

# Report on a Survey of Environmental Reporting Costs and Benefits

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#### EXECUTIVE SUMMARY

The Department for Environment, Food and Rural Affairs (formerly DETR) enlisted the support of ENVIRON, to conduct a survey of companies which produce annual environmental reports. The purpose of the survey was to examine the costs and benefits of environmental reporting and to compare this within different sectors, across company size and the reporting maturity of companies. It is hoped that the results will assist further development in the area of corporate environmental disclosure, by providing companies with an insight into what they could expect to spend on a report and what benefits they might hope to achieve.

The survey questionnaire was developed to allow companies to disclose the costs associated with developing an environmental report from the initial strategy development to report production through to final stakeholder surveys on the report content. The survey allowed for both external and internal costs to be estimated. From a list of categories of benefits, companies were given the opportunity to indicate their relative importance as a result of making environmental disclosures. Previous experience had shown that respondents were not easily able to assign financial figures to the benefits of reporting.

The survey was sent out to a total of 109 companies, of which 38 were FTSE100 companies, a further 17 were FTSE350 companies and the remaining 54 companies were 'other' environmental reporters. The selection of companies included those companies listed on the Corporate Register, a web based directory of published Environmental and Social reports. In order to facilitate data analysis and allow for comparison with future surveys respondents were allocated to 1 of 23 sectors. These sectors were chosen to match those classifications given on the corporate register for environmental and social reports. 47 completed replies were received, giving a response rate of 43.1%. The respondents had been reporting for an average of 4.79 years and the questionnaire responses indicated a full range of reporting maturities from both first time to seasoned reporters. The most mature reporter among the responses received had been disclosing environmental information for 12 years.

A review of the responses received indicated that the content quality of the report was generally very high when compared to the Global Reporting Initiative (GRI) reporting guidelines.

The annual environmental reporting costs ranged widely from £6,500 to £535,000, with an average cost of £92,716. When the costs associated with strategy formulation and establishment of information systems were excluded the range of reporting costs was £4,500 to £259,500 with an average cost of £66,903. The four companies not producing hard copy version of the report and only publishing on the internet showed a significant reduction in reporting costs with an average annual reporting cost of £11,215.

The survey responses showed no correlation between company size (annual turnover) and the expenditure on environmental reporting costs. Reporting costs varied widely between the 23 sectors. The sector reporting the lowest average annual reporting costs (excluding set up costs) is the banking, finance and investment sector, with an average cost of £9,262. The sector with the highest costs of £161,250 was the metals and mining sector.

It had been anticipated that the surveyed companies might not have easily identified a direct, financial benefit of environmental reporting. Indeed financial information on the benefits of environmental disclosure was only included in 6 of the responses received. These 6 companies had been reporting for a longer period, on average 7.1 years, as compared to the 4.79 years for the responding group taken as a whole. This could indicate one of two things. Either that the financial benefits of environmental reporting are not realised for the first few years of reporting, or and what is considered more likely, that seasoned reporters have realised the importance of capturing this information as a means of recording and monitoring progress against set targets. Financial benefits were recorded for only a few of the benefit categories. In the main these included savings as a result of setting reduction targets for resource use, waste generation, water usage, and energy expenditure.

The highest ranked benefits included those that related to the communication of a company's position on environmental issues. These included improved stakeholder dialogue, representational improvement, increased employment awareness, stronger internal commitment and the provision of environmental information to stakeholders.

The middle ranking benefits were in the main related to the mechanistic and procedural elements of environmental management. They included general improvements in environmental management, reduction in resource use, reduction in waste generated, reduction in water use and reduction in energy expenditure. These benefits are really the most tangible and robust issues surrounding environmental management systems. Also ranking amongst these middle ground benefits were the issues of improved access to markets and competitive advantage.

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The financial and regulatory benefit of producing environmental reports was assigned the lowest scores by the responding companies. The issues of lower insurance premiums, reduced cost of capital and reduced regulatory oversight were deemed to be of only limited benefit to the responding companies, and as a rule achieved the lowest benefits scores. However, current literature on the subject identifies a large body of evidence suggesting that companies are being subjected to increased scrutiny from fund managers, investment advisors and others to produce comprehensive environmental reports. However, the results of this current survey appear to contrast and conflict with the published information, and indicate that this pressure is either not being felt or is not currently being recognised by companies as a driver to produce an environmental report. It remains to be seen to what extent and to what end fund managers and financial institutions (pensions, investments and insurance) can enforce those policies laid down in their decision-making processes.

#### 1.0 INTRODUCTION

The Department for Environment, Food and Rural affairs (formerly DETR) enlisted the support of ENVIRON, to conduct a survey of companies which produce annual environmental reports. The purpose of the survey was to ascertain the costs and benefits of this form of corporate disclosure, and to compare those findings both between and within sectors, in relation to company size and in terms of the environmental reporting maturity of the company. The aim of the survey was to gain a better understanding of the costs and benefits of voluntary environmental reporting. It is hoped that the results will assist to further the development of the area of corporate environmental disclosure, by providing companies with an insight into what they could expect to spend on an annual environmental report, and what benefits they might hope to achieve.

A brief literature review was conducted prior to the design of the questionnaire used to gather available evidence on the costs and benefits of environmental reporting. The resources examined can be found in Annex A. The results of the review were used to guide the selection of companies to be included in the survey and the content of the questionnaire.

From the literature review, it was apparent that much of the research already conducted in the area of environmental reporting has centred on three main issues: the evaluation of the content of existing reports; the drivers encouraging environmental reporting; and the importance of corporate environmental disclosure to the ethical investment market.

ENVIRON conducted a survey in 1998 on the business case for environmental disclosure<sup>1</sup>. This survey looked at the drivers, costs and benefits of the corporate decision to publish company environmental information. However, the current literature review did not identify any other published research that has centred specifically on the questions of the costs and benefits of environmental disclosure.

A large number of journals are now including features outlining the pressure that financial investors and portfolio managers can bring to bear on the environmental reporting behaviour of large companies. In line with the continuing growth in ethical investment, a new rating system for evaluating safety, environmental and social performance has been launched by

<sup>&</sup>lt;sup>1</sup> EAG ENVIRON, 1998, Solving the Cost Puzzle—Environmental Reporting.

Bureau Veritas<sup>2</sup> and SERM<sup>3</sup>. Crucially, the National Association of Pension Funds (NAPF) will be incorporating the BV-SERM ratings into their corporate governance voting issues prior to company AGMs.

<sup>&</sup>lt;sup>2</sup> www.bureauveritas.com

 $<sup>^{3}</sup>$  Safety and Environmental Risk Management Rating Agency Ltd, www.serm.co.uk.

### 2.0 SURVEY METHODOLOGY AND QUESTIONNAIRE DEVELOPMENT

The survey took the form of a written questionnaire. This strategy was considered preferable over a telephone interview as it allowed the respondents time to assimilate the appropriate data and hence provide full and accurate answers.

During the initial project meeting between DEFRA and ENVIRON it was agreed that questionnaire responses would only be included in the final analysis from those companies who produce a separate, stand-alone environmental report. Any responding companies whose environmental disclosure was limited to environmental statements contained with the annual report were excluded from the analysis. The primary reason for this distinction was that based on previous experience there are large differences in the levels of environmental disclosure contained within company annual accounts. It would be extremely difficult to then make meaningful comparisons between company annual reports and stand alone environmental reports. It is suggested that future surveys should examine this issue in more detail. To facilitate this distinction, companies were therefore asked to answer questions on their reporting practices, and asked to submit information on report content. This provided the opportunity of ensuring that reports of a similar quality were being compared, and that a direct comparison between costs and benefits was therefore appropriate. The report content parameters included within the questions were based upon those items recommended for inclusion by the Global Reporting Guidelines 2000. These guidelines have been produced by the Global Reporting Initiative (GRI)<sup>4</sup> with the aim of making corporate environmental reports both logical and complete, and in order to facilitating benchmarking and comparability.

There is a wide variation in the split between the internal and external resources used to produce reports. As such, companies were given the opportunity of recording the costs of environmental reporting directly (typically for external resources), or alternatively, of recording the costs of reporting as a summation of the employee hours required to complete the various stages of the reporting process. Total costs were then calculated using employee salary bandings, assuming an average working year of 220 days.

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<sup>&</sup>lt;sup>4</sup> The Global Reporting Initiative (GRI) was established in 1997 by the non-profit Coalition for Environmentally Responsible Economies (CERES).

Previous experience had shown that respondents were not easily able to assign financial figures to some of the perceived benefits of reporting. Companies were therefore given the opportunity to give an indication of the relative importance of the different categories of benefit. (No benefit = 0, of limited benefit only = 1, recognised as an important company benefit = 2, and representing a major benefit to the company = 3)

A copy of the survey questionnaire is included in Annex B.

#### 3.0 SELECTION OF COMPANIES

ENVIRON's brief was to conduct the survey centred upon UK companies already committed to regular environmental disclosure. The selection of companies included those companies listed on the Corporate Register, a web-based directory of published corporate environmental and social reports (www.corporate-register.com) and other known environmental reporters. A total of 109 companies were contacted, of which 38 were FTSE 100 companies, a further 17 were FTSE 350 and the remaining 54 companies were other environmental reporters not included within these groups.

In order to facilitate data analysis, and allow comparisons with future surveys, responding companies were allocated to one of the following 23 sectors:

- Automotive
- ➤ Banks, Finance & Investment
- ➤ Beverages/Tobacco
- > Chemicals
- Civil Engineering/Homebuilding
- Consumer Goods
- > Diverse Services (includes waste management companies)
- > Entertainment/Leisure/Hotel/Restaurant
- > Food Production
- Food Retail
- ➤ General Retail
- ➤ Government/Authorities/Agencies
- ➤ Industrial/Electrical/Engineering/Manufacturing
- ➤ Information & Communication Technology
- Insurance
- Media/Advertising
- ➤ Metals/Mining
- Petrochemicals
- Pharmaceuticals
- Property/Real Estate
- Pulp & Paper
- > Transport

## Utilities

The sector divisions were chosen to match those classifications given on the Corporate Register.

#### 4.0 RESULTS

#### 4.1 GENERAL OBSERVATIONS

A total of 47 completed replies were received, giving a response rate of 43.1%. Three of these responses were subsequently excluded from the analysis; two because they had been insufficiently completed; and the other because the company concerned only included environmental information within an annual report, and did not produce a stand-alone environmental report.

Of the analysed replies (44), 15 companies were from the FTSE 100, 8 from the FTSE 350 and 21 from outside of these groups.

The respondents had been reporting for an average of 4.79 years. A full range of reporting maturity was observed, with completed questionnaires being received from both first time and seasoned reporters. The most mature reporter amongst the responses had been disclosing environmental information for 12 years.

All the companies recorded that their environmental reports were made publicly available. However, four of the responses were from companies that published and distributed their environmental report solely by electronic means via the Internet, with no hardcopy report being produced.

The responses indicated that the quality of the report's contents was generally of a high standard when compared to the GRI Reporting Guidelines. Fourteen issues were highlighted within the questionnaire as reference indicators of report content. However, the survey did not attempt to ascertain the quality of the content of the responses. When the completed questionnaires were scored against these reference indicators, an average report content score of 12.21 was calculated. It is also of note that only one response achieved a score of less than 10. With such a good comparability of report content (based on GRI reporting guidelines) between companies, a direct comparison of reporting costs and benefits was therefore possible, as it was concluded that differences in costs and benefits would likely be due to reasons other than the quality of the report content.

#### 4.2 COSTS OF ENVIRONMENTAL REPORTING

In response to the question, "How much does an environmental report cost to produce?", many companies were found to report costs which were initially significantly lower than the actual, time costs of reporting identified in subsequent questions. It appears that, in estimating a 'ballpark' figure, companies are failing to appreciate and include many aspects of the reporting process such as the costs of diverting internal resources, data acquisition and assimilation, target setting and monitoring, reporting design and layout, engagement of external consultants and report verification. The questionnaire was therefore specifically designed to ensure that this information was captured. As a result, the total costs recorded from the survey responses are perhaps higher than might initially be anticipated.

Table 1 records the range of costs and the average cost of the responses to each of the questions.

TABLE 1: MINIMUM, MAXIMUM AND AVERAGE COSTS ASSIGNED BY RESPONDING COMPANIES TO INDIVIDUAL QUESTIONS ON THE SURVEY					
<b>Survey Questions on Environmental</b>	Min.	Max.	Average		
Reporting Costs	recorded cost	recorded cost	recorded cost		
What costs were incurred during the strategy formulation stage of identifying the business case for reporting?	£300	£300,000	£11,907		
What costs were incurred in establishing information systems to ensure the availability of appropriate data?	£300	£108,000	£10,989		
What costs were involved in data collection?	£615	£100,000	£6,983		
What costs were incurred in copywriting the text for the report?	£670	£50,000	£7,318		
What costs were incurred in designing the hard copy version of the environmental report?	£80	£44,000	£12,118		
What costs were incurred in designing the internet version of the environmental report (where applicable)?	£80	£50,000	£5,249		
What were the costs associated with internal verification of the report?	£300	£30,000	£5,120		
What costs were incurred during the external verification of the report?	£1,000	£100,000	£8,206		
What were the costs of producing and printing the report?	£2,000	£66,000	£13,811		
What were the costs of distributing the report?	£200	£28,000	£2,624		

Total theoretical minimum, maximum and average costs	£5,701	£906,000	£86,107
What costs were incurred in responding to readers' comments on the report?	£60	£15,000	£768
Was a follow up survey conducted to measure stakeholder opinion to the report? How much did the survey cost?	£96	£15,000	£1,014

An initial analysis of the responses showed that the average annual reporting cost for those companies not producing a hard copy version of the report (based on the sample of 4) was very much lower than those companies who did opt to publish in this format. It was not possible, within the scope of the current survey, to examine in detail whether the content of the Internet reports was directly comparable in terms of quality and quantity of information with the hard copy counterparts. Consequently, these four responses were excluded from further cost analysis. However, it should be noted that this result in itself may indicate that companies who wish to limit the costs of environmental reporting could be encouraged to consider the production of electronic versions of their report as opposed to the publication of hard copy. Subsequent updates and modifications may also prove to be more cost-effective.

Table 1 indicates that there is a very broad range in the **theoretical** minimum, maximum and average costs to be selected. These are £5,701, £906,000 and £86,107 respectively.

In a previous survey by ENVIRON (1998)<sup>5</sup> companies gave a mixed response to the question of the effects of the use of the Internet on the costs of environmental reporting. At that time, some responding companies cited Internet use as a reason for escalating reporting costs, whilst others reported that Internet use in fact decreased the costs of producing an environmental report.

Some general observations on the responses to the questions concerning the costs of environmental reporting provided the following headline figures.

- The annual environmental reporting costs initially quoted ranged widely from £6,500 (Civil Engineering/Homebuilding) to £535,000 (Metals/Mining) with an average cost of £92,716;
- ➤ When the costs associated with the strategy formulation and the establishing of information systems were excluded i.e. the initial set up costs, the range of reporting costs

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<sup>&</sup>lt;sup>5</sup> Ibid.

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was £4,500 (Civil Engineering/Homebuilding) to £259,500 (Insurance) with an average cost of £66,903; and

➤ By comparison and for completeness, the average annual reporting costs for those companies not producing a hard copy version of the report was £11,215 where initial set up costs were excluded from the calculation. As mentioned above, this is significantly lower than the costs recorded by companies producing hard copy reports, representing less than 20% of the average costs of those companies producing hard copy reports.

The questionnaire was designed to investigate whether company size might account for some of the variation in reporting costs, i.e. whether a relationship exists between company size and the resources invested in reporting on environmental performance.

Two indices were used as measures of company size – the company annual turnover and the number of employees. Simple, linear regression analysis was conducted to explore the relationship between these indices and environmental reporting costs. The analysis was conducted for both the total reporting costs and for the reporting costs excluding initial set up costs. The results are shown graphically in Figures 1-4.

The data on each of the graphs does not closely relate to the calculated trend lines, which leads to the conclusion that there is very little or no correlation between company size and the costs of producing an environmental report. This is true for both measures of company size, annual turnover and number of employees.

This observation contrasts with the results of the 1998 ENVIRON survey<sup>6</sup>, which concluded that company size accounted for approximately half of the observed variation in reporting costs.

When one considers that as there is no discernible relationship between company size and costs incurred in reporting and that in general the respondees all scored highly in terms of report contents, one can conclude that the costs to be incurred could be expected to fall towards the lower end of those cited in Table 1. This would suggest that organisations could expect to spend between £5,701 (the **theoretical minimum**) and £92,716 the **average actual cost** on producing a stand alone environmental report. It is noted that other issues such as

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<sup>&</sup>lt;sup>6</sup> Ibid.

'willingness to spend', availability of resources and the efficiency of the data collection and assimilation process may also influence the funds available.

As stated earlier, a range of reporting maturity was observed, with responses being received from both first time and seasoned reporters. To establish whether the maturity of the reporter might account for some of the observed variation in costs, the costs were plotted against the number of years of reporting. Figures 5 & 6.

The graphs show a large cluster of company environmental reporting costs at less than £100,000. Interestingly however, as can be seen on Figure 5 the costs that deviate widely from this main group are all from companies that have been reporting for five years or less. This would indicate that whilst not all new comers to environmental disclosure experience high costs of reporting, those companies which do experience higher costs are often relatively new to the process of environmental disclosure. Indeed if Figure 5 is compared to Figure 6 where the initial set up costs have been excluded, it can be seen that the cost discrepancies are much less marked, with the trend line in Figure 6 being much flatter than that of Figure 5. This fact reinforces the conclusion that organisations are expected to spend less than £100,000 on producing a report. New reporters will and do experience higher costs. However, their target should be costs experienced by the 'mature reporter' who have learnt lessons and possibly identified efficiency improvements from the earlier reporting years.

Finally, the cost responses were analysed to examine whether sectoral differences had a role to play in reporting cost variations.

Table 2 shows the average annual reporting costs by sector where available, and indicates the sample size from which the average was calculated. Figure 7 represents this data graphically.

TABLE 2: AVERAGE ANNUAL REPORTING COSTS BY SECTOR				
Sector	Number of Companies Contacted	Number of Companies Responding	Average Annual Report Costs (Excluding Set Up)	
Automotive	2	1	£ 35,800	
Banks, Finance, Investment	5	1	£ 9,262	
Beverages/Tobacco	3	0	N/A	
Chemicals	6	2	N/A	
Civil Engineering/Homebuilding	8	2	£ 21,755	
Consumer Goods	2	1	N/A	
Diverse Services	9	3	£ 28,978	

Entertainment/Leisure/Hotel/			
Restaurant	2	2	£ 17,595
Food Production	2	1	£ 72,500
Food Retail	2	1	£ 112,200
General Retail	9	3	£ 43,050
Government/Authorities/Agencies	5	2	£ 74,000
Industrial/Electrical/Manufacturing/ Engineering	1	1	N/A
Information & Communications	2	2	£ 72,935
Insurance	3	3	£ 146,750
Media/Advertising	1	0	N/A
Metals/Mining	3	2	£ 161,250
Petrochemicals	4	1	£ 33,200
Pharmaceuticals	4	1	£ 88,040
Property/Real Estate	1	0	N/A
Pulp & Paper	4	2	£ 34,890
Transport	9	6	£ 64,406
Utilities	22	10	£ 81,306
TOTAL	109	47	

Notes: The environmental reporting costs listed above exclude the costs associated with strategy formulation and the costs incurred in setting up new information systems to capture the relevant data. In addition, data from companies which do not produce a hard copy version of their environmental report has been excluded

On first inspection, Figure 7 appears to indicate that the costs of producing environmental reports do vary widely between sectors. The utilities, diverse services and the transport sectors received the highest number of responses, with 10, 3 and 6 questionnaires being returned respectively. The average costs calculated from responses from companies within these sectors will therefore provide the most robust figures. Referring to Table 2, it can be seen that there is a marked difference between the average environmental reporting costs experienced within these sectors:

Utilities £ 77,106

Transport £ 64,406

Diverse Services £ 28,978

It is difficult to attribute reasons to these wide sectional differences. The highest cost can be attributed to the Metal/Mining sector whilst the second highest costs come from the Insurance sector (a service industry). However, at the other end of the scale the three sectors reporting the lowest costs are the Banking/Finance/Investment, Entertainment/leisure and Civil Engineering/Homebuilding sectors.

The proposition that sectors which are heavily regulated or where there is a large awareness (public and employee) of the sectors impact on the environment does not lead to an

explanation. One can only conclude that there is no discernible linkage between sector spend on environmental reports and type of sector as a result of the information gathered in this study.

Table 3 below summarises the tests made during the analysis for correlation between expenditure on environmental reporting and company attribute.

TABLE 3: SPEND CORRELATION				
Primary Issue	Comparison	Correlation		
Company size (annual turnover and number of employees)	Reporting spend	Little or no correlation		
Report content	Reporting spend	Little or no correlation		
Reporting spend	Reporting Maturity	Mature reporters showing costs of £100,000 or less		
Sector spend	Type of sector	No correlation		

#### 4.3 BENEFITS OF ENVIRONMENTAL REPORTING

It had been anticipated that the surveyed companies might not have easily identified a direct, financial benefit to environmental reporting. Indeed, financial information on the benefits of environmental disclosure was only included within six of the responses. However, some points of interest are raised by these replies:

- The companies reporting financial benefits of environmental disclosure had been producing reports for an average of 7.1 years, as compared to the 4.79 years of the responding group when taken as a whole. This could indicate one of two things. Either that the financial benefits of environmental reporting are not realised for the first few years of reporting, or and what is considered more likely, that seasoned reporters have realised the importance of capturing this information as a means of recording and monitoring progress against set targets.
- Financial benefits were recorded for only a few of the benefit categories. In the main these included savings as a result of setting reduction targets for resource use, waste, water usage and energy expenditure. In addition, one respondent recorded a financial benefit resulting from improved employee awareness. As above, this may represent the use of environmental reports as a tool to measure continual environmental improvements,

especially as data on resource use, waste, water usage and energy expenditure is relatively easy to capture.

Three of the six companies providing financial benefit data were from the utilities sector. This constitutes 50% of the sample, and compares to the 21.3% that the utility sector companies made of the total responses received. As outlined above, this may be as a result of the maturity of the utilities sector in terms of producing environmental reports. The average number of years of reporting for the utility sector was 7.56. However, it could also indicate that there are additional, sector specific drivers to capturing financial benefit information.

A more comprehensive understanding of the types of benefits realised by environmental reporting companies becomes apparent when the scored responses to the questions concerning benefits are analysed. Companies were given the opportunity of recording the benefit of environmental reporting on a scale of one to three. For the purpose of analysis, where an issue was recorded as being of no benefit to the company, a score of zero was assigned. In addition, individual responses that recorded which issues companies were unsure of, or unable to quantify, a particular benefit were excluded from the analysis. Figure 8 gives a graphical representation of the average score achieved by each benefit category. (The categories are represented in the same order as they appeared within the questionnaire.)

The results show that the benefits that ranked highest could generally be described as being related to the communication of a company's position on environmental issues. These included improved stakeholder dialogue, reputational improvements, increased employee awareness, stronger internal commitment and provision of environmental information.

The middle ranking benefits were in the main related to the mechanistic and procedural elements of environmental management. They included general improvements in environmental management, a reduction in resource use, reduced waste generation, and a reduction in water use and energy expenditure. These benefits are really the most tangible and robust issues surrounding environmental management systems. Also ranking amongst this middle ground of benefits were the issues of improved access to markets and competitive advantage.

The financial and regulatory benefits of producing an environmental report were assigned the lowest scores by the responding companies. The issues of lower insurance premiums, reduced cost of capital and reduced regulatory benefit were deemed to be of only limited benefit to the

responding companies, and as a group achieved the lowest benefit scores. As reported earlier, the literature review identified a large body of evidence that companies are being subjected to increasing scrutiny from fund managers, investment advisors and others to produce comprehensive environmental reports. However, the results of this survey appear to contrast and conflict with the published articles, and indicate that this pressure is currently either not being felt or is not currently being recognised by companies as a benefit of providing an environmental report. Therefore, the question becomes to what extent can fund managers and financial institutions enforce the policies laid down in their ethical investment decision-making processes?

To examine whether there may be some indication of sectoral differences, the responses to the benefits questions from companies within the utilities sector, diverse services sector and the transport sector were once again examined separately. Table 4 lists the average scores achieved by each benefit category within each of these three sectors. The overall, average benefit scores, as depicted in Figure 8, are included for reference.

TABLE 4: BENEFITS OF ENVIRONMENTAL REPORTING					
Type of Benefit	Average scores				
	All Sectors	Utilities Sector	Transport Sector	Diverse Services	
Decreased Resource Use	1.55	1.80	1.33	1.67	
Decreased Waste	1.57	2.00	1.67	0.75	
Decreased Water Usage	1.37	1.71	1.33	1.67	
Reduced Energy Expenditure	1.49	1.50	1.75	1.75	
Lower Insurance Premiums	0.53	0.43	0.00	1.00	
Reduced Cost of Capital	0.62	0.44	0.00	1.50	
Improved Access to SRI Funds	1.20	1.50	1.33	2.00	
Improved Market Access	1.30	1.67	1.00	2.25	
Competitive Advantage	1.48	1.71	1.00	2.50	
Stronger Internal Commitment	2.15	2.25	1.67	1.50	
Better Environmental Management	1.95	2.25	1.67	1.25	
Increased Employee Awareness	2.14	2.38	1.67	1.33	
Reduced Regulatory Burden	1.05	1.29	0.67	1.25	
Reputational Improvements	2.21	2.57	2.00	2.25	
Provision of Environmental Information	2.00	2.13	2.33	2.50	
Improved Stakeholder Dialogue	2.31	2.63	2.50	2.25	

This data is represented graphically in Figures 9, 10 & 11, and indicates that there may be sectoral differences in the benefits achieved by companies that produce environmental

reports. An examination of the data in Table 4 and Figures 9-11 highlights a number of these differences:

- ➤ In general, companies in the utilities sector assigned slightly higher scores to each benefit category than all the sector responses taken as a whole;
- > Conversely, companies in the transport sector generally assigned lower benefit scores than all the sector responses taken as a whole;
- Companies within the diverse services sector did not follow the same trends in assigning benefit scores as the other sectors. Improved access to SRI funds, and improvements in market access and competitive advantage scored highly when compared to the other two sectors;
- ➤ All three sectors ranked improved stakeholder dialogue, reputational improvements and the provision of environmental information as important/major benefits of producing an environmental report.

In conclusion therefore, it appears that the most significant benefits being perceived by reporters are the intangibles relating to: improved stakeholder dialogue, better reputation for managing environmental issues, increased employee awareness, stronger internal commitment to managing environmental issues and improved provision of environmental information.

#### 5.0 CONCLUSIONS

A survey of this type depends entirely on the quality of the responses received. The questionnaire was designed and agreed between ENVIRON and DEFRA in order to make the process of identifying costs and benefits as straight forward as possible.

Of the 47 completed responses received there is clearly a large variation in the costs associated with producing environmental reports. The costs initially quoted for the production of an environmental report ranged from £6,500 to £535,000 with an average cost of £92,716. A comparison of these costs against company size shows there is no direct correlation between costs of environmental reporting and company size. Some very large companies (in terms of turnover and employee numbers) appear to spend relatively little on the production of their environmental reports.

There are very large cost variations in the individual steps in preparing an environmental report. The strategy costs for identifying the business case for environmental reporting varied from £300 to £300,000. External verification costs varied from £1,000 to £100,000 and data collection costs varied from £615 to £100,000. On average, reporting strategy, data collection and verification costs appear to vary by a factor of a hundred between the least and most expensive reports.

Reporting costs vary widely across the different sectors. The sector reporting the lowest costs was Banking, Finance and Investment with an average annual report cost of £9,262. At the other end of the spectrum the Metals/Mining sector report an average cost of £161,250. The Utilities sector, which had the largest response rate of 10 companies out of a possible 22, cited an average annual cost of £81,306.

The majority of reporters scored highly in terms of report contents. Therefore differences in costs cannot readily be attributed to a report's contents.

This would suggest that the costs likely to be experienced could be between the average quoted cost of around £90,000 and the lower theoretical cost of around £6,000. This conclusion is supported by a cluster of 'mature reporters' experiencing costs of the order of £100,000.

DEFRA

Companies reporting financial benefits of environmental disclosure have been producing reports for an average of 7.1 years, as compared to the 4.79 years of the responding group taken as a whole. This could indicate 1 of 2 things. Either that the financial benefits of environmental reporting are not realised for the first few years reporting, or and what is considered more likely, that seasoned reporters have realised the importance of capturing this information as a means of recording progress against set targets.

The results show that the benefits that ranked highest could generally be described as being intangible benefits related to the communication of a companies position on environmental issues. These included improved stakeholder dialogue, reputational improvements, increased employee awareness, stronger internal commitment and provision of environmental information.

The middle ranking benefits were in the main tangible and related to the mechanistic and procedural elements of environmental reporting and management. They included general improvements in environmental management, decreased resource use, decreased waste, water usage and reduced energy expenditure. These benefits are really the most tangible and robust issues surrounding environmental management reporting and systems.

The financial and regulatory benefits of producing an environmental report were assigned the lowest scores. The issues of lower insurance premiums, reduced costs of capital and reduced regulatory oversight were deemed to be of only limited benefit to the responding companies, and as a group achieve the lowest benefit scores. The literature review identified a large body of evidence that companies are being subjected to increasing scrutiny from fund managers, investment advisors and others to produce comprehensive environmental reports. However, this contrasts with published literature which indicates that this pressures is currently either not being felt or is not currently being recognised by companies as a benefit of providing an environmental report. Therefore, the question becomes to what extent can fund managers and financial institutes enforce the policies laid down in their ethical investment decision-making processes?

Companies within the Diverse services sector (including waste management companies) did not follow the same trends in assigning benefit scores as the other sectors. Improved access to SRI funds, and improvements in market access and competitor advantage scored highly when compared to the other sectors.

## ANNEX A: LITERATURE SEARCH REFERENCES

- 1. Sustainability Reporting Guidelines, GRI (Global Reporting Initiative), 2000.
- 2. Socially responsible investment 'comes of age', PIRC Press Release, July 1999.
- 3. **Environmental Reporting and the Medium Sized Company,** Rachel Jackson (ACCA), Markus Milne (University of Otago, New Zealand) & Dave Owen (University of Sheffield), 2000.
- 4. The Emerging Relationship Between Environmental Performance and Shareholder Wealth, The Assabet Group, January 2001.
- 5. **EPA Study Highlights Financial Link to Environmental Performance,** National Advisory Council for Environmental Policy and Technology, Environmental Capital Markets Committee (US EPA), November 2000.
- 6. Analysis of Responses to FEE Discussion Paper "Providing Assurance on Environmental Reports", FEE European Federation of Accountants.
- 7. Voluntary Guidelines Published on Environmental Management and Reporting for Financial Institutions, Consortium of banks (FORGE) supported by DTI and DETR and Environmental Consultants from PriceWaterhouse Coopers.
- 8. **Investors Prod CEO's to Adopt New Sustainability Reporting Standards, SocialFunds.com**, November 2000.

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## ANNEX B: COPY OF QUESTIONNAIRE

COMPANY DETAILS					
Company Name	Contact Name				
Address	Job Title				
	Email				
	Company sector				
Tel No	Company annual turnover				
Fax No	Total number employees				
ENVIRONMEN'	TAL REPORTING				
How frequently does your company report on its	Annually				
environmental performance?	Other (please specify)				
Please give the year of your first environmental re	•				
Does your environmental report form a separate s alone document from your annual report?	tand YES • NO •				
Is your environmental report a publicly available document?	YES • NO •				
Please indicate the form(s) your report takes.	Hardcopy				
	Internet $\Box$				
Is your environmental report externally verified?	YES 🗆 NO 🗅				
Please tick the boxes below to indicate which o your environmental report.	f the following elements are included within				
-	ronmantal commitmants				
CEO/senior management statement detailing envi	ronmental commitments				
Environmental policy					
Statement regarding the status of company certifi	, -				
Statement regarding the coverage of the report (i.e. sites/regions, products/services etc)					
If coverage not complete, a statement on projecte	•				
Measurement data for environmental key perform	nance indicators				
If yes, please indicate which are used:					
Energy Consumption	č				
Greenhouse gas emissions  Waste to la					
	se specify)				
Disclosure of targets & objectives for future performance					

Record of compliance with environmental legislation	٦			
Reply card or other opportunity for feedback from the reader				
Statement explicitly naming the executive responsible for th	e report's production			
	· ····································	_		
Please detail any proposed significant changes to your curr content. Please give the estimated timescale over which the	<u>-</u>	_		
COSTS ASSOCIATED WITH ENVIRONM	AFNTAI REPORTIN	IC		
COSTS ASSOCIATED WITH ENVIRONM	ILIVIAL KLI OKIIIV	J		
The production of environmental reports invariably entails the use of both internal and external resources. Please give an estimation of the costs involved in each of the following stages of the report production process.				
If the costs were external, simply give the invoiced amount.				
For internal costs, give the total amount if possible. If actual costs are not easily assigned, please give an indication of the employee time required to complete the task against their approximate annual salary. If more than one member of staff was involved please give an indication of the total time against each salary category.				
Please provide a brief details in the space underneath each question if you think this would explain your answer more fully.				
(Note that all information will be treated as confidential)				
What costs were incurred during the strategy formulation stage of identifying the business case for reporting?  Total Cost				
	Approximate	Employee		
	annual salary	time (DAYS)		
	£10K-20K			
	£20K-30K			
	£30K-40K			
	More than £40K			
What costs were incurred in establishing information systems to ensure the availability of appropriate data?	Total Cost	(£)		
systems to ensure the availability of appropriate data:	or:-			
	Approximate	Employee		
	annual salary £10K-20K	time (DAYS)		
	£20K-30K			
£30K-40K				
	More than £40K			
	** * * = =			

What costs were involved in data collection?	Total Cost	(£)
	or:-	
	Approximate	Employee
	annual salary	time (DAYS)
	£10K-20K	
	£20K-30K	
	£30K-40K	
	More than £40K	
What costs were incurred in copywriting the text for the report?	Total Cost	(£)
Tepore:	or:-	
	Approximate	Employee
,	annual salary	time (DAYS)
	£10K-20K	
	£20K-30K	
	£30K-40K	
	More than £40K	
What costs were incurred in designing the hard copy	Total Cost	(£)
version of the environmental report?	or:-	
	Approximate	Employee
-	annual salary £10K-20K	time (DAYS)
	£20K-30K	
	£30K-40K	
	More than £40K	
What costs were incurred in designing the internet version	Total Cost	(£)
of the environmental report (where applicable)?	or:-	
	Approximate	Employee
	annual salary	time (DAYS)
	£10K-20K	
	£20K-30K	
	£30K-40K	
	More than £40K	
What were the costs associated with internal verification	Total Cost	(£)
of the report?	or:-	
	Approximate	Employee
	annual salary	time (DAYS)
<u> </u>	£10K-20K	
	£20K-30K	
	£30K-40K	
	More than £40K	

What costs were incurred during the external verification of the report?	Total Cost	(£)	
What were the costs of producing and printing the report?	Total Cost	(£)	
Frank Same	or:-		
	Approximate annual salary	Employee time (DAYS)	
	£10K-20K	time (DATS)	
	£20K-30K		
	£30K-40K		
	More than £40K		
What were the costs of distributing the report?	Total Cost	(£)	
Was a follow up survey conducted to measure stakeholder	Total Cost	(f)	
opinion to the report? How much did the survey cost?	Total Cost(£) or:-		
	Approximate	Employee	
	annual salary	time (DAYS)	
	£10K-20K		
	£20K-30K		
	£30K-40K		
	More than £40K		
What costs were incurred in responding to readers' comments on the report?	Total Cost or:- Approximate annual salary £10K-20K	Employee time (DAYS)	
	£20K-30K		
	£30K-40K		
	More than £40K		
Were there any additional costs experienced by your compalist? If yes, please give details:	any, which are not cov	vered in the above	

#### BENEFITS OF ENVIRONMENTAL REPORTING

Please indicate which of the following issues have been identified as a benefit to your company as a result of the production of an environmental report by ticking the appropriate box. If yes, please rate the benefit according to the following scheme:-

- 1 = of limited benefit only to the company
- 2 = recognised as an important benefit to the company
- 3 = represents a major benefit to the company

It is recognised that a financial saving is not always readily identifiable with these benefits, but wherever possible, please give an estimate of the financial saving or benefit that the company has achieved as a result.

Issue	Benefit to		Rank Benefit ( 1= limited benefit	Estimate of Saving
	Company		2= important	or Benefit
			benefit	<b>(£)</b>
Savings as a result of the measurement of	f key nerfo	rmai	3= major benefit)	e setting of
reduction targets:-	r Key perio	ımaı	nce mulcators, and th	ic setting of
i) Decreased resource use	YES		1 🗆 2 🗔 3 🗔	
	NO			
	Not sure			
ii) A reduction in wastes arising	YES		1 🗆 2 🗔 3 🗔	
	NO			
	Not sure			
iii) Decreased water usage	YES		1 🗆 2 🗔 3 🗔	
	NO			
	Not sure			
iv) A reduction in energy expenditure	YES		1 🗆 2 🗔 3 🗔	
	NO			
	Not sure			
Other direct savings:				
Lower insurance premiums	YES		1 🗆 2 🗔 3 🗔	
	NO			
	Not sure			
Attraction of investment:-				
A reduction in the cost of capital	YES		1 🗆 2 🗔 3 🗔	
	NO			
	Not sure			
Improved access to SRI funds. (The recent	YES		1 🗆 2 🗔 3 🗔	
amendment to the Pensions Act requires	NO			
funds to state how environmental considerations are taken into account	NT 4			
during investment selection.)	Not sure			

Market related benefits:			
Improved access for products/services in	YES		
environmentally conscious markets	NO		
	Not sure		
Competitive advantage over peers within	YES		
sector	NO		
	Not sure		
Internal benefits:		<del></del>	
Stronger internal commitment to environmental performance	YES		
	NO		
	Not sure	_	
Facilitation of better environmental	YES		
management	NO	<u> </u>	
	Not sure		
Increased employee awareness/increased	YES		
employee satisfaction	NO		
	Not sure		
External benefits:	1,00,0010		
Reduced regulatory burden/increased	YES		
ability to provide information to regulators.	NO		
, 1	Not sure		
Reputational improvements	YES		
	NO		
	Not sure	_	
The report provides an easily accessible,	YES		
single source of information reducing the	NO		
resources required to respond to			
environmental enquiries.	Not sure		
Improved stakeholder dialogue, and ability to demonstrate progress to stakeholders	YES		
to demonstrate progress to stakeholders	NO		
	Not sure	0	
Potential future benefit:			
Do you anticipate that enviro		·····················	
	could lead to a reduction in your company's NO environmental taxation obligations?		
		Not sure	
as your company identified other benefits not acluding where possible any quantifiable saving		· • •	
		Thank you for your time.	