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.

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

<table>
<thead>
<tr>
<th>Company</th>
<th>Fortune Rank</th>
<th>Revenue (Millions)</th>
<th>ERTS Score</th>
<th>Company</th>
<th>Fortune Rank</th>
<th>Revenue (Millions)</th>
<th>ERTS Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hewlett-Packard*</td>
<td>14</td>
<td>$91,658</td>
<td>68.20</td>
<td>Target*</td>
<td>33</td>
<td>$59,490</td>
<td>32.34</td>
</tr>
<tr>
<td>Dell*</td>
<td>34</td>
<td>$57,095</td>
<td>68.10</td>
<td>Verizon</td>
<td>13</td>
<td>$93,221</td>
<td>30.10</td>
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<tr>
<td>ConocoPhillips</td>
<td>5</td>
<td>$172,451</td>
<td>66.40</td>
<td>Microsoft*</td>
<td>49</td>
<td>$44,282</td>
<td>29.80</td>
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<tr>
<td>Johnson &amp; Johnson*</td>
<td>36</td>
<td>$53,324</td>
<td>61.30</td>
<td>Time Warner*</td>
<td>48</td>
<td>$44,788</td>
<td>29.48</td>
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<tr>
<td>General Motors*</td>
<td>3</td>
<td>$207,349</td>
<td>60.30</td>
<td>Morgan Stanley</td>
<td>20</td>
<td>$76,688</td>
<td>28.14</td>
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<tr>
<td>Ford Motor*</td>
<td>7</td>
<td>$160,126</td>
<td>59.84</td>
<td>Kroger</td>
<td>26</td>
<td>$66,111</td>
<td>28.10</td>
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<tr>
<td>Wal-Mart Stores</td>
<td>1</td>
<td>$351,139</td>
<td>59.60</td>
<td>AT&amp;T</td>
<td>27</td>
<td>$63,055</td>
<td>27.90</td>
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<tr>
<td>Dow Chemical*</td>
<td>40</td>
<td>$49,124</td>
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<td>Lowe's</td>
<td>45</td>
<td>$46,927</td>
<td>27.50</td>
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<tr>
<td>Chevron*</td>
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<td>$200,567</td>
<td>58.72</td>
<td>Wells Fargo*</td>
<td>41</td>
<td>$47,979</td>
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<tr>
<td>Citigroup*</td>
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<td>$146,777</td>
<td>53.20</td>
<td>State Farm Insurance</td>
<td>31</td>
<td>$60,528</td>
<td>25.40</td>
</tr>
<tr>
<td>Procter &amp; Gamble*</td>
<td>25</td>
<td>$68,222</td>
<td>50.70</td>
<td>Valero Energy</td>
<td>16</td>
<td>$91,051</td>
<td>18.06</td>
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<tr>
<td>IBM*</td>
<td>15</td>
<td>$91,424</td>
<td>46.40</td>
<td>Altria Group</td>
<td>23</td>
<td>$70,324</td>
<td>17.75</td>
</tr>
<tr>
<td>Exxon Mobil*</td>
<td>2</td>
<td>$347,254</td>
<td>46.00</td>
<td>Sears Holdings</td>
<td>38</td>
<td>$53,012</td>
<td>17.40</td>
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<tr>
<td>Bank of America*</td>
<td>9</td>
<td>$117,017</td>
<td>43.64</td>
<td>UnitedHealth Group</td>
<td>21</td>
<td>$71,542</td>
<td>13.30</td>
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<tr>
<td>Merrill Lynch</td>
<td>22</td>
<td>$70,591</td>
<td>43.08</td>
<td>Boeing</td>
<td>28</td>
<td>$61,530</td>
<td>9.20</td>
</tr>
<tr>
<td>Goldman Sachs Group</td>
<td>24</td>
<td>$69,353</td>
<td>43.00</td>
<td>AmerisourceBergen</td>
<td>29</td>
<td>$61,203</td>
<td>0.00</td>
</tr>
<tr>
<td>Pfizer*</td>
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<td>$52,415</td>
<td>43.00</td>
<td>Berkshire Hathaway</td>
<td>12</td>
<td>$98,539</td>
<td>0.00</td>
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<tr>
<td>American Int'l Group</td>
<td>10</td>
<td>$113,194</td>
<td>41.24</td>
<td>Cardinal Health</td>
<td>19</td>
<td>$81,895</td>
<td>0.00</td>
</tr>
<tr>
<td>Marathon Oil*</td>
<td>30</td>
<td>$60,643</td>
<td>40.80</td>
<td>Costco Wholesale</td>
<td>32</td>
<td>$60,151</td>
<td>0.00</td>
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<tr>
<td>United Parcel Service*</td>
<td>43</td>
<td>$47,547</td>
<td>40.70</td>
<td>Freddie Mac</td>
<td>50</td>
<td>$44,002</td>
<td>0.00</td>
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<tr>
<td>United Technologies*</td>
<td>42</td>
<td>$47,829</td>
<td>39.16</td>
<td>Lehman Brothers</td>
<td>47</td>
<td>$46,709</td>
<td>0.00</td>
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<tr>
<td>General Electric*</td>
<td>6</td>
<td>$168,307</td>
<td>38.80</td>
<td>McKesson</td>
<td>18</td>
<td>$88,050</td>
<td>0.00</td>
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<tr>
<td>Home Depot</td>
<td>17</td>
<td>$90,837</td>
<td>36.18</td>
<td>MetLife</td>
<td>37</td>
<td>$53,275</td>
<td>0.00</td>
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<tr>
<td>Wachovia Corp.</td>
<td>46</td>
<td>$46,810</td>
<td>34.82</td>
<td>Walgreen</td>
<td>44</td>
<td>$47,409</td>
<td>0.00</td>
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<tr>
<td>JP Morgan Chase &amp; Co</td>
<td>11</td>
<td>$99,973</td>
<td>34.16</td>
<td>WellPoint</td>
<td>35</td>
<td>$56,953</td>
<td>0.00</td>
</tr>
</tbody>
</table>

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

A moderately strong relationship exists between revenue and overall 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.

<table>
<thead>
<tr>
<th>µ Non-GRI=20.7</th>
<th>µ GRI=47.4</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image_url" alt="Graph showing revenue vs. ERTS score" /></td>
<td></td>
</tr>
</tbody>
</table>

[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 was low, with few reporting unfavorable results, third-party verification, or providing access to any original data sets.

Figure 7. Context provided in numerical reporting.

- 13% of those with reports said that their environmental performance was verified by a third party.
- Two companies provided original data so that the reader could verify results.
- 36% of companies reported unfavorable results.
- Only 6% of the reports provided an explanation of the significance of the unfavorable result.
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Companies fall short in the transparency of reporting, especially given the possibilities for two-way communication and updated 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.
- Only one company provided a blog and two provided discussion forums.
- 38% provided specific contact information or forms for questions regarding environmental information.

Substantive Information for Decision-Making
- Of the 30 companies that provided a formal report on their environmental impact and performance, 43% provided a PDF report, 17% had Web-based reports, and 40% provided both Web-based and PDF versions.

Accessibility of Information
- The average Flesch Reading Ease Readability: 36 (“difficult”). Scores ranged from 18 (“very difficult”) to 67 (“standard”). Those with the easiest scores often were the lightest in significant content, especially with regards to environmental performance.
- Only 3% explained all difficult terms, while 33% explained most of the terms, 30% explained some of the terms, and 35% didn’t explain any of the terms.
- 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).
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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