

Environmental Reporting and Third Party Statements

prepared by

Investor Responsibility Research Center
Environmental Information Service
1350 Connecticut Avenue NW, Suite 700
Washington, DC 20036

for the

Global Environmental Management Initiative
818 Connecticut Ave., NW, 2nd Floor
Washington, DC 20006

ISBN 1-879775-36-0

Environmental Reporting and Third Party Statements

Table of Contents

Acknowledgments	2
Executive Summary	3
I. Objectives	4
II. Methodology.....	4
III. Limitations.....	5
IV. Results.....	6
A. Report Credibility.....	6
B. Attestation Statements.....	16
C. Certifiers	20
V. Conclusions	22
Appendices	23
A. Survey Instrument	
B. Participating Organizations	
C. Third Party Attestation Statement Samples	
D. Sample Graphics from Amoco Company Report	
E. About IRRC	
F. About GEMI	

Acknowledgments

This study is a joint product of the Investor Responsibility Research Center (IRRC) and the Global Environmental Management Initiative (GEMI), which had the foresight to sponsor this research at an early stage of development for environmental reporting in general and third party attestation in particular. I thank the following individuals for providing useful advice in the formative stages of the project:

Jeanie Yermacoff, Amoco Corporation
Tom Davis, AT&T
Peter Chatel, The Coca-Cola Company
Denise Osterhues, The Dow Chemical Company
Darwin Wika, The DuPont Company
Maria Bober Rasmussen, Eastman Kodak Company
Rob Minter, The Southern Company

Jennifer Olha of the Law Companies Environmental Policy Center served as the project manager for GEMI. Mark Sten from Shapiro & Associates served as the facilitator for each of the five focus groups and helped synthesize the report conclusions. Responsibility for any errors or omissions that remain in the report rests with the author.

Jonathan Sandberg Naimon
IRRC Environmental Information Service
Washington, DC
March 1996

Executive Summary

Voluntary environmental reporting follows from implementation of business initiatives such as the Public Environmental Reporting Initiative (PERI), Responsible Care®, the Coalition for Environmentally Responsible Economies (CERES), and the International Chamber of Commerce (ICC) Business Charter for Sustainable Development. To enhance the credibility of these reports, an increasing number of firms have commissioned statements by third parties such as accounting or environmental consulting firms. Many corporations are evaluating the use of third party statements as a component of their International Organization for Standardization (ISO) reporting or Eco-Management and Audit Scheme (EMAS) audit processes.

The GEMI/IRRC Environmental Reporting & Third Party Statement project represents a systematic attempt to assess the value of published third party statements *to key stakeholder groups* as well as the value of other elements of a voluntary environmental report. This study reflects a growing effort to assess the value that is generated by various corporate environmental initiatives.

Five focus groups were conducted in 1995 with environmental groups, institutional investors, regulators, the media, and corporate environmental staff. **None of the stakeholder groups that participated in this study believed that recent third party statements added much, if any, incremental value to corporate environmental reports published in 1994.** The third party statements consistently received lower importance ratings in comparison with other elements of corporate environmental reports. These findings were consistent for investors, environmental advocacy groups, the media, government regulators, and corporate representatives. Moreover, the results of a head-to-head comparison of two reports (Amoco and British Petroleum) from companies operating in the same sectors (oil and chemicals) following a common format developed by the Public Environmental Reporting Initiative (PERI), confirm that third party statements are not a positive factor in stakeholder evaluations of corporate report credibility, and do not add much discernible incremental value today.

Report credibility hinges on other features of corporate environmental reports. The most important features were a balanced tone and the presence of numerous environmental performance indicators. Descriptions of selected corporate policies and presentation elements such as CEO statements and graphics were moderately important. The value of attestation statements in establishing credibility of corporate environmental progress claims is, according to the study, in the lowest third among some 42 factors which were assessed by the focus groups.

While the novelty of these third party statements, in comparison with other report elements, may have contributed to their low perceived value, focus group participant comments suggested that content shortcomings of 1994 third party statements were also an important factor. A sample of six attestation statements all received lower credibility ratings than most components of the BP and Amoco reports. In open discussion, representatives in each of the five groups, including a corporate sample drawn from GEMI members, said that without standards the third party statements are “meaningless.”

Many respondents in each of the focus groups said that third party statements had the potential to add incremental value to future corporate environmental reports. Three new attestation elements were identified:

- a statement that all major risks were included in the report,
- recommendations for future performance improvement areas, and
- a prioritization of outstanding environmental challenges facing the company.

In summary, third party statements in environmental reports, evaluated by themselves or in the context of a comparison between full reports, have not yet evolved to a stage where they enhance credibility with external audiences. Based on this research, third party attestation statements appear to require substantive improvements in order to meet the threshold of “*adding value.*”

I. Objectives

The primary objective of the study was to test whether third party attestation statements contained in voluntary corporate environmental reports added value in the eyes of external stakeholders. A structured survey was administered to representatives of five key stakeholder groups to permit systematic analysis of their responses. A copy of the survey is provided in Appendix A. The notion of adding value was assessed by comparing the quantitative responses of focus group participants to a series of questions about different report features and information channels. Two 1994 reports, by Amoco and British Petroleum (BP), were compared to see whether the presence of an attestation statement in one report (BP) would contribute to more positive evaluations of its credibility by various external stakeholder groups.

The second goal of the study was to assess which report elements contributed the most to communicating credibility, whether the answer was third party attestation or some other feature(s). This component of the study yielded numerous insights into what external stakeholders value most. Differences between group preferences were also explored.

The final goal of the study was to assess the credibility of different types of organizations to perform certifications of corporate environmental reports. Unlike regular annual reports, which in the United States are invariably attested to by an accounting firm, third party attestation statements in corporate environmental reports have been presented by management consultants, environmental engineering firms, environmental strategy consultancies, and nonprofit organizations.

II. Methodology

Focus groups are widely used to gauge the reactions of various groups to new products, services, politicians and concepts. IRRC convened a series of focus groups with leading corporate environmental stakeholders to assess the reaction of these groups to a sample of recent corporate environmental reports that feature third party attestation statements. Separate focus groups were conducted with five sets of stakeholders:

- staff members of environmental advocacy groups,
- institutional investors and investment managers with an interest in environmental issues,
- national media that cover environmental issues,
- environmental regulators operating at the state, federal, and municipal level, and
- corporate environmental professionals from GEMI member companies.

Members of each focus group reviewed the same set of 1994 corporate environmental reports and examples of recently published attestation statements. Each focus group participant completed a written survey on environmental reporting and participated in a three hour focus group designed to elicit opinions on the credibility of corporate environmental reports and third party attestation. Separate focus groups were held for each stakeholder group. Participating organizations are listed in Appendix B.

To test whether third party attestation statements add value, several approaches that could provide confirming evidence of a trend were employed. If the third party attestations added significant value, there should be a preference for reports containing such statements if other factors are equivalent. Although no two companies are identical, many 1994 reports have coalesced around a common set of report elements contained in the Public Environmental Reporting Initiative (PERI) guidelines, and the public “favorability” and “credibility” ratings of firms operating within the same industries are often quite close. Reports by two companies that followed the PERI reporting guidelines, Amoco and British Petroleum (BP) were compared. The British Petroleum (BP) report contained an attestation statement prepared by Ernst & Young, the Amoco report did not contain any third party statement. If the third party statement added significant value, one would expect the statement to contribute to an overall impression of credibility for the BP report, or highlight a shortcoming of the Amoco report.

The second technique for assessing the perceived value of attestation statements was to compare it with other report features that are expected to enhance credibility. Each focus group participant was asked to rate the importance of specific features in establishing the credibility for corporate claims of environmental progress. The ratings, on an importance scale ranging from 1 (no value at all) to 5 (vital), permit the perceptions of groups to be systematically explored. Since the features in the list are not linked to specific reports, this method offered somewhat less “intrusion” from other report features such as paper quality that apparently influence perceived credibility. For example, many focus group participants noted the chlorine and recycled fiber content paper stock used for environmental reports.

Study participants were also surveyed to identify which attestation statements have the most credibility, which features contribute the most to statement credibility, and which organizations are best suited to make credible attestations relating to corporate environmental programs. Because GEMI was concerned about positive or negative bias due to company or certifier name recognition on the part of the focus group participants, a “blind” procedure was used for the comparison of alternate attestation statements. Each of the six attestation statements was retyped, with the name of the individual company replaced by “The Company,” and the name of the individual certification firm replaced by “The Certifier,” with an additional designation of the type of certification firm (e.g., accounting firm, management consulting firm, environmental consulting firm, engineering firm). As a result, we were able to elicit stakeholder reaction to a series of distinct third party attestation statements with reduced bias from stakeholder knowledge or reaction to firm images. Thus, a desirable audit or attestation statement format would not be dismissed simply because an unliked firm used that approach.

Finally, the focus group discussions were used to elicit information on why the stakeholders assigned high or low ratings to different types of information and different reports and attestations. While it may be expected that significant differences would emerge from these discussions, there was a remarkable level of continuity in the feedback and responses of the different groups, as the results presented in Section IV of this report illustrate.

III. Limitations

Small differences in the absolute importance or credibility scores assigned specific elements should not be interpreted as necessarily representing significant differences in focus group perceptions. The ranking of report or attestation statement features, relative to other features, offers a better indication of stakeholder priorities.

The average number of participants in the five focus groups was relatively small: 7.4 participants per stakeholder group. Larger sample sizes for each group and some replications of the focus groups would be required to increase the confidence level associated with these results. Additional focus groups with a cross section of corporate employees would be needed to determine if internal corporate stakeholders shared similar views to the corporate sample of GEMI members that participated in the focus group. There is also an unavoidable selection bias in the process that was used to obtain participants. Since reviewing the reports and participating in the focus group meeting requires extra, uncompensated effort, only those individual members of each stakeholder group that were interested enough in the topics to invest their required time participated. Many of those who elected not to participate said they objected to efforts to help corporations “polish their image.” As a result, the level of interest and individual factor ratings emerging from the focus groups may well be somewhat higher than for the general population of representative stakeholder groups. The results may also be subject to some geographic bias. Focus groups were conducted in Atlanta, New York, Seattle, and Washington DC.

Despite these limitations, the type of simple comparisons described by this report should provide useful feedback to organizations examining the issues of corporate environmental credibility and reporting, and

provide insight into the response of critical stakeholder groups to new directions such as third party attestation for the near future.

IV. Results

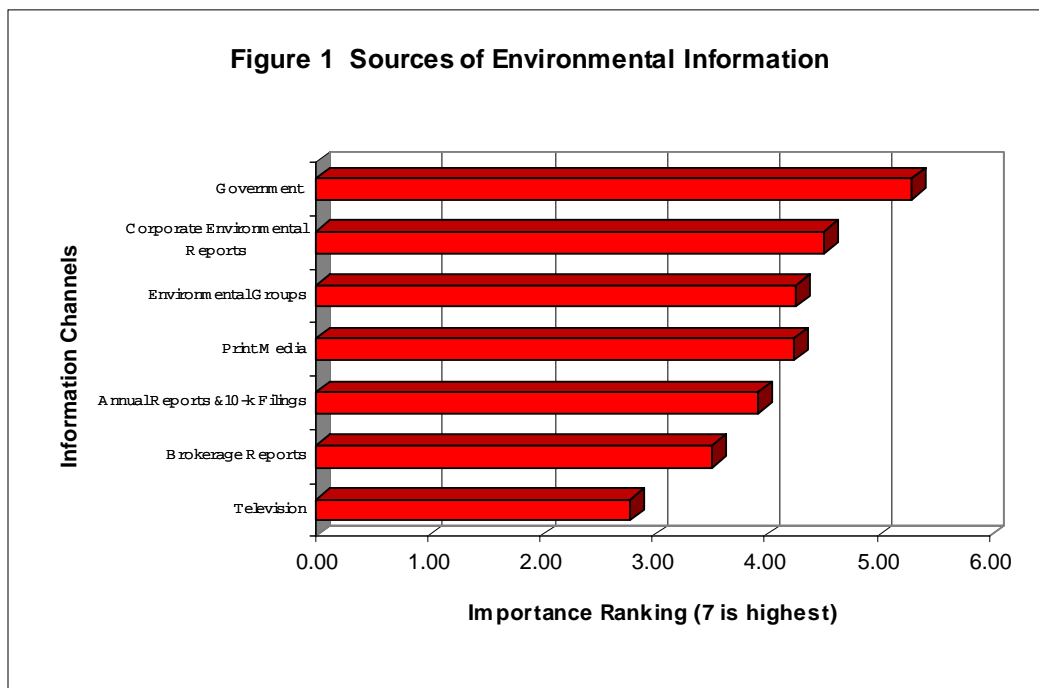
A. Report Credibility

Differences Between Stakeholder Groups

Only a few average score differences of 0.5 or more (on a scale of 1.0 - 5.0) emerged between stakeholder focus groups in the analyses of environmental report features, the Amoco/British Petroleum report comparison, and the information channel quality questions. Investors and environmentalists thought **environmental liability characterization** was more important (4.5 for both groups) than the corporate sample (3.9), the media group (3.7) and the regulator sample (3.5). **Adherence to U.S. environmental standards in international operations** was valued much more by external stakeholders (4.8 for environmental groups, 4.3 for investors, 4.2 for regulators, and 4.1 by the media) than by the corporate sample (3.6). The regulators valued **ISO 14000 Certification** less as a means of establishing the credibility of an environmental progress report (2.0) than the environmental groups (2.7), the investors (2.8), the media (2.6), and the corporate sample (2.6).

How important are corporate environmental reports?

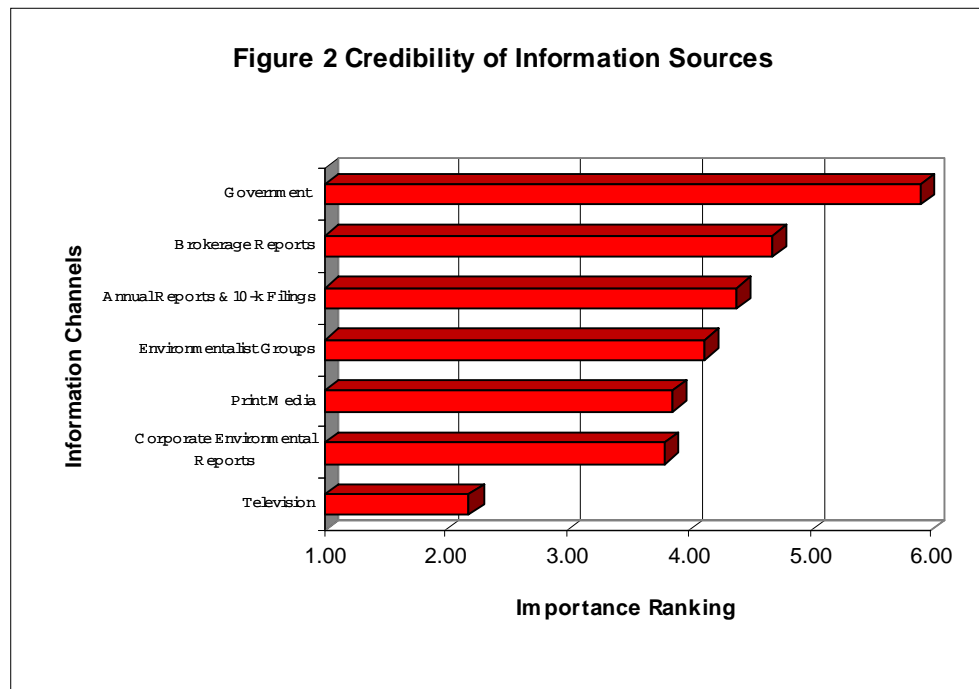
In a relatively short period of time, corporate environmental reports have made significant inroads into the competition for “mind space” among environmental information resources. Numerous other channels with distinct advantages position themselves as critical suppliers of environmental information, and yet, in less than five years, corporate environmental reports have attained a position of importance equivalent to the print media and environmental groups. Figure 1 shows that only government agencies were considered to be a more important source of environmental information than corporate progress reports by the stakeholders participating in the focus groups. (See Figure 1)



Government agencies topped the charts as a source of credible and important information on corporate environmental progress, earning significantly higher ratings than other sources of information. Although the role of government is evolving from an exclusively regulatory compliance focus, these results suggest that environmental agencies will continue to play a vital role as a source of credible information on corporate environmental performance for the foreseeable future.

How credible are corporate environmental reports?

Although corporate reports are important, the focus group results suggest that the credibility of corporate environmental reports still leaves a lot to be desired. Though rated more credible than television, corporate environmental reports are seen as less credible than all other information sources reviewed by stakeholder focus groups. (See Figure 2) The difference between stakeholder rankings of the importance and the credibility of corporate reports was greater than the corresponding differences for other information sources. This is consistent with previous research which suggests that corporations are not typically viewed by external stakeholders as the most credible sources of information. The newness of corporate environmental reports may also contribute to this “credibility gap,” along with the fact that multiple points of view are not typically included as they are in other information channels.



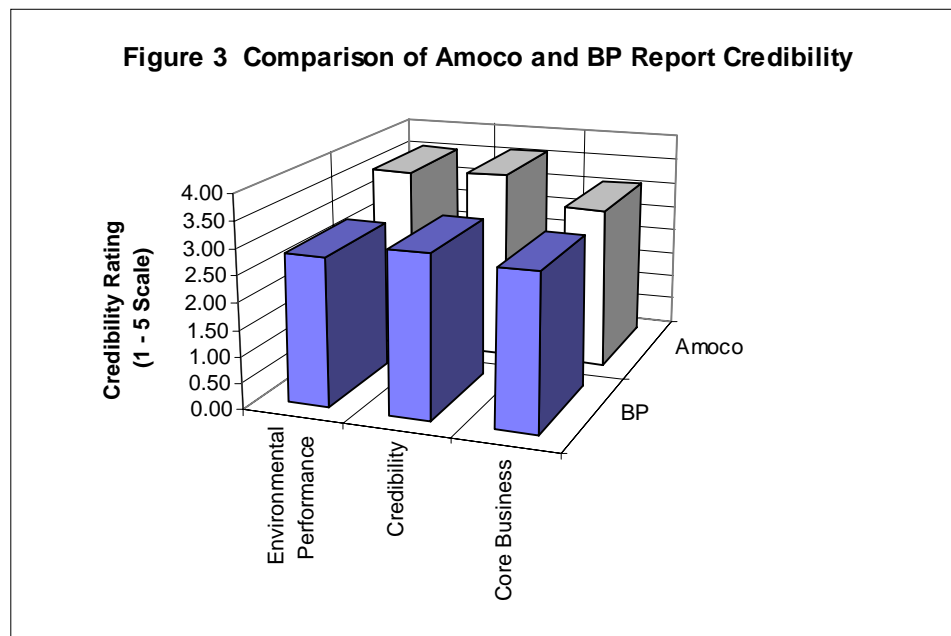
Do third party statements contribute to stakeholder perceptions of report quality?

Third party statements are intended to improve the credibility of the information contained in corporate environmental reports. A direct comparison of the environmental reports published by Amoco and British Petroleum (BP) provides one means for assessing whether a third party attestation statement contributed to a perception of report quality. Amoco’s report does not contain any third party statement, while BP’s report contains a third party statement by the accounting firm Ernst & Young. While there is no way to equate all other factors in these reports, GEMI selected these reports for comparison because they met several criteria which reduce, but do not eliminate, confounding factors. These criteria include:

- the two firms operate in the same industries, reducing the potential for bias against firms based on differential participation in industries (e.g., chemicals) that may be unpopular with the general public or certain stakeholder groups,

- both reports follow the guidelines of the Public Environmental Reporting Initiative (PERI), and both reports contain the same basic types of information and follow a similar outline, and
- both firms have retail as well as trade customers, increasing the usefulness of the findings to all companies, since retail and trade customers typically have different levels of consumer knowledge.

The presence of a third party statement from an internationally recognized accounting firm (Ernst & Young) did not appear to make an appreciable difference. All of the focus groups preferred the Amoco report to the BP report. Amoco's report was viewed as both more credible and complete in terms of addressing different facets of environmental performance than BP's report. Figure 3 suggests that corporate report credibility ratings seemed to follow evaluations of perceived environmental performance. BP was perceived to have much lower environmental performance, and as a result the credibility of its report suffered in the eyes of the stakeholder focus groups. Most stakeholder groups liked the way that the Amoco environmental report displayed corporate wide totals for many information areas, even though there may be a tradeoff in terms of relating such information to individual business units. (See Figure 3)



One area in which the reports were comparable was in perceptions of how well they addressed the core businesses of each company. Focus group participants agreed that neither company did a particularly good job of relating the report to its core business area. Several participants in each of the five focus groups suggested that this could reflect the lack of integration of the Environment, Health & Safety (EHS) departments (whose work is highlighted in these reports) and the companies' business units.

Both content and stylistic differences also contributed to the strong preference for the Amoco report. The Amoco report was generally seen by focus group participants as less glossy, less of a public relations document, and more factual. An environmentalist said that the Amoco report "seems more straightforward." Vague terms and phrases such as "sustainable" or "very low levels" seemed to reduce the credibility of the BP report even though it had many features desired by the stakeholders. One regulator stated, "I don't know what a sustainable forest is." A media participant suggested that Amoco's report was "less fluffy." One environmentalist suggested that the BP report had several good ideas, such as attestation by a third party, but did not develop those ideas as logically as Amoco did.

Which report features are valued by external stakeholders?

A balanced tone was considered the single most important features of a credible environmental report. The top tier of report features, those features receiving importance rankings averaging over 4.00 on a 5 point scale, includes several qualitative elements and several others that are quantitative and which could be used to in some way verify corporate environmental progress. These features are (starting from the most important):

- a balanced tone,
- compliance information,
- a description of environmental audits,
- quantitative information on environmental trends (other than TRI),
- information on toxics use,
- corporate environmental strategy,
- the application of U.S. standards on a worldwide basis,
- spill trends,
- toxic chemical emission reductions, and
- occupational safety and health information.

A balanced tone, defined as coverage of both positive and negative aspects of environmental programs, was the single highest rated credibility enhancing feature.

This feature comparison suggests that there is broad stakeholder support for verification of corporate environmental progress, but the interest is in a presentation more like a report card and less like a diploma or stamp of approval. (See Figure 4)

Most environmental report elements received importance average ratings of between 3.50 and 3.99. This middle group includes many of the core components of 1994 environmental reports:

- environmental policy,
- worldwide corporate standards,
- senior management compensation,
- remediation programs, and
- reformulation of individual products.

These responses suggest that much of the information contained in environmental reports on corporate environmental programs is no longer viewed as special, but rather as standard among larger companies.

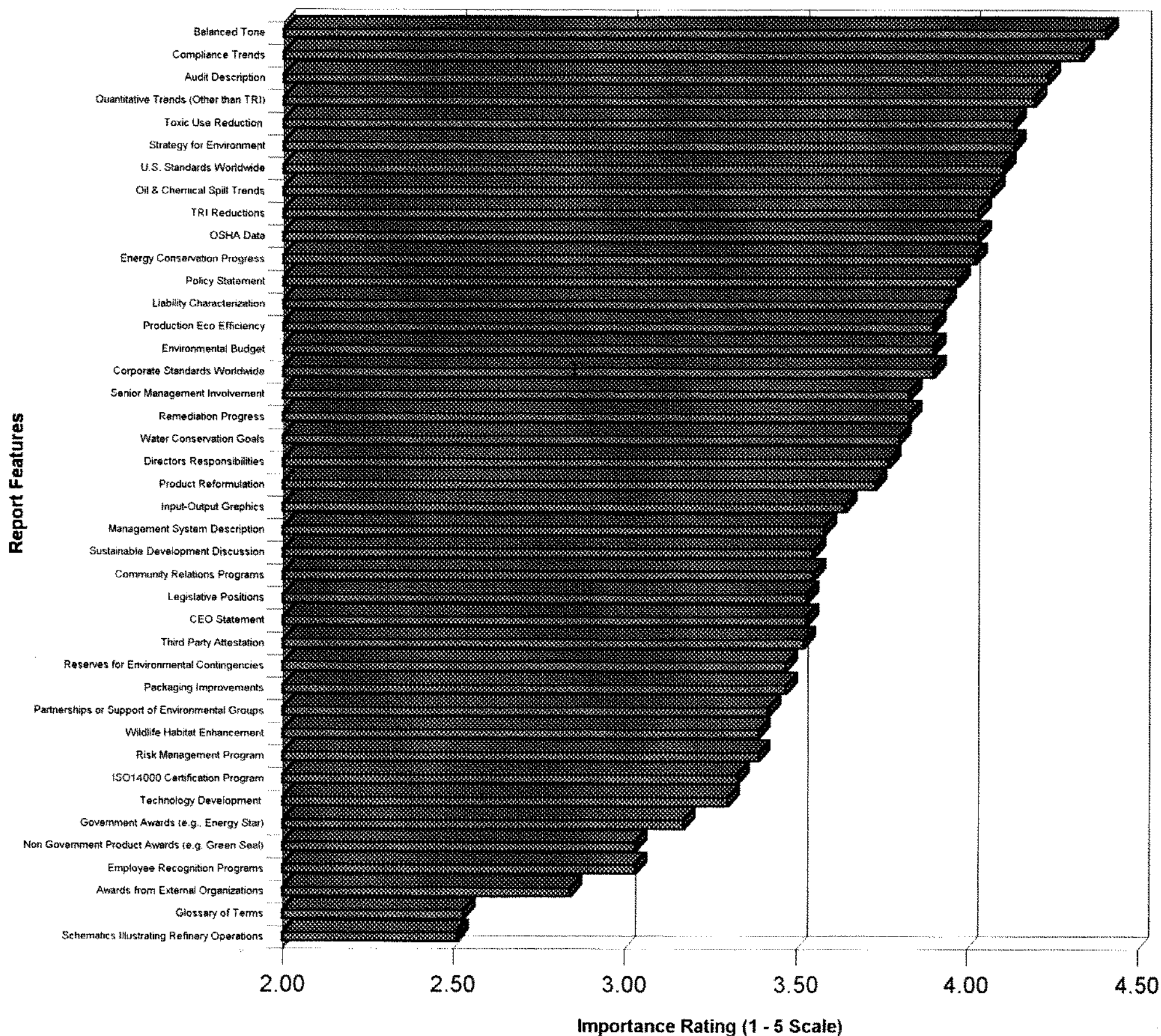
...there is stakeholder support for verification of corporate environmental progress, but the interest is in a presentation more like a report card and less like a stamp of approval.

One exception may be information on corporate policies to apply US environmental standards in non-US markets. Figure 5 illustrates that this type of policy, to a greater extent than other policies, seems to be viewed as a benchmark by external stakeholders.

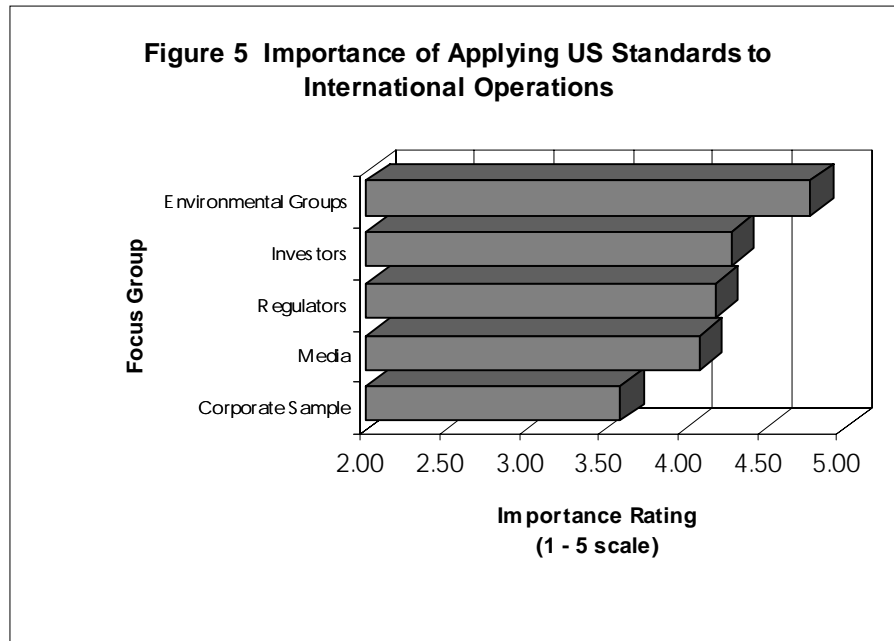
One program which was not detailed in the survey, but which investors, environmentalists, media and regulators suggested should be in the reports, was information on Local Emergency Planning Committees. This interest was echoed in many comments that corporate environmental reports typically do not address local environmental issues adequately.

From a communications standpoint, information on categories in the bottom third (elements receiving scores of 3.49 or lower) is also valuable. Topics such as packaging, evaluation of business partners' environmental attributes, corporate risk management, ISO 14000, technology and employee recognition programs received relatively low importance ratings. These findings suggest that there is still a need to communicate why such

Figure 4 Report Features That Enhance Credibility



programs are important-- either their importance is not evident to these external groups or the information on these topics is not convincing.



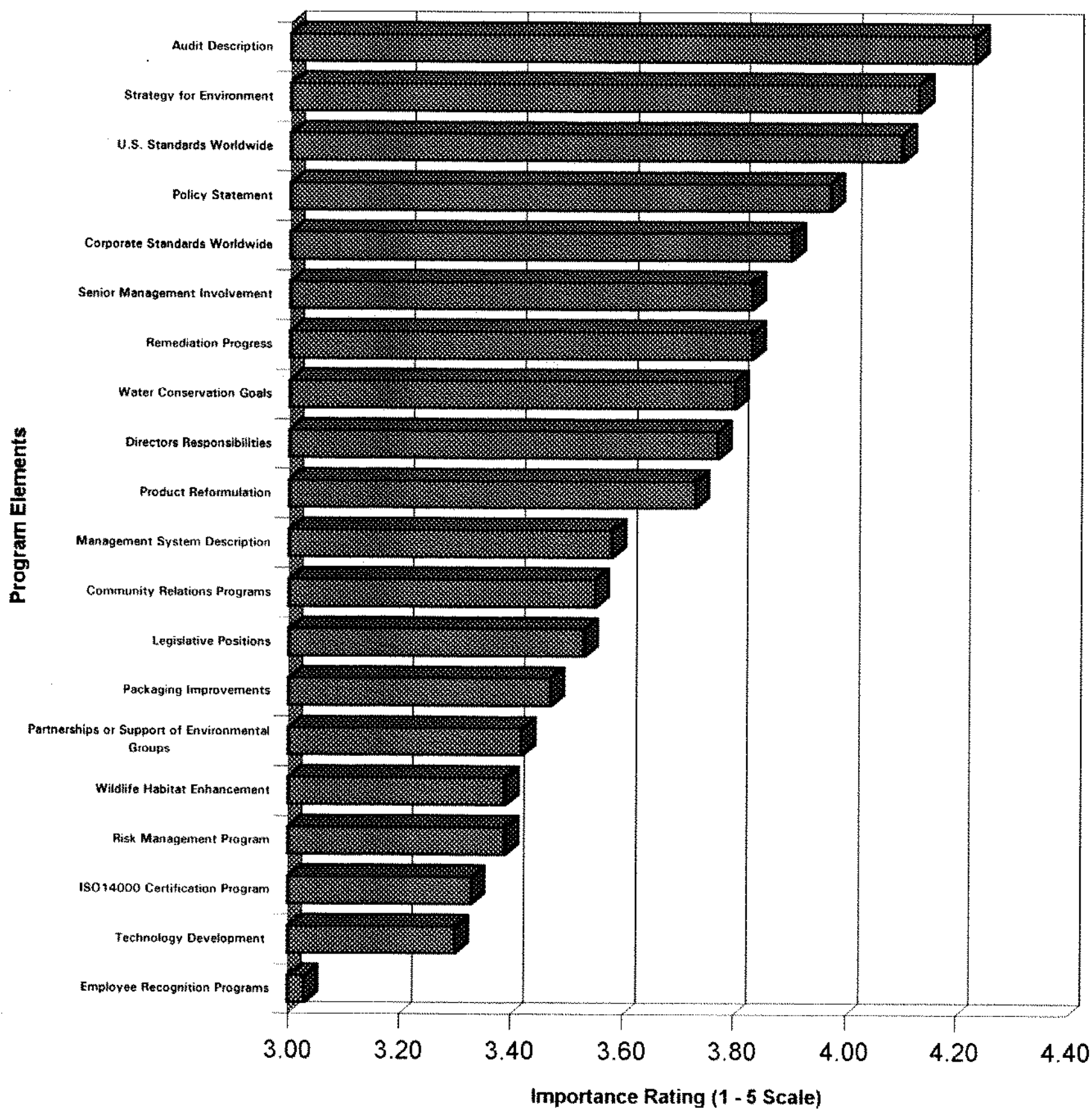
Corporate Program Elements

Another way of analyzing the contribution of these features to establishing credibility for corporate environmental progress claims is to divide them into **corporate program elements**, **environmental data elements**, and **presentation features**. Figure 6 depicts the importance ratings for information on **corporate program elements**. The high ratings given to audit program descriptions, corporate environmental strategy, and applying U.S. environmental standards to worldwide operations illustrate that focus group participants were receptive to qualitative information that responds to their programmatic expectations and priorities. The moderate importance ratings given to information on corporate standards, internal compensation programs, remediation progress, water conservation goals, board of director responsibilities, reformulated products, and management systems suggest that stakeholders are not particularly interested in *how* companies achieved the goals of their environmental policies, but rather, in how high the proverbial bar is set and whether or not the bar is cleared. (See Figure 6)

The relatively low ratings accorded legislation, evaluation of business partners, company land habitat enhancement, risk management, ISO 14000, environmental technology and employee recognition programs may reflect a belief that credibility in certain areas is better established in other ways. For example, the audit program description, which received a high rating, may be the context in which stakeholders expect to learn about risk management. Many stakeholders said they were not interested in technology per se but rather in the results that have been attained from its use.

...Stakeholders are not particularly interested in *how* companies achieved the goals of their environmental policies: but rather in *how high* the proverbial bar is set and *whether* or not the bar is cleared.

Figure 6 Importance of Specific Corporate Program Elements



During the discussions, stakeholders frequently asked for information on community or plant level performance that was not addressed in either of the 1994 reports or the survey instrument. Regulators and environmentalists were particularly interested in pollution prevention goals. One regulator thought the reports should highlight leadership efforts by major companies to help smaller companies achieve environmental improvement. Both investors and environmentalists expressed interest in receiving more information on company legislative and lobbying positions regarding deregulation initiatives, which they believed may provide information on corporate commitment to environmental stewardship and the capacity of individual companies to adapt to changing environmental priorities.

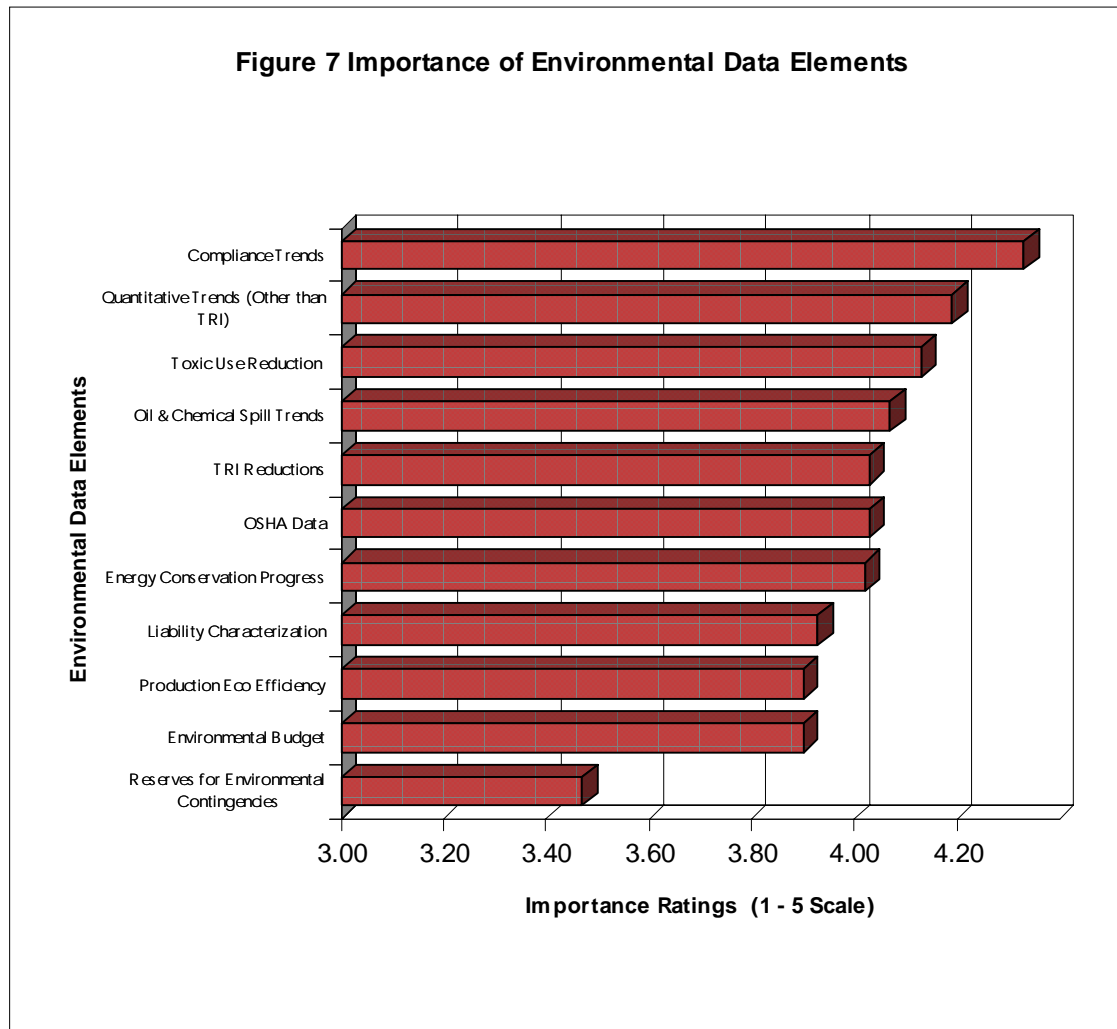
The modest credibility ratings assigned to ISO 14000 certification programs may suggest that the value of these programs remains to be demonstrated to some stakeholders. The regulatory focus group gave ISO 14000 certification programs the lowest importance rating of any stakeholder group. The draft status of ISO 14000 standards may have contributed to a lack of knowledge about its features among some stakeholder focus group participants.

Environmental Performance Data

Environmental data elements that could be used to assess the progress corporations have made towards reaching their respective “goals” generally received higher ratings than the corporate program elements: 4.0 to 3.7. While there was some variation in perceived importance, *not a single environmental data element* fell into the bottom third among the environmental report features evaluated by the focus groups. The most important environmental data elements for establishing corporate environmental progress credibility are shown in Figure 7.

The diversity of environmental data elements that received high importance ratings shows that stakeholders are open to learning about many dimensions of corporate performance improvement in addition to the widely publicized Toxic Release Inventory (TRI) data. The top position attained by compliance trends shows that compliance with environmental laws remains an important benchmark, despite the increasing interest in additional dimensions of environmental performance. Many environmentalists suggested that some type of holistic review of environmental impacts would be desirable, although no specific environmental indicators were suggested. Several regulators suggested that the environmental performance statistics should include a production index or other denominator, to provide readers with additional context.

The top position attained by compliance trends shows that compliance with environmental laws remains an important benchmark.



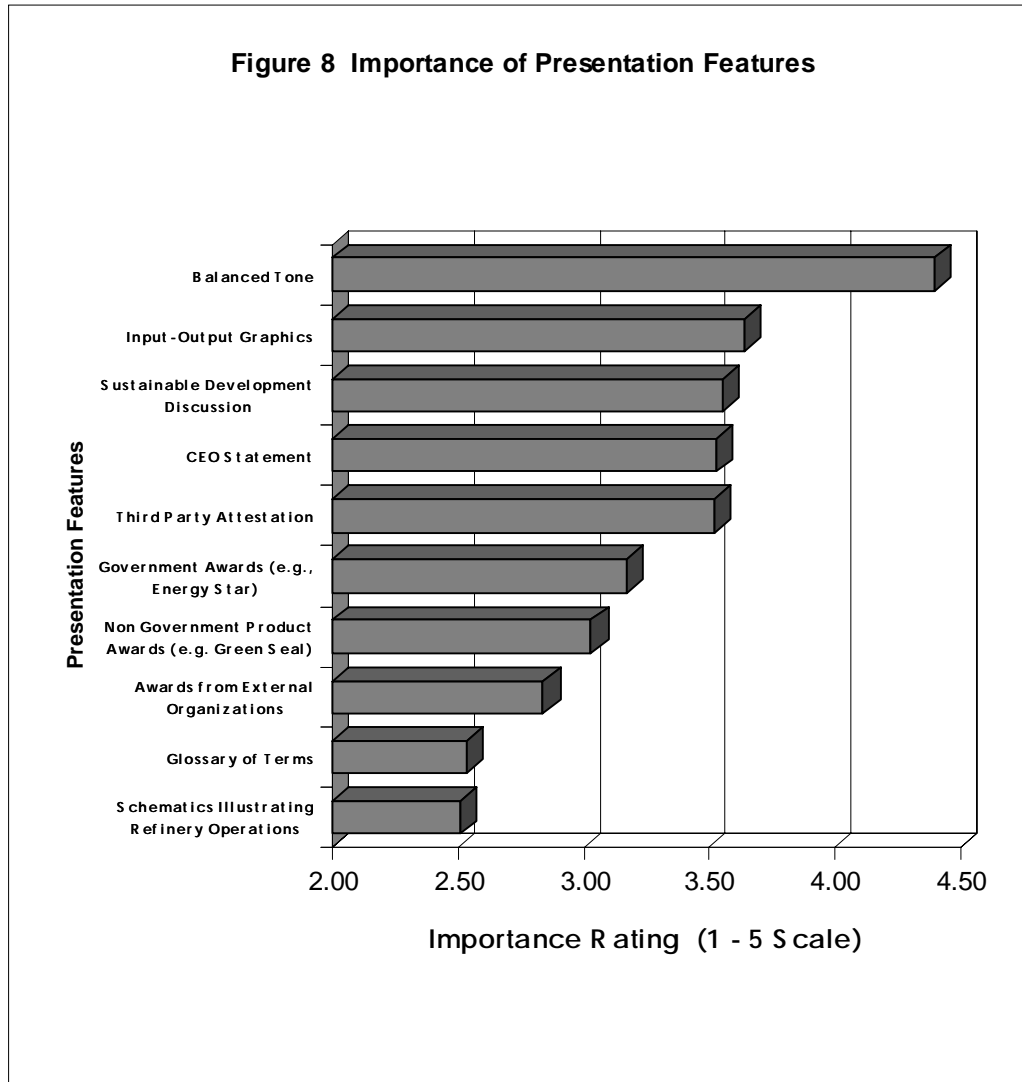
Presentation Features

Presentation features received lower average ratings (3.3) than environmental data elements (4.0) and corporate program elements (3.7). A balanced tone, defined in this survey as coverage of both positive and negative aspects of environmental programs, was the highest rated **presentation feature** and the single highest rated credibility enhancing component. As Figure 8 shows, there was a very sharp division of opinion on the value of the presentation elements. CEO statements, third party attestation statements and graphics received moderate importance characterizations, and glossaries and schematic diagrams received the lowest ratings of any report element evaluated. (See Figure 8)

Many participants, particularly in the media group, liked the graphic presentations in the Amoco report. Samples are reprinted in Appendix D. The results shown in Figure 8 support the notion that clear graphics are useful for making the data that stakeholders desire comprehensible. The results also show that CEO statements, acknowledged as vital within the corporation, do not carry quite as much weight with outside organizations. Despite their comparative lack of familiarity with corporate environmental programs, all the stakeholder focus groups sampled were relatively uninterested in glossaries and schematics illustrating refinery operations. This suggests that care must be taken in selecting graphical material or other inserts to assure that it does not suggest the company is “talking down” to the report audience.

The fact that third party statements received a much lower rating than a characterization of a report’s tone as “balanced” shows that third party statements do not carry much weight with these stakeholders at this time.

Put another way, stakeholders value a fair presentation that includes both negative and positive data on corporate progress much higher than they value the stated opinions of environmental certifiers. In comparison with other features that may contribute to establishing the credibility for corporate claims of environmental progress, third party statements fell into the lowest quartile. This means that seventy five percent of the features reviewed by stakeholders were ranked higher than third party statements by the stakeholder focus groups.

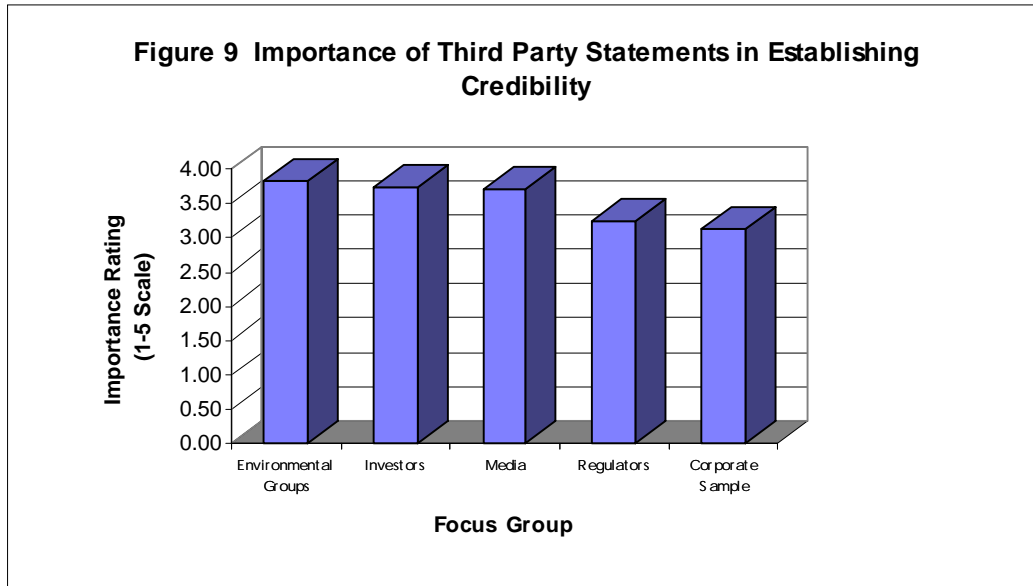


This means that seventy five percent of the features reviewed by stakeholders were ranked higher than third party statements by the stakeholder focus groups.

Regulators gave third party statements the lowest rating of any focus group, suggesting that proposals to use third party certifiers, as an alternative to traditional regulatory mechanisms, to assure environmental progress may not be easily accepted by American regulators.¹ (See Figure 9)

¹ In the United Kingdom, the Department of the Environment has proposed that third party certification under BS 7750 and ISO 14001 be used to assure environmental progress in lieu of traditional regulatory compliance activities by the Department of Her Majesty’s Inspection of Pollution. Similar initiatives have been launched in the United States.

Finally, the consistent preference of focus group participants for the Amoco report illustrates the importance of meeting a less tangible but by no means unimportant hurdle of having a report whose format and style convey that the product is a “report” rather than just “PR” or “adult MTV,” as one environmentalist put it.



B. Third Party Attestation Statements

Evaluation of Specific Third Party Statements

Stakeholders were asked to review a sample of six third party attestation statements taken from 1994 corporate environmental reports. To reduce the potential bias due to knowledge of individual firms, the statements were retyped and presented with “*The Company*” replacing the name of the specific company publishing the statement. The name of the firm signing the third party attestation was replaced with “*The Certifier*.” To reduce bias due to knowledge of problems or other bias for or against firms based in certain geographic regions, site information, where referenced, was replaced with Site A, Site B and Site C. To permit stakeholders to use information on the primary business line of the certifier, firms were classified (based on firm self-descriptions) as either:

- accounting firms,
- management consulting firms,
- environmental consulting firms, or
- environmental engineering firms.

Third party statements were selected to give participants exposure to a wide range of different attestation approaches. Based on the results of the first focus group with investors, the pool of third party statements was reduced from fourteen to six which were the most popular. Most of the investor focus group participants viewed the statements as “meaningless,” but at least one investor focus group participant was able to find something positive to say about each of the six attestation statements included in this smaller sample.

European reports were included because certain alternative approaches to certification under the Eco Management and Auditing Scheme (EMAS), British Standard 7750 (BS 7750) and the International Organization for Standardization (ISO) were debated by European companies.

Third party certification statements from the following companies were used for these focus groups:

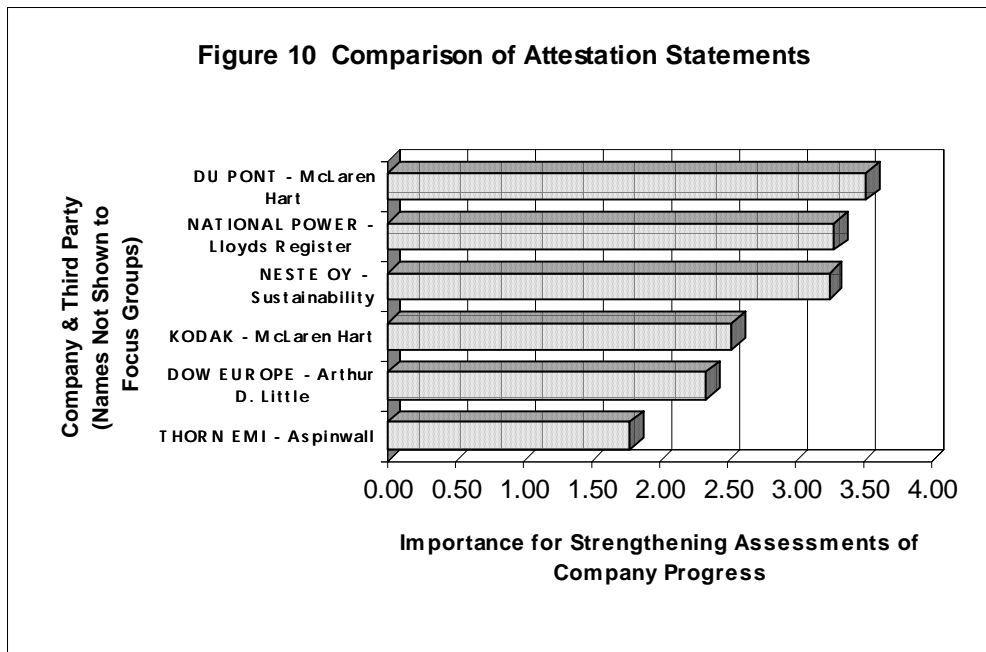
- Dow Europe SA
- The DuPont Company
- Eastman Kodak Company
- National Power
- Neste Oy
- Thorn EMI

Copies of these attestation statements are provided in Appendix C.

“Meaningless” was the most frequently applied term of reference in discussions of specific attestation statements. Perhaps because stakeholders do not yet have a known context for evaluating these attestations, few knew what to make of them other than to criticize the relatively vague and “squishy” language contained in them. An environmentalist said, “third party attestation is a good idea, but it needs to be more substantive than these.” A regulator commented that it was not clear whether the audits were done by the company and data sampled by the attestation firm or whether the attestation firm did the audits.

“Meaningless” was the most frequently applied term of reference in discussions of specific attestation statements.

The consistently critical comments and low ratings given the third party statements by every focus group show that the recent third party attestation statements do not add much, if any, value to stakeholder assessments of corporate environmental reports. Among the six reports, Figure 10 shows that the attestation statement taken from the DuPont Company’s 1994 Annual Environmental Review obtained the highest average rating (in the 3.5 area). Focus group discussions and the comparison of attestation elements confirmed that the presence of specific recommendations and a follow-up review of recommendations from previous reports contributed to the DuPont statement selection. National Power’s attestation statement received several high marks, relating to its specificity with regard to what the third party did and which performance measures were selected and used.



Would attestation standardization contribute to establishing report credibility?

“Standardization” was the one word repeated the most in discussions with every focus group on whether the sample attestation statements could add credibility to a report’s environmental progress claims. Without standardization, very few, if any, of the external stakeholder participants thought third party attestation could gain credence. Several participants in the regulator, investor, and media focus groups questioned whether it was worth the money to obtain a third party statement when there were no standards for what should be assessed. A few regulators suggested that it was not worth spending the resources to develop standards.

Without standardization, very few if any of the external stakeholder participants thought third party attestation could gain credence.

There was somewhat less agreement on what specifically should be contained within a standardized third party attestation. Many participants assumed that the statement would play some role in prioritizing the challenges facing the company, rather than simply serving as a verification that the company was making progress. For example, an environmentalist suggested that the attestation statements should discuss what the primary challenges facing the company were, including impacts from customer use. Many focus group participants wanted the certification statement to compare a company’s environmental performance with its industry peers. Several participants in the investor, regulator, media, and environmentalist focus groups emphasized the desirability of linking such third party statements to business decisions and environmental results, rather than to policies and management systems.

Many participants assumed that the third party statement would play some role in prioritizing the challenges facing the company, rather than simply serving as a verification that the company was making progress.

Which Specific Certification Elements Are Valued The Most?

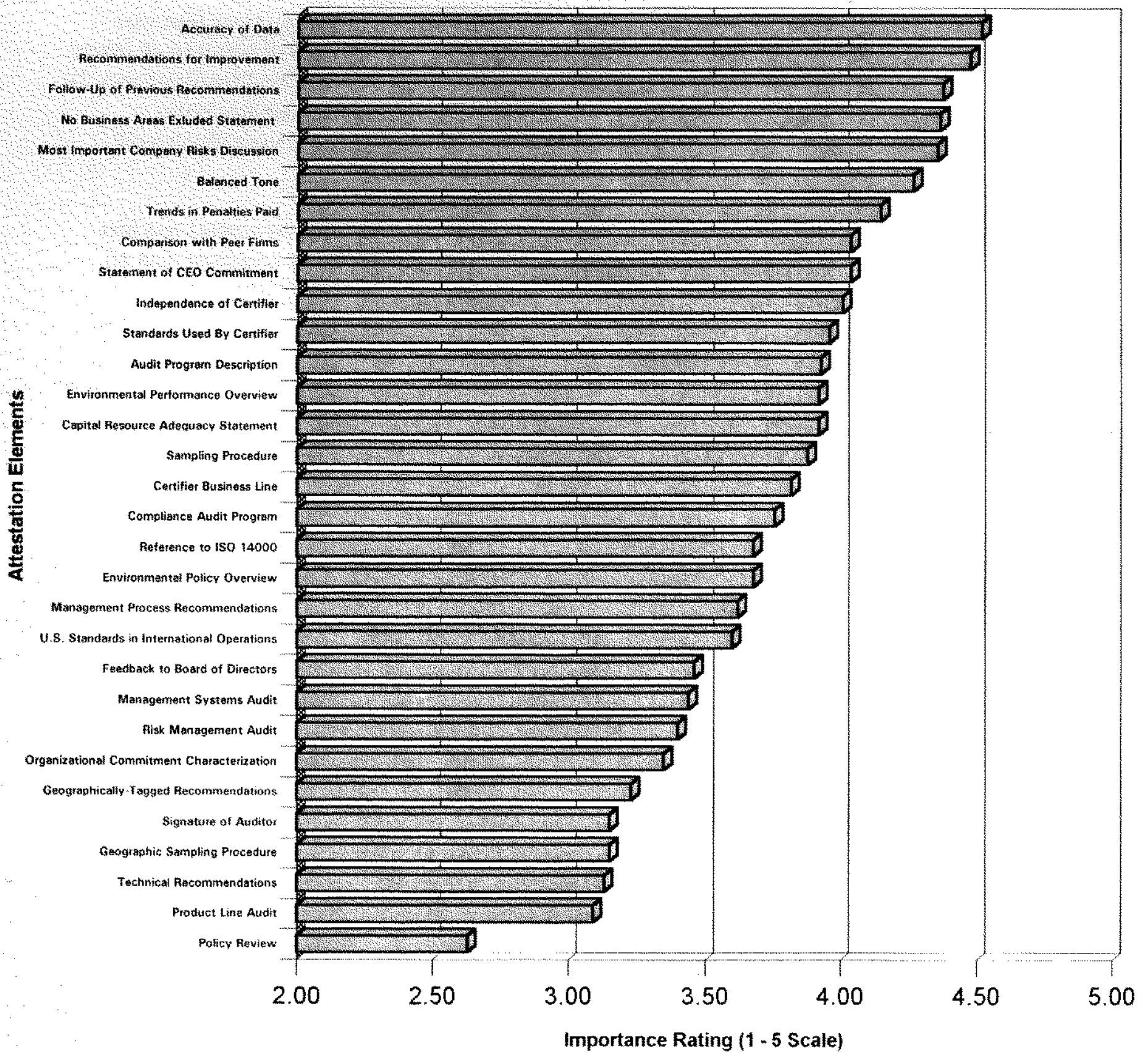
From the comparison of attestation statements, taken from the leading edge of recent corporate reports, it is evident that there is significant room for future improvement. The importance of a variety of certification elements to establishing credibility for voluntary corporate reports were evaluated individually to permit comparisons to be made and guide the development of more credible statements in the future.

Focus group participants were asked to assess the importance of specific certification elements in establishing the credibility of future third party attestation statements. What emerged is a portrait of what environmental attestation or certification statements could look like over the next few years. The features include a few “wish list” options that are not yet available, but by and large most of the highly rated attestation elements have been published by at least one company in North America or Europe. (See Figure 11)

Accuracy of data is the top priority and the most important individual feature of a certification statement. Recommendations for improvement are the number two priority, closely followed by information on the status of follow-up activities recommended by the previous environmental auditor(s). Statements to the effect that no significant risks were excluded and information on the nature of the firm’s most important environmental risk or challenge were the next most important items identified for third party certification. These preferences suggest there is some stakeholder demand for information on what EMAS and ISO term the “environmental aspects” of a firm’s operations -- the primary components of its environmental footprint.

Accuracy of data is the top priority and the most important single feature of a certification.

Figure 11 Importance of Specific Attestation Elements In Establishing Credibility



Only a handful of new attestation elements received high marks: benchmark study results comparing a company with industry competitors, an overview or “holistic” environmental performance assessment, information on the standards used by the certifier, the procedure used for sampling environmental data and information on the independence of the certifier and the basis for its fee. An assessment of local priority challenges was orally requested by participants.

It is instructive to compare the attestation elements that received the lowest scores with the current generation of third party statements. Management system and policy reviews, which occupy a prominent place in many current attestation statements found in third party reports, received low ratings from all groups, including the corporate sample. The policy review placed last. Technical recommendations and reviews of product lines received low scores, suggesting that most external stakeholders were not interested in the attestation addressing that level of detail. Reference to ISO 14000 received only mediocre rating in comparison with other features.

Greater stakeholder group differences emerged in responses to the attestation feature questions than was evident in environmental report features. Environmentalists gave a higher rating (a 5.0 of 5.0) than all others to inclusion of **comparative information** (e.g., the results of benchmark studies of a firm’s competitors). To a greater extent than the other stakeholder groups, environmentalists also valued information on the geographic or facility sample that was the basis for the attestation statement and geographically-tagged recommendations.

Investors said that the independence of the certifier (from the firm commissioning the statement) was less important than all other groups, but thought that organizational commitment was more important than all other groups.

Regulators most frequently expressed opinions that third party attestation was not worth the expense, particularly in comparison with what one called “an aggressive third party audit program.”

Corporate respondents gave lower ratings than the other stakeholder groups to:

- the “no exclusion of risks” statement,
- the compliance audit,
- US standards for international operations,
- balanced tone,
- ISO references, and
- management process assessments.

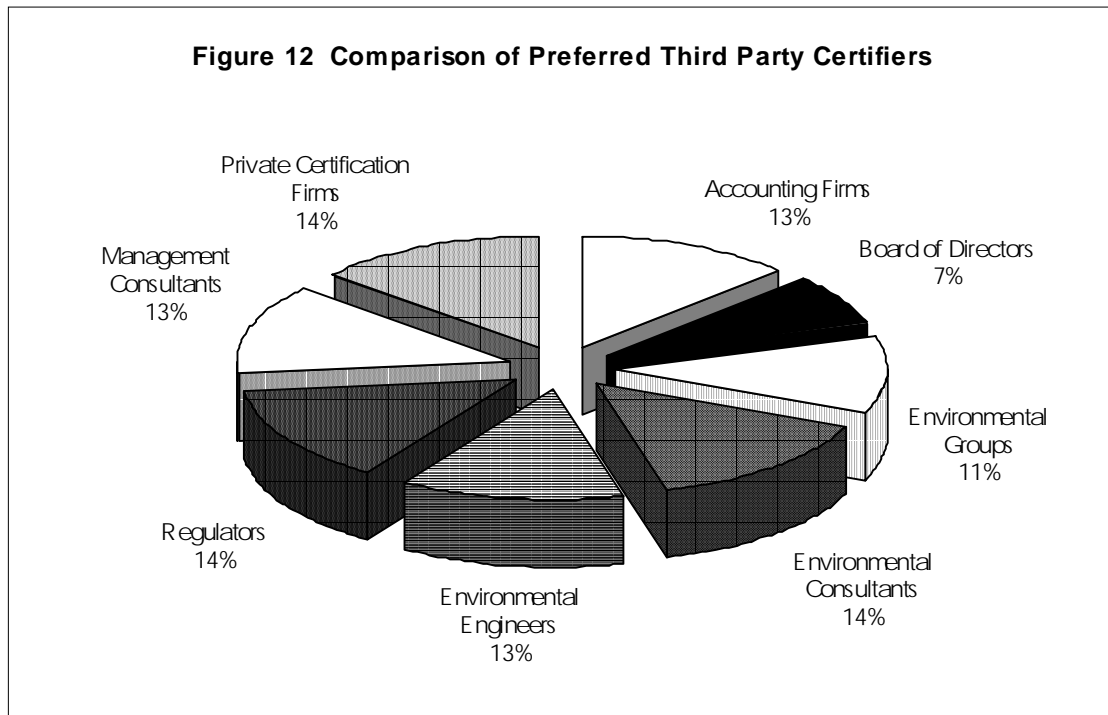
C. Certifiers

Who Can Readers Trust?

There was no clear consensus on the type of firm, combination of skills, or individuals that would be best qualified to give an informed, yet independent, third party attestation to a corporate environmental report. Many participants believe that the system for attestation of financial information in annual reports by accounting firms works reasonably well, as a result of widespread faith in the accounting standards and the ability of potentially aggrieved parties to sue the accounting firms for misrepresentation.

In response to a request to characterize the level of credibility that the following types of organizations provide for environmental certification, the focus groups produced a virtual six way tie. Accounting firms, environmental consultants, environmental engineers, management consultants, private certification firms, and regulators were all perceived as providing a similar level of credibility for this type of report certification. (See Figure 12) Many participants in the environmentalist, media, and regulatory focus groups did not answer this question, explaining that they “did not trust any (of these organizations) at this time.”

A consensus emerged that the development of standards, through a process involving a wide array of private and public interests, was more important than the type of organization that managed the audit or attestation team. Several participants in the regulatory and media groups suggested that interdisciplinary teams could be fielded from several organizations. Participants expressed doubt about the potential for attestations to add value until clear standards for the audit and the attestation were agreed upon.



The Future of Third Party Attestation

While focus group participants were almost uniformly critical of the 1994 third party statements, many expressed the view that third party auditing and attestation could be more valuable in the future. On the basis of comments by focus group participants in the open discussions, it would appear that the future value of third party attestation statements may hinge on a series of external developments, including the following:

- development of standards covering the scope and limitations of third party audits,
- development of standards covering the content of third party statements,
- development of accepted facility sampling techniques for third party audits, and
- eventual integration into the accepted accounting statement attestation scheme.

Sampling techniques for financial auditing are well defined, and parallel techniques for environmental auditing have been developed even if there is not a worldwide consensus yet. Ongoing efforts such as the International Organization for Standardization ISO 14001 Environmental Management System Specification, the European Union Eco-Management and Audit Scheme (EMAS), and U.S. efforts organized by the Environmental Auditing Roundtable, the U.S. Environmental Protection Agency and others bear on the development of relevant standards covering the content, scope and limitations of third party audits. An additional hurdle for third party attestation will be assuring that the topics covered by environmental audits and future attestation statements relate to the interests of the various stakeholders. A related challenge is to communicate effectively the context surrounding and reasons for addressing specific elements contained in future attestation statements.

Finally, several participants suggested that if corporations seek greater credibility, these reports could be summarized substantially and included in the annual reports that are subject to securities regulation.² Even if the more ambitious challenge of fully integrating environmental concerns into traditional accounting practices is not attained, it appears that the annual report incorporation approach could offer the potential to achieve some of the credibility benefits. Until these varied “beyond the report itself” challenges to attestation statement credibility are addressed, the value of attestation statements by third parties may continue to be quite limited.

V. Conclusions

This research effort shows that a diverse range of corporate stakeholders share common priorities in terms of the types of information on environmental progress they wish to see in corporate environmental reports. The results show that corporate environmental reports are already viewed as an important source of information on environmental progress, after less than five years in the marketplace. However, the Achilles heel of these reports is their credibility.

There is also broad consensus on what features of corporate reports contribute to their credibility. Two keys to credibility are providing a balanced presentation, including negative information and providing environmental performance indicators. Although Toxic Release Inventory (TRI) data have received more academic, media, and environmentalist attention than other types of environmental performance data,³ today’s stakeholders are interested in seeing information on ten other environmental performance indicators used in company reports.

Third party attestation statements do not yet add much, if any, credibility to a good environmental report. Some twenty seven other report features or elements add more value than third party attestation statements. From the focus groups it appears that a key to the acceptability of third party statements is the development of standards. Without national, international, or industry standards, even third party attestation statements that address the desire for certain new elements, such as data accuracy and characterization of important environmental challenges, may not generate additional credibility among external stakeholders.

One encouraging finding is the increasing importance of corporate environmental reports as a source of information for stakeholders. Another key trend is the increasing emphasis placed by leading companies on identifying environmental performance measures. Corporate environmental progress reports now incorporate a much wider array of performance measures, which have contributed to the perceived value of the reports. The relatively low perceptions of importance assigned to certain environmental programs and third party statement features can serve to pinpoint areas which deliver less “bang” for the resources required. Finally, stakeholders accorded a “balanced tone” the very highest rating. However environmental reporting and third party statements develop, this robust finding suggests that sharing information on outstanding challenges, as well as recent progress, will be an important element of successful communications.

² The 1994 annual reports of AlliedSignal, Inc. and Norsk Hydro include summaries of their environmental progress reports.

³ For example, see Pollution as News: Media and Stock Market Reactions to the Toxic Release Inventory Data, *Journal of Environmental Economics & Management*, **28**, 98-113 (1995), by James T. Hamilton.

APPENDIX A

SURVEY INSTRUMENT

IRRC Environmental Reports Survey

Organization _____

Can this survey be attributed to your organization? Yes No

1. Please prioritize the following sources of corporate environmental information in terms of their importance to your organization. Use 7 for the most important information source and 1 for the least important information source.

- Analyst reports by brokerage firms
- Annual reports and 10-k filings
- Corporate environmental reports
- Environmental group reports (non governmental organizations such as EDF, Greenpeace)
- Government (voluntary environmental programs and enforcement data)
- Print media or wire service reports
- TV programs, radio programs or other non-print mass media

2. Please prioritize the following sources of corporate environmental information in terms of their credibility. Use 7 for the most credible information source and 1 for the least credible information source.

- Analyst reports by brokerage firms
- Annual reports and 10-k filings
- Corporate environmental reports
- Environmental group reports (non governmental organizations such as EDF, Greenpeace)
- Government (voluntary environmental programs and enforcement data)
- Print media or wire service reports
- TV programs, radio programs or other non-print mass media

For the following questions, please indicate your response using the following 1 - 5 scale:

- 1 = inadequate / not credible
- 2 = poor
- 3 = adequate
- 4 = good
- 5 = critically important / very credible

	Amoco	BP
3. How credible was the information in each report? (Compared to other sources of information on oil or energy companies)	_____	_____
4. How well does each report relate to the core business issues for each company?	_____	_____
5. How complete were the reports in terms of addressing relevant facets of corporate environmental performance?	_____	_____

6. Are there any other types of information which should have been included in these progress reports?

7. How important are the following corporate report components in establishing credibility for a company's claims of environmental progress? Please use the same 1 - 5 scale, using 5 for critically important elements and 1 for elements which are not credible or inadequate. (While most of these elements are in at least one of the reports, a few elements would be new additions to these reports.)

- Adherence to corporate standards worldwide
- Adherence to U.S. standards worldwide
- Audit program description
- Awards from external organizations
- Balanced tone (both positive and negative aspects covered)
- Board of directors responsibilities
- CEO statement
- Community relations programs
- Compliance trends (e.g., penalties paid)
- Energy conservation and efficiency progress
- Employee recognition programs (awards, compensation)
- Environmental liability characterization (resource requirements)
- Environmental budget
- Environmental policy statement or principles
- Government awards (e.g., Energy Star, OSHA Star, Blue Angel)
- Glossary of terms
- Graphics showing disposition of material inputs and outputs (including wastes, products, and emissions)
- ISO 14000 certification program
- Management system description
- Oil and chemical spill trends (data)
- Occupational health (accident and injury) data
- Non Government Product awards (e.g., Green Seal, Green Cross)
- Partnerships or support of environmental groups
- Packaging improvements
- Production eco-efficiency (e.g., for safer handling of chemicals)
- Product reformulation information (includes new products)
- Public policy initiatives (e.g., legislative positions)
- Quantitative information on environmental trends (Company-defined parameters except TRI)
- Risk management program (insurance, fire & loss prevention)
- Remediation progress information
- Reserves for environmental contingencies
- Schematics illustrating refinery operations
- Senior management involvement in environmental committees
- Strategy for addressing environmental issues
- Sustainable development discussion
- Technology development programs
- Third party attestation statement
- Toxic Release Inventory (TRI) reductions
- Toxic Use Reduction plans
- Water conservation goals
- Wildlife habitat enhancement on company lands
- Other _____

The next five questions relate to the company attestation statements provided along with the reports. These questions are intended to stimulate discussion on the value (or lack thereof) of specific elements of this generation of third party attestation statements.

8. Would any of the statements strengthen your assessment of a company's environmental progress report? Please use a 5 if a statement would be critical to your assessment of a company's environmental progress report, and a 1 if a statement would be irrelevant to your assessment.

C D G H I N

9. How important to the credibility of voluntary corporate environmental reports would a third party statement be if it vouched for the following certification elements? Please use the 1 to 5 scale, reserving 5 for an element that would be critical to your assessment and 1 for an element which is irrelevant.

- Accuracy of data reported
- Assurance that no business areas were excluded from report
- Assurance that report addresses most important risks for the company
- Audit program description
- Balanced tone (both positives and negative aspects covered)
- Capital resources adequate for environmental management
- CEO and top management commitment characterization
- Comparisons with companies in industry (e.g., results of benchmark studies)
- Compliance component of audit program
- Feedback to board of directors
- Follow-up efforts for audit-identified problems
- Geographic information on sites included in sample
- Geographically-tagged recommendations
- Independence of certifier, basis for fee
- Individual signature of auditor on statement
- Management process recommendations
- Management system component of audit program
- Organizational commitment characterization
- Overview: environmental performance assessment
- Overview: environmental policy assessment
- Primary business of firm certifying report
- Procedure for sampling and collating environmental data
- Product line audit program
- Quantitative information on compliance trends (penalties paid)
- Recommendations for improvement
- Reference to international standards (e.g., ISO 14000, BS 7750)
- Reference to U.S. standards in international operations
- Review of policy development
- Risk management audit component
- Standards used by certifier (elaboration thereof)
- Technical recommendations
- Other _____

10. Are there specific elements in the enclosed attestation statements which were particularly valuable? yes no
 Are there other areas which you believe the third party statements should address? yes, explain no

11. How would you characterize the level of credibility which the following organizations provide for this type of certification? Use 5 for a very credible organization and 1 for an organization which would not be credible.

- Accounting firms
- Company board of directors
- Environmental advocacy group
- Environmental consulting firms
- Environmental engineering firms
- Government regulatory agencies
- Management consulting firms
- Private sector certification agency or company

Thank you very much for taking the time to complete this survey. We would appreciate it if you could FAX your responses back to IRRC (202-833-3555) as soon as possible so that we can review them and try to integrate your impressions into the agenda prior to the meeting. If you have any questions, please do not hesitate to call Jon Naimon at 202-833-0700.

APPENDIX B

ORGANIZATIONS PARTICIPATING IN STAKEHOLDER FOCUS GROUP MEETINGS

Investor Focus Group *(Held in New York, NY on March 17, 1995)*

Dreyfus Corporation (now part of Mellon Bank)
Franklin Research & Development
Greenwich Street Advisors
Jessie Smith Noyes Foundation
Scudder, Stevens & Clark
United States Trust Company
National Provident Institution (Provided input but did not attend the meeting)

Media Focus Group *(Held in Washington, DC on May 19, 1995)*

Bureau of National Affairs
Canadian Broadcasting Corporation
Environmental Software Report
The Green Business Letter
Global Horizons Syndicate
Greenwire
Turner Broadcasting System (TBS)/ Captain Planet

Regulator Focus Group *(Held in Seattle, WA on June 14, 1995)*

King County Office of Emergency Management
Municipality of Metropolitan Seattle, Water Pollution Control Department
Puget Sound Air Pollution Control Agency
Pacific Northwest Pollution Prevention Research Center
State of Washington Department of Labor and Industries
State of Washington, Enforcement, Safety & Program Support
State of Washington, Department of Ecology
U.S. Environmental Protection Agency, Region 9 Office of Enforcement

Environmental Focus Group *(Held in Washington, DC on October 3, 1995)*

Americans for the Environment
Environmental Action
Environmental Defense Fund
National Wildlife Federation
Sustainable Biosphere Initiative
World Wildlife Fund
Worldwatch Institute

Corporate Focus Group *(Held in Atlanta, GA on October 9, 1995)*

Anheuser-Busch Companies
The Coca-Cola Company
Coors Brewing Company
The DuPont Company
Georgia-Pacific Corporation
Johnson & Johnson
Olin Corporation
Tenneco
WMX Technologies, Inc.

APPENDIX C

THIRD PARTY ATTESTATION STATEMENT SAMPLES

Thorn EMI

Since 1991, the Certifier has acted as environmental consultant to the Company in a strategic capacity at Corporate level and on specific projects for its individual businesses.

REPORTING PROCESS

The information in this report has been collected through a questionnaire completed by each of the Company's businesses and signed by their Chief Executives.

We assisted in the production of the questionnaire and in processing the responses. Although a formal third party audit of the data has not been conducted, we consider that the Group has compiled this report with the intention of representing its environmental impacts and activities in an objective manner.

REPORT CONTENT AND DATA

We believe that this report appropriately focuses on the Company's main environmental issues. Where accurate data on specific issues is not readily available, estimates have been used or the information has been omitted from the data. This is clearly stated at the appropriate points in the report.

PERFORMANCE

The Company has taken seriously its commitment to the ICC Business Charter for Sustainable Development and has made significant progress since publishing its first environmental report last year. Momentum has been gathered by the Company's businesses in managing their environmental affairs and we have seen evidence of increased awareness, systematic activity, achievement of targets set at local level and the setting of further targets.

RECOMMENDATION

Having established a baseline in the major areas of environmental impact, we consider it is now appropriate to agree overall performance targets, at both Group and business level, for progressively reducing these impacts.

Aspinwall

National Power

Conclusions drawn from the Certifier's verification of the Company's 1994 report were that:

- The Company's written statements in the 1994 EPR presented a correct, true and fair picture of their environmental policy, programs and procedures.
- Commitment from the Chief Executive remained strong with environmental responsibility being devolved clearly amongst the management hierarchy. Awareness and resource commitment observed in 1993 had been improved on, both at power stations and headquarters, allowing initiatives to originate at all staff levels. Management now considers the environment as an integral part of business planning.
- The review of targets presented in the 1994 report is a true reflection of the developments and improvements seen during this year's verification activity. Target setting is now a combined approach involving both the individual department and the Chief Executive.
- Systems used to gather environmental data had been formalized and reviewed to ensure that all areas of concern were monitored. In addition, the process for reporting information, from site to corporate level, had been developed. It was comprehensive and well managed.
- The Company's internal verification process remained satisfactory and formal systems had been implemented to ensure uniformity on areas/issues being inspected. Also methods for categorizing impacts identified during audits had been developed.
- Collected and reported data presented a true and fair picture with regards to air emissions, water abstraction and returns, solid waste and complaints and incidents. At power station levels, aqueous emissions were collected and reported to HMIP. These are in compliance with HMIP consents.

Progress on the Certifier's proposed improvements in the previous progress report were determined as:

- CO₂ emission calculations are now based on the actual carbon content of the coal.
- Data collection guidelines, including those for waste, complaints and incident definitions, had been provided. The reported total tonnage of waste is correct but the means of aggregating data into the waste categories whilst adequate, requires further refinement.
- Special waste had been accounted for separately and compiled with regulatory requirements.
- Assessments related to power stations' operations and their non-conformance with technical guidance documents had been made uniform.

As a result of the Company's 1994 verification, the Company should consider:

- Reviewing reported environmental performance data to ensure that they are relevant and significant to power stations and the public.
- Providing evidence for performing better than regulations, where appropriate.
- Improving waste recycling schemes at all stations.
Improving methods for monitoring contractors to ensure environmental impacts associated with their activities are controlled.

The Certifier's verification methodology, for the calendar year 1993 and financial year 1993/4, was identical to that used for the previous environmental progress report and consisted of interviews,

document reviews and data acquisition sampling in accordance with ISO 9000, BS 77509 and ISO 10011 strategies. It was conducted at both headquarters and randomly selected stations which represent about 50% of 1993/4's generated output. Stations involved in the data verification were Site A, Site B, Site C including the flue gas desulphurisation plant , Site C, Site D, Site E (a commissioning station) and Site D (a decommissioning station.)

Lloyds Register

Eastman Kodak Company

The Company's HS&E Assessment Program meets and in some areas exceeds generally accepted standards and criteria for programs of this type found in other companies. The Program provides an independent evaluation of facility compliance and thereby assures Company management that compliance issues are routinely identified and remedied. The Company has continued to make improvements to the Program in all areas since it was started in 1988. The first assessments began in 1989 and today about 70 percent of the Company's major facilities have been evaluated for HS&E compliance.

A detailed independent evaluation of all elements of the Program was conducted by the Certifier using ten criteria, which reflect generally accepted industry standard. A summary of the evaluation is provided. Program strengths include explicit top management support and a demonstrated commitment to continuously improve the competent HS&E technical skills. Assessments are conducted in an independent, objective manner with due professional care. There are third-party participants (i.e., outside consultants) on all audits.

The Company's program is well documented. Effective assessment tools, protocols and other support materials have been developed and continue to be produced. Assessment reports are well written and distributed in a timely manner. The Company business units manage the corrective action process well and most findings are corrected within a year.

The Company program is now in its fifth year, as could be expected, some mid-course adjustments are needed. Key areas that need more attention relate to re-evaluating the Program objectives, analysis and measurement of its performance and its disclosure of appropriate information to interested third parties. The Company's HS&E Guiding Principles clearly call for measurement and disclosure of relevant information on performance. But how this specifically applies to the Company HS&E Program has not been evaluated. The Company Program also needs to better clarify its fundamental objectives, not an uncommon problem after a program has been up and running for five years. The distribution among "compliance assessments", "risk assessments" and "management systems assessments" have tended to become blurred.

In summary, the Company HS&E Program is one of the better programs in industry and after some work in the areas noted above should continue to be so in the future.

McLaren Hart

Program Evaluation	Below Standard	Meets Standard	Exceeds Standard
Explicit top management support and commitment for prompt corrective action of assessment findings			x
Proper organizational structure of the Program to assure independence and objective assessments		x	
Demonstrated assessor proficiency and exercise of due professional care		x	
Clearly stated and consistently applied assessment program objectives		x	
Existence of a written assessment plan including methodology, scope and committed resources			x
Preparation of clearly written assessment reports and distribution to appropriate levels of management			x
Implementation of an effective corrective action procedure for assessment findings		x	
Quality assurance mechanisms in place to assure accuracy and thoroughness			x
Measurement and analysis of performance and timely disclosure to customers, shareholders and the public		x	
Frequency of assessments on a schedule to evaluate HS&E compliance across all major operations		x	

Nestle Oy

The Certifier was commissioned by the Company in June 1994 to provide a verification of the statements and figures in this, the Company's second Progress Report. The verification was carried out against the Company's EHS policy and objectives and, more broadly, the fifth-point checklist of reporting ingredients detailed in another report, which was researched and written by the Certifier for the United Nations Environment Programme's Industry and Environment Programme Activity Centre (IE/PAC).

The verification process involved:

- interviews with key personnel at the Company's head office; and with the Company's European Responsible Care managers.
- site visits and interviews covering the Oil, Chemicals and Shipping operations;
- examination of the Company's policies, procedures and objectives;
- samples of reporting data from the Chemicals and Oil divisions. The Company's divisional performance indicators, and the collation of the data for the report.

As part of the verification process, we also interviewed representatives from the local regulatory authority and the Environmental Protection Department of Environmental Protection Agency. To provide an even wider perspective, sustainability contacted nongovernment organizations in several countries to discuss their views of the Company's environmental performance at local production sites.

Overall, the Certifier is satisfied that the 1993 Responsible Care Progress Report

- is a fair and accurate presentation of the Company's policies, management systems and procedures,
- the numerical data sampled during the verification are valid and demonstrate the progress which has been achieved by the Company during 1993.

In our view, the Company's performance in recent years has been impressive, and it is obvious that responsibility for protection of the environment is seen within the organization as a critical element of the Company's operations. During the interviews it was also clear that responsibility for the environment lies firmly with line management, not just the corporate Environment and Safety Department.

The Company operates a policy of openness, which is evident in the 1993 report and in the responses we received from external stakeholders. Communication with the public is a key part of the Responsible Care framework. In anticipation of future demand, we now urge the Company to move towards full Toxic Release Inventory-style performance data reporting covering all of its operations and sites, so that performance can be more readily tracked by external stakeholders. We also recommend that the Company publishes specific environmental performance reports for each of its main production sites to help communicate its activities, impacts and forward plans to local communities.

In the Certifier's view, the other priorities for action by the Company during the period 1994-1995 include a harmonized approach to standards, the development of fully documented environmental management systems, further environmental auditing and training, improvement in safety performance, the minimization of carbon dioxide emissions, and the development and implementation of an environmental purchasing policy in order to extend the Reasonable Care programme to include the Company's suppliers.

Dow Europe

In its 1993 Environmental Progress Report, the Company describes its environmental strategy and the progress the Company is making in implementing the strategy, both in the Company as a whole and at individual sites.

As part of the effort in preparing for this report, the Certifier was asked by the Company to validate the systems for collecting, compiling, analyzing and reporting data on which the Environmental Progress Report is based. We reviewed corporate documentation including policies and procedures, the Guidelines on reporting, and Environmental Management Systems manuals. We did not make a detailed verification of measurement and estimation techniques. We did, however, assure ourselves that the data collection methods were appropriate. We then visited four sites by the Company to validate the implementation.

Our overall conclusion is that the Company presents a balanced perspective on its environmental performance and that this performance is communicated openly and even-handedly. The Company has developed a consistent approach for reporting environmental discharge and energy data from its manufacturing facilities. The Guidelines on reporting are clear, and provide an adequate basis for consistent reporting. Our limited review suggests that site, regional and corporate level are following the Guidelines, but that they are not yet being applied uniformly across all sites.

Environmental Management Systems at the sites we visited are at various stages of development. Some are well-documented and in the process of implementation. Others are not yet at that stage of development. Better communication from site to site on best practice, especially in data collection and reporting, and a broader auditing program would accelerate this process.

In our opinion, most of the methods used for the measurement, estimation, and calculation are appropriate. We recommended, however, raising the standards of quality control and internal data verification. The people who collect data are competent and generally well-trained; however, additional training may be appropriate in quality control and the application of the Guidelines.

From our sites visits, we believe that the Company includes in its report virtually all relevant discharges to air, surface water and waste removed from the site. For steams and materials that have not been determined or are considered too small to report, we recommend that the Company carry out further evaluation where necessary with supporting measurements.

The Company's Environmental Progress Report supports its leading position by including most, though not all, of the voluntary environmental reporting guidelines, developed by progressive industry associations and para-governmental bodies such as the United Nation's Environmental Program and the Public Environmental Reporting Initiative.

Arthur D. Little

The DuPont Company

The Company instituted a corporate Environmental Audit Program in 1985. As part of the Company's quality assurance efforts, the Company commissioned a third-party, independent evaluation of the program in 1991. The evaluation consisted of a review of records, including program documentation and audit reports; interviews with senior corporate managers, the Corporate environmental staff and numerous auditors; and observation of five audits. The Certifier conducted the evaluation during the latter of 1991 and issued a final report on May 16, 1992. The Executive Summary of the Evaluation Report was included in a report published by the Company in early 1993.

In 1993, the Company contracted with the Certifier to conduct a follow-up evaluation of the program. The objectives of this second evaluation were to assess whether, in the past two years, the Company has responded appropriately to:

- The findings and recommendations of the first report;
- Any internal organizational and structural changes taking place over the two year period that might impact the effectiveness of the program; and
- Generally recognized and applicable improvements in the practice of environmental auditing.

PROGRAM OVERVIEW

"The objectives of the Company's environmental audits are:

- To assess global compliance with corporate environmental policy and applicable environmental laws and regulations;
- To provide assurance that management systems are in place for continuing compliance; and
- To verify and document that appropriate action is being taken in order to safeguard our environment."

The Company's objective is to conduct environmental audits of all major facilities operating in the U.S. and overseas. The program is relatively mature in the U.S., Canada and Europe but is evolving in the rest of the world. Audits generally involve a team leader and 1-8 auditors. The audits take from 2-5 days depending upon team size and the complexity of the facility. A fairly standard approach is used in preparing for, conducting and reporting the results of the audits.

The Company reviews its facilities based on a risk-driven schedule, as stated in the program guidelines. Facilities are ranked and placed into one of four categories. Certain large especially complex facilities may be defined as Category I, which requires annual audits of certain site areas or specific environmental media. Category II facilities are to be reviewed every two years; Category III, once every three years; and Category IV, once every four years.

EXECUTIVE SUMMARY

Overall, the Company environmental audit program is an excellent one. Its structure, content and procedures continue to meet or exceed those of programs generally found in comparable companies. In the past two years, since the initial third-party evaluation, substantial progress has been made in improving the program.

Of particular note are the following:

- The policy for report and facility action plan schedules has been shortened considerably from 90 days to 45 days.
- The corporate oversight function has been clearly defined in the program's guidance manual. There is a much more systematic and thorough oversight of the audit programs, including monitoring of facility action plan status for individual audits.
- All corporate audit protocols have been updated and improved in the past year.
- Audit reports are much improved and include a two-way classification of findings, which better defines the findings by type and provides priorities for developing corrective actions.
- All audited sites are now encouraged to complete site evaluations of the audit team's performance. An audit appraisal questionnaire has been prepared by corporate to assist in this process.

Notwithstanding these and other structural and procedural improvements in the corporate program, the execution of the audit programs has been somewhat adversely affected by the ongoing restructuring within the Company. The recent decentralization of the Company into 19 strategic business units (SBUs) has resulted in the creation of 16 separate business-level audit programs. Several of these programs have lost momentum during the organizational transition and are not consistently meeting all corporate audit program guidelines. The restructuring has also resulted in the loss of some experienced auditors. Audit program managers are aware of these challenges and it is likely that in the next six to twelve months they will be addressed.

RESULTS OF THE EVALUATION

The principal focus of the evaluation was to determine the progress the Company has made with respect to the 1991 findings. Therefore, this section is organized consistent with the listing of high- and medium-priority development needs presented in the executive summary of the progress made for each of the development needs. In all cases, at least some progress has been made in rectifying the deficiencies.

THE AUDIT PROGRAM

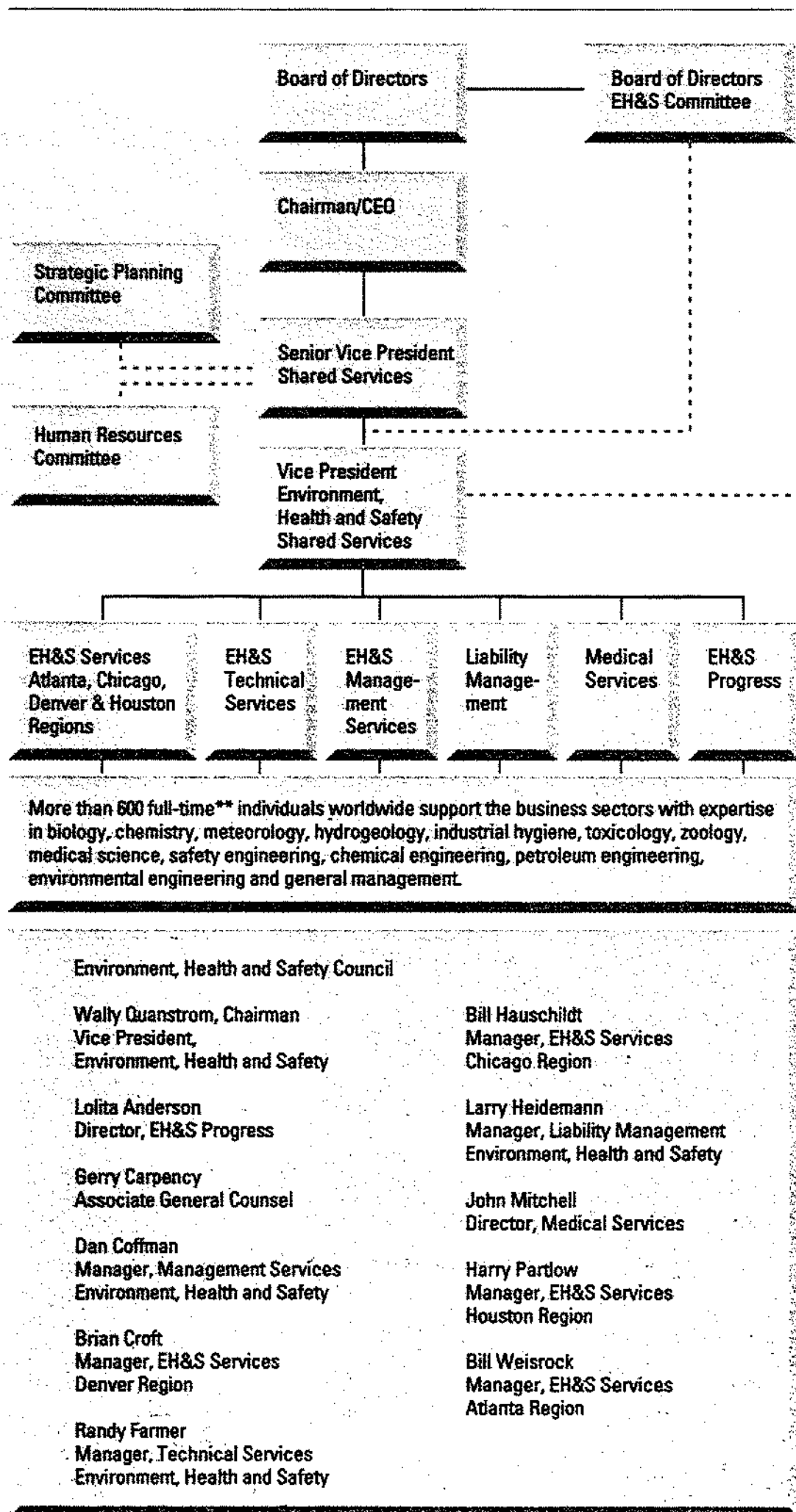
The program has experienced some major improvements in policies and procedures, specifically with respect to the development of better tools and tracking systems. Most notably the corporate guidance manual and audit protocols have been upgraded and updated in 1993. The July 1993 upgrade of program manual is a significant improvement, specifically the guidance provided on: community participation, report writing, findings classification, the audit appraisal questionnaire, and how to handle repeat findings. However, not all of the improvements required or recommended in the manual have implemented fully among the SBUs.

McLaren Hart

Findings	No Progress	Some Progress	Major Improvement	Fully Corrected
A1. Uneven follow-up for corrective actions among Businesses		x		
A2. Limited Corporate oversight of corrective action status at Business level			x	
B1. Too relaxed a policy for completion of reports & corrective action plans (90 days)				x
B2. Inconsistency in meeting the report & corrective action plan schedules		x		
C. Lack of an independence where Business SHEA staff audit sites where they have provided technical assistance		x		
D. Lack of an independent review of state regulations prior to the audits			x	
E. Outdated audit protocols				x
F. No formal Audit Program Plans developed by the Business			x	
G. No clearly articulated objectives for the Corporate oversight function				x
H. Lack of consistency in providing legal review of audit reports			x	
I. Audit team evaluations conducted only in one Business				x
The Audits				
A. Uncertainty among auditors over whether audits are compliance assessments or management system reviews		x		
B. Rambling, unstructured closing conferences			x	
C. Varying, rambling report styles			x	
D. Field verification techniques are not always used appropriately		x		
E. Ancillary activities (e.g., maintenance, warehouses, tollers, contractors) not always audited with same rigor as line operations		x		
F. Multiple tenant site audits do not always get the full cooperation of tenants		x		
G. Sites conducting self-audits only sporadically		x		

APPENDIX D

Figure 1— Environment, Health and Safety Shared Services Management*



*Organization Effective July 1994.

**This Represents a Reduction of Approximately 100 Full-Time EH&S Positions Compared to 1992.

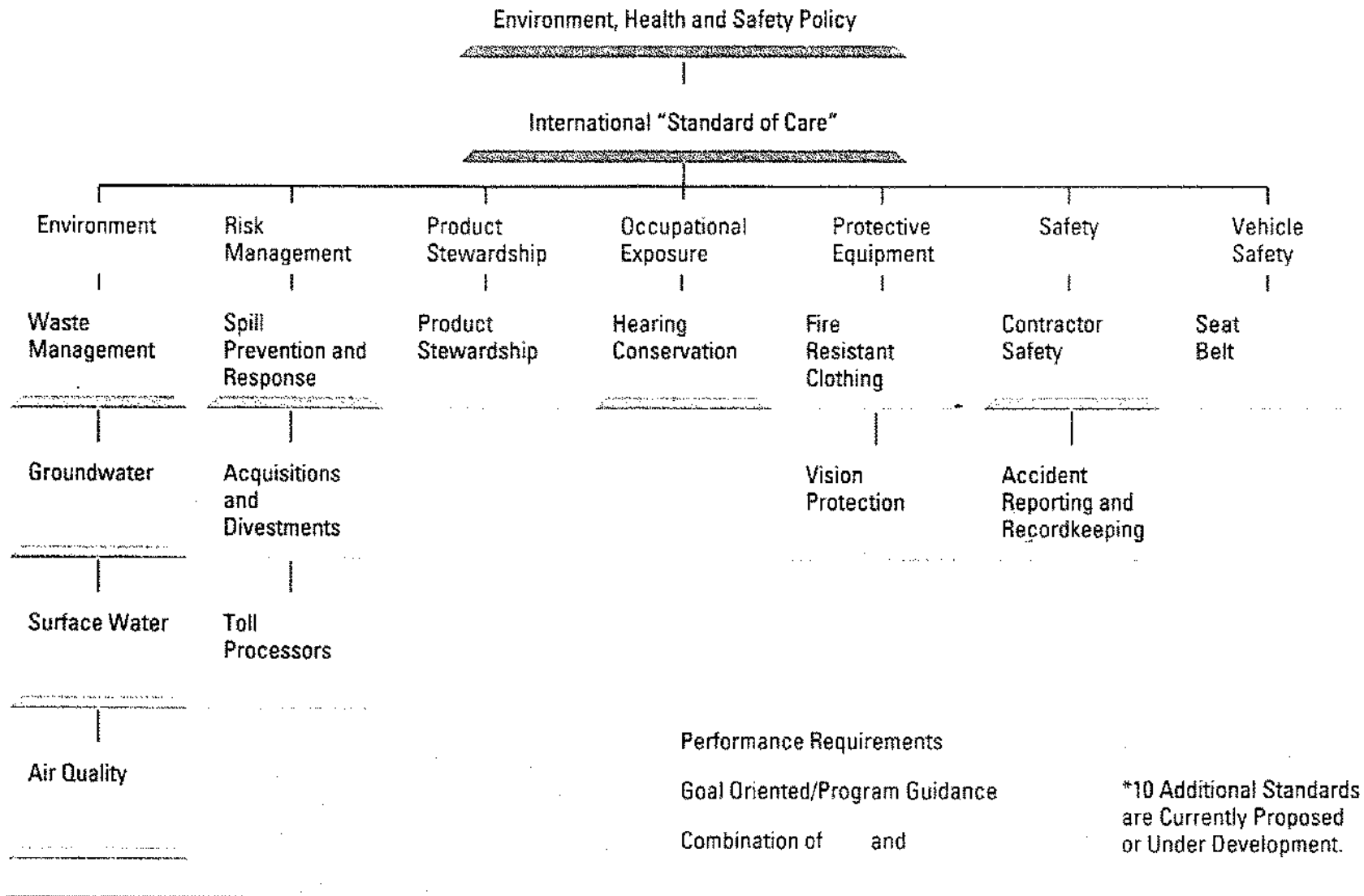
Amoco's environment, health and safety performance is the shared responsibility of all Amoco employees. The Board of Directors of the corporation holds the senior management of the parent corporation, business sectors, business units, and Environment, Health and Safety (EH&S) shared services accountable for the environment, health and safety performance of the operations, businesses and functions under their control.

Direction of Amoco's EH&S shared services is provided by the EH&S Council, which is chaired by the Vice President, EH&S shared services, and is comprised of senior environment, health and safety management and a legal representative. Significant recommendations of the council are subject to review and approval by the Strategic Planning Committee or the Human Resources Committee. Both committees include the Chairman, two vice chairmen, executive vice presidents from the three business sectors, the Chief Financial Officer, and three senior vice presidents of the corporation.

Oversight of Amoco's environment, health and safety programs and their results are provided by the EH&S Committee of the Board of Directors, which is chaired by an outside director and has a majority of outside directors. The functions of this committee include reviewing (1) Amoco's EH&S policies and standards, (2) the structure and results of the auditing function managed by EH&S shared services, (3) Amoco's programs and performance in safety, spill response, crisis management, air quality, waste management, waste minimization and product stewardship and (4) Amoco's progress in identifying and remediating contaminated sites, and informing the Board of Directors of significant findings.

Implementation of Amoco's EH&S policy (see Section 2) is coordinated by the Vice President, EH&S shared services, Amoco Corporation, who reports to the Senior Vice President, Shared Services. The Vice President, EH&S shared services, also oversees the activities of more than 600 full-time environment, health and safety professionals worldwide, most of whom work in EH&S shared services. The regional organization of EH&S shared services ensures close communication between environmental and operating personnel, facilitates sharing of programs and practices among diverse operations, and improves the cohesiveness and efficiency of our environment, health and safety function.

Guidance for environment, health and safety practices and procedures worldwide comes from the company's "International Standard of Care" (ISOC), shown in Figure 2. The ISOC is not intended to substitute for local laws and regulations, but rather to provide benchmarks for our



operations so they are consistent with Amoco's EH&S policy (see Section 2). It is introduced to new ventures from their inception to support responsible development of natural resources while protecting workers, customers and communities. During 1993, three new standards were issued: Surface Water Protection; Air Quality Management; and Evaluating Environmental Safety and Health Aspects of Toll Processing Agreements.

ISOC, Amoco (United Kingdom) Exploration Company

The ISOC is one of the components of the comprehensive Environmental Management System (EMS) developed during 1993 by Amoco (United Kingdom) Exploration Company (AMOEX). In addition to the ISOC, the EMS incorporates the requirements of the British Standards Institution's Specification for Environmental Management Systems, BS 7750, and the European Eco-management and Audit Regulation, 1836/93. Following a pilot project with the drilling department, the EMS was introduced to a series of environmental teams in November 1993 and was subsequently implemented throughout AMOEX. The EMS is raising environmental awareness, increasing acceptance of new environmental procedures and generating ideas for environmental performance improvements.

Amoco's estimated worldwide costs and expenditures for implementation of its environment, health and safety practices and procedures are shown in Figure 3. The 1993 decrease was due to reduced remediation costs compared to 1992, increased efficiencies in our environment, health and safety operations, completion of major capital environmental improvement projects and overall cost reductions throughout Amoco.

Figure 3— Estimated EH&S Costs and Expenditures

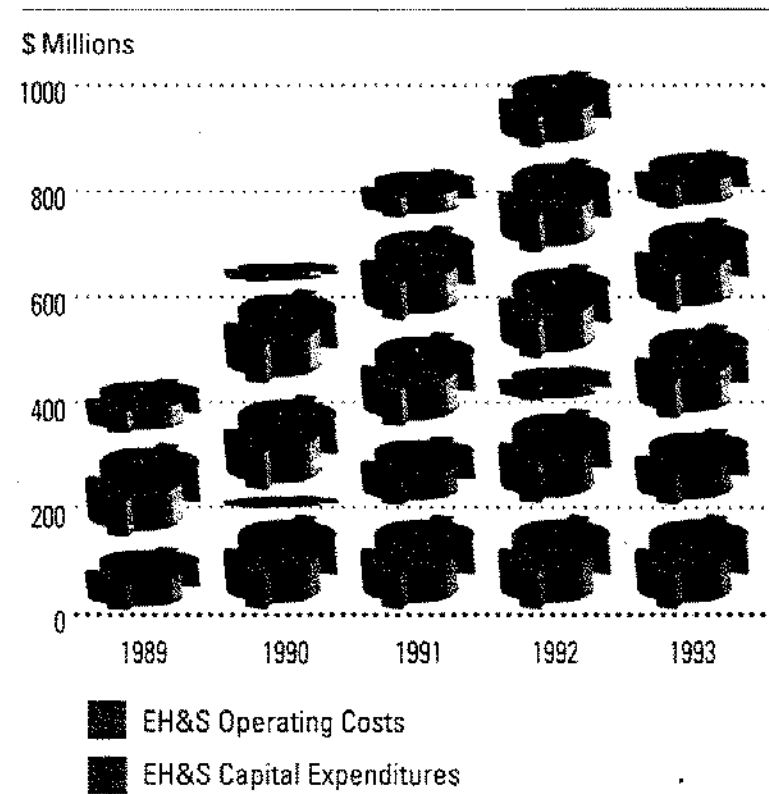
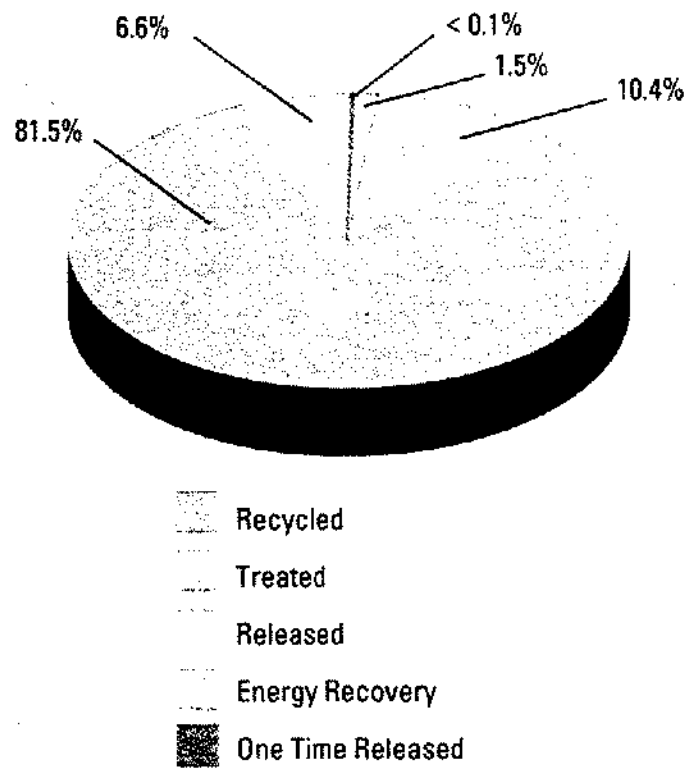


Figure 9—1993 Pollution Prevention Management — Percent of Total Reported Under U.S. Pollution Prevention Act



U.S. Pollution Prevention Act Data

In 1990, the TRI program was expanded by the U.S. Pollution Prevention Act (PPA) to require data on waste management and pollution prevention practices for TRI chemicals. This expansion requires reporting data on materials that are released, recycled, burned for energy and treated, both on- and off-site. The PPA information is qualitatively different from the TRI data because it covers methods of waste management for these chemicals rather than releases. The information is also different from typical waste management data since facilities are required to include materials that are byproducts and intermediates of routine refining and manufacturing processes—materials that may not be considered wastes under RCRA.

Amoco’s PPA results for 1993 are represented in Figure 9. The quantity of TRI chemicals managed by recycling, treating and energy recovery techniques is shown as a percentage of the total volume of materials reported. More than 90 percent of the chemicals reported by Amoco under the PPA were managed by reuse, recycling, recovery of valuable constituents, conversion to energy or treatment and did not reach the environment as “releases.”

U.S. EPA Industrial Toxics Emissions Reduction Program

In 1991, Amoco committed to participate in the U.S. EPA “33/50 Program.” This is a voluntary program aimed at reducing emissions of 17 priority chemical substances by 33 percent by the end of 1992 and 50 percent by the end of 1995, using 1988 emissions levels as a baseline. Specifically, we pledged to eliminate 3.5 million pounds of reported 1988 emissions by 1992 and 5.3 million pounds by 1995. Amoco supports this program’s focus on reducing emissions of targeted TRI compounds and its flexible and voluntary approach.

By the end of 1992, Amoco had reached its goal of a 3.5 million pound reduction of reported 1988 emissions. Through the end of 1993, by implementing projects and changes in plant operations, we eliminated more than 5.2 million pounds of reported 1988 emissions (see Figure 10). We are continuing to identify and evaluate options to further reduce emissions and are confident we will achieve and maintain our 1995 goal.

Figure 10—Cumulative Emissions Reductions for 17 Priority Chemicals

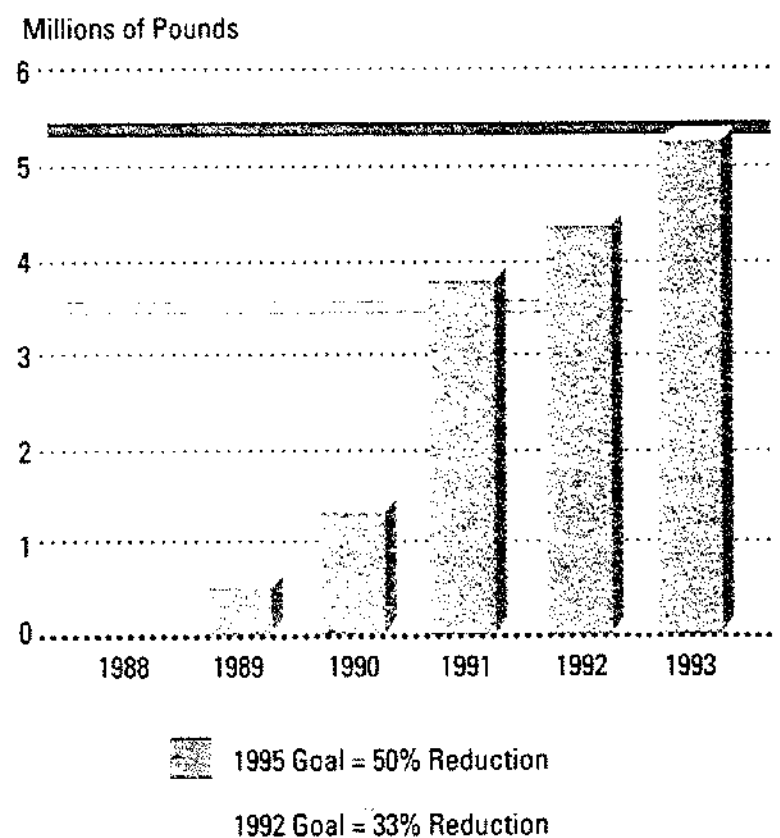


Figure 13—Amoco Chemicals—Percent Change in BTU/Pound of Product

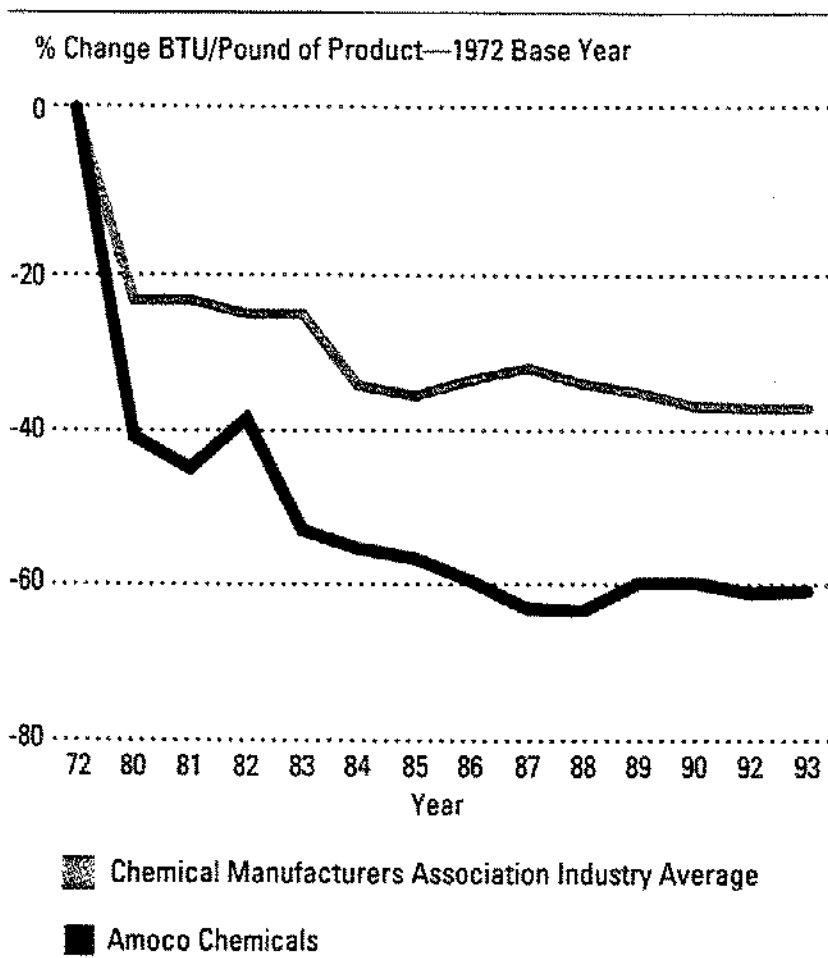
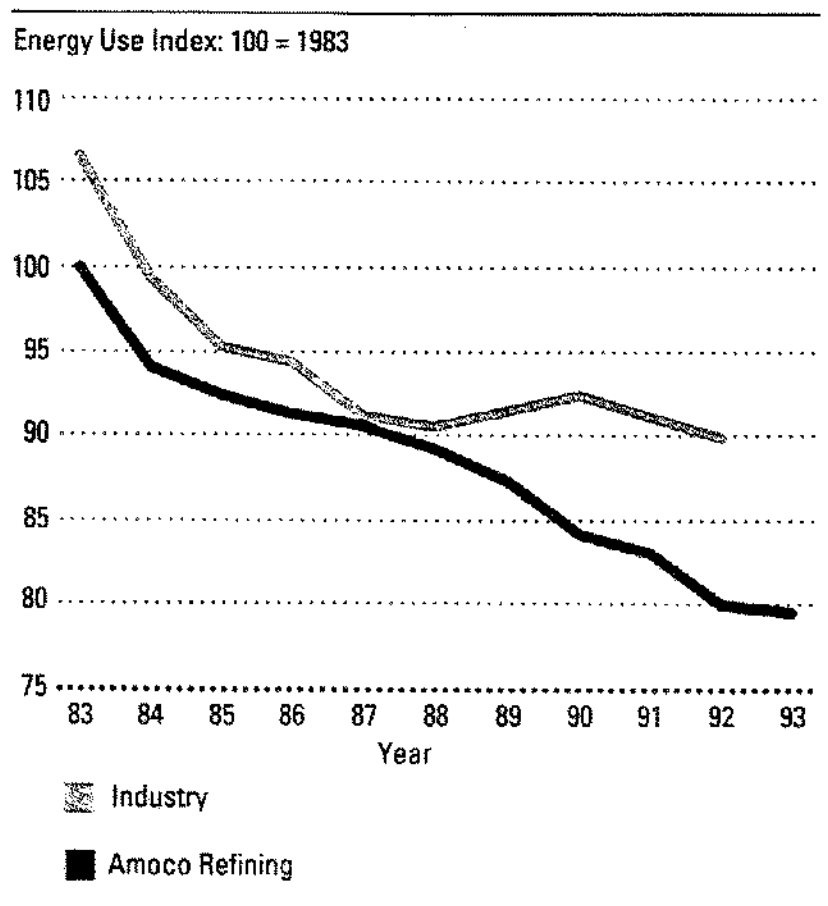


Figure 14— Amoco Refining— Energy Use Index



Energy Conservation

Amoco has a longstanding commitment to reduce energy consumption in its manufacturing and refining facilities.

Amoco's Chemicals Sector has demonstrated a 61 percent reduction in its energy consumption per pound of product manufactured since it began tracking these numbers in 1972 (Figure 13). This compares favorably to a 37 percent average reduction for all reporting Chemical Manufacturers Association facilities for the same time period. Amoco's Chemicals Sector has accomplished this reduction by implementing energy conservation projects, applying new process technology and emphasizing energy conservation operations and maintenance best practices.

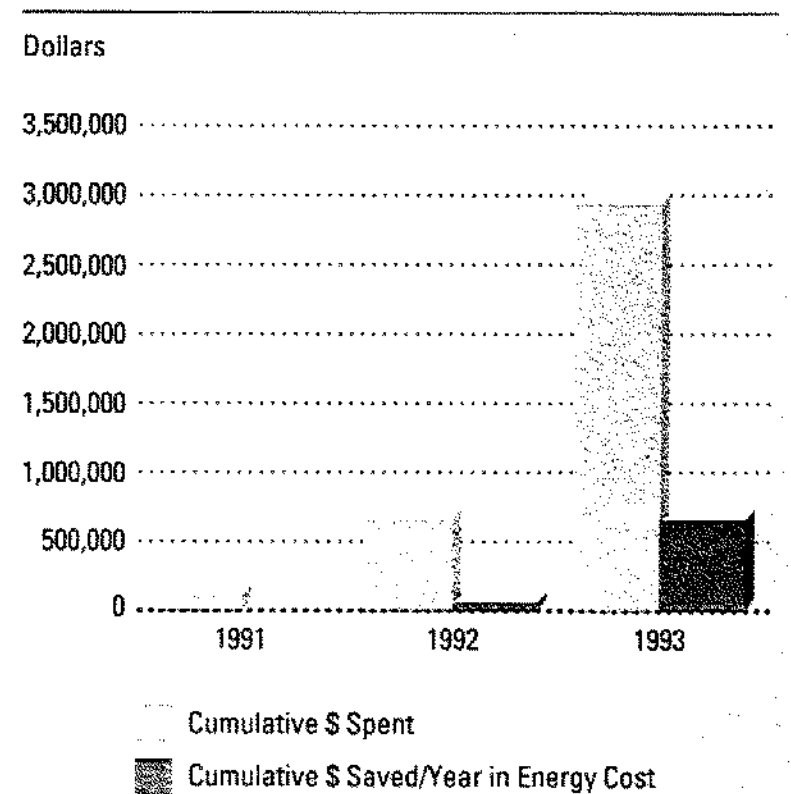
Since 1983, the Petroleum Products Sector's refining operations reduced its energy use index by 20 percent (Figure 14). This is greater than the average industry reduction of 16 percent during the same period. The Petroleum Products Sector achieved its energy efficiency improvements through a combination of capital investment and improved operations and maintenance practices.

Green Lights Program

In December 1990, Amoco signed a Memorandum of Understanding with the U.S. EPA to become one of its charter partners in the voluntary Green Lights Program. Through 1993, Amoco spent \$2.8 million to upgrade many of its major office facilities with energy efficient lighting, which has resulted in an energy savings of 12 million KWH/year or \$756,000 per year (Figure 15). According to U.S. EPA factors, this translates into an annual carbon dioxide emissions reduction equivalent to planting almost 3,500 acres of new trees per year or annually removing approximately 1,700 cars from the road. Through savings in energy costs, each Green Lights Program project is expected to return the finances invested within three to four years.

Green Lights Program projects were completed in 1993 at three research centers, four manufacturing facilities and 235 Petroleum Products Sector service stations.

Figure 15— Green Lights Program



Environment, Health and Safety Compliance

Environmental compliance measures may be based on internal reviews or external inspections. We have selected as compliance measures citations per inspection, based on external inspections, and fines paid by the corporation as a result of these citations. We have selected these measures since they include data from each of Amoco's three major business sectors, and because we believe they provide information that is familiar to external stakeholders. While Amoco tracks a number of important internal measures as well, we believe that the strength of our internal audit program will be reflected in these external compliance statistics. We note that citations, while a useful performance measure, do not necessarily reflect violations of laws or regulations since some citations are withdrawn following communications to the issuing agency. Further, citations often involve recordkeeping deficiencies rather than situations with potential health or environmental impacts.

Citations per Inspection

Inspections of Amoco facilities are conducted in the United States by federal, state and local agencies. The inspections evaluate compliance with environment, health and safety regulations as well as compliance with facility-specific permits. In 1993, 1,182 inspections were conducted at Amoco facilities in the United States, 29 percent by federal, 56 percent by state and 15 percent by local agencies. This represents a 30 percent decrease from the 1,687 inspections conducted in 1992.

Amoco facilities were issued 134 citations in 1993. This represents a 14 percent decrease from the 156 citations issued in 1992. Although some citations resulted from self reporting, most were based on results of agency visits.

We have expressed our overall compliance measure as the ratio of the number of Amoco citations per inspection. The 1,182 inspections and 134 citations in 1993 resulted in a total of 0.11 citations per inspection (or approximately one citation per nine inspections). Citations per inspection for the years 1990-1993 are shown in Figure 22.

Fines Paid

Fines paid by the corporation as a result of compliance citations by agencies totaled approximately \$410,000 in 1993 (see Figure 23). Compared to fines paid in the three preceding years, fines paid in 1993 increased. However, more than half of the fines reported paid in 1993 were the result of a new internal reporting method, which had not been used in previous years. It should also be noted that many fines are subject to a lengthy negotiation process, and, therefore, most of the fines paid in 1993 represent fines assessed in previous years. In contrast to fines paid, fines assessed against Amoco in 1993 decreased compared to 1992.

Figure 22—Citations and Inspections

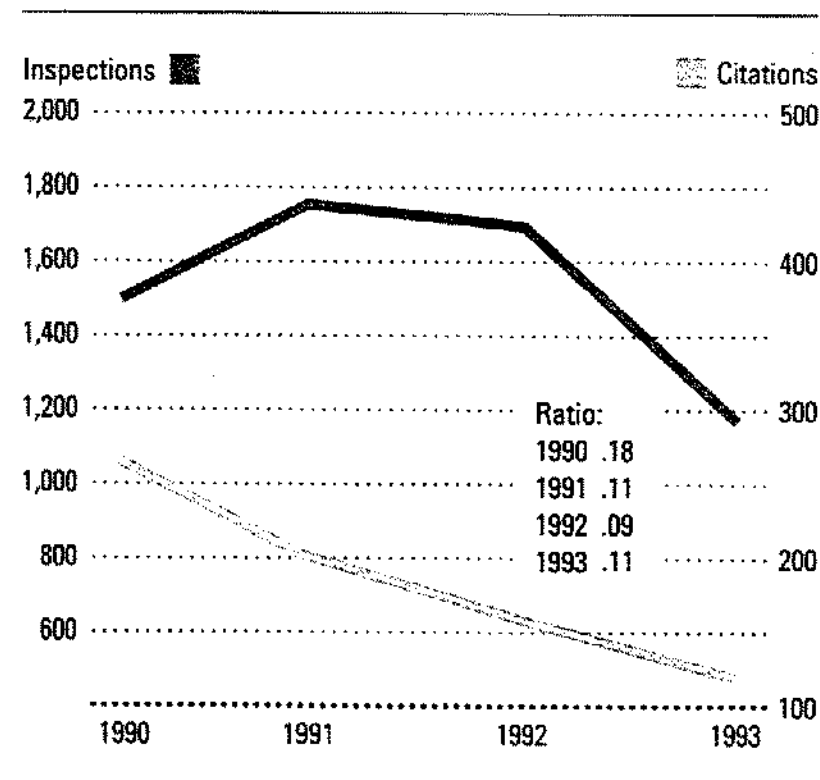
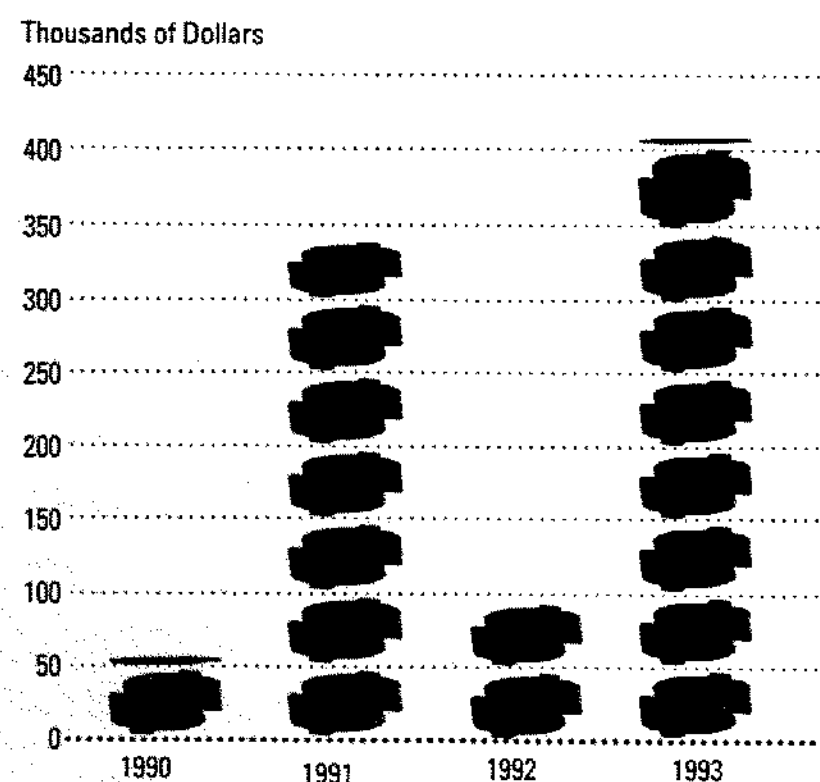


Figure 23—Fines Paid



APPENDIX E

ABOUT IRRC

IRRC is the United States' leading information resource for institutional investors, with programs in the environment, corporate governance, social issues, and global shareholder issues. Since 1972, it has forged a unique niche as a source of nonpartisan information on controversial topics for institutional investors, investment managers, insurance companies, banks, law firms, and leading corporations. IRRC is supported primarily by subscription fees paid by over 400 investing institutions and 100 operating companies for access to IRRC analytic reports, publications, software and proxy services.

IRRC's Environmental Information Service provides information on corporate environmental progress that leading companies use to benchmark their progress, and which investors use to inform their judgments about environmental proxy issues. Each year, the Environmental Information Service produces the **Corporate Environmental Profiles Directory** and proprietary software, which distills quantitative and qualitative information that can be used for benchmarking and for assessing environmental performance trends at 1500 public companies. Corporate Environmental Information Service subscribers include: **Allergan, ARCO, AT&T, British Petroleum, Chevron, Exxon, General Electric, Hewlett Packard**, and more than thirty other leading corporations. In conjunction with research partners such as the Environmental Protection Agency, the World Resources Institute, and Eco Efficiency Associates, IRRC undertakes empirical research on how corporate environmental programs relate to environmental trends and financial performance.

IRRC is governed by an independent board of directors drawn from the following organizations:

AT&T

Alliance Capital Management
Carnegie Corporation of New York
The Common Fund
The Ford Foundation
General Electric Investment Corporation
Institute for Fiduciary Education
University of Iowa College of Law

Bankers Trust
Investment Management Advisors
ITT Corporation
Hamilton Lane Advisors
TIAA-CREF
Time Warner Inc.
State of Wisconsin Investment Board

For more information about subscribing to IRRC's Environmental Information Service, contact Kristin Haldeman. For further information on environmental communication or environmental indicator issues, contact Jonathan Naimon.

IRRC

1350 Connecticut Ave., N.W. • Suite 700 • Washington, DC 20036-1701
(202) 833-0700 • fax (202) 833-3555

APPENDIX F

ABOUT GEMI

The Global Environmental Management Initiative (GEMI) is a non-profit organization of leading companies dedicated to helping business achieve environmental, health and safety excellence. Through the collaborative efforts of its members, GEMI promotes a worldwide business ethic for environmental management and sustainable development through example and leadership. GEMI's member companies as of March 1996 are:

AT&T
AlliedSignal Inc.
Amoco Corporation
Anheuser-Busch Companies
Apple Computer, Inc.
Bristol-Myers Squibb Company
Browning-Ferris Industries
The Coca-Cola Company
Colgate-Palmolive Company
The Coors Brewing Company
Digital Equipment Corporation
The Dow Chemical Company
Duke Power Company
The DuPont Company
Eastman Kodak Company
Florida Power and Light
Georgia-Pacific Corporation
Halliburton Company
Hughes Electronics Corporation
Johnson & Johnson
Merck & Company, Inc.
Olin Corporation
The Procter & Gamble Company
The Southern Company
Tenneco
Union Carbide Corporation
WMX Technologies, Inc.

Global Environmental Management Initiative
2000 L Street N.W., Suite 710 • Washington, DC 20036
202-296-7449 • Fax: 202-296-7442
Email: gemi@worldweb.net
<http://www.gemi.org>