

Measuring the Transparency of Environmental Sustainability Reporting Through Websites of Fortune 50 Corporations

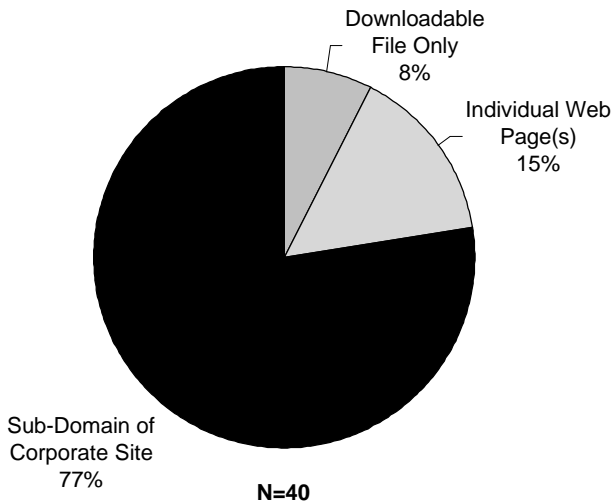
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Summary of Findings

- Environmental sustainability reporting is still being used as a public relations tool to position companies favorably on environmental issues, rather than to hold companies accountable to stakeholders for environmental performance.
- The majority of the Fortune 50 are providing some kind of environmental information online, but there is room for improvement in the adoption of the interactive and integrated technology that is available for reporting and stakeholder participation within the Web medium. These technologies would enhance the transparency of the reporting process.
- There is little evidence of stakeholder involvement in the environmental sustainability reporting process. If companies are involving stakeholders in this process, the disclosure of such participation would improve the appearance of transparency.
- Involving third party groups that provide reporting standards helped organizations to be more transparent in their reporting process, as determined by the ERTS scorecard.

80% of the Fortune 50 report environmental sustainability information online, mostly in dedicated sub-domains.

Figure 1. Location of online reporting within site among entities providing environmental information.



In Context

- A KPMG study of 1,100 companies found 24% had such reporting in 1999, up from 17% in 1996 and 13% in 1993.
- A 2002 study of the Global Fortune 500 found 63% reporting some kind of environmental information on the Internet.

Adoption of audio-visual and social media in environmental reporting is low.

Figure 2. Types of media observed in reports of environmental sustainability online.

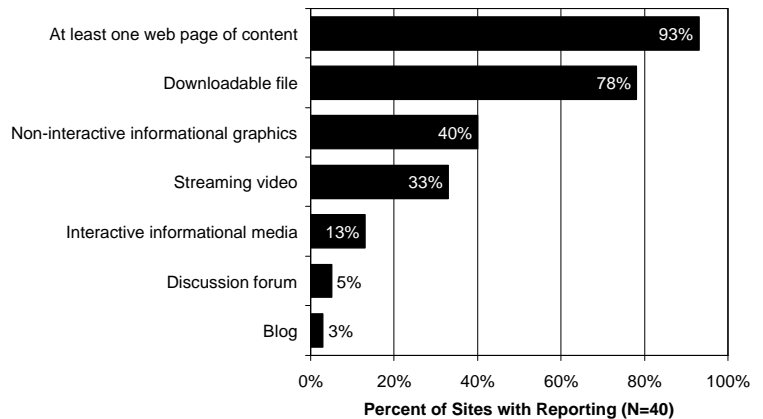
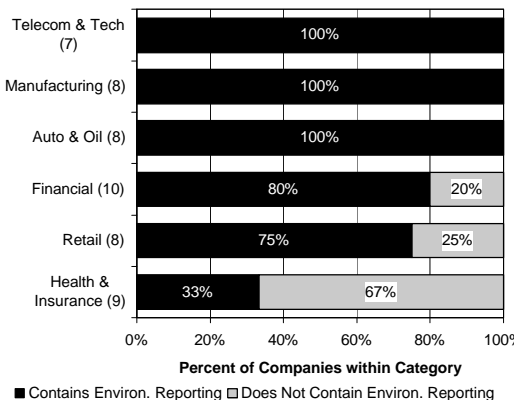


Figure 3. Saturation of reporting per industry category.



Companies in environmentally-sensitive industries are more likely to report on sustainability, but industry is not a requisite for providing such information.

- Companies in sensitive industries like oil refineries, auto manufacturing, and transportation all had some kind of environmental information. Large manufacturing companies did as well.
- Even among industries outside of environmental scrutiny, like telecommunications and technology companies, the likelihood to report on environmental sustainability efforts was still high.
- Companies in the health care and insurance industries were the least likely to provide information (33%).

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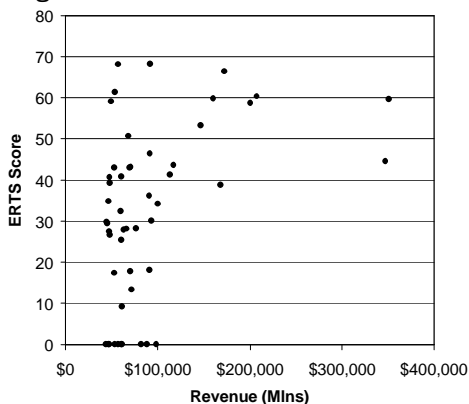
How well do companies score on the Environmental Reporting Transparency Scorecard?

Company	Fortune Rank	Revenue (Millions)	ERTS Score	Company	Fortune Rank	Revenue (Millions)	ERTS Score
Hewlett-Packard*	14	\$91,658	68.20	Target*	33	\$59,490	32.34
Dell*	34	\$57,095	68.10	Verizon	13	\$93,221	30.10
ConocoPhillips	5	\$172,451	66.40	Microsoft*	49	\$44,282	29.80
Johnson & Johnson*	36	\$53,324	61.30	Time Warner*	48	\$44,788	29.48
General Motors*	3	\$207,349	60.30	Morgan Stanley	20	\$76,688	28.14
Ford Motor*	7	\$160,126	59.84	Kroger	26	\$66,111	28.10
Wal-Mart Stores	1	\$351,139	59.60	AT&T	27	\$63,055	27.90
Dow Chemical*	40	\$49,124	59.10	Lowe's	45	\$46,927	27.50
Chevron*	4	\$200,567	58.72	Wells Fargo*	41	\$47,979	26.70
Citigroup*	8	\$146,777	53.20	State Farm Insurance	31	\$60,528	25.40
Procter & Gamble*	25	\$68,222	50.70	Valero Energy	16	\$91,051	18.06
IBM*	15	\$91,424	46.40	Altria Group	23	\$70,324	17.75
Exxon Mobil*	2	\$347,254	44.60	Sears Holdings	38	\$53,012	17.40
Bank of America*	9	\$117,017	43.64	UnitedHealth Group	21	\$71,542	13.30
Merrill Lynch	22	\$70,591	43.08	Boeing	28	\$61,530	9.20
Goldman Sachs Group	24	\$69,353	43.00	AmerisourceBergen	29	\$61,203	0.00
Pfizer*	39	\$52,415	43.00	Berkshire Hathaway	12	\$98,539	0.00
American Intl Group	10	\$113,194	41.24	Cardinal Health	19	\$81,895	0.00
Marathon Oil*	30	\$60,643	40.80	Costco Wholesale	32	\$60,151	0.00
United Parcel Service*	43	\$47,547	40.70	Freddie Mac	50	\$44,002	0.00
United Technologies*	42	\$47,829	39.16	Lehman Brothers	47	\$46,709	0.00
General Electric*	6	\$168,307	38.80	McKesson	18	\$88,050	0.00
Home Depot	17	\$90,837	36.18	MetLife	37	\$53,275	0.00
Wachovia Corp.	46	\$46,810	34.82	Walgreen	44	\$47,409	0.00
JP Morgan Chase & Co	11	\$99,973	34.16	WellPoint	35	\$56,953	0.00

*Indicates entities that submit Corporate Environmental Reports to the Global Reporting Initiative (GRI).

A moderately strong relationship exists between revenue and overall ERTS score.

Figure 4. Revenue vs. ERTS Score.



- A moderately strong ($r=.42$) and statistically significant ($p<.01$) relationship between revenue and the overall ERTS score suggests a relationship between the two variables.
- This does not suggest a causal relationship between environmental reporting and revenue, as perhaps those with greater revenue can afford to put more effort into such reporting.

Companies that submit a corporate environmental report to the Global Reporting Initiative have significantly higher ERTS scores



[$t=5.503$, $p < .000$]

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Policies, goals and awards are common elements in environmental reporting online; energy consumption is widely present.

Figure 5. Elements of environmental reporting.

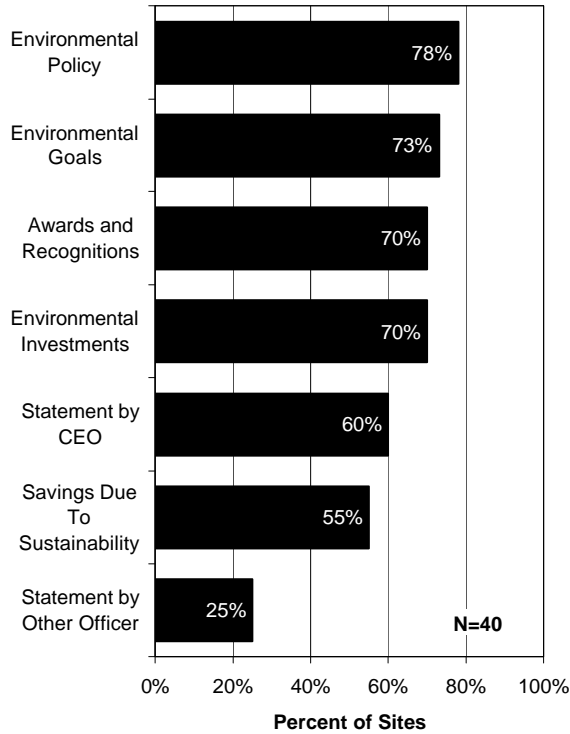
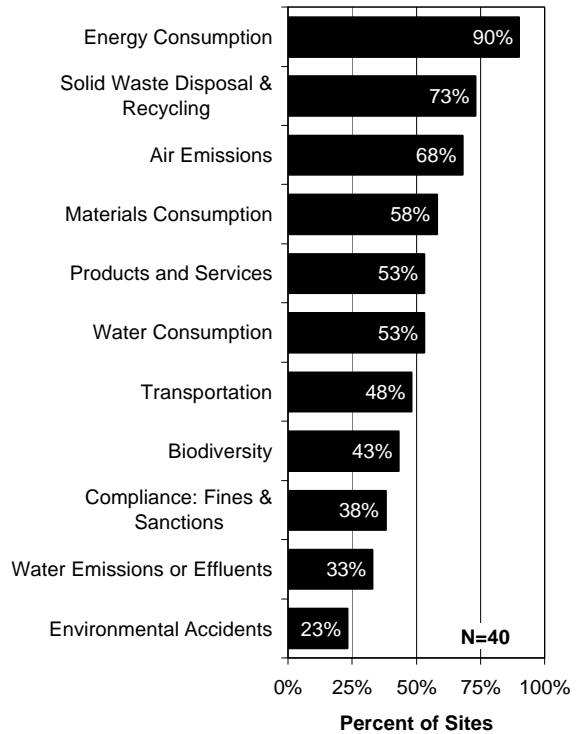


Figure 6. Topics discussed in environmental reporting.



Accountability is low, with few explaining the significance of unfavorable results, including third-party verification, or providing access to original data sets.

- Of the 40 companies that included information about environmental sustainability online, three did not include any form of numerical reporting.
- 14% of those that included numerical reporting said their environmental performance was verified by a third party.
- Two companies provided original data so that the reader could verify results.
- 45% of companies that provided any information about environmental sustainability reported unfavorable results.
- Only 6% of those reporting unfavorable results provided an explanation of the significance of the result “most of the time.”
- 61% of those that reported unfavorable results provided positive interpretations most of the time or some of the time.

Figure 7. Context provided in numerical reporting.

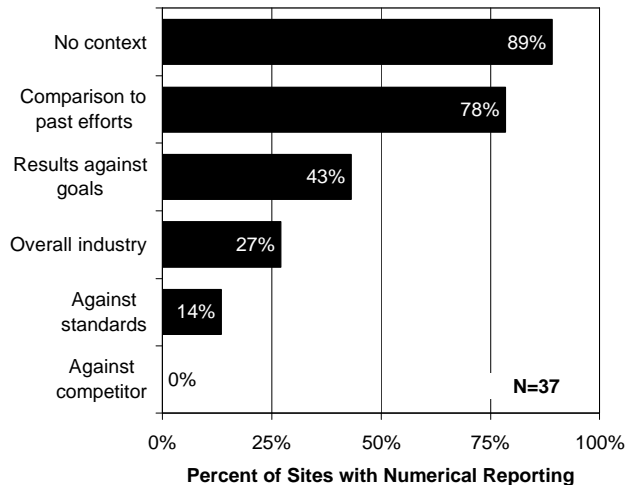
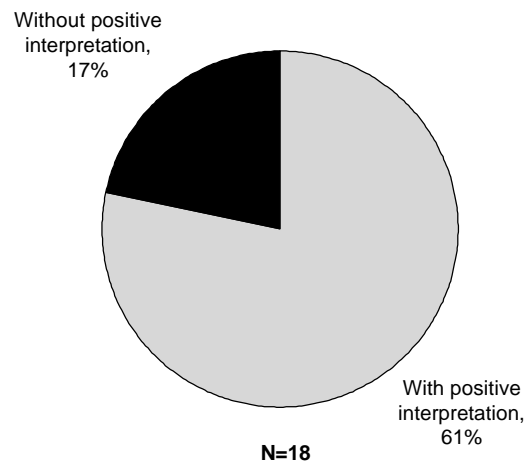


Figure 8. Interpretations of unfavorable results.



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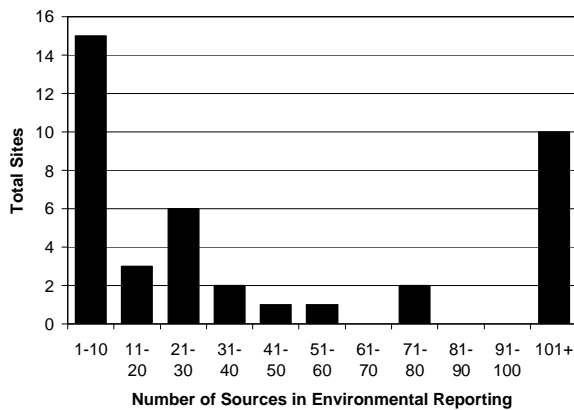
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Companies fall short in the transparency of reporting, especially given the possibilities for two-way communication and real-time reporting afforded by the Web medium.

Stakeholder Involvement

- 80% of companies with reports identified current or planned collaboration with stakeholder groups to improve environmental impact.
- 38% provided evidence or an explanation of how stakeholders were involved in the development of the reports.
- 38% provided specific contact information or forms for questions regarding environmental information.
- Only one company provided a blog and two provided discussion forums.

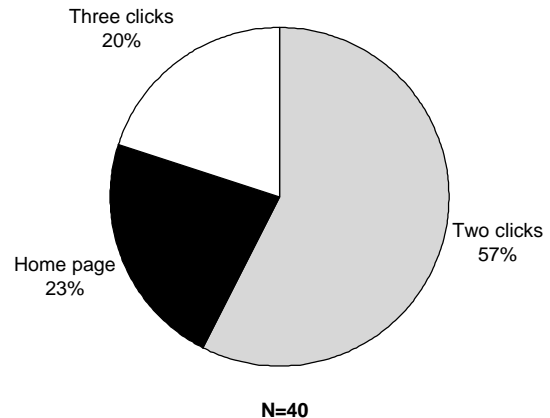
Figure 9. Total number of sources in reporting section.



Substantive Information for Decision-Making

- There was a large gap in the total number of sources included in environmental sustainability section, with 37% providing 1-10 sources, and 25% providing more than 100.
- 60% of companies that reported environmental sustainability online also provided a formal, periodically-updated report on their environmental impact and performance.
- Of these 30 companies that provided a formal report, 43% were in a PDF format only, 17% were only Web-based reports, and 40% provided both Web-based and PDF versions.

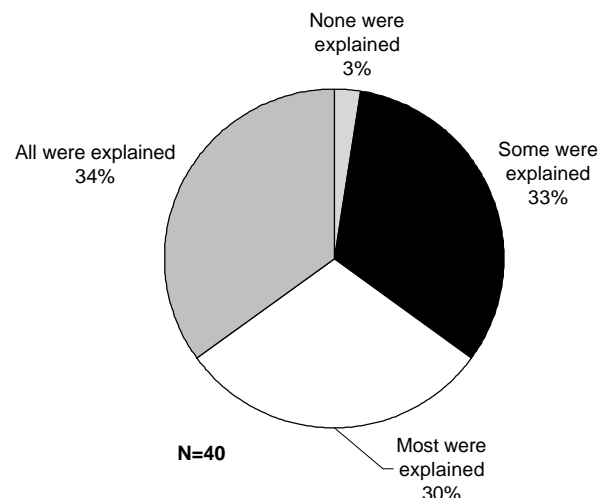
Figure 10. Click distance to environmental reporting.



Openness of Reporting

- Most environmental reporting was found through a menu bar or About Us section, for a total of two clicks required to find the information.
- 34% of sites explained all of the difficult terms in their environmental sustainability reporting.
- 33% of sites only explained some of the difficulty terms in their environmental sustainability reporting.
- The average Flesch Reading Ease readability score was 36 (“difficult”).
- Reading Ease Scores ranged from 18 (“very difficult”) to 67 (“standard”).
- Those with the easiest scores were often the lightest in significant content, especially with regards to performance measures.
- While the Internet and use of database software could allow for real time data reporting, none of the Websites were that sophisticated yet. The most recent reports (8) were identified as 2007. The rest were listed as 2006 reports (30).
- Two sites did not include any dates in their reporting.

Figure 11. Amount of difficult terms explained.



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Environmental Reporting Transparency Scorecard (100 pts total)

Use of Technology (12 pts)

Select all the types of content that are available.

- [1 pt] Web Page
- [1 pt] File, PDF
- [1 pt] File, Spreadsheet
- [1 pt] File, Other
- [1 pt] Recording, Video
- [1 pt] Recording, Audio
- [1 pt] Non-interactive informational graphics
- [1 pt] Interactive Media
- [1 pt] Social Media, Blog
- [1 pt] Social Media, Discussion Forum
- [1 pt] Social Media, Other
- [1 pt] Other

Useful Information (23 pts)

How many pages, reports, or original sources are provided in the environmental reporting section.

- [.5 pts] 1-10
- [1 pt] 11-20
- [1.5 pts] 21-30
- [2 pts] 31-40
- [2.5 pts] 41-50
- [3 pts] 51-60
- [3.5 pts] 61-70
- [4 pts.] 71-80
- [4.5 pts.] 81-90
- [5 pts.] 91+-100
- [5.5 pts.] 101+

Select any of the following that are included in the environmental reporting section.

- [1 pt] Environmental Policy
- [1 pt] Environmental Goals
- [1 pt] Environmental investments
- [1 pt] Savings due to environmental efforts
- [1 pt] Statement by CEO
- [1 pt] Statement by other officer
- [1 pt] Awards or 3rd party recognition

Select any topics discussed on the Website with regard to environmental sustainability.

- [1 pt] Air emissions
- [1 pt] Biodiversity
- [1 pt] Compliance: fines and sanctions
- [1 pt] Energy consumption
- [1 pt] Environmental accidents
- [1 pt] Materials consumption (other than energy)
- [1 pt] Products and services
- [1 pt] Solid waste disposal and recycling
- [1 pt] Transportation
- [1 pt] Water consumption
- [1 pt] Water emissions or effluents

Accountability (22 pts)

Select any types of numerical reporting used describe the results of environmental sustainability efforts. This does not include projections.

- [1 pt] Total
- [1 pt] Comparison to the past
- [1 pt] Comparison to standards of performance
- [1 pt] Against goals
- [1 pt] Comparison to industry

Was any information verified by an external third party such as EPA, GRI, accounting agency, or an environmental consultant?

[4 pts] Yes

Is the original data available for review?

[3 pts] Yes

Does the Website report any unfavorable results?

[4 pts] Yes

How does the Website disclose unfavorable results and topics?

- [1 pt] Reports most results with positive interpretations
- [2 pts] Reports some results with positive interpretations
- [3 pts] Reports unfavorable results with no interpretation

Does the report try to explain the significance of the unfavorable results in such a way that does not put it in favorable light?

- [1 pt] Does not explain so reader understands the significance
- [2 pts] Explains some so reader understands the significance
- [3 pts] Explains most so reader understands the significance

Involvement (20 pts)

Select all functions through which users can provide feedback.

- [1 pt] General contact information/form
- [1 pt] Contact information/form specifically for environmental reporting
- [2 pts] Blog comments
- [2 pts] Discussion forum

Select any channels through which responses to feedback from stakeholders are provided.

- [2 pts] Through discussion forum
- [2 pts] Through blog
- [1 pt] Through FAQ

Does this Website indicate that stakeholders were involved in the development of the criteria for the reporting?

[5 pts] Yes

Does this Website mention efforts or planned efforts to work with customers, activist groups, employees, investors and/or other stakeholders to improve environmental sustainability efforts.

[5 pts] Yes

Openness (23 pts)

If environmental sustainability efforts are reported, how many clicks does it take to get to the first environmental report page?

- [3 pts] 1 click
- [2 pts] 2 clicks
- [1 pt] 3 clicks
- [0 pts] 4+ clicks

Does the Website provide a report of its environmental impact/sustainability that is periodically updated and performance?

[5 pts] Yes

Enter the Flesch Reading Ease scores for the first pages (up to five) that have narrative content of at least three paragraphs.

[Mean score x 0.10 pts]

Were the unfamiliar terms explained in such a way that an average reader could understand them?

- [3 pts] All were explained
- [2 pts] Most were explained
- [1 pt] Some were explained
- [0 pts] None were explained

Select the most recent year for which environmental sustainability efforts were reported.

- [3 pts] 2007
- [2 pts] 2006
- [1 pt] 2005
- [0 pts] 2004 or earlier