Sustainability Rankings: Impacts on Corporate Sustainability

Sharon Muli
University of Pennsylvania

Follow this and additional works at: http://repository.upenn.edu/mes_capstones
Part of the Environmental Sciences Commons

http://repository.upenn.edu/mes_capstones/54

This paper is posted at ScholarlyCommons. http://repository.upenn.edu/mes_capstones/54
For more information, please contact libraryrepository@pobox.upenn.edu.
Sustainability Rankings: Impacts on Corporate Sustainability

Abstract
Companies are increasingly being held responsible for their actions because of pressure to maintain a positive public perception, comply with legislation, fulfill their company vision, and outperform competitors. An increasing number of organizations now publish sustainability rankings to evaluate the environmental, social, and economic sustainability of companies. While the purpose of many sustainability rankings varies and may range from informing the public to informing investment decisions, many rankings also aim to improve the sustainability of companies. This report identifies changes, both improvements and declines, in the sustainability rankings of eight companies in the health care industry and attempts to connect these changes to corporate sustainability efforts. Interviews of sustainability professionals from within several of these companies provide insight on the causes for changes in rankings, the internal impacts of these changes, and the general impacts of sustainability rankings within their company.

This analysis found that many companies have experienced a notable change in one or more sustainability rankings over the past several years. While it was challenging to identify the causes or impacts of a single ranking using externally available information, the interviews proved valuable. The causes of changes in rankings included changes to the company’s sustainability strategy and the development of a cohesive effort to perform well on the rankings that were considered most influential. Rankings that are well-recognized tend to have a greater impact on companies than those that are newer, focus on a specific topic, or are located in only one region. Rankings can generally impact companies by sparking discussion among employees, encouraging companies to evaluate their strategy to communicate sustainability, and providing a platform for sustainability professionals to communicate the company’s successes. Because employees are often drivers for a company’s sustainability, these findings indicate that sustainability rankings may provide a means to drive sustainability when this opportunity is recognized and utilized.

Disciplines
Environmental Sciences | Physical Sciences and Mathematics

This thesis or dissertation is available at ScholarlyCommons: http://repository.upenn.edu/mes_capstones/54
Sustainability Rankings: Impacts on Corporate Sustainability

Sharon Muli
University of Pennsylvania
Master of Environmental Studies, May 2013

Primary Reader: James Hagan
Lecturer & Advisor, Master of Environmental Studies, University of Pennsylvania

Secondary Reader: Keith Sutter
Product Director, Sustainable Brand Marketing, Johnson & Johnson
DEDICATION

To all of the individuals who are working to drive sustainability in order to better our future.

ACKNOWLEDGEMENT

I would like to acknowledge the professors in the University of Pennsylvania’s MES program who have expanded my knowledge and deepened my passion for the environment. I would like to thank my readers for supporting this project from the formation of the idea through the final product. Finally, I recognize my parents and my sister who have always supported me through the excitement and the challenges I have experienced throughout my studies.
ABSTRACT

SUSTAINABILITY RANKINGS: IMPACTS ON CORPORATE SUSTAINABILITY

Author: Sharon Muli
Master of Environmental Studies, May 2013, University of Pennsylvania

Primary Reader: James Hagan
Lecturer & Advisor, Master of Environmental Studies, University of Pennsylvania

Secondary Reader: Keith Sutter
Product Director, Sustainable Brand Marketing, Johnson & Johnson

Companies are increasingly being held responsible for their actions because of pressure to maintain a positive public perception, comply with legislation, fulfill their company vision, and outperform competitors. An increasing number of organizations now publish sustainability rankings to evaluate the environmental, social, and economic sustainability of companies. While the purpose of many sustainability rankings varies and may range from informing the public to informing investment decisions, many rankings also aim to improve the sustainability of companies. This report identifies changes, both improvements and declines, in the sustainability rankings of eight companies in the health care industry and attempts to connect these changes to corporate sustainability efforts. Interviews of sustainability professionals from within several of these companies provide insight on the causes for changes in rankings, the internal impacts of these changes, and the general impacts of sustainability rankings within their company.

This analysis found that many companies have experienced a notable change in one or more sustainability rankings over the past several years. While it was challenging to identify the causes or impacts of a single ranking using externally available information, the interviews proved valuable. The causes of changes in rankings included changes to the company’s sustainability strategy and the development of a cohesive effort to perform well on the rankings that were considered most influential. Rankings that are well-recognized tend to have a greater impact on companies than those that are newer, focus on a specific topic, or are located in only one region. Rankings can generally impact companies by sparking discussion among employees, encouraging companies to evaluate their strategy to communicate sustainability, and providing a platform for sustainability professionals to communicate the company’s successes. Because employees are often drivers for a company’s sustainability, these findings indicate that sustainability rankings may provide a means to drive sustainability when this opportunity is recognized and utilized.
# TABLE OF CONTENTS

Introduction and Literature Review .................................................................................................. 1  
   About Sustainability in Companies ............................................................................................... 2  
   About Sustainability Rankings ........................................................................................................ 3  
   Objective of Sustainability Rankings .............................................................................................. 10  
   Sustainability in Health Care Companies ....................................................................................... 12  
Materials and Methods...................................................................................................................... 13  
Results............................................................................................................................................... 18  
   Sustainability Rankings over Time ................................................................................................. 18  
   Changes by Ranking ....................................................................................................................... 19  
   General Impacts of Sustainability Rankings .................................................................................... 30  
Discussion ......................................................................................................................................... 32  
   Rankings and Sustainability Professionals ....................................................................................... 33  
   Rankings and Companies ................................................................................................................ 34  
   Ratings and the Raters .................................................................................................................... 35  
   Future Research ............................................................................................................................... 35  
Conclusions......................................................................................................................................... 35  
Appendix ............................................................................................................................................ 37  
Bibliography ....................................................................................................................................... 38
LIST OF TABLES

Table 1: About Select Well-Recognized Sustainability Rankings ................................................ 6
Table 2: List of Companies Studied............................................................................................. 16
Table 3: Interbrand's Gap Score Changes, 2011 to 2012................................................................. 37

LIST OF FIGURES

Figure 1: Inventory of the Most Prominent Ratings Extant Globally.............................................. 4
Figure 2: Dow Jones Sustainability World Index 2012; Top Components ................................... 7
Figure 3: Interbrand's Best Global Green Brands 2012................................................................. 8
Figure 4: Newsweek's Green Rankings 2012: Global Companies ................................................. 9
Figure 5: Publication of GlaxoSmithKline's Sustainability Rankings in 2012 Corporate
          Responsibility Report ................................................................................................... 10
Figure 6: Newsweek US Rankings .............................................................................................. 20
Figure 7: Newsweek Global Rankings ......................................................................................... 20
Introduction and Literature Review

The global population is increasing and the Earth’s finite resources must continue to meet the growing demands. To tackle this global challenge, the World Commission on Environment and Development proposed “a global agenda for change” in 1987 that focused on sustainability, which was defined as meeting “the needs of the present without compromising the ability of future generations to meet their own needs” (The World Commission on Environment and Development 1987). In the long-term, embracing sustainability will help to avoid a situation in which “human demand for essential energy and materials exceeds the capacity of the Earth to supply these resources and if the release of wastes exceeds the capacity of the biosphere to absorb or detoxify these substances” (Burger, et al. 2012). Over the past several decades, sustainability has become a growing topic of discussion in settings ranging from international forums to local communities.

The modern concept of sustainability includes environmental, social, and economic components. With the global challenges in mind, many organizations, groups, and individuals are making changes to move towards becoming more sustainable. This shift towards taking action and sharing both goals and achievements can be demonstrated by actions taken recently by governments and companies. For example, Executive Order 13423 required US federal agencies to increase energy efficiency, conserve water, purchase more sustainable vehicles, purchase more environmentally preferable products, and more to serve as an example to lead the nation in a better direction (Federal Register 2007). Companies are increasingly being held accountable for their environmental and social impacts and are expected to share this information.
publicly. The percentage of S&P 500 companies publicly sharing environmental, social and
governance information increased from about 20% in 2010 to about 53% in 2012 (Governance &
Accountability Institute, Inc. 2012).

About Sustainability in Companies

Many companies are motivated to incorporate sustainability into their business strategy
for numerous reasons, including the desire to act responsibly, pressure from legislation, demand
from consumers, and in the self-interest of the business (Carroll, et al. 2012). In a recent study
by the Boston Center for Corporate Citizenship, a survey of business executives found that
“corporate citizenship delivers real business results. It doesn’t just make firms look good and
employees feel good. It helps to achieve business goals such as increasing market share and
managing risk” (Boston College Center for Corporate Citizenship 2012). Corporate
sustainability is often defined as having three key pillars: environmental, social, and economic,
with governance as an overarching framework. While long-term economic success has
historically been a rather self-evident goal of a company, social and particularly environmental
sustainability issues are increasingly becoming a focus. As a result, a growing number of
environmental and social sustainability strategies, programs, and data collection mechanisms are
being developed and implemented within companies.

Guidelines such as ISO 14001 provide guidance on environmental management systems,
software systems facilitate the analysis of a product’s environmental impacts throughout its
entire lifecycle, and the Global Reporting Initiative (GRI) provides a framework for companies
to publicly report sustainability data. Formal sustainability reports and company websites are the
means through which many companies communicate their sustainability initiatives publicly.
About Sustainability Rankings

A wide range of sustainability rankings currently exist that examine corporate sustainability according to environmental, social, economic, and/or governance measures and report their findings to audiences such as the public, investors, and companies themselves. Sustainability rankings are developed by organizations involved in consulting, media, and investment. Many of these rankings apply to companies worldwide and consider all aspects of sustainability, while other rankings focus on a specific industry (such as health care or technology), geographical region, or environmental issue (such as carbon footprint or social impacts). Each organization reports their findings in different formats. For example, a report may include a list that ranks the world’s largest companies against each other, calculates numerical ratings of each company’s overall sustainability performance, calculates each company’s performance in various sustainability categories, lists rankings among competitors in the same industry, and/or lists rankings among companies in the same geographical location. These diverse rating and ranking systems will be referred to as ‘sustainability rankings’ or simply ‘rankings,’ and the organizations who publish them as ‘raters.’

The number of sustainability rankings that exists has been growing, particularly in the past decade. In a study by SustainAbility aimed at evaluating sustainability raters, there were 108 rankings identified as part of the list that they “aspired…to include all of the most prominent ratings extant globally” (SustainAbility, Taking Inventory of the Ratings Universe 2010). As seen below in Figure 1, of these 108 ratings, only 21 of them existed in 2000, indicating that over 87 prominent ratings have been developed in only ten years. Some of the well-recognized rankings include the Dow Jones Sustainability Index (DJSI), Carbon Disclosure Project (CDP)
Leadership Index, FTSE4Good Index Series, Global 100 Most Sustainable Corporations, Fortune’s Most Admired Companies, Newsweek’s Green Rankings, and Wal-Mart Sustainability Index (SustainAbility, Taking Inventory of the Ratings Universe 2010).

Figure 1: Inventory of the Most Prominent Ratings Extant Globally (SustainAbility, Taking Inventory of the Ratings Universe 2010)

Sustainability rankings have been developed for different audiences, including investors, the public, and companies themselves. Because the audience and purpose varies, each ranking is unique in the values they emphasize, the methods of data collection and analysis, and the techniques for sharing their findings. Below,
Table 1: About Select Well-Recognized Sustainability Rankings summarizes basic information regarding three well-known sustainability rankings: the Dow Jones Sustainability Index, Interbrand’s Best Global Green Brands, and Newsweek’s Greenest Companies. These are all well-recognized rankings, and they are beneficial to examine because they are developed by different types of rating organizations.
Table 1: About Select Well-Recognized Sustainability Rankings

<table>
<thead>
<tr>
<th>Sustainability Ranking</th>
<th>Type of Rating Organization</th>
<th>Primary Audience</th>
<th>Companies Considered</th>
<th>Key Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dow Jones Sustainability Index (Dow Jones Sustainability Index 2012)</td>
<td>Futures exchange company (S&amp;P Dow Jones Indices) and investment company (RobecoSAM)</td>
<td>Investors and companies</td>
<td>The 2,500 largest companies in the Dow Jones Total Global Stock Market Index</td>
<td>Long-term and industry-specific economic, environmental, and social criteria</td>
</tr>
<tr>
<td>Interbrand’s Best Global Green Brands (Interbrand 2012)</td>
<td>Consulting company within an advertising company (Omnicom)</td>
<td>Companies</td>
<td>Interbrand’s list of 100 most valuable global brands</td>
<td>Sustainability performance and perception</td>
</tr>
<tr>
<td>Newsweek’s Greenest Companies (Newsweek 2012)</td>
<td>Media, with the support of research organizations (Trucost and Sustainalytics)</td>
<td>The general public and companies</td>
<td>The largest publicly-traded companies based in developed and emerging markets worldwide</td>
<td>Environmental impact, environmental management, disclosure</td>
</tr>
</tbody>
</table>

The Dow Jones Sustainability Index family, launched in 1999, “tracks the stock performance of the world’s leading companies in terms of economic, environmental, and social criteria” (Dow Jones Sustainability Indexes 2012). It is meant to “serve as benchmarks for investors who integrate sustainability consideration into their portfolios” (Dow Jones Sustainability Indexes 2012). The results of this index, which include the top 10% of companies from the 2,500 largest in the Dow Jones Total Global Stock Market Index, can be broken down by both region and sector to meet the needs of particular investors. In addition, the sector level
data identifies one company as “Best-in-Class,” shown below in Figure 2: Dow Jones Sustainability World Index 2012; Top Components. This has led to competition among companies to continually improve to remain on the indices (Dow Jones Sustainability Indexes 2012).

**Figure 2: Dow Jones Sustainability World Index 2012; Top Components (Dow Jones Sustainability Index 2012)**

Interbrand’s Best Global Green Brands ranks companies by focusing on performance and perception, which together they believe make a green company “that operates sustainably and has built a positive image that can be leveraged to strengthen brand value” (Interbrand 2012). Interbrand, a brand consultancy, ranks the best green brands that are “profitable, ethical, and ecologically responsible...[and] are paving the way to a new era of stability, prosperity and confidence” (Interbrand 2012). Below, Figure 3: Interbrand's Best Global Green Brands 2012 shows the results of the 2012 rankings, which rank the companies and assign a gap score indicating the difference between performance and perception of sustainability. The aim of these rankings, explains Interbrand Global CEO Jez Frampton, “should be helping companies to recognize that there is a value to being a sustainable green company” (Interbrand 2012).
The Newsweek Green Rankings, first published in 2009, “is the first effort by a major media organization to rank companies based on their actual environmental footprint, management of that footprint, and sustainability communications” (Newsweek 2012). This ranking examines the largest 500 publicly-traded companies in America (for the US 500 list) and worldwide (for the Global 500 list). It evaluates companies according to environmental impact (with a relative weight of 45%), environmental management (45%), and disclosure (10%). As seen below in Error! Reference source not found., Newsweek publishes the relative ranking of companies globally (and in America) and within each industry, as well as scores in each of the three categories. The rankings are produced in collaboration with Trucost, which specializes in quantitative measurements of corporate environmental impacts, and Sustainalytics, which specializes in qualitative analysis of environmental policies, systems, and programs. Newsweek stated in 2009 that its goal is to “open a conversation on measuring environmental performance measures – an essential first step toward improving it” (Newsweek 2012).
There are several additional sustainability rankings that are notable. The Boston Center for Corporate Citizenship’s Corporate Social Responsibility Index, “captures public perception about the corporate citizenship, governance and workplace practices of more than 200 companies” and has published a list of the top 50 ranked companies in the United States since 2008 (Boston Center for Corporate Citizenship 2013). The Global 100 Most Sustainable Corporations list began in 2005 and is published by the media, research, and investment research company Corporate Knights. It evaluates large companies on sustainability disclosure practices, financial health, product category, and financial sanctions (Global 100 2013). The FTSE4Good evaluates global companies on factors including environmental sustainability, human rights, supply chain labor standards, countering bribery, and mitigating and adapting to climate change (FTSE 2013). It is intended “to provide a tool for investors looking to identify companies that meet globally recognized environmental and social standards, and to facilitate investment in those companies” (SustainAbility 2013). Corporate Responsibility Magazine’s 100 Best Corporate Citizens publishes a ranking annually based on publicly available environmental, social, and governance information (Corporate Responsibility Magazine 2010). The CDP scores...
companies on “the comprehensiveness of their disclosure and aspects of their company’s performance in relation to climate change” (CDP 2013).

**Objective of Sustainability Rankings**

There are a number of objectives of sustainability rankings, including providing information to investors, educating the public and informing their purchasing decisions, and motivating companies to improve. The DJSI offers licenses to the information, and the growth of these licenses suggests that there is growing interest in this information by responsible investors (SustainAbility 2013). To inform the public, many companies share their rankings on their websites and/or sustainability reports. Figure 5: Publication of GlaxoSmithKline's Sustainability Rankings in 2012 Corporate Responsibility Report shows an example of the ways that companies share their recognition in various sustainability rankings. Research indicates that, following the perception of a company’s products and services, the perception of a company’s citizenship, governance, and workplace practices impact a company’s reputation most in the mind of the public (Boston College Center for Corporate Citizenship 2009).

**Figure 5: Publication of GlaxoSmithKline's Sustainability Rankings in 2012 Corporate Responsibility Report**
While the impact of rankings on investors and the public may be clear, many organizations that develop rankings also aim to influence companies as one of their objectives (or they at least recognize that their rankings influence companies in certain ways). SustainAbility conducted a survey of raters to gather information about the ratings, including how they see companies using their rankings. According to the FTSE4Good Index in the survey, the FTSE4Good provides companies “with a transparent and evolving global corporate responsibility standard to aspire to and surpass” (SustainAbility, Rate the Raters Phase 5; Questionnaire for Raters 2013). The Newsweek Green Rankings can be used for “benchmarking performance” and the CR Magazine rankings can help companies “gain insights into their own level of transparency and accountability.” The Carbon Disclosure Project’s scores can be used by companies to “inform engagement plans with suppliers and can lead to purchasing allocation among suppliers – with those who have higher ratings being awarded more business…engage with suppliers in bottom quartiles to improve…[It can also help to] refine their approach to disclosure and in deciding how to progress their strategy on climate change” (SustainAbility, Rate the Raters Phase 5; Questionnaire for Raters 2013). According to the Dow Jones Sustainability Index, “participating companies often report that…[the analysis that serves as the basis for the DJSI] helps them identify areas for improvement with respect to their own sustainability agenda” (SustainAbility, Rate the Raters Phase 5; Questionnaire for Raters 2013). These responses indicate that the raters perceive that rankings are used by companies for purposes including comparing against other companies, improving company sustainability, and improving a company’s reputation by sharing their ranking.
Sustainability in Health Care Companies

A wide variety of companies produce products to support the health care industry. These include companies producing prescription pharmaceuticals, over-the-counter drugs, products to support personal care and maintain hygiene, medical diagnostic devices used in hospitals, treatment technology, and more. Sustainability is especially important in the health care industry, both for the activities within the companies themselves and for the sustainability of their products once they are sold.

Within companies that produce health care products, the processes they use to acquire raw materials, synthesize pharmaceuticals, and manufacture medical devices are energy and resource-intensive and produce significant amounts of waste. However, these processes can be improved. For example, synthesis of pharmaceuticals can be made more sustainable by applying green chemistry principles which include using safer solvents, requiring less energy, using renewable feedstocks, and degrading at the end of their life to reduce persistence in the environment (American Chemistry Society 2013).

The sustainability of health care products in their use and disposal is also important. Once the products leave the health care suppliers, they impact the hospitals, doctors, patients, and staff they come into contact with further down the supply chain. Hospitals operate 24/7, use materials and devices that contain potentially toxic materials, consume large amounts of energy, and produce significant amounts of waste (US Environmental Protection Agency 2013). To reduce these impacts, the majority of hospitals identify “green” attributes as very important when they purchase health care products and supplies, and these greener products are driven by greener suppliers (Johnson & Johnson 2012). For example, a more sustainable medical device
may consume less energy or generate less waste to process a certain number of tests. Products that consume less energy or water, or that produce less waste, have the direct benefits of reducing costs for hospitals. Chemicals that are effective at reducing the spread of disease without containing toxic ingredients are desirable because they are less likely to impact indoor air quality or cause cancer, which is particularly important for hospital patients who may be especially vulnerable (Health Care Without Harm 2013). When hospitals choose to purchase more sustainable products, they can help to create new markets for these products by “leveraging the massive purchasing power of the health care sector” (Health Care Without Harm 2013).

While health care companies are included in many of the well-recognized sustainability rankings, there are also sustainability rankings that focus specifically on issues within this industry. For example, the Access to Medicine Index focuses on important social responsibility issues faced by pharmaceutical companies. It ranks companies according to measures such as pricing products affordably, focusing research and development on high-priority diseases in regions where there is an unfulfilled need, donating products, and participating in philanthropic activities. This ranking explicitly states that, although access to medicine is a complex problem, “The aim of the Access to Medicine Index is to stimulate positive change by publicly encouraging pharmaceutical companies to step up their efforts to improve access to medicine worldwide” (Access to Medicines Index 2012). In addition to these specific rankings, many of the more general rankings also provide a breakdown of rankings within specific industries.

**Materials and Methods**
The companies that were chosen for this analysis produce health care products including pharmaceuticals, medical devices, and consumer products for personal care and hygiene. As shown below in
Many of these companies produce health care products as their primary focus, such as the pharmaceutical companies Merck, Pfizer, and GlaxoSmithKline. Other companies produce a variety of products, such as General Electric which produces health care technology including diagnostic devices in addition to energy infrastructure, aviation, transportation, and other products (GE Healthcare 2013). Narrowing the scope of this study to companies in one industry allowed an easier comparison between companies because their products and customers are somewhat similar and they face similar sustainability challenges. Despite these similarities, these companies vary in the specific categories of health care products they produce, their size, regions where they sell products, their physical location, and their country of origin.
Table 2: List of Companies Studied

<table>
<thead>
<tr>
<th>Companies</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnson &amp; Johnson (Johnson &amp; Johnson 2013)</td>
<td>Health care (pharmaceuticals, medical devices, consumer products)</td>
</tr>
<tr>
<td>General Electric (General Electric 2013)</td>
<td>Health care, energy infrastructure, aviation, transportation, home and business solutions</td>
</tr>
<tr>
<td>Merck (Merck 2013)</td>
<td>Pharmaceuticals (vaccines, prescription products, consumer products, animal health)</td>
</tr>
<tr>
<td>SC Johnson (SC Johnson 2013)</td>
<td>Home cleaning, air care, pest control, home storage, auto care</td>
</tr>
<tr>
<td>Unilever (Unilever 2013)</td>
<td>Nutrition, hygiene, personal care</td>
</tr>
<tr>
<td>Procter &amp; Gamble (Procter &amp; Gamble 2013)</td>
<td>Beauty product, grooming products, and household care</td>
</tr>
<tr>
<td>Pfizer (Pfizer 2013)</td>
<td>Pharmaceuticals (primary care, specialty care and oncology, established products and emerging markets, animal health, consumer health care)</td>
</tr>
<tr>
<td>GlaxoSmithKline (GlaxoSmithKline 2013)</td>
<td>Pharmaceuticals (prescription medicines, consumer health care - medicines, dental health, nutritional drinks)</td>
</tr>
</tbody>
</table>

First, each company’s sustainability rankings were tracked over time using information available on the raters’ websites and the companies’ websites. The following rankings were the focus, if applicable for each company: DJSI (World and North America), FTSE4Good, Corporate Responsibility Magazine’s 100 Best Corporate Citizens, Corporate Knight’s Global
100 Most Sustainable Corporations, the Boston Center for Corporate Citizenship’s Corporate Social Responsibility Index, Interbrand’s Best Global Green Brands, Newsweek’s Greenest Companies (US and Global), and the CDP (disclosure score and transparency grade). Significant changes, both drops and improvements, in sustainability rankings were identified. General trends were also identified. An attempt was made to correlate these changes to activities within the company directly before or after the ranking. This was done to identify whether these changes were the result of a deliberate action taken by the company and whether the publication of these rankings impacted the company internally.

Second, sustainability professionals were interviewed from a number of these health care companies. At least one individual in an environmental or sustainability role was contacted by email or LinkedIn message in each of the eight companies. Not all of the individuals replied to the message or were willing to be interviewed. A total of six individuals were interviewed by phone, Skype, or in-person interviews. The individuals interviewed included those within the Environment Health and Safety group, Corporate Responsibility group, or equivalent. These individuals had a range of titles such as “Senior Director Worldwide Environment, Health & Safety,” “Senior Manager EHS Communications and Training,” “Director of Corporate Citizenship,” and “Global Energy Director.”

The interviews focused on identifying the impacts, if any, that sustainability rankings have on companies. The questions focused on the impact of sustainability rankings on employees within the company, the efforts of the sustainability group, the sustainability strategy, and sustainability communication efforts. Questions were also asked about specific changes in
the company’s rankings, which helped to identify whether they may have been caused by a company reaction to previous rankings or produced a reaction within the company.

Results

Sustainability Rankings over Time

Sustainability rankings of eight health care companies were tracked over time. This process of tracking sustainability rankings indicated that many companies experienced a significant change in a single ranking in one year or a slight change in several rankings over a period of time.

A total of six individuals from several of these companies were interviewed. Interviews were conducted with four individuals from Johnson & Johnson, one individual from GE, and one individual from Procter & Gamble. A response was not received from the individuals contacted at Merck, Pfizer, SC Johnson, and Unilever. A response was received from the individual contacted at GlaxoSmithKline, but the employee who could provide information for this study was unwilling to participate. The interviews provided insight into the causes of changes in their sustainability rankings and how rankings impact the company.

The results from tracking the rankings and interviewing the six individuals are described below. First, a specific ranking that applies to almost all of the companies is focused on. Next, the results are described more in-depth on a company-by-company basis.
**Changes by Ranking**

It was valuable to compare all of the data for the Newsweek rankings over time for all of the companies. It was particularly useful for this ranking because all of the companies were included in the global ranking (and many in the US ranking) except SC Johnson, which is a private company. In addition, it is a rather well-recognized ranking and the information is easily accessible from all of the years it has been published. Below in Figure 6: Newsweek US Rankings and Figure 7: Newsweek Global Rankings, trends can be visualized over time. Newsweek has ranked the largest 500 publicly traded companies in the United States annually since 2009. Newsweek ranked the largest 100 global companies in 2010 and expanded this to include the largest 500 global companies in 2011 and 2012. As a result, if these absolute rankings are graphed, it appears that almost every company fell in 2011, which was due simply to a change in the sample size. Therefore, to normalize this change, Figure 7 indicates the rank percentile rather than the rank, which enables them to more easily be compared over time (Newsweek 2012).
Figure 6: Newsweek US Rankings (Newsweek 2012)

Figure 7: Newsweek Global Rankings (Newsweek 2012)
According to these two figures, there are several notable changes. A change in company that ranks the highest among the health care companies in this study is particularly notable because this company may be considered a leader in the industry. Johnson & Johnson was ranked among the top 6 companies in the US and the top 26 globally in the first several years, but the company fell in both the global and US rankings in 2012. However, despite this drop Johnson & Johnson remained the highest ranked among the companies in this study. Another significant drop was GlaxoSmithKline’s drop from 5th (out of 100) in 2010 to 153rd (out of 500) in 2011. This is a drop from the 5th rank percentile, and second among the companies in this study, to the 31st rank percentile. Merck’s rankings in both Newsweek rankings increased from 2011 to 2012, from 117th to 58th in the US and 153rd to 120th globally (Newsweek 2012).

In the other companies, there were slight increases and declines, but they are not particularly significant. For example, Pfizer’s rank percentile was somewhat consistent from 2010 to 2012. It was difficult to identify a trend for Procter & Gamble, which fell each year in the US ranking but went up in the global rank percentile in 2011. The other two companies, GE and Unilever, experienced some changes. However, they were not particularly significant and did not place the companies among the top of the companies in this study (Newsweek 2012).

Changes by Company: Highlights, Causes, and Impacts

Johnson & Johnson

Johnson & Johnson has tracked environmental data since 1990, reported environmental progress since 1993, and published an annual sustainability report encompassing social, environmental, and economic activities since 2003. The company’s commitment to
sustainability is part of The Credo, which was written in 1943 and “demonstrates Johnson & Johnson’s commitment to its employees, communities, the environment, and to stockholders; in other words, to sustainability” (Johnson & Johnson 2010). Currently, the company has a set of Healthy Future 2015 Goals with priorities including Advancing Global Health, Safeguarding the Planet, Supplier Sustainability, Engaged Health-Conscious Safe Employees, Advancing Community Wellness, Philanthropy Measurement, and Transparency and Collaborations (Johnson & Johnson 2013).

Johnson & Johnson has experienced several notable changes in sustainability rankings. First, the company was not listed on the DJSI World Index in 2007 and 2008, but was included in both the world and North American indices every other year (Dow Jones Sustainability Indexes 2012) (Johnson & Johnson 2013) (Environmental Leader 2009). Second, Johnson & Johnson fell in Newsweek’s Greenest Companies ranking from #6 to #36 in the US list and from #26 to #88 in the Global list in 2012 (Newsweek 2012). Finally, the company was ranked #2 in the Corporate Knights list of the Global 100 Most Sustainable Corporations in 2011, but was not included the four years prior or the two following years (Global 100 2012).

Interviews with Johnson & Johnson employees elucidated some of the causes and results of these changes in sustainability rankings. One factor that led to the company dropping from #6 to #36 in Newsweek's ranking for American companies was the decision to no longer purchase Renewable Energy Credits (RECs) and focus on energy projects with a more significant impact on the business and the environment. Annette Russo, Senior Manager EHS Communications and Training, explained that, "I reviewed what we had submitted to the two companies doing the ranking, and compared our answers to those that we gave the previous year. Most of the
responses had much the same content both years; one did not. That response, which included the decision to move away from RECs, seemed to be the reason for the drop in the ranking." (Russo 2013). She also explained the impact of this ranking on the company: "If we've dropped in the rankings from the previous year, we want to understand why that happened, and we are willing to do the work to answer that question" (Russo 2013). There was an internal response to this drop in the rankings. Jed Richardson, Global Energy Director, explained that the internal response included, "some internal meetings and some emails. And we decided, let's be more specific about RECs in the energy section of our sustainability report, including why we moved away from them to be more transparent in that area. This was a result of the rankings because I'd rather talk about all the great things we're doing in energy, instead of a complex and difficult issue like RECs (Richardson, Global Energy Director, Johnson & Johnson 2013). The 2012 sustainability report explains this decision, stating that, “after analyzing industry trends and speaking with key stakeholders, we made a decision to move away from purchasing voluntary renewable energy credits in favor of concentrating our resources on on-site efficiency and clean generation projects” (Johnson & Johnson 2013).

Unlike the Newsweek ranking in 2012, the impact of a ranking published about five years ago had a less notable impact at the time. When discussing Johnson & Johnson falling off the DJSI in 2007 and 2008, Al Iannuzzi, the Senior Director of Worldwide EHS, explained that there was "not a ton of impact back then. There has recently been a concerted effort to answer the questions better and increase our score, and it would be a much more meaningful event if we came off of it now" (Iannuzzi, Senior Director of Worldwide EHS, Johnson & Johnson 2013). In
addition, the company falling off the Corporate Knights list in 2011 did not have a notable impact.

General Electric (GE)

GE published the company’s first Citizenship report in 2005, which encompassed a range of sustainability issues. The company asserts that, “As a 130-year-old technology company, sustainability is embedded in our culture and our business strategy. Working to solve some of the world’s biggest challenges inspires our thinking and drives our actions. We are committed to finding sustainable solutions to benefit the planet, its people and the economy” (GE 2013). In 1953, GE began making donations through the GE Foundation, which today contributes to a number of social and environmental causes (GE Foundation 2013). The company published the first Ecomagination Report in 2005 for the ecomagination program to invest in better products and solutions, which “puts into practice GE’s belief that financial and environmental performance can be integrated to accelerate profitable growth for the Company, while taking on some of the world’s biggest challenges” (GE 2005).

Several sustainability rankings changed significantly in recent years. First, GE began to gain more recognition from rankings between 2008 and 2009. In 2008, GE was included in CR Magazine’s 100 Best Corporate Citizens ranking for the first time, and in 2010, GE was included on the DJSI World Index for the first time (Corporate Responsibility Magazine 2010) (GE 2013). Second, the Gap Score in Interbrand’s Best Global Green Brands ranking was significantly reduced from -23.17 in 2011 to 0.92 in 2012 (Interbrand 2012). The Gap Score indicates the company’s performance score minus the perception score, so a highly negative number reflects
that the company is perceived better than it actually performs (Interbrand 2012). Therefore, GE’s change from a highly negative to a slightly positive gap score is a desirable change, which specifies that the company’s performance is about equal to its perception. As calculated in Table 3: Interbrand's Gap Score Changes, 2011 to 2012 in the Appendix, GE’s gap score change was the most significant of any company in the same time period. Of the 47 companies that were on the list both years, the smallest change was 0.23 and the average change was 6.65 (Interbrand 2012).

Rajat Kapur, former Ecomagination Project Manager, explained that the drop in GE’s gap score on Interbrand's ranking "was the result of two factors. One, it got senior management’s attention because Interbrand is such a well-respected brand and a gap score that looks so negative says our perception is high but our delivery is low. Second, because the improvement in the gap score was in a short amount of time, it was probably not a result of not delivering on what we promise in our advertising, but GE just not communicating all of the information to Interbrand. I believe this change may have been the result of an initiative within GE to develop a concerted effort to decide which rankings are most important, determine how to look good on those rankings, and to coordinate the effort to provide information to the raters" (Kapur 2013).

GlaxoSmithKline (GSK)

GlaxoSmithKline began publishing a Corporate and Social Responsibility Report and Sustainability in Environment, Health and Safety Report in 2002. The 2012 Corporate Responsibility Report explains that, “At GSK our mission is to improve the quality of human life by enabling people to do more, feel better and live longer. This report describes the progress we
are making and how we are operating our business responsibly” (GlaxoSmithKline 2012). The priorities are in the following areas: health for all, our behavior, our people, our planet, and governance and engagement.

As mentioned previously, GlaxoSmithKline dropped in Newsweek’s ranking of global companies from 5th (out of 100) in 2010 to 153rd (out of 153) in 2011, which is a drop from the 5th rank percentile to the 31st rank percentile (Newsweek 2012). In 2012, GlaxoSmithKline dropped off the DJSI World Index (SAM Sustainability Investing 2012). In 2013, the company dropped off the Global 100 Most Sustainable Corporations by Corporate Knights, which it had been listed on for the previous four years (Global 100 2012). There was clearly a reaction to dropping off the DJSI, as the following message was included in the 2012 Corporate Responsibility Report: "We are disappointed not to be included in the Dow Jones Sustainability Indexes this year and are reviewing our performance against the criteria for inclusion” (GlaxoSmithKline 2012).

Merck

Merck’s first environmental report and public environmental goals were published in 1990, and the company has been reporting on progress since 1993. The first corporate responsibility report was published in 2005. The company’s sustainability currently encompasses four primary focus areas: access to health, employees, environmental sustainability, and ethics and transparency. Merck states that, “Our corporate responsibility approach is aligned with the company’s mission and values and articulates how we see our responsibilities in the areas of access to health, ethical and transparent business practices,
environmentally sustainable operations, scientific advancement, employee wellness and value-creation for our shareholders. (Merck 2011).

Some changes in Merck’s sustainability rankings included the addition of Merck to Corporate Responsibility Magazine’s list of the 100 Best Corporate Citizens list in 2009 and the increase in Merck’s CDP score to 71 in 2009 from 58 the previous year (Corporate Responsibility Magazine 2010) (CDP 2013). The CDP score for disclosure has slowly and consistently increased from 58 in 2008 to 83 in 2012 (CDP 2013). As mentioned previously, Merck’s rankings in both Newsweek rankings increased from 2011 to 2012, from 117th to 58th in the US and 153rd to 120th globally (Newsweek 2012).

Unilever

Unilever began publishing environmental performance and corporate social responsibility data in 2000. Since 2010, the company has published annually the Unilever Sustainable Living Plan, which outlines goals and progress in the areas of improved health and well-being, reducing environmental impacts, and enhancing livelihoods. In 2012, Unilever connected sustainability more directly to their business strategy. Their business strategy is called ‘the Compass’ that was first developed in 2009 and “lays out our ambitious vision and purpose, and defines four ‘Winning with’ pillars within the business that will help us achieve both: brands and innovation; marketplace; continuous improvement; and people… In 2012 we added our new purpose – ‘To make sustainable living commonplace’” (Unilever 2013).

In 2011, Unilever fell in the Corporate Knights Global 100 Most Sustainable Corporations, Unilever fell to #84 from #7 the previous year (Global 100 2012). Unilever has
generally increased in the CDP recently, from a disclosure score of 76 in 2009 to a score of 84 in 2012 and an A in transparency (CDP 2013).

Procter & Gamble

Procter & Gamble published its first Annual Global Environmental Report in 1993 and its first annual sustainability report in 1999 after forming a corporate sustainability department. In 2010, the company developed “long-term environmental sustainability vision primarily focused on renewable materials, waste reduction, renewable energy, and packaging reduction,” which also includes a set of goals for the year 2020 (Procter & Gamble 2013).

In 2009, Procter & Gamble was listed on two sustainability rankings for the first time. These rankings were the 100 Best Corporate Citizens by Corporate Responsibility Magazine and the Global 100 Most Sustainable Corporations by Corporate Knights (Global 100 2012) (Corporate Responsibility Magazine 2010). The individual interviewed at Procter & Gamble indicated that sustainability rankings have little impact on the company, aside from possibly increasing employee awareness and prompting the company to look at the methodology of the ranking.

SC Johnson

SC Johnson published the company’s first sustainability report in 1992 and was among the first to do so among consumer packaged goods companies. SC Johnson developed the Greenlist™ process in 2001 to evaluate raw materials based on their environmental impact and
launched an expansive ingredient disclosure program in 2009. The company currently reports annually on its environmental goals that are set every five years.

SC Johnson is a private company, unlike the other companies that were chosen in this study. As a result, a number of the rankings chosen were not applicable to SC Johnson. SC Johnson fell slightly in the Boston Center for Corporate Citizenship’s Corporate Social Responsibility Index from #8 to #40 from 2010 to 2011 (Boston Center for Corporate Citizenship 2013). Because of the limited amount of available information, no significant trends were noted for the company.

Pfizer

Pfizer published their first report on corporate responsibility in 2006 (Pfizer 2007). In 2012, Pfizer published the “first fully integrated Annual Review, providing a larger look at a number of dimensions of our performance - financial, environmental and social - in one review. It demonstrates the integral relationship between our responsibilities as an enterprise, and our core business strategies and their execution” (Pfizer 2013). The categories where progress is measured include financial, access to medicines, employees, and the environment.

The most notable change in Pfizer’s rankings was dropping off Corporate Responsibility Magazine’s 100 Best Corporations list in 2009 after being ranked #53 the previous year (Corporate Responsibility Magazine 2010). In addition, Pfizer improved from a CDP disclosure score of 67 in 2008 to a score of 87 in 2012 with an A in transparency (CDP 2013).
General Impacts of Sustainability Rankings

Interviewees generally agreed that certain well-recognized rankings have more significant impacts. For example, the Dow Jones Sustainability Index is often recognized and regarded as significant among a company’s senior management. Rankings such as this were described in interviews as “often quoted,” from a “well-respected brand,” “long-standing,” and that “get the most press and notoriety.” While the DJSI was mentioned by every individual interviewed, the FTSE4Good index, Interbrand’s ranking, and Newsweek’s ranking were also mentioned as being significant by at least one individual. Jed Richardson elaborated on this. When asked how the company responds when sustainability rankings are published, he explained that, "the response varies widely. In a company as big as Johnson & Johnson, the leadership likes to see high scores in the DJSI as a very broad, business-oriented CSR type survey. When it comes to the CDP, which Johnson & Johnson has made the leadership index for disclosure this year, internally it got very little attention because there's such a small community who is focused on carbon and renewable energy issues every day" (Richardson, Global Energy Director, Johnson & Johnson 2013).

Sustainability rankings impact the employees of some companies. When asked if rankings drive awareness or excitement among employees, Rajat Kapur explained that, "Yes, we have internal boards where people who are interested in ecomagination or sustainability can talk to each other. If GE does particularly well, we hear people say that this is awesome and I'm so proud of working here. If the ranking is not so good, people will say one of two things. First they may ask, ‘how could the ranking have ranked GE so low and how did they not know all of
the good things we're doing? ’ Or the employee population may say that we really did deserve this ranking because we really don't think about sustainability and we need to get better at it."

Depending on the company’s history, sustainability rankings may require companies to collect and publish more sustainability data than they would have otherwise. For example, Al Iannuzzi explained that Johnson & Johnson "has been collecting EHS data since the 90's, but outside of EHS, sustainability rankings have forced us to have more robust data collection" (Iannuzzi, Senior Director of Worldwide EHS, Johnson & Johnson 2013) This is beneficial because it increases transparency. In addition, companies often identify ways to improve when they begin to measure a metric.

Sustainability rankings also impact sustainability professionals in some companies, who may investigate the reasons for a particular ranking and use them as a benchmark. For example, when the CDP is published, Jed Richardson explained that "it serves as a benchmark against peers and helps you design where you want to be. The functional owners, like myself in energy, want to be best in class. We had meetings with the CDP staff to determine where we lost points or where others gained points" (Richardson, Global Energy Director, Johnson & Johnson 2013). When asked how the sustainability group reacts when a ranking changes, Annette Russo explained that, "we do research to understand why our ranking changed, including benchmarking with peer companies, looking deeper into any subsection scores for the ranking, and comparing our present responses to our previous year responses” (Russo 2013).

Sustainability professionals may also benefit from using sustainability rankings as a means to communicate the company’s successes. For example, Shaun Mickus, Director of Corporate Citizenship at Johnson & Johnson, explained that “being able to communicate the
Access to Medicines Index gave the organization the opportunity to create more awareness about what the company is doing in this space. Rankings are one of many trigger points to remind people that we do good work here” (Mickus, Director of Corporate Citizenship, Johnson & Johnson 2013).

However, sometimes sustainability rankings may not impact a company’s sustainability strategy, which is based on many factors besides rankings. These factors could include the company’s core beliefs, new research, and more. For example, Johnson & Johnson decided to alter the company’s renewable energy strategy by moving away from purchasing renewable energy credits (RECs) in 2011. This was one factor that led to a decline in the Newsweek Green Rankings score from #6 globally in 2011 to #36 in 2012. However, it is likely that knowing that this action would impact the company’s ranking would not likely have altered the company’s decision.

Discussion

Certain sustainability rankings do impact some companies, which indicates that this objective of many of the raters is being met. It was often challenging to correlate changes in rankings to a change within a company using publicly available information. Speaking with professionals within the companies, however, often provided valuable insight.

The impacts of sustainability rankings include sparking discussion among employees, gaining awareness and support for sustainability among upper management, and prompting sustainability employees to consider their sustainability programs and communication strategy. These impacts vary both by company and by the specific ranking.
While the impacts of rankings on employees within the company may not seem to be very substantial, employees may be the primary drivers of sustainability. In a survey of executives by the Boston Center for Corporate Citizenship, the levels of support among managers, executives, and non-management employees were most frequently reported as helping success of corporate citizenship, above media attention, global market competition, the regulatory environment, and more (Boston College Center for Corporate Citizenship 2012). This suggests that rankings may be driving the success of these programs, even though it may be occurring indirectly through means that may be difficult to measure.

**Rankings and Sustainability Professionals**

Sustainability professionals certainly take note of sustainability rankings, as was reflected by the ability of interviewees to state how their company, or even their competitors, performed in certain rankings. When these rankings are published, they may benefit these individuals by allowing them to perform their jobs better. In the event of a positive sustainability ranking, sustainability professionals should be sure to communicate this information, connect it to the work that has been accomplished recently, and use it to build momentum for furthering successful sustainability efforts. In the event of a negative ranking, sustainability professionals should use this opportunity to bring together the appropriate individuals and discuss how to improve the areas that led to the ranking.
Rankings and Companies

The conversations with sustainability professionals exposed several issues for companies to consider. First, companies may find it beneficial to assess which individuals should be providing information to the raters. While it may be desirable to assign this task to a lower level individual to reduce the obligations of more experienced employees, these lower level individuals may have less knowledge of detailed sustainability information. They also may have less access to those individuals who do possess this information. On the other hand, having more experienced employees provide this information to rates may divert their focus from sustainability work that might be more impactful. In addition, the environmental and social sustainability information may not be located in one department within a company because of how they have evolved over recent years, which may complicate the information collection process. As a result, it may be beneficial to weigh the advantages and disadvantages of having different individuals communicate with the raters.

Companies may also want to consider that sustainability rankings may be having more of an impact than they realize simply because they have no means to measure it. For example, having an internal discussion board for employees may provide a forum for employees to express their feelings about a particular ranking, whether it be support for the good work that the company is doing or disappointment that the company is not doing more in the area of sustainability. If a company develops a means to gauge the general reactions within the company, they will be able to make better informed decisions.
Ratings and the Raters

The conversations with sustainability professionals also highlighted issues that could be addressed by the raters. A number of interviewees indicated that the significant quantity of sustainability and other rankings can be a burden. Raters often request information from companies in unique formats, and responding to surveys consumes time and resources. If one goal of these rankings really is to drive companies to improve their sustainability and not just improve the way they communicate sustainability to raters, then the rankings may benefit from increasing the consistency of the way that questions are asked. As a result, sustainability professionals could focus less on answering surveys and more on implementing sustainability, and the raters could convert the data into any form they choose.

Future Research

This research could be expanded upon by additional studies. It would be beneficial to speak with more individuals to gain a broader perspective on the impacts of rankings on companies. It would also be beneficial to speak with employees of companies who are not in sustainability roles, but are aware of their company’s sustainability efforts, to determine if rankings increase awareness of their company’s efforts. Finally, comparing the impacts of sustainability rankings across industries would broaden the understanding of these rankings.

Conclusions

Sustainability rankings have previously been demonstrated to influence public perceptions of companies and the decisions of investors, and this report indicates that they also
have an impact on the internal conversations and actions of many companies. Companies and the sustainability professionals within them may benefit from evaluating their strategy to respond to organizations that publish sustainability rankings as well as identifying opportunities to use the rankings to drive corporate sustainability. While this report focuses on a set of companies within the health care industry, the findings may also prove to be valuable to companies within different industries.
# Appendix

## Table 3: Interbrand's Gap Score Changes, 2011 to 2012

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Difference between 2011 and 2012 Gap Score</th>
<th>Absolute Value of Gap Score Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.08</td>
<td>5.08</td>
</tr>
<tr>
<td></td>
<td>1.54</td>
<td>1.54</td>
</tr>
<tr>
<td></td>
<td>10.73</td>
<td>10.73</td>
</tr>
<tr>
<td></td>
<td>2.38</td>
<td>2.38</td>
</tr>
<tr>
<td></td>
<td>-1.16</td>
<td>1.16</td>
</tr>
<tr>
<td></td>
<td>3.98</td>
<td>3.98</td>
</tr>
<tr>
<td></td>
<td>-2.96</td>
<td>2.96</td>
</tr>
<tr>
<td></td>
<td>10.51</td>
<td>10.51</td>
</tr>
<tr>
<td></td>
<td>-3.97</td>
<td>3.97</td>
</tr>
<tr>
<td></td>
<td>-0.23</td>
<td>0.23</td>
</tr>
<tr>
<td></td>
<td>2.45</td>
<td>2.45</td>
</tr>
<tr>
<td></td>
<td>7.43</td>
<td>7.43</td>
</tr>
<tr>
<td></td>
<td>-0.82</td>
<td>0.82</td>
</tr>
<tr>
<td></td>
<td>-5.78</td>
<td>5.78</td>
</tr>
<tr>
<td></td>
<td>15.86</td>
<td>15.86</td>
</tr>
<tr>
<td></td>
<td>8.5</td>
<td>8.5</td>
</tr>
<tr>
<td></td>
<td>-5.6</td>
<td>5.6</td>
</tr>
<tr>
<td></td>
<td>7.6</td>
<td>7.6</td>
</tr>
<tr>
<td></td>
<td>-1.86</td>
<td>1.86</td>
</tr>
<tr>
<td></td>
<td>1.23</td>
<td>1.23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not on 2011 list</td>
</tr>
<tr>
<td></td>
<td>-2.81</td>
<td>2.81</td>
</tr>
<tr>
<td></td>
<td>12.66</td>
<td>12.66</td>
</tr>
<tr>
<td></td>
<td>24.09</td>
<td>24.09</td>
</tr>
<tr>
<td></td>
<td>-4.98</td>
<td>4.98</td>
</tr>
<tr>
<td></td>
<td>-15.06</td>
<td>15.06</td>
</tr>
<tr>
<td></td>
<td>-0.94</td>
<td>0.94</td>
</tr>
<tr>
<td></td>
<td>3.27</td>
<td>3.27</td>
</tr>
<tr>
<td></td>
<td>1.31</td>
<td>1.31</td>
</tr>
<tr>
<td></td>
<td>-3.43</td>
<td>3.43</td>
</tr>
<tr>
<td></td>
<td>-2.67</td>
<td>2.67</td>
</tr>
<tr>
<td></td>
<td>3.48</td>
<td>3.48</td>
</tr>
<tr>
<td></td>
<td>-2.78</td>
<td>2.78</td>
</tr>
<tr>
<td></td>
<td>4.07</td>
<td>4.07</td>
</tr>
<tr>
<td></td>
<td>10.29</td>
<td>10.29</td>
</tr>
<tr>
<td></td>
<td>14.74</td>
<td>14.74</td>
</tr>
<tr>
<td></td>
<td>4.14</td>
<td>4.14</td>
</tr>
<tr>
<td></td>
<td>14.67</td>
<td>14.67</td>
</tr>
<tr>
<td></td>
<td>6.26</td>
<td>6.26</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>-7.92</td>
<td>7.92</td>
</tr>
<tr>
<td></td>
<td>0.23</td>
<td>0.23</td>
</tr>
<tr>
<td></td>
<td>15.64</td>
<td>15.64</td>
</tr>
<tr>
<td></td>
<td>-4.05</td>
<td>4.05</td>
</tr>
<tr>
<td></td>
<td>11.81</td>
<td>11.81</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not on 2011 list</td>
</tr>
<tr>
<td></td>
<td>-6.45</td>
<td>6.45</td>
</tr>
<tr>
<td></td>
<td>-13.97</td>
<td>13.97</td>
</tr>
<tr>
<td></td>
<td>-16.05</td>
<td>16.05</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not on 2011 list</td>
</tr>
</tbody>
</table>

- Min change: 0.23
- Max change: 24.09
- Average Magnitude of Gap Score Change from 2011: 6.65
Bibliography


http://portal.acs.org/portal/acs/corg/content?_nfpb=true&pageLabel=PP_ARTICLEMAIN
&node_id=1415&content_id=WPCP_007504&use_sec=true&sec_url_var=region1&__
uuid=b53af0f-bab0-4870-a4c3-9fe7c220c4f5.


Boston College Center for Corporate Citizenship. "Building Reputation Here, There and
documentid=1270&documentFormatId=2331.


Campbell, John L. "Why Would Corporations Behave in Socially Responsible Ways? An
Institutional Theory of Corporate Social Responsibility." (Academy of Management
Review) 32, no. 3 (2007).

Carroll, Archie B., Kenneth J. Lipartito, James E. Post, Patricia H. Werhane, and Kenneth E.
Goodpaster. *Corporate Responsibility; The American Experience.* New York: Cambridge,
2012.


Actually Measure Corporate Social Responsibility?" (Journal of Economics and

http://www.thecro.com/content/100-best-corporate-citizens.

Dhanda, K. "Case Study in the Evolution of Sustainability: Baxter International Inc." (Journal of

Dow Jones Sustainability Index. *Dow Jones Sustainability Index Fact Sheet.* 2012.
http://www.sustainability-indexes.com/images/indexes-monthly-djsi-world_tcm1071-
337267.pdf.

——. "Dow Jones Sustainability Index Fact Sheet." 2012. http://www.sustainability-

Dow Jones Sustainability Indexes. *Index Family Overview.* 2012. http://www.sustainability-
index.com/dow-jones-sustainability-indexes/index.jsp.


Iannuzzi, Al, interview by Sharon Muli. Senior Director of Worldwide EHS, Johnson & Johnson (April 2013).


Richardson, Jed, interview by Sharon Muli. Global Energy Director, Johnson & Johnson (April 2013).

Russo, Annette, interview by Sharon Muli. Senior Manager EHS Communications and Training (April 2013).


Searcy, Cory, and Doaa Elkhawas. "Corporate Sustainability Ratings: An Investigation into how Corporations Use the Dow Jones Sustainability Index." (Journal of Cleaner Production) 35 (2012).


