2003)** [www.ncl.ac.uk](http://www.ncl.ac.uk)
- Noeke, Joseph (2000)** *Environmental management systems for universities - a case study (Paderborn)* International Journal of sustainability in higher education Vol 1 No3 (2000)
- People & Planet (2003)** <http://www.peopleandplanet.org/>
- Powell, Walter W. & DiMaggio, Paul J. (1991)** *New institutionalism in organizational analysis* University of Chicago Press Chicago USA
- Prakash, Aseem (2000)** *Greening the Firm - The politics of Corporate Environmentalism* Cambridge University Press Cambridge England
- Robson, Colin (2002)** *Real World Research* Blackwell Publishers Oxford England
- Tighe B. (2003)** Pro Vice Chancellor Aston University Personal Communication
- Viebahn, Peter (2002)** *An environmental management model for universities: from environmental guidelines to staff involvement (Osnabruck)* Journal of Cleaner Production Vol 10 (2002)
- Whyte, William F. (1943)** *Street Corner Society* University of Chicago Press Chicago USA
- Wright, Tarah S.A. (2002)** *Definitions and Frameworks for environmental sustainability in higher education* Higher Education Policy No 15 (2002)
- WWF (2002)** World Wide Fund for nature [www.wwf-uk.org/core/index.asp](http://www.wwf-uk.org/core/index.asp)
- Yin, Robert K. (1994)** *Case Study Research - designs and methods* Sage Publications London England



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# Appendix I

## Interview schedule

The following page is a typical interview schedule used during the research. It was intended to be used as guidance notes and not to be followed rigidly in every interview. Different interviews progressed in different ways, according to the position of the interviewee and the particular issues that were felt to be of greatest importance.



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# Interview Schedule

I am interested to find out about your perceptions of environmental management, and what part you feel that, they should be playing within the university management.

What I would like to talk about is:

- What your job involves
- The pressures on you
- The incentives / pressures to make environmental improvements

It shouldn't take more than  $\frac{1}{2}$  hour

Anything said here that I use in the final report will be used anonymously

So I can remember what we said, do you mind if I tape this conversation?

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- 1) What does your job here involve?      How long have you been working here?  
What are the main pressures?      What is being done with environ issues?
- 2) Have you tried to initiate any environmental changes – what happened?
- 3) Do you feel you have enough information (or access to information) to deal with environmental issues – to make decisions?
- 4) Driving forces – Have you had any environmental issues raised by: University management / Academic staff / Students / Other organisations
- 5) (If No) – What do you think? Does it surprise you? What about the future  
What environmental issues are likely to affect the Uni – e.g. sust funding?
- 6) Are you aware of what other local universities are doing in the area of environmental management? HEPS? How do you feel this affects what is done here? Uni image / reputation. What do you think?
- 7) Do you know of any other key individuals in the org who are particularly interested in environmental issues? Who are they? Do they get support? Have they made a difference?
- 8) Do you feel (you would be) supported / under pressure from those around you?
- 9) Do you feel there are (would be) the necessary resources to make environmental improvements (if you wanted to)?
- 10) Names of other people to talk to?



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# Appendix II

## NUS Statement of Environmental Intent

This appendix is a copy of a statement of environmental intent written by the NUS (Nation Union of Students). It aims to provide general guidance for unions and has been available for individual university student unions to sign up to.



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## Statement of Environmental Intent

### Introduction:

The 'Statement of Environmental Intent' marks an important and highly positive step forward in furthering awareness and action on environmental issues amongst the student population. The joint statement confirms a widespread and strong commitment to the environment across the HE sector, and puts environmental issues high up on the agenda. It suggests practical initiatives regarding environmental campus management and environmental education. The joint statement is the first time that Student Unions, Universities and Colleges have got together and stated what can and needs to be done to promote sustainable development, both educationally and in practice. There are already several institutions with environmental statements of their own, but this draws everyone together as a whole, building on the 1993 Toyne Report and the 1995 Student Declaration of Intent.

Sustainable development broadly means using resources wisely, and integrating environmental, economic and social considerations into that usage. It is about us realising how much power we have collectively and taking responsibility for our actions, ensuring that we minimise our impact on the world around us. The statement contains eight key areas that we can act on through assessing our management systems, educating our students (both formally and informally), and through raising awareness of the issues amongst staff members. It also specifies a time frame of five years, by which time every HE institution should have adopted environmental initiatives impinging on management and the curriculum. This briefing contains suggestions about how to convert the points into practice. The suggestions are by no means exhaustive, and if you have any to add, we would love to hear them. The briefing only outlines areas of action if you would like more detailed information, please get in contact. We realise that many of you will have already implemented some of the suggestions raised and that Unions are at different levels of development. However we hope that there is something in here for everyone who wants to make a difference. Let us know what you think, and thank you for reading.

### How can I use the statement at my own institution?

There are several ways in which the statement is relevant to your institution, and action can be divided up into two key areas. Firstly, through assessing and improving the way we manage our universities, colleges and student unions, through looking at the type of building materials we use, what we stock in our shops, how we deal with waste and where we invest our money. Secondly, the statement raises the importance of ensuring that we are educating our students about issues surrounding sustainable development, both through the curriculum and more informally, by providing discussion forums, booklets and training courses for those who are interested. The people that pass through our universities are the leaders of tomorrow, so it is important that they are clued up and become responsible citizens.

Going 'Green' is not something to be embraced by a few fanatics. It is a common task, which needs to be taken on with enthusiasm and pragmatism by us all. It is about all our futures and it is at the centre of responsible citizenship.



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## Managing our Student Unions, Universities and colleges in an Environmentally friendly way

### Sign up to Planet Pledge:

Planet Pledge is one of the best ways of committing your Student Union to environmental sustainability through simple and effective management systems. It enables you to put ecological thinking at the heart of your activities and to promote those values to your student population. The scheme was set up as a response by NUS to the growing concern about environmental issues by Student Unions. It was set up in 1994 and over 50 Unions have since signed up, pledging themselves to environmental improvement by limiting the negative impact of their actions and moving towards sustainability. It highlights that you can show your concern for environmental issues together with meeting the needs of your students, without damaging your financial performance. In fact, Planet Pledge can even improve your financial performance through reducing the level of waste you create, and may make your students more loyal when they see that you are taking environmental issues seriously. The costs to environmentally damaging organisations are rising all the time. These costs include fines, pollution clean up costs, resource waste and loss of custom.

### How does it work?

There are six basic elements to Planet Pledge. These are:

1. A commitment to environmental improvement by your Union's senior governing body, communicated to all students, officers and staff.
2. A review of the environmental performance of your Union (i.e. an environmental audit).
3. An action group (e.g., a Union environment committee) with the power and resources to implement environmental improvement.
4. A regularly updated action plan outlining the targets and goals over the next term, year or five years.
5. Knowledge and skills to make positive change and ensure that materials we use in our Union, where possible, come from sustainable resources.
6. Reporting process, including annual environmental report and regularly communicating information to your membership.

### How much does it cost?

Nothing. If you are a member of NUS, we can help you with resources and advice. We can help you carry out an environmental audit, provide you with information, via. NUS's Ethical and Environmental committee, on suitable products and materials for your Student Union. We can also give presentations on Planet Pledge to interested groups within your Student Union.

There is a Planet pledge pack available, which goes into the scheme in more detail, along with briefings on specific areas such as buying computers.



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**If you would like further information, please get in contact via;**

Planet Pledge  
c/o NUS Environment Campaign  
Nelson Mandela House  
461. Holloway Road  
London, N7 61-3

**Useful publications for further information:**

'Greening Commercial Services'- a guide produced by the Ethical and Environmental Committee of NUS Services Limited.

'How Green is Your *Student Union?*' *Questionnaire* available through NUS

**Pass policy at your General Meeting, Union Council, Executive or JCR:**

Passing a policy at a formal level allows your Union to make a solid and long-lasting commitment to the environment. Having a policy will also allow you to identify key people who will have specific responsibility for environmental issues, important if you want to ensure that all your enthusiasm and good ideas are actually implemented! An environment policy will act as a point of reference for students who want to get involved and monitor how environmental problems on campus are being tackled.

Each institution will have different issues to work on. For example, your Student Union could be located next to a polluted main road or river, so the policy could mandate the Executive to launch a campaign and lobby the council, University or College to help reduce pollution levels. Any policy will need to contain a section on what environmental issues need to be addressed, along with clear steps on how the issue will be, addresses. E.g. you could mandate the Union to monitor levels of pollution on campus and to run a campaign encouraging students and staff to consider using public transport and bicycles.

**Ultra Vires**

Legal restrictions on what Student Unions can spend money on does not stop you from passing policy, however you will need to be careful about spending, Union funds can't be spent on demonstrations, protests and campaigns that don't directly affect students as students. As a student officer you have a duty to ensure that Union money is spent legally, or you will be personally liable. You aren't able to give money to charity directly from your funds and can only subscribe to another organisation if it provides an educational benefit and is at a reasonable charge. Your Student Union should be able to provide you with more extensive information, or you can contact the NUS legal department. Remember, if in doubt, check first.

**Educate your members!**

By running awareness weeks, campaigns or by providing students with reading matter such as a Green Guide, you are taking a positive step towards ensuring that your students are being kept well informed. Through regular communication, students can find out why environmental issues are so important, why you are carrying out a particular campaign and you might find that people congratulate you for your hard work. Students need to know why environmental issues are relevant to them and by keeping them informed, you may impact on the way they carry out their life, both whilst at University and beyond. It is also important to ensure that students are being kept up to date with anything that you as a Student Union are doing on the environment. There is no point introducing a boycott of a particular product or company without telling people why you are doing it. Find someone prepared to be responsible for communicating with your members on a regular basis, as it is such a key area.



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### **Implement an Ethical Investment Policy:**

Many Unions have recently implemented Ethical investment Policies, thereby ensuring that they are investing their money with banks and businesses that are ethically sound. Some banks have bad track records with issues such as Third World Debt and the Arms Trade. Find out which bank handles your money and also check what your University or College invests their money in. Some Unions have recently found that their institutions have money invested in the arms trade, so encourage your University, via. Their Environment Committee (if they have one) to adopt an ethical investment policy too. By looking into ensuring that your money is being ethically invested or maybe even changing banks, you are sending out a strong message that you don't agree with the practices that certain banks and companies adopt.

### **Set up a green group:**

Green Groups are an ideal way of getting environmentally minded people together to discuss and plan campaigns. Many Unions already have active green groups and they are easy to set up. Places adverts around your student union, organise a time and place for regular meetings and get in touch with national green groups, such as People and Planet who will be happy to provide you with info for your local group.

### **Set up a recycling scheme.**

Many of the environmental problems currently faced are a result of over consumption of resources. By recycling and reusing, we reduce the need for new products and as a result reduce damage to the environment. Student Unions, as with the country as a whole, have been bad at integrating recycling into everyday practices and encouraging good habits amongst our students and staff that will last beyond being in higher Education. This is an example of an area you can lobby and work with your University over, along with your Local Council to encourage recycling amongst the community at large. You can set up a recycling point in your student union, creating a place where students can leave paper, aluminium cans, clothing, toner cartridges etc. Some Unions have managed to get a commitment from their University or College to provide recycling points on campus and in Halls. Contact a local recycling group (you can find their number in Yellow Pages) who may be able to help you out by providing good arguments and some support.

### **'Greening Education'**

The 'Statement of Environmental Intent' highlights the necessity of providing environmental education programmes for the staff and students at your institution. Its aims build on work already done to encourage the integration of environmental issues into the curriculum by projects such as HE 21. The HE 21 project was set up in the spring of 1997, when Forum for the Future was awarded funding to run a two year project to enable and promote examples of best practice for sustainability in the higher education sector. This section outlines the importance of integrating the teaching of environmental issues into the curriculum, and as such relates more to the formal provision of education by your University. However, we all have a responsibility to, educate ourselves and your Student Union can play a major part in educating students more informally, by providing information, opportunities for discussion and through running awareness weeks. You can play a crucial role in ensuring that students are being made aware of issues surrounding sustainable development, by looking at whether those opportunities are being made available at a formal level, and encouraging your University to make that provision if it is absent. The effectiveness of constant questioning and the voicing of concerns is often underestimated. As students become consumers within Higher Education, institutions have no choice but to listen to what we have to say.



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## **Why is 'Greening' Education so important?**

The provision of green education is important because it encourages the students that pass through our doors to be 'responsible citizens' when they leave. 'Greening Education' means encouraging people to learn to do as well as to know, and making students aware of the need for a more sustainable way of living. University shouldn't just be about gaining a degree, the students of today will be the decision makers of tomorrow, so it is important that we increase their capacity to address environmental and development issues. For environmental issues to be taken seriously, they need to be taught at a formal level and cross curricular. Your institution also needs to be seen to do as they teach others to do. Check whether they have an environment policy, whether they are attempting to limit the impact their management systems have on the environment and whether they communicate this to their students.

Staff members also need educating, so it is important to ensure that training programmes are, being provided for those that are keen to learn more. For environmental issues to be taught effectively, staff need to be committed to their teaching and believe in it themselves.

## **What can I do?**

1. Encourage the development of an action plan from your institution in response to the statement.
2. Contact Heads of Departments expressing the need for the incorporation of environmental issues into course material wherever possible, and for providing specific modules that go into issues in more depth.
3. Persuade your Education sabbatical to co-ordinate an assessment of student views on the need environmental education in degree programmes.
4. Lobby your University or College to set up an Environmental Policy Committee to consider issues put forward by the statement.



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# Appendix III

## People & Planet – background details

People & Planet are a student environmental organisation, there website home-page is shown on the next page. For more information go to <http://www.peopleandplanet.org/>



# People & Planet - UK student action on world poverty, human rights and the environment

## Welcome

...to P&P online, home of People & Planet, the UK student campaigning organisation working to

- end world poverty
- defend human rights
- protect the environment



November 1st and 2nd, University of Liverpool: An inspirational event with speakers, workshops, and hundreds of students tackling the biggest issues in the world including Fairtrade, climate change, HIV/AIDS, world trade....

[Click HERE](#)

## Free Updates

Concerned about world poverty, human rights or the environment?

Then click here for free email updates from People & Planet:

- Get the inside story on the issues that matter
- Keep in touch with student campaigning across the UK
- Emails weekly during term time
- No junk - guaranteed!

[Click HERE](#)

## Trade Justice

World trade rules are hurting the poor.

Despite the enormous wealth of the global economy, more than half the world's people still live on less than two dollars a day. International trade should be helping - but it isn't. Instead unjust trade rules are keeping the poor locked in poverty.

People & Planet is currently campaigning to rewrite these rules and for students to buy Fairtrade products.

[Click HERE](#)

## Climate Change

Climate change is happening now.

Climate change is the biggest environmental threat facing us today. Caused by the greenhouse gases released by burning fossil fuels, climate change is threatening the lives and livelihoods of millions of people.

We are currently campaigning to:

- Stop Esso. Esso are selling global action to prevent climate change
- get UK universities to

[Click HERE](#)

Contact Us [people@peopleandplanet.org](mailto:people@peopleandplanet.org)



Phone : +44 (0)1865 245678 Post : People & Planet, 51 Union Street, Oxford OX4 1JP, UK

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Please note: This website should not be confused with People & The Planet, an environmental gateway concerned with population, poverty, consumption and the environment, published by Planet 21.