Corporate Social Responsibility/Sustainability Reporting Among the Fortune Global 250: Greenwashing or Green Supply Chain?

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CORPORATE SOCIAL RESPONSIBILITY/SUSTAINABILITY REPORTING AMONG THE FORTUNE GLOBAL 250: GREENWASHING OR GREEN SUPPLY CHAIN?

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Abstract: The sustainability reporting efforts of MNCs who are members of the Fortune Global 250 (FG250) was investigated. The focus was on sustainability reporting by MNCs of supply chain impacts. The reporting of FG250 MNCs was examined to determine if greenwashing was occurring or whether MNCs had committed to operating a green supply chain. A mixed methodology was used consisting of quantitative analysis of twenty-five MNC CSR/sustainability reports which were randomly selected from the FG250 listing. Qualitative analysis using content analysis was also conducted on the reports. Both methodologies concentrated on the sustainability reporting of the selected MNCs in regard to their supply chain. Findings were mixed as there were great variations among the MNCs in their level of sustainability reporting about their supply chains. Some MNCs did not report on the activities of their supply chain at all (20%), the majority of the MNCs reported on their supply chain impacts at the value and goal level (48%), while the rest reported at the management approach level (32%). A majority of the sampled MNCs could be accused of greenwashing due to the lack of detailed quantitative information provided by the MNCs on the environmental impacts of their supply chain.

Keywords: Corporate social responsibility, Sustainability, Greenwashing, Green supply chain, Sustainability reporting, Environmental impacts

1. Introduction

Corporate social responsibility (CSR) has become an increasingly important aspect of doing business in the 21st century for most multinational corporations (MNCs). CSR in its broadest sense can be defined as “a view of the corporation and its role in society that assumes a responsibility among firms to pursue goals in addition to profit maximization and a responsibility among a firm’s stakeholders to hold the firm accountable for its actions” (Chandler and Werther, 2014, p.6). CSR activities have also been described as “the actions a company initiates to further some social good beyond its own interests, going beyond compliance and exceeding legal obligations” (Jones and Jonas, 2011, p.65). These actions could include charitable endeavors, fair labor practices, mitigating harmful environmental impacts, fair trade, and sustainability practices such as reclaiming packaging material and minimizing water usage and waste products (Jones and Jonas, 2011).

There have been numerous theories advanced for why MNCs practice CSR but the most dominant paradigm is stakeholder theory (Freundlieb and Teuteberg, 2013). Stakeholder theory proposes that all organizations have various groups or individuals that affect or are affected by the activities of the firm (Sweeney and Coughlan, 2008). The primary reason for CSR/Sustainability reporting is to provide stakeholders with the information they need to make decisions (Tschopp *et al.* 2011). Nemetz (2013) in his environmental performance model lists four main stakeholder groups: the government, internal and external stakeholders, and financial stakeholders. Government policies, laws and regulations affect CSR/sustainability reporting. Internal stakeholders include board members, executives, employees, and various departments such as human resources, legal and accounting. External stakeholders include unions, non-governmental organizations, professional organizations, customers, and the general public. Financial stakeholders include banks, investors, and insurers (Nemetz, 2013). An MNC has both obligations and responsibilities toward these stakeholders which it needs to discharge.

Valentine and Savage (2010) describe five forces that define the strategic environmental management practices of MNCs: macro forces, secondary stakeholders, industry specific forces, firm specific forces, and strategic forces. Macro forces are the political, economic, social, and technological conditions present in a country. Secondary stakeholders include creditors, government regulators, interest groups, the general public, educators, and unions. Industry specific forces include type of industry, risk factors, media exposure, customer pressure, supplier incentives, and industry practices. Firm specific forces include ownership, firm size, financial health, age of assets, and environmental reputation. Strategic forces include green positioning strategies, financial strategies, brand protection strategies, quality strategies, and cost-control strategies (Valentine and Savage, 2010). Sweeney and Coughlan (2008) found that most CSR/Sustainability reporting focused on the responsibility of the MNC to inform its various stakeholders.

MNCs report on their CSR efforts for various reasons. Possible explanations for CSR include reputation management, brand protection, competitive pressure, meeting community expectations, responding to media coverage of negative incidents, managing stakeholder groups, attracting ethical investors, or attempting to prevent potentially onerous government regulation (Jones and Jonas, 2011; Nikolaeva and Bicho, 2011). There has been a great deal of research on the link between CSR and the economic performance of MNCs. Although there has been contradictory findings the majority of studies have found a weak link between CSR and superior financial performance of firms (Samy *et al.* 2010).The level of CSR reporting by MNCs has steadily increased over the past two decades from 12% in 1992, to 24% in 1996, and to 28% in 1999 (Nikolaeva and Bicho, 2011). Fortanier and Kolk (2007) found that 161 of 250 (64%) MNCs reported on their CSR activities. By 2011, CSR reporting had increased to 80% of all MNCs (Jones and Jonas, 2011).

2. Sustainability

Sustainability is frequently used interchangeably with CSR but essentially it is a subcategory of the overall bigger picture. In particular, sustainability is usually associated with the use of natural resources and issues related to environmental concerns. Sustainability can be broadly defined as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (Chandler and Werther, 2014, p.536). Originally sustainability reporting focused solely on the environment but its scope has been broadened to include ethical/social issues, employee treatment, community involvement, and the organizational structure in place to control all these aspects (Kolk, 2008).

3. CSR/Sustainability Reports

MNCs can report their CSR efforts in several different manners. The most common is through a CSR or sustainability report. The more recent trend is toward integrated reporting. Integrated reporting of CSR occurs when sustainability activities of the MNC are included in the annual report. Sweeney and Coughlan (2008) found little difference in the format or content of CSR whether it was reported separately or integrated into the annual report. CSR reporting can also be voluntary or mandatory. Originally all CSR reporting was voluntary. However, there has been a recent trend toward mandatory CSR reporting particularly in the European Union (EU). As of 2013 mandatory CSR reporting in some form exists in Argentina, Austria, Belgium, Brazil, China, Denmark, France, Germany, Greece, India, Indonesia, Italy, Malaysia, the Netherlands, Norway, Portugal, South Africa, Spain, Sweden, and the U.K. (Reider-Gordon, 2013). These requirements may be through government regulation or through stock exchange procedures. France requires sustainability reporting under its Nouvelles Regulations Economiques, while Denmark mandates it through the Danish Financial Statements Act (Dragu and Tudor-Tiron, 2012). The Shanghai Stock Exchange requires CSR reporting as a prerequisite for listing as does the Johannesburg and Bursa Malaysia exchanges (Reider-Gordon, 2013; Dragu and Tudor-Tiron, 2012). Of course, in the United States CSR reporting is strictly voluntary which explains why U.S. MNCs lag behind their European brethren in CSR reporting. According to Breitbarth *et al.* (2010) 90% of European MNCs report on CSR compared to 59% in the U.S., and 61% of the rest of the world.

CSR reporting has mainly been conducted by MNCs. CSR reporting by small and medium size enterprises (SMEs) remains low even among developed countries (Tschopp *et al.* 2012). Although they may practice CSR many SMEs tend to avoid CSR reporting due to its cost, potential legal liabilities, and lack of standards (Jones and Jonas, 2011). According to Jones and Jonas (2011) eighty percent of the Fortune Global 250 (FG250) issued CSR reports. Verification by independent third parties remains spotty, as only forty percent of the FG250 issued reports with external assurance (Jones & Jonas, 2011). Sweeney and Coughlan (2008) found differences in CSR reporting depending on industry: financial and retail tended to focus on customers and employees, pharmaceutical the community at large and customers, telecommunications on customers, and automobile, oil, and gas on the environment. Most CSR reporting did not address the impact on shareholders. Samy *et al.* (2010) found that most MNCs did not report on all six aspects of CSR required by the GRI G3. In fact, most (40%) only reported on four of the six required aspects of CSR.

4. Reporting Standards

There is no universal standard for reporting CSR. The most commonly used reporting guidelines are produced by the Global Reporting Initiative (GRI). The most recent guideline is called G3 although G4 is expected to be released at some point in 2014 (Sarfaty, 2013). G4 moves toward integrated reporting rather than the issuance of a separate CSR report. As of 2009, the G3 was used by over 1,400 companies in over 64 countries (Jones and Jonas, 2011). Over 75 percent of the FG250 uses the GRI as a guideline for their CSR reporting (Sarfaty, 2013). The GRI G3 requires that a firm report on seven different areas of CSR: community, environment, diversity, human rights, corporate governance, employee relations, and product responsibility (Cho *et al.* 2012). GRI reporting has been criticized because it relies on self-reporting, is mostly qualitative, requires no third party assurance, and does not report on outcomes (Jones and Jonas, 2011). Sarfaty (2013) claims the GRI encourages box ticking and superficial compliance because the grading system is based on quantity of indicators not quality of performance. Investors in particular are beginning to demand assurance for the content of CSR reports by external providers such as accounting firms, consultants, or certifying bodies (Cho *et al.* 2012).

Other reporting standards include the ISAE 3000 produced by the International Audit and Assurance Standards Board, ISO 26000 produced by the International Standard Organization, the U.N. Global Compact, SA 8000, and AA1000 developed by Account Ability. ISAE 3000 mostly deals with risk management and with the two standards a firm may meet – reasonable assurance or low risk, and limited assurance or greater risk. AA1000 was created for the purpose of promoting accountability for sustainability and is based on three principles materiality, completeness, and responsiveness (Jones and Jonas, 2011).

SA 8000 is particularly interesting as a standard as it is the first CSR reporting mechanism designed for retailers, suppliers, and other companies that governs working conditions throughout the global supply chain. SA 8000 defines minimum requirements for workplace conditions that must be met by producers and their suppliers. SA 8000 covers eight areas: child labor, forced labor, health and safety, freedom of association and collective bargaining, discrimination, discipline, working hours, and pay scale (Rasche, 2010). It is essentially a certification process. Suppliers who have SA 8000 certification can be expected to provide good working conditions for their employees because they are monitored by independent third parties. The lack of standardization in CSR reporting creates several issues. The multitude of reporting standards allow MNCs to select the set of indicators that places them in the best light possible (Nikolaeva and Bicho, 2011). The lack of third party assurance and the narrative nature of most CSR reports make them of little value to investors or NGOs seeking to monitor the activities of MNCs.

5. Greenwashing

One of the more cynical views of CSR reporting is that it is merely for appearance sake or another form of marketing. Greenwashing is a practice that is deceptively used to promote the perception that a company's policies or products are environmentally friendly (Shacklett, 2011). A study by Loughran *et al.* (2009) found that MNCs that used terms such as "ethical" and "socially responsible" in their 10K SEC reports were more likely to be polluters and attempting to mislead the public and regulators. In other words the firms were engaging in greenwashing.

Many companies use CSR and sustainability reports as a form of damage control after an environmental disaster. For example, both Exxon and BP used CSR reporting as a method to blunt the outcry of the public in response to their disastrous oil spills (Bhatia, 2012). Bhatia (2012) in a study of both Chinese and U.S. CSR reporting found that reports were used to push a promotional agenda, and for self-justification of practices the public found offensive.

Even those MNCs who are above board in their CSR reporting tend to report only in generalities or through specific examples. Most sustainability reporting is qualitative and tends to highlight goals, ideals, commitments, and aspirations rather than actual deeds (Paul, 2008). Many nongovernmental organizations (NGOs) do not trust the information contained in CSR and sustainability reports because it is not verified by a third party. Readership of CSR reports is low because they tend to focus on processes rather than actual performance (Sarfaty, 2013).

Fortanier and Kolk (2007) found that only 16% of FG250 reported on the economic impact of their activities on their host country. In contrast, most of the MNCs reported quantitatively on the number of jobs they had created. However, most firms reported CSR qualitatively highlighting examples and projects rather than quantitatively reporting on their impact (Fortanier and Kolk, 2007). Qualitative reporting of this type can lead to suspicions of greenwashing or showcasing a few examples of best practices. In a recent study, Freundlieb and Teuteberg (2013) found that many MNC sustainability reports failed to contain information on how key performance indicators (KPI) were calculated and that they tended to cherry pick the ones which shed a positive light on their business practices. Wagner *et al.* (2009) found that reporting of CSR activities inconsistent with actual practices had a destructive effect on MNC reputations as it led to consumer perceptions of corporate hypocrisy. Without an in place agreed upon standard and lacking independent third party verification most reports are viewed as little more than strategic marketing at best and greenwash at worst (Tschopp *et al.* 2011).

Many MNCs that report quantitatively on their own sustainability practices may fail to report on the practices of their supply chain. One of the criticisms of sustainability is that has little impact if firms do not practice it through their entire supply chain. The news has been filled with reports of MNCs such as Apple and Nike which practice CSR but do business with suppliers who mistreat their employees and degrade the environment (Locke, 2013; Blanchard, 2012). Starbucks has long presented itself as a leader in fair trade practices, but was recently criticized for attempting to block Ethiopian farmers from trademarking their coffee and attempting to keep the price low (Wagner *et al.* 2009). Passing the buck for sustainability down the supply chain is another type of greenwashing by MNCs. According to Sarfaty (2013) in order to avoid charges of green washing CSR reporting needs to be relevant to stakeholders, reasonably collected, and address issues on which change is most needed.

6. Green Supply Chains

A supply chain is made up of all the companies that are involved in producing a product or providing a service including suppliers, transporters, warehousers, retailers and customers (Darnall *et al.* 2008). “Supply chain operations have significant impact on sustainability and therefore managing them in an environmentally and socially responsible way has now become a key management concern” (Bernon *et al.* 2012, p.150). A green supply chain involves an MNC “assessing the environmental performance of their suppliers, and requiring suppliers to undertake measures that ensure the environmental quality of their products, and evaluate the cost of waste in their operating systems” (Darnall *et al.* 2008, p.33). Green supply chains are being driven by various forces including retailer demand, customer preference, and regulatory pressure particularly in the EU (Scott, 2011).

In a recent study of 142 Danish companies, where CSR reporting is mandatory, 89% of the companies reported on CSR, of which 69% reported on policies, 60% on actions, but only 37% on actual results (Pedersen *et al.* 2013). Only 29% of the companies studied reported on the activities of their suppliers. Paul (2008) examined the reports of the 100 Most Sustainable Corporations as named by Innovest Strategic Value Advisors a consulting firm. She found that 95% of these MNCs reported on CSR or sustainability and the GRI was the most commonly used standard (40%). Paul’s study while interesting has one obvious limitation – the MNCs studied may report that they practice sustainability but is their reporting accurate and does it filter down through the supply chain?

One of the prime aspects of a green supply chain is in the area of carbon emissions. For most MNCs the prime culprit for a high level of carbon emissions is transportation. According to Webb (2009) 75% of a company’s carbon emissions are caused by transportation and logistics. Therefore, MNCs interested in a green supply chain should be attempting to cut their transportation carbon emissions and those of their suppliers. This can be accomplished by using biofuel, choosing the type of transportation with the least carbon foot print (trains and ships), utilizing smaller trucks when possible, and encouraging fuel efficient driving behavior by employees (Blanchard, 2012; Shacklett, 2011; Webb, 2009).

One of the best ways to implement a green supply chain is through Life Cycle Analysis (LCA). LCA is a method to evaluate the environmental burdens associated with a set of business processes, assess the impacts on the environment, and evaluate opportunities for improvement (Beamon, 2005). LCA takes into account such factors as greenhouse gas emissions, energy and water use, waste production, chemical impacts, using sustainable natural resources, carbon footprint, and recyclability (Scott, 2011). The goal of LCA is to either reuse non-biodegradable materials or return natural materials to the environment in a safe manner (Scott, 2011). Although there have been few studies that investigate green supply chains the evidence that exists is not encouraging. The consulting firm Accenture reported that only 10% of companies are actively monitoring their supply chain global footprints, and 37% had no idea of their supply chain greenhouse gas emissions (Blanchard, 2009). The Hudson Gain Corporation, a consulting firm, found that of 1,200 companies examined only 200 had a position dedicated to managing sustainability issues (Ladd, 2010). Global sourcing lengthens and complicates the supply chain making it difficult for MNCs to monitor their suppliers (Wagner *et al.* 2009).

In addition, Locke (2013) argues that MNCs undermine their own CSR efforts through the demands they make on their suppliers. Many MNCs pressure their suppliers to cut costs, manufacture products on shorter deadlines, and frequently change their product lines and specifications. As a result of these pressures suppliers pay low wages, cut or offer no benefits, and demand excessively long hours and frequent unpaid overtime (Locke, 2013). In a study of Scottish companies, Preuss (2005) found that the main factors in supplier selection were price, quality and delivery conditions. Only 23% of the companies formally considered the environmental performance of their suppliers (Preuss, 2005). Darnall *et al.* (2008) found that companies that had adopted an environmental management system (EMS) were more likely to monitor their suppliers' environmental practices. 58% of EMS adopters assessed their suppliers environmental or required their suppliers to undertake specific sustainable activities (Darnall *et al.* 2008).

7. Methodology

This research utilized a mixed methodology approach. Quantitative analysis of the content of CSR reports of a sample of Fortune Global 250 MNCs was conducted. One of the main advantages of analyzing annual reports is the unobtrusive nature of the method. According to Breitbarth *et al.* (2010) analyzing annual reports offers a distinct advantage because the data represents the official, unambiguous, unified position of the organization which is free from the respondents' personal bias, access to information or partial recall and not subject to errors related to the content and the context of communication. In addition, qualitative research through content analysis of the actual wording of Fortune Global 250 MNC annual reports was conducted. Due to its simplicity and the ease of downloading reports from the Internet content analysis is the most commonly used methodology for evaluating CSR among MNCs. At its heart content analysis is a research method that is used to determine the presence and meaning of words or phrases within a text (Sweeney and Coughlan, 2008). The goal was to "document both complexity of disclosure and its quantitative content" (Morhardt, 2010).

The researcher adopted the content analysis framework of Bouten *et al.* (2011) which measures whether CSR reporting is made in a comprehensive manner by classifying it into three areas: vision and goals, management approach, and performance indicators. Only if the activity described includes all three categories of CSR reporting is it considered to be comprehensive. In particular, the researcher focused on CSR activities related to sustainability. By providing an indication of both the completeness and the comprehensiveness of CSR reporting, the developed content analysis structure gives a clearer indication of the extent to which an organization is accountable to its stakeholders (Bouten *et al.* 2011). The researcher was particularly concerned with sustainability activities involving the supply chain.

8. Sample and Data Collection

The overall population consisted of the 250 MNCs that make up the Fortune Global 250. A simple random sample with replacement of 10% of these MNCs was taken using a random number generator located at http://www.random.org. One number reoccurred and was redrawn. As this research was primarily qualitative and involved in-depth content analysis the small sample size was appropriate (Miles and Huberman, 1994). Reports older than three years were excluded from the analysis. Previous studies in the area have been criticized for opaque selection methods, for concentrating on particular industries or countries, and not providing a diverse picture of current reporting practices (Freundlieb and Teuteberg, 2013). This study's selection process is transparent and provides a diverse look at the overall reporting practices of MNCs. See Table 1 for a listing of the 25 firms selected, their Fortune Global 250 ranking, their country, their industry, whether they reported on CSR, the type of report generated, and number of pages included in the report.

9. Quantitative Results

Of the twenty-five MNCs randomly selected twenty-four (96%) had posted some type of CSR report on their website. The only MNC without a CSR report was Tokyo Electric Power

(TEPCO). A Google search revealed a cached CSR report from 2010 but it was no longer linked from the TEPCO web site. Due to its age it was excluded from the research. While TEPCO had no CSR report their web site was essentially dedicated to addressing the impact of the Fukushima nuclear reactor disaster. The front page alone contained links to addressing the contaminated water issue, information on compensation for nuclear related damages, updates on the current situation at the reactor, radiation updates, live webcams, and almost daily press releases (TEPCO website, 2014). There was also a section on reforms the company had put in place to prevent a reoccurrence of a similar disaster (TEPCO website, 2014). The website revealed an MNC desperately struggling to handle the CSR and sustainability public relations disaster which it had suffered. Unfortunately, no amount of greenwashing can explain away what the most devastating environmental disaster in world history is probably.

Table 1 Companies Included in Research

Company Name	FG Rank	Country	Industry	Report Name	Year	# of Pages
Phillips 66	16	United States	Energy	Sustainability	2011	35
Petrobras	25	Brazil	Energy	Sustainability	2012	186
Statoil	39	Norway	Energy	Sustainability	2012	55
CVS Caremark	40	United States	Pharmaceuticals	CSR	2012	75
BNP Paribas	41	France	Banking	CSR	2012	116
Banco Santander	58	Spain	Banking	Sustainability	2012	103
Electricite de France	77	France	Energy	Sustainability	2012	121
Hyundai Motor	104	South Korea	Automotive	Sustainability	2013	99
Banco do Brasil	116	Brazil	Banking	Sustainability	2011	34
Tokyo Electric Power	117	Japan	Energy	No report	-	-
Sinochem Group	119	China	Chemicals	Sustainability	2012	74
Pertamina	122	Indonesia	Energy	Sustainability	2012	168
Mitsui	156	Japan	Energy	Sustainability	2013	93
Novartis	162	Switzerland	Pharmaceuticals	GRI	2012	90
Mitsubishi UFJ Financial Group	163	Japan	Banking	CSR	2012	63
Legal & General Group	173	Great Britain	Insurance	CSR	2012	180
China Telecommunications	182	China	Telecommunications	CSR	2011	5
Fujitsu	186	Japan	Technology	Sustainability	2013	49
Sumitomo Mitsui Financial Group	190	Japan	Banking	CSR	2012	66
Sabic	201	Saudi Arabia	Chemicals	Sustainability	2012	108
National Australia Bank	205	Australia	Banking	AnnualReview	2012	36
Hyundai Heavy Industries	206	South Korea	Shipbuilding	CSR	2012	35
Merck	214	United States	Pharmaceuticals	Environmental	2013	309
Best Buy	226	United Sates	Electronics	CSR	2013	53
KDDI	233	Japan	Telecommunications	CSR	2013	121

Phillips 66 was the highest ranked MNC selected from the FG250 with a ranking of 16th largest corporation. The smallest ranked MNC was KDDI at 233. Included in the sample were six MNCs from Japan, four from the U.S., two from China, France, South Korea and Brazil. The sample include eleven (44%) Asian MNCs and six (24%) European MNCs. The largest industry group was energy at 28 percent, followed by banking at 24 percent, pharmaceuticals at 12 percent, and chemicals and telecommunications at 8 percent.

Most of the MNCs referred to their reports as sustainability reports at 48 percent. Corporate social responsibility reports were also common at 36 percent. Despite the trend toward integrated reporting and the upcoming GRI G4 standard that requires it most MNCs published a separate sustainability or CSR report. Only two MNCs reported on sustainability in their annual reports (8%) – National Australia Bank and KDDI. Most of the reports were from 2012 at 60 percent, 24 percent were from 2013, and 12 percent were from 2011. Since there is no requirement on most MNCs to release CSR reports they are free to issue them as frequently or infrequently as they wish.

The reports varied considerably in length and in detail. The shortest report was by China Telecommunications, the 182nd ranked MNC on the FG250. The document consisted of five pages of poorly translated platitudes about the MNCs sincerity and trust, promises of connecting rural customers to the grid, care for its employees and attention to the environment. (China Telecommunications, 2011). There was no quantitative reporting of any kind in the document. In contrast Merck, the 214th ranked MNC, released a massive 309 page CSR report. Quantitative information was given in great detail, but the usefulness of the report was limited by the lack of an index or even a table of contents (Merck, 2013). As a result the reader is forced to go page by page through the report in a hunt for any specific information.

The most commonly used reporting standard was the Global Reporting Initiative (GRI). Sixty percent of the sampled MNCs used either version 3 or 3.1 of the GRI. Twenty percent of the MNCs used a home grown reporting method, and eight percent used an integrated report. All of the MNCs that issued a CSR report included environmental information (96%). Third party certification of some type was used by 48 percent of the sampled MNCs, 48 percent contained no outside certification for the content of the report.

All of the MNCs which produced reports included information on their environmental impact (96%). The level of detail varied but the vast majority reported quantitatively on greenhouse gas emissions, environmental accidents, water and energy use, and amount of waste generated. Most of the MNCs reported on their supply chain and their relationship with suppliers (80%). However, the level of detail varied greatly and much of the information on suppliers dealt with human rights, labor practices and working conditions. Most of the environmental reporting on suppliers was short and frequently stated that they were selected on various factors including their sustainability practices or that suppliers were required to follow a sustainability code provided by the MNC. Only one MNC, Hyundai Motor Company, reported on the environmental impact of their suppliers. Hyundai listed the number of 1st, 2nd and 3rd level suppliers they did business with and stated that they were required to obtain ISO 14001 environmental management certification as well as follow a supplier carbon footprint management system (Hyundai Motor Company, 2013). However, even Hyundai did not provide any actual numbers on supplier environmental impact. See Table 2 for a complete breakdown of the reporting standards, 3rd party certifications, environmental reporting, supplier information, level of detail on supplier interactions, and impact on the environment of supplier activities.

10. Qualitative Results

For the purposes of qualitative analysis the researcher adopted the coding structure created by Bouten *et al.* (2011) which measures whether CSR reporting is made in a comprehensive manner by classifying it into three areas: vision and goals, management approach, and performance indicators. Only if the activity described includes all three categories of CSR reporting is it considered to be comprehensive. The coding structure was modified to apply only to reporting on the environmental impact of suppliers. Thus the coding tree consisted of area (environment), ten items (materials, energy, water, biodiversity, emissions, products and services, compliance, transport, overall, and residual), and three information types (values and goals, management approach, and performance indicator).

Reporting on vision and goals includes information on disclosures related to values, aims, and future plans. In general, this information could be classified as general rhetoric or greenwashing. The MNC makes various claims about their commitment to only doing business with sustainable suppliers. MNCs that provide information on management approach are going a step further by describing specific actions or processes. This could include certifications required of suppliers and codes of conduct that suppliers must follow. Performance indicators are actual quantitative measures of supplier environmental impacts. This would include statements of greenhouse gas emissions, environmental accidents, water and energy use, and amount of waste generated.

Table 2 Company Reporting Details

Company Name	ReportStand	Environ Info	Supplier Info	Detail	Supplier Env Impact	3rd Party Cert.
Phillips 66	API	Yes	None	None	No	No
Petrobras	GRI 3.1	Yes	Yes	Detailed	No	Yes
Statoil	GRI 3.1	Yes	Yes	Medium	No	Yes
CVS Caremark	GRI 3.1	Yes	Yes	Detailed	No	No
BNP Paribas	ISAE 3000	Yes	Yes	Medium	No	Yes
Banco Santander	GRI3	Yes	Yes	Detailed	No	Yes
Electricite de France	GRI3	Yes	None	None	No	Yes
Hyundai Motor	GRI3.1	Yes	Yes	Detailed	Yes	Yes
Banco do Brasil	None	Yes	Yes	Minimal	No	No
Tokyo Electric Power	-	-	-	-	-	-
Sinochem Group	GRI3.1	Yes	Yes	Minimal	No	No
Pertamina	GRI3.1	Yes	Yes	Minimal	No	No
Mitsui	GRI3	Yes	Yes	Medium	No	Yes
Novartis	GRI3	Yes	None	None	No	Yes
Mitsubishi UFJ Financial Group	GRI3.1	Yes	Yes	Minimal	No	No
Legal & General Group	None	Yes	Yes	Medium	No	No
China Telecommunications	None	Yes	None	None	No	No
Fujitsu	None	Yes	Yes	Detailed	No	Yes
Sumitomo Mitsui Financial Group	GRI3.1	Yes	Yes	Minimal	No	No
Sabic	GRI3.1	Yes	Yes	Minimal	No	Yes
National Australia Bank	Integrated	Yes	Yes	Minimal	No	Yes
Hyundai Heavy Industries	None	Yes	Yes	Minimal	No	No
Merck	GRI3	Yes	Yes	Detailed	No	No
Best Buy	GRI3	Yes	Yes	Detailed	No	No
KDDI	Integrated	Yes	Yes	Minimal	No	Yes

In addition to Tokyo Electric Power, four other MNCs provided no information about the environmental aspects of their supply chain relationships - Phillips 66, Electricite de France, Novartis and China Telecommunication. Thus a full 20 percent of the sample does not report on their supply chain environmental practices. The majority of the sampled MNCs report their supply chain sustainability at the value and goal level (48%). There is a large level of variation in the information reported in this classification. Some such as Statoil pay mere lip service to sustainability with statements such as “we use suppliers committed to Health, Safety and the Environment (HSE)” and “we have minimum standards for HSE” (Statoil, 2012). However, no information on how these standards are monitored or implemented is provided. Other MNCs such as CVS Caremark provide much more detail on their efforts but it does not quite rise to the level of a management approach. CVS Caremark states “we share best practices and engage suppliers on their environmental footprint” and “we audit suppliers to make sure they comply with environmental laws and have effective environmental management systems” (CVS, 2012). However, CVS provides no details about these efforts.

A significant number of the MNCs sampled rose to the classification level of having a management approach to supply chain sustainability (32%). As mentioned previously Hyundai Motor Company provided significant detail on their supply chain. Other MNCs that reached this level were Petrobras, Santander, Mitsui, Fujitsu, National Australia Bank, Best Buy and Merck. Best Buy included information on supply chain goals which if reached will move them into the classification of performance indicators. Best Buy has enacted a Supplier Code of Conduct, has begun environmental audits of suppliers, and is a member of the Global Social Compliance Programme (GSCP). The GSCP is a third party group which audits supplier conditions. Petrobras requires ISO 14001 certification by all its suppliers, has a system called the Engineering Supplier Development Program which assist suppliers with sustainability, and runs a biodiesel program for its suppliers (Petrobras, 2012). Santander requires that its suppliers be signers of the U.N. Global Compact and audited 372 suppliers for compliance with this measure (Banco Santander, 2012). No MNC rose to the level of performance indicator as none provided quantitative figures for their supplier’s impact on the environment.

11. Discussion and Conclusions

The level of green supply chain commitment varies considerably among the FG 250 MNCs sampled in this research. A majority of the sample (68%) could be accused of greenwashing as they either do not report on the environmental impact of their supply chain at all or do so only at the values and goals level. It is apparent from studying the CSR reports of those MNCs who have reached the values and goals classification that some are genuinely attempting to both monitor and affect the environmental activities of their suppliers. Creating procedures for doing so is not an easy process – it is both a time consuming and expensive endeavor. MNCs which have made this effort should be lauded for their activities and encouraged to continue down this path. The researcher also found evidence of greenwashing in a significant number of the MNCs included in the sample. Most of these MNCs followed no reporting standard, did not report on their supply chain, or reported only vague and meaningless clichés on their supply chain impacts.

The MNCs who rose to the level of management approach were obviously heavily invested in the sustainability of their supply chains. While none reached the level of including performance indicators it was obvious from the detailed reporting provided that they were taking active measures in an effort to develop a green supply chain. Most of these MNCs have received awards for their environmental efforts and are included in lists of most sustainable companies and socially responsible companies. They take not only their own CSR efforts but also those of their suppliers very seriously. Under the coding classification of Bouten *et al.* (2011) none of the MNCs included in the sample reached the level of comprehensive reporting on their supply chain. However, this research shows that progress is being made in the area of sustainability by MNCs and their suppliers. The progress made in the last decade alone is remarkable. It is to be hoped that in the next decade all MNCs will report not only on their own sustainability efforts but those of their suppliers as well. The move toward mandatory CSR reporting and toward one standard suggests that this is likely to occur.

12. Limitations and Future Research

The sample was limited to firms who were members of the Fortune Global 250 therefore it is not generalizable to the activities of small and medium sized (SMEs) firms. Although the small sample size was appropriate for the in-depth qualitative analysis performed, a larger sample would have a smaller standard error eliminating the likelihood that unusual subjects (MNCs) were chosen. The activities of MNCs in regard to their own sustainability were not studied. Most of the MNCs reported on their own sustainability often in a quantitative manner. The number of MNCs who reached the performance indicator level in regard to their own sustainability activities would have been much higher.

Future research should be performed to look at the sustainability efforts of SMEs and their suppliers. Most firms fall into this category and their sustainability activities have a large impact on the environment. Other research on MNCs could look at the activities of all FG250 from a broader spectrum studying not only their supply chain but also their own environmental impacts as well.

References

Banco Santander Sustainability Report., 2012.
http://www.santander.com/csgs/Satellite/CFWCSancomQP01/en_GB/Corporate/Sustainability/Santander-and-sustainability/Reports.html

Beamon, B. M., 2005. Environmental and sustainability ethics in supply chain management. *Science & Engineering Ethics, 11*(2), pp.221-234..

Bernon, M., Baker, P., Mena, C., Palmer, A., Skipworth, H., Smart, A., and Templar, S., 2012. Towards more sustainable supply-chain management. In: D. Grayson, ed.,*Cranfield on Corporate Sustainability,* pp.149-166, Sheffield: Greenleaf Publishing Limited.

Bhatia, A., 2012. The corporate social responsibility report: The hybridization of a confused genre. *IEEE Transactions on Professional Communication, 55*(3), pp.221-238.

Blanchard, D., 2012. Corporate social responsibility in the supply chain. *Industry Week/IW, 261*(5), pp.22-26.

Blanchard, D., 2009. Green supply chain movement hits a speed bump. *Industry Week/IW, 258*(4), p. 42.

Bouten, L., Everaert, P., Van Liedekerke, L., De Moor, L., and Christiaens, J., 2011. Corporate social responsibility reporting: A comprehensive picture? *Accounting Forum, 35*(3), pp.187-204.

Breitbarth, T., Harris, P., and Insch, A., 2010. Pictures at an exhibition revisited: Reflections on a typology of images used in the construction of corporate social responsibility and sustainability in non-financial corporate reporting. *Journal of Public Affairs, 10*(4), pp.238-257.

Chandler, D. and Werther, W.B., 2014. *Strategic corporate social responsibility: Stakeholders, globalization, and sustainable value creation.* Third Edition. Thousand Oaks, CA: Sage Publications.

China Telecommunications Corporate Social Responsibility Report., 2011.
http://www.chinatelecom-h.com/en/ir/report/annual2011.pdf

Cho, S., Lee, C. and Park, C. K., 2012. Measuring corporate social responsibility. *CPA Journal, 82*(6), pp.54-60.

CVS Caremark Corporate Social Responsibility Report., 2012. http://www.cvshealth.com/sites/all/modules/custom/csr_report/files/2012-CVS-Caremark-CSR-Report.pdf

Darnall, N., Jolley, G., and Handfield, R., 2008. Environmental management systems and green supply chain management: Complements for sustainability? *Business Strategy & the Environment, 17*(1), pp.30-45.

Dragu, I. and Tudor-Tiron, A., 2013. New corporate reporting trends. Analysis on the evolution of integrated reporting. *Annals of the University of Oradea, Economic Science Series, 22*(1), pp.1221-1228.

Fortanier, F. and Kolk, A., 2007. On the economic dimensions of corporate social responsibility: Exploring fortune global 250 reports. *Business & Society, 46*(4), pp.457-478.

Freundlieb, M. and Teuteberg, F., 2013. Corporate social responsibility reporting--A transnational analysis of online corporate social responsibility reports by market-listed companies: Contents and their evolution. *International Journal of Innovation and Sustainable Development, 7*(1), pp.1-26.

Hyundai Motor Company Corporate Social Responsibility Report., 2013. https://csr.hyundai.com/upfile/report/scw/SocialContributionActivitiesWhitePaper(ENG)_2013.pdf

Jones, A., and Jonas, G. A., 2011. Corporate social responsibility reporting: The growing need for input from the accounting profession. *CPA Journal, 81*(2), pp.65-71.

Kolk, A., 2008. Sustainability, accountability and corporate governance: Exploring multinationals' reporting practices. *Business Strategy and the Environment, 17*(1), pp.1-15.

Ladd, S., 2010. Corporate greening: Good for the soul, but is it good for the bottom line? *Financial Executive, 26*(2), pp.36-41.

Locke, R. M., 2013. Can global brands create just supply chains? *Boston Review, 38*(3), pp.12-29.

Loughran, T., McDonald, B., and Yun, H., 2009. A wolf in sheep's clothing: The use of ethics-related terms in 10-K reports. *Journal of Business Ethics, 89*(1), pp.39-49.

Merck Corporate Responsibility Report., 2013. http://www.merckresponsibility.com/

Miles, M.B. and Huberman, A.M., 1994.*Qualitative data analysis: An expanded sourcebook.* Thousand Oaks, CA: Sage Publications.

Morhardt, J., 2010. Corporate social responsibility and sustainability reporting on the Internet. *Business Strategy & The Environment, 19*(7), pp.436-452.

Nemetz, P.N., 2013. *Business and the sustainability challenge: An integrated perspective*. New York: Routledge.

Nikolaeva, R. and Bicho, M., 2011. The role of institutional and reputational factors in the voluntary adoption of corporate social responsibility reporting standards. *Journal of the Academy of Marketing Science, 39*(1), pp.136-157.

Paul, K., 2008. Corporate sustainability, citizenship and social responsibility reporting. *Journal of Corporate Citizenship, 32*, pp.63-78.

Pedersen, E., Neergaard, P., Pedersen, J., and Gwozdz, W., 2013. Conformance and deviance: Company responses to institutional pressures for corporate social responsibility reporting. *Business Strategy and the Environment, 22*(6), pp.357-373.

Petrobras Sustainability Report., 2012. http://www.petrobras.com.br/en/society-and-environment/sustainability-report/

Preuss, L., 2005. Rhetoric and reality of corporate greening: A view from the supply chain management function. *Business Strategy & the Environment, 14*(2), pp.123-139.

Rasche, A., 2010. The limits of corporate responsibility standards. *Business Ethics: A European Review, 19*(3), pp.280-291.

Reider-Gordon, M., 2013. Understanding foreign states' mandatory corporate social responsibility reporting. *Litigation, 39*(1), pp.61-63.

Samy, M., Odemilin, G., and Bampton, R., 2010. Corporate social responsibility: A strategy for sustainable business success: An analysis of 20 selected British companies. *Corporate Governance, 10*(2), pp.203-217.

Sarfaty, G., 2013. Regulating through numbers: A case study of corporate sustainability reporting. *Virginia Journal of International Law, 53*(3), pp.574-621.

Scott, A., 2011. Corporate social responsibility: Greening the supply chain. *Chemical Week, 173*(8), pp.21-24.

Shacklett, M., 2011. Sustainability, greenwashing, and the road ahead for the supply chain. *World Trade, 24*(12), pp. 32-35.

Statoil Sustainability Report., 2012. http://www.statoil.com/annualreport2012/en/sustainability/pages/sustainability.aspx

Sweeney, L. and Coughlan, J., 2008. Do different industries report corporate social responsibility differently? An investigation through the lens of stakeholder theory. *Journal of Marketing Communications, 14*(2), pp.113-124.

TEPCO website., 2013. http://www.tepco.co.jp/en/index-e.html

Tschopp, D., Barney, D., and Murphy, P., 2012. The institutional promotion of corporate social responsibility reporting: Second tier institutions. *Journal of Academic & Business Ethics*, 6, pp.1-17.

Tschopp, D., Wells, S., and Barney, D., 2011. The institutional promotion of corporate social responsibility reporting. *Journal of Academic & Business Ethics,* 5, pp.1-18.

Valentine, S.V. and Savage, V.R., 2010. A strategic environmental management framework: Evaluating the profitability of being green. In: L. Lin-Heng, G. Ofori, M.L. Lai Choo, V.R.

Savage, and T. Yen-Ping, eds., *Sustainability matters: Environmental management in Asia*, River Edge, N.J.: World Scientific Publishing. pp.1-32,

Wagner, T., Lutz, R., and Weitz, B., 2009. Corporate hypocrisy: Overcoming the threat of inconsistent corporate social responsibility perceptions. *Journal of Marketing, 73*(6), pp.77-91.

Webb, A., 2009. How green is my supply chain? *Logistics & Transport Focus, 11*(10), pp.34-37.