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Environmental Disclosures

In the Annual Report & Accounts
of companies in FTSE All-Share

PART 2

TRUCOST PLC
taking the environment into account

ENVIRONMENT AGENCY

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The Environment Agency is the leading public body protecting and improving the environment in England and Wales.

It's our job to make sure that air, land and water are looked after by everyone in today's society, so that tomorrow's generations inherit a cleaner, healthier world.

Our work includes tackling flooding and pollution incidents, reducing industry's impacts on the environment, cleaning up rivers, coastal waters and contaminated land, and improving wildlife habitats.

Environment Agency Project Executive:
Howard Pearce

Environment Agency Project Manager:
Faith Ward

Written by Trucost plc.

Simon Thomas, Chris Morrison,
Ebba Schmidt, Nicholas Wright and
Jaydeep Chakraborty

Published by:

Environment Agency
Rio House
Waterside Drive, Aztec West
Almondsbury, Bristol BS32 4UD
Tel: 01454 624400 Fax: 01454 624409

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Foreword

A key priority of the Environment Agency, identified in our corporate strategy, is 'greening business'. This aims to reduce the impact on the environment and to bring about environmental improvements in business of all sizes, from large companies listed on the London Stock Exchange to small privately owned enterprises.

In addition to using our regulatory powers, we also encourage companies to assess and then reduce environmental risks and impacts and publicly report and summarise their performance against targets to their customers, shareholders, and wider stakeholders in their statutory Annual Reports and Accounts, with supporting data on their internet web-sites.

In responding to the Company Law Review, we stated that environmental disclosures need to be clear, comparable, and compulsory (as for financial information). Without this, customers, the City, shareholders and potential investors cannot truly assess and influence behaviour and future prospects of listed companies relative to others.

Moreover companies that manage their environmental risks and reduce their consumption of natural resources can save money, which benefits their profitability and public reputation.

We commissioned this study to provide a baseline of the current environmental disclosures of FTSE All Share companies before the new Company Law regulation, requiring listed companies to produce an "Operating and Financial Review", and the implementation of various EU environmental regulations such as the Emissions Trading Scheme and the Environmental Liability Directive. We intend to repeat the study in 2006.

Howard Pearce

Howard Pearce

Head of Environmental Finance and Pension Fund Management

July 2004

About Trucost

Trucost plc is an environmental research company that was founded in 2000 to help companies understand the environmental impacts of their business activities and to develop a platform that would facilitate more disclosure. Trucost provides data and analysis on company emissions and natural resource usage and presents these in financial as well as quantity terms. The external cost methodology employed by Trucost ranks a company's environmental impacts in order of significance, enabling directors and auditors to focus their efforts on those impacts that are likely to be material to their business. This also forms a transparent process with which a company and its auditors can assess whether it should make a public disclosure under the proposed Operating and Financial Review regulations. By presenting environmental performance in financial terms, Trucost research provides the basis for improved dialogue between the companies and investors or other stakeholders.

Trucost provides research to fund managers, analysts and other commentators on over 1,700 companies worldwide, including the entire FTSE All Share. Trucost has the support of an International Advisory panel of eleven leading academics in the fields of economics and the environment who lend their considerable experience to the specialist research staff located in London.

The Environment Agency has commissioned Trucost to carry out this study on its behalf.

www.trucost.com

Disclaimer

The views expressed in this document are not necessarily those of the Environment Agency. Its officers, servants or agents accept no liability whatsoever for any loss or damage arising from the interpretation or use of the information, or reliance upon views contained herein.

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Assessment of FTSE Industry Sectors

The type and scale of a company's environmental impacts are largely dependent on the business activities in which it is involved, i.e. the industry sector to which it belongs. The Global Reporting Initiative (GRI) and the Defra environmental reporting guidelines have sector-specific elements to them, and many voluntary reporting guidelines are sector-based initiatives driven by trade bodies and companies.

This section is designed to be used as a reference document. It contains disclosure profiles for 34 of the 36 FTSE sectors (there were no companies in the Investment Trusts or Diversified Industrials sectors). A list of the companies analysed in this study is given in Appendix A with their FTSE sector. The analysis covers overall reporting levels in the sector by index, an analysis of sector impacts compared the disclosure levels, and the location of disclosures in the Annual Reports and Accounts. Additionally, the main environmental topics discussed by the constituent companies are analysed for each sector. A brief description of the above analyses is given below. Case studies of environmental disclosures for companies in each sector are given throughout.

Profile

The profile details the main features of the sector including the number of companies in the sector split by the index they are in (e.g. FTSE 100, 250, Small Cap). Total turnover is the sum of the turnover of the companies in the sector for the accounting years used in this study, this is also given as a percentage of the sum of the turnover of all the companies in the study. The description of the sector is the description given by FTSE[1].

FTSE Sector Name	Mining
Total Turnover (Millions):	£28,243
Turnover as % of All Share:	2.4%
Number of Companies:	9

Index	Number of Companies
FTSE 100	4
FTSE 250	3
FTSE Small Cap	2
FTSE All Share	9

FTSE Description: Prospectors for, extractors and refiners of gold bearing ores. Finance houses engaged in financing and developing mining interests or deriving an income from mining interests. Companies engaged in the exploration, extraction and/or refining of minerals other than gold.

Context

This is a brief overview of the sector including current environmental and regulatory issues affecting the companies in the sector. The table given at the start of the sector gives a

[1] FTSE International Ltd,, *FTSE Global Classification System,* 2002

breakdown, by index, of the percentage of companies in the sector making any form of environmental disclosure.

Index	% Mining companies making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	100%	96%
FTSE Small Cap	100%	80%
FTSE All Share	100%	89%

Sector impacts and reporting in the FTSE350

One of the interesting aspects of the study was to determine whether there was a link between the level of disclosure and the degree to which the company had an impact on the environment. This was done using the external cost based approach described in the methodology (Methodology: *Determining The Link Between Impact and Disclosure*) to categorise the sector's environmental impacts as high, medium or low in five key areas (natural resource use, water, climate change, waste, and other environmental impacts). An example is shown in Table 1. The analysis was carried out for FTSE 350 companies only.

Table 1 Sector impacts and reporting levels table

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	High	High	High	Medium	High
Disclosure	0%	43%	43%	14%	14%

The categories of environmental impact all relate to direct environmental impacts. Therefore supply chain and product in use impacts are omitted from the analysis. The decision to focus on direct impacts only was in part due to the lack of comparability of methods used by companies to assess their indirect and product in use impacts. Note that Natural Resource Use in this context specifically refers to the extraction of raw materials or forestry/agriculture not the subsequent use of these materials in production processes by other companies.

Information disclosed by the FTSE All Share

A graph of the top ten topics disclosed by FTSE All Share companies in the sector is given in this section. This gives a more granular analysis of the issues discussed by the companies in the sector and attempts to determine the motivation behind the disclosures, in particular regulatory or reporting requirements.

Where the information is reported in the Annual Report and Accounts

With the Operating and Financial Review pending it is important to analyse where, in the Annual Reports and Accounts of FTSE All Share companies, disclosures relating to the environment are being made. It is of particular interest, for example, to compare the levels of disclosure in existing Operating and Financial Reviews, as opposed to an HSE or CSR section where the link between the environmental issues and business issues may not be so clearly made and subsequently be overlooked by investors.

Detailed Analysis of FTSE 350 Company Disclosures

A table detailing the topics disclosed for each FTSE 350 company by sector, is given at the end of each chapter. The level of disclosure on each topic is indicated by a symbol. The criteria used to assess disclosure levels and symbols used are given in Table 2. The methodology is discussed in more detail in Part 1 of this report, *Assessing links to shareholder value in the FTSE 350.*

Table 2 Criteria used to determine type of disclosure

Disclosure criteria	Description of criteria	Symbol Used in Tables
1. Quantitative reporters with awareness of bottom line impact	Companies that provide quantitative environmental performance data and link environmental impacts to shareholder return/bottom line/license to operate	●
2. Quantitative reporters with awareness of savings potential	Companies that provide quantitative performance data and link it to financial savings, but provide no link to shareholder return/bottom line.	●
3. Quantitative reporters	Companies that provide quantitative performance data, but provide no financial link	◑
4. Qualitative reporters	Companies that provide commentary on their environmental impact, but no quantitative data.	○
5. Non-reporters	Companies that provide no information on the environment in the Report & Accounts	

FTSE uses a system to classify companies according to the economic activity in which they are primarily involved. The Global Classification System has 10 Economic Groups which are then subdivided into 36 Sectors which themselves are divided into 102 Sub-sectors. For the purposes of this study, Economic Group levels have been used in the main report for high level analysis and the Sectors have been used for the detailed analysis carried out here. There were no companies in the Investment Trusts or Diversified Industrials sectors leaving the 34 sectors given overleaf.

Environmental disclosure in the FTSE All Share Sectors

Mining

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Mining
Total Turnover (Millions):	£28,243
Turnover as % of All Share:	2.4%
Number of Companies:	9
FTSE Description	Prospectors for, extractors and refiners of gold bearing ores. Finance houses engaged in financing and developing mining interests or deriving an income from mining interests. Companies engaged in the exploration, extraction and/or refining of minerals other than gold.

Index	Number of Companies
FTSE 100	4
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FTSE Small Cap	2
FTSE All Share	9

Context

Index	% Mining companies making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	100%	96%
FTSE Small Cap	100%	80%
FTSE All Share	100%	89%

Mining activities have a high environmental impact and can cause long-term damage that is expensive and sometimes impossible remediate. Many mining companies have been subject to high levels of public interest and criticism in the past, and in some cases their polluting actions have led to significant financial losses or interruptions to their operations. The 2000 Baia Mare Cyanide spill in Romania, for example, caused the suspension of its main operator, Esmeralda Exploration, from the Australian stock market.

Environmental litigation and NGO activism, the advent of the Polluter Pays Principle and changing regional legislation around the globe are just some examples of the issues with which the mining sector has deal. Mining operations are often located in remote areas, however, and many operators do not see the necessity of disclosing information, which they may regard as a private matter between the local regulator and themselves. The bigger players, however, are taking on board their responsibilities and openly communicate their efforts to improve their environmental performance.

Sector impacts and reporting in the FTSE350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	High	High	High	Medium	High
Disclosure	0%	43%	43%	14%	14%

Energy demand and thus climate change impact are high in the mining sector: The movement and processing (e.g. smelting) of large amounts of materials requires the burning of substantial amounts of fossil fuels. Consequently, climate change is one of the impacts most frequently disclosed by the sector, with 43% of mining companies in the FTSE 350 reporting on it. An example is given in Case study 1 below for UK Coal.

Case study 1: UK Coal, Annual Report and Accounts 2002
In their Operational and Financial Review, UK Coal (a FTSE Small Cap company) include a brief summary of environmental issues, most of which deals with waste management and expected financial savings under the U.K. landfill tax.
Accelerated annual increases in landfill tax, currently standing at £13 a tonne and set to rise to £15 a tonne by 2005 and higher, has resulted in a number of initiatives to divert waste away from landfill to other uses. The composting of wood for recycling as wood chip feedstock elevates our rating in the government's 'Waste Hierarchy' and as well as being environmentally beneficial, produces cost savings for each participating site. Waste minimisation has been recognised as a key area for future savings, with all sites being provided with objectives and targets that individually may be small but collectively, with longer-term price and tax increases, will show more significant savings whilst strengthening the Company's commitment to improving environmental awareness. Systems are now in place to record waste and costs for a number of waste streams so that improvements can be monitored quantitatively and performance indicators factually established.

Some of the environmental impacts of the mining sector are the subject of much controversy. Toxic emissions from mining waste (such as heavy metals and sulphuric acid)[2] are considered by many observers to be the most serious threat posed by mining operations. Mining operators however, are confident that they are managing their waste storage facilities effectively enough to render toxic releases insignificant, which may be an explanation for the relatively low level of disclosure of other environmental impacts.

Mining activities remove natural resources directly from the natural environment. The discussion of sustainable levels of resource use could therefore be seen as appropriate. However, no consideration of this subject was found in the Annual Report and Accounts of any FTSE 350 mining company.

[2] Toxic releases from mining waste are, for the purpose of this study, part of the category 'Other environmental impacts'.

Water is also a high impact, and disclosure levels are as high as for climate change. Mining involves the use of large quantities of water, even though operators increasingly recycle water.

It should be noted that mining waste, e.g. waste rock, overburden and tailings, has been excluded from the impact assessment in this section, as the methodology covers only controlled or municipal waste. This is because there is considerable disagreement as to whether waste rock, overburden or tailings should be categorised as waste. However, reporting levels could be expected to be higher, as waste storage facilities carry a risk of failure with possible long-term and catastrophic consequences. The management and control of tailings is therefore of critical importance and larger mining companies do evaluate and discuss this issue. However, as yet, no standards exist for the appraisal of risks associated with waste storage facilities, with the result that shareholders are unable to make comparisons of management quality. Responsible operators are therefore missing an opportunity to differentiate themselves from those that are less so.

Information disclosed by the FTSE All Share

Environmental policy, and provisions and liabilities are the most discussed environmental topics in the Annual Reports and Accounts of the mining sector (78%). Provision and liabilities are driven by financial reporting requirements (FRS12 see *Addressing Shareholders*) so disclosure is not voluntary. The occurrence of remediation (67%) in the top ten is characteristic for a sector that has to deal with long-term consequences of mining operations; the responsibility for the clean-up of contaminated sites increasingly lies with the operator.

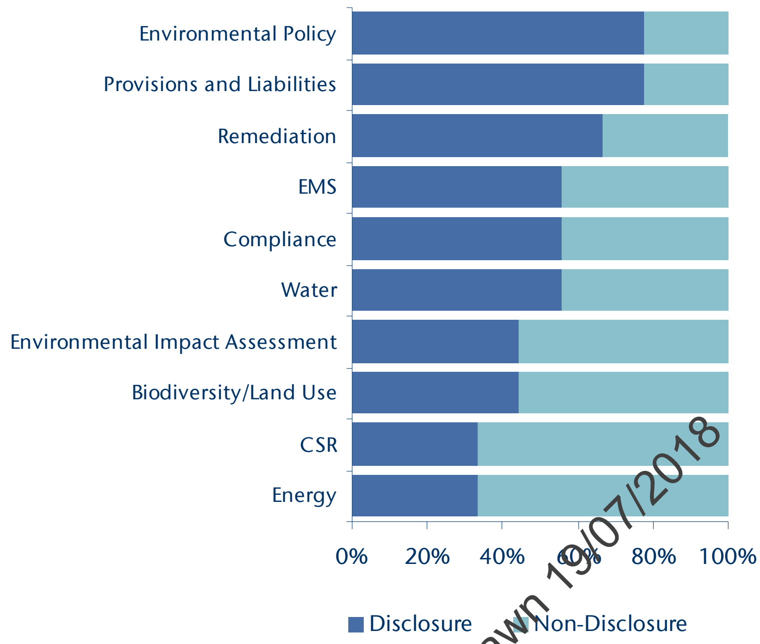


Figure 1. Top ten environmental topics in the Mining Sector (by percentage of FTSE All Share companies in the sector).

Where the information is reported in the Annual Report and Accounts

The majority of disclosures in the mining sector are made in the Operating and Financial Review and in a separate environment, health and safety or CSR section of the Annual Report and Accounts. BHP Billiton, for example, provides most statements on environmental topics in their HSEC Review, but also includes environmental matters when reviewing their operations. Many companies make disclosures on environmental matters in separate HSE/CSR sections within their Operating and Financial Review (for example Rio Tinto and Xstrata). Disclosures in Notes to the Accounts are generally provisions and liabilities relating to the closure of mines and remediation of environmental impacts after closure.

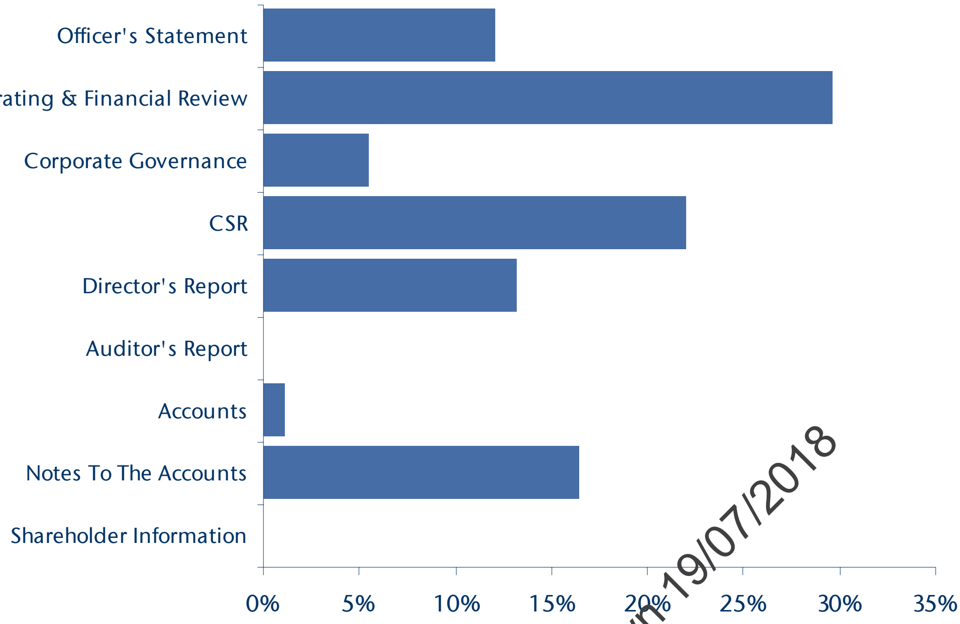


Figure 2. Location of environmental disclosures in the Annual Reports and Accounts of the Mining Sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
ANGLO AMERICAN PLC								○					○									○		○			✓
BHP BILLITON PLC			◑						○		○		○	○	○				○			○	○	○		○	✓
RIO TINTO PLC		○	○			○		○			○		○		○				◑			◑	○	◑	○	○	✓
XSTRATA AG		◑				○		○		○	●		○		○				○			○		○			✓
ANTOFAGASTA PLC		○		○																			○				
LONMIN PLC													○														✓
RANDGOLD RESOURCES LIMITED																						◑					

Oil & Gas

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

Index	Number of Companies
FTSE 100	3
FTSE 250	6
FTSE Small Cap	5
FTSE All Share	14

FTSE Sector Name	Oil and Gas
Total Turnover (Millions):	£197,645
Turnover as % of All Share:	16.8%
Number of Companies:	14
FTSE Description	Companies engaged in exploration for, and production of, mineral oil and gas . Providers of services, including drilling, for oil and natural gas exploration and production. Companies engaged in the exploration for, production, refining, distribution and supply of mineral oil and gas products.

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	100%	96%
FTSE Small Cap	100%	80%
FTSE All Share	100%	89%

Oil and gas activities involve a variety of environmental impacts from exploration to exploitation and downstream refining and processing. Seismic exploration, for example, brings with it disturbance of local wildlife and vegetation. Offshore production moves into increasingly deeper water and thus into more vulnerable ecosystems that have previously not been exposed to human activity.

Some of the main impacts arise during drilling operations, when drilling wastes and produced water are discharged into the sea. Drilling wastes are often polluted with drilling chemicals, and their physical and chemical effect on underwater life are not yet fully researched. Produced water, polluted with oil, hydrocarbons and chemicals, is a by-product of oil and gas extraction; volumes of produced water increase as resources are depleted. Technologies exist, however, to reduce discharges, one example being re-injection of drilling wastes or produced water into geological formations.

Energy use during oil and gas production, transport and downstream processing and refining is high, and thus combustion of fossil fuels results in air emissions. Another dominant source of air emissions in the oil and gas sector are venting and flaring of oil-associated gases.

Pipeline leaks and oil spills are highly visible environmental incidents with high but localised environmental impacts. For example, the Exxon Valdes oil spill in Alaska (1989) put the coastal ecosystem at risk. Pipeline leaks in the Niger Delta have immediate effects on environment and local communities.

Reporting levels in the oil and gas sector are high. All of the companies in the FTSE All Share make at least some form of environmental disclosure in their Annual Reports and Accounts, which is encouraging, as this is a high impact sector.

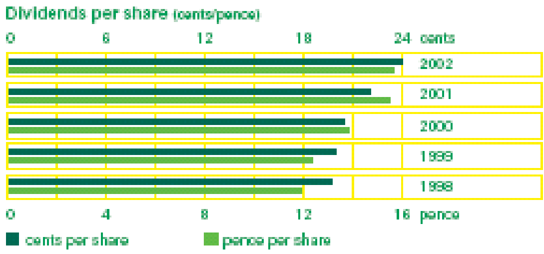
Sector Impacts and reporting in the FTSE 350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	High	High	High	High	High
Disclosure	0%	33%	44%	11%	11%

The oil and gas sector has high impacts throughout, but the reporting levels on the impacts analysed here do not reflect this adequately. Disclosures on climate change are high relative to other FTSE 350 companies at 44%; but only 33% of FTSE 350 companies in the sector report on water, and 11% on waste and other environmental impacts. Being a sector that is active in the exploitation of fossil fuel resources, the lack of reporting on natural resource use is striking. There was a high level of quantitative disclosure, however for the FTSE 100 companies, BG Group Plc, Shell Transport and Trading Company Plc and BP Plc.

BP Plc provides a breakdown of their key performance indicators in Case study 2 on page 3 of their Annual Report and Accounts – next to their dividend per share performance.

Case study 2: BP Plc, 2002, Operating and Financial Review



Environmental performance

	2002 BP	2002 underlying[a]	2001 BP
Greenhouse gas emissions (million tonnes)[b]	82.4	79.3	80.5
Total number of spills (>1 barrel)[c]	761	742	810[d]
Percentage of major operations with ISO 14001[e]	92	94	73

[a] BP operations excluding Veba.
[b] BP share of emissions of carbon dioxide and methane, expressed as an equivalent mass of carbon dioxide.
[c] 1 barrel = 159 litres = 42 US gallons.
[d] 2001 data has been restated to include all spills, whether the spill reached land or water or was contained.
[e] ISO 14001 is an international environmental management standard.

Information disclosed by the FTSE All Share

Disclosures on general CSR issues and environmental policies are at the top of the list of reported topics in the oil and gas sector (79%), showing a similar trend as the FTSE All Share overall. EMSs are reported by 43% of companies. As is the case for many other sectors, information on the implementation of environmental policies and performance measurement seems of lower importance than communicating that the policies exist. Environmental targets do not even appear in the top ten reported subjects.

Provisions and liabilities are also high up on the list, which is to be expected in a sector that has to deal with environmental remediation of its sites (such as refineries, oil fields, service stations).

Surprisingly, despite the high level of environmental impact and regulation, disclosures on waste, water and climate change specifically, issues relevant to every company according to Defra environmental reporting guidelines, are only reported on by three of the 14 companies in the sector within their Annual Reports and Accounts. Overall, environmental reporting in the FTSE All Share oil and gas sector in Reports and Accounts is disappointingly shallow although it is acknowledged that the largest companies in this sector often produce separate environmental reports that contain much useful information.

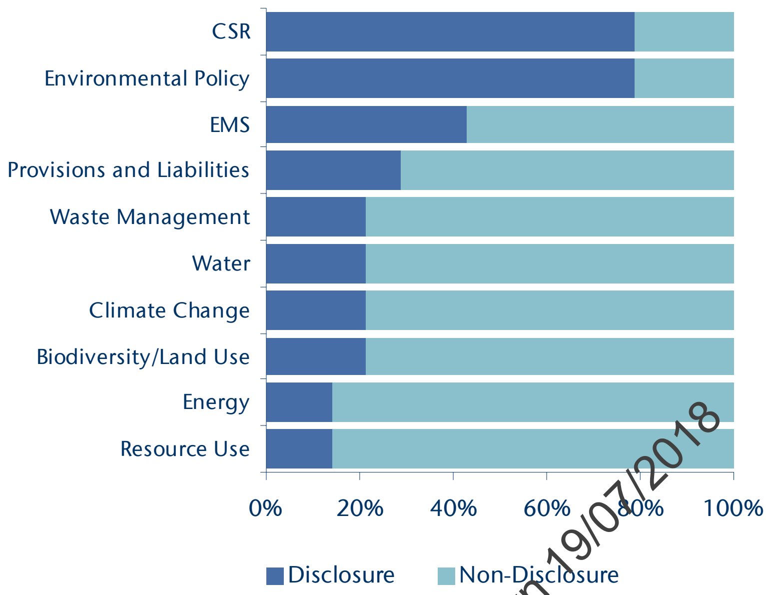


Figure 3. Top ten environmental topics in the Oil & Gas Sector (by percentage of FTSE All Share companies in the sector).

Where the information is reported in the Annual Report and Accounts

As is typical in almost all sectors, the majority of disclosures in the oil and gas sector are made in a separate HSE or CSR section. There is some disclosure in the operating and financial reviews (22%) although almost all of these disclosures (11 out of 14) were made by BP Plc and Shell Transport and Trading Company Plc.. There is a risk that HSE / CSR sections in Annual Report and Accounts are overlooked by investors and implicitly weaken the link between shareholder value and environmental performance. It will be interesting to see whether levels of disclosure increase when the OFR regulation comes in and whether disclosures in HSE / CSR sections change so as not to conflict with statements in the OFR.

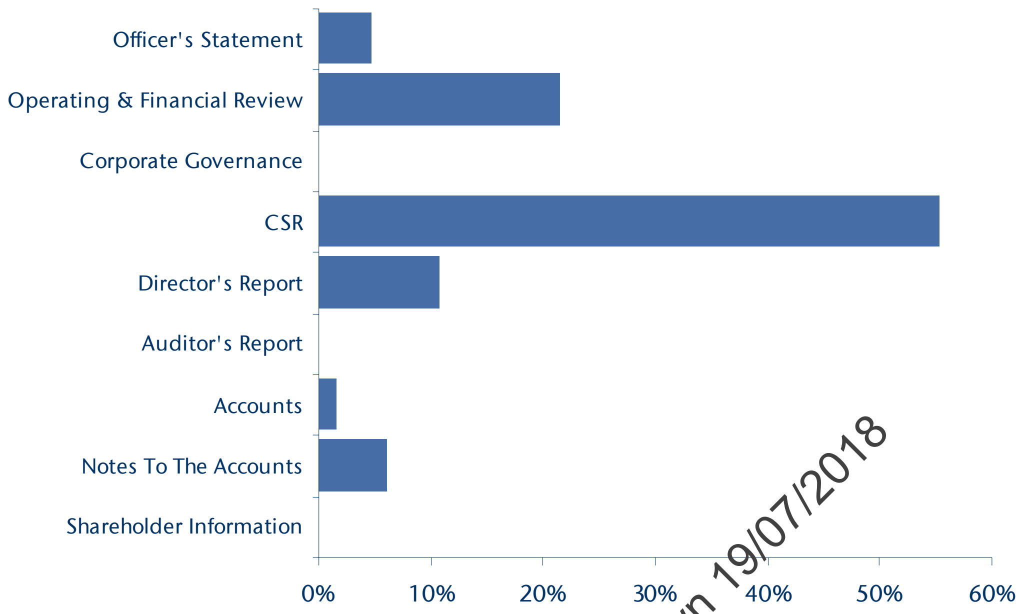


Figure 4. Location of environmental disclosures in the Annual Reports and Accounts of the Oil & Gas Sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
BG GROUP PLC						○		○			○		○		○							●				○	✓
BP PLC			◑	◑		◑		○		○	◑		○	○	◑							◑				○	✓
SHELL TRANSPORT AND TRADING COMPANY PLC		◑				◑					○		○			○						◑		○		○	✓
ABBOT GROUP PLC		○									○	○														○	✓
CAIRN ENERGY PLC																										○	✓
JOHN WOOD GROUP PLC		○	○								○		○												○	○	✓
PALADIN RESOURCES PLC																											✓
PREMIER OIL PLC													○													○	✓
TULLOW OIL PLC											○		○													○	✓

Chemicals

FTSE Sector Name	Chemicals
Total Turnover (Millions):	£16,545
Turnover as % of All Share:	1.4 %
Number of Companies:	11
FTSE Description	Producers of commodity and industrial chemicals, industrial gases and fibres. Producers of cellular polymers and specialist plastics. Manufacturers of polyethylene and other plastic packaging materials. Producers of fine chemicals, dyestuffs and chemicals for specialised applications. Biotechnology products not classified elsewhere.

Index	Number of Companies
FTSE 100	3
FTSE 250	4
FTSE Small Cap	4
FTSE All Share	11

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	100%	96%
FTSE Small Cap	75%	80%
FTSE All Share	91%	89%

All FTSE 100 and 250 chemical companies make some kind of disclosure on the environment, as do all but one of the FTSE All Share chemical companies, the exception being Dyson Group[3] who make no reference to any environmental topic.

The chemical sector has a high level of regulation, primarily IPC and IPPC and REACH regulations on operations in the UK and EU. Because of the risks associated with industrial scale chemical processes, operations require strict health, safety and environmental management systems to control these risks. The industry has implemented Responsible Care®, an integrated approach to reducing environmental impacts beyond the level required by regulation, including management systems and performance measurement.

While fines can be small – often less than £10,000 - the small risk of catastrophic failure as in the case of the explosion at the AZF chemical factory in Toulouse in September 2001 with 29 fatalities[4], or the large clean-up costs associated with contaminated land, results in environmental issues being a significant factor for investors. This is acknowledged in high reporting levels.

[3] The chemicals manufacturer not the household products manufacturer
[4] ENDS Report 321 October 2001

Sector impacts and reporting in the FTSE350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	High	High	Medium	High
Disclosure	14%	57%	71%	57%	57%

Chemicals companies have controlled (and accidental) emissions to water and will often abstract water for cooling and solvent use. Four of the FTSE 350 chemicals companies (57%) report on water. The majority of chemical companies (71%) report on climate change. Greenhouse gas emissions are primarily from energy use, which can be intensive for some processes but can also be a direct output of some processes. The issue is not necessarily the volume of waste produced by chemical processes but its often hazardous nature, which leads to high disposal costs and recycling difficulties. As a result of regulatory and cost pressures chemicals companies tend to control waste and hazardous waste very tightly. Despite this only four out of seven FTSE 350 companies (57%) report on the issue.

The chemical sector has other environmental impacts that are very diverse. The REACH regulations apply to over 30,000 chemicals. Many emissions are permitted but controlled, which requires monitoring and measurement. Again, despite the availability of data, only four out of seven FTSE 350 chemicals companies (57%) disclose this information in their Annual Reports and Accounts.

Information disclosed by the FTSE All Share

All FTSE All Share chemicals companies that make disclosures on environmental topics have an environmental policy that is published in their Annual Report and Accounts. Other commonly reported issues are water, waste management and climate change and, in contrast with most other sectors, environmental targets. The global chemical industry's Responsible Care® programme is a possible reason for this.

A number of high profile accidents, in particular the explosion at the AZF plant described above or the explosion Union Carbides' plant in Bhopal (now owned by Dow Chemical), have made investors and analysts wary of poor environmental management and safety records as they can result in business interruption, licensing problems, litigation and fines. These concerns probably lead to relatively high disclosure levels on environmental policy, targets, EMSs, compliance and impact assessments. A typical disclosure is given in Case study 3 for ICI.

Case study 3: ICI Plc, Annual Report and Accounts 2002

Violations of environmental, health and safety and other laws, regulations and standards could restrict the Group's operations, expose it to liability, increase its costs and have an adverse effect on its results of operations, cash flow and financial condition.

ICI is subject to a broad range of laws, regulations and standards in each of the jurisdictions where it operates, relating to pollution, the health and safety of employees, protection of the public, protection of the environment and the generation, storage, handling, transportation, treatment, disposal and remediation of hazardous substances and waste materials. These regulations and standards are becoming increasingly stringent.

It is the Group's policy to require that its subsidiaries comply with relevant laws, regulations and standards. However, violations of applicable laws, regulations and standards, in particular provisions of environmental, health and safety laws (including spills or other releases of hazardous substances to the environment) or of permit or approval requirements, could result in restrictions on the operation of the Group's facilities, +damages, fines or other sanctions, increased costs of compliance as well as reputational damage. ICI is also subject to environmental laws and regulations, principally in respect of soil and groundwater remediation, that in the future may require it to take action to correct effects on the environment of prior disposal or release of chemical substances by the Group or other parties.

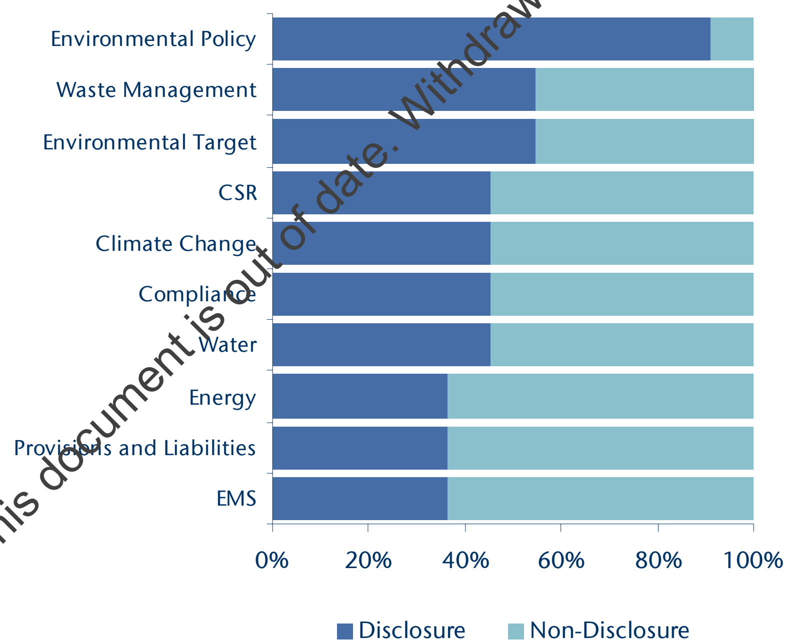


Figure 5. Top ten environmental topics in the Chemicals sector (by percentage of FTSE All Share companies in the sector).

Where the information is reported in the Annual Report and Accounts

61% of environmental disclosures in the Annual Reports and Accounts of chemical companies in the FTSE All share are made in an environment, health and safety or CSR section. 18% are reported in the Operating and Financial Review and around 5% in the notes to the Accounts (generally decommissioning costs).

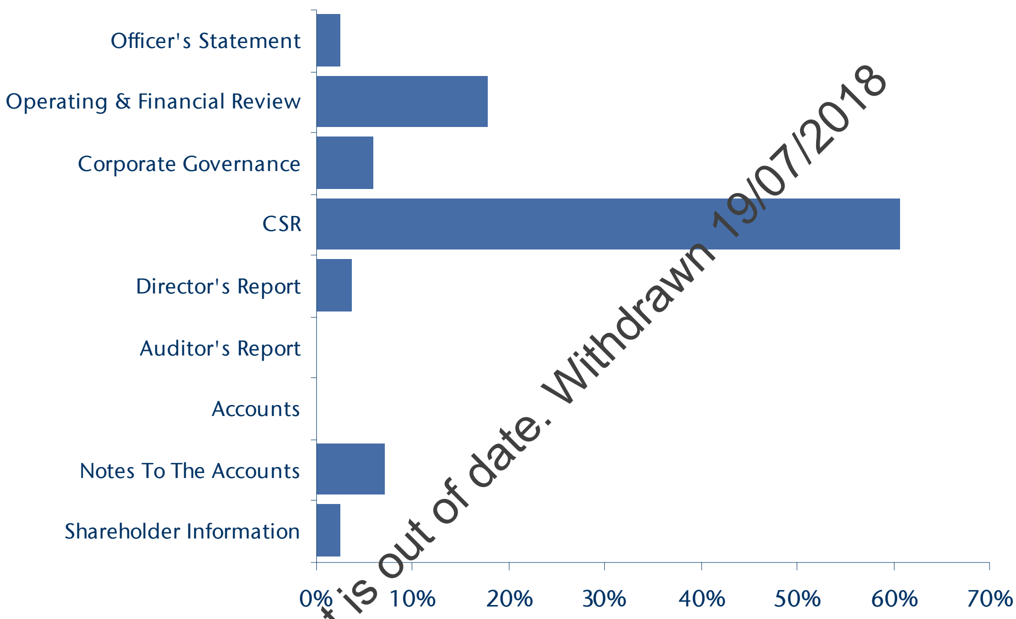


Figure 6. Location of environmental disclosures in the Annual Reports and Accounts of the Chemicals sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
BOC GROUP PLC (THE)		○	○	◑		◑				◑	○	◑	◑			◑			◑			○		○		○	✓
IMPERIAL CHEMICAL INDUSTRIES PLC	○	○	○		○	○					○		○			○			●			◑	○			○	✓
JOHNSON MATTHEY PLC	◑	◑		○							○	○	○			○		○							○	○	✓
BRITISH VITA PLC			○		○	◑						○	○						○								✓
CRODA INTERNATIONAL PLC		◑	●	◑		○			○		○		○						◑			◑		○			✓
VICTREX PLC					○	○						○	○						○								
YULE CATTO & CO. PLC				○			◑					◑								●						○	

Construction and Building Materials

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Construction and Building Materials
Total Turnover (Millions):	£61,477
Turnover as % of All Share:	5.2 %
Number of Companies:	40
FTSE Description	Wholesalers of building materials and timber importers. Producers of materials used in the construction and refurbishment of buildings and structures and refractory materials. Constructors of residential buildings. Constructors of non-residential buildings. Infrastructure contractors and providers of services to construction.

Index	Number of Companies
FTSE 100	2
FTSE 250	25
FTSE Small Cap	13
FTSE All Share	40

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	100%	96%
FTSE Small Cap	92%	80%
FTSE All Share	98%	89%

It is encouraging that all 27 Construction and Building Materials companies in the FTSE 350 disclose information on environmental issues. Disclosure levels are almost as high for the 13 FTSE Small Cap Construction and Building Materials companies - 92% compared with 80% for the FTSE Small Cap overall.

The Construction and Building Materials sector is subject to a wide range of environmental regulations. There are a number of trade bodies representing the various activities of companies in this sector, and sustainability strategies have been published by many of these, for example by the Institution of Civil Engineers (ICE)[5], or the British Ceramic Confederation and Brick Development Association.

[5] http://www.ice.org.uk/about_ice/aboutice_sustainability.asp

Sector impacts and reporting in the FTSE 350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	High	Medium	High	High	Medium
Disclosure	26%	41%	48%	56%	11%

The environmental impacts of construction companies are quite distinct from those of the building materials manufacturers. The main environmental issues for constructors from an impact and regulatory perspective are waste and transport. Waste from construction and demolition materials and soil amounts to 70 million tonnes per year in the UK.[6] The environmental impacts of building materials suppliers, on the other hand, can range from land use and biodiversity (indicated by natural resource use) through quarrying activities, to climate change from intensive energy use and, in the case of cement production, CO_2 from the chemical process itself. Water abstraction is primarily linked to quarrying, and occasionally to construction activities. Reporting levels in the FTSE 350 construction and building materials companies reflect their impacts to some degree, with 56% of them reporting on waste, 48% reporting on climate change and 41% reporting on water, a medium impact in this sector.

Information disclosed by the FTSE All Share

78% of FTSE All Share companies in the construction sector disclose their environmental policy, 43% of companies disclose information on environmental management systems, and 30% disclose information on environmental targets. In common with most sectors there is a substantial gap between reporting the existence and content of environment policies and reporting progress towards the targets that such policies should include.

[6] DTI, Sustainable Construction Brief, April 2004

Case study 4: Alfred McAlpine Plc, Annual Report and Accounts 2002

Commitment

We will collect data on our greenhouse gas emissions, water consumption and waste, in line with Government policy. We may do so initially on a sample basis only, to test data collection systems before extending the programme across the Group. We will include this data in our next SHE Report.

Results

We collected data against each of these key performance indicators on six of our operating contracts as a pilot scheme. We were also able to collect data on CO2 emissions for our company car fleet. The data acquired is useful in learning about the individual sites and contracts, but it is not yet generally informative about our Group position. We will continue to monitor these KPIs on a wider scale during 2003 and will publish improved data in our 2003 report.

Case study 4 shows the processes that Alfred McAlpine Plc is putting in place to develop management processes and key performance indicators.

Biodiversity and land use are reported by 63% of construction and building materials companies in the FTSE All Share. Reporting levels on energy are surprisingly low at 30% given the energy intensive nature of the industry.

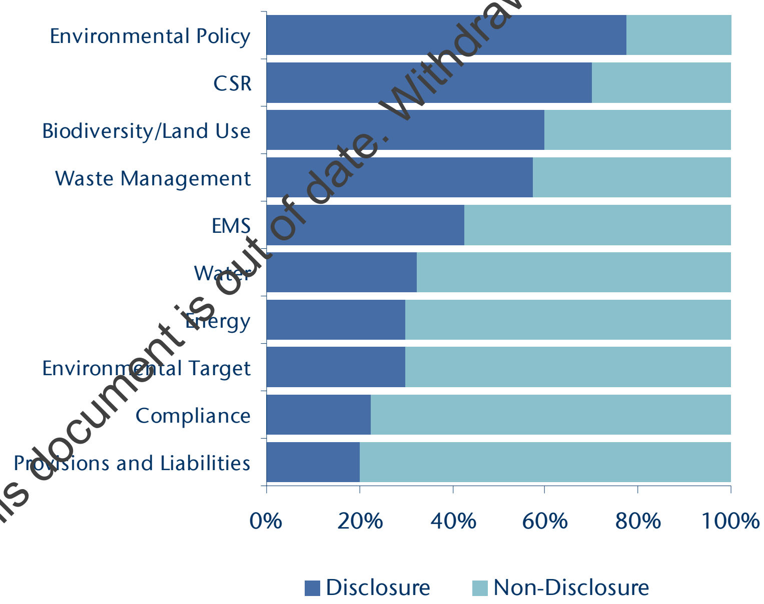


Figure 7. Top ten environmental topics in the Construction and Building Materials sector (by percentage of FTSE All Share companies in the sector.

Where the information is reported in the Annual Report and Accounts

The majority of disclosures for the sector (62%) are made in an environment, health and safety or CSR section of the Annual Reports and Accounts. The Directors' Report (13%), Operating and Financial Review (11%), and Officer's Statement (11%) are much less likely to contain environmental information.

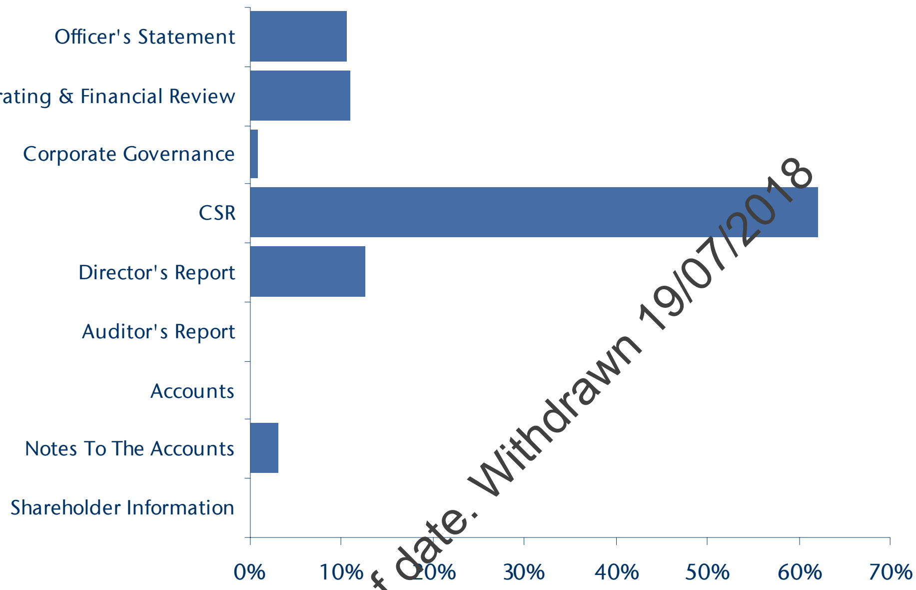


Figure 8. Location of environmental disclosures in the Annual Reports and Accounts of the Construction and Building Materials sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
HANSON PLC								○					○							○		○				○	✓
WOLSELEY PLC	○	○		○				○			○		○									◑				●	✓
AGGREGATE INDUSTRIES PLC	◑	○										○	○								○	○				○	✓
ALFRED MCALPINE PLC				○		○		○			○	○	○											○			✓
AMEC P.L.C.								◑																		●	✓
BALFOUR BEATTY PLC																										○	✓
BARRATT DEVELOPMENTS PLC			○	○				◑					○													○	✓
BELLWAY P.L.C.		○		○		○		◑	○			○	○		○									○		○	✓
BERKELEY GROUP PLC (THE)								◑																		●	✓
BOVIS HOMES GROUP PLC								○					○							○						○	✓
BPB PLC		○	◑	◑		●		◑				◑	○		○				○			◑					✓
CARILLION PLC	○			●		◑		◑					○													○	✓
CREST NICHOLSON PLC													○													○	✓
GEORGE WIMPEY PLC								○	○				○													○	✓
MARSHALLS PLC	○		◑	○	○			○			○	○	○		○				○							○	✓
MCCARTHY & STONE PLC	○	○		○				○	○	○			○						○	○						○	✓
NOVAR PLC				○							○		○					○				○				○	✓
PERSIMMON PLC								○				○	○		○											○	✓
PILKINGTON P.L.C.													○													○	✓
REDROW PLC	○	○	○	○				◑			○	○	○													○	✓
RMC GROUP P.L.C.		○	○			○		○	○		○	○	◑						○			◑		○		○	✓
SIG PLC	○	○	○	○				○		○																○	
TAYLOR WOODROW PLC				◑				◑			○								○							○	✓
TRAVIS PERKINS PLC		○	○	◑		◑				○	○	○	○			○		○	○							○	✓
ULTRAFRAME PLC			○								○		○														✓
WESTBURY PLC		○	○	○				◑	○				○		○												✓
WILSON BOWDEN PLC		○	○	○				○			○		○					○	○					○		○	✓

Forestry & Paper

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Forestry & Paper
Total Turnover (Millions):	£1,479
Turnover as % of All Share:	0.1 %
Number of Companies:	1
FTSE Description	Owners and operators of timber tracts, forest tree nurseries, sawmills. Producers, converters and merchants of all grades of paper.

Index	Number of Companies
FTSE 100	0
FTSE 250	1
FTSE Small Cap	0
FTSE All Share	1

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	N/A	96%
FTSE 250	100%	96%
FTSE Small Cap	N/A	80%
FTSE All Share	100%	89%

There is only one FTSE company in the forestry and paper sector, DS Smith Plc, so no general statements on this sector can be made. This sector has a large impact on the environment through logging and paper production. DS Smith Plc is a paper and packaging producer, and although it does not have direct impacts from logging it is indirectly exposed via its use of pulp. There are major environmental issues arising from energy use, water use, emissions to water and waste. The UK and European pulp and paper companies are primarily regulated by the IPC and IPPC regulations which require specific management techniques and abatement technologies and the reporting of emissions to national pollution inventories.

Sector impacts and reporting in the FTSE350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	High	High	High	High	High
Disclosure	100%	100%	100%	100%	0%

Forestry and paper production are direct users of wood and water, and as a consequence have a high natural resource use. Although DS smith is not a primary producer of wood it is obviously highly dependent on this natural resource and discusses the use of recycled material as a means of reducing its raw material inputs. Paper production uses large amounts of energy and water - as described in Case study 5, DS Smith's paper production accounts for most (85-90%) of their CO2 emissions and water use. Wastes from logging and paper production typically consist of wood from forestry and sludge from paper mills that contains wood based compounds, suspended solids, and nutrients that encourage algal growth. These give the sector high impact levels for waste and other environmental impacts, and although DS Smith does not specifically discuss these issues it does discuss the processes and management it has in place to deal with emissions.

Information disclosed by the FTSE All Share

DS Smith Plc, the only FTSE All Share company in the sector, reports on its environmental policy in combination with environmental targets and environmental management system (in this case, ISO 14001) and performance measures. It is likely that this high level of integration between the environmental and general management of the company is as a result of the extent of IPPC regulations on the paper and pulp industry in Europe which necessitates good internal management systems and high levels of reporting to the regulators' pollution inventories.

The company reports on its own major impacts, climate change, water and waste, the latter of particular importance with the Producer Responsibility Obligations (Packaging Waste) Regulations. The company also discusses its engagement with its supply chain on environmental issues. No graph is provided because with only one company in the sector, the analysis of the percentage of companies reporting on each issue is not meaningful.

Case study 5: DS Smith Plc, Annual Report and Accounts 2002/2003

Paper manufacturing has the largest environmental impact of all the Group's operations. It accounts for approximately 85% of the Group's total CO2 emissions and approximately 90% of water usage. Performance measures are well established in the nine paper mills and six of them have ISO 14001 certification. The UK mills are regulated through Pollution Prevention and Control (PPC) permits under which they each have specific improvement programmes and targets...While the paper mills and some other major sites have monitored key environmental performance data for some years and set targets for improvement, data for all the Group's sites has not previously been collated. The Group's businesses are now all required to report on energy usage, carbon dioxide (CO2) emissions, water usage, waste disposed of to landfill and waste recycled. This information is being monitored at divisional and Group level and improvement targets are increasingly being set across the Group. This will enable the Group to report more fully on its environmental performance and progress in future years.

Where the information is reported in the Annual Report and Accounts

Most of DS Smith Plc's disclosures are in the CSR section of its Annual Report and Accounts (79%), with the remainder of them in the Operating and Financial Review section (21%). Disclosures in the Operating and Financial Review relate to compliance with the UK Packaging Waste Regulations and certain issues surrounding the value of Packaging Recovery Notes which were subject to trading irregularities. However although DS Smith has extensive disclosure in its CSR section, environmental issues are clearly integral to DS Smith's license to operate and there is very little mention of them in its Operating and Financial Review.

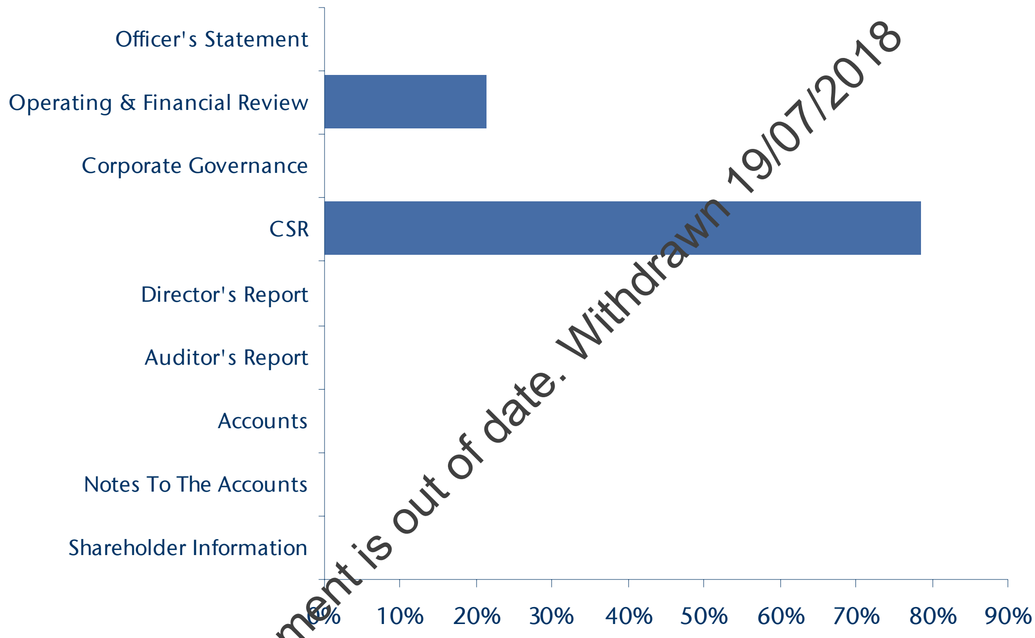


Figure 9. Location of environmental disclosures in the Annual Reports and Accounts of the Paper & Forestry sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
DS SMITH PLC	◑	○	○	●		◑					○	◑	○		◑			○	○							●	✓

Steel & Other Metals

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Steel & Other Metals
Total Turnover (Millions):	£7,953
Turnover as % of All Share:	0.7%
Number of Companies:	1
FTSE Description	Metal traders or producers of primary non-ferrous metal products, encompassing all processes from smelting to alloying, rolling and drawing. Steel stockholders or manufacturers of primary iron and steel products, encompassing all processes from smelting in blast furnaces to rolling mills and foundries.

Index	Number of Companies
FTSE 100	0
FTSE 250	1
FTSE Small Cap	0
FTSE All Share	1

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	N/A	96%
FTSE 250	100%	96%
FTSE Small Cap	N/A	80%
FTSE All Share	100%	89%

Steel manufacture in Europe generally, and in the UK in particular has declined and consolidated over the past two to three decades in the face of stiff international competition particularly from Asia. Many steel manufacturing operations are now based close to the source of the raw materials (primarily iron ore) and there is some evidence of operations being located in regions where environmental regulation is less stringent.

This sector only contains one company, Corus Group, therefore the sample size is insufficient to allow for any general statement on the industry. Health, safety and the environment have become a major focus for investors looking at the sector in the past few years with the imminence of the EU emissions trading scheme, and more generally the Kyoto Protocol, and disasters such as the explosion at Corus's Port Talbot works in November 2001 in which three people died. The former can result in significant capital expenditure to pay for abatement or emissions allowances, the latter can result in fines, operational down-time and litigation.

Sector impacts and reporting in the FTSE350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	High	High	High	High
Disclosure	0%	0%	100%	0%	0%

Steel is an alloy of iron with small amounts of carbon, and its use as construction material has been growing rapidly. The inputs to the manufacturing process are primarily energy in the form of electricity and fossil fuels for production, heating, and transportation, and raw materials such as iron and other metals and minerals (for alloys).

Outputs from the process include waste, emissions to air (from energy use and smelting, and machining of the product), and emissions to water (surface treatments and cleaning of steel products). Chemicals and oils are used in the production process which may lead to contamination if not managed adequately.

Out of the environmental impacts associated with the Steel industry, Corus Group Plc only report on climate change. It does so in the context of the climate change levy that was introduced in the Finance Act 2000.

Information disclosed by the FTSE All Share

The 14 disclosures made by Corus are predominantly related to the operational and financial issues arising from environmental impacts and regulations and Corus's management of those issues. As such these disclosures cover topics such as contaminated land, environmental taxes, environmental policies and management systems. No graph is provided because with only one company in the sector, the analysis of the percentage of companies reporting on each issue is not meaningful. An example is given in Case study 6.

Case study 6: Corus Group Plc Annual Report and Accounts 2002

The climate change levy was introduced in the Finance Act 2000...Corus has signed a negotiated agreement with the UK government allowing Corus to claim an 80% reduction in the amount of such tax up to the end of 2002. To receive the 80% reduction for the 2003 and 2004 periods, Corus will have to prove that it met certain energy efficiency targets in the milestone year of 2002. The agreement allows for a variation of the already agreed 2002 and future targets if, in the milestone year, throughput falls below 90% of the level of 1999. This variation has been triggered for 2002 and negotiations continue with the UK government to ensure Corus can continue to receive the 80% reduction. The reduction is worth approximately £28m per annum to Corus.

Where the information is reported in the Annual Report and Accounts

More than half (58%) of Corus's disclosures are made in the Operating & Financial Review. This is a strength of Corus's reporting and is driven by their corporate philosophy as shown in Case study 7. The statement in the case study is from the Directors Report, and the company explicitly links its environmental impacts to the financial performance of the business explaining why the management of environmental issues is a significant factor in the overall financial performance of the business. Disclosures in the Notes to the Accounts relate to potential liabilities as a result of the Port Talbot blast and the Climate Change Levy as described in Case study 6.

Case study 7: Corus Group Plc Annual Report and Accounts 2002

Corus believes that the incorporation of environmental and social factors as well as economic factors, within its business planning and reporting, adds to the sustainability of its business products and services through the management of risks, improved stakeholder confidence and brand positioning.

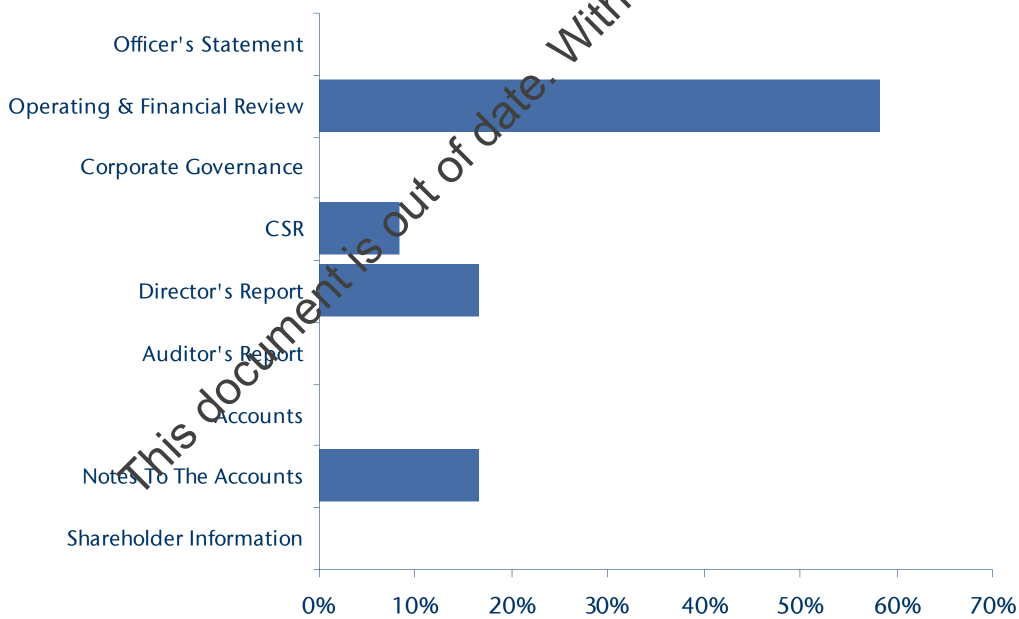


Figure 10. Location of environmental disclosures in the Annual Reports and Accounts of the Steel sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
CORUS GROUP PLC			◑					○	○		○		○						○	●						●	✓

Aerospace & Defence

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Aerospace & Defence
Total Turnover (Millions):	£19,735
Turnover as % of All Share:	1.7%
Number of Companies:	10
FTSE Description	Manufacturers and assemblers of aircraft, equipment and aircraft parts primarily used in commercial or private air transport. Producers of components and equipment for the defence industry.

Index	Number of Companies
FTSE 100	3
FTSE 250	4
FTSE Small Cap	3
FTSE All Share	10

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96 %
FTSE 250	100%	96 %
FTSE Small Cap	33%	80 %
FTSE All Share	30%	89 %

The main environmental impacts related to the Aerospace and Defence sector result from the use of toxic and persistent materials in the manufacture of electronics, hi-tech materials and weapons and the energy used to in the manufacturing process. Whilst the larger Aerospace and Defence companies all make disclosures, two of the three Small Cap companies, Chemring and Umeco, make no disclosures at all. Initiatives from the sector to reduce environmental impacts have tended to focus on reducing aircraft emissions rather than minimising operational and production impacts. The Society of British Aerospace Companies has joined a coalition to find solutions to the environmental impacts of air travel in general[7].

[7] http://www.sbac.co.uk/greener.htm

Sector impacts and reporting in the FTSE 350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	Medium	Medium	Medium	Low
Disclosure	0%	43%	43%	71%	14%

71% of FTSE 350 aerospace companies report on waste, which is significantly more likely than companies in other sectors. As observed with other sectors, reasons for high reporting on waste compared to other impact types may be due to ease of measurement and the existence of landfill tax regulation. Disclosures levels on water and climate change are similar to other FTSE sectors.

Information disclosed by the FTSE All Share

Disclosure on the implementation of environmental policies and performance measurement is more prevalent in the aerospace and defence sector than in many others: 80% of aerospace companies report on their environmental policy; 50% report on their EMS, and 20% on environmental targets. While some companies in the sector make disclosures on all the major environmental issues, environmental policy, waste and EMSs are the only subjects that are disclosed by 50% or more.

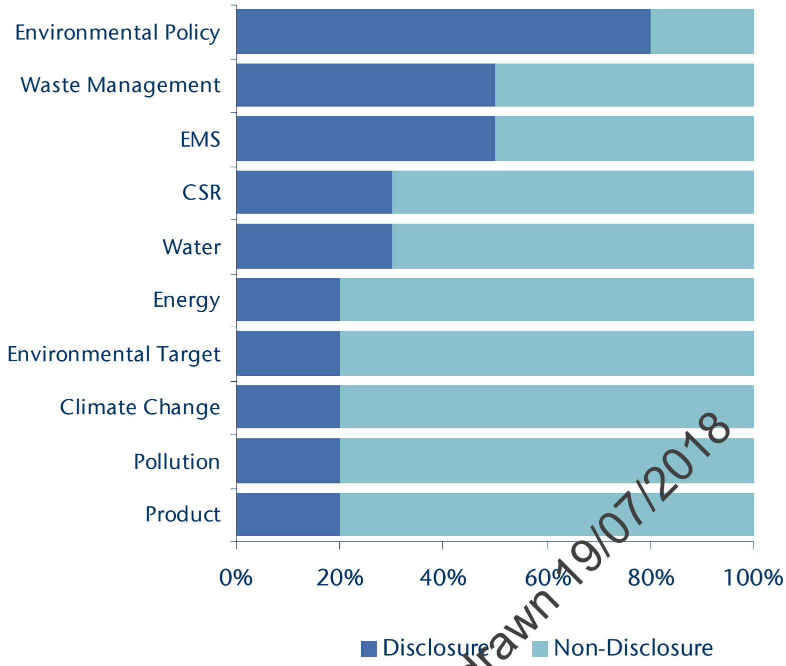


Figure 11. Top ten environmental topics in the Aerospace & Defence sector (by percentage of FTSE All Share companies in the Aerospace & Defence sector).

Where the information is reported in the Annual Report and Accounts

The location of disclosures in Annual Reports and Accounts of the Aerospace and Defence sector does not follow the general trend in the FTSE All Share. The majority of disclosures (59%) are made in Director's report, followed by disclosures in CSR sections (27%). However, there is minimal disclosure in the operating and financial reviews (2% only). The preponderance of information in the Directors Report is because most of the disclosures relate to the companies' policies towards and management of environmental issues. Corporate policies are generally discussed in the Directors Report rather than elsewhere in the Annual Report and Accounts. An example is given in Case study 8.

Case study 8: Cobham Plc, Annual Report and Accounts 2002

The group has adopted an environmental policy under which it is committed to meeting legislative requirements, to the prevention of pollution and to the continuous improvement of its environmental performance. The chief executive has been appointed as the main board member with overall environmental responsibility whilst, at the operating company level, the responsibility for ensuring compliance with the environmental policy lies with the appropriate subsidiary board. The Cobham environmental steering group is chaired by the chief executive, supported by the director of special projects and environmental representatives from each of the sub-groups. Its role is to ensure the implementation of policy, major initiatives and the regular reporting of environmental measures.businesses are now all required to report on energy usage, carbon dioxide (CO2) emissions, water usage, waste disposed of to landfill and waste recycled. This information is being monitored at divisional and Group level and improvement targets are increasingly being set across the Group. This will enable the Group to report more fully on its environmental performance and progress in future years.

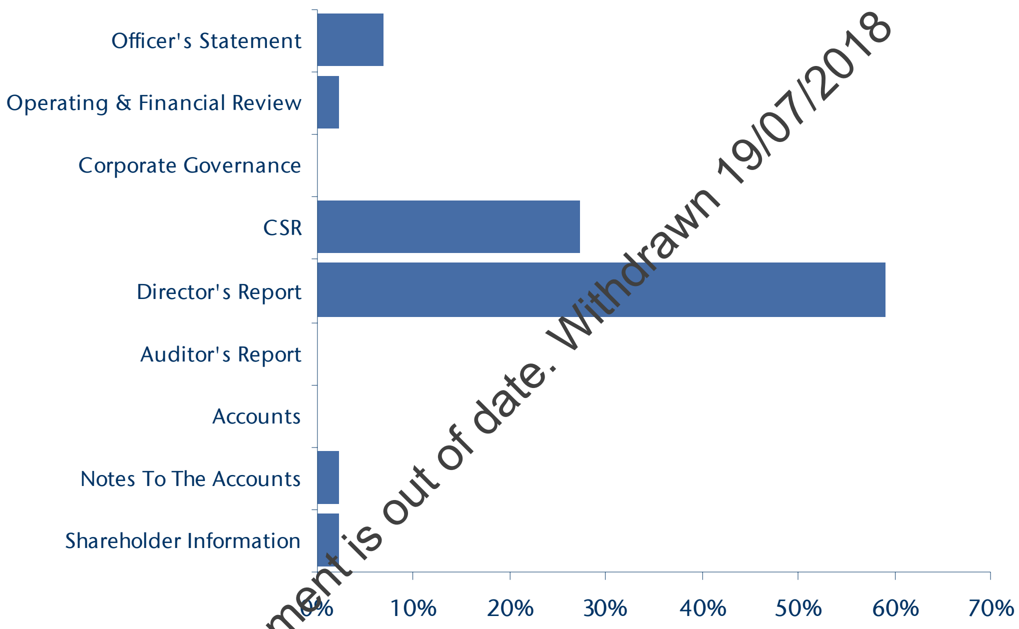


Figure 12. Location of environmental disclosures in the Annual Reports and Accounts of the Aerospace & Defence sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
BAE SYSTEMS PLC			●	○	●	●			○		○		○													○	✓
ROLLS-ROYCE GROUP PLC				◑		○				○	○	○	○			○			○							○	✓
SMITHS GROUP PLC													○									○					✓
COBHAM PLC		○	○	○							○		○		○												
MEGGITT P.L.C.		○		◑							○		○													○	
ULTRA ELECTRONICS HOLDINGS PLC													○														
VT GROUP PLC		○		○	○											○		○									

Electronic and Electrical Equipment

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Electronic and Electrical Equipment
Total Turnover (Millions):	£7,662
Turnover as % of All Share:	0.7%
Number of Companies:	13
FTSE Description	Producers, and distributors of industrial electrical components and equipment. Producers, and distributors of industrial electronic components and equipment not classified elsewhere.

Index	Number of Companies
FTSE 100	0
FTSE 250	4
FTSE Small Cap	9
FTSE All Share	13

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	N/A	96 %
FTSE 250	75%	96 %
FTSE Small Cap	100%	80 %
FTSE All Share	92%	89 %

Electronic and electrical equipment production requires large amounts of energy and water together with chemicals which are often persistent and toxic. For example, for 2g computer chip requires 1.5Kg of fossil fuels, 32ltrs of water and 75g of chemicals. In addition, every year householders and commercial groups in the UK discard an estimated 1 million tonnes of waste electronic and electrical equipment[8] incorporating persistent and toxic chemicals. This has resulted in the introduction of the EU Restriction of Hazardous Substances in Electrical and Electronic Equipment (ROHS) Directive and Waste Electrical and Electronic Equipment (WEEE) Directive both of which will be implemented at a national level over the next three years. ROHS is designed to ban the use of lead, mercury, cadmium, hexavalent chromium, PBBs and PBDEs in electrical and electronic goods to minimise the environmental impact on disposal (PBBs and PBDEs can take several thousand years to decompose). WEEE is designed to make producers responsible for final disposal of their products. This emphasis on producer responsibility has had

[8] http://www.wasteonline.org.uk/resources/InformationSheets/ElectricalElectronic.htm

a significant impact on the industry recently with potential annual costs of £217m to £455m in the UK alone[9].

Only one company in this sector does not make any form of disclosure, all FTSE Small Cap companies (how many?)disclose some information on environmental topics, a higher level than in the FTSE 250.

Sector impacts and reporting in the FTSE350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	Medium	Low	Low	Low
Disclosure	25%	75%	25%	50%	25%

The toxic substances found in electrical and electronic equipment include lead, cadmium, chromium VI, mercury, PBBs, PBDEs and PVC – all materials covered by ROHS. While the production process may not lead to large amounts of waste, there is major problem with the end of life disposal of the product. Producers of electrical and electronic equipment are responsible for a proportion of the post-consumer waste under WEEE. It seems that disclosure of waste management is driven by this regulatory environment for FTSE 350 electrical and electronic equipment manufacturing companies.

Information disclosed by the FTSE All Share

[9] Partial regulatory impact assessment on directive 2002/96/ec of the European Parliament and of the Council on waste from electrical and electronic equipment (WEEE directive) DTI, March 2003

While most companies have an environmental policy there is little disclosure on other issues given the potential costs and business issues associated with ROHS and WEEE. Unsurprisingly, waste is the main environmental impact discussed (five companies) followed by water (four companies), energy and climate change are not discussed by the majority of companies. Only Renishaw Plc explicitly refers to WEEE regulation. This low level of disclosure is surprising given that the compliance costs of the WEEE regulation are expected to be significant.

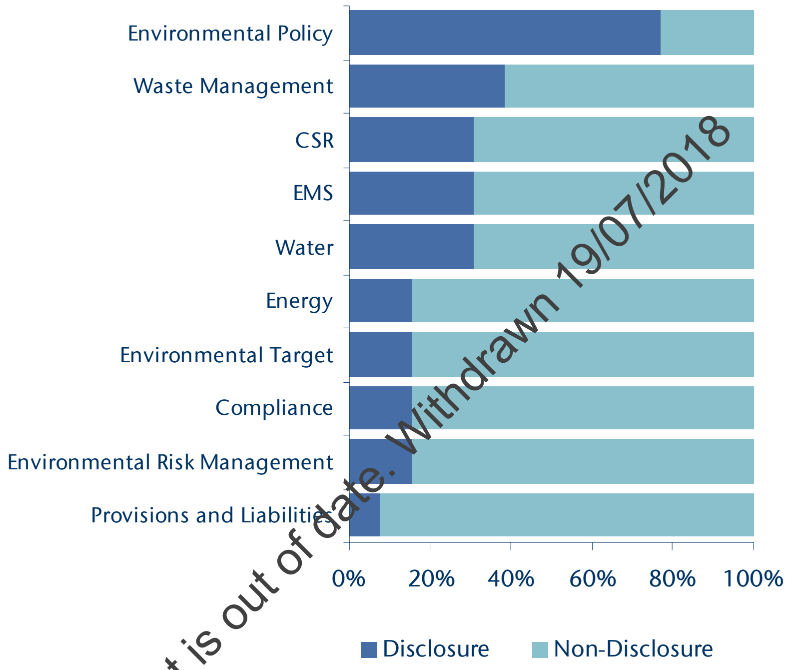


Figure 13. Top ten environmental topics in the – sector (by percentage of FTSE All Share companies in the – sector.

Where the information is reported in the Annual Report and Accounts

More companies (46%) make environmental disclosures in the Directors' Report than in any other part of the Reports and Accounts. This is because most disclosure related to environmental policy and corporate policies are generally discussed in the Directors Report. Most of the remaining disclosures were made in the environment, health and safety or CSR sections. Only 2% of disclosures were in the Operating and Financial Review.

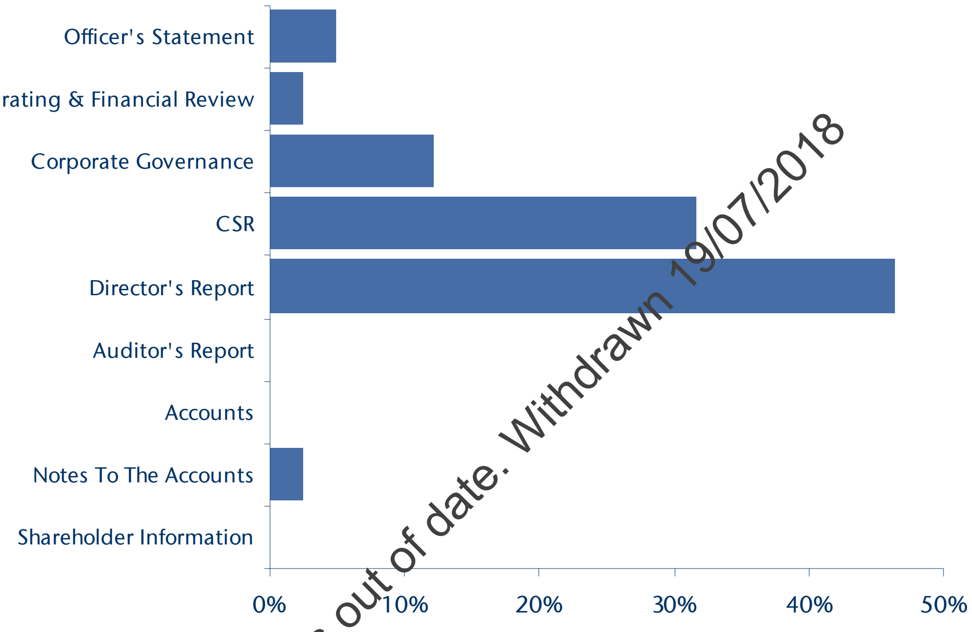


Figure 14. Location of environmental disclosures in the Annual Reports and Accounts of the Electronic and Electricity Equipment sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
INVENSYS PLC		○								○			○						◑			○				○	✓
LAIRD GROUP PUBLIC LIMITED COMPANY (THE)		○		○							○		○	○					○							○	✓
RENISHAW PLC	○	○	○	○																							
SPECTRIS PLC																											✓

Engineering & Machinery

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Engineering & Machinery
Total Turnover (Millions):	£14,940
Turnover as % of All Share:	1.3%
Number of Companies:	22
FTSE Description	Manufacturers of commercial vehicles, railway rolling stock and heavy agricultural and construction machinery and their parts. Designers, manufacturers and installers of industrial plant and pollution control equipment. Producers of castings, pressings, welded shapes; fabricators and erectors of structural steelwork. Engineering companies not classified elsewhere, making, or distributing a variety of products.

Index	Number of Companies
FTSE 100	1
FTSE 250	11
FTSE Small Cap	10
FTSE All Share	22

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	100%	96%
FTSE Small Cap	100%	80%
FTSE All Share	100%	89%

The Engineering and Machinery sector has a variety of operations. The products of this sector include cooking equipment, broadcasting and photographic equipment, die-casting and the manufacture of components for other specialised industries.

All companies in this sector make some form of disclosure. This is a significantly higher level than in the FTSE All Share overall and, as there are a total of 22 companies in the sector and 45% of engineering companies are in the FTSE Small Cap, the disclosure levels are even more remarkable.

Sector impacts and reporting in the FTSE350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	Medium	Medium	Medium	High
Disclosure	8%	25%	50%	42%	17%

While the sector is not typically energy intensive, there are energy demands from factories, machining processes and transportation of goods. Half the FTSE 350 companies made disclosure on climate change. There can be large amounts of waste and water use for engineering firms due to the metalwork processes involved, although both of these tend to be controlled to reduce costs. The level of disclosure of waste and water use, therefore, is disappointingly low among FTSE 350 companies, although it does rise for FTSE Small Cap companies.

Other environmental impacts include the use of solvents, chemicals such as volatile organic compounds (VOCs) used in cleaning systems, and paints and refrigerants that have ozone-depleting potential. Reporting levels are low for these impacts.

Information disclosed by the FTSE All Share

The ten most reported on environmental topics in the engineering sector are similar to those of the FTSE All Share overall, with environmental policy being at the top (82% of engineering companies referring to it), followed by CSR (59%), waste management (55%), EMS (45%) and energy (41%). The environmental impacts that the sector reports on are the same as for most other sectors (waste, energy/climate change and water). Differing from other sectors, engineering companies tend to report more on environmental procurement as demonstrated in Case study 9, Aga Foodservices Group plc.

Case study 9: Aga Foodservices Group Plc Annual Report and Accounts 2002

Supply chain – ethical trading code

The board recognises the importance of managing the supply chain to ensure, so far as is practicable, that its direct and indirect suppliers adopt the same core principles as the Aga Foodservice Group. The Group has therefore introduced an ethical trading code which encompasses a set of global sourcing principles covering fair terms of employment, human rights, health and safety, equal opportunities and good environmental practice. Every operating company is required to review compliance with the code throughout its supply chain and to monitor any areas of non-conformance. The board's target is to seek confirmation of supplier compliance by the end of 2003.

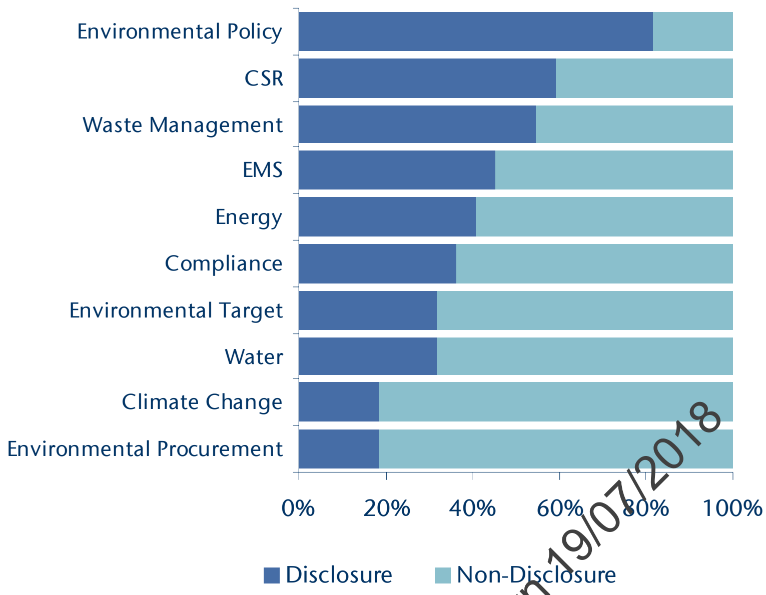


Figure 15. Top ten environmental topics in the Engineering & Machinery sector (by percentage of FTSE All Share companies in the Engineering & Machinery sector).

Where the information is reported in the Annual Report and Accounts

Almost half of disclosures (44%) are made in a CSR section of the Annual Reports and Accounts thus potentially marginalizing the value of the information supplied to shareholders. Only FKI Plc makes explicit links between environmental and business issues, and only five companies (8%) discuss the environment in their Operating and Financial Review. 30% of disclosures are made in the Director's Report; these disclosures relate mostly to policy and occasionally the management systems used to implement them.

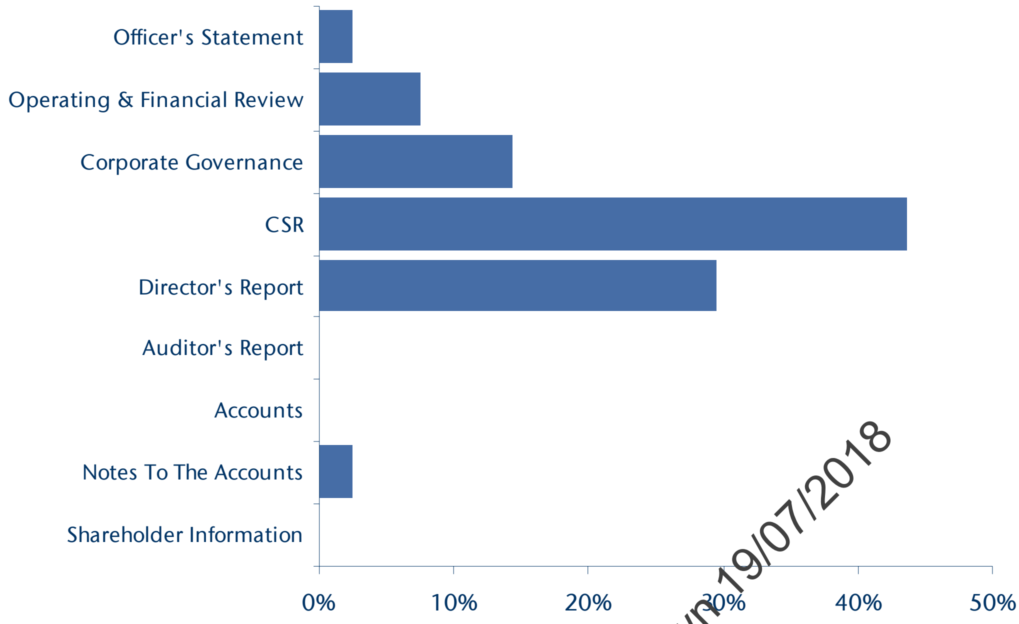


Figure 16. Location of environmental disclosures in the Annual Reports and Accounts of the Engineering & Machinery sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
TOMKINS P.L.C.				○														○	○							○	✓
AGA FOODSERVICE GROUP PLC											○	○	◑		○			○	○						○	○	✓
BODYCOTE INTERNATIONAL P.L.C.											○	○	○													○	
COOKSON GROUP P.L.C.											○								○			○				○	✓
FKI PLC		●	◑	●	○	○			○		○	◑	○		○			○	●							○	✓
HALMA P.L.C.			○										○													○	✓
IMI PLC				○						○			○			◑											✓
KIDDE PLC																										○	✓
MORGAN CRUCIBLE COMPANY PLC (THE)		○	○	○							○														○	○	✓
ROTORK P.L.C.	○		○			○					○		○													○	✓
SPIRAX-SARCO ENGINEERING PLC			○							○	○		○			○			○							○	✓
WEIR GROUP PLC (THE)		◑	◑	○		◑						○	◑						○			◑				○	

Automobiles & Parts

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Automobiles & Parts
Total Turnover (Millions):	£12,129
Turnover as % of All Share:	1%
Number of Companies:	9
FTSE Description	Companies which manufacture and assemble passenger automobiles and motor cycles. Manufacturers, and distributors of auto parts other than those classified elsewhere. Tyre manufacturers and distributors. Tyre treaders for automobiles, trucks, tractors and aircraft. Distributors, sellers and/or servicers of vehicles.

Index	Number of Companies
FTSE 100	1
FTSE 250	2
FTSE Small Cap	6
FTSE All Share	9

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	100%	96%
FTSE Small Cap	33%	80%
FTSE All Share	56%	89%

The direct environmental impacts of the automobile industry are relatively low compared with the upstream and downstream impacts of the sector. Modern automobile companies are predominantly assembly, marketing and financing operations. As such, industry initiatives have focussed on supply chain issues and the design of more fuel-efficient vehicles. There are no automobile manufacturers listed in the FTSE All Share, only automotive parts companies, retailers and coachworks. Environmental impacts of automotive parts and coachworks companies are similar to those of the Electronic and Electrical Equipment sector and Engineering and Machinery sectors.

All three FTSE 350 companies make some form of environmental disclosures but only two (33%) of the Small Cap companies do so.

Sector Impacts and reporting in the FTSE 350

The direct impacts of automobile manufacturing are fairly low. Though the life cycle of a car brings with it significant resource use and emissions of pollutants to the air, the impacts analysed here only cover the direct impacts of the sector; as car manufacturers do not mine the metal and other raw materials required, the associated natural resource use has not been attributed to them. In addition while the emissions from a car may be part of a car manufacturer's producer responsibility, they do not form part of this analysis.

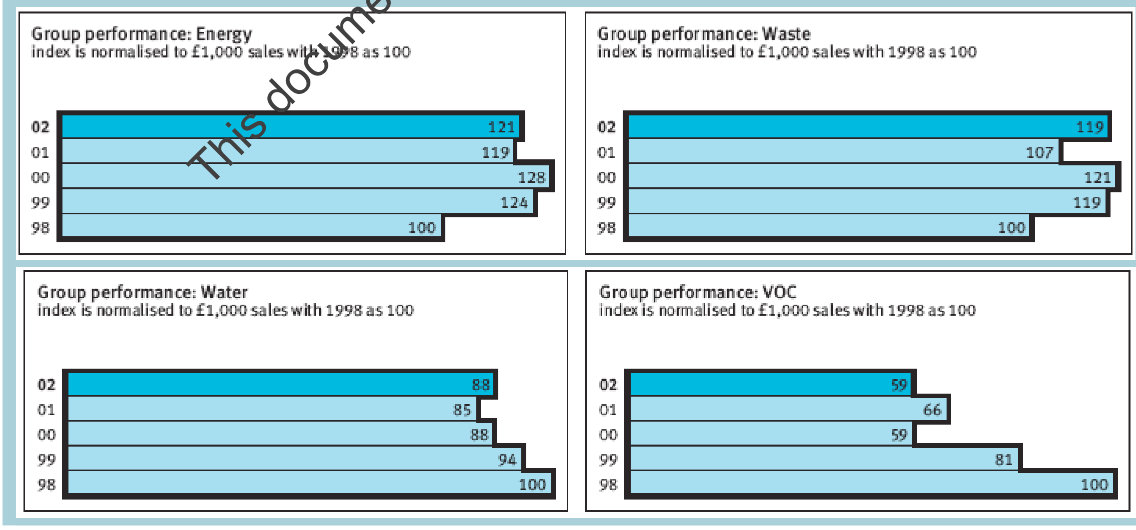
Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	Medium	Low	Medium	Low
Disclosure	0%	0%	33%	67%	33%

Water use and waste and other emissions are medium impacts of the sector, and waste is most widely reported, with 67% of FTSE 350 companies making some form of disclosure on this impact. Climate change and water use are reported on by GKN alone out of the FTSE 350 companies. Other impacts include emissions to water of VOCs and waste oils used in the production process. Case study 10 demonstrates GKNs clear disclosure of its main environmental key performance indicators.

Case study 10: GKN Plc Annual Report and Accounts 2002

Performance

We continue to concentrate on four key performance indicators, energy use and associated carbon dioxide emissions, waste generation, water use and volatile organic compound (VOC) consumption. As described on page 27 (Scope of the review), the data in respect of these suffers from some distortion as a result of the differing profiles of the various manufacturing businesses and in particular by the relatively high energy consumption of the US metal powder manufacturer, Hoeganaes, acquired in 1999. Performance data for Hoeganaes in 1998 is not available and therefore is not included in the charts below.



Information disclosed by the FTSE All Share

Levels of reporting in the automobiles sector are very low. Environmental policy is the most common disclosure and is reported by 44% of companies in the sector. Compared to the FTSE All Share, this level is disappointingly low. Environmental management systems are disclosed by one third (33%) of companies. A number of automobile manufacturers are now required to use ISO14001 management systems as a condition of supply to their customers. Only 33% report on CSR compared to 47% for the FTSE All Share.

One reason for this sector's poor reporting compared to other FTSE All Share sectors, is the relatively high proportion of FTSE Small Cap companies that are in it. FTSE Small Cap companies are seen to disclose less than FTSE 350 companies, a trend which results in low overall reporting levels in a sector that is dominated by Small Cap companies. In addition many are retailers and show levels similarly low levels of reporting as the General Retailer sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
GKN PLC			◑	◑		◑				◑	◑	◑	●	○	○				◑			◑				●	✓
INCHCAPE PLC								○																		○	✓
REG VARDY PLC				○	○								○	○				○	○								✓

Household Goods and Textiles

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

Index	Number of Companies
FTSE 100	0
FTSE 250	2
FTSE Small Cap	3
FTSE All Share	5

FTSE Sector Name	Household Goods & Textiles
Total Turnover (Millions):	£1,280
Turnover as % of All Share:	0.1%
Number of Companies:	5
FTSE Description	Manufacturers or wholesalers of all types of clothing and footwear, including those for sportswear. Manufacturers and distributors of furniture (including office furniture) and furnishings, carpets and other materials for covering floors, consumer electronic and electrical equipment; domestic appliances, lighting, tools for use in the home, hardware, cutlery, tableware, giftware, jewelry and watches; leisure equipment; textile materials and goods other than clothing, and of leather goods other than footwear. Processors of hides and skins.

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	N/A	96%
FTSE 250	100%	96%
FTSE Small Cap	67%	80%
FTSE All Share	80%	89%

The Household Goods and Textiles sector includes companies producing a diversified range of products. Three of the companies are producers, importers and distributors of domestic electronic goods (Amstrad Plc, Alba Plc and Pace Micro Technology Plc). One company, Games Workshop Plc, is a manufacturer and retailer of miniature figures and games. Another company, Headlam Plc is a wholesaler of floor coverings. Because of this diversity, the companies in the sector have different types of environmental impact.

The main regulation applicable to this sector is the EU Restriction of Hazardous Substances in Electrical and Electronic Equipment (ROHS) Directive and Waste Electrical and Electronic Equipment (WEEE) Directive, both of which will be implemented at a national level over the next three years. ROHS is designed to ban the use of lead, mercury, cadmium, hexavalent chromium, PBBs and PBDEs in electrical and electronic goods to minimise the environmental impact on disposal (PBBs and PBDEs can take several thousand years to decompose). WEEE is designed to make producers responsible for final disposal of their products. This emphasis on producer responsibility has had a significant impact on the industry recently with potential annual costs of £217m to £455m in the UK alone[10]. Alba discuss their approach to dealing with the forth-coming regulations in Case study 11.

Case study 11: Alba Plc Annual Report and Accounts 2002

The Group seeks to minimise the environmental impact of its activities and aims to operate in accordance with the standards required by law, codes of best practice and issued guidelines. The Group is also participating through its membership of trade associations in the consultative stages of emerging environmental legislation, such as the Waste Electrical and Electronic (WEEE) Directive and the Restriction of Hazardous Substances in Electrical and Electronic Equipment (ROHS) Directive.

Sector impacts and reporting in the FTSE350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	High	High	High	High
Disclosure	0 %	0 %	0 %	50 %	0 %

Only Headlam Plc and Alba Plc are in the FTSE 350. The Household Goods and Textiles sector's impacts mainly arise from manufacturing processes and offices. According to Headlam Plc, the major impacts are 'from inefficient transportation, unnecessary waste materials and unsuitable products'[11]. Despite being a high impact of the sector, there is very little disclosure on it. Alba Plc does go into some detail in relation to ROHS and WEEE and the use of recycled materials, but for all other environmental impacts, disclosure is disappointingly low.

[10] Partial regulatory impact assessment on directive 2002/96/ec of the European Parliament and of the Council on waste from electrical and electronic equipment (WEEE directive) DTI, March 2003
[11] Headlam Group, Annual report 02

Information disclosed by the FTSE All Share

Amstrad Plc makes no mention of the environment in its Annual Report and Accounts despite the impending WEEE regulations. The remaining four FTSE All Share companies in this sector discuss their environmental policy in their Annual Reports and Accounts. Three of the five companies mention a waste management strategy, but only two of them mention water, EMS and targets. No one of the four reporting companies does so to a significantly greater degree than the rest. All four companies with environmental policies report to roughly similar degrees, but cover different environmental topics such as policy, management systems, targets and waste.

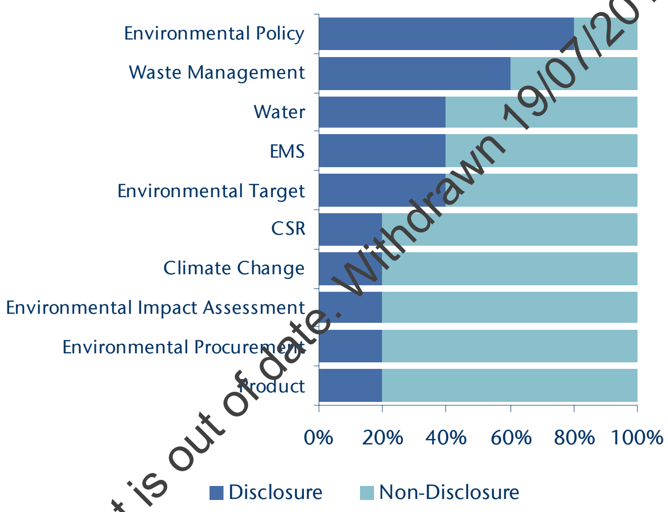


Figure 17. Top ten environmental topics in the Household Goods and Textiles sector (by percentage of FTSE All Share companies in the Household Goods and Textiles sector.

Where the information is reported in the Annual Report and Accounts

The location of disclosures in the Annual Report and Accounts is dependent upon the company reporting them. Pace Micro Technology Plc and Headlam Plc make most of their disclosures in the Directors Report. This is a natural place as policy and management issues are normally discussed here and most disclosures are centred on policy and management systems. Alba Plc discloses most of its information in the Corporate Governance section and Games Workshop Plc makes all of its disclosures in the Operating and Financial Review.

This is typical for many sectors and highlights the lack of conformity for the disclosure of environmental issues in the Annual Report and Accounts.

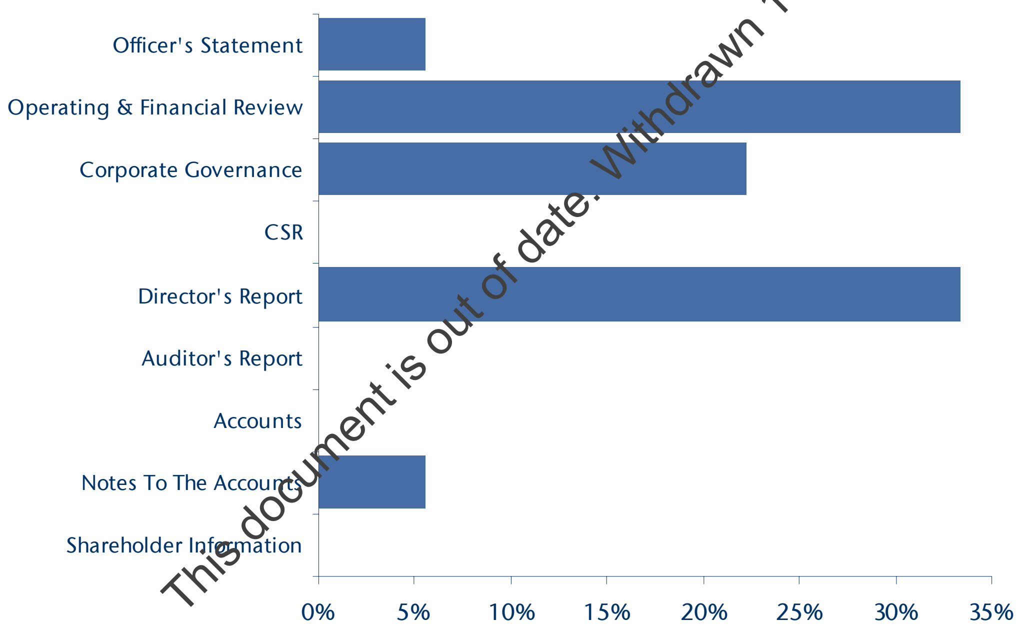


Figure 18. Location of environmental disclosures in the Annual Reports and Accounts of the Household Goods and Textiles sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
ALBA PLC				○									○													○	✓
HEADLAM GROUP PLC													○		○												✓

Beverages

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Beverages
Total Turnover (Millions):	£18.162
Turnover as % of All Share:	1.5 %
Number of Companies:	5
FTSE Description	Manufacturers and shippers of malt and malt liquors such as beers, ales and stout. Distillers, blenders and shippers of alcoholic beverages such as whisky, brandy, rum, gin or liquors. Also producers of wine and cider. Manufacturers of non-alcoholic beverages including carbonated mineral waters.

Index	Number of Companies
FTSE 100	4
FTSE 250	0
FTSE Small Cap	1
FTSE All Share	5

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	N/A	96%
FTSE Small Cap	100%	80%
FTSE All Share	100%	89%

The primary environmental aspects of the non-alcoholic industry involve water use and wastewater discharge from products and washing, chemical use in cleaning, and management of scrap and solid waste.

The alcoholic beverages industry includes beer, wine and liquor production. In addition to the environmental problems associated with the non-alcoholic beverage companies, brewers emit large quantities of carbon dioxide in the fermentation process.

Water conservation, recycling of fermentation wastes and energy efficiency are the some methods to improve environmental performance in the sector. Breweries in particular have many options available for turning wastes into new products, such as growing edible mushrooms on fermentation wastes.

Beverage companies are required to have high quality management systems to be in place in their production processes due to regulations governing the quality of water used in the product and bacterial contamination. Thus companies in this sector are also more likely to have good environmental management systems.

All companies in this sector make some form of environmental disclosure. With only few companies in this sector, however, general statements can only be made with caution.

Sector Impacts and reporting in the FTSE 350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	High	High	High	Low
Disclosure	0%	0%	50%	50%	0%

Remarkably, none of the FTSE 350 companies in the beverages sector make any detailed disclosures with respect to water. Given the fact that water use is a high impact in this sector, detailed disclosure on the subject in the Annual Report and Accounts would be very helpful to shareholders. The US based company Coca-Cola is a good example of how the unsustainable use of local water can have adverse affects on the company's reputation and threaten its license to operate. It has recently suffered severe public relations problems and community activism in the Indian state of Kerala due to its use of local groundwater and its sale of toxic fertiliser to local communities[12].

The levels of disclosure on climate change and waste are better. Both Diageo and Scottish and Newcastle make extensive references to their separate CSR report although do not discuss the issues in their annual report and accounts. Allied Domecq and SABMiller also make references to their separate CSR reports for further performance data.

Information disclosed by the FTSE All Share

It is remarkable that water, one of the high impacts of the beverages sector, is not in the top ten disclosed environmental topics of the sector. Energy (60%), climate change (40%) and waste (40%) are the environmental impacts that the sector does report on.

Environmental Policy and CSR disclosure is at 80% for this sector, and is very similar to that for the FTSE All Share.

As is the case for many other sectors, there is less communication of implementation of environmental policies and performance measurement than of the policy itself. Given the fact that 80% of beverage companies disclose their environmental policies, it is disappointing to see only 40% of companies informing about their EMS, and 20% about their environmental targets.

12 Coke With a New Twist: Toxic Cola, The Indian Resource Center, http://www.indiaresource.org/campaigns/coke/index.html

Without management systems, targets and performance indicators, policy cannot be properly implemented.

Case study 12: Allied Domecq Plc, Annual Report and Accounts 2002

Environmental – We are an acknowledged sector leader in environmental policy. This was again recognised in two important benchmarking surveys: the Business in the Environment index where we lead the drinks sector as we have in each of the seven years that the BiE index has been established; and in our continued inclusion in the Dow Jones sustainability index. The adoption of ISO14001as the global production standard has committed the business to making continual improvements in our production processes to minimize their environmental impact. Over 80% of the Group has plans and targets for water use improvements, waste reduction and energy efficiency. Some examples of the practical effect of our environmental policy can be found in the environment section of our website (www.allieddomecq.com), and our full Environmental, Health and Safety Report will be updated in early 2004.

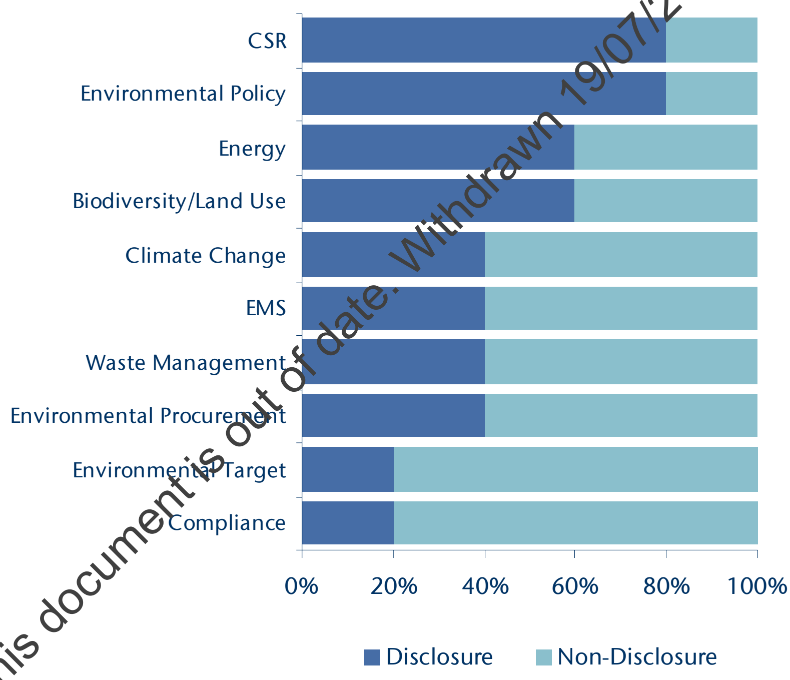


Figure 19. Top ten environmental topics in the Beverages sector (by percentage of FTSE All Share companies in the Beverages sector.

Where the information is reported in the Annual Report and Accounts

The vast majority of companies in this sector (75%) make their disclosure in an HSE or CSR section compared to 46% for the FTSE All Share. The related Food Producers and Processors industry also make high disclosures in the CSR sections (69%).

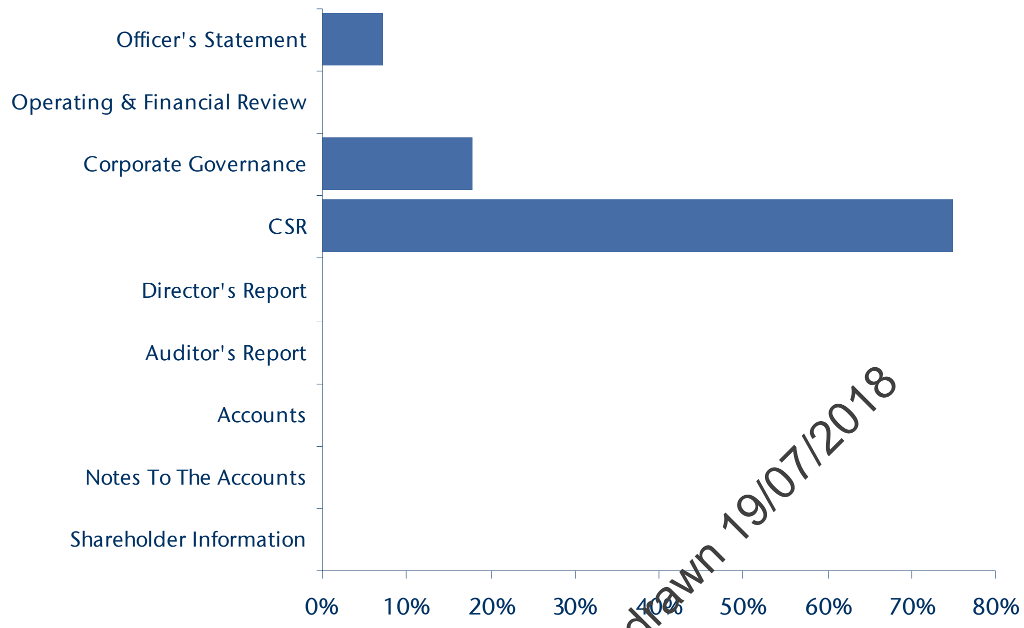


Figure 20. Location of environmental disclosures in the Annual Reports and Accounts of the Beverages sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
ALLIED DOMECQ PLC			○	◑				○			○		●													○	✓
DIAGEO PLC													○	○											○		✓
SABMILLER PLC			○	○		○		◑							◑											○	✓
SCOTTISH & NEWCASTLE PLC												○	○					○								○	✓

Food Producers & Processors

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Food Producers & Processors
Total Turnover (Millions):	£49,890
Turnover as % of All Share:	4.2 %
Number of Companies:	14
FTSE Description	Crop growers excluding forestry. Companies which raise livestock commercial fishers, manufacturers of livestock feeds. Owners of plantations . Processors and wholesalers of food.

Index	Number of Companies
FTSE 100	3
FTSE 250	4
FTSE Small Cap	7
FTSE All Share	14

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	100%	96%
FTSE Small Cap	86%	80%
FTSE All Share	93%	89%

The Food Producers and Processors sector has high environmental impacts all through the food life-cycle, from crop and livestock production to processing, packaging and distribution. It is amongst the highest impact sectors in the FTSE All Share. Agriculture is, for example, by far the largest abstractor of water globally[13]. With a world population that is expected to grow from six to nine billion, the environmental impact of the sector is going to increase. The sector is under scrutiny from consumers, and food retailers are following demands from their customers to use their influence on their supply chain to reduce its environmental impact. Linking Environment and Farming (LEAF) is an organisation that aims to “help farmers improve their environment and business performance” by, for example, promoting and demonstrating Integrated Farm Management (IFM).

[13] World Resources Institute, 2003. Freshwater Resources.

Sector impacts and reporting in the FTSE 350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	High	High	High	High	High
Disclosure	0%	0%	50%	50%	0%

Food Producers and Processors have high environmental impacts. Unsustainable resource use, for example of soil and fisheries, leads to the degradation of natural resources. In extreme cases farming can result in deforestation and soil erosion, and most modern agricultural practices result in pesticide and fertilisers leeching into the groundwater. In England 55% of agricultural areas are now considered to be nitrate vulnerable zones (under the 1991 EU Directive on nitrates) where the groundwater quality is at risk. For food processors the main environmental impacts are waste to land and water, both of which are carried out under commercial agreements with waste and water companies resulting in significant costs and the risk of pollution incidents, especially to water. In the light of this, the disclosure of this natural resource use in the FTSE 350 is lower than could be expected. Cadbury Schweppes Plc is notable for a commitment to improve their environmental performance in soil protection.

As mentioned before, the agricultural sector is the biggest abstractor of water globally. The FTSE 350 disclosure level for this environmental topic is quite high, at 71%, indicating a degree of recognition of the issue.

The food producers and processors sector accounts for 10-15% of energy use in industrialised countries, and disclosure levels for the FTSE 350 food producers and processors for this environmental topic is also high.

Disclosure on waste management is fairly high, with more than half of the Food Producers and Processors reporting on it. Disclosures often relate to packaging waste which has been recognised as a major issue, and many companies refer to the U.K. Producer Responsibility (Packaging Waste) Regulations.

Information disclosed by the FTSE All Share

The top ten environmental topics for the sector (in the FTSE All Share) include water, waste management and climate change/energy[14], while resource use and other environmental impacts

[14] As stated in the methology, climate change and energy use have been merged for the purpose of the sector impact analysis.

do not appear. The majority of the remaining topics are related to the corporate management of environmental impacts, for example environmental management systems (EMS) or environmental targets. CSR appears lower than average on the list, indicating that reporting on environmental impacts and efforts to manage them has replaced general statements of intent, at least to a degree. Compliance is also amongst the top ten issues; references to compliance range from absence of prosecutions to the commitment to compliance.

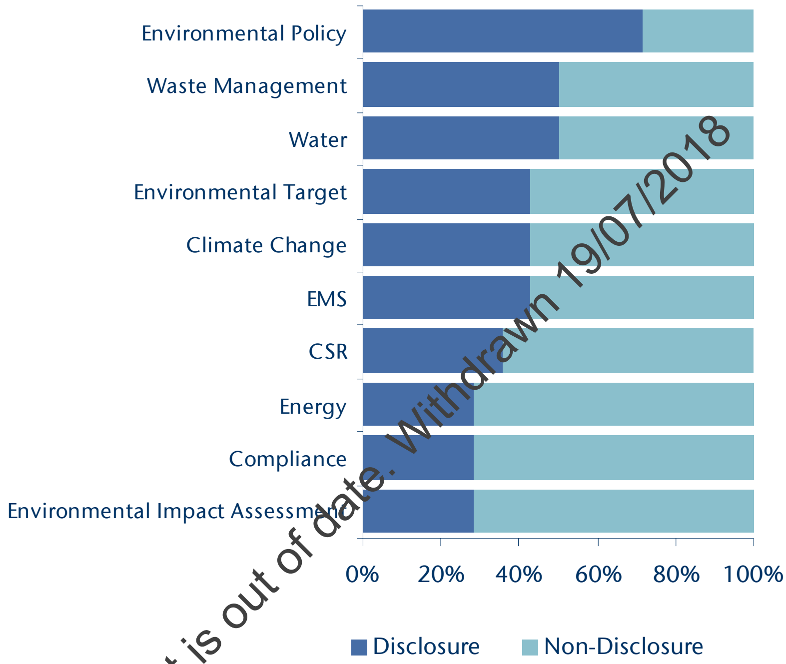


Figure 21. Top ten environmental topics in the Food sector (by percentage of FTSE All Share companies in the Food sector).

Where the information is reported in the Annual Report and Accounts

The vast majority of disclosures (69%) in the food producers and processors sector are made in separate HSE/CSR sections. This is a much higher proportion than for all companies in the FTSE All Share, where 46% of the information is provided in separate HSE/CSR sections. It is difficult to tell why the food sector differs from other sectors in this respect; it is possible that there has just been a broad uptake of a similar approach in this particular sector.

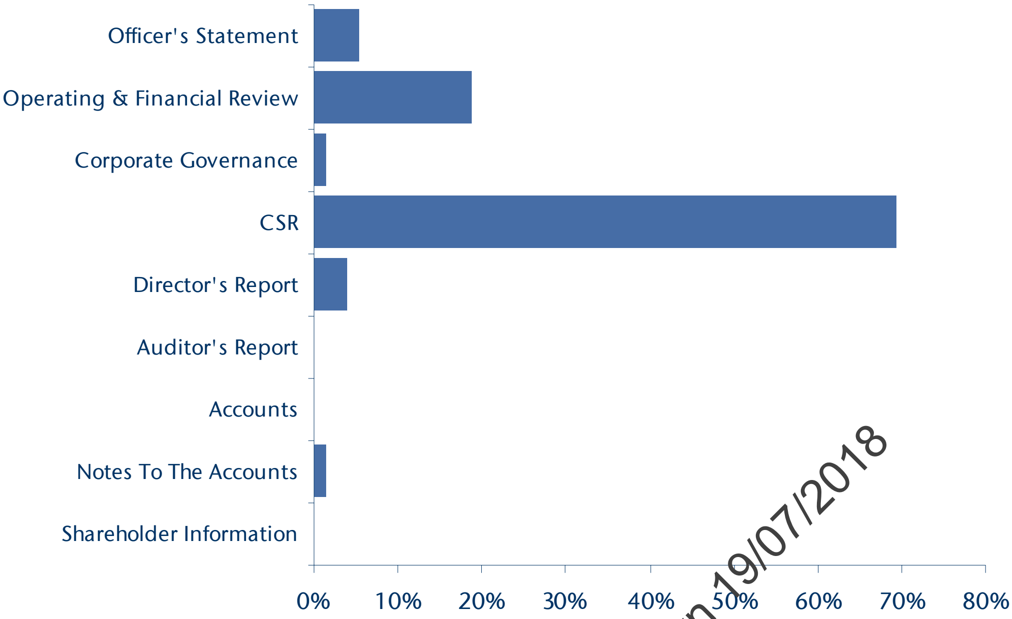


Figure 22. Location of environmental disclosures in the Annual Reports and Accounts of the Food sector.

Case study 12: Arla Foods Plc, Annual Report and Accounts 2002

Fig. 1 Water consumption at Danish production plants

Key figures in m³/ton finished product

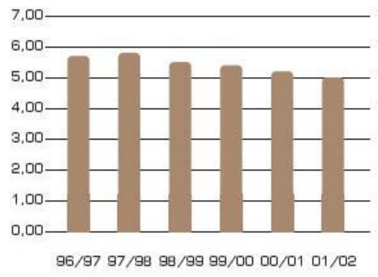


Fig. 2 Energy consumption at Danish production plants

Key figures in MWh/ton finished product

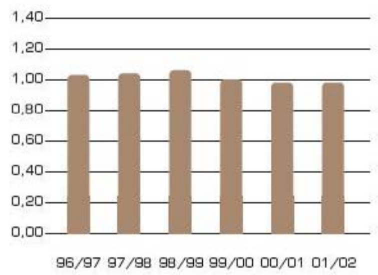
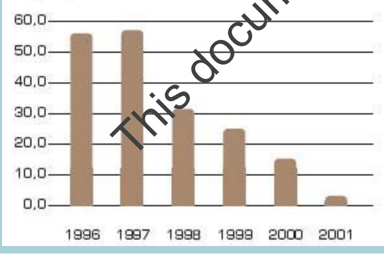


Fig. 3 Emission of NOx from Götene

ton/per year



By changing from oil to bio-fuel NO_x emission have been significantly reduced.

Arla Foods aims at reducing CO2 emissions by 5% and NOx emissions by 10% by 2005/06. To achieve these goals, a number of initiatives have been taken. Thus Götene Dairy has introduced the first wood pellet bio-combustion plant to replace three old oil generators which used approx. 10,000 cubic metres of oil per year. (See Fig. 3). The transport of milk in trucks affects the environment in the form of emissions of CO2, NOx and particles. To minimise these emissions, joint environmental targets for transport at group level are being prepared. At Hobro Garage a two-year project aims at reducing diesel consumption by training drivers. As the project has progressed, the drivers have been able to monitor the considerable fall in diesel consumption online. Experience from similar projects has shown a potential saving of 5-10%, with equivalent reductions in emissions.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
ASSOCIATED BRITISH FOODS PLC	○	○		○		○						○	○														✓
CADBURY SCHWEPPES PUBLIC LIMITED COMPANY	○	○	○	○				○			○		○						○			○					✓
UNILEVER PLC		○													○											○	✓
DAIRY CREST GROUP PLC		○	○	○							○	○	○						○								✓
GEEST PLC			◑	○									○		○			○	◑			◑				○	✓
NORTHERN FOODS PLC																										○	✓
TATE & LYLE PLC		●				○		◑			○	○														○	✓

Health

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Health
Total Turnover (Millions):	£13,379
Turnover as % of All Share:	1.1 %
Number of Companies:	14
FTSE Description	Owners and operators of health maintenance organisations. Owners and operators of hospitals, clinics, nursing homes, rehabilitation and retirement centres. Manufacturers of medical equipment, devices and eye care products. Diversified and other health care companies not classified elsewhere.

Index	Number of Companies
FTSE 100	3
FTSE 250	1
FTSE Small Cap	10
FTSE All Share	14

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	100%	96%
FTSE Small Cap	90%	80%
FTSE All Share	93%	89%

The Health sector covers a wide range of activities, including private hospitals and nursing homes, as well as the manufacture of medical equipment and eye care products. As such, the sector's impacts are varied. The lead trade body for the sector is the Association of British Healthcare Industries (ABHI) and it mainly addresses issues of waste. Aside from waste, hospitals use electricity and water and manufacturers may use resources. Some companies in the sector will also produce small quantities of radioactive waste and may also use hazardous chemicals. An example of reporting in this area is Isotron Plc (see Case Study 13) with a more standard example being Dechra Pharmaceuticals Plc. The ABHI specifically address three specific types of waste: packaging, electric and healthcare[15]. Otherwise it does not particularly address environmental impacts, which is interesting as after stating that they have an environmental policy, waste is the second most common environmental issue that health companies mention in their Annual Report and Accounts indicating that trade body initiatives are effective.

[15] Association of British Healthcare Industries, Environment Department

Case study 13: Isotron Plc, Annual Report and Accounts 2002

Health, Safety and the Environment

Isotron and its Board recognise that the special technologies the Company employs in its processes generate unusual environmental and health and safety issues. As a consequence Isotron is keenly aware of its responsibilities to its employees, neighbours and local communities. Isotron conducts its business from sixteen sites in eight countries. It's principal processes employ ionising radiation (gamma radiation and electron beams), used on thirteen sites and a toxic gas (ethylene oxide) used on three sites.

Gamma radiation is generated via the decay of radioisotope (cobalt 60) which itself is generated by exposure of natural cobalt (cobalt 59) to neutron bombardment in a nuclear reactor. Transport, manipulation and processing with cobalt 60 all carry an element of risk that must be managed.

Ethylene oxide gas is explosive as well as toxic; it is transported and stored in liquid form under pressure but used as gas in our processes. Again its transport, manipulation and usage present particular health, safety and environmental issues.

Sector impacts and reporting in the FTSE350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	Medium	Medium	Low	Low
Disclosure	25%	50%	50%	50%	0%

Within the FTSE 350, 50% of the companies report on the sector's most major impact – climate change, which is encouraging. Half of the companies report on water use and waste, a quarter on natural resource use and there is no reporting on other environmental impacts. Given that this sector has a low environmental impact when compared to other sectors, reporting is more widespread than might be expected.

Information disclosed by the FTSE All Share

64% of companies in the FTSE All Share report an environmental policy, but only 36% report on waste management. It is surprising that only 14% of FTSE All Share health companies report on energy use or climate change, as this is the sector's greatest impact on the environment, and is also seen to be the most reported subject in many other sectors.

As is the case for many other sectors, there is little communication of implementation of environmental policies and performance measurement. Given the fact that 53% of FTSE All Share health companies disclose their environmental policies, the number of companies informing about their EMS (29%) cannot be considered high. Environmental targets do not even appear in the top ten.

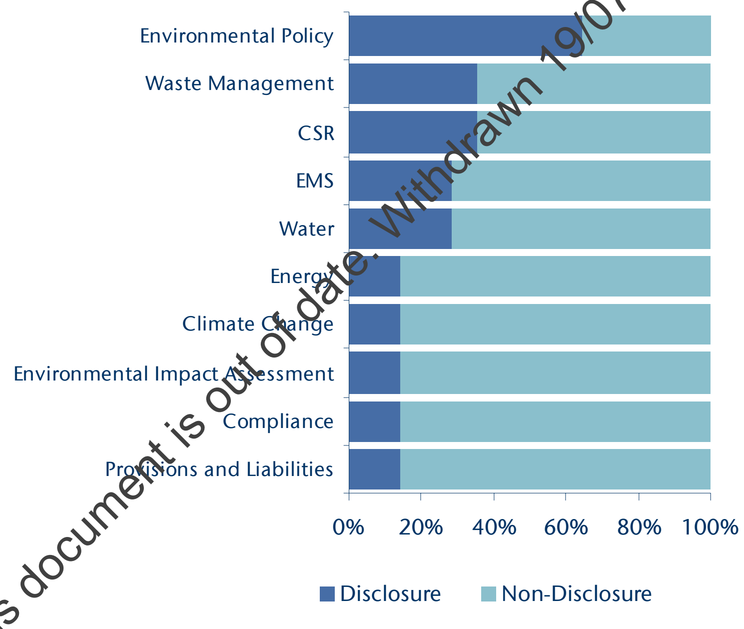


Figure 23. Top ten environmental topics in the Health sector (by percentage of FTSE All Share companies in the Health sector.

Where the information is reported in the Annual Report and Accounts

53% of the disclosures in the FTSE All Share are made in a HSE/CSR section of the Annual Report and Accounts. 28% are reported in the Director's Report and 4% in the Notes to the Accounts (this is data disclosed on radioactive decommissioning costs). That the majority of data is reported in the HSE/CSR section suggests that it is not being linked to business issues, however, there are some aspects of the sector's environmental impact, particularly involving radioactive materials, that are discussed in the financial statements or to included in the Director's Report.

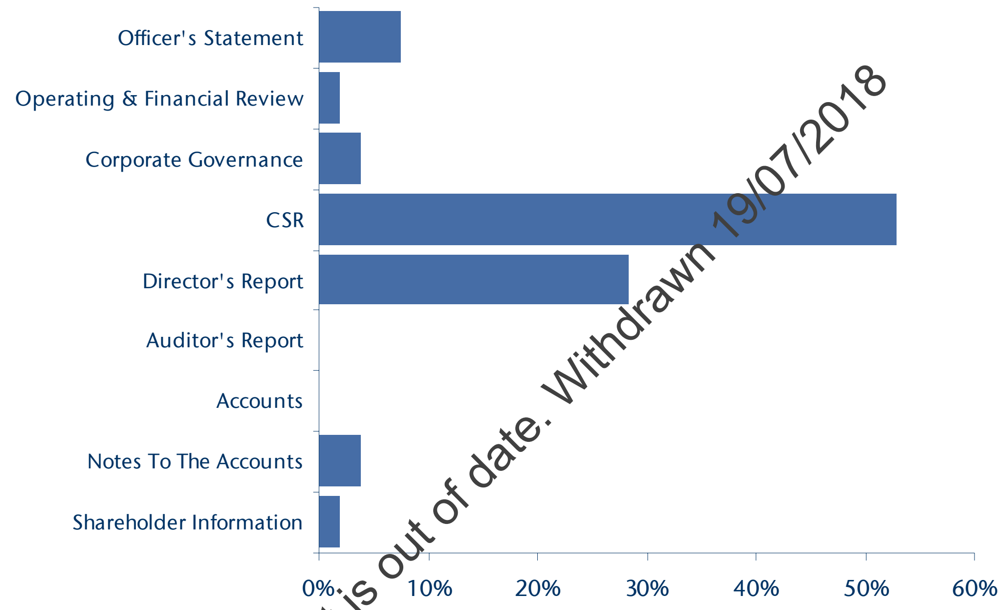


Figure 24. Location of environmental disclosures in the Annual Reports and Accounts of the Health sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
ALLIANCE UNICHEM PLC			○	○									○														✓
AMERSHAM PLC		○	◑					◑			○		◑						○			○			○	○	✓
SMITH & NEPHEW PLC	○	○		◑									○													○	✓
SSL INTERNATIONAL PLC						◑					○															○	✓

Personal Care and Household Products

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Personal Care and Household Products
Total Turnover (Millions):	£4,684
Turnover as % of All Share:	0.4%
Number of Companies:	3
FTSE Description	Producers and distributors of detergents, soaps and polishes. Producers and distributors of toiletries, cosmetics and hygiene products.

Index	Number of Companies
FTSE 100	1
FTSE 250	1
FTSE Small Cap	1
FTSE All Share	3

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100 %	96 %
FTSE 250	0 %	96 %
FTSE Small Cap	100 %	80 %
FTSE All Share	67 %	89 %

The Personal Care and Household Products sector is a small sector in the FTSE All Share, both in market capitalisation and in number of companies. There are three companies in the sector; Reckitt and Benckiser Plc, PZ Cussons Plc and McBride Plc.

The sector covers a broad range of activities. The largest environmental impacts from the manufacture of cleaning products are the use of water, emissions to water in the manufacturing process and the production of waste from the manufacture of packaging for its products.

The industry is subject to IPPC and REACH regulations which require environmental management systems and regulatory reporting. The industry is covered by a number of trade bodies, primarily the UK Cleaning Products Industry Association (UKCPI)[16] and the umbrella EU Association Internationale de la Savonnerie, de la Détergence et des Produits d'Entretien (AISE)[17] UKCPIA and AISE have an environmental code of conduct to which its members commit. All companies in this study are members of the UKCPI.

[16] The UKCPI website can be found at http://www.ukcpi.org/index.htm
[17] The AISE website can be found at http://www.aise-net.org/index.html

Sector impacts and reporting of the FTSE 350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	HIgh	Medium	High	Medium
Disclosure	0 %	0 %	0 %	0 %	0 %

Despite the high water and waste impacts of this sector, there is no specific reporting on any of the direct impacts of the sector by either of the two FTSE 350 companies in the sector. In fact, PZ Cussons Plc does not include environmental information in their Annual Report and Accounts at all. Reckitt and Benckiser provides little information other than a policy statement although it does refer to its separate environmental report which contains detailed information on processes, management systems and emissions.

Information disclosed by the FTSE All Share

Case study 14: McBride Plc, Annual Report and Accounts 2002

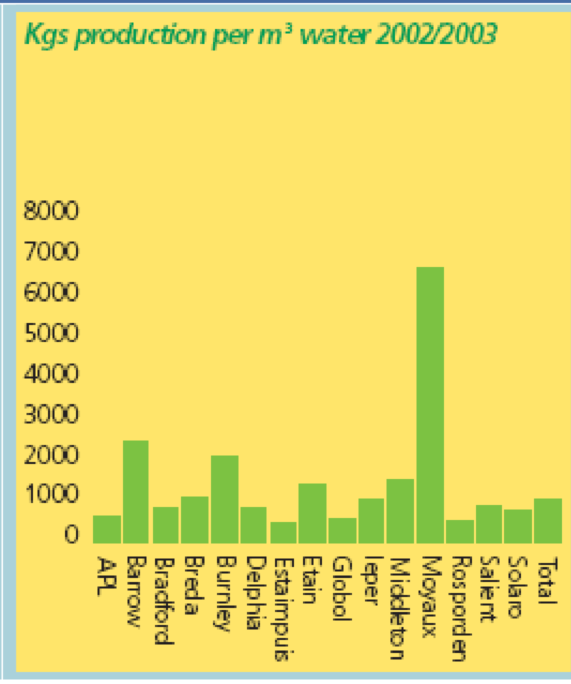
Reusing water

Fresh water is one of the planet's most important resources, and we're committed to re-using this irreplaceable natural commodity wherever possible. In our Ieper Delphia site, we're successfully reusing 40% of Cleaning In Place rinsing water. In the household products factory, 50% of tank cleaning water is reused, at Moyaux and Estaimpuis closed loop cooling systems are in place enabling highly significant reductions in consumption. In the UK, we're pioneering a new system at the Middleton site where water already warmed by passage through a heat exchanger is then used in a manufacturing process that requires warm water.

Conserving energy

By raising awareness of the need for energy conservation and introducing more efficient lighting, we have achieved important improvements in energy use across the Group.

Our Middleton site has reduced overall energy consumption per unit produced by 9%, while our bottle-manufacturing site at Bradford is now using 5.8% less electricity for every bottle it makes.



Because of the small number of companies in this sector, with one company (PZ Cussons Plc) not disclosing environmental information at all, the most reported impacts are those disclosed by McBride Plc and Reckitt Benckiser Plc. Both report on their environmental policies; and only Reckitt Benckiser includes a general CSR statement. All other topics listed relate to disclosures made by McBride. An example of McBride's reporting can be seen in Case study 14.

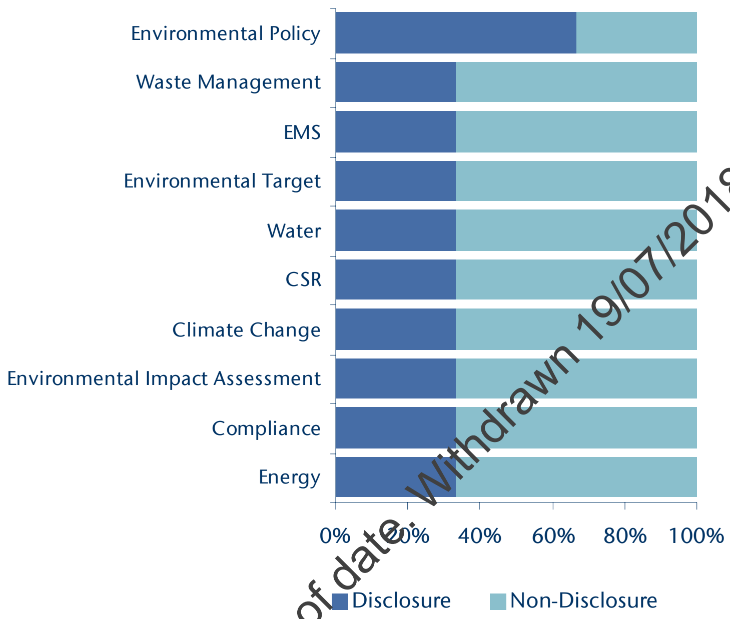


Figure 25. Top ten environmental topics in the Personal Care and Household Products sector (by percentage of FTSE All Share companies in the sector).

Where the information is reported in the Annual Report and Accounts

McBride Plc introduces its approach to sustainable development in the Chief Executives statement and splits much of its reporting amongst the Director's Report and the CSR section. The Directors Report contains more information on systems, processes and policy while the CSR section discusses broader issues of sustainable development and some of the companies impacts. Reckitt and Benckiser Plc reports on its environmental policy within the CSR section of its Annual Report and Accounts.

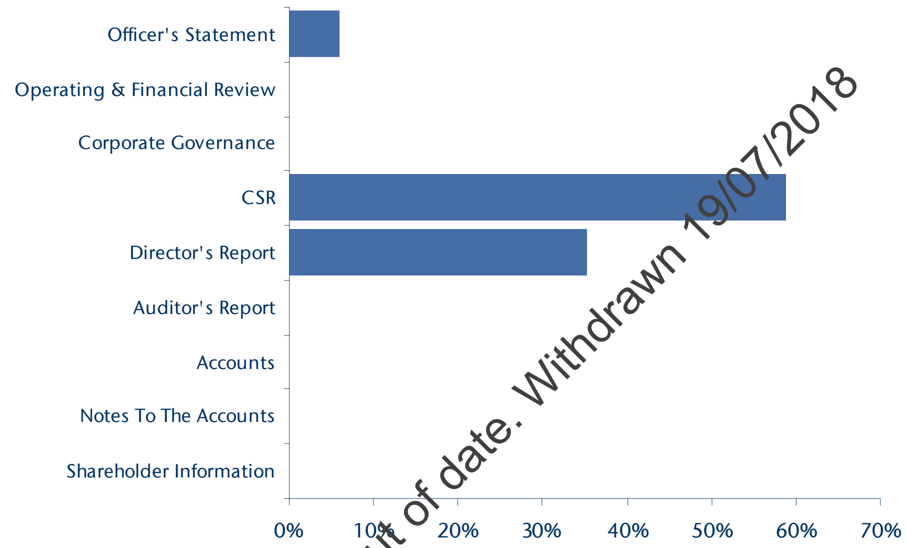


Figure 26. Location of environmental disclosures in the Annual Reports and Accounts of the Personal Care & Household Products sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
RECKITT BENCKISER PLC													○													○	✓
PZ CUSSONS PLC																											

Pharmaceuticals and Biotechnology

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

Index	Number of Companies
FTSE 100	3
FTSE 250	4
FTSE Small Cap	11
FTSE All Share	18

FTSE Sector Name	Pharmaceuticals and Biotechnology
Total Turnover (Millions):	£34,702
Turnover as % of All Share:	2.91%
Number of Companies:	18
FTSE Description	Companies the majority of whose research and development involves the use of living material as its means of drug discovery and diagnostics development and which would derive the majority of its revenue from wither sales or licensing of these drugs and/or diagnostic tools. Biotechnology and drug research and development and/or exploitation.

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	67%	96%
FTSE 250	100%	96%
FTSE Small Cap	55%	80%
FTSE All Share	67%	89%

The Pharmaceuticals and Biotechnology sector has fairly low environmental impacts because most of the companies' operations focus on research and marketing with much of the manufacturing, and the associated environmental impacts, outsourced.

In the production of high value chemicals, there is a general trend to increase efficiency and reduce the amount of waste, so it is recycled wherever possible. The trade organisation for this sector in Britain is the Association of the British Pharmaceutical Industry (ABPI)[18], which concerns itself chiefly with the environmental effects of pharmaceuticals themselves, rather than the impacts caused by their production. Reporting levels in the sector are below average even though many of the companies in the FTSE 350 produce a supplementary report on the environment.

Out of the three pharmaceutical companies GlaxoSmithKline Plc and Astrazeneca Plc provide fairly extensive environmental disclosure while Shire Pharmaceuticals Group Plc provide none at all in their Annual Report and Accounts. All three provide extensive separate HSE or CSR reports.

[18] The ABPI can be found at http://www.abpi.org.uk/default.asp

Out of 11 FTSE Small Cap companies only 6 make any from of environmental disclosure. All but one of the FTSE Small Cap companies not reporting is a biotechnology company.

Sector impacts and reporting in the FTSE 350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	High	Medium	Medium	High
Disclosure	14%	0%	29%	14%	29%

Water and other environmental impacts are medium impacts for this sector. However, there is no reporting on water, and reporting on other environmental impacts is below average (29%), and relates primarily to the use of ozone depleting substances as propellants in inhalation products. Impacts of climate change and waste management arise from running offices, laboratories, and small-scale manufacturing and so are relatively low, although it is disappointing that less than one third of pharmaceutical and biotech companies report on the issues. Overall disclosure in this sector is at a lower level than that of many low impact sectors such as insurance or banking.

Information disclosed by the FTSE All Share

The two top environmental topics in the Pharmaceuticals and Biotechnology sector are environmental policy (61%) and CSR (33%), which is identical to the two top subjects for the FTSE All Share overall. This is followed by compliance (28%), with statements ranging from commitment to compliance to the discussion of obligations arising from compliance. This is also the context for disclosures of provisions and liabilities that have to be made for remediation work with 11% of pharmaceutical companies in the FTSE All Share referring to them, a low level that can be explained with the trend to outsource manufacturing and thus avoiding environmental obligations arising from running manufacturing facilities. In Case study 15 Astrazeneca Plc discuss the costs involved in complying with environmental regulation.

Case study 15: Astrazeneca Plc, Annual Report and Accounts 2002

Environmental costs and liabilities

The Group's expenditure on environmental protection, including both capital and revenue items, relates to costs which are necessary for meeting current good practice standards and regulatory requirements for processes and products. They are an integral part of normal ongoing expenditure for maintaining the Group's manufacturing capacity and product ranges and are not separated from overall operating and development costs. There are no known changes in environmental, regulatory or other requirements resulting in material changes to the levels of expenditure for 2000, 2001 or 2002.

Very few companies report on environmental policy in conjunction with environmental targets (17%) and EMS (11%) indicating that, while almost two thirds of companies have a policy, few have integrated that policy into the business function.

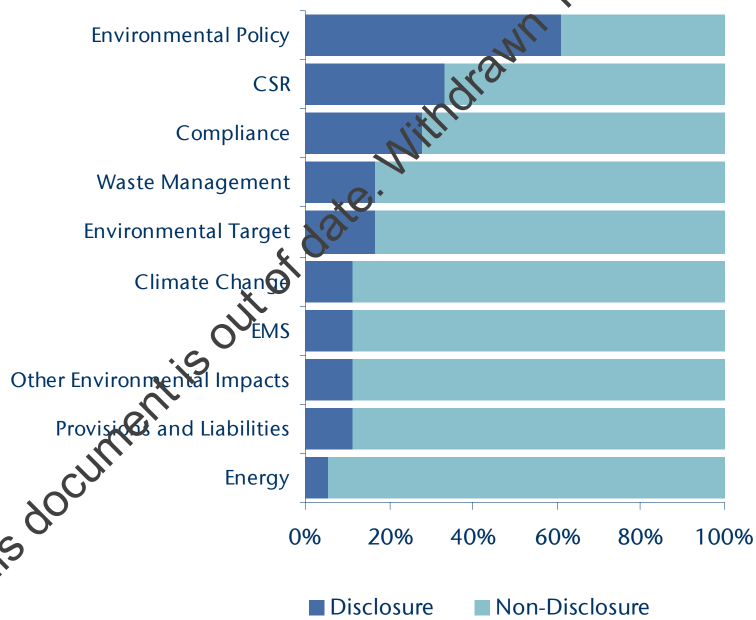


Figure 27. Top ten environmental topics in the Pharmaceuticals and Biotechnology sector (by percentage of FTSE All Share companies in the Pharmaceuticals and Biotechnology sector).

Where the information is reported in the Annual Report and Accounts

Reporting in the Pharmaceuticals sector shows two notable differences to the reporting pattern in the FTSE all Share overall: no environmental information is disclosed in Officer's Statement, but the amount disclosed in corporate governance sections is substantially higher in the Pharmaceuticals and Biotechnology sector than in the FTSE All Share overall (24%).

31% of information is disclosed in a CSR section, making it the most popular section to disclose environmental data. 14% of information is disclosed in the operating and financial review, but few of the disclosures would require to be audited, except those referring to provisions and liabilities. There still is some need for preparation for the requirements of the upcoming OFR.

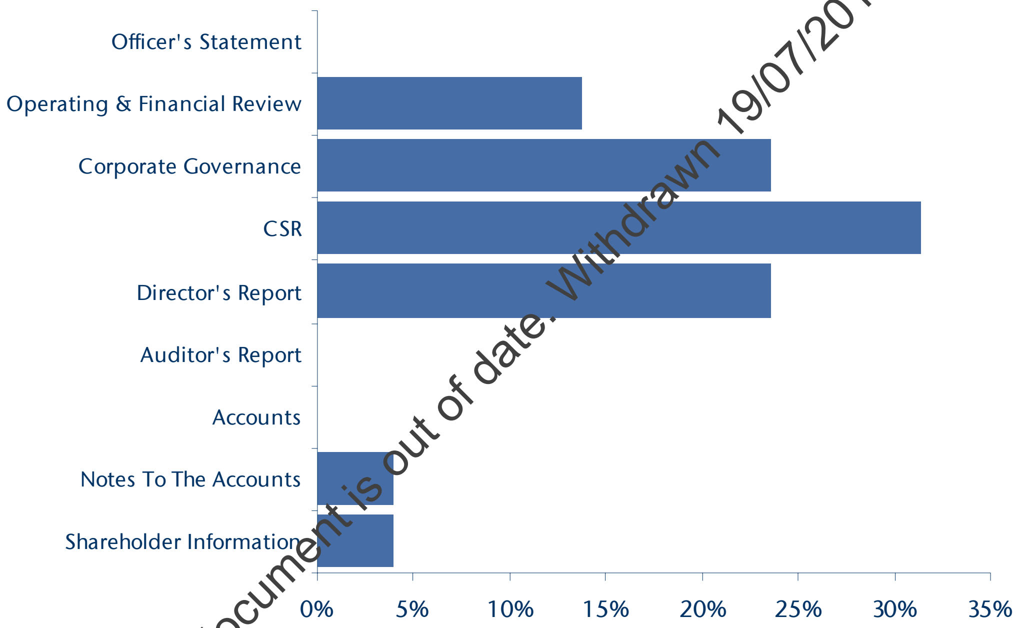


Figure 28. Location of environmental disclosures in the Annual Reports and Accounts of the Pharmaceuticals and Biotechnology sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
ASTRAZENECA PLC						○				○								○	○			○					✓
GLAXOSMITHKLINE PLC	○		○			○					○	○	○	○		○			○			○				○	✓
SHIRE PHARMACEUTICALS GROUP PLC																											✓
ACAMBIS PLC				○								○	○													○	✓
CELLTECH GROUP PLC									○				○		○										○	○	✓
GALEN HOLDINGS PUBLIC LIMITED COMPANY													○													○	✓
SKYEPHARMA PLC										○			○						○								

Tobacco

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

Sector Profile

FTSE Sector Name	Tobacco
Total Turnover (Millions):	£16.356
Turnover as % of All Share:	1.4 %
Number of Companies:	3
FTSE Description	Cigarette and tobacco manufacturers and wholesalers.

Index	Number of Companies
FTSE 100	3
FTSE 250	0
FTSE Small Cap	0
FTSE All Share	3

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	N/A	96%
FTSE Small Cap	N/A	80%
FTSE All Share	100%	89%

Cigarette manufacture has a substantial impact on the environment, but, since the effects of tobacco on human health are the focus of public attention, the environmental impacts tend to be overshadowed. However these environmental impacts are a cause for concern.

Tobacco companies exhibit a relatively high level of environmental disclosure. It is encouraging to see, in a high impact sector, that all companies make some form of environmental disclosure. There are only three companies in this sector, all of whom are in the FTSE 100.

Sector impacts and reporting in the FTSE350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	High	High	Low	High	Low
Disclosure	33%	0%	67%	33%	0%

There is some forest damage where large quantities of wood are used to dry tobacco, mainly as fuel but also in the construction of curing barns. Coal and oil are also used for curing. Around 5% of all deforestation in Africa is said to be caused by tobacco cultivation and production.

Another environmental impact of tobacco growth is the use of pesticides and herbicides. Tobacco plants are prone to many diseases and therefore require substantial use of these chemicals.

Cigarette and cigar production result in large quantities of waste in the form of tobacco slurry, solvents, oil and grease, paper, wood, plastic and packaging material, as well as toxic chemical waste. In the United States, the tobacco industry is ranked 18th among all sectors in the production of chemical waste[19].

Waste is shown to be the highest risk category in this sector, along with natural resource use. Even so, only one company reports on each of them, while two companies report on climate change, which is a low risk category. There is no clear relationship between the sector's risk levels and their levels of disclosure.

Although all Tobacco companies report on some aspect of their environmental impact these disclosures are not focussed on the areas of most impact.

Information disclosed by the FTSE All Share

All three tobacco companies in the FTSE All Share report on CSR issues. This is a result of the risks to the companies' license to operate associated with society's view of their product. Apart from this, it is difficult to draw any further conclusions since there is little consensus in the sector on what is reported.

[19] Joossens, L. Diversification is the future for many tobacco farmers. Tobacco Control 1996; 5: 177-8

Case study 16: Gallaher Group Plc, Annual Report and Accounts 2002

Benchmarking performance

The Group participates in the annual Business in the Environment Index of Corporate Environmental Engagement of FTSE 350 companies. In the Sixth Index (which covers 2001 – results published in February 2002), the Group's score increased to 72%, up from 59% in the Fifth Index. In the overall rankings, the Group was placed 90th out of 192, up from 107th out of 184. The Index provides a useful means of benchmarking performance and identifying areas for potential improvement. The Index results continue to confirm the established focus of the Group environment policy to be correct. The Group's largest European site, Lisnafillan, again participated in the annual Business in the Community survey of environmental management in the top 200 Northern Ireland companies. Having achieved first quintile status in 2001, Lisnafillan increased its score by a further 6.3 percentage points, achieving 88.2% in 2002. Retention of this first quintile position remains an environmental objective for the site..

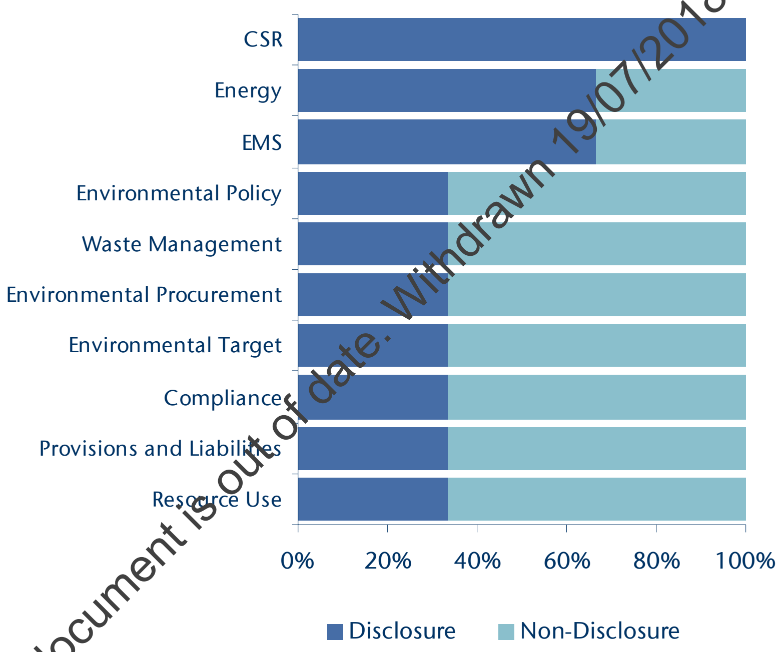


Figure 29. Top ten environmental topics in the Tobacco sector (by percentage of FTSE All Share companies in the Tobacco sector).

Where the information is reported in the Annual Report and Accounts

50% of disclosures are made in CSR sections of the Annual Report and Accounts. 30% of all disclosures are made in the Operating and Financial Review, dealing mostly with management processes.

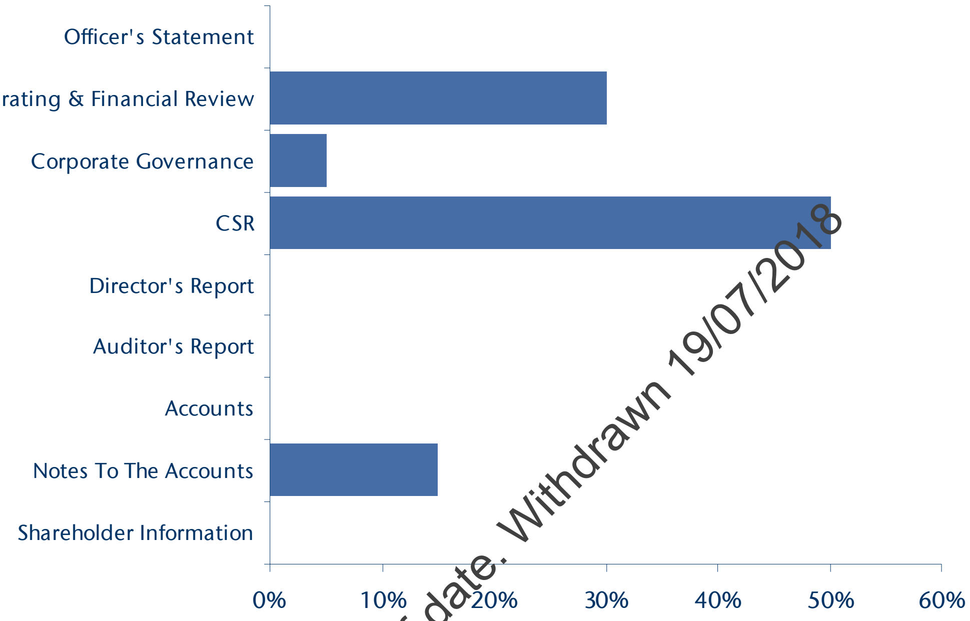


Figure 30. Location of environmental disclosures in the Annual Reports and Accounts of the Tobacco sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
BRITISH AMERICAN TOBACCO P.L.C.																						○				○	✓
GALLAHER GROUP PLC	○		◑	○							●	◑	○					○	○							●	✓
IMPERIAL TOBACCO GROUP PLC			◑								○									○						○	✓

General Retailers

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

Sector Profile

Index	Number of Companies
FTSE 100	6
FTSE 250	18
FTSE Small Cap	21
FTSE All Share	45

FTSE Sector Name	General Retailers
Total Turnover (Millions):	£68,919
Turnover as % of All Share:	5.9 %
Number of Companies:	45
FTSE Description	Shops concentrating on mass distribution of both hard lines and soft goods at discounted prices due to volume. Retailers conducting the majority of their business on the Internet or other electronic systems (e.g. digital TV). Shops and wholesalers concentrating on the sale of a single class of goods not classified elsewhere. Retail outlets with more than one department, selling a varied range of goods not classified elsewhere. Shops concentrating on the sale of a single class of soft goods, clothing, etc.

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	78%	96%
FTSE Small Cap	81%	80%
FTSE All Share	82%	89%

The General Retail sector covers a wide range of business activities and contains a large number of companies. The lead trade organisation for the sector is the British Retail Consortium, which published an environmental initiative in 2001[20]. This initiative is largely concerned with waste minimisation and recycling. It is worth noting however, that any of the larger retailers with a company fleet of vehicles will have a direct impact on climate change caused by the combustion of fossil fuels, along with the impacts from the shops themselves, which includes energy use.

The major impact of the sector is waste from packaging and damaged goods. The burden of waste has been placed back on the producer and retailer in recent years with the introduction of Producer Responsibility Regulations including packaging waste and Waste Electrical and Electronic Equipment (WEEE). Under these regulations, retailers are required to recover certain

[20] The British Retail Consortium 'Towards Retail Sustainability' 2001

percentages of waste. It is unsurprising, therefore, that over half (58%) of FTSE All Share general retail companies report on waste management.

In Case study 17, House of Fraser Plc discusses their approach to forthcoming waste regulation in the Directors Report.

Case study 17: House of Fraser Plc, Annual Report and Accounts 2002/2003

The Group continues its policy of minimising energy costs, with lighting, heating and air-conditioning introducing building energy management systems. Staff are made aware of the Group's policy.

The Group, as part of its commitment to conducting its operations in a socially and environmentally responsible manner, has in place a steering committee which meets regularly in order to keep abreast of, and proactively effect, impending waste legislation currently mooted by Parliament. Along with its external environmental advisers, the Group is dedicated to ensuring that all impending legislation is implemented into its operations and communicated to its staff once it becomes operative. For example, scoping work has already begun to assess the possible impact of, and the steps necessary to implement, the European Waste Electrical and Electronic Equipment (WEEE) Directive on the consumer electrical part of the Group's business. The Directive, which must be implemented by EU member states byAugust 2004, sets the collection, recycling and recovery targets for all types of electrical products.

The Group strives to keep waste materials to a minimum and to reduce, recycle, and where necessary, dispose of waste by the safest and most responsible means available to reduce environmental impact. As part of this process, the Group has adopted many recycling initiatives which permeate throughout its organisation. These range from the recycling of clothes hangers within its stores, to the donation of computer equipment to a recognised charity whose aim is to promote access to, and use of, Information Technology by community groups. This also plays a part in helping to reduce waste.

Sector Impacts and reporting in the FTSE 350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	Low	Medium	Medium	Medium
Disclosure	13 %	8 %	38 %	63 %	8 %

In general retail outlets do not use much water, and given that retailers do not extract, abstract or harvest natural resources, this impact is low for this sector too. It is unsurprising to see little reporting on these impacts. However, all shops use electricity and produce waste and many retailers will have distribution networks that use fuel. This leads to medium exposure to climate change and other impacts from fuel use, but the major impact for the sector is that of waste. It is encouraging to see 63% of FTSE 350 companies discussing their waste management in their Annual Reports and Accounts.

Information disclosed by the FTSE All Share

62% of the FTSE All Share companies in the General Retailers section disclose an environmental policy in their Annual Report and Accounts and 58% report on their waste management. It is interesting to see more companies reporting on waste than on CSR, suggesting that waste is a topic that many retail companies take seriously; the driver for this is the UK packaging regulation. Just over 40% of companies also report on energy use. The low level of reporting on any issues other than policy , CSR and waste is indicative of the perceptions the industry has of its impacts and the regulatory pressures on the sector. It is surprising that climate change and other emissions from transportation are not disclosed by more FTSE All Share general retail companies for example. The growing tendency to outsource distribution may be a factor in this.

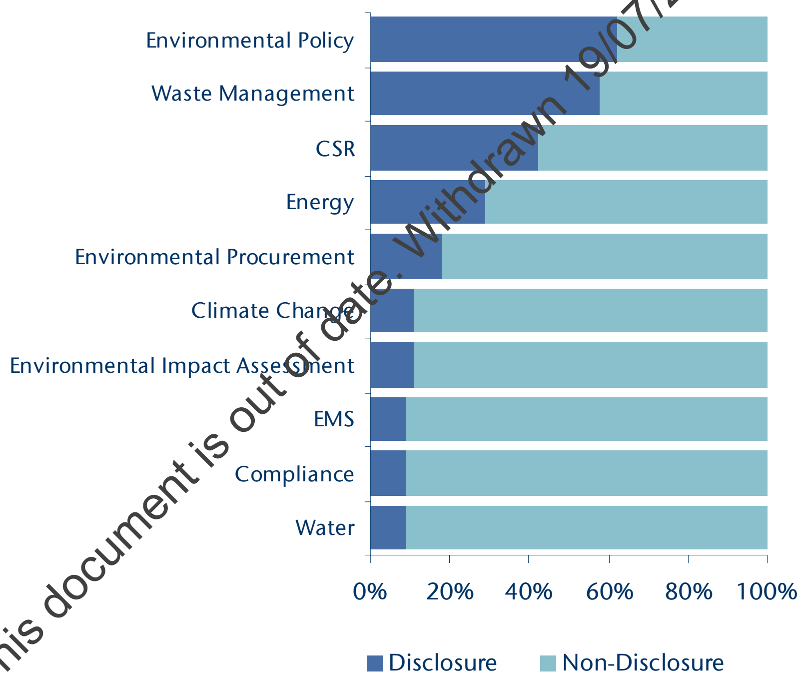


Figure 31. Top ten environmental topics in the General Retailer sector (by percentage of FTSE All Share companies in the sector).

Where the information is reported in the Annual Report and Accounts

50% of retail companies choose to report in the CSR section, and 24% in the Directors' Report of their Annual Reports and Accounts. Only 13% of companies report in their Operating and Financial Review sections. The location of disclosures in the general retail sector is dependent upon the company. Kingfisher Plc and Body Shop Plc make almost all their disclosures in the Operating and Financial Review, making it clear that they consider environmental issues to be at the core of their business (Courts Plc and Signet Plc are the only other companies making disclosures in their Operating and Financial Review). Most other companies make disclosures in HSE/CSR sections or discuss policy and management systems in the Directors Report.

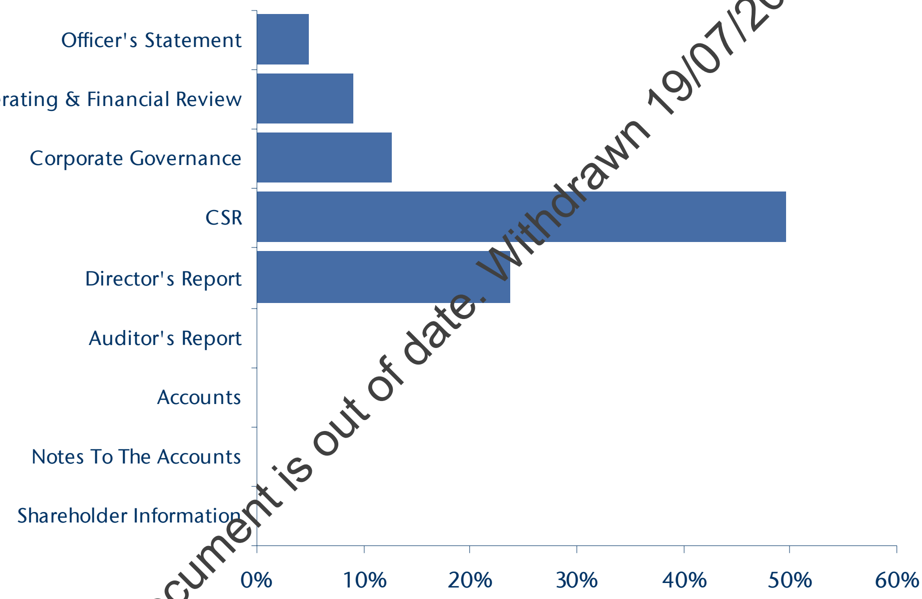


Figure 32. Location of environmental disclosures in the Annual Reports and Accounts of the General Retailers sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity /Land Use	Contaminated Land	Environmental	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
BOOTS GROUP PLC				●				○				●	○						○							○	✓
DIXONS GROUP PLC				◑		◑							○													○	✓
GUS PLC			○								○		○		○	○		○							○	○	✓
KINGFISHER PLC				○		○										○		○							○	○	✓
MARKS AND SPENCER GROUP PLC																										○	✓
NEXT PLC													○													○	✓
BURBERRY GROUP			◑	◑									●		◑											○	
CARPETRIGHT PLC				○									○														
CARPHONE WAREHOUSE GROUP PLC (THE)	○			○						○																	✓
DEBENHAMS PLC		○	◑	◑									○													○	✓
DFS FURNITURE COMPANY PLC	○		○	○									○														
HMV GROUP PLC				○									○														
JJB SPORTS PLC			○	○		○			○																	○	✓
MATALAN PLC				○						○			○		○												✓
MFI FURNITURE GROUP PLC	○		○	●							○	○	○														✓
N. BROWN GROUP P.L.C.				○									○														✓
NEW LOOK GROUP PLC													○													○	✓
SIGNET GROUP PLC				○								○	○					○									✓
W H SMITH PLC		●	○	◑				○					○		◑			○									✓
WOOLWORTHS GROUP PLC													○					○								○	✓
EBOOKERS PLC																											
FRENCH CONNECTION GROUP PLC																											✓
KESA ELECTRICALS PLC																											
LASTMINUTE.COM PLC																											

Leisure & Hotels

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Leisure & Hotels
Total Turnover (Millions):	£37,479
Turnover as % of All Share:	3.2%
Number of Companies:	31
FTSE Description	Providers of gambling and casino facilities. Hoteliers and hotel service companies. Providers of leisure facilities. Operators of restaurants and pubs, including integrated brewery companies.

Index	Number of Companies
FTSE 100	3
FTSE 250	16
FTSE Small Cap	12
FTSE All Share	31

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	94%	96%
FTSE Small Cap	75%	80%
FTSE All Share	87%	89%

The Leisure and Hotels sector includes gambling establishments such as bookmakers and casinos, leisure facilities such as health clubs and cruise lines, restaurants and bars, pub chains and hotels.

There are a number of trade associations. The most significant body is the British Hospitality Association (BHA) which advises its members on environmental policy. The International Hotels Environment Initiative (IHEI)[21] has developed the Benchmark Hotel website for hoteliers focussing on energy use, water use, waste and the use of chemicals. These environmental issues are typical of the sector generally – the main impacts for the sector are associated with waste packaging, general waste and climate change.

An example is given by De Vere Hotel, a FTSE 250 hotel group, in Case study 18.

[21] The IHEI can be found at http://www.ihei.org and is part of the International Tourism Partnership

Case study 18: De Vere Group Plc, Annual Report and Accounts 2002

Environmental Policy

Energy consumption is our biggest environmental issue and our continuing challenge is to minimise energy use. We benchmark gas and electricity consumption in sites across the Group and use this information to apply best practice. Energy efficiency remains a key feature of our design, maintenance and refurbishment programmes.

Various energy efficiency initiatives have been trialled and implemented during the year, including alternative heating and energy management schemes, the active procurement of energy efficient plant and equipment, high efficiency boilers and low energy lighting. As a consequence, at the majority of sites, average energy usage per

unit has fallen by approximately 3% during the year.

We also monitor and benchmark water usage to allow comparisons to be made between sites and to identify areas where savings can be achieved. Our waste conservation programmes are continuing; the recycling of glass and paper is being achieved through nominated group contractors and compactors have been installed at several sites to minimise the volume of waste.

We are also working with our supply-chain and encouraging our suppliers to develop environmentally superior processes and packaging to improve overall environmental performance. This year saw the switch of our preferred supplier for cleaning chemicals to a company that have been innovative in producing a new product line and alternative packaging to lessen environmental impact.

Sector impacts and reporting in the FTSE 350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	Low	Medium	Low	Low
Disclosure	0%	32%	21%	37%	5%

All companies in the sector produce waste from paper, packaging, cooking oil, cleaning chemicals etc and all use varying amounts of energy. Reporting levels in the FTSE 350 on five key environmental topics are comparatively low. The main impact of this sector is climate change reported by 21% of FTSE 350 leisure and hotel companies. The disclosures in the 'other environmental impacts' category are disclosures made by Wolverhampton and Dudley breweries with reference to noise control from their venues.

Information disclosed by the FTSE All Share

68% of the FTSE All Share companies in the Leisure and Hotels sector disclose their environmental policy. There is some reporting on environmental targets (10%), but environmental management systems are not in the top ten topics reported. 42% of companies in the sector report on general CSR topics. Waste management (29%) is the most commonly reported environmental impact, which is lower than in the FTSE All Share. However, energy and water are also reported on by 26% of companies in the sector.

Overall there are few companies reporting on the relevant environmental issues in the sector and even fewer discussing their management of those issues. The sector is one of the worst performing in the FTSE All Share for detailed disclosure levels.

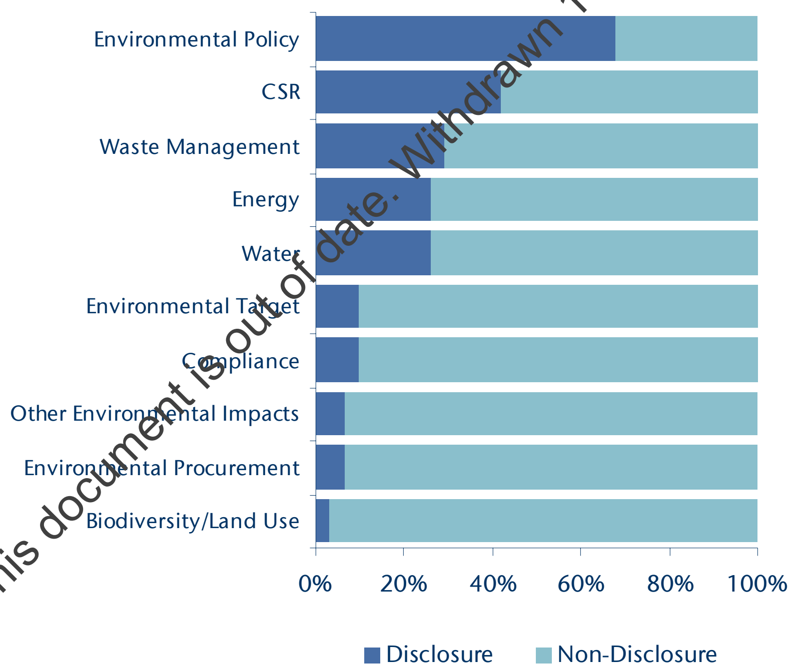


Figure 33. Top ten environmental topics in the Leisure & Hotels sector (by percentage of FTSE All Share companies in the Leisure & Hotels sector.

Where the information is reported in the Annual Report and Accounts

The Leisure and Hotels sector differs from most other sectors in that the majority of disclosures are not made in the CSR section of the Annual Reports and Accounts, but in the Directors' Report (55%). This is related to the fact that many of the disclosures relate to policy rather than environmental performance or the effects of environmental issues on the companies affected.

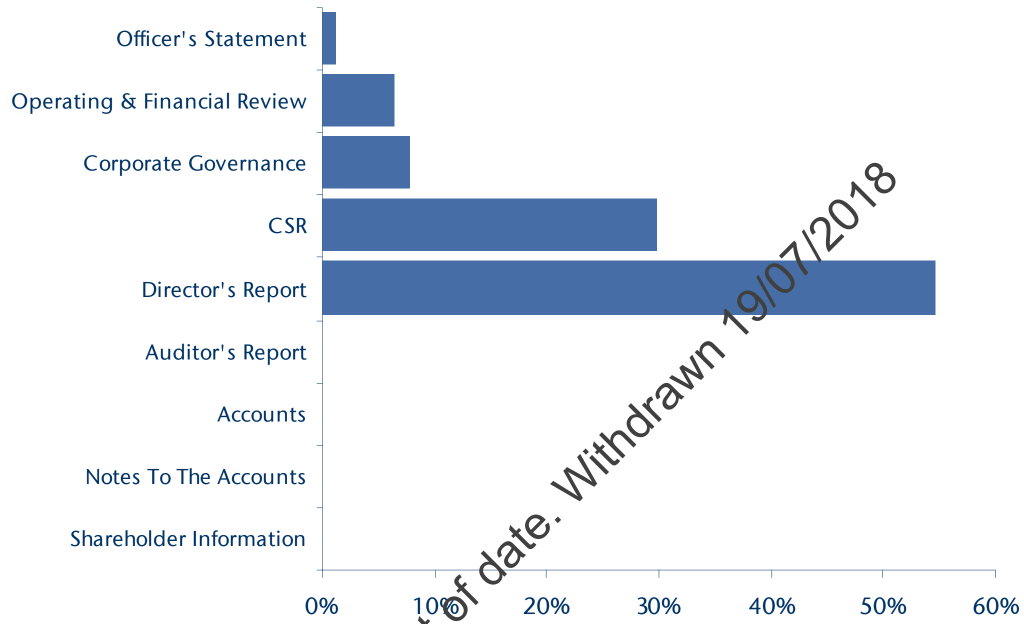


Figure 34. Location of environmental disclosures in the Annual Reports and Accounts of the Leisure & Hotels sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
CARNIVAL PLC		○		○																							✓
HILTON GROUP PLC													○					○							○	○	✓
INTERCONTINENTAL HOTELS GROUP PLC													○													○	✓
DE VERE GROUP PLC		○	◑	○								○	○					○									
ENTERPRISE INNS PLC													○														
FIRST CHOICE HOLIDAYS PLC			◑					○			○															○	
GREENE KING PLC																											
HOLIDAYBREAK PLC																										○	✓
LUMINAR PLC																										○	
MANCHESTER UNITED PLC				◑								○	○													○	
MILLENNIUM & COPTHORNE HOTELS PLC		○		○																						○	
MITCHELLS & BUTLERS PLC													○													○	✓
PUNCH TAVERNS PLC													○						○								
RANK GROUP PLC (THE)		○	○										○													○	✓
STANLEY LEISURE PLC		○		○									○						○							○	
WETHERSPOON (J.D.) PLC			○	◑									○													○	✓
WHITBREAD PLC		○		○									○														✓
WOLVERHAMPTON & DUDLEY BREWERIES										○			○						○								✓
WILLIAM HILL PLC																											

Media & Entertainment

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

Index	Number of Companies
FTSE 100	9
FTSE 250	18
FTSE Small Cap	13
FTSE All Share	40

FTSE Sector Name	Media & Entertainment
Total Turnover (Millions):	£30,359
Turnover as % of All Share:	2.6%
Number of Companies:	40
FTSE Description	Independent radio and television contractors, not classified elsewhere. Companies providing facilities and/or programmes for contractors. Film production. Providers of television, media services and programming facilities driven by subscriptions. Advertising, marketing and public relations agencies and consultants. Manufacturers of photographic equipment for use by the general public. Operators of photographic studios and film development companies. Publishers of information via printed or electronic media. Printers or distributors of printers' requisites and artists' materials.

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	67%	96%
FTSE 250	100%	96%
FTSE Small Cap	77%	80%
FTSE All Share	85%	89%

The Media and Entertainment sector covers a wide range of activities. While much of the sector’s output is in the form of electronic media and most companies in the sector have a relatively low environmental impact. A few, such as printing and recorded media reproduction, have a significant environmental impact and are subject to fairly rigorous environmental regulation. The primary regulations effecting print and recorded media reproduction companies are Integrated Pollution Control and Integrated Pollution Prevention Control. Both these regulatory frameworks require management systems, monitoring and reporting to the regulator and so could be expected to enhance environmental disclosure. However, although the majority of FTSE All Share companies in this sector disclose some form of environmental information, levels are still below the average in the FTSE All Share.

Out of the four FTSE 100 companies not making any environmental disclosures in their Annual Report and Accounts, three, Reed Elsevier Plc, Reuters Group Plc and Yell Group Plc are in the media and entertainment sector (they do provide information in separate HSE or CSR reports).

This suggests that the environment is not something that companies in this sector feel they need to report on in the Annual Report and Accounts, given the sector's relatively low environmental impact.

Sector impacts and reporting in the FTSE350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	Medium	Medium	Medium	Low
Disclosure	4%	19%	33%	44%	7%

It was noted previously that most companies in the sector have a relatively low environmental impact. However print and recorded media reproduction uses large amounts of water, creates significant levels of waste and results in emissions to water.

Unsurprisingly, the environmental issue most discussed by Media and Entertainment companies in the FTSE 350 companies is waste, an issue not only for printers and media manufacturers but all companies with large workforces and offices. 44% of media and entertainment companies made disclosures on waste – lower than the average for the FTSE All Share overall. The other environmental issue associated with printing is water use.

Case study 19: Granada Plc, Annual Report and Accounts 2002

Water

Total water usage (m^3) 2002: 103,907 (2001: 109,439)	Programme making and broadcasting including washing and cleaning, air conditioning systems (cooling towers), toilets and washrooms and in catering operations. Resource depletion impact only.	Electronic control of toilet flushing. Installation of percussion taps in washrooms. Further reduction in per person water usage.

Comment: Water usage has reduced by over 5%.

Solid waste

Total waste (tonnes) 2002: 1,847 (2001: 2,746)	Programme making and broadcasting including waste from office refurbishment,catering waste. Resource depletion and pollution impact. Hazardous waste continues to be less than 0.1%.	Recycling schemes established for toner cartridges, video films, paper and drink cans, as well as end of life electrical and electronic equipment. Videotape erasers purchased to encourage reuse of tapes.

Comment: A significant amount of waste is now being recycled leading to a decrease of over 32% in the year. Meridian has had specific success with their approach to waste of "who could reuse this?" as opposed to "how can I get rid of this?".

It is disappointing that, while over half the FTSE 350 companies in this sector are involved in printing and publishing (16 out of 27) less than one fifth (19%) make any disclosure in their

Annual Report and Accounts. More companies report climate change, a relatively low environmental impact for the sector, than on water. Granada Plc, Case study 19, is a good example of reporting in this sector with clear and concise performance data.

Information disclosed by the FTSE All Share

63% of the media companies in the FTSE All Share disclose their environmental policy, and 45% of them report on their CSR activities. Overall, the reporting profile of the sector is similar to that of the FTSE All Share. Waste is the impact that is most reported (40%), with water (20%), energy (15%) and climate change (15%) at much lower levels.

As is the case for many other sectors, there is little communication of implementation of environmental policies and performance measurement. Given the fact that 63% of media companies disclose their environmental policies, it is disappointing to see only 8% of companies informing about their EMS. Environmental targets do not even appear in the top ten disclosure.

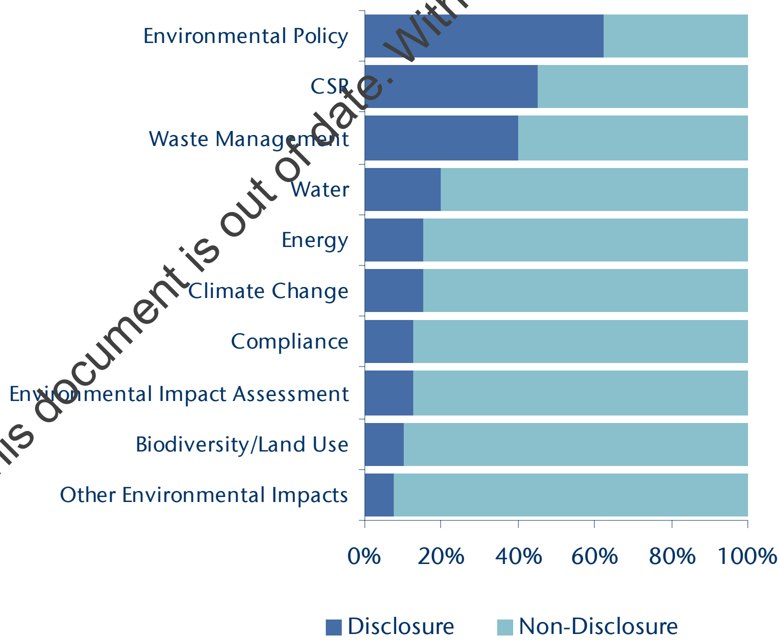


Figure 35. Top ten environmental topics in the Media & Entertainment sector (by percentage of FTSE All Share companies in the Media & Entertainment sector.

Where the information is reported in the Annual Report and Accounts

The majority of information (52%) is reported in the CSR section of the Annual Reports and Accounts. Most of the rest of the disclosures are found in the Director's Report (37%). Almost all the disclosures made in this section relate to policy. There is comparatively little disclosure in the operating and financial reviews (7% only).

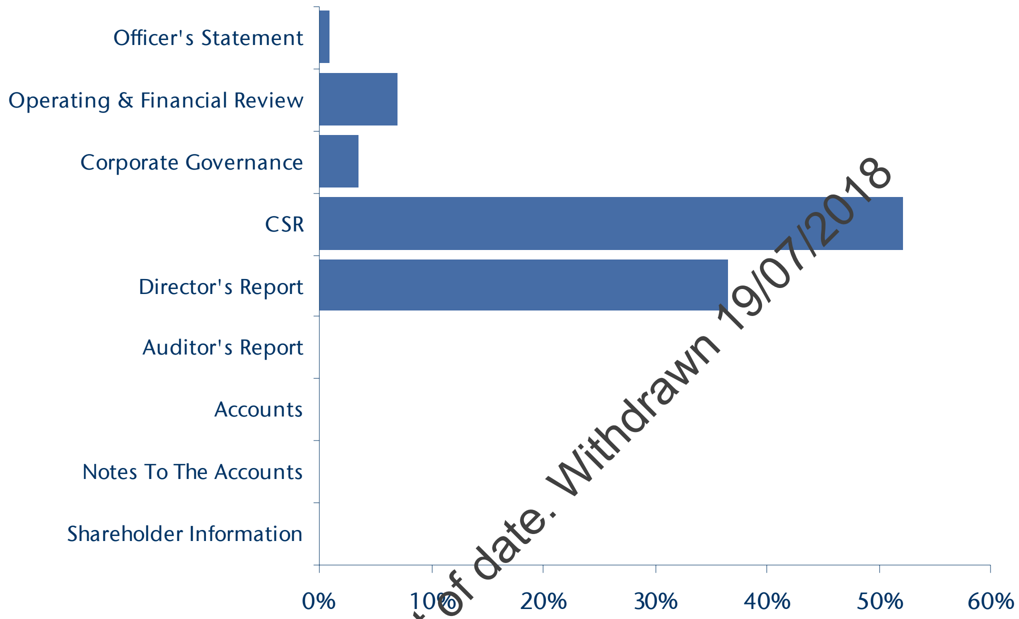


Figure 36. Location of environmental disclosures in the Annual Reports and Accounts of the Media & Entertainment sector

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
BRITISH SKY BROADCASTING GROUP PLC																										○	✓
DAILY MAIL AND GENERAL TRUST PLC	◑	●		◑		○						○	○		○											○	
EMAP PLC				○				○							○											○	✓
GRANADA PLC		◑		◑							◑		◑		◑				○							○	✓
PEARSON PLC													○						○								✓
WPP GROUP PUBLIC LIMITED COMPANY													○													○	✓
REED ELSEVIER PLC																											✓
REUTERS GROUP PLC																											✓
YELL GROUP PLC																											✓
AEGIS GROUP PLC				○									○														✓
CAPITAL RADIO PLC				○						○			○													○	✓
CARLTON COMMUNICATIONS PLC		◑		◑		◑				◑																○	✓
CHRYSALIS GROUP PLC					○	○							○		○			○								○	
EMI GROUP PLC			◑	◑		◑					○															○	✓
EUROMONEY INSTITUTIONAL INVESTOR PLC													○														
GWR GROUP PLC													○													○	
HIT ENTERTAINMENT PLC																										○	
INFORMA GROUP PLC													○														
JOHNSTON PRESS PLC		◑		◑		○							○							○					○	○	
PHOTO-ME INTERNATIONAL PLC													○														
SCOTTISH RADIO HOLDINGS PLC		○	○	○				○																			
SMG PLC		●	○	◑									○													○	
ST. IVES PLC												○	○														
TAYLOR & FRANCIS GROUP PLC			○	○									○														
TAYLOR NELSON SOFRES PLC													○														
TRINITY MIRROR PLC			○	○		◑							○						○							○	✓
UNITED BUSINESS MEDIA PLC													○													○	

Support Services

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Support Services
Total Turnover (Millions):	£47,910
Turnover as % of All Share:	4.1 %
Number of Companies:	64

Index	Number of Companies
FTSE 100	5
FTSE 250	21
FTSE Small Cap	38
FTSE All Share	64

FTSE Description: Providers of non-financial services to a wide range of industries, which could have been provided "in house", excluding those activities classified elsewhere. Couriers and providers of non-contractual mail and package delivery services. Providers of education, business and management training courses and employment services. Providers of solid and hazardous waste management, recovery and disposal services. Funeral directors, cemetery and crematorium operators. Providers of financial administration services. Companies installing, servicing and monitoring alarm systems and those providing security services.

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	100%	96%
FTSE Small Cap	87%	80%
FTSE All Share	92%	89%

The Support Services sector covers a wide range of activities, some of which (security, management training etc.) have very low environmental impacts, whereas others (particularly waste management services) will have very high impacts. As one might expect from such a fragmented sector, there is no trade association or environmental initiative covering everyone, but a range covering the various subcategories.

92% of companies in this sector report that they have an environment report, and 100% of the FTSE 350 companies do. The most comprehensive disclosures come from waste management companies, which are subject to a number of environmental regulations, but even companies in the support services sector that only have offices will still have environmental impacts from heating, lighting and transportation, along with office waste. The fragmented nature of the sector makes it hard to draw any general conclusions, but it is nonetheless encouraging to see such a high percentage of companies reporting.

Sector impacts and reporting in the FTSE350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	Low	Medium	Medium	Medium
Disclosure	12%	23%	38%	42%	15%

As expected of a sector where a lot of companies only have impacts from their offices, the impact levels are quite low. The presence of waste management companies in the sector raise the levels of waste impact (as they have to deal with hazardous waste etc) and the only other impact that all the companies have in common is climate change effects from energy use. The levels of reporting reflect the level of impact – there is little reporting on resource or water use, as they are not something that occurs much in the sector. The converse is true for climate change and waste impacts.

Information disclosed by the FTSE All Share

Case study 20: British Polythene Industries Plc, Annual Report and Accounts 2002

Gas consumption per unit of production fell by a further 17% in 2002 and by 26% since 1998. Total gas consumption fell by 4.1 million Kwh in the year. CO2 output reduced by 2% (2,528 tonnes) and has now fallen by over 10% since 1998, showing the Group's commitment to energy efficiency and CO2 emission reduction The Group has reduced the number of sites involved in the implications of VOC legislation through printing and solvent emissions in the UK from 20 sites in 1999 to 12 printing sites in 2002 through a process of rationalisation.

In 2002 of the 12 UK sites printing, 2 are using abatement to comply with UK VOC legislation. At Ardeer, biofilters have been fitted to major printing presses during 2002 and early 2003. At Worcester, a thermal regenerative oxidiser was commissioned with careful modifications of the plant in order to meet UK VOC emissions regulations for the whole plant. Plans are now in hand to introduce abatement to our site at Stockton-on-Tees.

	1999	2000	2001	2002
Energy Consumption				
Unit consumption per tonne of product				
Electricity kwh/tonne	693	676	669	664
Gas kwh/tonne	75.4	76.8	66.6	55.1
CO_2 Output kgs/tonne	321	314	308	303
VOC Emissions				
UK solvent purchases (tonnes)				
Non abatement sites	767	460	284	255
Abatement sites	630	840	718	842
	1,397	1,300	1,002	1,097

75% of support services companies in the FTSE All Share disclose an environmental policy, and 47% report on waste. 38% of companies report on an EMS, but only 11% refer to environmental targets, indicating that while the companies in this sector show willingness to formulate a policy, less importance is given to communicating its implementation and the outcomes.

A good example of concise environmental reporting with key performance indicators, is given in Case study 20. British Polythene Industries Plc, a FTSE Small Cap company, in business with a relatively high environmental impact and fairly atypical of the sector, provides detailed information on their major impacts, CO2 and VOC emissions.

Given that all companies in the sector produce waste and use energy, it is disappointing to see low levels of reporting on these categories when so many companies have an environmental policy and therefore presumably, collect some useful data. Companies that report on compliance are those that face environmental regulations, in this case, waste management companies.

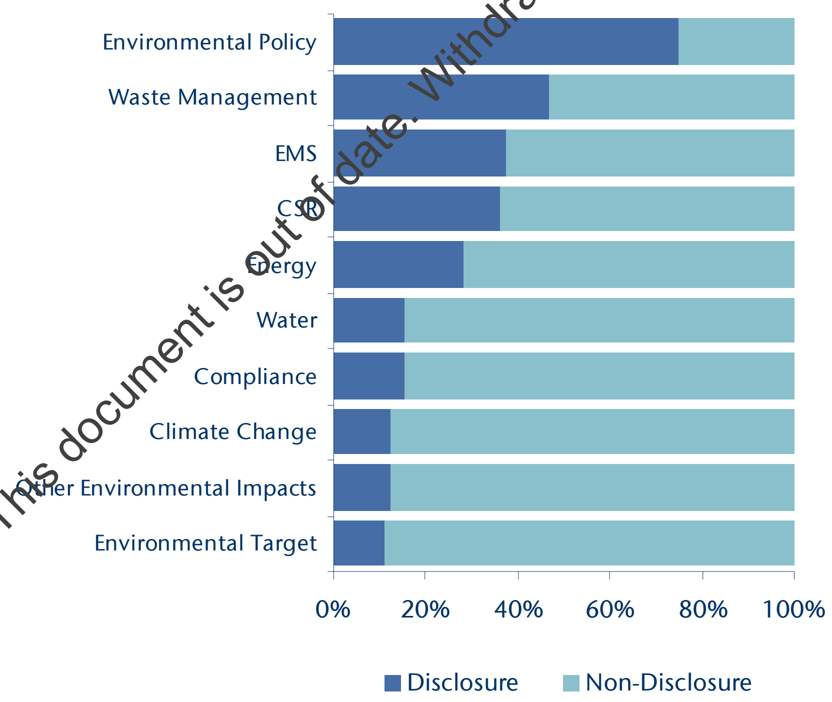


Figure 37. Top ten environmental topics in the Support Services sector (by percentage of FTSE All Share companies in the Support Services sector.

Where the information is reported in the Annual Report and Accounts

The majority of disclosures (52%) are made in a CSR section of the Annual Report and Accounts; a slightly higher proportion than in the FTSE All Share overall. The main disclosures in the Directors Report are similar in nature to those made in the CSR section, policy and waste management, although, unlike the CSR sections, there is little mention of any other issue in this section. There is comparatively little disclosure in the operating and financial reviews (6% only). 4% of disclosures are in the Notes to the Accounts, and are without exception records of provisions and liabilities and general compliance costs.

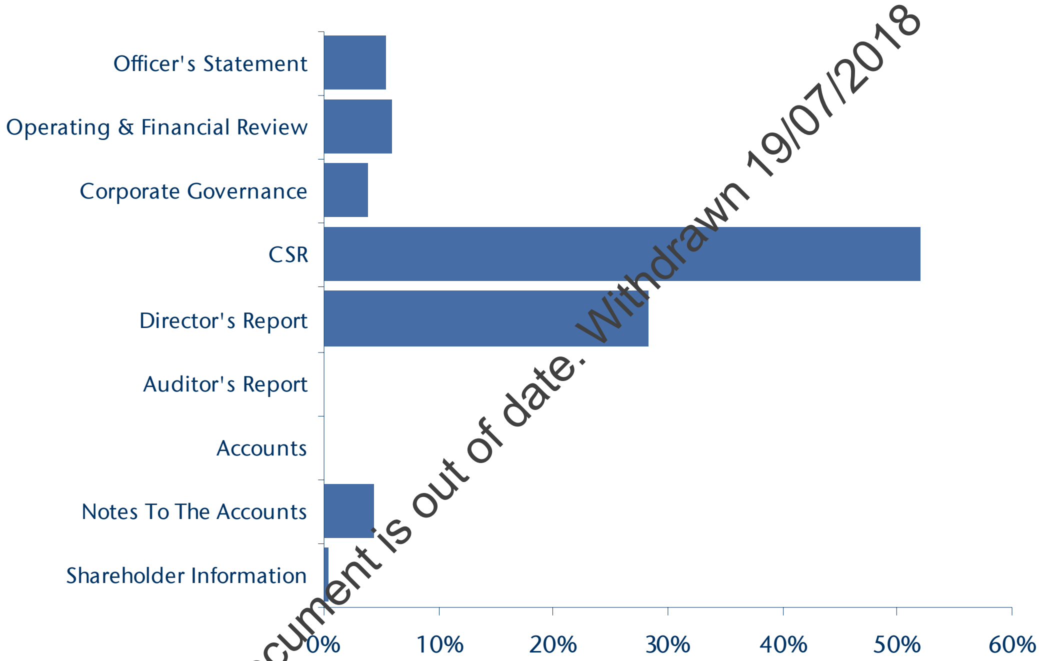


Figure 38. Location of environmental disclosures in the Annual Reports and Accounts of the – sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
BUNZL PUBLIC LIMITED COMPANY														○								○					
COMPASS GROUP PLC		○	○										○		○							○				○	✓
HAYS PLC				◑									○														
RENTOKIL INITIAL PLC																						◑			○	○	✓
REXAM PLC	○			○								○	○		◑							◑		○		○	✓
AGGREKO PLC					○					○			○														
BRAMBLES INDUSTRIES PLC			●	○	○	◑					○		○	○	◑				○			○	○			○	✓
BTG PLC													○													○	
CAPITA GROUP PLC (THE)		○		○				○			○	○	○		○											○	✓
DAVIS SERVICE GROUP PLC (THE)																			○								
DE LA RUE PLC		◑		◑		◑				○	◑	○	○														✓
ELECTROCOMPONENTS PLC	○		●	◑		○					○		○		○											○	✓
INTERSERVE PLC				○							○		○						○								✓
INTERTEK GROUP PLC					○								○						◑								
JARVIS PLC	○	○	◑	●		◑		○			○		○													○	✓
JOHN LAING PLC											○											◑					
MICHAEL PAGE INTERNATIONAL PLC													○													○	
MITIE GROUP PLC				○									○													○	✓
PHS GROUP PLC											○																
PREMIER FARNELL PLC		◑		◑		○					○		○						○		○						✓
RAC PLC													○														✓
RPS GROUP PLC			◑								○		○													○	✓
SECURICOR PLC						○																				○	✓
SERCO GROUP PLC		○								○	○		○														✓
SOUTH STAFFORDSHIRE GROUP PLC			◑					○			○		○														
WS ATKINS PLC			○	○							○		○		○				○							○	✓

Transport

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Transport
Total Turnover (Millions):	£36,431
Turnover as % of All Share:	3.1 %
Number of Companies:	27

Index	Number of Companies
FTSE Small Cap	9
FTSE 250	15
FTSE 100	3
FTSE All Share	27

FTSE Description: Air transport companies and operators of airports and related facilities and services. Land transport and related facilities and services, including road and tunnel operators and vehicle rental, and agencies which undertake the transportation of goods from shippers to receivers. Water-borne transport and related services and terminal facilities

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE Small Cap	100%	80%
FTSE 250	100%	96%
FTSE 100	100%	96%
FTSE All Share	100%	89%

Given the nature of the Transport sector, it is unsurprising that all 27 transport companies in the FTSE All Share make some form of environmental disclosure. Firstly, the vehicles used by the transport sector require fossil fuels, which have an impact on air quality and climate change. Secondly, their headquarters and branch offices require electricity, gas and water. However, most environmental disclosures relate to environmental policy and surprisingly only eight of the 27 companies mention climate change.

The aviation industry faces the possibility of being included in the second phase of the EU Emissions Trading Scheme starting in 2008 and is responsible for a growing proportion of UK CO_2 emissions[22]. It is perhaps no coincidence that of the three FTSE 100 companies in the sector, all report on climate change, two of them (British Airways Plc and BAA Plc) operate within the aviation industry, the third, Exel Plc is a logistics company.

[22] House of Commons Environmental Audit Committee Pre–Budget Report 2003: Aviation Follow–up Report, together with formal minutes March 2004

The sector includes seven aviation companies (including aviation service companies), five shipping companies and 15 road and rail transport companies. The environmental impacts for all are similar with climate change and other emissions to air such as sulphur dioxide, nitrogen oxides and particulates from the combustion of fossil fuels.

In Case study 21, Avis Europe Plc has taken the step to offset the emissions from their operations by planting trees through the Future Forest program.

Case study 21: Avis Europe Plc, Annual Report and Accounts 2002

As market leader in car rental we take our environmental responsibility seriously. Avis is making a real difference to the world in which we live and leading the world's travel and transport industry with our new "Caring for our climate" campaign. With the support of Future Forests, the international environmental consultancy, we have identified the carbon emission levels we produce and what we can do to offset and reduce these over time. Avis has implemented a market-leading three point plan to reduce carbon emissions:

- becoming carbon neutral for all our European operations
- setting a plan to reduce CO_2 emissions from these operations from 2003 onwards and
- enabling and encouraging customers to offset the CO_2 from their car rental.

Avis uses an annual reporting process to assess energy usage and waste from the European operations. The Edinburgh Centre for Carbon Management calculates how many trees need to be planted to offset the CO_2 emitted. Just under 20,000 tonnes of CO_2 are emitted by our European operations, with over 50% from electrical sources. To offset these emissions, over 70,000 trees had been planted on behalf of Avis, its staff and customers in 26 public-access forests by the end of 2002.

Sector impacts and reporting in the FTSE350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	Low	High	Medium	High
Disclosure	0%	33 %	39 %	50 %	22 %

Transport has a high direct impact on climate change but other environmental impacts are also important. Transport companies should keep records of fuel use as this is an important efficiency measure. From fuel use it is possible to calculate the amount of carbon dioxide and other pollutants emitted using calculators that are available from WBCSD and Defra, and it should be possible for most companies to report on their climate change impacts. Nevertheless, reporting levels are low. Reporting is prevalent amongst companies that may face a financial burden from these impacts and rare in companies that do not.

Information disclosed by the FTSE All Share

Almost all of the transport companies in the FTSE 350 companies (with the exception of Northgate Plc) disclose their environmental policy in their Annual Reports and Accounts. Most companies also discuss corporate social responsibility and waste management. BA explicitly state in their CSR statement that 'Consumers will more and more judge a company on its integrity and ethics, as well as the value of its commercial products and services'.[23]

After making broad references to environmental policy and CSR, the third most widely covered topic is waste management. All FTSE All Share Transport companies produce waste and 56% of them make a disclosure on their waste management. It is interesting to note that while climate change remains the most significant environmental impact of transport activities, waste is the most widely reported impact.

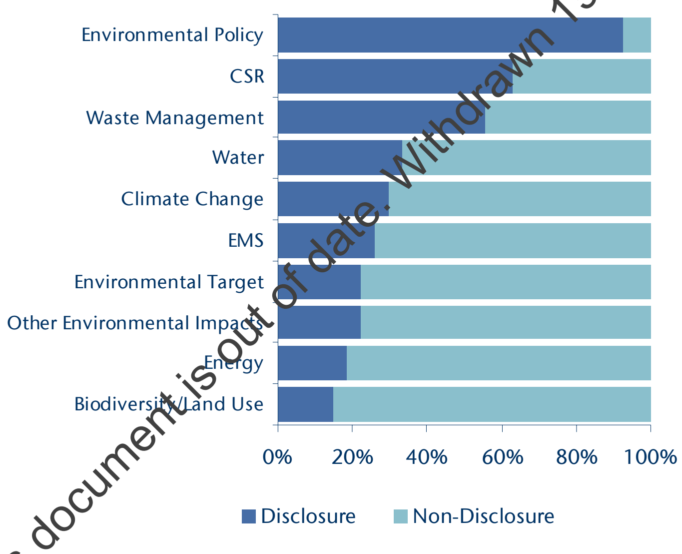


Figure 39. Top ten environmental topics in the Transport sector (by percentage of FTSE All Share companies in the Transport sector.

[23] British Airways 2002/2003 Annual Report, page 4.

Where the information is reported in the Annual Report and Accounts

Just under 40% of companies in the FTSE All Share report in the CSR section of their Annual Report and Accounts which contained most disclosures. However, it is encouraging to see some 15% of disclosures being made in the Operating and Financial Review and Director's Report, suggesting that some transport companies view these issues not only as general CSR issues but as issues integral to the successful operation of the businesses.

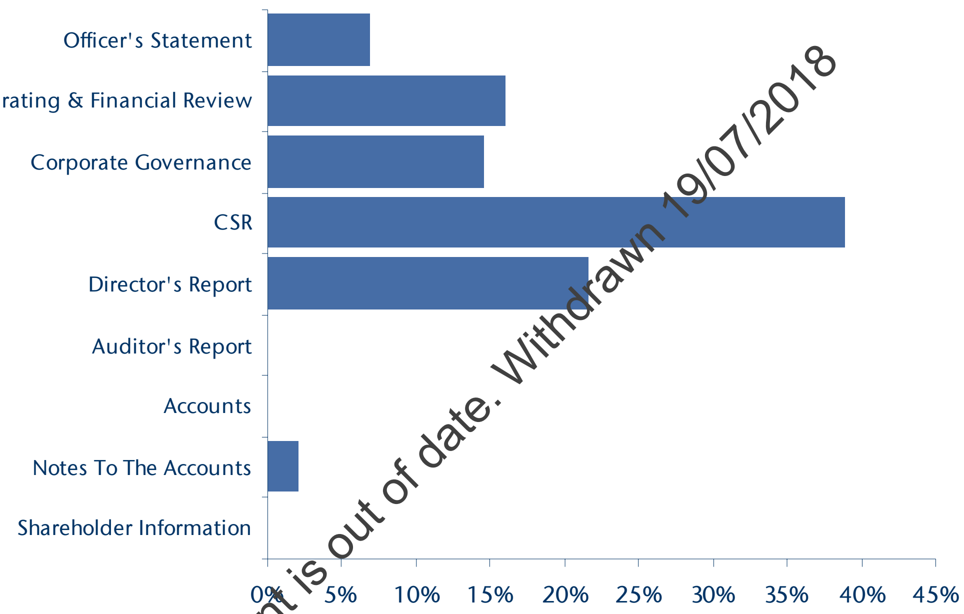


Figure 40. Location of environmental disclosures in the Annual Reports and Accounts of the Transport sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
BAA PLC		○	○	◑	○	◑		○		●		○	○	○				◑							○	○	✓
BRITISH AIRWAYS PLC						◑							●													●	✓
EXEL PLC		○		○		○							○												○	○	✓
ARRIVA PLC				○	○					○	○		○						○							○	✓
ASSOCIATED BRITISH PORTS HOLDINGS P.L.C.						○		○			○	○	○													○	✓
AVIS EUROPE PLC			◑	○	◑	◑		○			○		○	○		○										○	✓
BBA GROUP PLC																						◑				○	✓
EASYJET PLC				○									○														
EUROTUNNEL P.L.C.			○	○				○			○		○														✓
FIRSTGROUP PLC		◑											◑														✓
FORTH PORTS PLC		○									○		○													○	
GO-AHEAD GROUP PLC (THE)													○													○	✓
MERSEY DOCKS AND HARBOUR COMPANY (THE)				○									○						○								✓
NATIONAL EXPRESS GROUP PLC												○	○													○	✓
NORTHGATE PLC				○															○								
PENINSULAR AND ORIENTAL STEAM NAVIGATION													○														✓
STAGECOACH GROUP PLC		○		○						○		○	○									○				○	✓
TBI PLC		○	○			○				○		○	○													○	✓

Food & Drug Retailers

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Food & Drug Retailers
Total Turnover (Millions):	£67,047
Turnover as % of All Share:	5.7 %
Number of Companies:	8
FTSE Description	Retailers of food and drug products.

Index	Number of Companies
FTSE 100	4
FTSE 250	3
FTSE Small Cap	1
FTSE All Share	8

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	100%	96%
FTSE Small Cap	100%	80%
FTSE All Share	100%	89%

The Food & Drug Retailers sector has an environmental impact through power use by retail outlets (shops, supermarkets etc), waste from packaging and greenhouse gas emissions (and other emissions to air) caused by the vehicles in the transport fleet. The sector is dominated by a small number of large companies (J. Sainsbury Plc, Safeway Plc, Tesco Plc and WM Morrison Supermarkets Plc[24]), each of which will have a large share in the total impacts of the sector. It is encouraging to see such high reporting levels in the sector.

Retail outlets have a high environmental impact through their supply chain and supermarkets indirectly cause further environmental impacts if they are built out of town and more people drive to reach them. An example of reporting on energy use is taken from the Somerfield Plc 2002/2003 Annual Report and Accounts, see Case study 22.

[24] This study was carried out prior to the takeover of Safeway by Morrison.

Case study 22: Somerfield Plc, Annual Report and Accounts 2002
Environment The refurbishment of our store portfolio, with its increased emphasis on chilled, fresh food, led to a 4% increase in total electricity consumption in the year but continuing investment to improve existing equipment means that we remain on track to achieve our target of a 13% reduction in like-for-like consumption over the five year period to 2006/07. In our 1,250-vehicle car fleet we are incentivising drivers to choose less-polluting cars. We are continuing to reduce the environmental impact of our delivery fleet, reducing vehicle mileage, fuel consumption and diesel emissions. We have achieved this through better back loading, improved routing, and the introduction of more efficient vehicles. During the year we reduced fuel consumption by 2% and cut CO2 emissions by 1313 tonnes.

The collaborative initiative between industry and NGOs, Race To The Top[25], provides indicators, principles and procedures to help supermarkets improve their environmental and social impacts.

The Producer Responsibility Obligations (Packaging Waste) Regulations (1997) places an obligation on retailers to recover a proportion of their waste packaging. Supermarkets selling electronic goods are subject to the Waste Electrical and Electronic Equipment Directive (WEEE), placing similar obligation on retailers to recover end-of-life electrical and electronic goods. Supermarkets may additionally be subject to the EU Liability directive, particularly if they have petrol stations and their associated contaminated land issues.

Sector impacts and reporting in the FTSE 350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	Low	Medium	Medium	Medium
Disclosure	0%	29%	43%	57%	43%

Retail outlets do not, usually, use natural resources or abstract large amounts of water. These impacts are therefore low for this sector and reporting levels are also quite low. The sector's greatest environmental impact, and the most heavily regulated, is waste and over half of the companies in the FTSE 350 (57%) report on it – a higher figure than the FTSE All Share overall. Climate change impacts arise from the combustion of fossil fuel in delivery fleets and also indirectly from the use of electricity to heat and light shops, which is reported on by 43% of companies. Other impacts include the land use in out-of-town developments and non-greenhouse gas impacts of transport (noise, sulphur dioxide etc).

[25] Race To The Top can be found at http://www.racetothetop.org/

Information disclosed by the FTSE All Share

Almost all of the companies in the FTSE All Share report on their CSR activities and around three quarters on their environmental policy. Tescos Plc and J. Sainsbury Plc, the UK's largest two publicly owned supermarkets, only make policy disclosures and nothing else although they do refer to their extensive reporting in separate HSE or CSR reports. However, while J. Sainsbury Plc mentions it 'has a strong record on environmental matters' it provides the shareholder with no readily detailed performance information in its Annual Report and Accounts. Tesco even states that 'many investors take an interest in how companies are managing non-financial risks as these can, under certain circumstances, have an impact on shareholder value' and yet does nothing to address environmental issues in its Annual Report and Accounts.

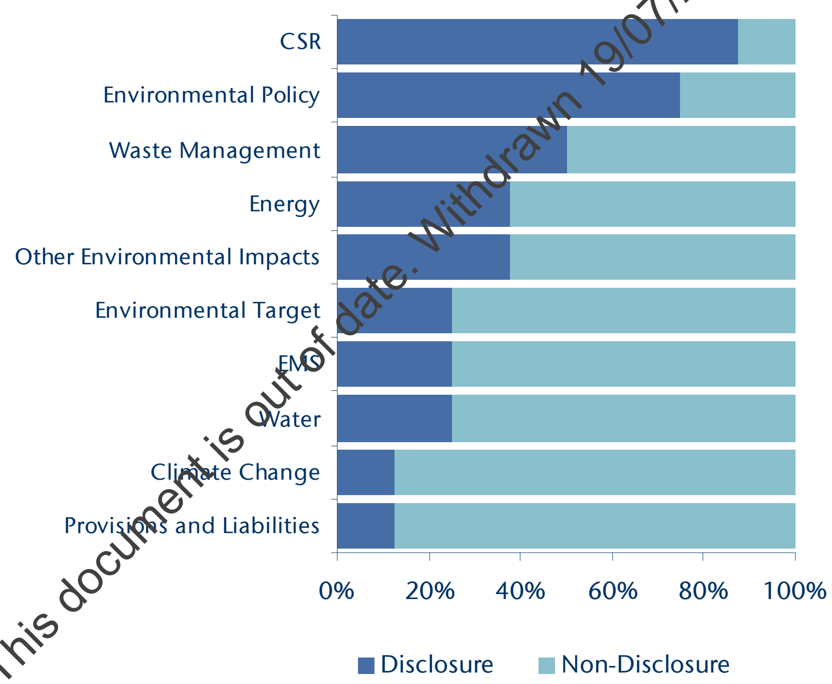


Figure 41. Top ten environmental topics in the Food & Drug Retailers sector (by percentage of FTSE All Share companies in the Food & Drug Retailers sector.

It is clear that the issue that most concerns companies is waste, with 50% of the FTSE All Share food and drug retailers making disclosures on it. Many companies report on their attempts to reduce or recycle waste. These disclosures seem to be driven by packaging waste regulations.

40% of FTSE All Share food and drug retailers report on energy and other environmental impacts. Other environmental impacts refers to ozone depleting substances in refrigeration (W.M. Morrison Plc and The Big Food Group Plc) and noise from transport in urban areas (Somerfield Plc). There is also reporting on targets, EMS, water and (specifically) climate change. W.M Morrison Plc also report on environmental provisions and liabilities (provisions for the decommissioning of a petrol station).

Where the information is reported in the Annual Report and Accounts

More than two-thirds of disclosures (68%) by FTSE All Share food and drug retailers are reported in the CSR section of the Annual Reports and Accounts – a far higher proportion than the FTSE All Share overall. There are also, remarkably, no disclosures made in the Operating and Financial Review despite the financial impact of waste and packaging regulations and WEEE. It is clear that compliance with the forthcoming OFR will require a significant reappraisal of reporting for the food and retail sector.

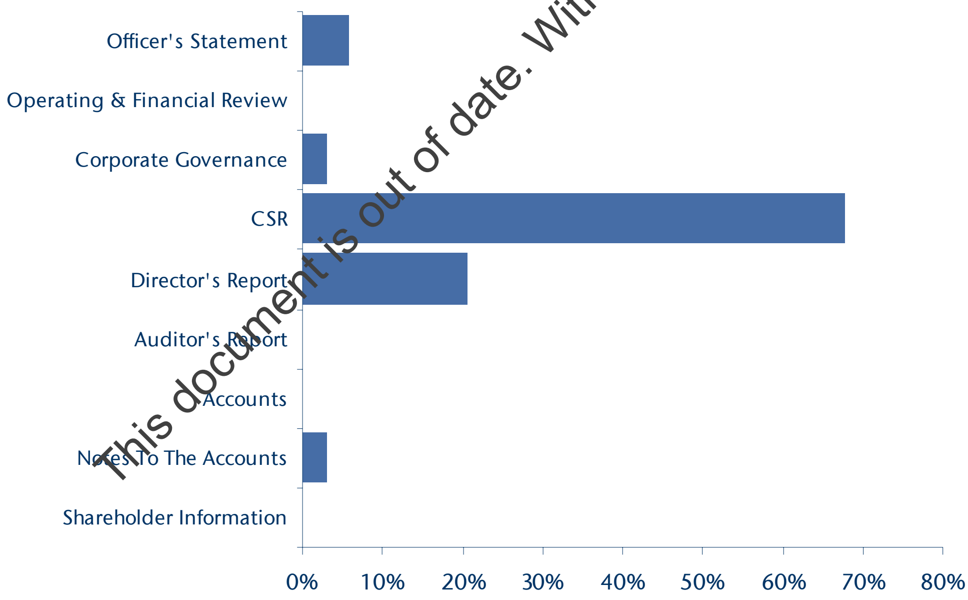


Figure 42. Location of environmental disclosures in the Annual Reports and Accounts of the – sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
J. SAINSBURY PLC													○													○	✓
SAFEWAY PLC			◑			◑					○		○													○	✓
TESCO PLC																										○	✓
WM MORRISON SUPERMARKETS PLC		○	○	◑				○		○		◑	○									○					✓
THE BIG FOOD GROUP PLC				○						○																○	✓
GREGGS PLC			○	○							○		○													○	
SOMERFIELD PLC		○		◑						◑			○													○	✓

Telecommunication Services

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Telecommunication Services
Total Turnover (Millions):	£61,530
Turnover as % of All Share:	5.2%
Number of Companies:	11
FTSE Description	Operators of fixed-line telecommunications networks. Operators of mobile (cellular and satellite broadcast) telecommunications networks.

Index	Number of Companies
FTSE 100	4
FTSE 250	2
FTSE Small Cap	5
FTSE All Share	11

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	100%	96%
FTSE Small Cap	60%	80%
FTSE All Share	82%	89%

The Telecommunications sector consists of mobile operators which have environmental impacts associated with the installation of mobile phone masts and electro-magnetic frequency (EMF) emissions, and fixed-line operators who have a greater impact as a result of ground contamination from exchanges. Because the majority of phone lines in the UK are installed and run by BT Group Plc, and the fixed-line operators in the sector rent these lines, individual fixed-line operators do not have a large direct environmental impact resulting from phone line operation. It is interesting to note that BT Group Plc, along with the mobile phone operators, have the largest disclosure levels within the sector, which may reflect this. It may also be related to their size. They are in the main FTSE 100 companies and we have noted that larger companies are most likely to report more.

The major regulations affecting the industry are the EU Waste Electrical and Electronic Equipment Directive (WEEE) which will oblige mobile phone companies to recover a certain proportion of the mobile phones they sell at the end of their life. The European Information, Communications and Consumer Electronics Technology Industry Associations (EICTA) is already operating a recycling scheme.

Sector impacts and reporting in the FTSE 350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	Low	Medium	Medium	Low
Disclosure	0%	17%	17%	67%	17%

Environmental impacts in the telecommunications sector are comparatively low. Waste is a major issue, particularly for mobile phone operators due to the high turnover in mobile phones. The trend to 'upgrade' mobile phones every 18 months[26] and the forthcoming WEEE Directive have already encouraged take-back schemes to deal with the recovery of end-of-life mobile phones. It is encouraging therefore, to see two-thirds of FTSE 350 telecommunications companies making disclosures on waste. Reporting on climate change, on the other hand, is low: only two companies (BT Group Plc and Telewest Communications Plc) disclose their climate change impact, and quantify it as well. Disclosures concentrate on office waste.

Information disclosed by the FTSE All Share

82% of Telecommunications companies in the FTSE All Share disclose their environmental policy, and 55% them disclose their waste management strategies, indicating that waste is seen as a prominent impact of the sector. An example can be seen in Case study 23, in which Kingston Communications Plc, a FTSE SmallCap company discusses its approach to waste management and recycling in the environmental section of the Annual Report and Accounts.

Case study 23: Kingston Communications (Hull) Plc, Annual Report and Accounts 2003

Improving waste management has been a priority with improved processes introduced during the year. Specific targets included environmentally friendly disposal of printer cartridges and fluorescent tubes. Potential re-use markets are now trawled for waste electronic equipment, either in its original state or at component level, and a contract has been included with a specialist company for recycling of equipment that cannot be economically re-used. Further Group-wide energy efficiencies are planned, such as reducing unnecessary lighting use and improved paper-recycling arrangements.

Additionally, site specific schemes have been implemented such as those at the Company's Vulcan Street engineering facility in Hull where waste management and drainage facilities have been upgraded to the latest standards. Business specific initiatives continue such as duct sharing with other operators to minimise street works and the continued accolade of the Swan Nordic Environmental Mark for Kingston information's 100 per cent recyclable directories.

Disclosures on environmental management systems are made by 36% of telecoms companies. In conjunction with disclosures on environmental policy, this communicates that these

[26] J.D. Power and Associates Reports: Owners of Wireless Mobile Phones Keep Handsets Longer Before Upgrading Despite More Affordable Pricing, J.D. Power and Associates October 2002

companies are taking steps towards including environmental issues in their management processes. 18% of companies disclose environmental targets, which is another building block of corporate management of environmental impacts. Other disclosures on specific environmental impacts most commonly made are energy at 27% and biodiversity/land use at 18%.

A good example of reporting on key performance indicators in the Annual Report and Accounts is given by Telewest Communications Plc, another FTSE Small Cap company.

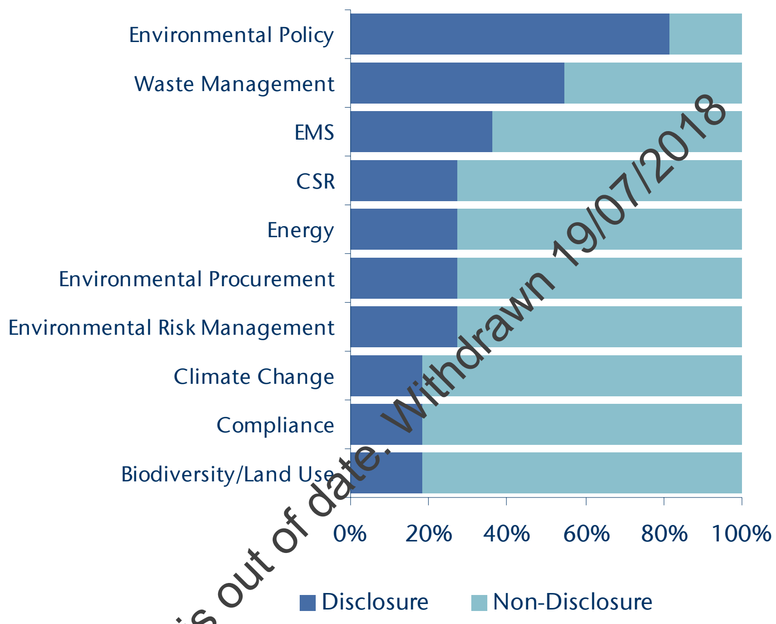


Figure 43. Top ten environmental topics in the Telecommunications Services sector (by percentage of FTSE All Share companies in the Telecommunications Services sector.

Case study 24: Telewest Communications Plc, Annual Report and Accounts 2003

Energy/Fuel

We estimate that we consumed approximately 197 million kWh of electricity, which is equivalent to 85,307 tonnes of CO2 emissions. Additionally, we can now estimate that we have consumed approximately 15.5 million therms of gas, which equates to three tonnes of CO2. We are currently rationalizing our property portfolio, which should deliver a reduction in 2003. This in turn will contribute to further energy savings. For the first time we have also been able to estimate the electricity consumption, and hence impact, of our network infrastructure. We estimate a consumption of 82 million kWh, with an equivalent impact of 35,508 tonnes of CO2 emission. We estimate this to be within 5% accuracy, as our network runs off an unmetered supply network.

Refrigerants

We had a number of ozone depleting fire suppression systems protecting our technical areas. 2002 saw the identification and replacement of 28 Halon or NAFF gas systems, in advance of legislative requirements. Telewest no longer has any NAFF or Halon systems in our properties.

Case study 24: Telewest Communications Plc, Annual Report and Accounts 2003

Waste

In the fourth quarter of 2002 we established a national partnership with Biffa, for the management of our waste across the Group. We now have an accurate method for tracking total tonnage and volumes of all commercial waste products, segregated into landfill and recycled office consumables. Based on initial data, we estimate that our total waste output for 2002 was 6,853 tonnes, compared with 7,860 in 2001. In 2003 we will see a major launch in the recycling of office consumables and outputs and will be in a position to set targets for both reduction in waste output and an improvement in our recycled contribution overall. Our hazardous waste continues to be negligible and any disposal complies with current legislation.

Where the information is reported in the Annual Report and Accounts

58% of disclosures are in the CSR section of the Annual Reports & Accounts of the telecommunications sector. This is followed by disclosures in the Directors' Report with only 18%. This is similar to the trend in the FTSE All Share overall. A very low proportion of disclosures are made in audited sections (6% in Notes to the Accounts). The risk of discussing all environmental issues in a separate section is that many investors will skip the section, only reading the sections they believe are relevant to them. For this reason, this study has focussed on addressing the link companies make between environmental issues and business issues. Unfortunately this link is rare.

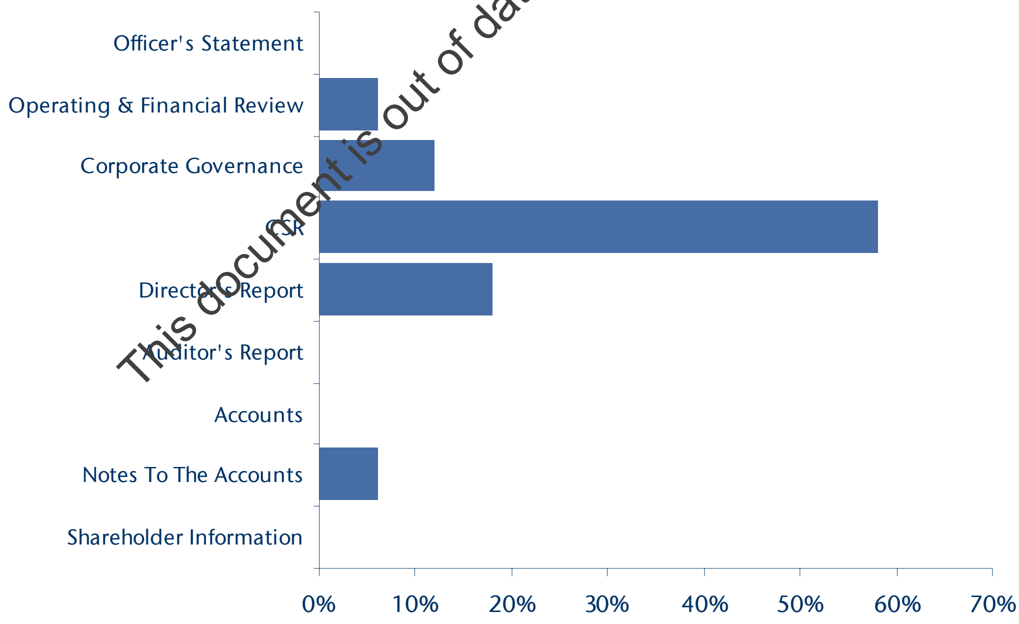


Figure 44. Location of environmental disclosures in the Annual Reports and Accounts of the Telecommunications Services sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
BT GROUP PLC			◑	●		◑					○		○	○	◑			◑				◑				●	✓
CABLE & WIRELESS PLC				○				○		○	○	○	○													○	✓
MMO2 PLC											○		○	○								◑			○		✓
VODAFONE GROUP PUBLIC LIMITED COMPANY				○									○	○												○	✓
COLT TELECOM GROUP PLC		○											○														
THUS GROUP PLC				○									○					○	○								✓

Electricity

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	ELECTRICITY
Total Turnover (Millions):	£12,794 M
Turnover as % of All Share:	1.1%
Number of Companies:	5
FTSE Description	Generators and distributors of electricity

Index	Number of Companies
FTSE 100	2
FTSE 250	2
FTSE Small Cap	1
FTSE All Share	5

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	100%	96%
FTSE Small Cap	100%	80%
FTSE All Share	100%	89%

The electricity industry is one of the largest industries in the UK possessing assets of almost £35 billion and serving 28 million customers[1]. Because of the scale and nature of its operations, it has the potential for significant effects on the environment. The primary means of electricity generation for all electricity companies in the FTSE All Share (with the exception of British Energy) is through the burning of fossil fuels such as gas, oil and coal, which leads to the emission of greenhouse gases. British Energy is a nuclear generator and has its own environmental issues with nuclear waste disposal. In 2000 the electricity industry was responsible for 25% of the UK's greenhouse gas emissions[27]. Given the industry's high impact on the environment, there is a correspondingly high level of environmental reporting. All electricity companies in the FTSE All Share make some form of environmental disclosure. It should be noted that some household name generators such as Powergen and Npower are not independently listed but are subsidiaries of foreign companies.

[27] Electricity and the Environment 2003 – Electricity Association

Sector impacts and reporting in the FTSE 350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	High	High	High	High
Disclosure	0%	25%	100%	25%	25%

Although electricity companies are heavy users of natural resources they are not primary producers. It would therefore not be realistic to require them to disclose information about mining remediation liabilities even though they are highly reliant on coal. The environmental impacts that for which they are directly responsible stems from the burning of coal and is hence a climate change impact rather than a natural resource impact.

It therefore comes as no surprise that all electricity companies in the FTSE 350 disclose their climate change impact particularly given the financial impact of the imminent EU Emissions Trading Scheme on the sector. These impacts could be positive or negative depending on historic emissions of the company and the cost to the company of changing its generation mix. From the start of the scheme (January 2005) companies will be required to account for emissions allocations as government grants under IAS 39 and account for the off-setting liabilities under FRS12.

Despite the large amounts of water used for cooling and steam production which require abstraction permits, only Scottish Power Plc refers to the management systems in place to ensure compliance with these permits. Even Scottish Power Plc only refers to its US operations which maybe as a result of SEC or Sarbanes-Oxley requirements. Although water is returned after use, much is lost as steam, flora and fauna are removed from the water, and it is usually cleaned prior to use. Moreover, it is also returned to source warmer. All these factors can impact the local aquatic environment.

Waste too is a problem for most power stations. Fossil fuel power stations produce large amounts of ash and spent fuel, and contaminated waste is one of the main operating and decommissioning costs for nuclear reactors. Despite this, Scottish Power is the only FTSE 350 company to discuss waste disposal issues, although British Energy, a FTSE Small Cap company, does include extensive discussion on nuclear waste and its accounting policies for decommissioning costs in the Operating and Financial Review and the Notes to the Accounts.

Other environmental impacts include emissions to air such as sulphur dioxide, nitrogen oxides and mercury all of which are controlled substances. All power plants have to report their emissions to the Environment Agency Pollution Inventory.

Information disclosed by the FTSE All Share

All companies in the sector have environmental provisions and liabilities relating to contaminated land, waste or decommissioning which is rarely the case in other sectors. Environmental policy (80%), environmental targets (80%) and EMS (60%) all form part of the top ten reported topics, indicating that the sector, to some degree, attempts to incorporate environmental management into general management structures.

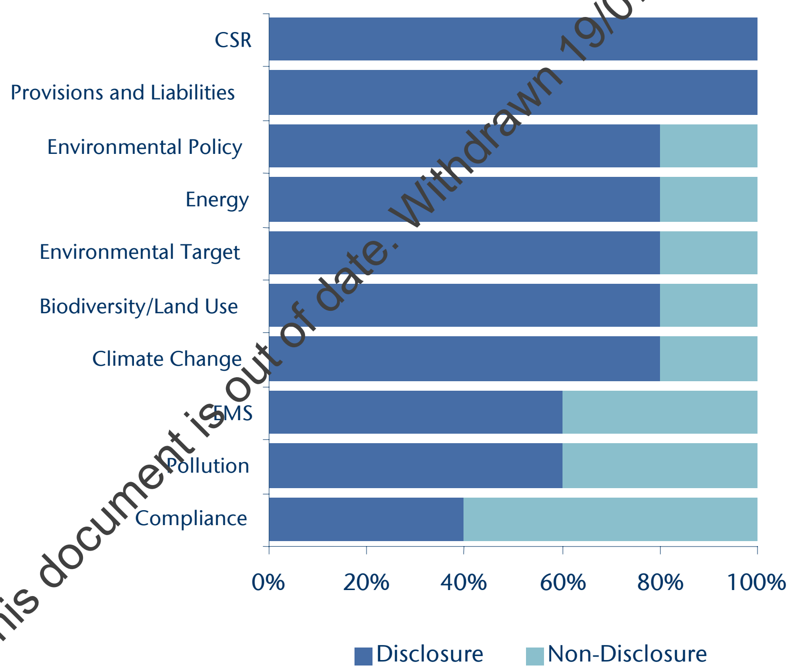


Figure 45. Top ten environmental topics in the Electricity sector (by percentage of FTSE All Share companies in the Electricity sector).

Where the information is reported in the Annual Report and Accounts

It is indicative of the high degree of regulation, the high profile and potential costs associated with the environmental impacts of the sector that a high degree of disclosures (36%) are made in the Operating and Financial Review section and another 15% of disclosures are made in the Notes to the Accounts, mainly in relation to provisions and liabilities. The remaining disclosures are made in the Corporate Governance section (20%) and the environment, health and safety or CSR section (20%) of the Annual Report and Accounts. In Case study 25, International Power gives clear information on its Key Performance Indicators for greenhouse gas emissions.

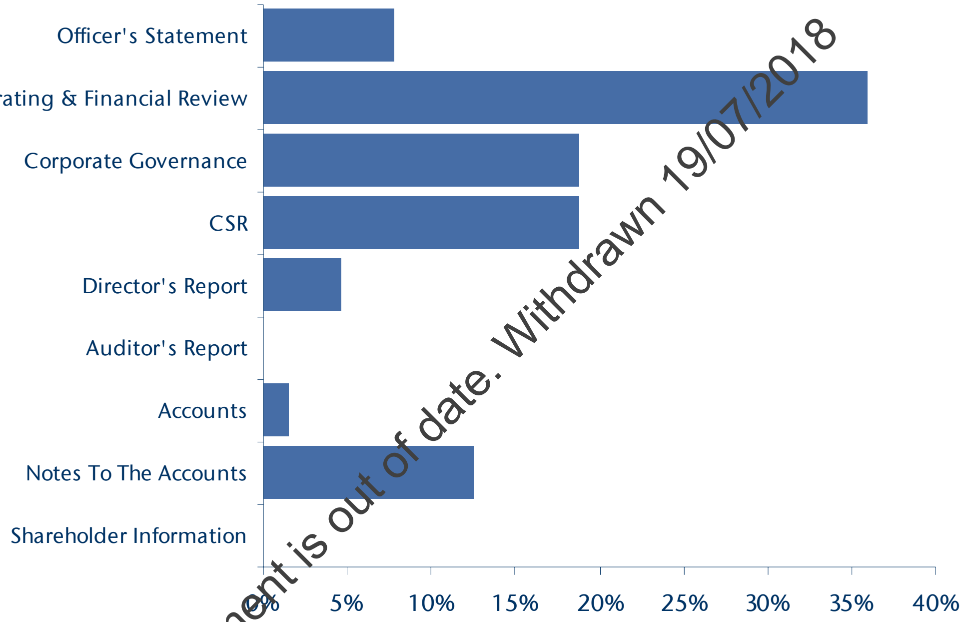


Figure 46. Location of environmental disclosures in the Annual Reports and Accounts of the Electricity sector.

Case study 25: International Power Plc Annual Report and Accounts 2002

We recognise climate change as being a key business issue for the future. As society's attitude to fossil-sourced emissions changes, together with the introduction of the EU Emissions Trading Scheme, we anticipate there will be an increasing impact on our business. As part of our management process, data on our most significant environmental impacts, including carbon dioxide (CO_2) emissions, will continue to be monitored and reported annually as Key Performance Indicators (KPIs). Details of our other emissions can be found on our website. Figure 1 illustrates the emissions of CO_2 per kilowatt-hour resulting from our power generation activities over the last three years. We strive to make our power stations as efficient as possible and to ensure, through proper maintenance practices, that they are available to operate whenever required.

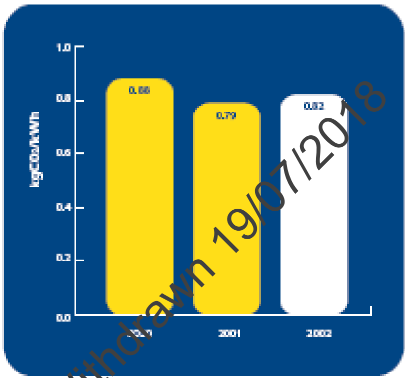


Figure 1 Total CO_2 emissions from International Power's power stations

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
SCOTTISH AND SOUTHERN ENERGY PLC			◑		◑	◑						○	○													○	✓
SCOTTISH POWER PLC		●	○	○	○	●		●	●	○	◑	○	●		●				●		●	◑		○		○	✓
INTERNATIONAL POWER PLC			○			◑		○	◑		○	○		○							○	○				○	✓
VIRIDIAN GROUP PLC			○					○					○									○				○	✓

Utilities, Other

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

Index	Number of Companies
FTSE 100	4
FTSE 250	3
FTSE Small Cap	2
FTSE All Share	9

FTSE Sector Name	Utilities
Total Turnover (Millions):	£33,584
Turnover as % of All Share:	2.9%
Number of Companies:	9
FTSE Description	Distributors of natural and manufactured gas. Companies where the majority of total profits arise from the provision of utilities, where no single utility accounts for greater than 80% of the profits arising from utilities. Companies responsible for the provision of water and then removal of sewage.

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	100%	96%
FTSE Small Cap	100%	80%
FTSE All Share	100%	89%

Of the nine companies in this sector, five are water utilities and the remainder are involved in the provision, distribution, transportation and transmission of gas and electricity. In 2000, more than 75% of all groundwater abstracted in England and Wales was for public water supply[28], which is delivered to the consumer by the water utility companies.

All the companies are regulated to some degree. The water companies, regulated by Environment Agency and Drinking Water Inspectorate, monitor environmental impacts and the standard of drinking water quality respectively and companies are required to file regulatory reports disclosing achievements against non-financial and environmental targets.

All the companies in the sector make some disclosure, and one of the main drivers for this is the need to maintain the license to operate granted by the regulator. Most of the companies in the sector are natural monopolies, i.e. structural properties of the sector mean it is inefficient for two companies to lay water pipe for example to a household. This natural monopoly status is part of the reason for the regulation, but companies that are natural monopolies also tend reinforce the license to operate that is granted to them by their customers and the community.

[28] Digest of Environmental Statistics, Published December 2002, Environment Agency

Sector impacts and reporting in the FTSE350

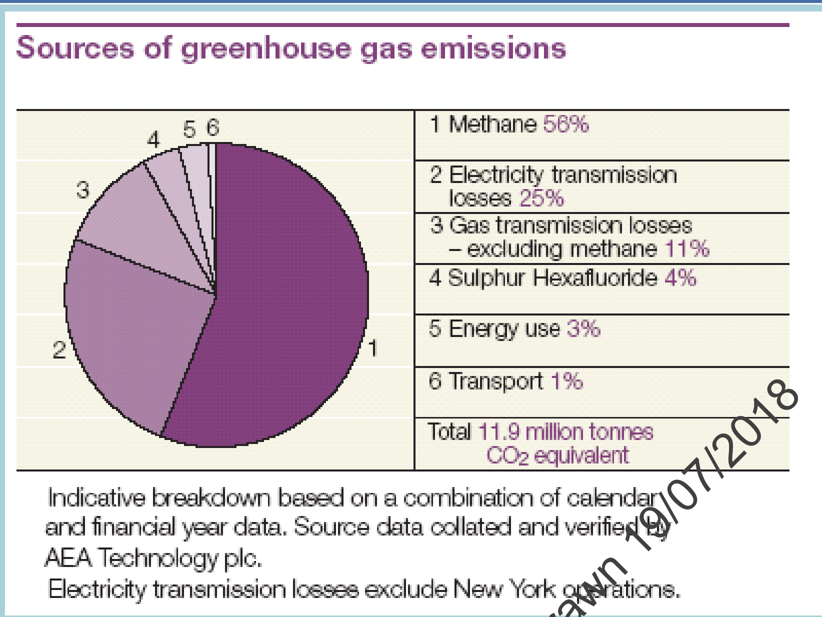
Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	High	High	Medium	High
Disclosure	0%	57%	57%	71%	14%

The environmental impacts of this sector are obviously highly dependent on whether the companies are public water suppliers or gas and electricity distributors. The former obviously have a very high level of water abstraction. Given the nature of the water and sewage infrastructure, these companies are also responsible for sewage and hence large amounts of waste. Some companies in the sector have expanded their operations to become 'environmental service suppliers', services that include waste disposal, remediation and consultancy, which involve other environmental impacts. Water utilities release greenhouse gases through their use of energy and transportation but the primary source of greenhouse gas emissions is methane from sewage and landfill, which has 21 times the global warming potential of CO_2.

The other utilities companies are National Grid, the electricity and gas distributor, and Centrica, a multi-utility services provider. National Grid is unique in the UK in operating the UK's electricity and gas networks, and its impacts are primarily hazardous waste and contaminated land from substations, electromagnetic frequencies from its power cables and fugitive natural gas emissions all of which it discusses in its Annual Report and Accounts. National Grid Plc's climate change disclosures are given in Case study 26.

Waste is an issue that all the companies in this sector have in common, which explains why the majority (71%) of FTSE 350 companies report on it. Unsurprisingly, all water companies report on water. Disclosures relating to climate change are not as widespread as might be expected, given that all have a high exposure to this issue. Furthermore it is disappointing that more companies do not discuss their particular and specific impacts, which would fall into the 'other environmental impacts' grouping of this study.

Case study 26 National Grid Plc Annual Report and Accounts 2002/2003



Information disclosed by the FTSE All Share

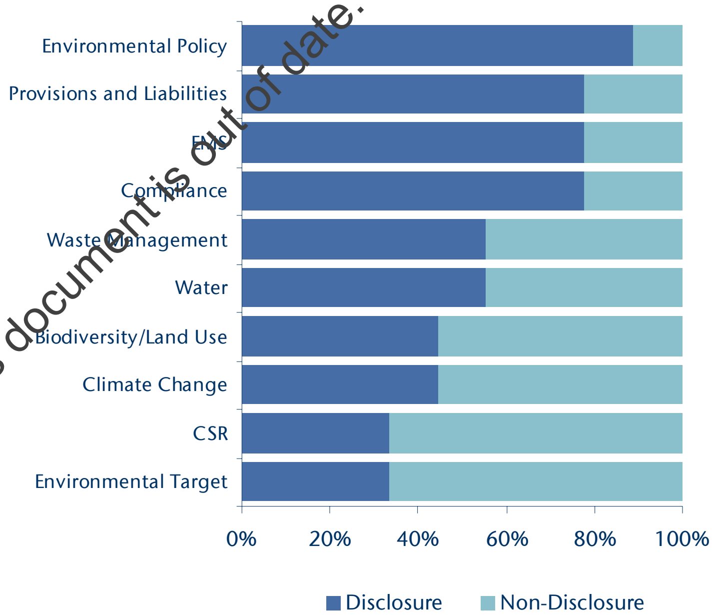


Figure 47. Top ten environmental topics in the Utilities sector (by percentage of FTSE All Share companies in the Utilities sector).

As a result of the high level of regulation within the utilities sector, almost all companies (89%) have an environmental policy and disclose it. In addition, provisions and liabilities, management systems and compliance are discussed by 78% of the FTSE All Share companies in the sector. This is a result of the importance of the regulators in this sector, as they have the ability to remove any company's license to operate.

Waste management is discussed by 56% of utilities companies in the FTSE All Share, despite the fact that waste and hazardous waste are major issues for all companies in the sector. Water is discussed by the water companies but is less of an issue for the other utilities. It is surprising, with environmental targets being set by the regulator, that few companies (33%) discuss their environmental targets in their Annual Report and Accounts.

Where the information is reported in the Annual Report and Accounts

It is indicative of the importance of regulation to the sector that almost one third (30%) of disclosures are made in the Operating and Financial Review. This compares to 11% for FTSE All Share companies, making it clear that environmental issues are a core business issue for utilities. Many disclosures (41%) though are made in separate HSE/CSR sections.

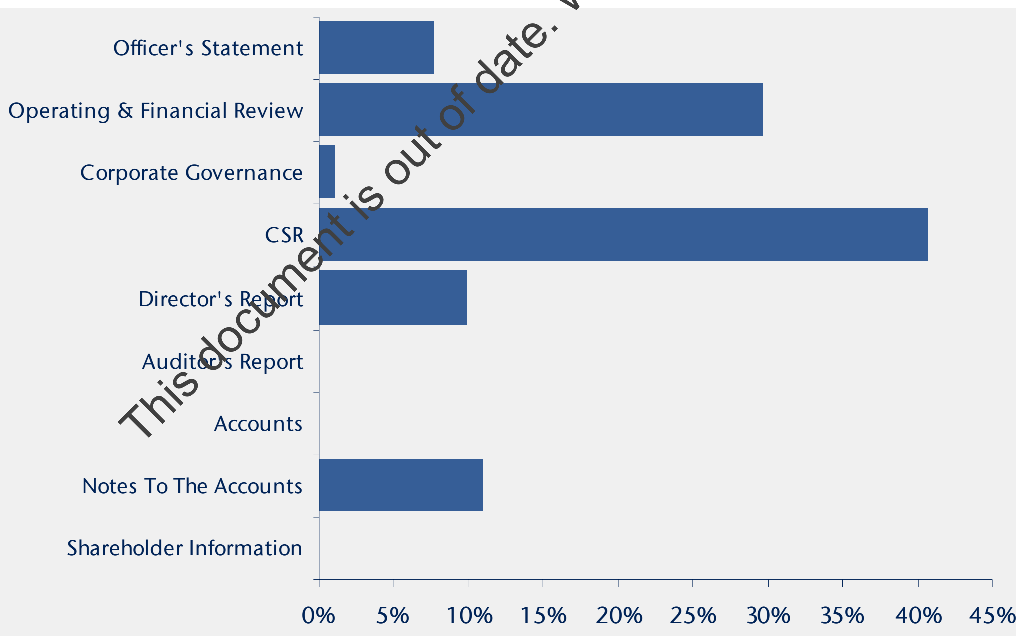


Figure 48. Location of environmental disclosures in the Annual Reports and Accounts of the Utilities sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
CENTRICA PLC			◑			○					○		◑														✓
NATIONAL GRID TRANSCO PLC			○	○		◑			○		●	○	○					○	○			◑		○			✓
SEVERN TRENT PLC		◑		◑		○		◑			○		○						○			○		○		○	✓
UNITED UTILITIES PLC		○		◑				○			○	○	○		◑				○			○					✓
AWG PLC		○		○															○							○	✓
KELDA GROUP PLC		○		◑	○	○		○		○	○		○					○	○			○					✓
PENNON GROUP PLC		○						○			○								◑	○		○					✓

Banks

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Banks
Total Turnover (Millions):	£135,380
Turnover as % of All Share:	11.5%
Number of Companies:	11
FTSE Description	Banks providing a broad range of financial services, with significant retail banking and money transmission.

Index	Number of Companies
FTSE 100	10
FTSE 250	1
FTSE Small Cap	0
FTSE All Share	11

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	100%	96%
FTSE Small Cap	N/A	80%
FTSE All Share	100%	89%

Even though banks deliver services that have a seemingly low impact on the environment, there are aspects to the sector that should not be neglected. Their headquarters and branch offices require electricity, gas and water. Barclays Plc, for example, has 2916 branches worldwide amounting to a total of 1,466,000m^2 of floor space.[29] In addition corporate travel and paper use (both internal and the printing of statements) result in significant fuel and paper use. For example, even Egg Plc, a virtual bank with no branches or paper statements, used 864 tonnes of paper and was responsible for 2.5 million car miles in 2002[30]

It should be noted that banks face significant risks as a result of the environmental impacts that borrowers are responsible for. In the USA creditors not only risk the value of their collateral falling due to environmental impairment (e.g. land or asbestos contamination) but can themselves become liable for clean-up if the debtor is forced into bankruptcy and cannot pay the remediation costs.

[29] Barclays Plc, 2003. Corporate Social Responsibility Report 2003
[30] Egg Plc, 2002 Annual Report and Accounts

All FTSE All Share Banks make some kind of disclosure on the environment in their Annual Report and Accounts. This may be influenced by the fact that all companies in the Bank sector are in the FTSE 100 except Egg Plc (FTSE 250) and larger companies have a tendency to report more.

It is encouraging to see all Banks disclosing information on their environmental policy. The industry initiative of the banking sector is the FORGE[31] group that provides guidelines on environmental management and reporting and the UNEP Finance Initiative[32].

Sector impacts and reporting in the FTSE 350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	Low	Low	Low	Low
Disclosure	0%	18%	36%	54%	0%

As discussed in the previous section, banks have a relatively low direct impact. The methodology used to determine the relative impact of the sector does not include the impacts within the loan books. The major impacts for banks are their branches and offices. Given this low overall impact there is a surprisingly high level of disclosure on climate change and waste although there is less disclosures on other issues.

Information disclosed by the FTSE All Share

All companies with the exception of Royal Bank of Scotland (RBS) discuss their Environmental Policy in the Report and Accounts RBS does, however, have an Environmental Policy which is shown on its website.

Most banks discuss corporate social responsibility which may be a function of reputational risks and opportunities they face in their retail banking businesses. For example, The Co-operative Bank estimates that £40 million of 2002 profits were attributable to their ethical approach to banking.[33]

Egg Plc, Case study 27, provides clear and concise disclosure on their environmental performance.

[31] FORGE Guidelines on Environmental Reporting November 2000 (http://www.abi.org.uk/forge)
[32] UNEP Finance Initiative (http://unepfi.net)
[33] Co-Op

Case study 27: Egg Plc, Annual Report and Accounts 2002

This chart shows our progress against targets.

Parameter	Data 2001[1]	Data 2002	Targets 2002	Targets 2003*
Energy use/Utilities[2]				
Electricity (kWh per person)	5,744	5,812	−10%	−10%
Gas (kWh per person)	2,860	2,557	−5%	−5%
Water (cu mtrs per person)	11.26	9.93	−5%	−5%
Business travel[3]				
Total car miles (miles per person)	1,191	1,029	−5%	−5%
Total train miles (miles per person)	103	305	−5%	No target
Paper use[3]				
Office and print (kgs per person)	176	306	−10%	No target
Copy paper (kgs per person)	40	43	No target	−10% (on 2001 levels)
Waste[4]				
Total solid waste (kgs per person)	160	179	−5%	No target
Total landfill (kgs per person)	101	108	−10%	−10%
Total recycled (kgs per person)	59 (rate of 37%)	71 (rate of 40%)	+10%	+10%

1 In 2002 we improved our data collection and our baseline (2001) has been adjusted to reflect this.

2 We did not meet our electricity target because of additional computer systems using more power. We aim to meet the target in 2003.

3 Rail has a lower environmental impact than cars. We will continue to switch more staff journeys to trains. We will not try to reduce train miles.

4 Paper use includes print (for marketing) and copy paper used in our offices. In 2003 we will focus on reducing the use of copy paper.

5 Cleaning before office relocation and our brand refresh in early 2002 contributed to greater amounts of waste. In 2003 we aim to further increase recycling and meet our 2001 target for reducing the amount of waste sent to landfill. We will not focus on our 2001 target for reducing overall levels of solid waste.

*Target reductions for 2003 are on 2002 levels, unless otherwise stated.

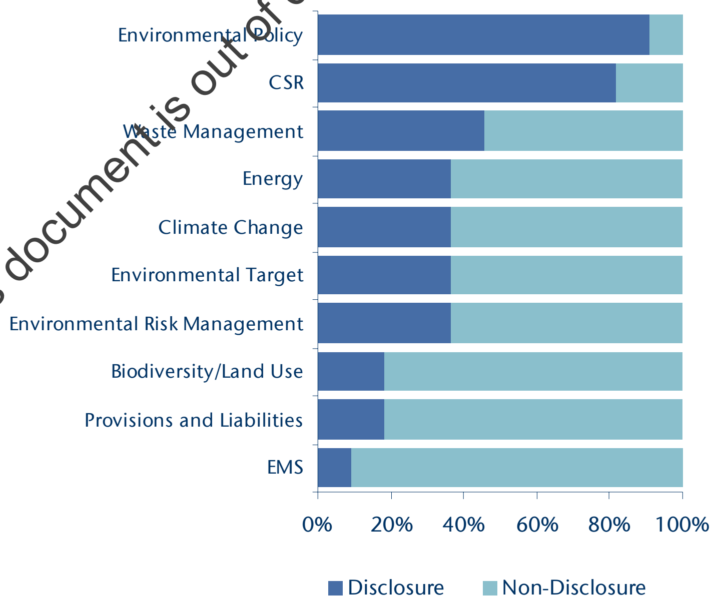


Figure 49. Top ten environmental topics in the Banks sector (by percentage of FTSE All Share companies in the Health sector.

Where the information is reported in the Annual Report and Accounts

Almost all banks have a CSR section in their Annual Report and Accounts consequently most disclosures were picked up there. However, it is encouraging to see some disclosures being made in the Operating and Financial Review as well, implying that banks are beginning to treat the environment as a core business issue.

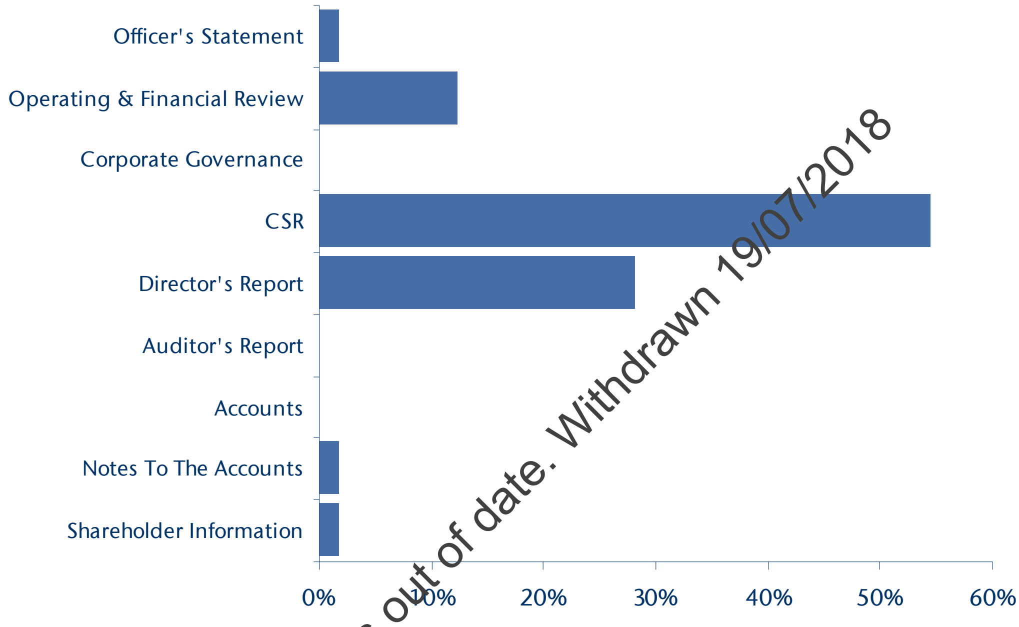


Figure 50. Location of environmental disclosures in the Annual Reports and Accounts of the Banks sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
ABBEY NATIONAL PLC													○	○												○	✓
ALLIANCE & LEICESTER PLC			○	○								○	○													○	✓
BARCLAYS PLC		◑		◑		◑			○		○	◑	○	○	○				○						○	○	✓
BRADFORD & BINGLEY PLC												◑	○													○	✓
HBOS PLC			◑	○		●							●	○													✓
HSBC HOLDINGS PLC								○					○													○	✓
LLOYDS TSB GROUP PLC													○	○								○				○	✓
NORTHERN ROCK PLC			○	◑		○							○														✓
ROYAL BANK OF SCOTLAND GROUP PLC (THE)																										○	✓
STANDARD CHARTERED PLC			○	○				○					○									○				○	✓
EGG PLC		◑		◑		◑						◑	○					○								●	✓

Insurance

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Banks
Total Turnover (Millions):	£16,482
Turnover as % of All Share:	1.4 %
Number of Companies:	16
FTSE Description	Insurance and life assurance agencies. Companies engaging principally in accident, fire, marine and other classes of insurance business not classified elsewhere. Re-insurance companies. Insurance companies with life assurance, non-life insurance and reinsurance interests, no one of which predominates.

Index	Number of Companies
FTSE 100	1
FTSE 250	5
FTSE Small Cap	10
FTSE All Share	16

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	100%	96%
FTSE Small Cap	60%	80%
FTSE All Share	75%	89%

Table 1. Environmental disclosure levels for companies in the Insurance Sector (left) and for all FTSE All Share.

The Insurance sector has few environmental impacts, as it is almost entirely office based. Impacts will arise from paper, waste and fuel used for heating and lighting the offices. In addition to their relatively low environmental impact many companies in this sector are in the FTSE Small Cap, a property that has throughout this report been a factor contributing to lower reporting levels. As a consequence of these two facts, levels of environmental disclosure for insurance companies are among the worst in the All Share.

There is however a contrast between the FTSE Small Cap and FTSE 350 such that every FTSE 350 company in the sector reports on the environment but less than two thirds of FTSE Small Cap insurance companies do. Reporting on paper waste recycling and waste reduction through the increased use of electronic communication are common.

Although insurance companies have little impact themselves, the nature of their business makes it necessary to address environmental issues. Insurance companies have faced heavy losses in respect of asbestos, contaminated land and climate change through storm and flood damage. It is important to note that increased premiums in respect of climate change have and will continue to lag claims relating to weather related losses. The risks and subsequent opportunities (in increased premiums and insured assets) this represents for the industry, is highlighted by Jardine Lloyd Thomson Group Plc in their Chief Executives Review (see Case study 28). The Royal & Sun Alliance Insurance Group Plc discuss the techniques used to value asbestos and other environmental liabilities in the Notes to the Accounts in Case study 29

Case study 28: Jardine Lloyd Thomson Group Plc, Annual Report and Accounts 2002

Taking no risk is the biggest risk of all

The continued threat of terrorism and political unrest, along with natural disasters linked to climate change, spectacular corporate failures and stock market falls, have created much uncertainty. Caution is a natural and sensible reaction to current events, but for business to take no risk is the biggest risk of all. Our position at the heart of the risk business will provide us with many opportunities to grow.

Case study 29: Royal & Sun Alliance Insurance Group Plc, Annual Report and Accounts 2002

Asbestos and environmental claims

The estimation of the provisions for the ultimate cost of claims for asbestos and environmental pollution is subject to a range of uncertainties that are generally greater than those encountered for other classes of business. A significant issue is the long delay in reporting losses since the onset of illness and disability arising from exposure to harmful conditions may only become apparent many years later. For example, cases of mesothelioma can have a latent period of up to 40 years. There may also be complex technical issues that give rise to delays in notification arising from unresolved legal issues on policy coverage and the identity of the insureds. As a consequence, traditional techniques for estimating claims provisions cannot wholly be relied upon and the Group employs specialised techniques to determine provisions using the extensive knowledge of both internal asbestos and environmental pollution experts and external legal and professional advisors.

While insurers may not have large environmental impacts through their own operations, they do own a large proportion of the FTSE All Share (to balance their liabilities) and hence have a high degree of influence over the levels of disclosure of other firms.

Sector impacts and reporting in the FTSE350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	Low	Low	Low	Low
Disclosure	0%	33%	50%	50%	0%

This sector has low direct impacts in all areas. The impacts that the FTSE 350 insurance companies do report on are water, waste and climate change – environmental impacts that all companies should report according to the Defra environmental reporting guidelines.

Information disclosed by the FTSE All Share

69% of insurance companies in the FTSE All Share disclose their environmental policy. 38% report on CSR activities and only 25% report on waste management. Any other impacts are reported on by only one or two FTSE All Share companies. The Royal and Sun Alliance Insurance Group Plc, Amlin Plc, Wellington Underwriting Plc and Jardine Lloyd Thomson Group Plc are the main reporters.

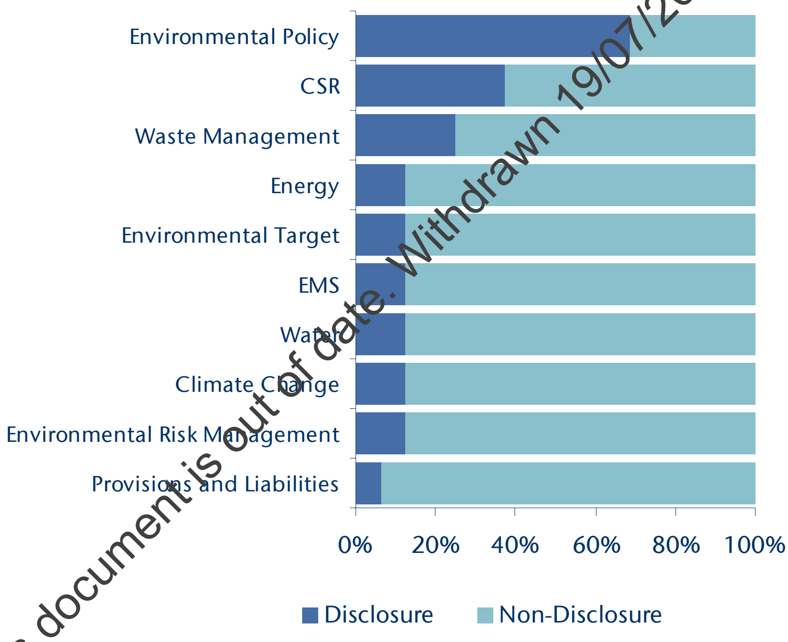


Figure 51. Top ten environmental topics in the Insurance sector (by percentage of FTSE All Share companies in the sector).

Where the information is reported in the Annual Report and Accounts

Unusually, the majority of reporting in this sector is in the Director's Report rather than in a CSR section. This differs from the FTSE All Share in that, in general, most environmental disclosure is contained in an EHS/CSR section. However, given the limited level of disclosure and the fact that most disclosures relate to policy (and hence are more likely to appear in the Directors Report) this is less surprising.

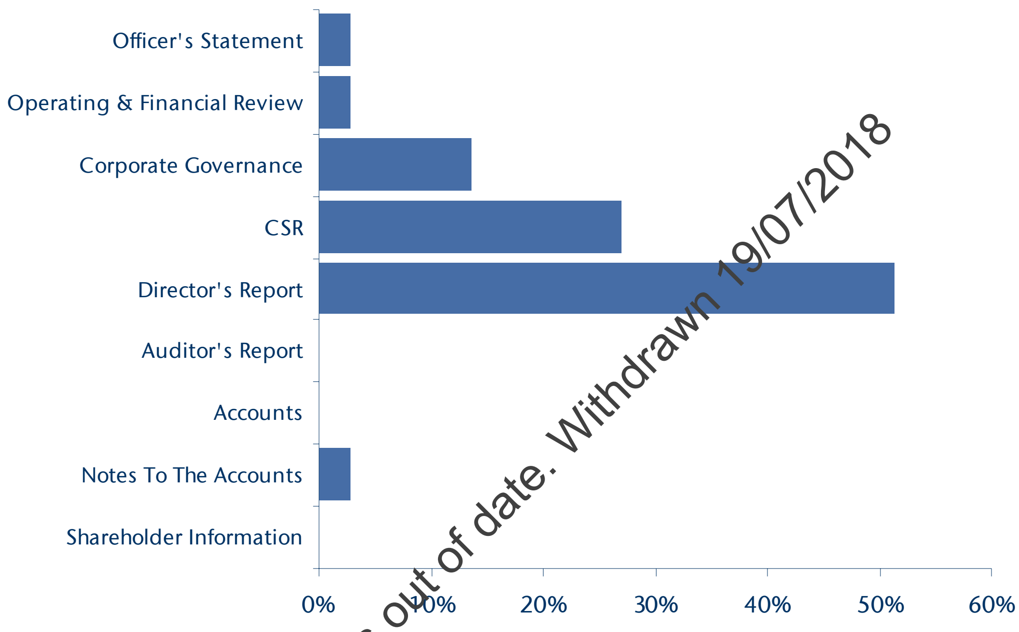


Figure 52. Location of environmental disclosures in the Annual Reports and Accounts of the Insurance sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
ROYAL & SUN ALLIANCE INSURANCE GROUP PLC		○	○			○					○	◑	○						○			○			○	○	✓
AMLIN PLC				○								○	○	○													
BRIT INSURANCE HOLDINGS PLC													○	○												○	
HISCOX PLC			○										○													○	
JARDINE LLOYD THOMPSON GROUP PLC				○		○							○													○	✓
WELLINGTON UNDERWRITING PLC		○		○									○													○	✓

Life Assurance

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Life Assurance
Total Turnover (Millions):	£94,545
Turnover as % of All Share:	8.0 %
Number of Companies:	7
FTSE Description	Companies engaging principally in life assurance and/or disability business.

Index	Number of Companies
FTSE 100	5
FTSE 250	2
FTSE Small Cap	0
FTSE All Share	7

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	100%	96%
FTSE Small Cap	N/A	80%
FTSE All Share	100%	89%

With the exception of offices, which require heat and light and produce paper waste, the life assurance sector has a small physical impact on the environment. However, despite this, it is encouraging that all companies in the sector disclose some form of environmental information. Members of the FTSE 100 or FTSE 250 are more likely to make environmental disclosures than FTSE Small Cap Companies and insurance companies tend to be in the larger indices. With only few companies in this sector, however, general statements can only be made with caution.

The companies in this sector make much of their revenue from the retail sector and trust and reputation are of primary importance when marketing their products. When a pension or life insurance policy is brought the relationship between the purchaser and the life assurer continues until death, (unlike buying fast food or a book where the relationship ends once the item has been purchased). Life assurers therefore, market themselves as ‘partners for life’ and reputation is vital.

While life assurers may not have large environmental impacts through their own operations, the companies do own or manage a large proportion of the FTSE All Share and hence have a high degree of influence over of the level of disclosure of other firms.

Sector impacts and reporting in the FTSE 350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	Low	Low	Low	Low
Disclosure	0%	14%	57%	57%	0%

This sector has low direct impacts in all areas. The impacts that the FTSE 350 companies do report on are water, waste and climate change – environmental impacts that all companies should report on according the Defra environmental reporting guidelines.

Friends Provident Plc provide a good example of disclosure in their Annual Report and Accounts (see Case study 30) highlighting their main key performance indicators.

Case study 30: Friends Provident Plc, Annual Report and Accounts 2002

The environment

Climate change is perhaps the biggest environmental problem facing the planet today and we recognise that the electricity we burn and the emissions from our company cars have a direct impact. Based on DEFRA (Department for Environment, Food and Rural Affairs) guidelines, emissions from gas and electricity at our Head Office sites amounted to 5,650 tonnes CO_2 in 2002 (7,275 tonnes CO_2 2001). From October 2002, and at no additional cost to our shareholders, we negotiated contracts to supply the majority of our electricity from renewable sources for the next two years, which will reduce our total energy-related emissions in 2003 even further. Emissions from company cars amounted to 3,794 tonnes CO_2 in 2002 (6,074 tonnes CO_2 2001). We have now introduced a campaign to reduce inter-office travel and LPG converted vehicles are now available as an option when replacing company cars. Additionally, in 2002 we upgraded our video-conferencing facilities, promoting video/tele-conferencing to all staff as part of our policy to cut down on business travel. Our other major direct impacts result from the paper and water we use and the waste we produce. We established a measure for plain paper use, 54 million sheets in 2002 (57 million sheets in 2001) and have set a target to reduce this amount by 1% in 2003. Our water usage at Head Office sites was 34.8 litres per employee each day (36.8 litres/employee/day in 2001) and our aim is to reduce this consumption further through the continued operation of good housekeeping measures. We produced 910 tonnes of waste in 2002 (1,030 in 2001) of which 32.4% (29.6% in 2001), mainly paper and plastic cups, was recycled.

Information disclosed by the FTSE All Share

All life assurance companies in the FTSE All Share disclose their environmental policy, and 57% discuss CSR issues and waste management policies. Other disclosures are made by fewer than four companies. These disclosures are mainly made by two companies Legal & General Plc and Friends Provident Plc. Aviva Plc discusses environmental risks in the Notes to the Accounts (see Case study 31) even though it considers the risk to be low and immaterial.

Case study 31: Aviva Plc, Annual Report and Accounts 2002

Asbestos, pollution and social environmental hazards

In the course of conducting insurance business, various companies within the Aviva Group receive general insurance liability claims, and become involved in actual or threatened litigation arising therefrom, including claims in respect of pollution and other environmental hazards. Amongst these are claims in respect of asbestos production and handling in various jurisdictions, including the United Kingdom, Australia, Canada and South Africa. Given the significant delays that are experienced in the notification of these claims, the potential number of incidents which they cover and the uncertainties associated with establishing liability and the availability of reinsurance, the ultimate cost cannot be determined with certainty. However, the Groupís exposure to such liabilities is not significant and, on the basis of current information and having regard to the level of provisions made for general insurance claims, the directors consider that any costs arising are not likely to have a material impact on the financial position of the Group.

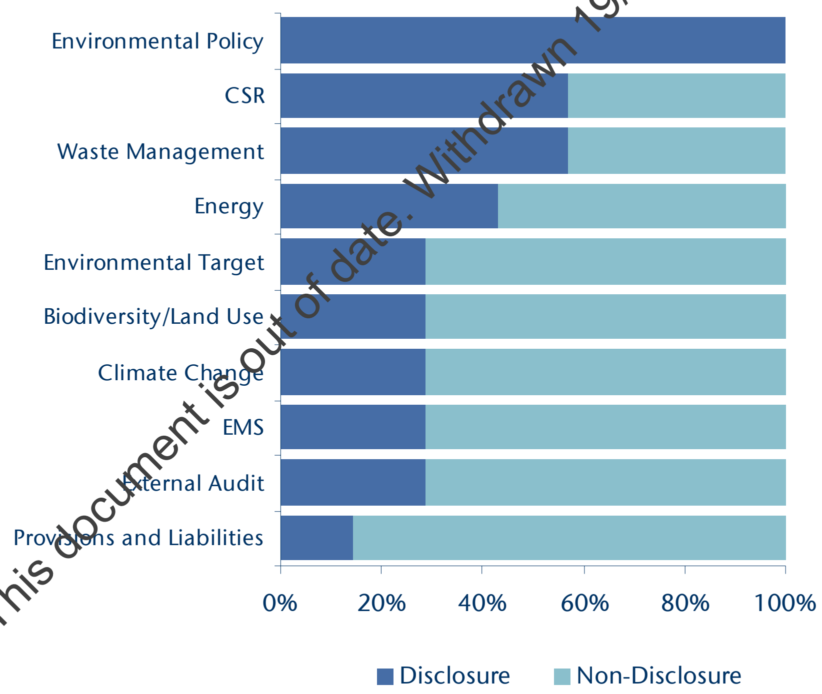


Figure 53. Top ten environmental topics in the Life Assurance sector (by percentage of FTSE All Share companies in the sector).

Where the information is reported in the Annual Report and Accounts

The vast majority of disclosures are reported in the CSR section of the Annual Report and Accounts, with a small number in the Director's Report (where they can be audited), the Officer's Statement. The Operating and Financial Review or the Notes to the Accounts. The disclosures in the Notes to the Accounts are typically taxes, provisions & liabilities etc, whilst those in other sections, including CSR tend to be more general reviews of environmental performance. The high level of disclosures in the HSE or CSR sction of the Annual report and Accounts is indicative of the drivers of environmental disclosure by companies in the life assurance sector - that the key stakeholders for environmental issues are perceived by the companies to be customers rather than shareholders

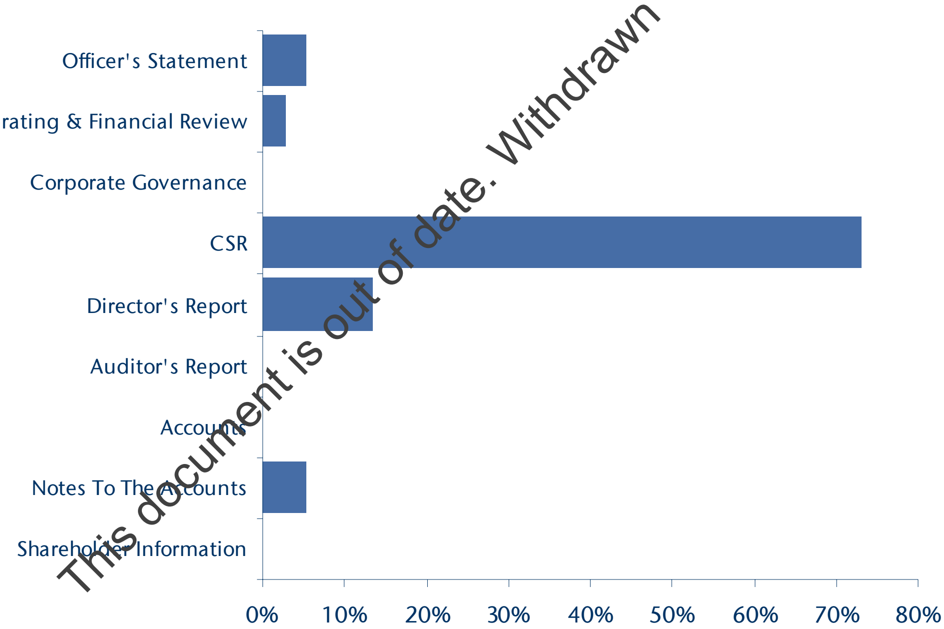


Figure 54. Location of environmental disclosures in the Annual Reports and Accounts of the Life Assurance sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
AVIVA PLC			◑	○									○									○				○	✓
FRIENDS PROVIDENT PLC			○	◑		◑		○			○	◑	○		◑			◑							○	○	✓
LEGAL & GENERAL GROUP PLC		○		◑		◑					○	◑	○							○					○	○	✓
OLD MUTUAL PLC													○														✓
PRUDENTIAL PLC			○										○														✓
BRITANNIC GROUP PLC								○					○													○	✓
ST JAMES'S PLACE CAPITAL PLC				○									○														✓

Investment Companies

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

Index	Number of Companies
FTSE 100	1
FTSE 250	0
FTSE Small Cap	0
FTSE All Share	1

FTSE Sector Name	Investment Companies
Total Turnover (Millions):	£299
Turnover as % of All Share:	0.03 %
Number of Companies:	1
FTSE Description	Companies engaged primarily in owning stakes not giving control in a diversified range of companies, which are FTSE Index eligible, subject to passing the relevant entry criteria.

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	N/A	96%
FTSE Small Cap	N/A	80%
FTSE All Share	100%	89%

Investment companies have limited physical impact on the environment; their environmental impacts being associated with office space (energy use for light and heating, small amounts of office waste). It is not possible to make general statements about this sector, as there is only one investment company in the FTSE All Share, 3I Group Plc.

It should be noted that there is a difference between investment companies and investment trusts. 114 Investment trusts were excluded from the analysis as they exist principally to own the shares or securities of other companies. Investment trusts are unlikely to have large direct environmental impacts and giving consideration to the impacts of the companies they own would involve an element of double counting. 3i Group Plc is a private equity and venture capital company that invests in private, rather than listed, companies.

Despite 3i Group Plc's relatively low, indirect impact, it does have a influence over the companies it invests in. Its policy on environmental issues as an investor is given clearly in Case study 32 from its CSR report.

Case study 32: 3i Group Plc, Annual Report and Accounts 2002

3i aims to invest in companies which:

- respect human rights;
- comply with current environmental, ethical and social legislation;
- have proposals to address defined future legislation;
- seek to comply with their industry standards and best practice.

3i recognises that the most significant risks to its short and long term value from environmental, ethical and social matters arise from its investment business. For example, if a company in which 3i has an investment acted irresponsibly on corporate responsibility issues, this might affect the monetary value of that investment and, as a shareholder in that investment, raise reputational issues for 3i. As an investor, 3i has the opportunity to influence the behaviour of the companies in which it has an investment and encourages the development and adoption of good corporate governance. This is achieved through the training of non-executive Directors who are appointed to sit on investee company boards and the raising of awareness within investee companies of social, environmental and ethical issues. However, as an investor in unquoted businesses, 3i does not have day-to-day operational control over these businesses. 3i has clear procedures to reduce the risks of 3i investing in businesses which operate in and environmentally, ethically or socially unacceptable manner. Where, after an investment has been made, 3i becomes aware that an investee company is not operating in an acceptable way, 3i will seek to use its influence to encourage improvement. Where that is not possible, 3i will seek to divest itself of the investment.

Sector impacts and reporting in the FTSE350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	Low	Low	Low	Low
Disclosure	0%	0%	100%	100%	0%

This sector has low direct impacts in all areas. According to the Defra environmental reporting guidelines all companies, however, should report on waste, climate change/energy use and water use. 3i Group states that it measures its performance against CO_2 emissions and recycling although no conclusions can be drawn as to the effectiveness of its policy with respect to these issues as it does not disclose any data on its performance (see Case study 33).

Case study 33: 3i Group Plc, Annual Report and Accounts 2002

As a financial services business employing fewer than 900 employees worldwide, 3i's direct environmental impact is relatively low. The Group measures its own energy and resource usage where practicable and sets targets to achieve improvement. The principal benchmarks against which the Group measures its performance are for:

- CO2 emissions; and
- recycling of paper and other materials.

The Group also assesses the environmental standards of its suppliers, through its procurement policy.

In light of the influence these companies hold over others they could be expected to set an example and report on their own, albeit relatively low, environmental impacts.

Information disclosed by the FTSE All Share

3i Group Plc make disclosures in 5 topics including policy, climate change and waste management.

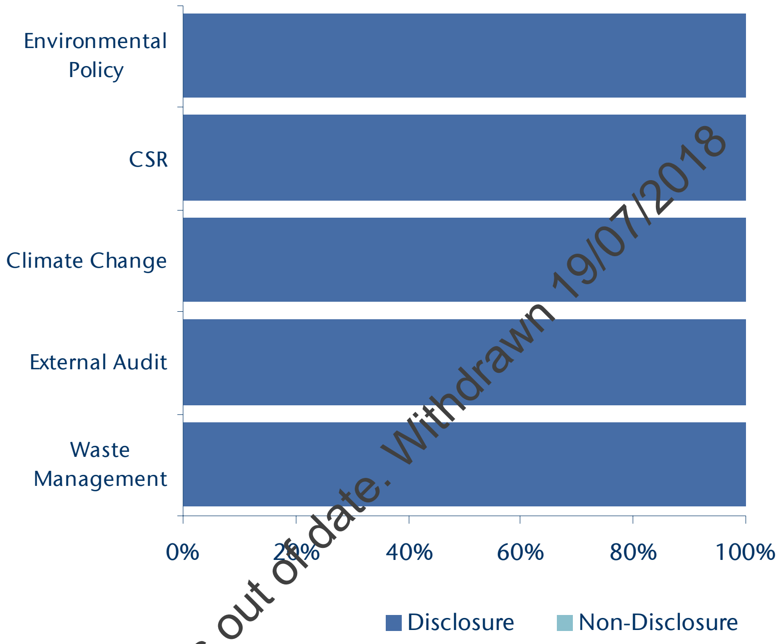


Figure 55. Top ten environmental topics in the Investment Companies sector (by percentage of FTSE All Share companies in the Investment Companies sector.

Where the information is reported in the Annual Report and Accounts

All of the disclosures made by 3I Group Plc are made in the CSR section (the disclosures are generally broad 'policy' type statements rather than quantitative performance indicators).

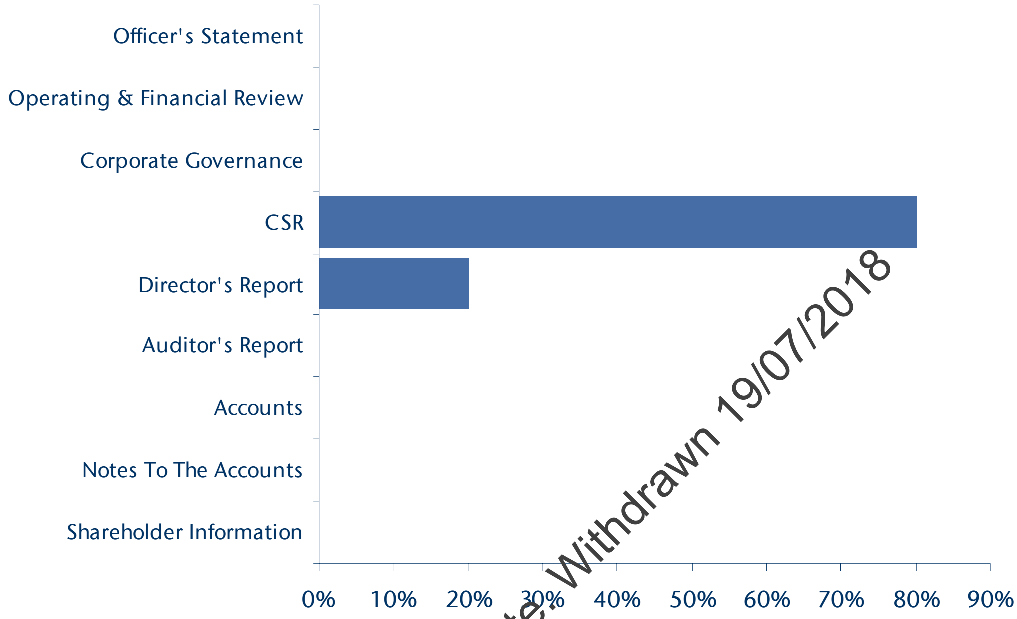


Figure 56. Location of environmental disclosures in the Annual Reports and Accounts of the Investment Companies sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
3I Group Plc						○							○												○	○	✓

Real Estate

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Real Estate
Total Turnover (Millions):	£4,832
Turnover as % of All Share:	0.4%
Number of Companies:	33
FTSE Description	Companies specialising in the ownership and/or development of property assets not classified elsewhere. Estate agents and surveyors.

Index	Number of Companies
FTSE 100	3
FTSE 250	13
FTSE Small Cap	17
FTSE All Share	33

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	92%	96%
FTSE Small Cap	82%	80%
FTSE All Share	88%	89%

The Real Estate industry is mainly office based, and its larger environment impacts arise from the development or redevelopment of property. However, real estate companies do not, on the whole, have much direct involvement in construction, other than improvements to property and maintenance and so do not have the same impacts as the construction sector.

Despite the sector's relatively low direct environmental impact (the companies in the real estate sector are somewhat akin to investment companies, and most construction or maintenance work is outsourced), the environment is a major concern to the real estate sector. Properties need to be surveyed for potential environmental contamination either of the land they occupy or of the construction materials used. Land contaminated by oil and asbestos building materials are common examples. Remedial action is sometimes required which is often expensive and dangerous to undertake. Real Estate companies also have direct interactions with local communities particularly with regard to planning consents. In addition the UK government has introduced a number of regulations relating to the environmental standards new buildings must achieve[34]. As these aspects of the real estate sector's interactions with the environment have significant financial implications, it is surprising that the sector has a lower level of disclosure than the FTSE All Share overall.

[34] For example the EU Energy Performance of Buildings Directive 2002/91/EC to be transposed into UK law by 4th January 2006.

However there are a large number of companies and many of these are quite small. It has been observed throughout this report that large companies disclose more than their smaller counterparts.

The main body collaborating with the real estate sector on environmental issues it the Foundation for the Built Environment (FBE) which researches and advising on better quality and sustainable building[35]. The FBE is responsible for the BRE and the BREEM building quality rating system.

Sector Impacts and reporting of the FTSE 350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	Low	Low	Low	Low
Disclosure	6%	38%	38%	44%	19%

In a low impact sector, it is encouraging to see that a relatively large number of FTSE 350 real estate companies report on environmental topics. Reporting levels for the analysed impacts are comparable with those in high impact sectors. However, the three main issues that according to the Defra environmental reporting guidelines, all companies should provide performance indicators for, waste management, climate change/energy and water use are still only covered by less than half real estate companies.

Land Securities has even become involved in the UK emissions trading scheme. It discusses the issue in Case study 34 below.

Case study 34: Land Securities Plc, Annual Report and Accounts 2002

We are participating in the trial UK Emissions Trading Scheme, which runs until December 2007, and are committed to an ongoing cut of about 1% per year in aggregate emissions of CO2 across our portfolio of managed offices, which equates to more than 3,500 tonnes over five years. We comfortably beat our target for 2002, earning over £13,500 from the scheme for successful compliance, a reward we shared with our contractors who were instrumental in our success. We won three Green Apple Awards for our environmental activities, one for our environment day which is now to be an annual event. We won a gold award for Making a Corporate Commitment (MACC2)to reduce CO2 emissions and a bronze award for the intranet system implemented to control Land Securities Trillium's ISO14001-certified environmental management system (EMS).We became a founder member of Trucost, a system for measuring and benchmarking total environmental footprints using both direct and supply chain impacts. Land Securities Trillium encouraged and helped one major supplier to develop its own EMS to achieve certification to ISO14001.

Information disclosed by the FTSE All Share

[35] More information on the FBE can be found at http://www.fbe.org.uk/. More information on BRE and BRE EM can be found at http://www.bre.co.uk/

76% disclose their environmental policy, but only 30% refer to environmental targets, and only 24% to their EMS. This drop in reporting indicates that companies, even though they have policies, see less need to communicate their efforts to implement them and to provide performance information. CSR is a common topic for disclosure (45%) which is perhaps indicative of the importance of local communities in planning matters. The prevalence of CSR disclosures is similar to the level of FTSE All Share companies in general. Waste management, which includes waste reduction and recycling, was the other main issue discussed (42%).

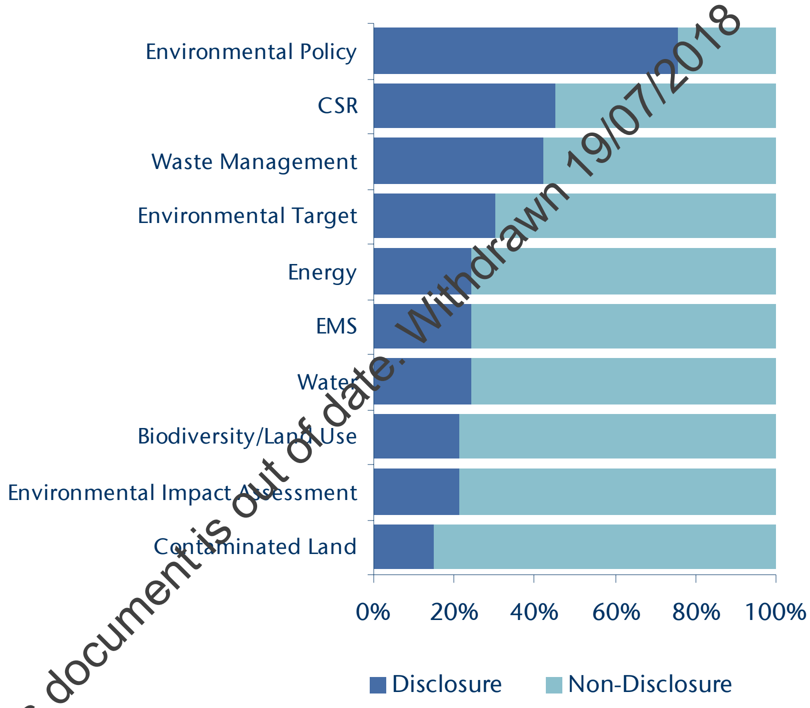


Figure 57. Top ten environmental topics in the Real Estate sector (by percentage of FTSE All Share companies in the Real Estate sector.

Where the information is reported in the Annual Report and Accounts

The real estate sector differs from the average in the FTSE All Share in that more is reported in the Directors' Report (43%) than in a separate CSR section (33%). Only 5% of disclosures are made in the operating and financial review, without exception these were regarding the companies' environmental policies. This would not fulfil the requirements of the forthcoming OFR regulations, which requires disclosure of issues in order to allow shareholders to assess business strategies and future prospects.

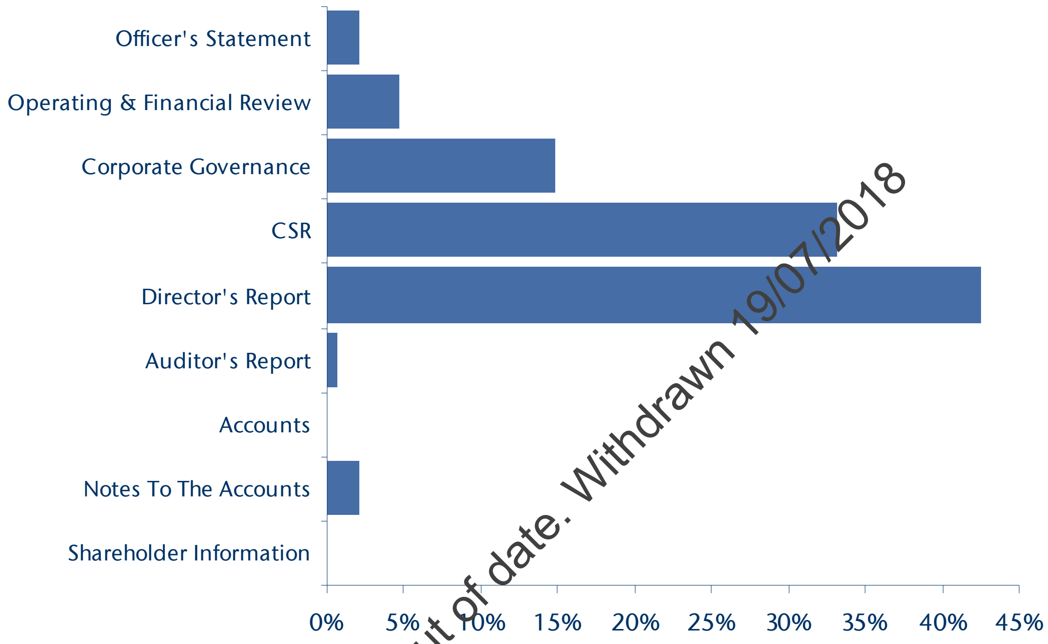


Figure 58. Location of environmental disclosures in the Annual Reports and Accounts of the Real Estate sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
BRITISH LAND COMPANY PLC (THE)								○			○	○	○		○			○								○	✓
LAND SECURITIES GROUP PLC						◑					○	○	○					○	○						○	○	✓
LIBERTY INTERNATIONAL PLC				○							○		○													○	✓
BRIXTON PLC					○	○		○	○				○														
CANARY WHARF GROUP PLC	○	○	○	◑				○		○	○	○	○					○							○	○	✓
CHELSFIELD PLC												○	○		○												✓
DERWENT VALLEY HOLDINGS PLC		○		○						○			○													○	✓
GREAT PORTLAND ESTATES P.L.C.			○	○							○		○													○	✓
HAMMERSON PLC															○									○			✓
LONDON MERCHANT SECURITIES PLC		○		○									○														
MINERVA PLC											○	○	○		○											○	
PILLAR PROPERTY PLC		○											○														
QUINTAIN ESTATES AND DEVELOPMENT PLC		○	○	○				○	○				○											○			✓
SHAFTESBURY PLC																										○	✓
SLOUGH ESTATES PLC		◑	◑	◑		◑	◑	◑		○		◑	○											○		○	✓
NHP PLC																											✓

Speciality & Other Finance

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Speciality & Other Finance
Total Turnover (Millions):	£9,303
Turnover as % of All Share:	0.8%
Number of Companies:	26
FTSE Description	Asset managers. Credit card companies, providers of personal finance services. Banks providing a range of specialist financial services, primarily to corporate clients. Stockbrokers. Institutional providers of mortgages and mortgage insurance not engaging in other types of retail or commercial banking. Financial holding companies and companies engaged in financial activities not specified elsewhere.

Index	Number of Companies
FTSE 100	3
FTSE 250	12
FTSE Small Cap	11
FTSE All Share	26

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	100%	96%
FTSE Small Cap	73%	80%
FTSE All Share	88%	89%

This sector covers financial companies that are not easily placed in any other category. Activities covered by the sector are mainly the provision of asset management and investment banking services, brokerage and retail financial services. The sector also includes the London Stock Exchange Plc. However, as far as environmental impacts are concerned, they are all very similar in having a relatively low direct environment impact. Any impacts that do arise are caused by office use (paper waste, electricity use etc). Despite this relatively low impact, it is encouraging that all 15 FTSE 350 companies make some sort of disclosure on environmental issues although there could be better reporting amongst FTSE Small Cap companies.

Sector impacts and reporting in the FTSE350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	Low	Low	Low	Low
Disclosure	0%	20%	40%	33%	7%

This sector has low direct impacts in all areas. According the Defra environmental reporting guidelines all companies should report on waste, climate change/energy use and water use. Climate change is the most reported on impact by FTSE 350 companies in the sector (40%) followed by waste. It is clear however that, while all FTSE 350 speciality and other finance companies make some sort of disclosure on environmental issues there is little depth to those disclosures.

Information disclosed by the FTSE All Share

Around 60% of companies disclose their environmental policies, and around half report on their CSR activities. One third of speciality and other finance FTSE All Share companies report on waste. Beyond these policy and waste however the reporting levels are disappointingly low. Only six out of 26 speciality and other finance companies report on energy or climate change and only four on water use. It is clear that the companies in the sector have some way to go to achieve coverage of even the basic environmental issues. All other disclosures were made by two or less companies.

There was also virtually no quantitative reporting on performance indicators with only Cattles Plc making any reference to improved performance, even in this case the company is referring to an external benchmark rather than a standard measure (see Case study 35).

Case study 35: Cattles Plc, Annual Report and Accounts 2002

An IT hardware recycling initiative has been established across the group to ensure that all decommissioned and redundant IT equipment is identified either for recycling suitability or specialist disposal in the most effective environmental manner. Paper waste arising from two of our main locations in Yorkshire is now delivered into the recycle chain to reduce the level of our waste sent to landfill sites. Participation by these locations in the BiTC regional Green Index has highlighted our successes so far, with reductions of 9% being achieved in our output of solid waste, 10% improvement in our energy consumption and a creditable 38% reduction in our white paper usage. We are seeking to make further improvements through procurement where we look to place business with organisations that operate active environmental policies.

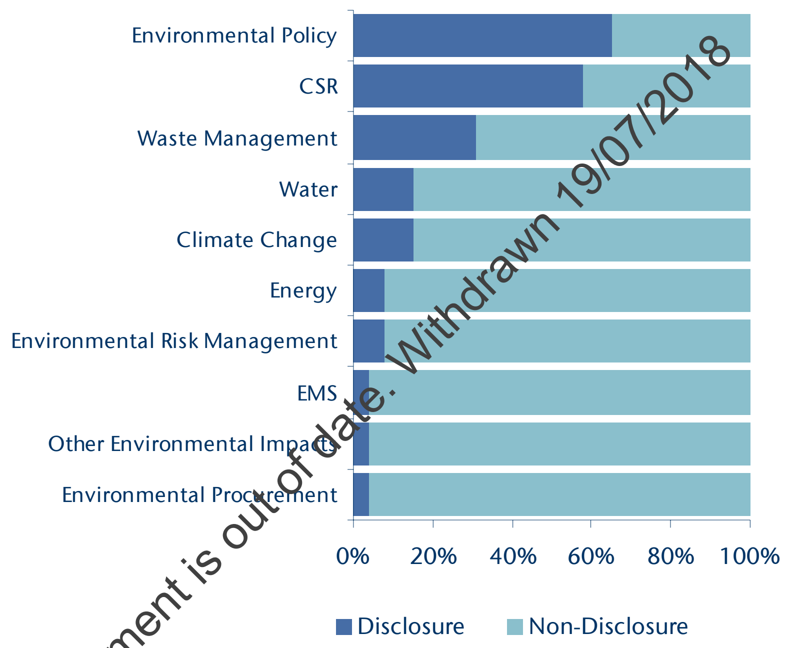


Figure 59. Top ten environmental topics in the real estate sector (by percentage of FTSE All Share companies in the sector.

Where the information is reported in the Annual Report and Accounts

Information relating to the environment is disclosed in the Directors Report (43%) which primarily refers to policy or general CSR issues or the HSE or CSR section if the report has one (38%), in which other issues such as waste management, water use and climate change are discussed. Disclosures made in the Corporate Governance (13%) section relate to policy or CSR issues.

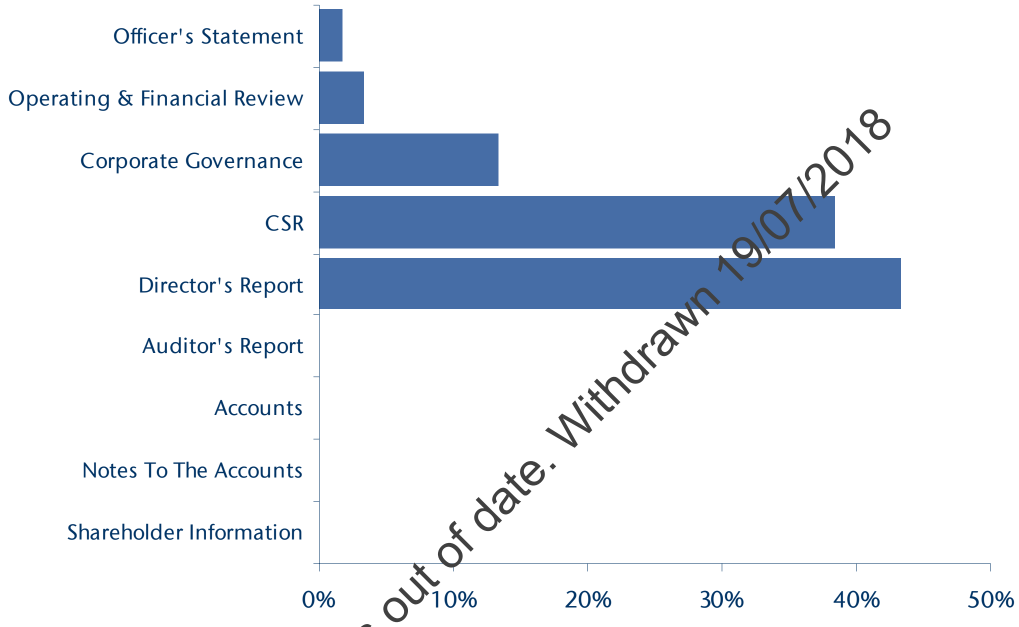


Figure 60. Location of environmental disclosures in the Annual Reports and Accounts of the – sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
AMVESCAP PLC			○										○													○	✓
MAN GROUP PLC		○		○		○							○													○	
SCHRODERS PLC													○													○	✓
CATTLES P.L.C.		●		◑		○							○													○	
CLOSE BROTHERS GROUP PLC						○							○													○	✓
COLLINS STEWART TULLETT PLC													○														
COUNTRYWIDE ASSURED GROUP PLC				○									○														
ICAP PLC																										○	
INTERMEDIATE CAPITAL GROUP PLC																										○	
INVESTEC PLC													○	○				○								○	
ISIS ASSET MANAGEMENT PLC													○													○	✓
LONDON STOCK EXCHANGE PLC		○		○		○							○														✓
PARAGON GROUP OF COMPANIES PLC (THE)			○								○		○														
PROVIDENT FINANCIAL PLC																										○	✓
SINGER & FRIEDLANDER GROUP PLC				○						○																○	

Information Technology (IT) Hardware

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Information Technology Hardware
Total Turnover (Millions):	£3,492
Turnover as % of All Share:	0.3%
Number of Companies:	13
FTSE Description	Manufacturers and distributors of computers and associated electronic data processing equipment and accessories. Semiconductor capital equipment, wafer and chip manufacturers and distributors. Manufacturers and distributors of digital equipment used in telecommunications, including mobile telephones, switchboards and microwave systems..

Index	Number of Companies
FTSE 100	0
FTSE 250	4
FTSE Small Cap	9
FTSE All Share	13

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	N/A	96%
FTSE 250	100%	96%
FTSE Small Cap	67%	80%
FTSE All Share	77%	89%

The process of IT equipment manufacture is resource intensive, requiring large amounts of energy and water together with chemicals which are often persistent and toxic. For example, for 2g computer chip requires 1.5Kg of fossil fuels, 32ltrs of water and 75g of chemicals. Production waste and post-consumer waste, which includes heavy metals and persistent compounds, is a major problem. Since 1996 the market for refurbished computers has increased by 500%, but still less than 20% of all discarded UK computers are recycled[36]. Each year 100 million computers are sold worldwide and over 1 million computers worldwide are disposed of in landfill sites. This has resulted in the introduction of the EU Restriction of Hazardous Substances in Electrical and Electronic Equipment (ROHS) Directive[37] and Waste Electrical and Electronic Equipment (WEEE)[38] Directive both of which will be implemented at a national level over the next three years. ROHS is designed to ban the use of lead, mercury, cadmium, hexavalent chromium, PBBs and PBDEs in electrical and electronic goods to minimise the environmental impact on disposal (PBBs and

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[36] http://www.wasteonline.org.uk/resources/InformationSheets/ElectricalElectronic.htm
[37] Directive 2002/95/EC of the European Parliament and of the Council , the Restriction of Hazardous Substances in Electrical and Electronic Equipment (ROHS)
[38] Directive 2003/108/EC of the European Parliament and of the Council of 8 December 2003 amending Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE)

PBDEs can take several thousand years to decompose). WEEE is designed to make producers responsible for final disposal of their products. This emphasis on producer responsibility has had a significant impact on the industry recently with potential annual costs of £217m to £455m in the UK alone[39].

There are also risks of land contamination from current or historic manufacturing operations.

Whilst it is encouraging that all four FTSE 250 companies make some from of disclosure on their environmental impacts, only two-thirds (67%) of FTSE Small Cap companies do – a low level given the potential costs and effect on operations.

Sector impacts and reporting in the FTSE350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	Medium	Low	Low	Low
Disclosure	0%	25%	25%	75%	25%

The toxic substances found in computers include lead, cadmium, chromium VI, mercury, PBBs, PBDEs and PVC – all materials covered by ROHS. While the production process may not lead to large amounts of waste, there is major problem with the end of life disposal of the product. Producers of IT hardware are responsible for a proportion of the post-consumer waste under WEEE. It seems that disclosure of waste management is driven by this regulatory environment for FTSE 350 information technology hardware companies as demonstrated by Marconi Plc in Case study 36.

Case study 36: Marconi Plc Annual Report and Accounts 2002

Our certification of major sites to the International Standard for Environmental Management Systems (ISO 14001) has been maintained and new objectives have been set by senior management to ensure that our endeavours for enhanced achievements continue. Objectives for 2003/04 include:

- Introduction of new environmental metrics;
- Launch of a business project to steer compliance with the European Waste Electrical and Electronic Equipment (WEEE) and the Restrictions on Hazardous Substances (RoHS) directives; and
- Reductions in the Carbon Dioxide emissions from the Group vehicle fleet.

Our audit programme will continue to ensure environmental practices are well managed and our environmental policy

[39] Partial regulatory impact assessment on directive 2002/96/ec of the European Parliament and of the Council on waste from electrical and electronic equipment (WEEE directive) DTI, March 2003

is cohesively adhered to. Our Management System will also ensure that our certification to ISO 14001 is maintained and is subject to continuous improvement.

While Arm Holdings Plc and Spirent Communications Plc report on waste, only Marconi Plc reports on water, waste and climate change, and Arm Holdings Plc reports on other environmental impacts (the reduction of ozone depleting substances in air-conditioning and fire suppressants). Marconi Plc's higher level of disclosure could due to it being a member of the FTSE 100 until fairly recently.

Information disclosed by the FTSE All Share

62% of all IT Hardware companies in the FTSE All Share disclose an environmental policy in their Annual Reports and Accounts. 54% report on waste management, a high level compared to reporting on other impacts such as energy use (23%) - climate change and water do not even appear in the top ten.

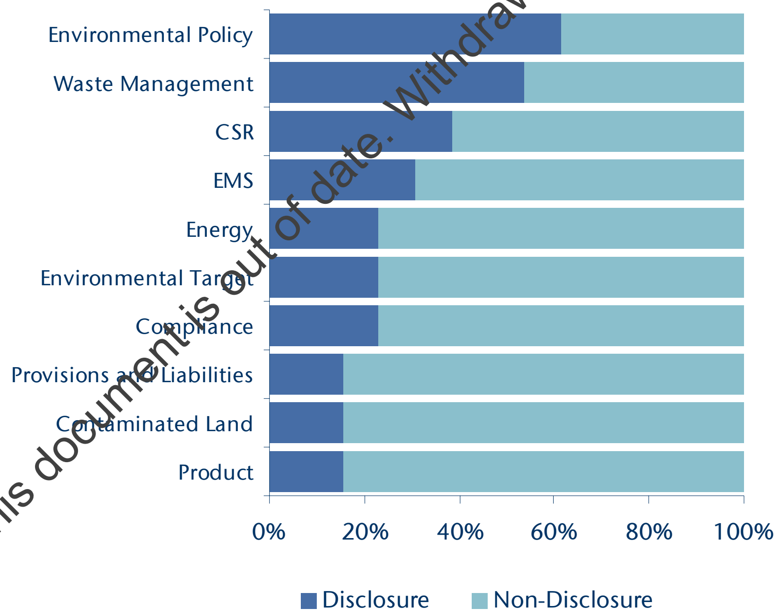

Figure 61. Top ten environmental topics in the Information Technology Hardware sector (by percentage of FTSE All Share companies in the Information Technology Hardware sector).

The relatively high disclosure of environmental policies is not supported by equally high disclosures on EMS (only 29%) or environmental targets (23%), indicating communicating the implementation of environmental policies and performance measurement is less relevant than communicating the intention. Overall, there is little depth to disclosures made by companies and virtually no quantitative disclosures.

Where the information is reported in the Annual Report and Accounts

46% reporting occurs in the separate HSE/CSR sections of the Annual Reports and Accounts which is approximately the same as that for all the companies in the FTSE All Share (46%). There is also a high disclosure rate in the Corporate Governance section (30%), with some policy references in the Directors Report and references to contaminated land liabilities in the Notes to the Accounts by Bookham Technologies Plc and Marconi Plc.. It is remarkable that, given the risks associated with ROHS and WEEE, no discussion of environmental issues are found in the operating and financial review.

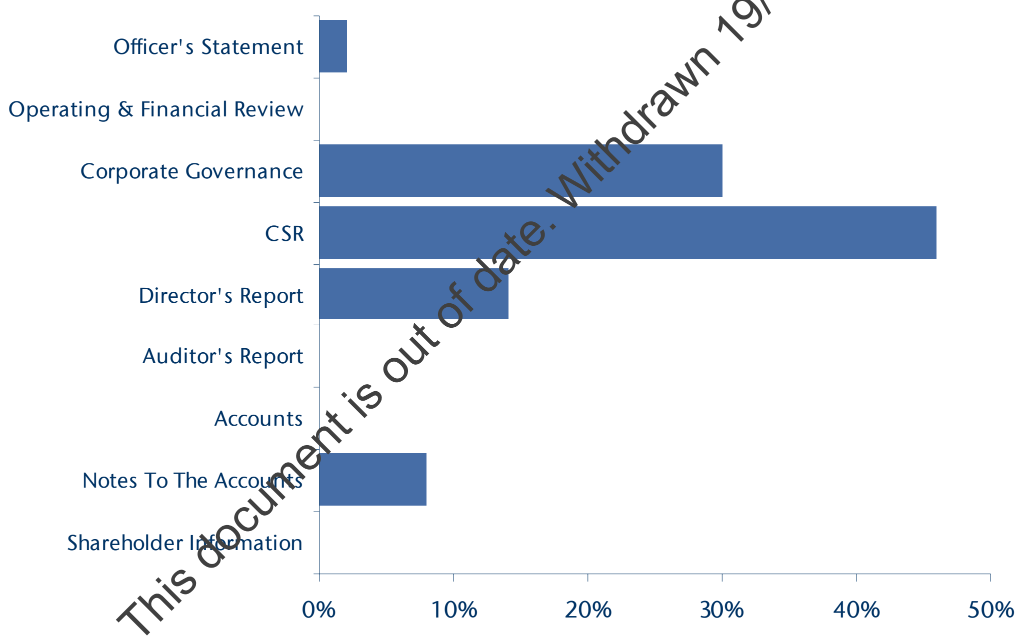

Figure 62. Location of environmental disclosures in the Annual Reports and Accounts of the Information Technology Hardware sector.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
ARM HOLDINGS PLC				○						○			○			○		○							○	○	✓
MARCONI CORPORATION PLC		○	○	○		○					○	◑	○			○			○			○				○	✓
PSION PLC													○														
SPIRENT PLC				◑					○		○	○		○										○		●	✓

Software & Computer Services

It is recommended that the section entitled "Assessment of FTSE Industry Sectors" is read before this section.

FTSE Sector Name	Software & Computer Services
FTSE Description	Providers of computer services. Consultants for information technology not classified elsewhere. Access providers, internet software, on-line service providers. Producers of computer software.
Total Turnover (Millions):	£9,889
Turnover as % of All Share:	0.8 %
Number of Companies:	31

Index	Number of Companies
FTSE 100	1
FTSE 250	8
FTSE Small Cap	22
FTSE All Share	31

Context

Index	% Companies in sector making any form of environmental disclosure	% Companies making any form of environmental disclosure
FTSE 100	100%	96%
FTSE 250	88%	96%
FTSE Small Cap	82%	80%
FTSE All Share	84%	89%

Although this sector is primarily office based, and 'hosting' companies use a large amount of electricity to power their systems, in general the companies in this sector have a similar environmental profile to any other office-based service providers. Generally environmental impacts are low and limited to heat, light, a small amount of water and paper waste. Waste from the software industry may also include computer parts and more packaging than average, whereas paper waste may be lower, as documents and data may be stored digitally although the 'paperless office' is not yet a reality. Companies that produce their own compact discs will also have polycarbonate wastes to deal with. All of that said this is a low impact sector. The policy statement of Eidos Plc a FTSE Small Cap company shown in Case study 37, is typical of many software companies' statements.

Case study 37: Eidos Plc Annual Report and Accounts 2002

Environmental

In appreciating the importance of good environmental practice, Eidos seeks to ensure that its operations and products cause the minimum detrimental impact to the environment. The Group's objective is to comply with environmental legislation in all countries where it operates and to promote effective resource management, energy efficiency, waste minimisation and recycling initiatives throughout the business. The entertainment software sector is, however, traditionally of low environmental impact.

Sector impacts and reporting in the FTSE350

Impact Type	Natural Resource Use	Water	Climate Change	Waste	Other
Impact	Low	Low	Low	Low	Low
Disclosure	0%	11%	11%	44%	0%

Most direct environmental impacts are negligible (or zero in the case of natural resource use). This may explain the very low level of reporting in the sector. As discussed in the *Information Technology Hardware* sector study, there is a high proportion of toxic and persistent compounds used in the manufacture of IT equipment. Software and computer services companies use a large amount of IT hardware and therefore have an indirect exposure to these impacts. All the disclosures on waste by companies in the sector refer to office waste rather than packaging or production waste. Only Anite Group Plc refers to climate change and only Xansa Plc refers to water use.

Information disclosed by the FTSE All Share

65% of companies disclose their environmental policy, and 45% disclose on waste management. CSR activities are reported by 29%. Very few companies report on specific environmental impacts. This pattern of reporting is common amongst office-based companies, however this sector is unusual in that reporting on waste stands out. Often, reporting of environmental impacts appears to be driven by data availability, which is relatively easy to acquire for waste. Despite this, however, all reporting on waste in the software sector is qualitative only.

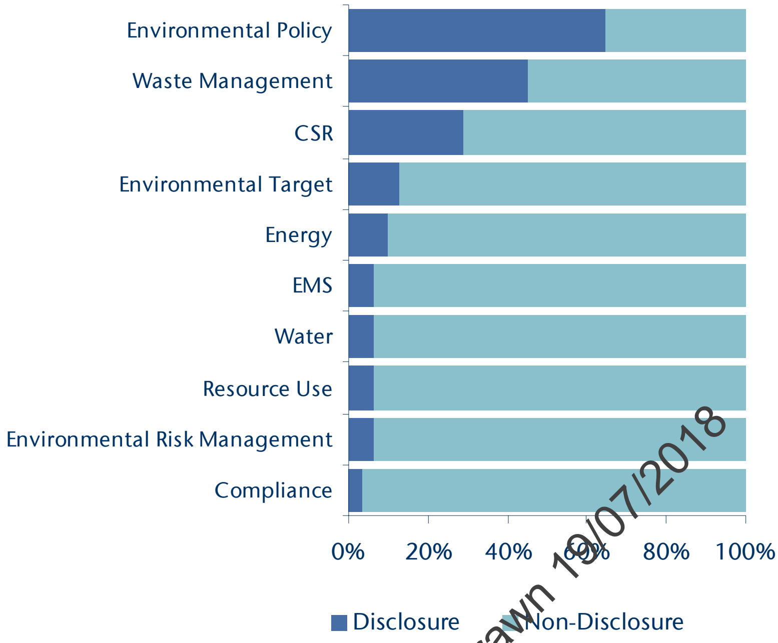

Figure 63. Top ten environmental topics in the Software & Computer Services sector (by percentage of FTSE All Share companies in the Software & Computer Services sector.

Where the information is reported in the Annual Report and Accounts

The majority of disclosures are reported in the Director's Report, followed by the HSE/CSR and Corporate Governance sections. This is common when many of the disclosures are with respect to policy as corporate policies are generally discussed in the Directors Report. Given the low impact of the sector it is interesting to note that one company (Xansa Plc) does disclose the environmental performance of its facilities in India in the Shareholder Information section as shown in Case study 38.

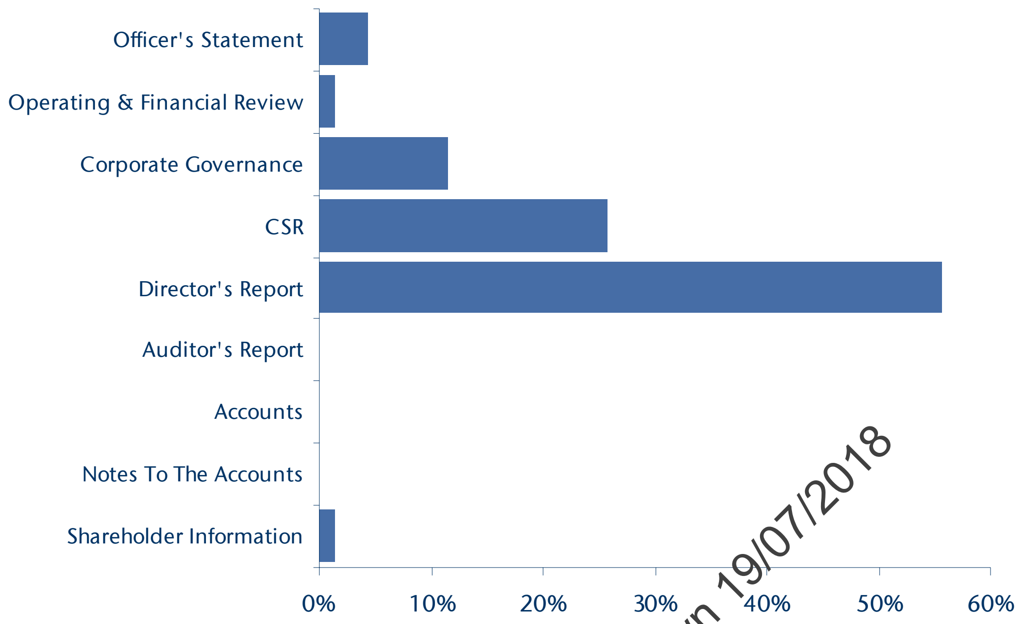

Figure 64. Location of environmental disclosures in the Annual Reports and Accounts of the Software & Computer Services sector.

Case study 38: Xansa Plc Annual Report and Accounts 2002

As far as is practicable, Xansa's purchasing choices favour products showing clear environmental advantages and we seek to use suppliers having similar policies and practices. In accordance with this commitment, the design and construction of our new campus developments in India have incorporated measures for water harvesting and recycling, energy efficiency, controls over air quality and emissions as well as environmental landscaping. Construction materials have been sourced from sustainable sources wherever practical.

	Resource Use	Water	Energy	Waste Management	Pollution	Climate Change	Acid Rain	Biodiversity/Land Use	Contaminated Land	Other Environmental Impacts	EMS	Environmental Target	Environmental Policy	Environmental Risk Management	Environmental Impact Assessment	Product	Environmental Accounting	Environmental Procurement	Compliance	Environmental Tax	License To Operate	Provisions and Liabilities	Environmental Incident	Remediation	External Audit	CSR	Supplementary Report
SAGE GROUP PLC (THE)				○																							✓
COMPUTACENTER PLC				○							○		○													○	✓
DIMENSION DATA HOLDINGS PLC				○								○	○													○	
ISOFT GROUP PLC	○												○														✓
LOGICACMG PLC				○									○														
MISYS PLC													○													○	✓
TOREX PLC													○													○	
XANSA PLC		○	○									○	○													○	✓
AUTONOMY CORPORATION PLC																											